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Preface

This Preface introduces the guides, online help, and other information sources available to help you more effectively use Oracle Fusion Applications.

Oracle Fusion Applications Help

You can access Oracle Fusion Applications Help for the current page, section, activity, or task by clicking the help icon. The following figure depicts the help icon.

You can add custom help files to replace or supplement the provided content. Each release update includes new help content to ensure you have access to the latest information. Patching does not affect your custom help content.

Oracle Fusion Applications Guides

Oracle Fusion Applications guides are a structured collection of the help topics, examples, and FAQs from the help system packaged for easy download and offline reference, and sequenced to facilitate learning. You can access the guides from the Guides menu in the global area at the top of Oracle Fusion Applications Help pages.

Guides are designed for specific audiences:

- **User Guides** address the tasks in one or more business processes. They are intended for users who perform these tasks, and managers looking for an overview of the business processes. They are organized by the business process activities and tasks.

- **Implementation Guides** address the tasks required to set up an offering, or selected features of an offering. They are intended for implementors. They are organized to follow the task list sequence of the offerings, as displayed within the Setup and Maintenance work area provided by Oracle Fusion Functional Setup Manager.

- **Concept Guides** explain the key concepts and decisions for a specific area of functionality. They are intended for decision makers, such as chief financial officers, financial analysts, and implementation consultants. They are organized by the logical flow of features and functions.

- **Security Reference Manuals** describe the predefined data that is included in the security reference implementation for one offering. They are
intended for implementors, security administrators, and auditors. They are organized by role.

These guides cover specific business processes and offerings. Common areas are addressed in the guides listed in the following table.

<table>
<thead>
<tr>
<th>Guide</th>
<th>Intended Audience</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common User Guide</td>
<td>All users</td>
<td>Explains tasks performed by most users.</td>
</tr>
<tr>
<td>Common Implementation Guide</td>
<td>Implementors</td>
<td>Explains tasks within the Define Common Applications Configuration task list, which is included in all offerings.</td>
</tr>
<tr>
<td>Functional Setup Manager User Guide</td>
<td>Implementors</td>
<td>Explains how to use Oracle Fusion Functional Setup Manager to plan, manage, and track your implementation projects, migrate setup data, and validate implementations.</td>
</tr>
<tr>
<td>Technical Guides</td>
<td>System administrators, application developers, and technical members of implementation teams</td>
<td>Explain how to install, patch, administer, and customize Oracle Fusion Applications.</td>
</tr>
</tbody>
</table>

Note
- Limited content applicable to Oracle Cloud implementations.

For guides that are not available from the Guides menu, go to Oracle Technology Network at http://www.oracle.com/technetwork/indexes/documentation.

Other Information Sources

My Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Use the My Oracle Support Knowledge Browser to find documents for a product area. You can search for release-specific information, such as patches, alerts, white papers, and troubleshooting tips. Other services include health checks, guided lifecycle advice, and direct contact with industry experts through the My Oracle Support Community.

Oracle Enterprise Repository for Oracle Fusion Applications

Oracle Enterprise Repository for Oracle Fusion Applications provides details on service-oriented architecture assets to help you manage the lifecycle of your
software from planning through implementation, testing, production, and changes.

In Oracle Fusion Applications, you can use Oracle Enterprise Repository at http://fusionappsoer.oracle.com for:

- Technical information about integrating with other applications, including services, operations, composites, events, and integration tables. The classification scheme shows the scenarios in which you use the assets, and includes diagrams, schematics, and links to other technical documentation.
- Other technical information such as reusable components, policies, architecture diagrams, and topology diagrams.

Note
The content of Oracle Enterprise Repository reflects the latest release of Oracle Fusion Applications.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/us/corporate/accessibility/index.html.

Comments and Suggestions

Your comments are important to us. We encourage you to send us feedback about Oracle Fusion Applications Help and guides. Please send your suggestions to oracle_fusion_applications_help ww_grp@oracle.com. You can use the Send Feedback to Oracle link in the footer of Oracle Fusion Applications Help.
Marketing Offering: Overview

Using the marketing business process area, your enterprise can create consumer awareness of your products or services. You can send marketing messages directly to consumers. Drive prospects towards well qualified leads for your organization’s sales force. Define your company’s marketing strategy, create marketing plans, define pricing and budgets, identify customer segments, create marketing collateral, and execute campaigns across multiple channels. Integration across marketing, planning, pricing, campaign development and execution, and lead management enables marketing effectiveness, intelligence, and performance analysis. You can effectively close the loop in your marketing campaigns.

Before you begin, use the Getting Started page in the Setup and Maintenance work area to access reports for each offering, including full lists of setup tasks, descriptions of the options and features you can select when you configure the offering, and lists of business objects and enterprise applications associated with the offering.

The first implementation step is to configure the offerings in the Setup and Maintenance work area by selecting the offerings and options that you want to make available to implement. For the Marketing offering, you can select the following options:

- E-Mail Server for Marketing
- Lead Management
- Segmentation Server for Marketing
- Marketing Business Intelligence Analytics

Next, create one or more implementation projects for the offerings and options that you want to implement first, which generates task lists for each project. The application implementation manager can customize the task list and assign and track each task.

If you select all of the options, the generated task list for this offering contains the following groups of tasks:

- Define Common Applications Configuration
• Define Common CRM Configuration
• Define Territory Management Configuration
• Define Lead Management
• Define Common Marketing Configuration
• Define Campaign Fulfillment System
• Define E-Mail Server
• Define Segmentation Manager
• Define Transactional Business Intelligence Configuration
• Define Extensions for Marketing

**Define Common Applications Configuration**

Use this task list to manage definitions used across offerings, typically applying to multiple products and product families. These definitions include enterprise structures, workforce profiles, security, and approval rules, amongst others.

You can find other information that supports the common implementation tasks in the Oracle Fusion Applications Concepts Guide.

**Define Common CRM Configuration**

Use this task list to define and manage the setup for common options within the customer relationship management set of business processes.

**Define Territory Management Configuration**

Use this task list to define and manage the attributes, attribute values, metrics, policies, and measure information that is related to territory management.

**Define Lead Management**

Use this task list to define and manage the setup to support sale leads creation and followup functions.

**Define Common Marketing Configuration**

Use this task list to define and manage the setup for common functions within the marketing business process.

**Define Campaign Fulfillment System**

Use this task list to create and manage marketing suppliers, such as call centers and fulfillment companies, that provide campaign distribution services.

**Define E-Mail Server**

Use this task list to install and manage e-mail server configuration changes. The e-mail server provides the e-mail sending daemon that delivers e-mail, the bounce-handling daemon that tracks e-mails that cannot be delivered, and the click-through daemon that tracks e-mail recipient responses.
Define Segmentation Manager

Use this task list to define and manage Oracle Fusion Segmentation configuration, such as list formats, merge fields, and configuration parameters, for Oracle Fusion Marketing.

Define Transactional Business Intelligence Configuration

Use this task list to configure Oracle Transactional Business Intelligence for ad hoc reporting, including managing the repository, connections, presentation catalog, and currency type display.

Define Extensions for Marketing

Use this task list to define extensions such as custom Oracle Enterprise Scheduler jobs.

You can also customize and extend applications using other tools. For more information, see the Oracle Fusion Applications Extensibility Guide.

Manage Application Implementation

Manage Application Implementation: Overview

The Manage Applications Implementation business process enables rapid and efficient planning, configuration, implementation, deployment, and ongoing maintenance of Oracle Fusion applications through self-service administration.

The Setup and Maintenance work area offers you the following benefits:

- **Prepackaged Lists of Implementation Tasks**
  Task lists can be easily configured and extended to better fit with business requirements. Auto-generated, sequential task lists include prerequisites and address dependencies to give full visibility to end-to-end setup requirements of Oracle Fusion applications.

- **Rapid Start**
  Specific implementations can become templates to facilitate reuse and rapid-start for comparable Oracle Fusion applications across many instances.

- **Comprehensive Reporting**
  A set of built-in reports helps to analyze, validate and audit configurations, implementations, and setup data of Oracle Fusion applications.

With Oracle Fusion Functional Setup Manager you can:

- Learn about and analyze implementation requirements.
• Configure Oracle Fusion applications to match your business needs.

• Achieve complete visibility to setup requirements through guided, sequential task lists downloadable into Excel for project planning.

• Enter setup data through easy-to-use user interfaces available directly from the task lists.

• Export and import data from one instance to another for rapid setup.

• Validate setup by reviewing setup data reports.

• Implement all Oracle Fusion applications through a standard and consistent process.

The following documentation resources are available for learning how to configure Oracle Fusion Applications.

• Functional Setup Manager Developer’s Guide
• Common Implementation Guide
• Customer Data Management Implementation Guide
• Enterprise Contracts Implementation Guide
• Marketing Implementation Guide
• Sales Implementation Guide
• Fusion Accounting Hub Implementation Guide
• Financials Implementation Guide
• Compensation Management Implementation Guide
• Workforce Deployment Implementation Guide
• Workforce Development Implementation Guide
• Incentive Compensation Implementation Guide
• Procurement Implementation Guide
• P6 EPPM Administrator’s Guide for an Oracle Database
• P6 EPPM Administrator’s Guide for Microsoft SQL Server Database

Implementing Oracle Fusion CRM with the Functional Setup Manager: Functional Overview

Oracle Fusion Applications use the Setup and Maintenance work area, available in the Navigator menu under the Tools heading, as the central work area for planning and executing the setup tasks required to implement and maintain your Oracle Fusion CRM application.
Every phase of application implementation lifecycle is supported by the **Setup and Maintenance** work area, also referred to as the Functional Setup Manager.

Using the list of tasks on the left side of the **Setup and Maintenance** work area, you can:

- Review the functionality available for implementation using the **Getting Started** task.
- Select what functionality you want to implement using the **Configure Offerings** task.
- Create and manage implementation projects using the **Manage Implementation Projects** task.

You can perform individual setup and maintenance tasks, either from an implementation project or by searching for the task or task group in the **All Tasks** tab in the work area.

Although you are not required to create an implementation project for setting up your application functionality, implementation projects make it possible to export your setups for use in other environments using the **Manage Configuration Packages** task. Exporting is useful if you want to move your setups from a test environment to a production environment, for example.

### Reviewing Functionality Available for Implementation

Using the **Getting Started** task, you can review the functionality available for you to implement.

Oracle Fusion Applications functionality is organized by offerings. Offerings comprise tasks related to business processes that are typically provisioned and implemented as a unit. For Oracle Fusion CRM, there are five relevant offerings:

<table>
<thead>
<tr>
<th>Offering</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Contracts</td>
<td>Oracle Fusion Enterprise Contracts provides the most complete solution for managing sales, procurement, and other contracts. It is a comprehensive offering for standardizing corporate contract policies, improving internal controls, and complying with all contractual obligations and regulatory requirements.</td>
</tr>
<tr>
<td>Customer Data Management</td>
<td>Configure everything you need to manage customers, contacts, and resources, and ensure data quality.</td>
</tr>
<tr>
<td>Incentive Compensation</td>
<td>Configure how you manage incentive compensation, including incentive plans, performance monitoring, credit and rollup rules, earnings calculations, and payment determination.</td>
</tr>
<tr>
<td>Marketing</td>
<td>Configure everything you need to manage marketing campaigns and leads, including segmentation and e-mail servers.</td>
</tr>
<tr>
<td>Sales</td>
<td>Configure everything you need to manage sales planning and forecasting, pursue and track opportunities, align territories, and distribute sales quotas.</td>
</tr>
</tbody>
</table>
Click an offering to obtain details in a series of reports. Available reports include:

- **Offering Content Guide**
  List of business processes and activities covered by the offering.

- **Associated Features**
  Lists the options and features available for implementation.

- **Setup Task Lists and Tasks**
  Complete list of implementation tasks organized in task lists. The tasks, which include all the common and prerequisite tasks, are organized in the order they are to be implemented.

- **Related Business Objects**
  Lists business objects along with the applicable Web service used for the export and import process. The report displays the business object, associated product and enterprise application, and the related Web service.

- **Related Enterprise Applications**
  List of Java Enterprise Edition applications used for entering, exporting, and importing setup data.

**Selecting What Functionality You Want to Implement**

Using the **Configure Offerings** task, you can select which optional functionality or features will be available for implementation within each offering.

For example, for the Sales offering, you can enable for implementation the following optional functionality:

- Competitors
- Quotas
- References
- Sales Catalog
- Sales Prediction Engine
- Outlook Integration
- Territory Management
- Lead Management
- Sales Business Intelligence Analytics
- Partner Management

On the Configure Offerings page, you can also select optional features such as implementing a local help system, or automatic phone dialing with Enhanced Click-to-Dial.
Creating and Managing Implementation Projects

When you are ready to implement, you can use the Manage Implementation Projects task to create the list of setup tasks you will need from one or more offerings. While you can implement your application by searching for each setup task individually, creating an implementation project provides you with many project management features, such as assigning tasks and tracking their completion. Creating an implementation project also makes it possible for you to export your setup after it is complete so you can reuse it in a different environment.

Although there are no restrictions on the number of offerings you can include in a single implementation project, you should create separate projects for each offering:

- If you are implementing and deploying offerings at different times
- To keep the list of setup tasks manageable within a project

About Implementation Tasks and Task Lists

The setup tasks in an offering or in an implementation project are organized in nested task lists in the suggested implementation order:

1. The most common setup tasks which apply across offerings
2. Tasks common to an application area such as CRM
3. Tasks common across multiple modules in an application area
4. Tasks for specific modules such as Opportunity Management, Territory Management, and Sales Forecasting

Note that:

- You do not have to complete all of the setup tasks in a project or an offering. Many setup tasks are optional or have default values already populated for you.
- Each offering is self-contained and includes the common tasks. If you are implementing multiple offerings, you do not have to duplicate the common task setup.

You can obtain more information about many setup task lists or individual tasks by clicking the question mark help icon. Compilations of all the implementation help topics are available in implementation guides.

Implementing Oracle Fusion CRM with the Functional Setup Manager: Special Considerations

This topic highlights the differences between using the Functional Setup Manager to implement Oracle Fusion CRM on premise and in the cloud.

While there is no difference in how you use the Functional Setup Manager on premise and in the cloud, there is a difference in the setup tasks you carry out to
implement your application. When you implement Oracle Sales and Marketing Cloud Service:

- Some required setup tasks, listed in the following table, are already completed for you based on the information you provided on the initial questionnaire.
- Some tasks in an offering may not be available. For example, Oracle Sales and Marketing Cloud Service permits you to import customer and other application data from a file, but does not permit you to load data directly into the application using a loader. Some security customizations, such as the creation of additional enterprise roles, must be done for you by service administrators. Details about the availability of specific tasks are provided in related topics.

The following table lists tasks set up for you when you implement in the Oracle Sales and Marketing Cloud Service.

<table>
<thead>
<tr>
<th>Implementation Task Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Enterprise HCM Information</td>
<td>Oracle enters the company name you provided in the questionnaire as the name of the enterprise in the application. You can search for the name from the Manage Enterprise HCM Information page and edit it. All of the other fields on the Edit Enterprise page are for Oracle Fusion Human Capital Management (HCM), and so are not relevant for CRM.</td>
</tr>
<tr>
<td>Manage Legal Address</td>
<td>This is the address you provided as the physical address in the questionnaire. As a best practice, use the same legal corporate address used for tax information.</td>
</tr>
<tr>
<td>Manage Legislative Data Group</td>
<td>The legislative data group is required for creating a legal employer. Legislative data groups are used for partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. CRM-only implementations require only one data group.</td>
</tr>
<tr>
<td>Manage Legal Entity</td>
<td>The legal entity is required for creating employee users. When you create a user who is an employee, you must select the legal entity, the legal employer. You can set up multiple legal entities if your business requires them, but, for CRM-only implementations, you can assign all employees to just one corporate legal employer. You must complete this task before executing the next step: Manage Legal Entity HCM Information task.</td>
</tr>
<tr>
<td>Manage Legal Entity HCM Information</td>
<td>In this task, you associate the legislative data group defined in the Manage Legislative Data Group task with the Legal Entity HCM Information.</td>
</tr>
<tr>
<td>Manage Locations</td>
<td>This is the physical address of your company. Creating a location is required for creating an item organization. An item organization is required if you are adding items into the Sales Catalog.</td>
</tr>
<tr>
<td>Manage Business Unit</td>
<td>Oracle creates one business unit for creating your employee users based on your company name. Because all CRM transactions occur in one business unit, you can assign all employees to the same corporate business unit.</td>
</tr>
</tbody>
</table>
Manage Divisions

Oracle creates a division based on your company
name. Divisions are used to support management
reporting for financial and subledger business
functions. Divisions are not required for CRM-only
implementations because CRM implements security
and reporting through the territory hierarchy, not
through business units and divisions.

Manage Job

Oracle creates the Customer Administrator job
solely to enable the provisioning of enterprise
roles to implementation users. When you assign
the Customer Administrator job to a user, the
role provisioning rule created in the next step
automatically provisions the enterprise roles
required by implementors. Jobs are used by Oracle
Fusion HCM implementations; they are not required
for CRM-only implementations.

Manage HCM Role Provisioning Rules

Oracle creates the rules that automatically provision
CRM resources and implementors with the
enterprise roles they need to perform their work.
Oracle creates a separate rule for relevant enterprise
roles in the security reference implementation.
For a list of the rules that are set up for you, see
the Application Security for the Oracle Sales and
Marketing Cloud Service: Getting Started topic.

Select the Manage Users link from the Navigator.

Oracle creates one initial user for you. Sign in as
the initial user to create other users, including other
setup users.
For step-by-step instructions on creating a setup
user and a CRM application user, see the topics
Creating Additional Implementation Users for the
Oracle Sales and Marketing Cloud Service: Worked
Example and Creating Application Users for the
Oracle Sales and Marketing Cloud Service: Worked
Example.

Manage Currencies

By default, the currencies you specified in the
questionnaire are enabled. You can enable or disable
currencies that appear in the list of values used to
enter currencies in the application's user interface.

Manage Currency Profile Option

Select the corporate currency used by your
organization. The default value is set to U.S. Dollar.
This step is required for Territory Management. It
is recommended that you not change the selected
Corporate Currency Default profile option value for
ZCA_COMMON_CORPORATE_CURRENCY after
the currency is used in transactions.

Manage Item Organizations

Oracle creates the Global Item Organization for
you. An item organization is required by the Sales
Catalog if you are including items.

Manage Product Group Profile Option Values

Oracle sets this profile to the Global Item
Organization. This association enables you to create
items for use in the Sales Catalog.

Overview 1-9


### Define Default Proposal Owner
Oracle assigns the Customer Administrator (the implementation user created for you) as the default owner of automatically generated sales territory proposals. Whenever a user creates a territory proposal, he automatically becomes its owner. The application uses the default proposal owner in cases where a proposal is created automatically by the system, as is the case when territory updates need to be propagated to inheriting territories.

### Manage Accounting Calendars
Oracle selects the accounting calendar you specified in the questionnaire as the calendar for forecasts and territories.

### Manage Calendar Profile Option
Oracle specifies the accounting calendar as the common calendar in the Accounting Calendar Default (ZCA_COMMONCALENDAR) profile option. This step is required for territory management and forecasting.

**Caution**
Because many Oracle Fusion CRM applications use this profile option, do not change the value after it is set. Changing the value could result in the loss of data.

### Manage Administrator Profile Values
Oracle assigns the Customer Administrator as the default owner or an assignee for automatically created customer center tasks, sales lead tasks and marketing campaign tasks.

### Select Forecasting Options
Oracle sets the forecast period, frequency, due date, and territory freeze date based on the information you provided in the questionnaire.

### Manage Sales and Marketing Organizations
Oracle creates a sales and marketing organization called Global Organization. You select this resource organization as the parent of the top organization in your resource organization hierarchy.

You will be using this same task to create the resource organizations for every manager user.

### Manage Resource Organization Hierarchies
Oracle identifies the Global Organization as the top of the sales and marketing hierarchy.

---

**Implementation Tasks Completed for You in the Oracle Sales and Marketing Cloud Service: Explained**

Oracle completes the implementation tasks listed in this topic according to the information you provided when you signed up for the Oracle Sales and Marketing Cloud Service. You can verify or edit the values for each task.

The following table lists the completed tasks in the order they are implemented. Except for the Manage Users task, you can review each setup task and make any necessary changes by searching for the task name in the **Setup and Maintenance** work area and clicking the **Go to Task** button.
Links to both the **Setup and Maintenance** work area and the **Manage Users** task appear in the **Navigator** menu at the top of any application page.

<table>
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<td>Manage Legal Address</td>
<td>This is the address you provided. As a best practice, use the same legal corporate address used for tax information.</td>
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<tr>
<td>Manage Legislative Data Group</td>
<td>The legislative data group is required for creating a legal employer. Legislative data groups are used for partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. CRM-only implementations require only one data group.</td>
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</tr>
<tr>
<td>Manage Legal Entity HCM Information</td>
<td>In this task, you associate the legislative data group defined in the Manage Legislative Data Group task with the Legal Entity HCM Information.</td>
</tr>
<tr>
<td>Manage Business Unit</td>
<td>Oracle creates one business unit for creating your employee users. The name of the business unit is based on your company name. Because all CRM transactions occur in one business unit, you can assign all employees to the same corporate business unit.</td>
</tr>
<tr>
<td>Select the <strong>Manage Users</strong> link from the <strong>Navigator</strong></td>
<td>Oracle creates one initial user for you. Sign in as the initial user to create other users, including other users with the permissions to perform implementation tasks. These users are called setup users. For step-by-step instructions on creating a setup user and a CRM application user, see the topics Creating Setup Users for the Oracle Sales and Marketing Cloud Service: Worked Example.</td>
</tr>
</tbody>
</table>
as a unit throughout the implementation lifecycle. You can assign these tasks to users and track their completion using the included project management tools.

**Maintaining Setup Data**

You can also create an implementation project to maintain the setup of specific business processes and activities. In this case, you select specific setup task lists and tasks.

**Exporting and Importing**

Implementation projects are also the foundation for setup export and import. You use them to identify which business objects, and consequently setup data, you will export or import and in which order.

**Selecting Offerings**

When creating an implementation project you see the list of offerings and options that are configured for implementation. Implementation managers specify which of those offerings and options to include in an implementation project. There are no hard and fast rules for how many offerings you should include in one implementation project. The implementation manager should decide based on how they plan to manage their implementations. For example, if you will implement and deploy different offerings at different times, then having separate implementation projects will make it easier to manage the implementation life cycles. Furthermore, the more offerings you included in an implementation project, the bigger the generated task list will be. This is because the implementation task list includes all setup tasks needed to implement all included offerings. Alternatively, segmenting into multiple implementation projects makes the process easier to manage.

**Offerings: Explained**

Offerings are application solution sets representing one or more business processes and activities that you typically provision and implement as a unit. They are, therefore, the primary drivers of functional setup of Oracle Fusion applications. Some of the examples of offerings are Financials, Procurement, Sales, Marketing, Order Orchestration, and Workforce Deployment. An offering may have one or more options or feature choices.

**Implementation Task Lists**

The configuration of the offerings will determine how the list of setup tasks is generated during the implementation phase. Only the setup tasks needed to implement the selected offerings, options and features will be included in the task list, giving you a targeted, clutter-free task list necessary to meet your implementation requirements.

**Enabling Offerings**

Offerings and their options are presented in an expandable and collapsible hierarchy to facilitate progressive decision making when specifying whether or not an enterprise plans to implement them. An offering or its options can either be selected or not be selected for implementation. Implementation managers decide which offerings to enable.
Provisioning Offerings

The Provisioned column on the Configure Offerings page shows whether or not an offering is provisioned. While you are not prevented from configuring offerings that have not been provisioned, ultimately the users are not able to perform the tasks needed to enter setup data for those offerings until appropriate enterprise applications (Java EE applications) are provisioned and their location (end point URLs) is registered.

Options: Explained

Each offering in general includes a set of standard functionality and a set of optional modules, which are called options. For example, in addition to standard Opportunity Management, the Sales offering includes optional functionality such as Sales Catalog, Sales Forecasting, Sales Prediction Engine, and Outlook Integration. These optional functions may not be relevant to all application implementations. Because these are subprocesses within an offering, you do not always implement options that are not core to the standard transactions of the offering.

Feature Choices: Explained

Offerings include optional or alternative business rules or processes called feature choices. You make feature selections according to your business requirements to get the best fit with the offering. If the selected offerings and options have dependent features then those features are applicable when you implement the corresponding offering or option. In general, the features are set with a default configuration based on their typical usage in most implementations. However, you should always review the available feature choices for their selected offerings and options and configure them as appropriate for the implementation.

You can configure feature choices in three different ways:

Yes or No

If a feature can either be applicable or not be applicable to an implementation, a single checkbox is presented for selection. Check or uncheck to specify yes or no respectively.

Single Select

If a feature has multiple choices but only one can be applicable to an implementation, multiple choices are presented as radio buttons. You can turn on only one of those choices.

Multi-Select

If the feature has multiple choices but one or more can be applicable to an implementation then all choices are presented with a checkbox. Select all that apply by checking the appropriate choices.
Define Common Applications Configuration for Marketing

Common Implementation: Overview

Common implementation involves accessing tasks that are available in multiple offerings, or that apply to multiple products and product families. The Define Common Applications Configuration task list and other activities include these common setup and implementation tasks.

You can find other information in support of common implementation in the Oracle Fusion Applications Concepts Guide.

In addition, you can customize and extend applications using various tools. For more information, see the Oracle Fusion Applications Extensibility Guide.

**Define Common Applications Configuration Task List**

Use the Define Common Applications Configuration task list to set up and administer an implementation of behaviors across offerings.

Most Oracle Fusion Applications offerings include the Define Common Applications Configuration task list for implementing what is common in multiple or all Oracle Fusion applications. The task lists and tasks within Define Common Applications Configuration can be present in all offerings, some, or just a single offering.

Common implementation includes such tasks as setting up security, defining enterprise structures, configuring Oracle Fusion Applications Help, and setting options. Many of the common implementation tasks involve configuring reference objects provided by Oracle Fusion Middleware Extensions for Applications (Applications Core), such as messages, flexfields, document sequences, and profile options. Some common implementation tasks involve configuring features provided by Oracle Application Toolkit (ATK), such as the Watchlist. Other common implementation tasks involve Oracle Fusion Applications products such as the Assign Balancing Segment Values to Ledger task in Oracle Fusion General Ledger.

**Other Common Setup and Maintenance Tasks**

Other setup and maintenance tasks exist in multiple offerings but not in the Define Common Applications Configuration task list. Use these other task lists to define an Oracle Fusion Transactional Business Intelligence configuration, and to define extensions such as custom Oracle Enterprise Scheduler jobs.

You can access common implementation tasks and task lists by starting in the Setup and Maintenance Overview page and searching for task lists by name.

Setup and Maintenance is available from the Administration menu to users provisioned with appropriate roles. The Administration menu provides access to other tasks, such as for customization.

Define Synchronization of Users and Roles from LDAP
User and Role Synchronization: Explained

Oracle Identity Management (OIM) maintains Lightweight Directory Access Protocol (LDAP) user accounts for users of Oracle Fusion applications. OIM also stores the definitions of abstract, job, and data roles and holds information about roles provisioned to users. During implementation, any existing information about users, roles, and roles provisioned to users must be copied from the LDAP directory to the Oracle Fusion Applications tables. Once the Oracle Fusion Applications tables are initialized with this information, it is maintained automatically. To perform the initialization, you run the process Retrieve Latest LDAP Changes.

Note
For security and audit best practice, implementation users have person records and appropriate role-based security access. So that appropriate roles can be assigned to implementation users, you must run the process Retrieve Latest LDAP Changes before you create implementation users.

During initial implementation, the installation super user performs the task Run User and Role Synchronization Process to run the Retrieve Latest LDAP Changes process.

Tip
The user name and password of the installation super user are created during installation provisioning of Oracle Fusion Applications. For details of the user name and password, contact your system administrator or the person who installed Oracle Fusion Applications.

Define Implementation Users

Getting Started with an Implementation: Overview

To start an Oracle Fusion Applications implementation, you must set up one or more initial users using the super user that was created during installation and provisioning of the Oracle Fusion Applications environment, or using the initial administrator user provided by Oracle for Oracle Cloud Application Services implementations. Because Oracle Fusion Applications is secure as delivered, the process of enabling the necessary setup access for initial users requires several specialized steps when getting started with an implementation.

The following high level steps are required for starting an implementation.

1. If you are not starting an Oracle Cloud Application Services implementation, sign into Oracle Identity Manager (OIM) as the OIM Administration users and provision the IT Security Manager job role with roles for user and role management. This enables the super user account, which is provisioned with the IT Security Manager job role, to create implementation users.

2. For starting all implementations, sign in as the user with initial access: either the Oracle Fusion Applications installation super user or the initial Oracle Cloud Application Services administrator user.

3. Select an offering to implement, and generate the setup tasks needed to implement the offering.

4. Perform the following security tasks:
b. Create an IT security manager user by using the Create Implementation Users task.

c. Provision the IT security manager with the IT Security Manager role by using the Provision Roles to Implementation Users task.

5. As the newly created IT security manager user, sign in to Oracle Fusion Applications and set up at least one implementation user for setting up enterprise structures.

a. Create an implementation user by using the Create Implementation Users task.

b. Provision the implementation user with the Application Implementation Manager job role or the Application Implementation Consultant job role by using the Provision Roles to Implementation Users task. The Application Implementation Consultant job role inherits from all product-specific application administrators and entitles the necessary View All access to all secured object.

c. Optionally, create a data role for an implementation user who needs only the limited access of a product-specific Application Administrator by using the Create Data Role for Implementation Users. Then assign the resulting data role to the implementation user by using the Provision Roles to Implementation Users task.

The figure shows the task flow from provisioning the IT Security Manager job role with the user and role management entitlement to creating and provisioning implementation users for enterprise setup.
Initial Security Administration: Critical Choices

After installation and provisioning, and before setting up enterprise structures and implementing projects, you must establish required entitlement for the super user account and at least one implementation user to proceed with the implementation. Once initial enterprise structure setup is complete, additional users may be created through processes available in Human Capital Management (HCM).

Initial security administration consists of the following,

- Preparing the IT Security Manager job role
- Synchronizing users and roles from Lightweight Directory Access Protocol (LDAP) with HCM
- Creating implementation users
- Optionally creating data roles for implementation users
- Provisioning implementation users with roles

Once the first implementation project begins and the enterprise work structure is set up, use standard user and security management processes such as the
Define Common Applications Configuration for Marketing

Manage Users task to create and manage additional users. Do not use the Create Implementation Users task after your enterprise has been set up.

**Preparing the IT Security Manager Job Role**

Initially the super user is not provisioned to manage users and roles.

You must add the following Oracle Identity Management (OIM) roles to the IT Security Manager job role’s role hierarchy to enable the super user to create one or more initial implementation users.

- Identity User Administrators
- Role Administrators

Additionally, you must assign the Xellerate Users organization to the IT Security Manager role.

**Synchronizing Users and Roles from LDAP**

After configuring an offering and setting up the task lists for implementation, the Run User and Roles Synchronization Process task is available to the super user for synchronizing users and roles in the LDAP store with Oracle Fusion Human Capital Management (HCM).

**Defining Initial Implementation Users**

The super user is provisioned with roles that provide broad access to Oracle Fusion Middleware and Oracle Fusion Applications administration, and is not suitable as an implementation user in most enterprises. The super user should define at least one implementation user, which consists of creating the user account and provisioning it with at least the Application Implementation Consultant and Application Implementation Manager job roles.

As a security guideline, define an IT security manager user who in turn defines one or more implementation users to set up enterprise structures. The IT security manager users can provision the implementation user with the Application Implementation Consultant role, which entitles access to all enterprise structures. Or the IT security manager can create a data role that restricts access to enterprise structures of a specific product and provisioning that role.

Depending on the size of your implementation team, you may only need a single implementation user for security administration, implementation project management, enterprise structures setup, and application implementation. That single user must then be provisioned with all indicated roles, and therefore broad access.

**Creating Implementation Users**

The super user creates one or more implementation users by performing the Create Implementation Users task.

---

**Note**

This initial implementation user is a user account created in Oracle Identity Management only, specifically for setting up enterprise structures, and is not related to a real person or identity such as a user defined in HCM.
Creating Data Roles for Implementation Users

As an alternative to provisioning an implementation user with the Application Implementation Consultant role to access all enterprise structures, you may need implementation users with access restricted to enterprise structures for specific products. In this case, use the Create Data Roles for Implementation Users task to create a data role based on a job role with less broad access, such as the HCM Application Administrator job role.

Provisioning Roles to Implementation Users

After creating an implementation user, you must provision the user with one or more roles by performing the Provision Roles to Implementation Users task.

For example, assign a role to the implementation user that provides the access necessary for setting up the enterprise. Depending on need, provision to the implementation user the predefined Applications Implementation Consultant role or a product family-specific administrator data role, such as a data role based on the predefined Financials Applications Administrator.

Caution

The Application Implementation Consultant has broad access. It is a very useful role for experimentation or setting up a pilot environment, but may not be suitable for implementation users in a full implementation project.

Initial Security Administration: Worked Example

This example illustrates initial security administration after having installed and provisioned an Oracle Fusion Applications environment.

In Oracle Fusion Applications, you manage users and security through Oracle Fusion Human Capital Management (HCM) user management flows, which are included in each of the offering task lists. However, the HCM task flows require that enterprise structures have been set up, and yet to add users who can set up enterprise structures you need to have set up HCM. Therefore, you need to create one or more initial implementation users who are responsible for providing the following.

- Users and their applications security management
- Implementation project management
- Initial enterprise structures management

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decision</th>
<th>In this Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to sign in to Oracle Fusion Applications for the first time</td>
<td>Use the super user account that was created when installing and provisioning Oracle Fusion Applications (for example, FAADMIN).</td>
</tr>
<tr>
<td>How to ensure that the roles and users in the Lightweight Directory Access Protocol (LDAP) store match what is available for selection when defining implementation users</td>
<td>Perform the Run User and Roles Synchronization Process task.</td>
</tr>
<tr>
<td>How to create a first implementation user</td>
<td>Prepare the IT Security Manager job role for user and role management so the super user and any other user provisioned with the IT Security Manager job role can manage users and roles.</td>
</tr>
<tr>
<td>How to establish security administration users</td>
<td>Define an IT security manager user provisioned with the IT Security Manager job role.</td>
</tr>
<tr>
<td>How to establish an implementation user with access to set up enterprise structures</td>
<td>Define an implementation user provisioned with the Application Implementation Consultant job role.</td>
</tr>
</tbody>
</table>

You create an initial implementation user by performing the following tasks.

1. The Oracle Identity Management System Administrator user provisions the IT Security Manager job role with roles for user and role management.
2. The Oracle Fusion Applications super user synchronizes LDAP users with HCM user management so that users can be provisioned with roles through HCM.
3. The Oracle Fusion Applications super user performs the Create Implementation Users task to create one or more IT security manager and administrator users provisioned with security administrative entitlement.
4. The IT Security Manager user signs in to Oracle Fusion Applications and performs the Create Implementation Users task to create implementation managers and users.
5. The IT Security Manager user provisions implementation users for enterprise structure setup.

Note

The following tasks assume that the super user has configured an offering and set up task lists. When not following a task flow within an activity, you can find tasks in Navigator > Tools > Setup and Maintenance > All Tasks. Search for the task and click its Go to Task icon in the search results.

Preparing the IT Security Manager Role

The super user that was created when installing and provisioning Oracle Fusion Applications (for example, FAADMIN), or the initial administrator user provided by Oracle for Oracle Cloud Application Services, has all necessary access for implementing Oracle Fusion Applications and administering security. This access is provided by the following roles:

- Application Implementation Consultant
- IT Security Manager

Neither of these roles provides access needed for creating and managing Oracle Fusion Applications users. Therefore, you must add the following two OIM roles to the IT Security Manager role:

- Identity User Administrators
Role Administrators

The following procedure is prerequisite to an IT security manager or administrator creating an initial one or more implementation users.

1. While signed into Oracle Identity Manager as the OIM System Administrator user, click the Administration link in the upper right of the Oracle Identity Manager.

   This accesses the Welcome to Identity Manager Delegated Administration menu.

2. In the Roles list of tasks, click Advanced Search - Roles. Search for the Identity Users Administrators role by entering the role name in Display Name and clicking Search.

   In the Search Results, click the role’s Display Name.

3. On the Hierarchy tab, select Inherits From and click Add.

4. In the Add Parent Role to: IDENTITY USER ADMINISTRATORS window, select the role category: Common - Job Roles and add the IT Security Manager.

   Click the arrow icon to show the list of available roles. Select IT Security Manager and move it to the Roles to Add list. Click Save.

5. Search for the Role Administrators role, and repeat steps 1 to 4 to add that role to the IT Security Manager role’s role inheritance.

6. Assign the IT Security Manager role to the Xellerate Users organization.
   a. In the Welcome to Identity Manager Delegated Administration menu (see step 1, above), in the Organizations list of tasks, click Advanced Search - Organizations.
   b. Search for the Xellerate Users organization by entering Xellerate Users in Display Name and clicking Search.
   c. In the Search Results, click the organization’s Display Name. The Xellerate Users page appears.
   d. Click the Administrative Roles link in the row of links above the Xellerate Users.
   e. In Filter By Role Name of the Details window, enter the following string:

      *IT_SECURITY_MANAGER*

   f. Click Find.
   g. Enable Read, Write, Delete, and Assign.
   h. Click Assign.
   i. Click Confirm.

Synchronizing Users and Roles from LDAP

Lightweight Directory Access Protocol (LDAP) must be synchronized with HCM user management so that users can be provisioned with roles through HCM.
1. Sign in to Oracle Fusion Applications using the super user’s user name (for example FAADMIN) and password.

If you do not know the super user name and password, check with your system administrator or the person who installed Oracle Fusion Applications. For more information about account creation in Oracle Fusion Applications provisioning, see the Oracle Fusion Applications Installation Guide.

2. Perform the Run User and Roles Synchronization Process task by clicking Submit in the Process Details page.

The Retrieve Latest LDAP Changes process takes some time to complete the first time it is run.


**Defining an IT Security Manager User**

The super user has broad access to Oracle Fusion Middleware and Oracle Fusion Applications administration. Due to this broad access, your enterprise needs users dedicated to managing users and applications security, such as an IT security manager user.

1. While signed in as the Oracle Fusion Applications super user, access the Create Implementation Users task and create an IT security manager.

The Oracle Identity Manager appears.

2. Click Create User.

For details, see the Creating Users section in the Oracle Fusion Middleware User’s Guide for Oracle Identity Manager.

3. Provide the following attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last name</td>
<td>&lt;any valid string&gt;</td>
<td>Smith</td>
</tr>
<tr>
<td>Organization</td>
<td>Xellerate Users</td>
<td>N/A</td>
</tr>
<tr>
<td>User type</td>
<td>Non Worker</td>
<td>N/A</td>
</tr>
<tr>
<td>User login</td>
<td>&lt;any valid string&gt;</td>
<td>IT_SECURITY_MANAGER</td>
</tr>
<tr>
<td>Login password</td>
<td>&lt;any valid string&gt;</td>
<td>SeKur1TyPa$w0Rd</td>
</tr>
</tbody>
</table>

**Note**

In Oracle Fusion Applications, an implementation user is a user account created in OIM only, specifically for implementation tasks, and is not related to a real person or identity such as a user defined in HCM.

4. Click Save.

5. On the Roles tab in the IT_SECURITY_MANAGER user creation task flow, click Assign.
6. In the Add Role window, search for the IT Security Manager role and click Add.

**Defining an Implementation User for Enterprise Structures Setup**

1. Sign in to Oracle Fusion Applications using the IT security manager user’s name and password.

2. Create and provision an implementation user using the same task flow as for creating the IT security manager user in the previous section, except provision the following roles.
   
   • Application Implementation Manager
   
   • Application Implementation Consultant

**Note**

For an implementation to begin, at least one user must be provisioned with the Application Implementation Manager role, and another or the same user must be provisioned with the Application Implementation Consultant role. The Application Implementation Consultant has broad access to set up all enterprise structures.

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**Define Currencies and Currency Rates**

**Defining Currencies: Points to Consider**

When creating or editing currencies, consider these points relevant to entering the currency code, date range, or symbol for the currency.

**Currency Codes**

You cannot change a currency code after you enable the currency, even if you later disable that currency.

**Date Ranges**

Users can enter transactions denominated in the currency only for the dates within the specified range. If you do not enter a start date, then the currency is valid immediately. If you do not enter an end date, then the currency is valid indefinitely.

**Symbols**

Even if you enter a symbol for a currency, the symbol is not always displayed when an amount is displayed in this currency. Some applications use currency
symbols when displaying amounts. Others, like Oracle Fusion General Ledger, do not.

**Euro Currency Derivation: Explained**

Use the Derivation Type, Derivation Factor, and Derivation Effective Date fields to define the relationship between the official currency (Euro) of the European Monetary Union (EMU) and the national currencies of EMU member states. For each EMU currency, you define its Euro-to-EMU fixed conversion rate and the effective starting date.

**Note**

If you need to use a different currency code for Euro, you can disable the predefined Euro currency and create a new one.

**Derivation Type**

The Euro currency derivation type is used only for the Euro, and the Euro derived derivation type identifies national currencies of EMU member states. All other currencies do not have derivation types.

**Derivation Factor**

The derivation factor is the fixed conversion rate by which you multiply one Euro to derive the equivalent EMU currency amount. The Euro currency itself should not have a derivation factor.

**Derivation Effective Date**

The derivation effective date is the date on which the relationship between the EMU currency and the Euro begins.

**Creating Conversion Rate Types: Critical Choices**

Maintain different conversion rates between currencies for the same period with the Oracle Fusion General Ledger conversion rate types functionality. Four predefined daily conversion rate types are seeded: Spot, Corporate, User, and Fixed, allowing you to use different rate types for different business needs. During journal entry, the conversion rate is provided automatically by the General Ledger based on the selected conversion rate type and currency, unless the rate type is user. For user rate types, you must enter the conversion rate. Define additional rate types as needed. Set your most frequently used rate type as the default. Conversion rate types cannot be deleted.

Assign conversion rate types to automatically populate the associated rate for your period average and period end rates for the ledger. For example, you can
assign the predefined rate type **Spot** to populate your period average rates and the predefined rate type **Corporate** to populate your period end rates. Period average and period end rates are used in translation of account balances.

Conversion rate types are used to automatically assign a rate when you perform the following accounting functions:

- Convert foreign currency journal amounts to ledger currency equivalents
- Convert journal amounts from source ledgers to reporting currencies or secondary ledgers
- Run Revaluation or Translation processes

In creating new conversion rates, decide whether to do the following:

- Enforce inverse relationships
- Select pivot currencies
- Select contra currencies
- Enable cross rates and allow cross rate overrides
- Maintain cross rate rules

### Enforce Inverse Relationships

Check the **Enforce Inverse Relationship** check box to specify whether or not to enforce the automatic calculation of inverse conversion rates when defining daily rates.

<table>
<thead>
<tr>
<th>Action</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checked</td>
<td>When you enter a daily rate to convert currency A to currency B, General Ledger automatically calculates the inverse rate, currency B to A, and enters it in the adjacent column. If either rate is changed, the application automatically recalculates the other rate. You can update the application calculated inverse rate, but once you do, the related rate is updated. The check box enforces that the inverse relationship is maintained but does not prevent you from updating the rates.</td>
</tr>
<tr>
<td>Unchecked</td>
<td>General Ledger calculates the inverse rate but you can change the rate and update the daily rates table without the corresponding rate being updated.</td>
</tr>
</tbody>
</table>

### Select Pivot Currencies

Select a pivot currency that is commonly used in your currency conversions. A pivot currency is the central currency that interacts with contra currencies. For example, you set up a daily rate between the US dollar (USD) and the Euro currency (EUR) and another between the USD and the Canadian dollar (CAD). USD is the pivot currency in creating a rate between EUR and CAD.
EUR and CAD are the contra currencies. Select the pivot currency from the list of values which contains those currencies that are enabled, effective, and not a statistical (STAT) currency. The description of the pivot currency is populated automatically based on the currency definition.

If you want the application to create cross rates against a base currency, define the base currency as the pivot currency. Selected pivot currencies can be changed in the Rate Types page.

**Select Contra Currencies**

Select currencies available on the list of values as contra currencies. The available currencies are those currencies which are enabled, effective, not STAT currency, and not the pivot currency selected earlier. The description of the contra currency is populated automatically based on the currency definition. Add or delete contra currencies in the Contra Currencies region of the Rate Types page.

**Enable Cross Rates and Allow Cross Rate Overrides**

Check the **Enable Cross Rates** check box to calculate conversion rates based on defined currency rate relationships. General Ledger calculates cross rates based on your defined cross rate rules. Associate your cross rate rules with a conversion rate type, pivot currency, and contra currencies. Cross rates facilitate the creation of daily rates by automatically creating the rates between contra currencies based on their relationship to a pivot currency. If the **Enable Cross Rates** check box is changed to unchecked after entering contra currencies, the application stops calculating cross rates going forward for that particular rate type. All the earlier calculated cross rates for that rate type remain in the database unless you manually delete them.

For example, if you have daily rates defined for the pivot currency, USD to the contra currency, EUR, and USD to another contra currency, CAD, the application will automatically create the rates between EUR to CAD and CAD to EUR. This prevents the need to manually define the EUR to CAD and CAD to EUR rates.

Check the **Allow Cross Rates Override** check box to permit your users to override application generated cross rates. If you accept the default of unchecked, the application generated cross rates cannot be overridden.

**Maintain Cross Rate Rules**

Define or update your cross rate rules at any time by adding or removing contra currency assignments. Add a contra currency to a cross rate rule and run the Daily Rates Import and Calculation process to generate the new rates. If you remove a cross rate rule or a contra currency from a rule, any cross rates generated previously for that contra currency remain unless you manually delete them. Changes to the rule are not retroactive and will not affect previously stored cross rates. The Cross Rate process generates as many rates as possible and skips currencies where one component of the set is missing.

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**Note**
With a defined web service that extracts daily currency conversion rates from external services, for example Reuters, currency conversion rates are automatically updated for the daily rates and all cross currency relationships.

**Using Rate Types: Examples**

There are four seeded conversion rate types in Oracle Fusion applications:

- Spot
- Corporate
- User
- Fixed

**Scenario**

You are the general ledger accountant for InFusion America Inc. You are entering a journal entry to capture three transactions that were transacted in three different foreign currencies:

- Canadian dollar (CAD): A very stable currency
- Mexican Peso (MXP): A fluctuating currency
- Hong Kong dollar (HKD): An infrequently used currency

You enter two lines with accounts and amounts for each foreign currency transaction. Based on your company procedures, you select the appropriate rate type to populate the rate for **Corporate** and **Spot** rate types from your daily rates table. You manually enter the current rate for the **User** rate type.

<table>
<thead>
<tr>
<th>Currency Selected</th>
<th>Rate Type Selected</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD</td>
<td>Corporate</td>
<td>Entered a periodic type of transaction. Your company has established a daily rate to use for the entire month across divisions for all transactions in CAD. CAD is a stable currency that only fluctuates slightly over the month.</td>
</tr>
<tr>
<td>MXP</td>
<td>Spot</td>
<td>Entered a periodic type of transaction. Your company enters daily rates each day for MXP because this currency is unstable and fluctuates.</td>
</tr>
<tr>
<td>HKD</td>
<td>User</td>
<td>Entered a one time transaction. Your company does not maintain daily rates in HKD.</td>
</tr>
</tbody>
</table>

**Note**
Your company does not currently use the **Fixed** rate type. From January 1, 1999, the conversion rate of the French franc (FRF) against the euro currency (EUR) was set at a fixed rate of 1 EUR to 6.55957 FRF. Your French operations were started in 2007, so you maintain all your French business records in the EUR.

### Entering Daily Rates Manually: Worked Example

You are required to enter the daily rates for currency conversion from Great Britain pounds sterling (GBP) to United States dollars (USD) each day for your company InFusion America Inc.

Oracle Application Development Framework (ADF) Desktop Integration is an Excel add-in that must be loaded onto each client. Because ADF Desktop Integration is an add-in to Microsoft Office products, you can use this feature only if they have Microsoft Excel 2007 or above, Internet Explorer 7 or above, and Microsoft Windows 7, XP Professional SP2, or Vista. Users must download the installation files from **Navigator - Tools - Download Desktop Integrator Installer**.

#### Entering Daily Rates

1. Navigate to the Period Close work area.
   
   Use the Period Close work area to link to close processes and currency process.

2. Click the Manage Currency Rates link.
   
   Use the Currency Rates Manager page to create, edit, and review currency rate types, daily rates, and historical rates.

3. Click the Daily Rates tab.
   
   Use the Daily Rates tab to review and enter currency rates.

4. Click the Create in Spreadsheet button.
   
   Use the Create Daily Rates spreadsheet to enter daily rates in a template that you can save and reuse.

5. Click in the From Currency field. Select the GBP - Pound Sterling list item.

6. Click in the To Currency field. Select the USD - US Dollar list item.

7. Click in the Conversion Rate field. Select the Spot list item.

8. Click in the From Conversion field. Enter the desired information into the From Conversion field. Enter a valid value e.g. "8/1/2011".

9. Click in the To Conversion Date field. Enter the desired information into the To Conversion Date field. Enter a valid value e.g. "8/1/2011".

10. Click in the Conversion Rate field. Enter the desired information into the Conversion Rate field. Enter a valid value e.g. "1.33225".

11. Click the Submit button. Click the OK button twice.

12. Review the Record Status column to verify that all rows were loaded successfully.
13. Save the template to use to enter daily rates frequently. You can save the spreadsheet to either a local drive or a shared network drive.

**Updating Currency Rates: Worked Example**

You are required to change today’s daily rates that were already entered. The rates you are changing are for currency conversion from Great Britain pounds sterling (GBP) to United States dollars (USD) for your company InFusion America Inc.

Currency conversion rates were entered by an automatic load to the Daily Rates table. They can also be entered through a spreadsheet.

**Updating Currency Rates**

1. Navigate to the Period Close work area.
   
   Use the Period Close work area to link to close processes and currency process.

2. Click the Manage Currency Rates link.
   
   Use the Currency Rates Manager page to create, edit, and review currency rate types, daily rates, and historical rates.

3. Click the Daily Rates tab.
   
   Use the Daily Rates tab to review and enter currency rates.

4. Click the From Currency list. Select the GBP - Pound Sterling list item.

5. Click the To Currency list. Select the USD - US Dollar list item.

6. Enter the dates for the daily rates that you are changing. Enter today’s date.

7. Click the Rate Type list. Select the Spot list item.

8. Click the Search button.

9. Click in the Rate field. Enter the new rate of 1.7 in the Rate field.

10. Click in the Inverse Rate field. Enter the new inverse rate of 0.58822 in the Inverse Rate field.

11. Click the Save button.

**FAQs for Currencies and Currency Rates**

**When do I create or enable currencies?**

Create currencies to use, for example for reporting purposes, if they are not already provided. All currencies from the International Organization for Standardization (ISO) 4217 standard are provided.
Enable any currency other than USD for use in Oracle Fusion Applications, for example for displaying monetary amounts, assigning to sets of books, entering transactions, and recording balances. Only USD is enabled by default.

**What’s the difference between precision, extended precision, and minimum accountable unit for a currency?**

Precision is the number of digits to the right of the decimal point used in regular currency transactions. Extended precision is the number of digits to the right of the decimal point used in calculations for this currency, and it must be greater than or equal to the standard precision. For example, USD would have 2 for precision because amounts are transacted as such, for example $1.00. For calculations, for example adding USD amounts, you might want the application to be more precise than two decimal digits, and would enter an extended precision accordingly.

**Note**

Some applications use extended precision. Others, such as Oracle Fusion General Ledger, do not.

Minimum accountable unit is the smallest denomination for the currency. For example, for USD that would be .01 for the cent. This unit does not necessarily correspond to the precision for all currencies.

**What’s a statistical unit currency type?**

The statistical unit currency type is used only for the Statistical (STAT) currency. The Statistical currency is used to record statistics such as the number of items bought and sold. Statistical balances can be used directly in financial reports, allocation formulas, and other calculations.

**What’s the difference between spot, corporate, user, and fixed rate types?**

Spot, corporate, user, and fixed conversion rate types differ based on the fluctuations of your entered foreign currency and your company procedures for maintaining daily rates.

<table>
<thead>
<tr>
<th>Rate Type</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot</td>
<td>For currencies with fluctuating conversion rates or when exact currency conversion is needed.</td>
</tr>
<tr>
<td>Corporate</td>
<td>For establishment of a standard rate across your organization for a stable currency.</td>
</tr>
<tr>
<td>User</td>
<td>For infrequent entries where your daily rates for the entered foreign currency are not set up.</td>
</tr>
<tr>
<td>Fixed</td>
<td>For rates where the conversion is constant between two currencies.</td>
</tr>
</tbody>
</table>
If you have infrequent foreign currency transactions, the user rate type can simplify your currency maintenance while providing an accurate conversion rate on the date of the transaction.

Define Enterprise Structures for Marketing

Enterprise Structures: Overview

Oracle Fusion Applications have been designed to ensure your enterprise can be modeled to meet legal and management objectives. The decisions about your implementation of Oracle Fusion Applications are affected by your:

- Industry
- Business unit requirements for autonomy
- Business and accounting policies
- Business functions performed by business units and optionally, centralized in shared service centers
- Locations of facilities

Every enterprise has three fundamental structures, legal, managerial, and functional, that are used to describe its operations and provide a basis for reporting. In Oracle Fusion, these structures are implemented using the chart of accounts and organizations. Although many alternative hierarchies can be implemented and used for reporting, you are likely to have one primary structure that organizes your business into divisions, business units, and departments aligned by your strategic objectives.

Legal Structure

The figure above shows a typical group of legal entities, operating various business and functional organizations. Your ability to buy and sell, own, and employ comes from your charter in the legal system. A corporation is a distinct legal entity from its owners and managers. The corporation is owned by its shareholders, who may be individuals or other corporations. There are many
other kinds of legal entities, such as sole proprietorships, partnerships, and government agencies.

A legally recognized entity can own and trade assets and employ people in the jurisdiction in which it is registered. When granted these privileges, legal entities are also assigned responsibilities to:

- Account for themselves to the public through statutory and external reporting
- Comply with legislation and regulations
- Pay income and transaction taxes
- Process value added tax (VAT) collection on behalf of the taxing authority

Many large enterprises isolate risk and optimize taxes by incorporating subsidiaries. They create legal entities to facilitate legal compliance, segregate operations, optimize taxes, complete contractual relationships, and isolate risk. Enterprises use legal entities to establish their enterprise’s identity under the laws of each country in which their enterprise operates.

In the figure above, a separate card represents a series of registered companies. Each company, including the public holding company, InFusion America, must be registered in the countries where they do business. Each company consists of various divisions created for purposes of management reporting. These are shown as vertical columns on each card. For example, a group might have a separate company for each business in the United States (US), but have their United Kingdom (UK) legal entity represent all businesses in that country. The divisions are linked across the cards so that a business can appear on some or all of the cards. For example, the air quality monitoring systems business might be operated by the US, UK, and France companies. The list of business divisions is on the Business Axis. Each company’s card is also horizontally striped by functional groups, such as the sales team and the finance team. This functional list is called the Functional Axis. The overall image suggests that information might, at a minimum, be tracked by company, business, division, and function in a group environment. In Oracle Fusion Applications, the legal structure is implemented using legal entities.

**Management Structure**

Successfully managing multiple businesses requires that you segregate them by their strategic objectives, and measure their results. Although related to your legal structure, the business organizational hierarchies do not need to be reflected directly in the legal structure of the enterprise. The management structure can include divisions, subdivisions, lines of business, strategic business units, and cost centers. In the figure above, the management structure is shown on the Business Axis. In Oracle Fusion Applications, the management structure is implemented using divisions and business units.

**Functional Structure**

Straddling the legal and business organizations is a functional organization structured around people and their competencies. For example, sales, manufacturing, and service teams are functional organizations. This functional structure is represented by the Functional Axis in the figure above. You reflect the efforts and expenses of your functional organizations directly on the income
statement. Organizations must manage and report revenues, cost of sales, and functional expenses such as research and development (R&D) and selling, general, and administrative (SG&A) expenses. In Oracle Fusion Applications, the functional structure is implemented using departments and organizations, including sales, marketing, project, cost, and inventory organizations.

Enterprise Structures Business Process Model: Explained

In Oracle Fusion Applications, the Enterprise Performance and Planning Business Process Model illustrates the major implementation tasks that you perform to create your enterprise structures. This process model includes the Set Up Enterprise Structures business process, which consist of implementation activities that span many product families. Information Technology is a second Business Process Model which contains the Set Up Information Technology Management business process. Define Reference Data Sharing is one of the activities in this business process and is important in the implementation of the enterprise structures. This activity creates the mechanism to share reference data sets across multiple ledgers, business units, and warehouses, reducing the administrative burden and decreasing the time needed to implement.

The following figure and chart describes the Business Process Model structures and activities.
<table>
<thead>
<tr>
<th>BPM Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Enterprise</td>
<td>Define the enterprise to capture the name of the deploying enterprise and the location of the headquarters. There is normally a single enterprise organization in a production environment. Multiple enterprises are defined when the system is used to administer multiple customer companies, or when you choose to set up additional enterprises for testing or development.</td>
</tr>
<tr>
<td>Define Enterprise Structures</td>
<td>Define enterprise structures to represent an organization with one or more legal entities under common control. Define internal and external organizations to represent each area of business within the enterprise.</td>
</tr>
<tr>
<td>Define Legal Jurisdictions and Authorities</td>
<td>Define information for governing bodies that operate within a jurisdiction.</td>
</tr>
<tr>
<td>Define Legal Entities</td>
<td>Define legal entities and legal reporting units for business activities handled by the Oracle Fusion Applications.</td>
</tr>
<tr>
<td>Define Business Units</td>
<td>Define business units of an enterprise to allow for flexible implementation, to provide a consistent entity for controlling and reporting on transactions, and to be an anchor for the sharing of sets of reference data across applications.</td>
</tr>
<tr>
<td>Define Financial Reporting Structures</td>
<td>Define financial reporting structures, including organization structures, charts of accounts, organizational hierarchies, calendars, currencies and rates, ledgers, and document sequences which are used in organizing the financial data of a company.</td>
</tr>
<tr>
<td>Define Chart of Accounts</td>
<td>Define chart of accounts including hierarchies and values to enable tracking of financial transactions and reporting at legal entity, cost center, account, and other segment levels.</td>
</tr>
<tr>
<td>Define Ledgers</td>
<td>Define the primary accounting ledger and any secondary ledgers that provide an alternative accounting representation of the financial data.</td>
</tr>
<tr>
<td>Define Accounting Configurations</td>
<td>Define the accounting configuration that serves as a framework for how financial records are maintained for an organization.</td>
</tr>
<tr>
<td>Define Facilities</td>
<td>Define inventory, item, and cost organizations. Inventory organizations represent facilities that manufacture or store items. The item master organization holds a single definition of items that can be shared across many inventory organizations. Cost organizations group inventory organizations within a legal entity to establish the cost accounting policies.</td>
</tr>
<tr>
<td>Define Reference Data Sharing</td>
<td>Define how reference data in the applications is partitioned and shared.</td>
</tr>
</tbody>
</table>

**Note**

There are product specific implementation activities that are not listed here and depend on the applications you are implementing. For example, you can
Global Enterprise Configuration: Points to Consider

Start your global enterprise structure configuration by discussing what your organization’s reporting needs are and how to represent those needs in the Oracle Fusion Applications. Consider deployment on a single instance, or at least, on as few instances as possible, to simplify reporting and consolidations for your global enterprises. The following are some questions and points to consider as you design your global enterprise structure in Oracle Fusion.

- Enterprise Configuration
- Business Unit Management
- Security Structure
- Compliance Requirements

Enterprise Configuration

What is the level of configuration needed to achieve the reporting and accounting requirements? What components of your enterprise do you need to report on separately? Which components can be represented by building a hierarchy of values to provide reporting at both detail and summary levels? Where are you on the spectrum of centralization versus decentralization?

Business Unit Management

What reporting do I need by business unit? How can you set up your departments or business unit accounts to achieve departmental hierarchies that report accurately on your lines of business? What reporting do you need to support the managers of your business units, and the executives who measure them? How often are business unit results aggregated? What level of reporting detail is required across business units?

Security Structure

What level of security and access is allowed? Are business unit managers and the people that report to them secured to transactions within their own business unit? Are the transactions for their business unit largely performed by a corporate department or shared service center?

Compliance Requirements

How do you comply with your corporate external reporting requirements and local statutory reporting requirements? Do you tend to prefer a corporate first or an autonomous local approach? Where are you on a spectrum of centralization, very centralized or decentralized?

Modeling Your Enterprise Management Structure in Oracle Fusion: Example

This example uses a fictitious global company to demonstrate the analysis that can occur during the enterprise structure configuration planning process.
Scenario

Your company, InFusion Corporation, is a multinational conglomerate that operates in the United States (US) and the United Kingdom (UK). InFusion has purchased an Oracle Fusion enterprise resource planning (ERP) solution including Oracle Fusion General Ledger and all of the Oracle Fusion subledgers. You are chairing a committee to discuss creation of a model for your global enterprise structure including both your US and UK operations.

InFusion Corporation

InFusion Corporation has 400 plus employees and revenue of $120 million. Your product line includes all the components to build and maintain air quality monitoring (AQM) systems for homes and businesses. You have two distribution centers and three warehouses that share a common item master in the US and UK. Your financial services organization provides funding to your customers for the start up costs of these systems.

Analysis

The following are elements you need to consider in creating your model for your global enterprise structure.

- Your company is required to report using US Generally Accepted Accounting Principles (GAAP) standards and UK Statements of Standard Accounting Practice and Financial Reporting Standards. How many ledgers do you need to achieve proper statutory reporting?

- Your managers need reports that show profit and loss (revenue and expenses) for their lines of business. Do you use business units and balancing segments to represent your divisions and businesses? Do you secure data by two segments in your chart of accounts which represents each department and legal entity or one segment that represents both to produce useful, but confidential management reports?

- Your corporate management requires reports showing total organizational performance with drill down capability to the supporting details. Do you need multiple balancing segment hierarchies to achieve proper rollup of balances for reporting requirements?

- Your company has all administrative, account payables, procurement, and human resources functions performed at their corporate headquarters. Do you need one or more business unit in which to perform all these functions? How will your shared service center be configured?

The following figure and table summarize the model that your committee has designed and uses numerical values to provide a sample representation of your structure. The model includes the following recommendations:

- Creation of three separate ledgers representing your separate legal entities:
  - InFusion America Inc.
  - InFusion Financial Services Inc.
  - InFusion UK Services Ltd.

- Consolidation of results for system components, installations, and maintenance product lines across the enterprise
- All UK general and administrative costs processed at the UK headquarters
- US Systems' general and administrative costs processed at US Corporate headquarters
- US Financial Services maintains its own payables and receivables departments
In this chart, the green globe stands for mandatory and gold globe stands for optional setup. The following statements expand on the data in the chart.

- The enterprise is mandatory because it serves as an umbrella for the entire implementation. All organizations are created within an enterprise.

- Legal entities are also mandatory. They can be optionally mapped to balancing segment values or represented by ledgers. Mapping balancing segment values to legal entities is mandatory if you plan to use the intercompany functionality.

- At least one ledger is mandatory in an implementation in which you record your accounting transactions.

- Business units are also mandatory because financial transactions are processed in business units.

- A shared service center is optional, but if used, must be a business unit.

- Divisions are optional and can be represented with a hierarchy of cost centers or by a second balancing segment value.

- Departments are mandatory because they track your employees.

- Optionally, add an item master organization and inventory organizations if you are tracking your inventory transactions in Oracle Fusion Applications.

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**Note**

Some Oracle Fusion Human Capital Management and Customer Relationship Management implementations do not require recording of accounting transactions and therefore, do not require implementation of a ledger.

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**Note**

The InFusion Corporation is a legal entity but is not discussed in this example.

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**Define Initial Configuration**

**Establishing Enterprise Structures Using the Enterprise Structures Configurator: Explained**

The Enterprise Structures Configurator is an interview-based tool that guides you through the process of setting up a basic enterprise structure. By answering questions about your enterprise, the tool creates a structure of divisions, legal entities, business units, and reference data sets that reflects your enterprise structure. After you create your enterprise structure, you also follow a guided process to determine whether or not to use positions, and whether to set up additional attributes for jobs and positions. After you define your enterprise structure and your job and position structures, you can review them, make any necessary changes, and then load the final configuration.
This figure illustrates the process to configure your enterprise using the Enterprise Structures Configurator.

To be able to use the Enterprise Structures Configurator, you must select the Enterprise Structures Guided Flow feature for your offerings on the Configure Offerings page in the Setup and Maintenance work area. If you do not select this feature, then you must set up your enterprise structure using individual tasks provided elsewhere in the offerings, and you cannot create multiple configurations to compare different scenarios.

**Establish Enterprise Structures**

To define your enterprise structures, you use the guided flow within the Establish Enterprise Structures task to enter basic information about your enterprise, such as the primary industry and the location of your headquarters. You then create divisions, legal entities, business units, and reference data sets. The Establish Enterprise Structures task enables you to create multiple enterprise configurations so that you can compare different scenarios. Until you load a configuration, you can continue to create and edit multiple configurations until you arrive at one that best suits your enterprise.

**Establish Job and Position Structures**

You also use a guided process to determine whether you want to use jobs only, or jobs and positions. The primary industry that you select in the Establish Enterprise Structures task provides the application with the information needed to make an initial recommendation. You can either accept the recommendation, or you can answer additional questions about how you manage people in your enterprise, and then make a selection. After you select whether to use jobs or positions, the guided process prompts you to set up a descriptive flexfield structure for jobs, and for positions if you have chosen to use them. Descriptive flexfields enable you to capture additional information when you create jobs and positions.
Review Configuration

Finally, you can review a summary of the results of the two interview processes. For each configuration, the online summary lists the divisions, legal entities, business units, reference data sets, and job and position structures that the application will create when you load the configuration.

For a more detailed analysis of a configuration, you can access the Technical Summary Report. This report lists the same information as the online summary, but also lists the following information that will be created by the application when you load the configuration, based on your configuration:

- Legislative data groups (the application creates one legislative data group for each country that is identified in the configuration.)
- Name of the legislative data group that will be assigned to the payroll statutory unit that is generated for each legal entity.
- Organization hierarchy.

The Technical Summary report also lists the default settings that will be loaded for these fields, which you access from the Manage Enterprise HCM Information task: Worker Number Generation, Employment Model and Allow Employment Terms Override. You can print the Technical Summary Report for each of your configurations and compare each scenario.

Note

If your PDF viewer preferences are set to open PDFs in a browser window, the Technical Summary report replaces the Oracle Fusion application. Use your browser’s Back button to return to the application.

Load Configuration

You can load only one configuration. When you load a configuration, the application creates the divisions, legal entities, business units, and so on. After you load the configuration, you then use individual tasks to edit, add, and delete enterprise structures.

Designing an Enterprise Configuration: Example

This example illustrates how to set up an enterprise based on a global company operating mainly in the US and the UK with a single primary industry.

Scenario

InFusion Corporation is a multinational enterprise in the high technology industry with product lines that include all the components that are required to build and maintain air quality monitoring (AQM) systems for homes and businesses. Its primary locations are in the US and the UK, but it has smaller outlets in France, Saudi Arabia, and the United Arab Emirates (UAE).

Enterprise Details

In the US, InFusion employs 400 people and has a company revenue of $120 million. Outside the US, InFusion employs 200 people and has revenue of $60 million.

Analysis

InFusion requires three divisions. The US division will cover the US locations. The Europe division will cover the UK and France. Saudi Arabia and the UAE will be covered by the Middle East division.
InFusion requires legal entities with legal employers, payroll statutory units, tax reporting units, and legislative data groups for the US, UK, France, Saudi Arabia, and UAE, in order to employ and pay its workers in those countries.

InFusion requires a number of departments across the enterprise for each area of business, such as sales and marketing, and a number of cost centers to track and report on the costs of those departments.

InFusion requires business units for human capital management (HCM) purposes. Infusion has general managers responsible for business units within each country. Those business units may share reference data. Some reference data can be defined within a reference data set that multiple business units may subscribe to. Business units are also required for financial purposes. Financial transactions are always processed within a business unit.

**Resulting Enterprise Configuration**

Based on this analysis, InFusion requires an enterprise with multiple divisions, ledgers, legal employers, payroll statutory units, tax reporting units, legislative data groups, departments, cost centers, and business units.

This figure illustrates the enterprise configuration that results from the analysis of InFusion Corporation.

**Division: Explained**

Managing multiple businesses requires that you segregate them by their strategic objectives and measure their results. Responsibility to reach objectives can be
delegated along the management structure. Although related to your legal structure, the business organizational hierarchies do not need to reflect directly the legal structure of the enterprise. The management entities and structure can include divisions and subdivisions, lines of business, and other strategic business units, and include their own revenue and cost centers. These organizations can be included in many alternative hierarchies and used for reporting, as long as they have representation in the chart of accounts.

**Divisions**

A division refers to a business oriented subdivision within an enterprise, in which each division organizes itself differently to deliver products and services or address different markets. A division can operate in one or more countries, and can be comprised of many companies or parts of different companies that are represented by business units.

A division is a profit center or grouping of profit and cost centers, where the division manager is responsible for attaining business goals including profit goals. A division can be responsible for a share of the company’s existing product lines or for a separate business. Managers of divisions may also have return on investment goals requiring tracking of the assets and liabilities of the division. The division manager reports to a top corporate executive.

By definition a division can be represented in the chart of accounts. Companies may choose to represent product lines, brands, or geographies as their divisions: their choice represents the primary organizing principle of the enterprise. This may coincide with the management segment used in segment reporting.

Oracle Fusion Applications supports a qualified management segment and recommends that you use this segment to represent your hierarchy of business units and divisions. If managers of divisions have return on investment goals, make the management segment a balancing segment. Oracle Fusion applications allows up to three balancing segments. The values of the management segment can be comprised of business units that roll up in a hierarchy to report by division.

Historically, divisions were implemented as a node in a hierarchy of segment values. For example, Oracle E-Business Suite has only one balancing segment, and often the division and legal entity are combined into a single segment where each value stands for both division and legal entity.

**Use of Divisions in Oracle Fusion Human Capital Management (HCM)**

Divisions are used in HCM to define the management organization hierarchy, using the generic organization hierarchy. This hierarchy can be used to create organization based security profiles.

**Legal Entities: Explained**

A legal entity is a recognized party with rights and responsibilities given by legislation.

Legal entities have the right to own property, the right to trade, the responsibility to repay debt, and the responsibility to account for themselves to regulators,
taxation authorities, and owners according to rules specified in the relevant legislation. Their rights and responsibilities may be enforced through the judicial system. Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, expenses and income, pay transaction taxes, or perform intercompany trading.

A legal entity has responsibility for elements of your enterprise for the following reasons:

- Facilitating local compliance
- Taking advantage of lower corporation taxation in some jurisdictions
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

**The Role of Your Legal Entities**

In configuring your enterprise structure in Oracle Fusion Applications, you need to understand that the contracting party on any transaction is always the legal entity. Individual legal entities own the assets of the enterprise, record sales and pay taxes on those sales, make purchases and incur expenses, and perform other transactions.

Legal entities must comply with the regulations of jurisdictions, in which they register. Europe now allows for companies to register in one member country and do business in all member countries, and the US allows for companies to register in one state and do business in all states. To support local reporting requirements, legal reporting units are created and registered.

You are required to publish specific and periodic disclosures of your legal entities’ operations based on different jurisdictions’ requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. These reports must be filed with specified national and regulatory authorities. For example, in the United States (US), your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), who enforces statutory reporting requirements for public corporations.

Individual entities privately held or held by public companies do not have to file separately. In other countries, your individual entities do have to file in their own name, as well as at the public group level. Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in a local currency, as well as being included in your enterprise’s reporting requirements in different currency.

A legal entity can represent all or part of your enterprise’s management framework. For example, if you operate in a large country such as the United Kingdom or Germany, you might incorporate each division in the country as a separate legal entity. In a smaller country, for example Austria, you might use a single legal entity to host all of your business operations across divisions.
Creating Legal Entities in the Enterprise Structures Configurator: Points to Consider

Using the Enterprise Structures Configurator (ESC), you can create legal entities for your enterprise automatically, based on the countries in which divisions of your business operate, or you can upload a list of legal entities from a spreadsheet.

Automatically Creating Legal Entities

If you are not certain of the number of legal entities that you need, you can create them automatically. To use this option, you first identify all of the countries in which your enterprise operates. The application opens the Map Divisions by Country page, which contains a matrix of the countries that you identified, your enterprise, and the divisions that you created. You select the check boxes where your enterprise and divisions intersect with the countries to identify the legal entities that you want the application to create. The enterprise is included for situations where your enterprise operates in a country and acts on behalf of several divisions within the enterprise and is a legal employer in a country. If you select the enterprise for a country, the application creates a country holding company.

The application automatically creates the legal entities that you select, and identifies them as payroll statutory units and legal employers. For each country that you indicated that your enterprise operates in, and for each country that you created a location for, the application also automatically creates a legislative data group.

Any legal entities that you create automatically cannot be deleted from the Create Legal Entities page within the Enterprise Structures Configurator. You must return to the Map Divisions by Country page and deselect the legal entities that you no longer want.

Example: Creating Legal Entities Automatically

InFusion Corporation is using the ESC to set up their enterprise structure. They have identified two divisions, one for Lighting, and one for Security. The Lighting division operates in Japan and the US, and the Security division operates in the UK and India.

This figure illustrates InFusion Corporation’s enterprise structure.
This table represents the selections that InFusion Corporation makes when specifying which legal entities to create on the Map Divisions by Country page.

<table>
<thead>
<tr>
<th>Country</th>
<th>Enterprise</th>
<th>InFusion Lighting</th>
<th>InFusion Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>US</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>UK</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>India</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Based on the selections made in the preceding table, the ESC creates the following four legal entities:

- InFusion Lighting Japan LE
- InFusion Lighting US LE
- InFusion Security UK LE
- InFusion Security India LE

**Creating Legal Entities Using a Spreadsheet**

If you have a list of legal entities already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, then add your legal entity information to the spreadsheet, and then upload directly to your enterprise configuration. You can export and import the spreadsheet multiple times to accommodate revisions.

**Legal Entity in Oracle Fusion: Points to Consider**

Oracle Fusion Applications support the modeling of your legal entities. If you make purchases from or sell to other legal entities, define these other legal entities in your customer and supplier registers, which are part of the Oracle Fusion Trading Community Architecture. When your legal entities are trading with each other, you represent both of them as legal entities and also as customers and suppliers in your customer and supplier registers. Use legal entity relationships to determine which transactions are intercompany and require intercompany accounting. Your legal entities can be identified as legal employers and therefore, are available for use in Human Capital Management (HCM) applications.

There are several decisions that need to be considered in creating your legal entities:

- The importance of legal entity in transactions
- Legal entity and its relationship to business units
- Legal entity and its relationship to divisions
- Legal entity and its relationship to ledgers
- Legal entity and its relationship to balancing segments
- Legal entity and its relationship to consolidation rules
• Legal entity and its relationship to intercompany transactions
• Legal entity and its relationship to worker assignments and legal employer
• Legal entity and payroll reporting
• Legal reporting units

The Importance of Legal Entity in Transactions

All of the assets of the enterprise are owned by individual legal entities. Oracle Fusion Financials allow your users to enter legal entities on transactions that represent a movement in value or obligation.

For example, the creation of a sales order creates an obligation for the legal entity that books the order to deliver the goods on the acknowledged date, and an obligation of the purchaser to receive and pay for those goods. Under contract law in most countries, damages can be sought for both actual losses, putting the injured party in the same state as if they had not entered into the contract, and what is called loss of bargain, or the profit that would have made on a transaction.

In another example, if you revalued your inventory in a warehouse to account for raw material price increases, the revaluation and revaluation reserves must be reflected in your legal entity's accounts. In Oracle Fusion Applications, your inventory within an inventory organization is managed by a single business unit and belongs to one legal entity.

Legal Entity and Its Relationship to Business Units

A business unit can process transactions on behalf of many legal entities. Frequently, a business unit is part of a single legal entity. In most cases the legal entity is explicit on your transactions. For example, a payables invoice has an explicit legal entity field. Your accounts payables department can process supplier invoices on behalf of one or many business units.

In some cases, your legal entity is inferred from your business unit that is processing the transaction. For example, your business unit A agrees on terms for the transfer of inventory to your business unit B. This transaction is binding on your default legal entities assigned to each business unit. Oracle Fusion Procurement, Oracle Fusion Projects, and Oracle Fusion Supply Chain applications rely on deriving the legal entity information from the business unit.

Legal Entity and Its Relationship to Divisions

The division is an area of management responsibility that can correspond to a collection of legal entities. If desired, you can aggregate the results for your divisions by legal entity or by combining parts of other legal entities. Define date-effective hierarchies for your cost center or legal entity segment in your chart of accounts to facilitate the aggregation and reporting by division. Divisions and legal entities are independent concepts.

Legal Entity and Its Relationship to Ledgers

One of your major responsibilities is to file financial statements for your legal entities. Map legal entities to specific ledgers using the Oracle Fusion General
Within a ledger, you can optionally map a legal entity to one or more balancing segment values.

**Legal Entity and Its Relationship to Balancing Segments**

Oracle Fusion General Ledger supports up to three balancing segments. Best practices recommend that one of these segments represents your legal entity to ease your requirement to account for your operations to regulatory agencies, tax authorities, and investors. Accounting for your operations means you must produce a balanced trial balance sheet by legal entity. If you account for many legal entities in a single ledger, you must:

1. Identify the legal entities within the ledger.
2. Balance transactions that cross legal entity boundaries through intercompany transactions.
3. Decide which balancing segments correspond to each legal entity and assign them in Oracle Fusion General Ledger Accounting Configuration Manager. Once you assign one balancing segment value in a ledger, then all your balancing segment values must be assigned. This recommended best practice facilitates reporting on assets, liabilities, and income by legal entity.

Represent your legal entities by at least one balancing segment value. You may represent it by two or three balancing segment values if more granular reporting is required. For example, if your legal entity operates in multiple jurisdictions in Europe, you might define balancing segment values and map them to legal reporting units. You can represent a legal entity by more than one balancing segment value, do not use a single balancing segment value to represent more than one legal entity.

In Oracle Fusion General Ledger, there are three balancing segments. You can use separate balancing segments to represent your divisions or strategic business units to enable management reporting at the balance sheet level for each division or business unit. For example, use this solution to empower your business unit and divisional managers to track and assume responsibility for their asset utilization or return on investment. Using multiple balancing segments is also useful when you know at the time of implementation that you are disposing of a part of a legal entity and need to isolate the assets and liabilities for that entity.

**Note**

Implementing multiple balancing segments requires every journal entry that is not balanced by division or business unit, to generate balancing lines. Also, you cannot change to multiple balancing segments easily after you have begun to use the ledger because your historical data is not balanced by the new multiple balancing segments. Restating historical data must be done at that point.

To use this feature for disposal of a part of a legal entity, implement multiple balancing segments at the beginning of the legal entity’s corporate life or on conversion to Oracle Fusion.

If you decided to account for each legal entity in a separate ledger, there is no requirement to identify the legal entity with a balancing segment value within the ledger.
Define Common Applications Configuration for Marketing

Note
While transactions that cross balancing segments don’t necessarily cross legal entity boundaries, all transactions that cross legal entity boundaries must cross balancing segments. If you make an acquisition or are preparing to dispose of a portion of your enterprise, you may want to account for that part of the enterprise in its own balancing segment even if it is not a separate legal entity. If you do not map legal entities sharing the same ledger to balancing segments, you will not be able to distinguish them using the intercompany functionality or track their individual equity.

Legal Entity and Its Relationship to Consolidation Rules

In Oracle Fusion Applications you can map legal entities to balancing segments and then define consolidation rules using your balancing segments. You are creating a relationship between the definition of your legal entities and their role in your consolidation.

Legal Entity and Its Relationship to Intercompany Transactions

Use Oracle Fusion Intercompany functionality for automatic creation of intercompany entries across your balancing segments. Intercompany processing updates legal ownership within the enterprise’s groups of legal entities. Invoices or journals are created as needed. To limit the number of trading pairs for your enterprise, set up intercompany organizations and assign them to your authorized legal entities. Define processing options and intercompany accounts to use when creating intercompany transactions and to assist in consolidation elimination entries. These accounts are derived and automatically entered on your intercompany transactions based on legal entities assigned to your intercompany organizations.

Intracompany trading, in which legal ownership isn’t changed but other organizational responsibilities are, is also supported. For example, you can track assets and liabilities that move between your departments within your legal entities by creating departmental level intercompany organizations.

Note
In the Oracle Fusion Supply Chain applications, model intercompany relationships using business units, from which legal entities are inferred.

Legal Entity and Its Relationship to Worker Assignments and Legal Employer

Legal entities that employ people are called legal employers in the Oracle Fusion Legal Entity Configurator. You must enter legal employers on worker assignments in Oracle Fusion HCM.

Legal Entity and Payroll Reporting

Your legal entities are required to pay payroll tax and social insurance such as social security on your payroll. In Oracle Fusion Applications, you can register payroll statutory units to pay and report on payroll tax and social insurance on behalf of many of your legal entities. As the legal employer, you might be
required to pay payroll tax, not only at the national level, but also at the local level. You meet this obligation by establishing your legal entity as a place of work within the jurisdiction of a local authority. Set up legal reporting units to represent the part of your enterprise with a specific legal reporting obligation. You can also mark these legal reporting units as tax reporting units, if the legal entity must pay taxes as a result of establishing a place of business within the jurisdiction.

Business Units: Explained

A business unit is a unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy. A business unit can process transactions on behalf of many legal entities. Normally, it will have a manager, strategic objectives, a level of autonomy, and responsibility for its profit and loss. Roll business units up into divisions if you structure your chart of accounts with this type of hierarchy. In Oracle Fusion Applications, you assign your business units to one primary ledger. For example, if a business unit is processing payables invoices they will need to post to a particular ledger. This assignment is mandatory for your business units with business functions that produce financial transactions.

In Oracle Fusion Applications, use business unit as a securing mechanism for transactions. For example, if you run your export business separately from your domestic sales business, secure the export business data to prevent access by the domestic sales employees. To accomplish this security, set up the export business and domestic sales business as two separate business units.

The Oracle Fusion Applications business unit model:

- Allows for flexible implementation
- Provides a consistent entity for controlling and reporting on transactions
- Anchors the sharing of sets of reference data across applications

Business units process transactions using reference data sets that reflect your business rules and policies and can differ from country to country. With Oracle Fusion Application functionality, you can choose to share reference data, such as payment terms and transaction types, across business units, or you can choose to have each business unit manage its own set depending on the level at which you wish to enforce common policies.

In countries where gapless and chronological sequencing of documents is required for subledger transactions, define your business units in alignment with your ledger definition, because the uniqueness of sequencing is only ensured within a ledger. In these cases, define a single ledger and assign one legal entity and business unit.

In summary, use business units in the following ways:

- Management reporting
- Processing of transactions
- Security of transactional data
- Reference data definition and sharing
**Brief Overview of Business Unit Security**

Business units are used by a number of Oracle Fusion Applications to implement data security. You assign data roles to your users to give them access to data in business units and permit them to perform specific functions on this data. When a business function is enabled for a business unit, the application can trigger the creation of data roles for this business unit based on the business function’s related job roles.

For example, if a payables invoicing business function is enabled, then it is clear that there are employees in this business unit that perform the function of payables invoicing, and need access to the payables invoicing functionality. Therefore, based on the correspondence between the business function and the job roles, appropriate data roles are generated automatically. Use Human Capital Management (HCM) security profiles to administer security for employees in business units.

**Creating Business Units in the Enterprise Structures Configurator: Points to Consider**

Business units are used within Oracle Fusion applications for management reporting, processing of transactions, and security of transactional data. Using the Enterprise Structures Configurator (ESC), you create business units for your enterprise either automatically or manually.

**Automatically Creating Business Units**

To create business units automatically, you must specify the level at which to create business units. Business units within your enterprise may be represented at the business function level, such as Sales, Consulting, Product Development, and so on, or they may be represented at a more detailed level, where a business unit exists for each combination of countries in which you operate and the functions in those countries.

You can automatically create business units at the following levels:

- Country
- Country and Division
- Country and business function
- Division
- Division and legal entity
- Division and business function
- Business function
- Legal entity
- Business function and legal entity

Select the option that best meets your business requirements, but consider the following:
• If you use Oracle Fusion Financials, the legal entity option is recommended because of the manner in which financial transactions are processed.

• The business unit level that you select determines how the application automatically creates reference data sets.

After you select a business unit level, the application generates a list of business units, and you select the ones you want the application to create. If you select a level that has two components, such as country and division, then the system displays a table listing both components, and you select the check boxes at the intersections of the components.

The business units listed by the application are suggestions only, and are meant to simplify the process to create business units. You are not required to select all of the business units suggested. When you navigate to the next page in the ESC guided flow, which is the Manage Business Units page, you cannot delete any of the business units that were created automatically. You must return to the Create Business Units page and deselect any business units that you no longer want.

**Example: Selecting Business Unit Levels**

InFusion Corporation is using the Enterprise Structures Configurator to set up their enterprise structure. They have identified two divisions, one for Lighting, and one for Security. They operate in four countries: US, UK, Japan, and India, and they have created a legal entity for each of the countries. The sales and marketing functions are based in both India and Japan, while the US and the UK have only the sales function.

This figure illustrates InFusion Corporation's enterprise structure.

<table>
<thead>
<tr>
<th>Business Unit Level</th>
<th>Suggested Business Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>• US</td>
</tr>
<tr>
<td></td>
<td>• UK</td>
</tr>
<tr>
<td></td>
<td>• Japan</td>
</tr>
<tr>
<td></td>
<td>• India</td>
</tr>
</tbody>
</table>
| Country and Division | • InFusion Lighting: Japan  
|                      | • InFusion Lighting: US  
|                      | • Infusion Security: UK  
|                      | • Infusion Security: India  
| Country and business function | • Sales: Japan  
|                               | • Marketing: Japan  
|                               | • Sales: US  
|                               | • Sales: UK  
|                               | • Marketing: India  
|                               | • Sales: India  
| Division | • InFusion Lighting  
|         | • InFusion Security  
| Division and Legal Entity | • InFusion Lighting: Japan  
|                           | • InFusion Lighting: US  
|                           | • Infusion Security: UK  
|                           | • Infusion Security: India  
| Division and Business Function | • InFusion Lighting, Sales  
|                                    | • InFusion Lighting, Marketing  
|                                    | • InFusion Security, Sales  
|                                    | • InFusion Security, Marketing  
| Business Function | • Sales  
|                  | • Marketing  
| Legal Entity | • Legal Entity: Japan  
|             | • Legal Entity: US  
|             | • Legal Entity: UK  
|             | • Legal Entity India  
| Legal Entity and Business Function | • Legal Entity: Japan, Sales  
|                                      | • Legal Entity: Japan, Marketing  
|                                      | • Legal Entity: US, Sales  
|                                      | • Legal Entity: UK, Sales  
|                                      | • Legal Entity India, Marketing  
|                                      | • Legal Entity India, Sales  

**Manually Creating Business Units**

If none of the levels for creating business units meets your business needs, you can create business units manually, and you create them on the Manage Business
Units page. If you create business units manually, then no reference data sets are created automatically. You must create them manually as well.

**Jobs and Positions: Critical Choices**

Jobs and positions represent roles that enable you to distinguish between tasks and the individuals who perform those tasks. The key to whether to use jobs or positions is how each is used. Positions offer a well-defined space independent of the person performing the job. Jobs are a space defined by the person. A job can be defined globally in the Common Set, whereas a position is defined within one business unit.

You can update the job and department of a position at any time. This is useful if you hire someone into a new role and want to transfer the position to another department.

During implementation, one of the earliest decisions you will make is whether to use jobs or a combination of jobs and positions. The determinants for this decision are:

- The primary industry of your enterprise
- How you manage your people

**Primary Industry of Your Enterprise**

Primary industries and how they usually set up their workforce are listed in the table below.

<table>
<thead>
<tr>
<th>Primary Industry</th>
<th>Workforce Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>Positions</td>
</tr>
<tr>
<td>Utilities</td>
<td>Positions</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Positions</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>Positions</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>Positions</td>
</tr>
<tr>
<td>Educational Services</td>
<td>Positions</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>Positions</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td>Jobs</td>
</tr>
<tr>
<td>Construction</td>
<td>Jobs</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>Jobs</td>
</tr>
<tr>
<td>Information</td>
<td>Jobs</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>Jobs</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>Jobs</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>Jobs</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>Jobs</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td>Jobs</td>
</tr>
</tbody>
</table>
Management of People

The following table displays suggestions of whether to use jobs or a combination of jobs and positions based on your industry and how you manage your employees when there is turnover.

<table>
<thead>
<tr>
<th>Industry</th>
<th>We always replace employees by rehiring to same role</th>
<th>We replace the head count, but the manager can use the head count in a different job</th>
<th>We rehire to the same position, but the manager can request a reallocation of budget to a different post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project (An industry that supports project-based forms of organization in which teams of specialists from both inside and outside the company report to project managers.)</td>
<td>Positions</td>
<td>Jobs</td>
<td>Jobs</td>
</tr>
<tr>
<td>Controlled (An industry that is highly structured in which all aspects of work and remuneration are well organized and regulated.)</td>
<td>Positions</td>
<td>Positions</td>
<td>Positions</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Retail</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Education</td>
<td>Positions</td>
<td>Jobs</td>
<td>Positions</td>
</tr>
<tr>
<td>Other</td>
<td>Positions</td>
<td>Jobs</td>
<td>Jobs</td>
</tr>
</tbody>
</table>

Positions: Examples

Positions are typically used by industries that use detailed approval rules, which perform detailed budgeting and maintain head counts, or have high turnover rates.

Retail Industry

ABC Corporation has high turnover. It loses approximately 5% of their cashiers monthly. The job of cashier includes three positions: front line cashier, service desk cashier, and layaway cashier. Each job is cross trained to take over another cashier position. When one cashier leaves from any of the positions, another existing cashier from the front line, service desk or layaway can assist where needed. But to ensure short lines and customer satisfaction, ABC must replace each cashier lost to turnover.

Since turnover is high in retail it is better for this industry to use positions. There is an automatic vacancy when an employee terminates employment. The position exists even when there are no holders. This is important if the person who leaves the company is a manager or supervisor with direct reports. All direct reports continue reporting to the position even if it is empty. You do
not need to reassign these employees to another manager or supervisor; the replacement manager is assigned to the existing position.

Also, an advantage to using positions is that when you hire somebody new many of the attributes are defaulted in from the position. This speeds up the hiring process.

This figure illustrates the retail position setup.

Health Care Industry

The hospital has a structured head count and detailed budgeting. For example, a specific number of surgeons, nurses, and interns of various types are needed. These positions need to be filled in order for the hospital to run smoothly. Use jobs and positions if you need to apply detailed head count rules.

Health care is an industry that needs to regulate employment, roles, and compensation according to strict policies and procedures. Fixed roles tend to endure over time, surviving multiple incumbents. Industries that manage roles rather than individuals, where roles continue to exist after individuals leave, typically model the workforce using positions.

This figure illustrates the hospital position setup.
Jobs: Example

Jobs are typically used without positions by service industries where flexibility and organizational change are key features.

Software Industry

For example, XYZ Corporation has a director over the departments for developers, quality assurance, and technical writers. Recently, three developers have left the company. The director decides to redirect the head count to other areas. Instead of hiring all three back into development, one person is hired to each department, quality assurance, and technical writing.

In software industries, the organization is fluid. Using jobs gives an enterprise the flexibility to determine where to use head count, because the job only exists through the person performing it. In this example, when the three developers leave XYZ Corporation, their jobs no longer exist, therefore the corporation has the flexibility to move the headcount to other areas.

This figure illustrates the software industry job setup.

Job and Position Structures: Explained

Job and position structures identify the descriptive flexfield structure that enables you to specify additional attributes that you want to capture when you define jobs and positions. Job and position attributes provide further detail to make jobs and positions more specific. You also use attributes to define the structure of your jobs and positions. You can specify attributes at the enterprise level for jobs and positions, at the business unit level for positions, and at the reference data set level for jobs. Job and position structures are optional.

Enterprise-Level Job Attributes

When you define a job, you enter a value for the name of the job. To make job names more specific, set up attributes that enable you to identify additional details about the job, such as the nature of the work that is performed or the relative skill level required for the job. If these attributes apply to all jobs within your enterprise, set up enterprise-level job attributes. Standard capabilities mean that you can use the different segments of the name to identify common jobs or job holders for analysis or compensation, or for grouping records in reports, for
example, to find all jobs of a specific job type. You should not use attributes with values that change regularly, for example, salary ranges or expense approval levels that change every year.

This figure illustrates how job type and job level provide further details for the HR Application Specialist job.

Enterprise-Level Position Attributes

Position attributes at the enterprise level are similar to those for jobs. Each position that you define identifies a specific role in the enterprise, which you can manage independently of the person in the position, and it will belong to one specific department or organization. The name of each position must be unique. To simplify the process of managing unique names for positions, set up enterprise-level attributes to identify separate components of the position name. For example, you can set up an attribute for position title and one for position number. When defining the attributes that make up the structure of a position name you should also consider if any of your attributes are part of the definition of a common job type. Using job types for a position can help you manage common information that applies to many different positions. For example you can define a job type of Manager.Level 1 and use this for comparison of positions across departments or lines or business, or for setting common job requirements. You can then define multiple manager type positions in your HR department, each of which has responsibility for a different management function or group.

This figure illustrates how title and position number provide further details for the manager position.
Business Unit-Level Attributes for Positions

If you have information that you want to capture for positions that is specific to each business unit, then you can define attributes at the business unit level for positions. When you create positions, these attributes appear in addition to any enterprise-level attributes. For example, you may want to identify the sales region for all positions in the sales business unit. You can set up a text attribute called Sales Region and use it to enter the necessary information when creating positions for the sales business unit.

Reference Data Set-Level Attributes for Jobs

If you have information for jobs that applies to specific reference data sets, set up attributes for jobs at the reference data set level. When you create jobs, these attributes appear in addition to any enterprise-level attributes. For example, you may want to identify all information technology (IT) jobs within a specific set. You can set up a text attribute called Function and use it to enter IT in jobs that you create that perform an IT function within a specific set.

FAQs for Define Initial Configuration

What happens if I don't use the Enterprise Structures Configurator to set up my enterprise structures?

The Enterprise Structures Configurator is an interview-based tool that guides you through setting up divisions, legal entities, business units, and reference data sets. The tool also enables you to assign reference data sets to business units and locations. You can set up multiple configurations to perform what-if scenarios, and then print each configuration to compare the resulting enterprise structure. If you do not use the Enterprise Structures Configurator, then you must set up your enterprise structure using the individual tasks that correspond to each enterprise component. In addition, you will not be able to set up multiple configurations and compare different scenarios. It is recommended that you use the Enterprise Structures Configurator.

What's an ultimate holding company?

The legal entity that represents the top level in your organization hierarchy, as defined by the legal name entered for the enterprise. This designation is used only to create an organization tree, with the ultimate holding company as the top level, divisions and country holding companies as the second level, and legal employers as the third level.

Define Enterprise for Marketing

Enterprise: Explained

An enterprise consists of legal entities under common control and management.

Enterprise Defined

When implementing Oracle Fusion Applications you operate within the context of an enterprise that has already been created in the application for you. This
is either a predefined enterprise or an enterprise that has been created in the application by a system administrator.

An enterprise organization captures the name of the deploying enterprise and the location of the headquarters. There is normally a single enterprise organization in a production environment. Multiple enterprises are defined when the system is used to administer multiple customer companies, for example, multiple tenants, or when a customer chooses to set up additional enterprises for testing or development.

Oracle Fusion Applications offers capabilities for multiple tenants to share the same applications instance for some human resources processes. If you offer business process outsourcing services to a set of clients, each of those clients may be represented as an enterprise within an Oracle Fusion Application instance. To support this functionality, system owned reference data such as sequences, sets, and flexfields are also defined within an enterprise.

In Oracle Fusion Applications, an organization classified as an enterprise is defined before defining any other organizations in the HCM Common Organization Model. All other organizations are defined as belonging to an enterprise.

Managing Enterprise Information for Non-Oracle Fusion HCM Users: Explained

The Manage Enterprise HCM Information task includes default settings for your enterprise such as the employment model, worker number generation, and so on. If you are not implementing Oracle Fusion Human Capital Management (HCM), then the only action you may need to perform using this task is to change the enterprise name, if necessary. The other settings are HCM-specific and are not relevant outside of Oracle Fusion HCM.

Locations: Explained

A location identifies physical addresses of a workforce structure, such as a department or a job. You can also create locations to enter the addresses of external organizations that you want to maintain, such as employment agencies, tax authorities, and insurance or benefits carriers.

The locations that you create exist as separate structures that you can use for reporting purposes, and also in rules that determine employee eligibility for various types of compensation and benefits. You enter information about a location only once. Subsequently, when you set up other workforce structures you select the location from a list.

Location Sets

When you create a location, you must associate it with a set. Only those users who have access to the set’s business unit can access the location set and other associated workforce structure sets, such as those that contain departments and jobs.

You can also associate the location to the common set so that users across your enterprise can access the location irrespective of their business unit. When users search for locations, they can see the locations that they have access to along with the locations in the common set.
The following figure shows how locations sets restrict access to users.

Creating Multiple Locations Simultaneously

If you have a list of locations already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, then add your location information to the spreadsheet, and then upload directly to your enterprise configuration. You can upload the spreadsheet multiple times to accommodate revisions.

FAQs for Define Enterprise for Marketing

Why can't I see my location in the search results?

You can search for approved locations only. Also, if you created a location in Oracle Fusion Trading Community Model, then you can't access that location from Oracle Fusion Global Human Resources. For use in Oracle Fusion HCM, you must recreate the location from the Manage Locations page.

What happens if I select a geographic hierarchy node when I'm creating or editing a location?

The calendar events that were created for the geographical node start to apply for the location and may impact the availability of worker assignments at that location. The geographical hierarchy nodes available for selection on the Locations page display from a predefined geographic hierarchy.

What happens if I select an inventory organization when I'm creating or editing a location?

The location is available for selection in purchase documents of that inventory organization in Oracle Fusion Inventory Management. If you don’t select an inventory organization, then the location is available in purchase documents across all inventory organizations.
What happens if I inactivate a location?

Starting from the effective date that you entered, you can no longer associate the location with other workforce structures, assignments, or applications. If the location is already in use, it will continue to be available to the components that currently use it.

How can I associate a location with an inventory organization?

From the Manage Locations page in Oracle Fusion Global Human Resources.

To appear on the Create or Edit Location pages, your inventory organization must be effective on today’s date and must exist in the location set that you selected.

Define Geographies

Geography Structure, Hierarchy, and Validation: How They Fit Together

There are three components that are dependent on each other when defining a country: geography structure, geography hierarchy, and geography validation. Every country has to have the geography structure defined first before the hierarchy can be defined, and the geography hierarchy has to be defined before the validation can be defined.

Geography Structure

Firstly, you need to create a geography structure for each country to define which geography types are part of the country structure, and how the geography types are hierarchically related within the country structure. For example, you can create geography types called State, City, and Postal Code. Then you can rank the State geography type as the highest level within the country, the City as the second level, and the Postal Code as the lowest level within the country structure. Geography structure can be defined using the Manage Geographies task, or can be imported using tasks in the Define Geographies activity.

Geography Hierarchy

Once the geography structure is defined, the geographies for each geography type can be added to the hierarchy. For example, below the United States you can create a geography called California using a State geography type.

As part of managing the geography hierarchy you can view, create, edit, and delete the geographies for each geography type in the country structure. You can also add a primary and alternate name and code for each geography. A geography hierarchy can be created using the Manage Geographies task, or can be imported using tasks in the Define Geographies activity.

Geography Validation

After defining the geography hierarchy, you need to specify the geography validations for the country. You can choose which address style formats you would like to use for the country, and for each selected address style format you can map geography types to address attributes. You can also select which
geography types should be included in geography or tax validation, and which
geography types will display in a list of values during address entry in other
user interfaces. The geography validation level for the country, such as error or
warning, can also be selected.

Geography Structures: Explained

A geography structure is a hierarchical grouping of geography types for a
country. For example, the geography structure for the United States is the
geography type of State at the top, then followed by the County, then the City,
and finally the Postal Code.

You can use the geography structure to establish:

- How geographies can be related
- The types of geographies you can define for the country

How Geographies Can Be Related

You can determine how a country’s geographies are hierarchically related by
creating the hierarchy of the geography types in the geography structure. When
you define a country’s structure the country geography type is implicitly at the
top of the geography structure, and the numbering of the subsequent levels start
with 1 as the next geography level after country.

You must add a geography type as a level in the country structure before you
can define a geography for that geography type in a country. For example, before
defining the state of California, the State geography type must be added to the
United States country structure. Only one geography type can be used for each
level, you cannot define more than one geography type at the same level.

Note

After you first define a country structure you can only add geography types
below the current lowest level, and delete geography types without defined
geographies.

To simplify the creation of a country structure you can copy a structure from
another country, and then amend the geography type hierarchy for the country.

The Types of Geographies You Can Define for the Country

The application provides you with a set of available master reference geography
types. If required, you can create a geography type before adding it to the
country structure. Each geography type is added below the current lowest level.

Note

If you want to delete a geography type that is not at the lowest level in the
country structure, then you have to delete the geography type level and all the
levels below it.
A geography type that you create within the country structure can be used for other country structures as well.

**Geography Hierarchy: Explained**

Geography hierarchy is a data model that lets you establish conceptual parent-child relationships between geographies. A geography, such as Tokyo or Peru, describes a boundary on the surface of the earth. The application can extrapolate information based on this network of hierarchical geographical relationships.

For example, in the geography hierarchy the state of California is defined as the parent of San Mateo county, which is the parent of Redwood City, which is the parent of the postal code 94065. If you enter just 94065, the application can determine that the postal code is in California, or that the corresponding city is Redwood City.

The application leverages geography hierarchy information to facilitate business processes that rely on geography information, for example, tax calculation, order sourcing rules, sales territory definition. The geography hierarchy information is centrally located in the Trading Community Model and shared among other application offerings.

The top level of the geography hierarchy is Country, so the hierarchy essentially contains countries and their child geographies. Other aspects of the geography hierarchy include:

- Geography
- Geography type
- Geography usage
- Master reference geography hierarchy
- User defined zones

**Geography**

A geography is a boundary such as a country, state, province or city. It is a physical space with boundaries that is a defined instance of a geography type. For example, San Jose is a geography of the City geography type.

**Geography Type**

Geography types are a divisional grouping of geographies, which can be either geopolitical (for example, City, Province, and District) or user defined (for example, Continent, Country Regions, Tax Regions).

**Geography Usage**

Geography usage indicates how a geography type or geography is used in the application. A master reference geography always has the usage of Master Reference. User defined zones can have the usages of Tax, Shipping, or Territory, based on what is relevant for their purpose.
Master Reference Geography Hierarchy

The geography hierarchy data is considered to be the single source of truth for geographies. It is all the data, including geography types and geographies, that you define and maintain in the Trading Community Model tables.

The geography usage for the entire hierarchy is the master reference, and defined geography types and geographies are considered as master reference geography types and geographies. For example, Country is a universally recognized geography type, and United States is considered a master geography.

User Defined Zones

User defined zones are a collection of geographical data, created from master reference data for a specific purpose. For example, territory zones are collections of master reference geographies ordered in a hierarchy. Tax and shipping zones are collections of master reference geographies without a hierarchical grouping.

Geography Validation: Explained

Geography validation determines the geography mapping and validation for a country’s address styles, as well as the overall geography validation control for a country.

The No Styles Format address style format is the default address style format for a country. By defining the mapping and validation for this format you will ensure that validations can be performed for any address in the country. After the No Styles Format is defined you can set up additional mapping for specific address styles.

For each address style format, you can define the following:

- Map to attribute
- Enable list of values
- Tax validation
- Geography validation
- Geography validation control

Map to Attribute

For every address style format, you can map each geography type to an address attribute. For example, you can map the State geography type to the State address attribute for the United States, or map the State geography type to the County address attribute for the United Kingdom. The geography types that appear are based on how the country structure is defined. The list of address attributes that appear are based on address formats delivered with the application, or your customer defined address formats.

Note
You only need to map geography types that you want to use for geography or tax validation purposes.

**Enable List of Values**

Once a geography type is mapped to an attribute, then you can specify whether the geography type will appear in a list of values during address entry in user interfaces. It is very important to review carefully if you want to enable a list of values. You should only enable a list of values if you have sufficient geography data imported or created for that geography. Once you have enabled a list of values for an address attribute, you can only select the geography data available for the geography type. This means that if a specific geography value is not available in the geography hierarchy, you cannot create an address with a different geography value.

**Tax Validation**

You can also specify whether a geography type will be included in tax validation. For example, for the United States North America address style format you specify that County, State, and City are used for tax validation. This will mean that when a transaction involves an address with the North America address style, the address must have the correct county, state, and city combination based on the geography hierarchy data, to be considered valid for tax calculation.

**Geography Validation**

You can specify whether a geography type will be included in geography validation. This will mean that, for example, when the user enters a United States address using the North America address style format, the address must have the correct country, state, and postal code combination based on geography hierarchy data to be considered geographically valid.

If an address element is mapped to a geography type, but not selected for geography validation usage, then during address entry suggested values will be provided for the address element, but the address element will not be validated.

**Note**

For either the tax or geography validation, do not skip more than one consecutive level unless you are certain that the selected geography types can uniquely identify geographies. For example, the United States country structure is: State, County, City, and Postal Code, and you want to select just State and Postal Code for geography or tax validation. However, for the combination of California and 94065, the city can be either Redwood Shores or Redwood City. In this case, you should also select at least the City geography type for geography or tax validation.

**Geography Validation Control**

You can select the geography validation level for a country. Validation will check if the entered address maps to the geography hierarchy data available for the
Define Common Applications Configuration for Marketing

country, and the geography validation control determines whether you can save an address that did not pass validation during address entry. For example, if the validation level is **Error**, then an address cannot be saved if the values do not match the geography hierarchy data.

These are the geography validation levels you can choose:

- **Error** - only completely valid addresses can be saved, with all mandatory address elements entered.
- **No Validation** - all addresses can be saved including incomplete and invalid addresses.

Regardless of the result of validation, the validation process will try to map any address attribute to a geography of the country, and store any mapping it could establish based on the available data. This is called **Geography Name Referencing** and it is executed as part of validation. The result of this referencing is used in several business processes in the application to map an address to a specific geography or zone.

**Note**

The Geography Dimension value in territories is derived from sell-to addresses of sales accounts. To use geography dimensions in territories, ensure that the geography elements in addresses, such as state, city, and postal code, are validated. You can do so by enabling geography validation for each country using the Manage Geographies task. While doing so, ensure that at least one level in the geography hierarchy is enabled for geography validation. It is recommended that you enable geography validation for all geography levels that you intend to use for territory definition for each country. You can enable a list of values containing specific geography elements. This will help users search and select appropriate geography values during addresses entry and eliminate all possibilities of wrong address entry. You can also set geography validation control to Error in the Manage Geography Validation page. This ensures that users can only use valid geography elements in addresses. If you have already created addresses before setting up geography validation for a country, you must execute the Run Maintain Geography Name Referencing task for that country after enabling geography validation to ensure that all your geography elements are validated.

**Defining Address Cleansing: Explained**

Address cleansing provides a way to validate, correct, and standardize addresses that are entered in a user interface. Geography validation only validates the geography attributes of an address, for example, State, City, and Postal codes; address cleansing validates both the geography attributes and the address line attributes.

Address cleansing can only be used through the Oracle Fusion Trading Community Data Quality product, because the feature is delivered using Data Quality integration. You need to ensure that you have a license for the countries that will use Trading Community Data Quality data cleansing.

You can specify the real time address cleansing level for each country by choosing either **None**, meaning that there is no real time address cleansing, or by
choosing Optional, meaning that you will have the choice to cleanse addresses.
Once you have enabled address cleansing for a country a Verify Address icon
appears at address entry points in the application. You can then click the icon
to perform address cleansing and receive a corrected, standardized address.
If Trading Community Data Quality does not find a matching address the
application will alert you.

Managing Geography Structures, Hierarchies, and Validation: Worked Example

This example shows how to configure the geography structure, hierarchy,
and validation for a country geography, using the United Kingdom country
geography as an illustration.

The following table summarizes the key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy an existing country structure?</td>
<td>No, create a new country structure.</td>
</tr>
<tr>
<td>What is the structure of the geography types?</td>
<td>Create geography types with the following ranking structure:</td>
</tr>
<tr>
<td></td>
<td>1. County</td>
</tr>
<tr>
<td></td>
<td>2. Post Town</td>
</tr>
<tr>
<td>What is the geography hierarchy?</td>
<td>Create the following hierarchy:</td>
</tr>
<tr>
<td></td>
<td>1. Country of United Kingdom</td>
</tr>
<tr>
<td></td>
<td>2. County of Berkshire</td>
</tr>
<tr>
<td></td>
<td>3. Post Town of Reading</td>
</tr>
<tr>
<td>Which address style format will you use when</td>
<td>The default address style format, called the No Styles Format.</td>
</tr>
<tr>
<td>mapping geography validations?</td>
<td></td>
</tr>
<tr>
<td>Are you using Oracle Fusion Tax for tax</td>
<td>No, do not select Tax Validation for the geography types.</td>
</tr>
<tr>
<td>purposes?</td>
<td></td>
</tr>
</tbody>
</table>

Add the County and Post Town geography types to the geography structure.
Next, add the geographies for the County and Post Town geography types to
define the geography hierarchy. Finally, specify the geography validations for the
geography types you have added to the geography structure.

Defining the geography structure

Add the County and Post Town geography types to the United Kingdom
geography structure.

1. On the Manage Geographies page, enter GB in the Code field. Click Search.
2. On the Manage Geographies page, click Structure Defined.
3. On the Manage Geography Structure page, click the Create button next to the Copy Country Structure From field.
4. In the Geography Structure section, select the County list item in the Add Geography Type field.
5. Click Add.
6. Select the Post Town list item in the Add Geography Type field.
7. Click Add.

**Defining the geography hierarchy**

To begin creating the geography hierarchy for the United Kingdom, you add the geographies for the County and Post Town geography types using the geography hierarchy user interfaces. You can also use the Manage File Import Activities task to import geography hierarchies using a csv or xml file.

1. On the Manage Geographies page, enter GB in the Code field. Click Search.
2. On the Manage Geographies page, click Hierarchy Defined.
3. On the Manage Geography Hierarchy page, Geography Hierarchy section, click the United Kingdom to highlight the table row.
4. Click the Create button.
5. In the Create County page, Primary and Alternate Names section, enter Berkshire in the Name field.
6. Click Save and Close.
7. On the Manage Geography Hierarchy page, Geography Hierarchy section, click Berkshire to highlight the table row.
8. Click the Create button.
9. In the Create Post Town page, Primary and Alternate Names section, enter Reading in the Name field.
10. Click Save and Close.

**Defining the geography validations**

Now you want to specify the geography validations for the geography types you have added to the United Kingdom. Define the geography mapping and validation for the United Kingdom default address style format. Then map the geography types to attributes, enable the geography types for Lists of Values and Geography validation, and set the geography validation level.

1. On the Manage Geographies page, click Validation Defined.
2. On the Manage Geography Validation page, Address Style section, click No Styles Format to highlight the table row.
3. For the County geography type, click the County list item in the Map to Attribute field.
4. Click the Enable List of Values option for the County geography type.
5. Click the Geography Validation option for the County geography type.
6. For the Post Town geography type, click the City list item in the Map to Attribute field.
7. Click the Geography Validation option for the Post Town geography type.
8. In the Geography Validation Control section, click the Error list item in the Geography Validation Level for Country field.

9. Click Save and Close.

Define Geographies: FAQs for Define Geographies

When do I define address cleansing?

When address data entered into the application needs to conform to a particular format, in order to achieve consistency in the representation of addresses. For example, making sure that the incoming data is stored following the correct postal address format.

Why can't I update a geography structure by copying an existing country structure?

You can only update a geography structure by adding existing geography types, or by creating new geography types and then adding them to the geography structure. You can only copy an existing country structure when you are defining a new country structure.

Why can't I delete a level of the country geography structure?

If a geography exists for a country geography structure level then you cannot delete the level. For example, if a state geography has been created for the United States country geography structure, then the State level cannot be deleted in the country geography structure.

Can I add any geography to the geography hierarchy?

Yes. However, the geography type for the geography that you want to add must be already added to the country geography structure.

Can I edit a specific geography in the geography hierarchy?

Yes. In the Manage Geography Hierarchy page you can edit details such as the geography's date range, primary and alternate names and codes, and parent geographies.

How can I add a geography that is the level below another geography in a geography hierarchy?

Select the geography that you want your geography to be created below, and then click the Create icon. This will allow you to create a geography for a geography type that is the level below the geography type you selected. The structure of the country’s geography types are defined in the Manage Geography Structure page.

Define Geographies: Define File-Based Data Import
File-Based Data Import: How It Works

The Define File-Based Data Import group of tasks relies on integration with different Oracle Fusion Applications and architecture components, such as interface tables and application base tables. This topic provides an overview of these components to help you understand the import process and the different import activity statuses.

The following figure provides an overview of the major application components used when you import data from a file. These components include:

- Import object
- Import mapping
- Import activity
- File repository
- Oracle Fusion CRM Application Composer
- Interface tables
- Application tables

Import Objects, Import Mapping, and Import Activity

The import objects you select when you create an import activity are provided by Oracle. They are managed using the Manage File Import Objects task.
When you create an import activity, you must specify a mapping of the fields in your file to the attributes of the import object. You can create the mapping either while creating an import activity or separately using the Manage File Import Mappings task. The mapping is stored and managed as a separate object.

**File Repository**

The text or XML data file you upload for import is stored in a file repository so that it is available for import processing when you schedule an import activity. Any attachments you upload are stored in the same repository.

**Application Composer and Customer Extensions**

When you create additional attributes for import using Oracle Fusion CRM Application Composer, these extensions are stored in a separate repository and are available when you create your mapping.

**Interface Tables**

The import activity populates the application interface tables with your data. This is an intermediate holding area for your data that permits you to correct any import errors. Oracle Fusion CRM application data is not changed at this point.

**Application Tables**

The import activity loads your data into Oracle Fusion CRM application tables to complete the import.

**Importing Country Structures Using File-Based Import: Explained**

This topic explains how to prepare and import country structure data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature. A country structure is a hierarchical grouping of geography types for a country. For example, the geography structure for the United States has the geography type of State at the top, followed by the County, then the City, and finally the Postal Code.

You can use the country structure to set up the following:

- The relationships between geographies within a country
- The types of geographies that you can define for a country

Consider the following questions when importing your data:

- How does your legacy system or source system represent the country structure compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
How do you verify your imported data?

**Comparing Business Object Structures**

You must understand how your country structure data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a country structure.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country’s structure, organized in a hierarchy using geography level numbers. For example, if you are importing the country structure of Australia, the country structure could be the following: 1: Country, 2: State, 3: County, 4: Town, 5: ZIP.

**Import Objects for the Country Structure**

To facilitate the import of country structures, Oracle Fusion Applications incorporate the structure of the country structure into import objects. The import object for country structures is GeoStructureLevel.

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the country structure.

A good understanding of the attribute details of the import objects is critical to preparing your import data. For information about the Oracle Fusion Applications attributes, see the Oracle Enterprise Repository. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Structure</td>
<td>Country Structure Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which
can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Country Structures Using File-Based Data Import**

For the country structure business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new country structure, you import the Country Structure object.

You must be assigned the Master Data Management Administrator job role to access and submit the import activities for country structures.

**Verifying Your Imported Data**

You can view the list of import activities from the Manage Import Activities page. You can verify your imported data by clicking the Status column for your import activity.

**Country Structure Import Objects: How They Work Together**

This topic describes the Country Structure import object. You use the Country Structure import object when you submit a file-based import activity to import your country structure information. This topic introduces the following:

- Target import object concepts
- Target objects for the Country Structure import object
- Target import object attributes
- Target object attribute reference guide files

**Target Import Object Concepts**

The Country Structure import object is used to import a country structure hierarchy, including details, such as geography type, geography type name, parent geography type, geography level numbers, and so on. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Country Structure Target Import Objects**

The Country Structure import object contains one target import object that organizes the individual attributes of the different aspects of the geography
structure. When updating an existing country structure, you must provide the parent reference information of the existing country structure. This reference information connects the imported geography structure to the existing one. Use the ImpGeoStructureLevel target import object to create and update country structure information.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import does not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for country structures.

**Target Import Objects Attributes Resources**

To access the reference guide files for the country code’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

For detailed information on importing geographies using file-based import, refer to Document No. 1481758.1, Importing Master Reference Geography Data, on the Oracle Support site.

The following table lists the reference guide files that are available from the Documentation tab for the Country Code File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeoStructureLevel</td>
<td>Contains information that specifies a country’s geography structure.</td>
<td>HZ_IMP_GEO_STRUCTURE_LEVELS_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: GeographyType, GeographyTypeName, LevelNumber, and ParentGeographyType.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attribute: CountryCode</td>
<td></td>
</tr>
</tbody>
</table>
Importing Geographies Using File-Based Import: Explained

This topic describes the tasks you must perform to import geography information. A geography is any region with a boundary around it, regardless of its size. It might be a state, a country, a city, a county, or a ward. You must create or import geographies before you can associate them with custom zones and addresses.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the geography compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- What import features are available for importing your business object?
- How do you verify your imported data?

Comparing Business Object Structures

You must understand how your geography data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a geography.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country's structure, organized in a hierarchy using geography level numbers. For example, if you are importing the country structure of Australia, the country structure could be the following: 1: Country, 2: State, 3: County, 4: Town, 5: ZIP.

Import Objects for the Geography

To facilitate the import of geographies, Oracle Fusion Applications incorporate the structure of the geography into import objects. The import object for the geography is ImpGeography.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the geography.

A good understanding of the attribute details of the import objects is critical to preparing your import data. For information about the Oracle Fusion Applications attributes, see the Oracle Enterprise Repository. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup
and Maintenance work area where you can define your values. For additional information, including a list of reference file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>Geography Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing geographies to search for related topics in Oracle Fusion Applications Help.

**Extensible Attributes**

Oracle Fusion Applications do not support extensible attributes for geographies. You can only import data for attributes provided by Oracle Fusion Applications.

**Importing Geographies Using File-Based Data Import**

For the geography business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new geography, you import the Geography object. You must be assigned the Master Data Management Administrator job role to access and submit the import activities for geographies.

When importing geography information, you must provide the parent reference information for all parent levels for the entity.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Master Data Management Administrator job role can also navigate to the Manage Geographies work area to view the imported geographies.

**Geography Import Objects: How They Work Together**

This topic describes the Geography import object. You use the Geography import object to import geography information.

This topic introduces the following:

- Target import object concepts
- Target objects for the Geography import object
• Target import object attributes
• Target import object attribute reference guide files

Target Import Object Concepts

The Geography import object is used to import geography hierarchy information to create or update the geography data of a country. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Geography Target Import Objects

The target import objects in the Geography import object contain information about the geography hierarchy. When updating an existing geography, you must provide the parent reference information of the existing geography, which connects the geography to the country of which it is a part.

Use the ImpGeography target import object to create and update geography information.

Note

Before you import geography data for a country, you must define the country’s geography structure.

Target Import Objects Attributes

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can redefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

Target Import Objects Attributes Resources

To access the reference guide files for the geography’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

For detailed information on importing geographies using file-based import, refer to Document No. 1481758.1, Importing Master Reference Geography Data, on the Oracle Support site.

The following table lists the reference guide files that are available from the Documentation tab for the Geography File-Based Data Import asset.
## Target Import Object

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Attribute Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>Contains information that captures a country's geography hierarchy details.</td>
<td>HZ_IMP_GEOGRAPHIES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: CountryCode, GeoDataProvider, GeographyType, PrimaryGeographyCode, PrimaryGeographyCodeType, and PrimaryGeographyName.</td>
<td>Reference attribute: CountryCode</td>
</tr>
</tbody>
</table>

### Importing Geographies Using File-based Data Import: Worked Example

This example demonstrates how to import data using the File-Based Data Import tool. In this particular example you have a source file containing geography data that you want to import into the application, so that the geography data can be used for uses related to locations, such as real time address validation and tax purposes.

The following table summarizes the key decisions for this scenario:

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of object are you importing?</td>
<td>Geography</td>
</tr>
<tr>
<td>What file type are you using for your source data?</td>
<td>Text file</td>
</tr>
<tr>
<td>Where are you uploading your source data file from?</td>
<td>Your desktop</td>
</tr>
<tr>
<td>What data type is your source data file?</td>
<td>Comma separated</td>
</tr>
<tr>
<td>Which fields are you importing into Oracle Fusion</td>
<td>All, except for the RecordTypeCode field</td>
</tr>
<tr>
<td>applications?</td>
<td></td>
</tr>
<tr>
<td>When do you want to process the import?</td>
<td>Immediately</td>
</tr>
</tbody>
</table>

### Summary of the Tasks

These are the steps that are required to create an import activity and submit the import:

1. Determine what information is in the source file.
2. Create and schedule the import activity.
3. Monitor the import results.

### Prerequisites when importing additional geography data after your initial import

1. You need to ensure that the combination of Source ID and Parent Source ID values are unique for each row of data within a single import. However, your source data files do not need to have the same Source ID and Parent Source ID values as your previously imported geography data. If the geography structure levels and the parents for each geography value are the same, the changed IDs will not affect the import.
2. Ensure that all of the parents of a child geography are included in your data file so that the child geography can be added. For example, if you originally imported US, CA, and San Francisco, and now you want to import the city of San Jose in CA, then your data file needs to include US, CA, and San Jose.

3. Check that your source data file has the correct values for the geography data that you have already loaded. For example, if your initial import included the value US for country and CA as state, and in a subsequent import you have California as a state, your geography import will result in two state records (CA and California) in the application data, with the US as the country parent.

**Determine what information is in the source file**

1. Your source geography data files should include a unique Source ID value for each row of data, and a Parent Source ID value which identifies the parent of that row of geography data. Source IDs, or Parent Source IDs, should not exceed 18 characters. An example of geography source data could be as follows:

<table>
<thead>
<tr>
<th>Geography Level</th>
<th>Name</th>
<th>Source ID</th>
<th>Parent Source ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Country)</td>
<td>US</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2 (State)</td>
<td>CA</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>3 (County)</td>
<td>Alameda</td>
<td>111</td>
<td>11</td>
</tr>
<tr>
<td>4 (City)</td>
<td>Pleasanton</td>
<td>1111</td>
<td>111</td>
</tr>
<tr>
<td>4 (City)</td>
<td>Dublin</td>
<td>1112</td>
<td>111</td>
</tr>
</tbody>
</table>

**Create and schedule the import activity**

You create an import activity, enter the import details, and schedule the import. An import activity definition provides the instructions for the import processing - this includes selecting the source file, or file location; mapping fields from the source file to the Oracle Fusion object and attribute; and scheduling the import.

1. Navigate to Setup and Maintenance and search for the Manage File Import Activities task. Click **Go to Task**.
2. In the Manage Import Activities page, click the **Create** icon.
3. In the Create Import Activity: Set Up page, create an import activity for the Geography object type by completing the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Master Reference Geographies</td>
</tr>
<tr>
<td>Object</td>
<td>Geography</td>
</tr>
<tr>
<td>File Type</td>
<td>Text File</td>
</tr>
<tr>
<td>File Selection</td>
<td>Specific file</td>
</tr>
<tr>
<td>Upload From</td>
<td>Desktop</td>
</tr>
<tr>
<td>File Name</td>
<td>Choose relevant file from desktop</td>
</tr>
</tbody>
</table>
Define Common Applications Configuration for Marketing

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Comma separated</th>
</tr>
</thead>
</table>

**Note**

Ensure that the file type that you select in the Create Import Activity: Set Up page matches the file type of the source data file.

4. Click Next.

5. On the Create Import Activity: Map Fields page, map each field from your source file to the Oracle Fusion object and attribute, as shown in this example:

<table>
<thead>
<tr>
<th>Column Header</th>
<th>Example Value</th>
<th>Ignore</th>
<th>Object</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Geography</td>
<td>Primary</td>
<td>United</td>
<td>Imp Geography</td>
<td>Primary Geography Name</td>
</tr>
<tr>
<td>Name</td>
<td>Geography Name</td>
<td>States</td>
<td>Geography</td>
<td>Name</td>
</tr>
<tr>
<td>Country Code</td>
<td>US</td>
<td>No</td>
<td>Imp Geography</td>
<td>Country Code</td>
</tr>
<tr>
<td>Record Type Code</td>
<td>0</td>
<td>Yes</td>
<td>Imp Geography</td>
<td>Record Type Code</td>
</tr>
<tr>
<td>Source ID</td>
<td>10265</td>
<td>No</td>
<td>Imp Geography</td>
<td>Source ID</td>
</tr>
<tr>
<td>Parent Source ID</td>
<td>1053</td>
<td>No</td>
<td>Imp Geography</td>
<td>Parent Source ID</td>
</tr>
</tbody>
</table>

If you do not want to import a column in the text file you can select Ignore.

**Note**

If you have any difficulties mapping the fields from your source file to the relevant Oracle Fusion applications object, you can use the import object spreadsheets for reference.

6. Click Next.

7. On the Create Import Activity: Create Schedule page, select Immediate in the Schedule field so that the import will start immediately.

Instead of immediately importing the data, you can choose a date and time to start the import. You can also specify if the import will be repeated, and the frequency of the repeated import.

8. Click Next.

**Monitor the import results**

You monitor the progress of the Import Activity processing, and view completion reports for both successful records and errors.

2. Your import details are correct so you click **Activate** to submit the import. Once the import activity has completed, the Status field value will change to Completed.

### File-Based Import Objects: Explained

Import objects represent the application and attribute information for business objects that can be imported using external source files.

This topic describes the following:
- Import object management options
- Custom objects

#### Import Object Management Options

A single import object can have multiple associated components that are considered objects by themselves. An object and associated objects that can be imported within the same source file are grouped together within the application module class.

**Note**

Each object includes the Import Activity object (MktImpJobs1). The Import Activity object is a required component of the application module but is not mapped to a source file. All values for this object are derived from the Import Activity definition. Consequently, do not update the **Map**, **Required**, and **Default Value** settings for the Import Activity object.

The following table includes information about the import object:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes</td>
<td>A view-only listing of object attributes that represent each column in the interface table for the object.</td>
</tr>
<tr>
<td>Length</td>
<td>A view-only listing of widths for the columns in the interface tables. If the source file values for the attribute have more characters than the attribute length, the source file row will not be imported.</td>
</tr>
<tr>
<td>Default Value</td>
<td>Optionally, specify an attribute value to use if a value is not available from the source file or Import Activity constant value.</td>
</tr>
<tr>
<td>Map</td>
<td>Enable the list of attributes that can be mapped to a source file or constant value in the Import Mapping and Import Activity Map Fields step.</td>
</tr>
<tr>
<td>Required</td>
<td>Specify the list of attributes that must be mapped to source file columns. Consequently, if you have selected an attribute as required, you must also enable the Map option for that attribute. When mapping the external source file, the required target attribute defined for the object are displayed with an asterisk.</td>
</tr>
</tbody>
</table>
**Custom Objects**

To use the file-based import feature for custom objects, you must first generate the artifacts required for import. You generate these required artifacts within Oracle Fusion CRM Application Composer, after making your object model extensions.

**File-Based Import Mapping: Explained**

Import mapping enables you to predefine a mapping between the columns provided in a source file and the attributes pertaining to the objects being imported. Once you create a mapping, it can be reused in the Import Activity definition.

This topic contains the following sections:

- Import options
- Source file options
- Target options

**Import Options**

The following attributes pertain to the import mapping.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The business object to be imported.</td>
</tr>
<tr>
<td>Name</td>
<td>The name that identifies the mapping in the Import Mapping and Import Activity UIs. If the mapping was initially created while mapping fields directly in the Import Activity user interface and automatically saved without providing a user-defined mapping name, the mapping name is derived from the Import Activity name and date.</td>
</tr>
<tr>
<td>Decimal Separator</td>
<td>The format of the fractional portion of numerical values in columns mapped to attributes with a decimal attribute type.</td>
</tr>
<tr>
<td>Date Format</td>
<td>The format of values in columns mapped to attributes with a date attribute type.</td>
</tr>
<tr>
<td>Timestamp Format</td>
<td>The format of values in columns mapped to attributes with a time stamp attribute type.</td>
</tr>
<tr>
<td>Lock</td>
<td>If selected, prevents any user, other than the creator of the mapping, from editing the mapping.</td>
</tr>
</tbody>
</table>

**Source File Options**

Map each column that the source file is expected to contain with a specific attribute.

The following table describes the details pertaining to columns provided in the source file:

<table>
<thead>
<tr>
<th>Source Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>The sequence number in which the columns are expected to be provided in the source file. Two rows cannot have the same sequence number.</td>
</tr>
</tbody>
</table>
Target Options

The following table describes the details pertaining to corresponding attributes in the target application table:

<table>
<thead>
<tr>
<th>Target Attributes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The group of import objects that represent the components of the business object being imported.</td>
</tr>
<tr>
<td>Attribute</td>
<td>The attribute name that represents the corresponding interface table column for the object.</td>
</tr>
<tr>
<td>Duplicate Validation</td>
<td>If selected, the attribute, along with other selected attributes, determines what constitutes a duplicate object when comparing objects in the interface tables and existing objects in the target application tables. For example, to validate the uniqueness of an object in the target application tables by the combination of an object's name and date, select Duplicate Validation for both attributes in the mapping.</td>
</tr>
</tbody>
</table>

Import Activity Source File Options: Explained

The Import Activity consists of a step by step guided process to assist you with creating an import activity for a given object.

This topic describes the source file options defined in the Import Activity that are used by the import process to locate and parse the source file data.

Source File Data

Enter attribute details pertaining to the source file as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Type</td>
<td>Source file must be either Text or XML.</td>
</tr>
<tr>
<td>Data Type, Delimiter, and Header Row Included</td>
<td>A Text file type can further be defined based on how the data is delimited and if the source file is expected to include a row of headings for each column.</td>
</tr>
<tr>
<td>Import Mapping</td>
<td>Displays a list of predefined mappings for the object selected for this import activity. The selected mapping will be used as the basis for mapping your source file in the next Import Activity step.</td>
</tr>
</tbody>
</table>
Source File Location
The following outlines the options that are available to you when locating your source file for import.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| File Selection  | Select from the following file selections:  
|                 | • Specific file  
|                 | Enables you to upload a specific source file from a local file system, such as your desktop, a URL address, or from a network path. A file name is required for this option.  
|                 | • Most recent file  
|                 | Enables you to schedule repeating import activities without having to select a new file every time. This selection is only available when you select Network from the Upload From options.  
|                 | You need to copy the new file to the specified network path for repeating import activities. You do not need to enter a file name for this option and can only upload your source file from a network path. The asterisk wildcard is supported for multiple characters. The question mark wildcard is supported for a single character.  
| Upload From     | You can upload the source file from three locations:  
|                 | • Desktop  
|                 | • URL  
|                 | • Network  
|                 | If you select Desktop, a File Name field with an associated Update button is displayed. Click Update and browse to search for and select the file you want to upload.  
|                 | If you select URL, enter the address location as in the following example format: http://www.example.com/  
|                 | If you select Network, enter the file name path as in the following example format: \ComputerName\SharedFolder\Resource\  
| **Note**        | If you selected the Specific File as your file selection option, then you will have to include the file name for both URL and Network file path locations. |

Import Activity Import Options: Explained
This topic describes the import options available while creating import activities.
Source File Data Transformation

The following options are used to identify the formatting of source file data so the data can be correctly interpreted and transformed by the import process:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decimal Separator</td>
<td>The format of the fractional portion of numerical values in columns mapped to attributes with a decimal attribute type.</td>
</tr>
<tr>
<td>Date Format</td>
<td>The format for values in columns mapped to attributes with a date attribute type.</td>
</tr>
<tr>
<td>Time Stamp Format</td>
<td>The format for values in columns mapped to attributes with a time stamp attribute type.</td>
</tr>
<tr>
<td>File Encoding</td>
<td>The overall encoding of the characters within the file.</td>
</tr>
</tbody>
</table>

Interface to Target Import Options

Depending on the object you are importing and the application modules you have implemented, you can select one or more of these options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Mode</td>
<td>For importing leads and employee resources only, you have the option of specifying if you want to create and update records or update only. If you select update, then any new records will be ignored by the import process. For all other import objects, both create and update are available.</td>
</tr>
</tbody>
</table>
| Allowable Error Count| An error count above the threshold will stop the import process for all records. If the error count is below the threshold, records without errors are imported. In either case, records with errors will be reported in the Error and Exception files. Validation errors include:  
  - Missing required values  
  - Values that exceed the attribute length  
  - Invalid identifiers and lookup codes  
  - Duplicates to existing records in the destination tables based on the combination of attributes selected for duplicate validation in the predefined Import Mapping  
  Duplicates found using matching configurations for Customer Data Management objects do not contribute to the error count. |
<p>| Notification E-Mail   | The e-mail of the intended recipient of import processing notifications.                                                                                                                                 |</p>
<table>
<thead>
<tr>
<th>Customer Data Management Duplicates</th>
<th>Using this option, which is available only if you have licensed Oracle Fusion Trading Community Data Quality, you can select different options for handling duplicates when you are importing customers, consumers, and legal entities either alone or as part of another object. The duplicates are determined using the following matching configurations:</th>
</tr>
</thead>
</table>
|                                    | • Batch Location Basic Duplicate Identification  
• Batch Person Basic Duplicate Identification  
• Batch Organization Basic Duplicate Identification |
| You can select from one of the following:                                                                 |
|                                    | • Do Not Import Duplicate Records  
If the main object of the Import Activity is a consumer, customer, or a legal entity object, rows that are matched to existing records will not be imported. These duplicates records are reported in the Exception and Error reports.  
If the Customer Data Management objects are components of another object and one or more matches are found, the existing duplicate records are evaluated to determine the most recent record. The most recent record will be associated with the main object being imported.  
For example, when importing a marketing response object, the consumer object is also a component of the response. If the consumer is matched to an existing record, the consumer in the interface tables is not imported. However, the response object will import and the most recent existing consumer record will be associated to the response. |
|                                    | • Import Duplicate Records  
The Customer Data Management objects will be imported even if matched records exist. |
|                                    | • Import Duplicate Records and Create Resolution Request  
The Customer Data Management objects will be imported even if matched records exist. In addition, a duplicate resolution request is created and displayed in the Customer Data Management, Duplicate Resolution work area. |
Duplicate Look Back Days

This option applies only to the Lead import object. Only existing leads created within the period determined by the look back days value are evaluated for duplicates based on the attributes selected for duplicate validation in the predefined import mapping. If a duplicate is found, the lead will not be imported and the duplicate record will be reported on the Exception report. Duplicate leads are included in the calculation of the allowable error count threshold.

Import Activity Field Mapping: Explained

After entering your import options, the second step of the import activity process is to map fields in the source file to the corresponding target attributes. This topic explains:

- Map Fields
- Saving the Import Mapping
- Constant Values

Map Fields

The Map Fields section can be subdivided into source file columns and target attribute columns.

The source column header value is derived from one of the following:

- Predefined mapping, if one is selected
- The source file, if the Header Row Included option is selected in the first step of the Import Activity definition (for Text file type only)
- Generic values of Column A, Column B, and so on, if the Header Row Included option is not selected (for Text file type only)
- XML tagging structure (for XML file type only)

The following table outlines the source columns:

<table>
<thead>
<tr>
<th>Source Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column Header</td>
<td>Represents the column header for Text file types and the tagging structure for XML file types.</td>
</tr>
<tr>
<td>Example Value</td>
<td>Values are derived from the first source file saved with the predefined mapping. If you did not select a predefined mapping, the example values are taken from the first data row in the source file selected in the first step of the Import Activity definition.</td>
</tr>
<tr>
<td>Ignore</td>
<td>Select this option if you do not want to import the source file data in that column.</td>
</tr>
</tbody>
</table>

The following table outlines the target columns:

<table>
<thead>
<tr>
<th>Target Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The group of import objects that represent the components of the business object being imported.</td>
</tr>
<tr>
<td>Attribute</td>
<td>The attribute name that represents the corresponding interface table column for the object.</td>
</tr>
</tbody>
</table>
Saving the Import Mapping

The mapping between source file information and target attributes is saved as a reusable mapping when the Import Activity is saved, using the import activity name and date to derive a mapping name. If you selected a predefined mapping, modifications made in the Import Activity to an unlocked mapping will update and save to the predefined mapping. If the predefined mapping is locked, a modified mapping will be saved as a new mapping. To specify a mapping name for new mappings, select the Save As option from the Map Fields Actions menu.

Constant Values

Constant values provide a way to specify a value for a target attribute that all imported objects will inherit. For example, if a source file does not contain a column for business unit and all of the objects in the file belong to the same business unit, enter a constant value for the object and business unit attribute.

File Import Activity Statuses: Explained

This topic explains the meaning of the different import activity statuses when you import data from a file using the Manage File Import Activities task.
The following table lists and describes the import activity statuses.

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No status displayed for the activity</td>
<td>The new import activity definition is not complete.</td>
</tr>
<tr>
<td>New</td>
<td>The import activity definition is complete, but the activity is not yet scheduled to run.</td>
</tr>
<tr>
<td>Scheduled</td>
<td>The import activity definition is complete and scheduled to run later.</td>
</tr>
<tr>
<td>Interface table upload in progress</td>
<td>The data file is being loaded into the interface tables.</td>
</tr>
<tr>
<td>Base table upload in progress</td>
<td>The data file is being loaded from the interface tables into the application tables.</td>
</tr>
<tr>
<td>Completed</td>
<td>All records were processed and loaded into the application tables.</td>
</tr>
<tr>
<td>Completed with errors</td>
<td>The import activity found errors in the data file that you must correct. You can view details about the errors by clicking the status link.</td>
</tr>
</tbody>
</table>

File-Based Import Monitoring: Explained

You can monitor all file import activities that are currently scheduled to run, have completed successfully, or failed with errors. For each import activity, you can view the details pertaining to each underlying process and make necessary updates for any failed records to import again.

You can view the list of import activities from the Manage Import Activities page. Select the import activity that you want to monitor by clicking on the hyperlink in the corresponding Status column. The View Import Status results page is displayed which contains the following sections:

- Files Processed
- Import Processes

Files Processed

The Files Processed section displays a row for each source file that is processed.
The import processing details are summarized and displayed for each source file and include the following:

<table>
<thead>
<tr>
<th>File Processing Summary Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records Read From File</td>
<td>The number of records read from the source file.</td>
</tr>
<tr>
<td>Format Errors</td>
<td>The number of errors found when processing data to insert into the interface tables from the source file, Import Activity constants, and Import Object value default values. View the error details in the Exception and Error files attached to the process.</td>
</tr>
<tr>
<td>Load Errors</td>
<td>The number of errors found when importing data from the interface tables to the destination application tables. View the error details in the Exception and Error files attached to the process.</td>
</tr>
<tr>
<td>Successfully Loaded</td>
<td>The number of import objects imported to the application destination tables. If the import object is made up of multiple components, each component is counted as successfully loaded. Consequently the Successfully Loaded count may be larger than the Records Read From File count. View the successful record details in the Log file attached to the process.</td>
</tr>
<tr>
<td>Attachments</td>
<td>Once an Import Activity process has completed, processing reports are included in the Attachments column. The Log file includes the records that were successfully imported plus the unique destination application table identifiers for the objects. The Exception file includes the records that were not imported plus a reference to one of the errors for each record that failed. The Error file includes all the errors for each record that failed validation.</td>
</tr>
</tbody>
</table>

**Import Processes**

From the Import Processes section, you can view details pertaining to each process involved in importing the objects in the source file. A listing of brief messages provides information on processing steps within each underlying process.

**Define Geographies: FAQs for File-Based Data Import**

**What determines the list of objects displayed?**

A single import object can have multiple associated components that are considered objects by themselves. Whether or not an associated object can be grouped as a component of another object for the purpose of file import is determined by the complexity of the object structure and how it is stored in the data model. Oracle Fusion provides import objects predefined to meet the file processing import requirements. Consequently, in some cases, more than one source file may be required to capture all associated components of an object.

**What happens if I inactivate an Import Activity?**

The Import Activity will not stop the currently running process. However, it will stop the next process that has not started plus any future repeating file import activities. You can always activate the process at a later stage.

**Define Legal Entities for Marketing**
Legal Entities: Explained

A legal entity is a recognized party with rights and responsibilities given by legislation.

Legal entities have the right to own property, the right to trade, the responsibility to repay debt, and the responsibility to account for themselves to regulators, taxation authorities, and owners according to rules specified in the relevant legislation. Their rights and responsibilities may be enforced through the judicial system. Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, expenses and income, pay transaction taxes, or perform intercompany trading.

A legal entity has responsibility for elements of your enterprise for the following reasons:

- Facilitating local compliance
- Taking advantage of lower corporation taxation in some jurisdictions
- Preparing for acquisitions or disposals of parts of the enterprise
- Isolating one area of the business from risks in another area. For example, your enterprise develops property and also leases properties. You could operate the property development business as a separate legal entity to limit risk to your leasing business.

The Role of Your Legal Entities

In configuring your enterprise structure in Oracle Fusion Applications, you need to understand that the contracting party on any transaction is always the legal entity. Individual legal entities own the assets of the enterprise, record sales and pay taxes on those sales, make purchases and incur expenses, and perform other transactions.

Legal entities must comply with the regulations of jurisdictions, in which they register. Europe now allows for companies to register in one member country and do business in all member countries, and the US allows for companies to register in one state and do business in all states. To support local reporting requirements, legal reporting units are created and registered.

You are required to publish specific and periodic disclosures of your legal entities' operations based on different jurisdictions' requirements. Certain annual or more frequent accounting reports are referred to as statutory or external reporting. These reports must be filed with specified national and regulatory authorities. For example, in the United States (US), your publicly owned entities (corporations) are required to file quarterly and annual reports, as well as other periodic reports, with the Securities and Exchange Commission (SEC), who enforces statutory reporting requirements for public corporations.

Individual entities privately held or held by public companies do not have to file separately. In other countries, your individual entities do have to file in their own name, as well as at the public group level. Disclosure requirements are diverse. For example, your local entities may have to file locally to comply with local regulations in a local currency, as well as being included in your enterprise’s reporting requirements in different currency.

A legal entity can represent all or part of your enterprise’s management framework. For example, if you operate in a large country such as the United Kingdom or Germany, you might incorporate each division in the country as a separate legal entity. In a smaller country, for example Austria, you might use a single legal entity to host all of your business operations across divisions.
Legal Entity in Oracle Fusion: Points to Consider

Oracle Fusion Applications support the modeling of your legal entities. If you make purchases from or sell to other legal entities, define these other legal entities in your customer and supplier registers, which are part of the Oracle Fusion Trading Community Architecture. When your legal entities are trading with each other, you represent both of them as legal entities and also as customers and suppliers in your customer and supplier registers. Use legal entity relationships to determine which transactions are intercompany and require intercompany accounting. Your legal entities can be identified as legal employers and therefore, are available for use in Human Capital Management (HCM) applications.

There are several decisions that need to be considered in creating your legal entities.

- The importance of legal entity in transactions
- Legal entity and its relationship to business units
- Legal entity and its relationship to divisions
- Legal entity and its relationship to ledgers
- Legal entity and its relationship to balancing segments
- Legal entity and its relationship to consolidation rules
- Legal entity and its relationship to intercompany transactions
- Legal entity and its relationship to worker assignments and legal employer
- Legal entity and payroll reporting
- Legal reporting units

The Importance of Legal Entity in Transactions

All of the assets of the enterprise are owned by individual legal entities. Oracle Fusion Financials allow your users to enter legal entities on transactions that represent a movement in value or obligation.

For example, the creation of a sales order creates an obligation for the legal entity that books the order to deliver the goods on the acknowledged date, and an obligation of the purchaser to receive and pay for those goods. Under contract law in most countries, damages can be sought for both actual losses, putting the injured party in the same state as if they had not entered into the contract, and what is called loss of bargain, or the profit that would have made on a transaction.

In another example, if you revalued your inventory in a warehouse to account for raw material price increases, the revaluation and revaluation reserves must be reflected in your legal entity’s accounts. In Oracle Fusion Applications, your inventory within an inventory organization is managed by a single business unit and belongs to one legal entity.

Legal Entity and Its Relationship to Business Units

A business unit can process transactions on behalf of many legal entities. Frequently, a business unit is part of a single legal entity. In most cases the legal entity is explicit on your transactions. For example, a payables invoice has an explicit legal entity field. Your accounts payables department can process supplier invoices on behalf of one or many business units.

In some cases, your legal entity is inferred from your business unit that is processing the transaction. For example, your business unit A agrees on
terms for the transfer of inventory to your business unit B. This transaction is binding on your default legal entities assigned to each business unit. Oracle Fusion Procurement, Oracle Fusion Projects, and Oracle Fusion Supply Chain applications rely on deriving the legal entity information from the business unit.

**Legal Entity and Its Relationship to Divisions**

The division is an area of management responsibility that can correspond to a collection of legal entities. If desired, you can aggregate the results for your divisions by legal entity or by combining parts of other legal entities. Define date-effective hierarchies for your cost center or legal entity segment in your chart of accounts to facilitate the aggregation and reporting by division. Divisions and legal entities are independent concepts.

**Legal Entity and Its Relationship to Ledgers**

One of your major responsibilities is to file financial statements for your legal entities. Map legal entities to specific ledgers using the Oracle Fusion General Ledger Accounting Configuration Manager. Within a ledger, you can optionally map a legal entity to one or more balancing segment values.

**Legal Entity and Its Relationship to Balancing Segments**

Oracle Fusion General Ledger supports up to three balancing segments. Best practices recommend that one of these segments represents your legal entity to ease your requirement to account for your operations to regulatory agencies, tax authorities, and investors. Accounting for your operations means you must produce a balanced trial balance sheet by legal entity. If you account for many legal entities in a single ledger, you must:

1. Identify the legal entities within the ledger.
2. Balance transactions that cross legal entity boundaries through intercompany transactions.
3. Decide which balancing segments correspond to each legal entity and assign them in Oracle Fusion General Ledger Accounting Configuration Manager. Once you assign one balancing segment value in a ledger, then all your balancing segment values must be assigned. This recommended best practice facilitates reporting on assets, liabilities, and income by legal entity.

Represent your legal entities by at least one balancing segment value. You may represent it by two or three balancing segment values if more granular reporting is required. For example, if your legal entity operates in multiple jurisdictions in Europe, you might define balancing segment values and map them to legal reporting units. You can represent a legal entity by more than one balancing segment value, do not use a single balancing segment value to represent more than one legal entity.

In Oracle Fusion General Ledger, there are three balancing segments. You can use separate balancing segments to represent your divisions or strategic business units to enable management reporting at the balance sheet level for each division or business unit. For example, use this solution to empower your business unit and divisional managers to track and assume responsibility for their asset utilization or return on investment. Using multiple balancing segments is also useful when you know at the time of implementation that you are disposing of a part of a legal entity and need to isolate the assets and liabilities for that entity.

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**Note**
Implementing multiple balancing segments requires every journal entry that is not balanced by division or business unit, to generate balancing lines. Also, you cannot change to multiple balancing segments easily after you have begun to use the ledger because your historical data is not balanced by the new multiple balancing segments. Restating historical data must be done at that point.

To use this feature for disposal of a part of a legal entity, implement multiple balancing segments at the beginning of the legal entity’s corporate life or on conversion to Oracle Fusion.

If you decided to account for each legal entity in a separate ledger, there is no requirement to identify the legal entity with a balancing segment value within the ledger.

**Note**

While transactions that cross balancing segments don’t necessarily cross legal entity boundaries, all transactions that cross legal entity boundaries must cross balancing segments. If you make an acquisition or are preparing to dispose of a portion of your enterprise, you may want to account for that part of the enterprise in its own balancing segment even if it is not a separate legal entity. If you do not map legal entities sharing the same ledger to balancing segments, you will not be able to distinguish them using the intercompany functionality or track their individual equity.

**Legal Entity and Its Relationship to Consolidation Rules**

In Oracle Fusion Applications you can map legal entities to balancing segments and then define consolidation rules using your balancing segments. You are creating a relationship between the definition of your legal entities and their role in your consolidation.

**Legal Entity and Its Relationship to Intercompany Transactions**

Use Oracle Fusion Intercompany functionality for automatic creation of intercompany entries across your balancing segments. Intercompany processing updates legal ownership within the enterprise’s groups of legal entities. Invoices or journals are created as needed. To limit the number of trading pairs for your enterprise, set up intercompany organizations and assign them to your authorized legal entities. Define processing options and intercompany accounts to use when creating intercompany transactions and to assist in consolidation elimination entries. These accounts are derived and automatically entered on your intercompany transactions based on legal entities assigned to your intercompany organizations.

Intracompany trading, in which legal ownership isn’t changed but other organizational responsibilities are, is also supported. For example, you can track assets and liabilities that move between your departments within your legal entities by creating departmental level intercompany organizations.

**Note**

In the Oracle Fusion Supply Chain applications, model intercompany relationships using business units, from which legal entities are inferred.

**Legal Entity and Its Relationship to Worker Assignments and Legal Employer**

Legal entities that employ people are called legal employers in the Oracle Fusion Legal Entity Configurator. You must enter legal employers on worker assignments in Oracle Fusion HCM.
Legal Entity and Payroll Reporting

Your legal entities are required to pay payroll tax and social insurance such as social security on your payroll. In Oracle Fusion Applications, you can register payroll statutory units to pay and report on payroll tax and social insurance on behalf of many of your legal entities. As the legal employer, you might be required to pay payroll tax, not only at the national level, but also at the local level. You meet this obligation by establishing your legal entity as a place of work within the jurisdiction of a local authority. Set up legal reporting units to represent the part of your enterprise with a specific legal reporting obligation. You can also mark these legal reporting units as tax reporting units, if the legal entity must pay taxes as a result of establishing a place of business within the jurisdiction.

HCM Organization Models: Examples

These examples illustrate different models for human capital management (HCM) organizations. Each example includes a legislative data group (LDG). LDGs are not an organization classification, but they are included in the example to show how you associate them with a payroll statutory unit to partition payroll data.

Simple Configuration

This example illustrates a simple configuration that does not include any tax reporting units. The legal employer and payroll statutory units are the same, sharing the same boundaries. Reporting can only be done at a single level. Countries such as Saudi Arabia and the United Arab Emirates (UAE) might use this type of model, as reporting in these countries is done at the legal entity level.

This figure illustrates a simple configuration where the enterprise has only one legal entity that is both a payroll statutory unit and a legal employer.
Multiple Legal Employers and Tax Reporting Units Under One Payroll Statutory Unit

This example illustrates a more complex configuration. In this enterprise, one legal entity, InFusion US, is defined as a payroll statutory unit and has two separate legal entities, which are also legal employers. This model shows multiple legal employers that are associated with a single payroll statutory unit, and how tax reporting units are always associated with a specific legal employer (or employers) through the payroll statutory unit. The implication is that payroll statutory reporting boundaries vary from human resources (HR) management, and the balances can be categorized separately by either payroll statutory unit, legal employer, or tax reporting unit. This configuration is based on tax filing requirements, as some tax-related payments and reports are associated with a higher level than employers. An example of a country that might use this model is the US.

This figure illustrates an enterprise that has one payroll statutory unit and multiple legal employers and tax reporting units.

One Payroll Statutory Unit and Two Tax Reporting Units That Are Subsidiaries of the Legal Entity

This model makes no distinction between a legal employer and a payroll statutory unit. Tax reporting units are defined as subsidiaries to the legal entity. In this enterprise, legal entity is the highest level of aggregation for payroll calculations and reporting, and statutory reporting boundaries are assumed to be the same for both payroll and HR management. An example of a country that might use this model is France.

This figure illustrates an example of an organization with one legal entity that is both a legal employer and a payroll statutory unit and that has two tax reporting units.
One Payroll Statutory Unit with Several Tax Reporting Units That Are Independent from the Legal Employer

In this model, the enterprise has one legal entity, and legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently. Using this model, you would not typically need to report on tax reporting unit balances within a legal employer, and balances can be categorized by either or both organizations, as required. An example of a country that might use this model is India.

This figure illustrates an enterprise with one legal entity that is a payroll statutory unit and a legal employer, and the tax reporting units are independent from the legal employer.
Multiple Payroll Statutory Units with Several Tax Reporting Units that are Independent from the Legal Employer

In this model, the enterprise has two legal entities, and legal employers and tax reporting units are independent from each other within a payroll statutory unit, because there is no relationship from a legal perspective. Therefore, you can run reporting on both entities independently. Using this model, you would not typically need to report on tax reporting unit balances within a legal employer, and balances can be categorized by either or both organizations, as required. An example of a country that might use this model is the United Kingdom (UK).

This figure illustrates an enterprise with two legal entities, and legal employers and tax reporting units are independent from each other.
Payroll Statutory Units, Legal Employers, and Tax Reporting Units: How They Work Together

When you set up legal entities, you can identify them as legal employers and payroll statutory units, which makes them available for use in Oracle Fusion Human Capital Management (HCM). A tax reporting unit is created automatically when you add a legal entity and identify it as a payroll statutory unit. Depending on how your organization is structured, you may have only one legal entity that is also a payroll statutory unit and a legal employer, or you may have multiple legal entities, payroll statutory units, and legal employers.

Legal Employers and Payroll Statutory Unit

Payroll statutory units enable you to group legal employers so that you can perform statutory calculations at a higher level, such as for court orders or for United Kingdom (UK) statutory sick pay. In some cases, a legal employer is also a payroll statutory unit. However, your organization may have several legal employers under one payroll statutory unit. A legal employer can belong to only one payroll statutory unit.

Payroll Statutory Units and Tax Reporting Units

Payroll statutory units and tax reporting units have a parent-child relationship, with the payroll statutory unit being the parent.
Tax Reporting Units and Legal Employers

Tax reporting units are indirectly associated with a legal employer through the payroll statutory unit. One or more tax reporting units can be used by a single legal employer, and a tax reporting unit can be used by one or more legal employers. For example, assume that a single tax reporting unit is linked to a payroll statutory unit. Assume also that two legal employers are associated with this payroll statutory unit. In this example, both legal employers are associated with the single tax reporting unit.

FAQs for Define Legal Entities for Marketing

What's a legal employer?

A legal employer is a legal entity that employs workers. You define a legal entity as a legal employer in the Oracle Fusion Legal Entity Configurator. The legal employer is captured at the work relationship level, and all employment terms and assignments within that relationship are automatically with that legal employer. Legal employer information for worker assignments is also used for reporting purposes.

What's a payroll statutory unit?

Payroll statutory units are legal entities that are responsible for paying workers, including the payment of payroll tax and social insurance. A payroll statutory unit can pay and report on payroll tax and social insurance on behalf of one or many legal entities, depending on the structure of your enterprise. For example, if you are a multinational, multicompany enterprise, then you register a payroll statutory unit in each country where you employ and pay people. You can optionally register a consolidated payroll statutory unit to pay and report on workers across multiple legal employers within the same country. You associate a legislative data group with a payroll statutory unit to provide the correct payroll information for workers.

Define Business Units for Marketing

Business Units: Explained

A business unit is a unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy. A business unit can process transactions on behalf of many legal entities. Normally, it will have a manager, strategic objectives, a level of autonomy, and responsibility for its profit and loss. Roll business units up into divisions if you structure your chart of accounts with this type of hierarchy. In Oracle Fusion Applications, you assign your business units to one primary ledger. For example, if a business unit is processing payables invoices they will need to post to a particular ledger. This assignment is mandatory for your business units with business functions that produce financial transactions.

In Oracle Fusion Applications, use business unit as a securing mechanism for transactions. For example, if you run your export business separately from your domestic sales business, secure the export business data to prevent access by the domestic sales employees. To accomplish this security, set up the export business and domestic sales business as two separate business units.

The Oracle Fusion Applications business unit model:
• Allows for flexible implementation
• Provides a consistent entity for controlling and reporting on transactions
• Anchors the sharing of sets of reference data across applications

Business units process transactions using reference data sets that reflect your business rules and policies and can differ from country to country. With Oracle Fusion Application functionality, you can choose to share reference data, such as payment terms and transaction types, across business units, or you can choose to have each business unit manage its own set depending on the level at which you wish to enforce common policies.

In countries where gapless and chronological sequencing of documents is required for subledger transactions, define your business units in alignment with your ledger definition, because the uniqueness of sequencing is only ensured within a ledger. In these cases, define a single ledger and assign one legal entity and business unit.

In summary, use business units in the following ways:
• Management reporting
• Processing of transactions
• Security of transactional data
• Reference data definition and sharing

Brief Overview of Business Unit Security

Business units are used by a number of Oracle Fusion Applications to implement data security. You assign data roles to your users to give them access to data in business units and permit them to perform specific functions on this data. When a business function is enabled for a business unit, the application can trigger the creation of data roles for this business unit based on the business function's related job roles.

For example, if a payables invoicing business function is enabled, then it is clear that there are employees in this business unit that perform the function of payables invoicing, and need access to the payables invoicing functionality. Therefore, based on the correspondence between the business function and the job roles, appropriate data roles are generated automatically. Use Human Capital Management (HCM) security profiles to administer security for employees in business units.

Business Functions: Explained

A business unit can perform many business functions in Oracle Fusion Applications. Prior to Oracle Fusion Applications, operating units in Oracle E-Business Suite were assumed to perform all business functions, while in Oracle PeopleSoft, each business unit had one specific business function. Oracle Fusion Applications blends these two models and allows defining business units with one or many business functions.

Business Functions

A business function represents a business process, or an activity that can be performed by people working within a business unit and describes how a business unit is used. The following business functions exist in Oracle Fusion applications:
• Billing and revenue management
• Collections management
• Customer contract management
• Customer payments
• Expense management
• Incentive compensation
• Marketing
• Materials management
• Inventory management
• Order fulfillment orchestration
• Payables invoicing
• Payables payments
• Procurement
• Procurement contract management
• Project accounting
• Receiving
• Requisitioning
• Sales

Although there is no relationship implemented in Oracle Fusion Applications, a business function logically indicates a presence of a department in the business unit with people performing tasks associated with these business functions. A business unit can have many departments performing various business functions. Optionally, you can define a hierarchy of divisions, business units, and departments as a tree over HCM organization units to represent your enterprise structure.

**Note**

This hierarchy definition is not required in the setup of your applications, but is a recommended best practice.

Your enterprise procedures can require a manager of a business unit to have responsibility for their profit and loss statement. However, there will be cases where a business unit is performing only general and administrative functions, in which case your manager’s financial goals are limited to cost containment or recovering of service costs. For example, if a shared service center at the corporate office provides services for more commercially-oriented business units, it does not show a profit and therefore, only tracks its costs.

In other cases, where your managers have a responsibility for the assets of the business unit, a balance sheet can be produced. The recommended best practice to produce a balance sheet, is to setup the business unit as a balancing segment in the chart of accounts. The business unit balancing segment can roll up to divisions or other entities to represent your enterprise structure.

When a business function produces financial transactions, a business unit must be assigned to a primary ledger, and a default legal entity. Each business unit can post transactions to a single primary ledger, but it can process transactions for many legal entities.

The following business functions generate financial transactions and will require a primary ledger and a default legal entity:
Define Common Applications Configuration for Marketing

- Billing and revenue management
- Collections management
- Customer payments
- Expense management
- Materials management
- Payables invoicing
- Project accounting
- Receiving
- Requisitioning

Business Unit Hierarchy: Example

For example, your InFusion America Company provides:

- Air quality monitoring systems through your division InFusion Air Systems
- Customer financing through your division InFusion Financial Services

The InFusion Air Systems division further segments your business into the System Components and Installation Services subdivisions. Your subdivisions are divided by business units:

- System Components by products: Air Compressors and Air Transmission
- Installation Services by services: Electrical and Mechanical

Oracle Fusion applications facilitates independent balance sheet rollups for legal and management reporting by offering up to three balancing segments. Hierarchies created using the management segment can provide the divisional results. For example, it is possible to define management segment values to correspond to business units, and arrange them in a hierarchy where the higher nodes correspond to divisions and subdivisions, as in the Infusion US Division example above.

Define Workforce Structures for CRM
Locations: Explained

A location identifies physical addresses of a workforce structure, such as a department or a job. You can also create locations to enter the addresses of external organizations that you want to maintain, such as employment agencies, tax authorities, and insurance or benefits carriers.

The locations that you create exist as separate structures that you can use for reporting purposes, and also in rules that determine employee eligibility for various types of compensation and benefits. You enter information about a location only once. Subsequently, when you set up other workforce structures you select the location from a list.

Location Sets

When you create a location, you must associate it with a set. Only those users who have access to the set’s business unit can access the location set and other associated workforce structure sets, such as those that contain departments and jobs.

You can also associate the location to the common set so that users across your enterprise can access the location irrespective of their business unit. When users search for locations, they can see the locations that they have access to along with the locations in the common set.

The following figure shows how locations sets restrict access to users.

Creating Multiple Locations Simultaneously

If you have a list of locations already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, then add your location information to the spreadsheet, and then upload directly to your enterprise configuration. You can upload the spreadsheet multiple times to accommodate revisions.

Division: Explained

Managing multiple businesses requires that you segregate them by their strategic objectives and measure their results. Responsibility to reach objectives can be delegated along the management structure. Although related to your legal
structure, the business organizational hierarchies do not need to reflect directly the legal structure of the enterprise. The management entities and structure can include divisions and subdivisions, lines of business, and other strategic business units, and include their own revenue and cost centers. These organizations can be included in many alternative hierarchies and used for reporting, as long as they have representation in the chart of accounts.

**Divisions**

A division refers to a business oriented subdivision within an enterprise, in which each division organizes itself differently to deliver products and services or address different markets. A division can operate in one or more countries, and can be comprised of many companies or parts of different companies that are represented by business units.

A division is a profit center or grouping of profit and cost centers, where the division manager is responsible for attaining business goals including profit goals. A division can be responsible for a share of the company’s existing product lines or for a separate business. Managers of divisions may also have return on investment goals requiring tracking of the assets and liabilities of the division. The division manager reports to a top corporate executive.

By definition a division can be represented in the chart of accounts. Companies may choose to represent product lines, brands, or geographies as their divisions: their choice represents the primary organizing principle of the enterprise. This may coincide with the management segment used in segment reporting.

Oracle Fusion Applications supports a qualified management segment and recommends that you use this segment to represent your hierarchy of business units and divisions. If managers of divisions have return on investment goals, make the management segment a balancing segment. Oracle Fusion applications allows up to three balancing segments. The values of the management segment can be comprised of business units that roll up in a hierarchy to report by division.

Historically, divisions were implemented as a node in a hierarchy of segment values. For example, Oracle E-Business Suite has only one balancing segment, and often the division and legal entity are combined into a single segment where each value stands for both division and legal entity.

**Use of Divisions in Oracle Fusion Human Capital Management (HCM)**

Divisions are used in HCM to define the management organization hierarchy, using the generic organization hierarchy. This hierarchy can be used to create organization based security profiles.

**Adding a New Division After Acquiring a Company: Example**

This example shows how to restructure your enterprise after acquiring a new division.

**Scenario**

You are part of a senior management team at InFusion Corporation. InFusion is a global company with organizations in the United States (US), the United Kingdom (UK), France, China, Saudi Arabia, and the United Arab Emirates (UAE). Its main area of business is in the high tech industry, and it has just acquired a new company. You must analyze their current enterprise structure and determine what new organizations you need to create to accommodate the new company.
Details of the Acquired Company

The acquired company is a financial services business based in Germany. Because the financial services business differs significantly from the high tech business, you want to keep the financial services company as a separate business with all the costs and reporting rolling up to the financial services division.

Analysis

The following table summarizes the key decisions that you must consider when determining what new organizations to set up and how to structure the enterprise.

<table>
<thead>
<tr>
<th>Decision to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create location?</td>
<td>The financial services company is based in Frankfurt as are the departments, so you need to create only one location.</td>
</tr>
<tr>
<td>Create separate division?</td>
<td>Yes. Although the new division will exist within the current enterprise structure, you want to keep the financial services company as a separate line of business. Creating a separate division means you can manage the costs and reporting separately from the InFusion Corporation. It also means you do not have to modify any existing organizations in the enterprise setup.</td>
</tr>
<tr>
<td>Create business unit?</td>
<td>Yes. The financial services business requires you to create several jobs that do not exist in your high tech business. You can segregate the jobs that are specific to financial services in a new business unit.</td>
</tr>
<tr>
<td>How many departments?</td>
<td>The financial services company currently has three departments for sales, accounting, and marketing. As you have no plans to downsize or change the company, you can create three departments to reflect this structure.</td>
</tr>
<tr>
<td>How many cost centers?</td>
<td>Although you can have more than one cost center tracking the costs of a department, you decide to create one cost center for each department to track costs.</td>
</tr>
<tr>
<td>How many legal entities?</td>
<td>Define a legal entity for each registered company or other entity recognized in law for which you want to record assets, liabilities, and income, pay transaction taxes, or perform intercompany trading. In this case, you need only one legal entity. You must define the legal entity as a legal employer and payroll statutory unit. As the new division operates in Germany only, you can configure the legal entity to suit Germany legal and statutory requirements.</td>
</tr>
</tbody>
</table>

Note

When you identify the legal entity as a payroll statutory unit, the application transfers the legal reporting unit that is associated with that legal entity to Oracle Fusion HCM as a tax reporting unit.
Create legislative data group? | Yes. Because you currently do not employ or pay people in Germany, you must create one legislative data group to run payroll for the workers in Germany.

**Resulting InFusion Enterprise Structure**

Based on the analysis, you must create the following:

- One new division
- One new location
- Three new departments
- Three new cost centers
- One new legal entity
- One new legislative data group

The following figure illustrates the structure of InFusion Corporation after adding the new division and the other organizations.

**Cost Centers and Departments: Explained**

A cost center represents the smallest segment of an organization for which costs are collected and reported. A department is an organization with one or more operational objectives or responsibilities that exist independently of its manager and has one or more workers assigned to it.
The following two components need to be considered in designing your enterprise structure:

- Cost centers
- Departments

**Cost Centers**

A cost center also represents the destination or function of an expense as opposed to the nature of the expense which is represented by the natural account. For example, a sales cost center indicates that the expense goes to the sales department.

A cost center is generally attached to a single legal entity. To identify the cost centers within a chart of accounts structure use one of these two methods:

- Assign a cost center value in the value set for each cost center. For example, assign cost center values of PL04 and G3J1 to your manufacturing teams in the US and India. These unique cost center values allow easy aggregation of cost centers in hierarchies (trees) even if the cost centers are in different ledgers. However, this approach will require defining more cost center values.

- Assign a balancing segment value with a standardized cost center value to create a combination of segment values to represent the cost center. For example, assign the balancing segment values of 001 and 013 with cost center PL04 to represent your manufacturing teams in the US and India. This creates 001-PL04 and 013-PL04 as the cost center reporting values.

The cost center value of PL04 has a consistent meaning. This method requires fewer cost center values to be defined. However, it prevents construction of cost center hierarchies using trees where only cost center values are used to report results for a single legal entity. You must specify a balancing segment value in combination with the cost center values to report on a single legal entity.

**Departments**

A department is an organization with one or more operational objectives or responsibilities that exist independently of its manager. For example, although the manager may change, the objectives do not change. Departments have one or more workers assigned to them.

A manager of a department is typically responsible for:

- Controlling costs within their budget
- Tracking assets used by their department
- Managing employees, their assignments, and compensation

**Note**

The manager of a sales department may also be responsible for meeting the revenue targets.
The financial performance of departments is generally tracked through one or more cost centers. In Oracle Fusion Applications, departments are defined and classified as Department organizations. Oracle Fusion Human Capital Management (HCM) assigns workers to departments, and tracks the headcount at the departmental level.

The granularity of cost centers and their relationship to departments varies across implementations. Cost center and department configuration may be unrelated, identical, or consist of many cost centers tracking the costs of one department.

**Department Classifications: Points to Consider**

A department can be classified as a project organization, sales and marketing organization, or cost organization.

Oracle Fusion Human Capital Management (HCM) uses trees to model organization hierarchies. It provides seeded tree structures for department and other organizational hierarchies that can include organizations with any classification.

**Project Organization**

Classify departments as a project owning organization to enable associating them with projects or tasks. The project association is one of the key drivers for project access security.

In addition, you must classify departments as project expenditure organizations to enable associating them to project expenditure items. Both project owning organizations and project expenditure organizations can be used by Oracle Fusion Subledger Accounting to derive accounts for posting Oracle Fusion Projects accounting entries to Oracle Fusion General Ledger.

**Sales and Marketing Organization**

In Oracle Fusion Customer Relationship Management (CRM), you can define sales and marketing organizations. Sales organization hierarchies are used to report and forecast sales results. Sales people are defined as resources assigned to these organizations.

In some enterprises, the HCM departments and hierarchies correspond to sales organizations and hierarchies. It is important to examine the decision on how to model sales hierarchies in relationship to department hierarchies when implementing customer relationship management to eliminate any possible redundancy in the definition of the organizations.

The following figure illustrates a management hierarchy, in which the System Components Division tracks its expenses in two cost centers, Air Compressors and Air Transmission. At the department level, two organizations with a classifications of Department are defined, the Marketing Department and Sales Department. These two departments can be also identified as a Resource Organizations, which will allow assigning resources, such as sales people, and other CRM specific information to them. Each department is represented in the chart of accounts by more than one cost center, allowing for granular as well as hierarchical reporting.
Cost Organization

Oracle Fusion Costing uses a cost organization to represent a single physical inventory facility or group of inventory storage centers, for example, inventory organizations. This cost organization can roll up to a manager with responsibility for the cost center in the financial reports.

A cost organization can represent a costing department. Consider this relationship when determining the setup of departments in HCM. There are no system dependencies requiring these two entities, cost organization and costing department, be set up in the same way.

Jobs: Explained

As part of your initial implementation, you specify whether to use jobs and positions, or only jobs. Jobs are typically used without positions by service industries where flexibility and organizational change are key features.

Basic Details

Basic details for a job include an effective start date, a job set, a name, and a code.

A job code must be unique within a set. Therefore, you can create a job with the code DEV01 in the US set and another job with the same code in the UK set. However, if you create a job with the code DEV01 in the Common set, then you cannot create a job with the same code in any other set.

Benchmark Information

You can identify a job as being a benchmark job. A benchmark job represents other jobs in reports and salary surveys. You can also select the benchmark for jobs. Benchmark details are for informational purposes only. A progression job is the next job in a career ladder.

Progression Information

Progression jobs enable you to create a hierarchy of jobs and are used to provide the list of values for the Job field in the Promote Worker and Transfer Worker tasks. The list of values includes the next three jobs in the progression job hierarchy. For example, assume that you create a job called Junior Developer and
select Developer as the progression job. In the Developer job, you select Senior Developer as the progression job. When you promote a junior developer, the list of values for the new job will include Developer and Senior Developer. You can select one of these values, or select another one.

**Jobs and Grades**

You can assign grades that are valid for each job. If you are using positions, then the grades that you specify for the job become the default grades for the position.

**Evaluation Criteria**

You can define evaluation criteria for a job, including the evaluation system, a date, and the unit of measure for the system. One predefined evaluation system is available, and that is the Hay system. An additional value of Custom is included in the list of values for the Evaluation System field, but you must add your own criteria and values for this system.

**Uploading Jobs Using a Spreadsheet**

If you have a list of jobs already defined for your enterprise, you can upload them from a spreadsheet. To use this option, you first download a spreadsheet template, then add your job information to the spreadsheet, and then upload directly to your enterprise configuration. You can upload the spreadsheet multiple times to accommodate revisions.

**Jobs: Example**

Jobs are typically used without positions by service industries where flexibility and organizational change are key features.

**Software Industry**

For example, XYZ Corporation has a director over the departments for developers, quality assurance, and technical writers. Recently, three developers have left the company. The director decides to redirect the head count to other areas. Instead of hiring all three back into development, one person is hired to each department, quality assurance, and technical writing.

In software industries, the organization is fluid. Using jobs gives an enterprise the flexibility to determine where to use head count, because the job only exists through the person performing it. In this example, when the three developers leave XYZ Corporation, their jobs no longer exist, therefore the corporation has the flexibility to move the headcount to other areas.

This figure illustrates the software industry job setup.
FAQs for Define Workforce Structures for CRM

Why can't I see my location in the search results?

You can search for approved locations only. Also, if you created a location in Oracle Fusion Trading Community Model, then you can't access that location from Oracle Fusion Global Human Resources. For use in Oracle Fusion HCM, you must recreate the location from the Manage Locations page.

How can I associate a location with an inventory organization?

From the Manage Locations page in Oracle Fusion Global Human Resources.

To appear on the Create or Edit Location pages, your inventory organization must be effective on today's date and must exist in the location set that you selected.

What happens if I select an inventory organization when I'm creating or editing a location?

The location is available for selection in purchase documents of that inventory organization in Oracle Fusion Inventory Management. If you don't select an inventory organization, then the location is available in purchase documents across all inventory organizations.

What happens if I select a geographic hierarchy node when I'm creating or editing a location?

The calendar events that were created for the geographical node start to apply for the location and may impact the availability of worker assignments at that location. The geographical hierarchy nodes available for selection on the Locations page display from a predefined geographic hierarchy.

What happens if I inactivate a location?

Starting from the effective date that you entered, you can no longer associate the location with other workforce structures, assignments, or applications. If the location is already in use, it will continue to be available to the components that currently use it.

What's the difference between a job set and a job family?

A job family is a group of jobs that have different but related functions, qualifications, and titles. They are beneficial for reporting. You can define competencies for job families by associating them with model profiles.

A job set is an organizational partition of jobs. For example, a job set can be global and include jobs for use in all business units, or it can be restricted to jobs for a specific country or line of business. When you select a job, for a position or an assignment, the available jobs are those in the set associated with the business unit in which you are working, and also those in the Common set.

Define Facilities for Marketing
Schedule Components: How They Fit Together

Schedules are comprised of workday patterns and exceptions. Workday patterns are comprised of shifts. You can also create exceptions, nonworking days, to the schedules.

Begin by creating shifts and then assigning those shifts to workday patterns. Next, create a schedule that is a collection of workday patterns and any exception dates.

Shift

A shift is a period of time, typically expressed in hours, and it can be defined by a start time and an end time, or a duration. A shift can be for a work period or a off period. You can create time, duration, and elapsed shifts.

Workday Pattern

A workday pattern is a collection of shifts for a specific number of days. You can create time, duration, and elapsed workday patterns.

Exception

An exception is a record of a date that overrides the availability of a resource to which a schedule has been assigned. For example, a resource is assigned
a schedule that includes December 25 as a working day. An exception can be created for December 25 and applied to that schedule to override resource availability for that date. Exceptions can also be for a date time period such as 9 a.m. to 11 a.m. on December 25th.

**Schedule**

A schedule is defined by a start date, an end date, and a sequence of workday patterns to be followed between those dates. A schedule can also contain exception dates that override the availability of resources to which the schedule is assigned. Quarter types such as 4-4-5, 4-5-4 are supported.

**Managing Shifts: Examples**

A shift is a period of time, typically expressed in hours, that is used to build workday patterns. Workday patterns are used to build schedules. There are multiple types of shifts you can create. The following scenarios illustrate each type.

**Managing Time Shifts**

Next month you are adding a second shift for your manufacturing operations. This new shift will start right after your regular first shift. You can create a time shift that starts at 4:00 p.m. and ends at 12:00 a.m. There are restrictions in updating existing shifts and patterns. Shifts and patterns cannot be updated if the change affects a schedule, that is they are associated to a schedule. If a shift is created but not assigned to a pattern (or assigned to a pattern but the pattern is not assigned to a schedule) it can be updated. If a pattern is created and not assigned to a schedule it can be updated.

**Managing Time Shifts with Punch Details**

Your division has decided that the employees in the office must clock in and out for lunch starting next week. All employees will take the same lunch hour. Add punch shift details to the existing shift so that employees punch in at 8:00 a.m.; they punch out for lunch from 11:30 a.m. to 12:30 p.m.; they punch back in at 12:30 p.m.; and they punch out for the day at 5:00 p.m.

**Managing Time Shifts with Flexible Details**

Jorge Sanchez is a contractor who is starting work in your department next week. His hours will be flexible, so you need to create a new time shift with flexible details that he can use to record his time. He will have a flexible start time from 7:00 a.m. to 9:00 a.m. and a flexible end time from 4:00 p.m. to 6:00 p.m. His core work hours will be from 9:00 a.m. to 4:00 p.m.

**Managing Duration Shifts**

One of the divisions in your organization does not use fixed start and end times for its daily shifts; the division only records the total duration of the shift and indicates if resources are available or not during that time. All of the employees in the division are available for 24 hours straight, and then they are not available for the next 24 hours. You should create a duration shift that indicates that resources are available for 24 hours, and create a second duration shift that indicates that resources are not available for 24 hours.
Managing Elapsed Shifts

The employees in the Human Resources department all work 8 hours a day, but the start and end times vary by employee. Some employees start at early as 6:00 a.m., while others don’t start until 9:00 a.m. Create an elapsed shift with a duration of 8 hours, where all employees are assumed to be available for the number of hours in the shift at any time during the day.

Managing Workday Patterns: Examples

A workday pattern is a collection of shifts for a specific number of days. There are multiple types of workday patterns you can create. The following scenarios illustrate each type.

Managing Time Workday Patterns

Your department works a Monday through Friday workweek with 8 hour shifts each day. Time patterns always have time shifts. That is, the shift will have start time and end time. You can create a time workday pattern with a length of 7 days and details of an 8 hour time shift for days 1 through 5. Days 6 and 7 are considered nonworking days.

Managing Duration Workday Patterns

A new group of employees starts next month, and each employee will work a schedule where he or she is available for 10 hours, and then not available for the next 16 hours, and then available for 10 hours again, and so on. This pattern starts on midnight of the first day of the next month. Create a duration workday pattern with a 10-hour available duration shift, followed by a 16-hour not available duration shift. Do not specify the pattern length or start and end days, and the pattern will repeat for the length of the schedule to which it is associated.

Managing Elapsed Workday Patterns

In the summer, several divisions in your organization work only 4 hours on Fridays. They work extended hours on Wednesdays and Thursdays to cover the 4 hours they will not work on Fridays. Create an elapsed workday pattern with a length of 7 days. Days 1 and 2 will have an 8-hour shift assigned, while days 3 and 4 will have a 10-hour shift assigned. Finally, day 5 will have a 4-hour shift assigned. As in the time workday pattern, days 6 and 7 are considered nonworking days.

Item Organization: Explained

An item organization defines an item when inventory balances are not stored and inventory storage or inventory movement is not reflected in the Oracle Fusion Applications. For example, you would use an item organization in a retail scenario, if you need to know the items that are listed by and sold through each retail outlet even though inventory and transactions are recorded in another system. In Oracle Fusion Customer Relationship Management (CRM), item organizations are used to define sales catalogs.

Note
- Items belong to an item organization.
- Item attributes that are associated with financial and accounting information are hidden from the item if it exists within the item organization.
- Item organizations can be changed by administrators to an inventory organization by updating the necessary attributes. There is no difference in the way items are treated in these two types of organizations except that there cannot be any financial transactions in the downstream applications for items that are assigned to an item organization.

**Item Master Organization: Explained**

An item master organization lists and describes items that are shared across several inventory organizations or item organization.

The following example shows the choice between inventory organizations that track inventory transactions, stored in two warehouses, and item organizations that just track items, listed in two sales catalogs.

For the most efficient processing, you should:

- Have a single item master
- Include an item and its definition of form, fit, and function only once in the item master
- Separate the item master organization from organizations that store and transact items

**Note**
Oracle Fusion allows multiple item masters, however, use this capability cautiously. If you acquire a company, there may be value in allowing the old item master to exist for a transition period. If you manage your subsidiaries as separate businesses, there may be reduced value in a single item master.

Define Social Networking

Getting Started with Oracle Fusion CRM Collaboration: Overview

Oracle Fusion CRM Collaboration is a collection of features of the Oracle WebCenter product. Employees in an organization can use these features to collaborate and stay informed of the latest information.

Employees can use Oracle Fusion CRM Collaboration features to do the following business tasks:

- Access real-time feeds of business transactions.
- Engage in contextual discussions around key business goals.
- Leverage group spaces to enhance team collaboration.
- Enhance virtual team communication by staying up-to-date on peer activities, deals, connections, and community updates.
- Gain greater visibility into opportunities and best practices.
- Make informed decisions with peer feedback.
- Access critical information to streamline the sales process.

From Oracle WebCenter, Oracle Fusion CRM Collaboration leverages the following features.

Activity Streams

Activity streams provide an ongoing view of activities from connections, actions taken in group spaces, and other business activities. Within Oracle Fusion CRM Collaboration, activity streams have been enabled for opportunities and customer business events, as displayed in the following Oracle Fusion CRM areas:

- Welcome page
- Sales Dashboard
- Customer Center overview page

Employees can use activity streams to:

- Stay current on relevant business updates or updates from the communities of which the user is a member.
- Stay up-to-date on what others are working on and what is happening in your organization.
- Make timely decisions with real-time contextual insight.
- Overcome organizational and geographical boundaries that make it hard to find help and expertise.
• Increase employee interaction and collaboration.

For more information, see "Tracking Your Connections Activities" in the Oracle Fusion Middleware User's Guide for Oracle WebCenter Spaces.

Blogs

Blogs are typically personal records of an individual user's experience and opinions. In Oracle WebCenter Spaces, users can create blogs to group related blog posts, for example to group topics by the same author or otherwise related topics. Each blog contains various blog posts. Although, blogs have not been exposed in Oracle Fusion CRM, users can access blogs by way of Oracle Web Center Spaces. For more information, see "Working with Blogs" in the Oracle Fusion Middleware User's Guide for Oracle WebCenter Spaces.

Discussion Forums

You can use a discussion forum to post, respond to, and preserve topical information, and other users can post information relevant to those topics. All of this information is preserved within the discussion forum so that teams of users can collaborate on opportunities and customer records. Everyone who is part of the opportunity or customer team can post and reply to discussions. Within Oracle Fusion CRM Collaboration, discussions are enabled for opportunities and customer business objects. For more information, see "Creating a Discussion Forum" in the Oracle Fusion Middleware User's Guide for Oracle WebCenter Spaces.

Discussions has been enabled for:

• Opportunity
• Customer
• References
• Competitors

Group Spaces

Teams of employees can use group spaces to collaborate in the context of an opportunity or customer record. Within a group space, employees can collaborate by engaging in existing discussions or creating new ones, and they can create new wikis. They can also create new group spaces and leverage available features, such as discussions, blogs, wikis, announcements, and so on. By using group spaces, employee groups can contend with work blockages, such as:

• Unstructured sales activities that are not captured.
• Information that is locked in silos.
• Hard-to-find successful or useful content.
• Numerous e-mail threads used for collective content authoring.

For more information, see "Understanding Space Basics" in the Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces.

Tags

Tags categorize business objects in Oracle Fusion Applications, for example specific invoices and opportunities, with your own keywords. You can share tags
so that anyone searching or browsing for items can find them based on common

tags. For more information, see "Working with the Tags Service” in the Oracle


Wiki

Wiki are Web sites of interlinked Web pages that members of a group can create

and edit in a Web browser. Members who have the appropriate permissions can
add and edit information to share it with their group. For more information, see
"Working with Wikis” in the Oracle Fusion Middleware User’s Guide for Oracle
WebCenter Spaces.

Wiki have been enabled for:

- References
- Competitors

Collaboration Capabilities in Oracle Fusion CRM: Highlights

Oracle Fusion CRM Collaboration includes the following features.

Fusion Welcome Page

Across all Fusion applications, the Fusion Welcome page shows all activity
stream messages:

- Opportunities and customer records that a user is following.
- Discussion groups of which the user is a member.
- Updates to wikis, blogs, announcements, and so on, from the group space
  of which the user is a member. The features available in a group space
  depend on the template that was used when the group space was created.
- Connections updates.
- Status updates.
- Healthcare management activity stream messages.
- Projects.
- All corresponding comments and likes for any of the above activity
  messages.

Sales Dashboard Page

The Sales Dashboard shows activity stream messages for the following functions:

- Opportunities and customer records that a user is following.
- Discussion groups of which the user is a member.
- Updates to wikis, blogs, announcements, and so on, from the group space
  of which the user is a member. The features available on a group space
  depend on the template that was used when the group space was created.
- Connections updates.
- Status updates.
• All corresponding comments and likes for any of the above activity messages.

**Customer Center Overview Page**

The Customer Center Dashboard shows activity stream messages for the following functions:

• Opportunities and customer records that a user is following.
• Discussion groups of which the user is a member.
• Updates to wikis, blogs, announcements, and so on, from the group space of which the user is a member. The features available on a group space depend on the template used when the group space was created.
• Connections updates.
• Status updates.
• All corresponding comments and Likes for any of the above activity messages.

**Posting Messages**

You can post a status update message from the Oracle Fusion Welcome page. This message can be posted to Everyone, to members of a specific group space, or to members of a specific opportunity or customer sales team. A user can also post a message from an Oracle WebCenter group space. Within a group space, the same field is available for users to post a status update.

• For more information on Oracle Fusion CRM Collaboration capabilities, See: Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

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**Group Spaces in Oracle Fusion CRM: Highlights**

Group spaces bring people together in a virtual environment for ongoing interaction and information sharing, enabling the formation and support of social networks. Teams can use group spaces to collaborate through discussions, in the context of an opportunity or customer record, and create new wikis. Users can also create a new group space and leverage available features, such as discussions, blogs, wikis, announcements, and so on. Group spaces support the collaboration of project teams and communities of interest by providing a dedicated and readily accessible area for relevant services, pages, and content, and by supporting the inclusion of specified members. A member can invite you to join a space, in which case you receive a notification. To see all the spaces that you can join, use the **Spaces** link in the global area or go to the **Spaces** dashboard, which contains a list of the spaces to which you belong, a list of any recommended spaces, and a tool to search for all public spaces that you can join.

The available features in a group space depend on the template that was selected when the group space was created. Out-of-the-box templates provide a variety of features. Spaces are an Oracle WebCenter feature that is used not only in the Oracle WebCenter Spaces application but also throughout Oracle Fusion Applications.
Accessing Group Spaces

You can access group spaces by the Spaces link in the global navigation area. From there, you can access the existing public group spaces or the group space of which you are a member. From within the Edit Opportunity page of an opportunity record, you can also access an existing group space or create a new group space. Click an icon to display a popup window where you can do the following group space activities:

- Select and add a group space: You can select an existing group space from the list. The application allows all users who have access to the opportunity record to use the features exposed in the selected group spaces.
- Create and link a group space: You can create new group spaces using existing group spaces templates. Users who have access to the opportunity record can use the features that are exposed in the newly created group spaces.

Setting Up Group Spaces

You can associate existing group spaces to an object, or you can create new ones. These associations have no impact on any embedded group spaces within the object, nor do they create a new embedded forum or wiki for that object. You can make associations in the following ways:

- Opportunity management: A default group space is associated with each opportunity record. Drill into the group space to use any of the features available in the default group space (wikis and discussions). You can create and associate new group spaces to the opportunity record. Depending on the template that was selected when the group space was created, you can use any of the features in the group space, such as wikis, discussions, blogs, announcements, and so on.
- Group Spaces link: From the top navigation menu, you can create and access a group space and use any of the features available in the group space.

Security for Enabling or Viewing Group Space Widgets

Users need specific security permissions to enable or view group space widgets, such as forums, wikis, and so on, for the following objects:

- Opportunity: For enabling, the typical role is a sales person or other advanced user. Security is controlled by an opportunity team member with full access plus the functional privilege View Opportunities. For viewing, the typical role is a sales person with regular access. Security is controlled by an opportunity team member with View or Edit access plus the functional privilege View Opportunities.
- Competitor: For enabling, the typical role is a sales administrator. Security is controlled with the functional privilege Manage Sales Competitor. For viewing, the typical role is a sales person with the functional privilege View Sales Reference.
- Reference: For enabling, the typical role is sales administrator. Security is controlled with the functional privilege Manage Sales Reference. For viewing, the typical role is a sales person with the functional privilege View Sales Reference.
Optional Enabling

Deploying organizations have a choice of enabling embedded forums and wikis for sales objects by using two profile options:

- **Key: (<Object> Group Space Enabled)** Determines whether or not a particular object, such as an opportunity, has support for embedding forums and wikis.

- **Key: (<Object> Group Space Template Default)** Determines which group space template to use in case the object is to have embed support (if the value for the first option is Y).

- For an embed-enabled sales object, the edit view for an instance of that object provides an additional check box to show existing embedded forums and wikis (or enable embedding and showing forums and wikis if no embedded widgets exist at that point). Only advanced users of the object instance (with full access for opportunities, sales administrators for competitors and references) can see and interact with this check box. It is not visible to other users.

Embedding Group Space Widgets

To embed group space widgets, use the following actions:

- When embedded forums or wikis already exist, display the Discussions tab and Wikis tab with existing embedded content by checking the Discussions and Wikis check box. Forums and wikis are created for that object instance using the group spaces template that was specified in the first profile option. The Discussions tab and Wikis tab appear in the object instance for the newly-created widgets.

- To hide the Discussions tab and Wikis tab with existing embedded content, uncheck the Discussion and Wikis check box.

Group Spaces and Oracle WebCenter

For more information on group spaces, see the Oracle Fusion Middleware User's Guide for Oracle WebCenter. As you read that guide, note the following points:

- Disregard content that is specific to the Oracle WebCenter Spaces application, for example the home space. Although there is no home space in Oracle Fusion Applications, many of the features within the home space are also available in Oracle Fusion Applications.

- The way to access spaces in Oracle Fusion Applications is different from the instructions in the guide. In Oracle Fusion Applications, you can use the Spaces link in the global area or on pages where available, as well as the Spaces dashboard.

See: Oracle Fusion Middleware User's Guide for Oracle WebCenter

Discussion Forums in Oracle Fusion CRM: Highlights

Teams of users can use discussion forums to collaborate on opportunities and customer records. Everyone who is part of an opportunity or customer team can
collaborate and take part in discussions by posting and replying to discussions. When someone posts a new discussion entry or replies to an existing discussion, the users who are members of the opportunity or customer team are notified by an activity stream message.

Members can drill into a discussion to read all replies, watch the forum where discussions are created, and view, edit, reply, and create their own discussions by accessing the group space. Members can also create and participate in text-based discussions with other users within the scope of specific business objects, an application, or a space. For example, in Oracle Fusion Applications Help, you can post questions or comments regarding topics covered by a specific help file and view posts from other members regarding the same help.

The Discussions feature is an Oracle WebCenter service used within and outside of spaces in Oracle Fusion Applications. Discussions are fully described in the Oracle Fusion Middleware User's Guide for Oracle WebCenter Spaces. As you read that guide, note the following points:

- In Oracle Fusion Applications, discussions can exist outside of spaces. Content that is specific to spaces applies to spaces within Oracle Fusion Applications, but discussions work similarly outside of spaces.
- Various user interfaces, or task flows, are described in the guide. The interfaces and flows that are available to you depend on the pages that you can access.

### Setting Up and Using Discussion Forums

Moderators can create discussion forums in which members can view and participate in topics and threads. Set up and use discussion forums in the following ways:

- Edit Opportunity page: This option is available only to users at the level of someone like an opportunity owner, that is, a member with full access. To enable a discussion forum for an opportunity, click an Opportunity Name. Then in the Edit Opportunity page Summary region, check the Show Discussions and Wiki check box and then Save. This option creates discussions and wikis for the opportunity, and a Discussions tab in the Additional Details region of the Edit Opportunity page. After you enable discussions, you cannot disable them. When a discussion is enabled on the opportunity, anyone with a minimum of view access on the opportunity can contribute to it.
- Customer Center: For each customer record, the Discussion Forums link is displayed in the Customer Center region. A setup is not necessary.
- Opportunity Management: In each opportunity record the Discussions tab is available in the Additional Details region. You can create and associate new group spaces to the opportunity record and the user Discussions feature under the group space.
- Global group space: At the global navigation level, click the Spaces link, then Create. When you create a space choose the Discussion template, then you can navigate to the space, add members, create pages, and upload documents.

### See Also

- For more information about discussion groups,
See: Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

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**Wikis in Oracle Fusion CRM: Highlights**

A wiki is a Web site of interlinked Web pages that allows members of a group to create and edit the Web pages in a Web browser. Members of a group who have the appropriate permissions can add and edit information and share it among the group. Wikis are available by way of CRM References and Competitors.

In Oracle WebCenter Spaces, you can create and manage wiki documents by using the Documents service. To support the wiki functionality, the Documents service stores all wiki documents on Oracle Content Server. For this feature to work, the Oracle Content Server needs to be set up.

**Setting Up Wikis**

This option is available only to users at the level of full access, for example, someone like an opportunity owner.

- In the Edit Opportunity page, to enable a wiki for an opportunity, click an Opportunity Name.
- Then in the Edit Opportunity page Summary region, check the Show Discussions and Wiki check box and then save.
- This option creates wikis for the opportunity and a Wiki tab about competitors. When a wiki is enabled on the opportunity, anyone with a minimum of view access on the opportunity can contribute to it.
- After you enable wikis, you cannot disable them.

**See Also**

- For more information about wikis, see the following document.
  See: Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

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**Tags in Oracle Fusion CRM: Highlights**

Use tags to categorize business objects in Oracle Fusion Applications, for example specific invoices and opportunities, with your own keywords. You can share tags so that anyone searching or browsing for items can find them based on common tags. For example, members collaborating on a project can tag all related work with a particular term. Although tags are available to anyone who has access to the item, when you create tags you can designate them to be private.

The tags feature is an Oracle WebCenter service.

Tags are fully described in the Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces. As you read that guide, note the following points:
• Disregard discussions specific to the Oracle WebCenter Spaces application, for example the global search in the application.

• Although the guide describes tagging Oracle WebCenter pages and documents, in Oracle Fusion Applications you tag specific business objects.

• Not all tag features are available in Oracle Fusion Applications, for example the Tags and Similarly Tagged Items user interfaces.

Understanding Tags

Aside from the Tags icon and the Tag Center dialog box, tags are available in Oracle Fusion Applications from applicable Oracle Fusion Applications Search results. The search considers tags in finding matching results. The search results do not indicate the number of times a particular tag was applied, and not all searches retrieve private tags. You can access the Tag Center dialog box from the global area or other places in Oracle Fusion Applications, for example in Oracle Fusion Applications Help. The Tag Center shows all tags, not only those relevant to what you are working on. For example, the tag center in Oracle Fusion Applications Help displays all tags, not only the tags for help files. Use tags to do the following actions:

• Use the tag icon to tag specific business objects. Read only about the step that describes the fields you enter to tag an item.

• Browse and search for items using tags in the Tag Center dialog box. Disregard instructions about how to open the tag center.

• For more information about tags,

  See: "Understanding the Tag Center" in Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

  See: "Working with Tags and Tagged Items in the Tag Center" in Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

  See: "Tagging Application Pages" in Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

Activity Streams in Oracle Fusion CRM: Highlights

Activity streams show a continuous view of activities from connections, actions in group spaces, and other business activities. For example, you might see that specific users have created, edited, or deleted specific business objects, such as customers or opportunities, and you can use activity streams to access more information about that user or object. Additionally, similar to social networking Web sites, the activity stream displays messages that other users want to broadcast.

Activity Stream is an Oracle WebCenter feature, available in Oracle Fusion Applications on the Welcome dashboard and various other locations within and without the context of spaces. The types of activities that are tracked vary depending on each Activity Stream region.
Setting Up Activity Streams

You can set up activity streams from the Navigator link by selecting Setup and Maintenance under Tools. In the Search: Tasks field, type "Activity". In the Search Results list select Set Activity Streams Options. Click the icon in the Go to Task column to open the Setup and Maintenance page. Expand Service Categories. In the rows for Customer and Opportunity select the following check boxes:

- Display Activities: When new updates are made, the application displays the corresponding activity messages on the application UI.
- Allow Owner Override: This function allows the end user to override the Display Activities option by going to the Activity Streams Options feature.
- Publish: The system publishes the activity stream messages when new updates are made. These messages are first published or written to the Activity Streams repository, where they are written to the database table but not displayed. To display them, click Display Activities.

Understanding Activity Stream Security

Activity stream messages are only displayed to users who are:

- Following the opportunity or customer record (specific to CRM).
- Members of a discussion group who are involved with a discussion entry that is associated to an opportunity or customer record. In this case, users who have been invited to be part of the discussion receive an activity stream message for create, read, update, and delete operations about the discussion. The events tracked for opportunities are different from the ones tracked for customers.
- Connected to specific users.
  
- Members of a group space.

Tracking Activity Streams

Users can start receiving activity streams for opportunities or customer records by accessing the Opportunity or Customer Edit page. Under the header, click Follow. The system starts displaying the activity stream for changes to the records that the user is following. When using activity streams, note the following points:

- A user can stop receiving activity stream messages for opportunities or customer records by unfollowing the opportunity or customer record. Hover over the message and click Unfollow.
- You can hide (not display) updates to connections by hiding the person. You can also hide the activity stream messages from the group spaces that are associated to the opportunity or customer record.
- To view or unhide the connection or group space, click the Options link to see a list of connections or group spaces that are hidden. If you choose to unhide them, the system displays the connections or group space activity stream messages again.
• When an activity stream message is displayed, the message contains hyperlinks to the user who updated the record. Clicking that user’s name returns the user’s Profile page. If the activity stream is for an opportunity record, then the hyperlink is to that opportunity record. If you click an opportunity name, then the application returns the Opportunity Edit page. If the activity stream is for a customer record, then the hyperlink is to that customer record. If the you click a customer name, then the application opens the Customer Edit page.

Liking and Commenting in an Activity Stream
• For information on liking and commenting in an activity stream,


Activity Stream and Oracle WebCenter Spaces
Activity streams are described fully in the Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces. As you read that guide, note the following points:

• Although the guide describes activity streams only in the context of spaces, in Oracle Fusion Applications activity streams work similarly outside of spaces.

• The scope of what is potentially tracked in activity streams is different from what is described in the guide. Many types of activities are specific to Oracle Fusion Applications.

• The exact navigation or user interface in Oracle Fusion Applications might differ from what is described in the guide. Ignore any subject matter that is specific to Oracle WebCenter Spaces.


Using Profiles
In an activity stream message, click a person’s name or picture to open the Portrait tab giving general information about that person, such as contact information and areas of expertise. If you click on your own name or picture, then the My Portrait tab opens, showing more detailed, human resources-related information about you, such as your professional development goals.

• For more information about profiles,


Blogs in Oracle Fusion CRM: Highlights
Blogs are typically personal records of an individual user's experience and opinions. The word "blog" is a contraction of the term "Web log". In Oracle
WebCenter Spaces, you can create blogs to group related blog posts, for example to group topics by the same author or related subjects.

In Oracle WebCenter Spaces, each blog contains various blog posts, with the most recently added blog post displayed at the top. In a Blog page style mode, the Archives pane on the right provides controls for navigating to blog posts. Blog posts are categorized automatically by year and subcategorized by month. Next to the date of a year, the number in parenthesis represents the total number of blog posts created during that year. The number next to a month represents the total number of blog posts created during that month. For example, the designation December (2) shows that two blog posts were created in the month of December. Clicking any month displays all blog posts that were created during that month. You can view all blog posts available in a blog, regardless of the month or year they were created, by clicking the View All link. If there are more blog posts than can be displayed on one page, typically 10 posts, you can use the Next and Previous buttons to navigate through the list of blog posts.

See Also

- For more information on blogs, see the following document.
  
  See: Oracle Fusion Middleware User’s Guide for Oracle WebCenter Spaces

How can I enable social networking features?

Set the Social Networking Features Enabled profile option to “Y” on the Manage Social Networking Profile Option Values page. If you enable this profile option, users can access the following features:

- Kudos
- Message board
- Activity stream
- Connections
- Personal status

Note

If you disable social networking features, users can continue to access the bookmarks they created from the Bookmarks region in the Activities and Interests card on the My Portrait tab. Also, the spaces that users are a member of continue to appear in the Spaces region.

Define Workforce Profiles

Profile Management: Explained

Profile management provides a framework for developing and managing talent profiles that meet your industry or organizational requirements.
summarize the qualifications and skills of a person or a workforce structure such as a job or position. Profiles are valuable for tracking workers’ skills, competencies, and accomplishments, and for various talent management activities, such as career planning, identifying training needs, performance management, and in the recruitment process for identifying job requirements and suitable applicants.

This topic discusses:

- Profile search
- Profile comparison
- Best-fit analysis

Profile Search

You can search profiles for workers, jobs, and positions with certain criteria. For example, an HR (Human Resources) specialist in London who is looking to fill an applications developer position from within the company can search for profiles of all workers who are based in London and have experience with Java and PL/SQL.

Profile Comparison

Using the comparison feature, you can compare profiles to determine next career moves or training needs for workers, and identify suitable candidates for jobs. For example, if John is looking for his next career move, he can compare his profile to that of a job to determine whether his competency ratings match the targeted competency ratings in a job profile. For example, if his Teamwork rating is 3 and the Product Strategy Teamwork requirement is 4, he has a deficiency of -1. John and his manager can use this gap to drive development plans and for other talent management-related functions.

Best-Fit Analysis

Use the best-fit analysis to determine the person profile that most closely matches a job profile, or the job profile that is the best match for a person profile. For example, if you are trying to fill a Developer vacancy, and the job profile requires a B.S. degree in Computer Science, level 4 expertise coding Java, and a Teamwork rating of at least 3, you can review an automatically-generated list of workers who most closely match this set of requirements. You can also use the best-fit analysis to find workers who are similar to a selected worker, or jobs that are similar to a selected job.

Oracle Fusion Profile Management Components: How They Work Together

You can configure Oracle Fusion Profile Management to meet your business requirements using these components: the content library, profiles and profile types, content subscribers, educational establishments, instance qualifier sets, and rating models.

This figure illustrates how the components of Profile Management fit together.
Content Library

The content library provides the foundation for profiles as it stores both content types and content items.

Profile Types

Profile types are templates that you use to create profiles. Profile types determine whether the profile is for a person or for a workforce structure such as a job or a position, and the content of the profile. You select content types from the content library to create content sections for the profile type.

Profiles

You create person profiles for individual workers and model profiles for workforce structures, such as a jobs or positions. The information that you complete for the profile is determined by how the profile type has been set up. For example, a person profile might contain information about a person’s education, language skills, competencies, and activities and interests. A job profile might contain information about the requirements for the job, such as competencies, language skills, degrees, or certifications.

Content Subscribers

Content subscribers are applications external to Oracle Fusion Profile Management that use content types.

Educational Establishments

You can define educational establishments for workers to use when they add education information, such as degrees, to their profile.
Instance Qualifier Sets
You assign instance qualifiers to content types. Instance qualifier sets uniquely identify multiple instances of a content item on a profile. For example, if multiple people update a performance rating for a competency on a worker's profile, instance qualifiers provide a unique identifier to each instance of the competency so that you can determine who provided each rating.

Rating Models
When you create content types in the content library, you can attach rating models to determine the scale for measuring performance and proficiency. You can also use rating models to measure the risk and impact of loss for workers, and to measure their potential.

Oracle Fusion Profile Management, Performance Management, Goal Management, and Talent Review: How They Work Together

Oracle Fusion Profile Management supports talent management business processes in these products:
- Oracle Fusion Performance Management
- Oracle Fusion Goal Management
- Oracle Fusion Talent Review

Oracle Fusion Performance Management
Oracle Fusion Performance Management uses the rating models that you define in Profile Management to rate workers on their performance. When you define a performance document template, you can specify whether the ratings and comments from managers and workers are uploaded automatically to workers' profiles when the performance document is finalized. Instance qualifier sets distinguish the manager ratings from the workers' self ratings. Performance Management also uses competencies from the content library in performance documents.

Oracle Fusion Goal Management
You can set up a content type relationship between the Goals content type and other content types, such as the Competencies content type and the Memberships content type. Using these relationships, you can then set up target outcomes for goals. Target outcomes are the content items within the content type that is related to the Goals content type. For example, if you set up a relationship between the Goals content type and the Competencies content type, workers can add a target outcome of a specific competency to their goals. In this case, the specific competency is the content item within the Competencies content type. When workers complete the goal, their profiles are updated to include the competency.

Oracle Fusion Talent Review
Oracle Fusion Talent Review uses information from the Performance and Potential and Risk of Loss sections within a worker's profile to build the analytics that are part of the talent review process. These sections are defined as content types within the content library and included in the person profile type. When a talent review is complete, workers' profiles are updated automatically with the performance and potential ratings given during calibration discussions. Instance qualifier sets enable you to distinguish the talent review rating from
ratings given by the worker’s manager, a peer, or perhaps the worker’s self-evaluation.

**Define Talent Profile Settings**

**Profile Management Lookups: Explained**

This topic identifies common lookups that are profile management-related and have user or extensible customization levels. Review these lookups, and update them as appropriate to suit enterprise requirements.

**Profile Management Lookups**

Profile management lookups are described in the following table.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Description</th>
<th>Customization Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT_CONTENT_SUPP_CODE</td>
<td>Codes to identify where the content type originated, such as from the customer or from a third party. HR specialists assign supplier codes when setting up new content types.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_COMPETENCY_EVAL_TYPE</td>
<td>Types of competency ratings, such as self, supervisor, and peer. Evaluation types are used in instance qualifier sets to identify the role of the person who provided a competency rating for a worker.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_DEGREE_LEVEL</td>
<td>Required levels of education for a job or position profile, such as a Bachelor’s Degree or Masters degree.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_DURATION</td>
<td>Time periods for when a worker would like to make a career move. Workers select a duration for their career move in the career preferences information on the career planning card.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_EDUCATION_LEVEL</td>
<td>Types of education that a degree provides, such as a Bachelor’s degree or one year college. HR specialists use education levels when creating content items in the Degrees content type.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_IMPORTANCE</td>
<td>Values for the importance level of each content type. Importance values are used in the best-fit analysis calculation.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_NOTES_TYPE</td>
<td>Values for categories of notes, such as external, internal, and so on.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_PAY_FREQUENCY</td>
<td>Frequencies at which a worker is paid. Workers specify a preferred pay frequency when they edit their work requirements on the experience and qualifications card.</td>
<td>User</td>
</tr>
<tr>
<td>Field Name</td>
<td>Description</td>
<td>Accessibility</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>HRT_READINESS</td>
<td>Time periods in which a worker will be ready for advancement to a specified job or position profile. Managers and human resource (HR) specialists use readiness levels when editing the talent ratings information on workers’ career planning cards.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_RISK_REASON</td>
<td>Reasons for why a worker is at risk for leaving the company. Managers and HR specialists use risk reasons when editing the talent ratings information on workers’ career planning cards.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_SATISFACTION_METHOD</td>
<td>Methods by which an item such as a competency is verified, such as assessment or demonstration. Managers and HR specialists use these values to identify the method that was used to evaluate the proficiency of a worker in a particular skill or quality.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_TASK_PRIORITY</td>
<td>Codes for the priority of a task, such as High, Medium, and so on. Talent review facilitators specify a priority when assigning tasks during a talent review.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_TASK_TYPE</td>
<td>Categories of tasks, such as Preparation, Presentation, and so on. Talent review facilitators specify a task type when assigning tasks during a talent review.</td>
<td>Extensible</td>
</tr>
<tr>
<td>HRT_TRAVEL_FREQUENCY</td>
<td>Percentages of time a worker is expected to travel for a job or position, for example, 25 percent or 50 percent. Managers and HR specialists specify the required travel frequency on job and position profiles. Workers also specify a travel frequency when they edit their work requirements on the experience and qualifications card</td>
<td>User</td>
</tr>
<tr>
<td>HRT_VALIDITY_PERIOD</td>
<td>Periods of time for which content items such as licenses and certifications are valid. Managers and human resource (HR) specialists select validity periods when setting up content items for the Licenses and Certifications content type.</td>
<td>User</td>
</tr>
<tr>
<td>HRT_WORK_DAYS</td>
<td>Work days for a job or position, such as Monday through Friday. Managers and HR specialists specify the expected work days on job and position profiles.</td>
<td>User</td>
</tr>
</tbody>
</table>
Value Sets: Explained

A value set is a set of valid values that you assign to a flexfield segment.

An end user enters a value into a flexfield segment while using the application. The flexfield validates the segment against the set of valid values that you configured as a value set and assigned to the segment.

For example, you can define a required format, such as a five digit number, or a list of valid values, such as green, red, and blue.

Flexfield segments are usually validated, and typically each segment in a given flexfield uses a different value set. You can assign a single value set to more than one segment, and you can share value sets among different flexfields.

Caution

Be sure changes to a shared value set are compatible with all flexfields segments using the value set.

Defining value sets involves making decisions about the following.

- Validation
- Security
- Precision and scale
- Usage and deployment

Validation

The following types of validation are available for value sets.

- Format only, where end users enter data rather than selecting values from a list
- Independent, a list of values consisting of valid values you specify
- Dependent, a list of values where a valid value derives from the independent value of another segment
- Subset, where the list of values is a subset of the values in an existing independent value set
- Table, where the values derive from a column in an application table and the list of values is limited by a WHERE clause

A segment that uses a format only value set does not present a list of valid values to users.
You can build a tree structure from the values in an independent value set whose data type is character.

**Note**

Adding table validated value sets to the list of available value sets available for configuration is considered a custom task.

For more information, see the Oracle Fusion Applications Extensibility Guide.

**Security**

Value set security only works in conjunction with usage within flexfield segments. If a value set is used standalone, meaning outside a flexfield, value set security is not applied, but Oracle Fusion data security is enforced.

You can specify that data security be applied to the values in flexfield segments that use a value set. Based on the roles provisioned to users, data security policies determine which values of the flexfield segment end users can view or modify.

Value set security applies at the value set level. If a value set is secured, every usage of it in any flexfield is secured. It is not possible to disable security for individual usages of the same value set.

Value set security applies to independent, dependent, or table-validated value sets.

Value set security applies mainly when data is being created or updated, and to key flexfield combinations tables for query purposes. Value set security does not determine which descriptive flexfield data is shown upon querying.

Security conditions defined on value sets always use table aliases. When filters are used, table aliases are always used by default. When predicates are defined for data security conditions, make sure that the predicates also use table aliases.

For key flexfields, the attributes in the view object that correspond to the code combination ID (CCID), structure instance number (SIN), and data set number (DSN) cannot be transient. They must exist in the database table. For key flexfields, the SIN segment is the discriminator attribute, and the CCID segment is the common attribute.

**Precision and Scale**

For a value set with the data type Number, you can specify the precision (maximum number of digits user can enter) or scale (maximum number of digits following the decimal point).

**Usage and Deployment**

The usage of a value set is the flexfields where that value set is used. The deployment status of flexfields in which the value set is used indicates the deployment status of the value set instance.

The figure shows a value set used by a segment in a key flexfield and the context segment of a descriptive flexfield.
For most value sets, when you enter values into a flexfield segment, you can enter only values that already exist in the value set assigned to that segment.

Global and context-sensitive segment require a value set. You can assign a value set to a descriptive flexfield context segment. If you specify only context values, not value sets for contexts, the set of valid values is equal to the set of context values.

**Defining Value Sets: Critical Choices**

Validation and usage of value sets determine where and how end users access valid values for attributes represented by flexfield segments.

**Tip**

You can create value sets while creating descriptive and extensible flexfield segments. However, define value sets before configuring key flexfield segments that use them, because you assign existing value sets while configuring key flexfield segments.

**Value Sets for Context Segments**

When assigning a value set to a context segment, you can only use table-validated or independent value sets. The data type must be character and the maximum length of the values being stored must not be larger than column length of the context.

**Format Only Validation**

The format only validation type enables end users to enter any value, as long as it meets your specified formatting rules. That is, the value must not exceed the maximum length you define for your value set, and it must meet any format requirements for that value set.
For example, if the value set allows only numeric characters, your user could enter the value 456 (for a value set with maximum length of three or more), but could not enter the value ABC. A format only value set does not otherwise restrict the range of different values that users can enter. For numeric values, you can also specify if a numeric value should be zero filled or how many digits should follow the radix separator.

**Interdependent Value Sets**

You cannot specify a dependent value set for a given segment without having first defined an independent value set that you apply to another segment in the same flexfield. You use a dependent value set to limit the list of values for a given segment based on the value that the end user has chosen for a related independent segment. The available values in a dependent list and the meaning of a given value depend on which value was selected for the independently validated segment.

For example, you could define an independent value set of U.S. states with values such as CA, NY, and so on. Then you define a dependent value set of U.S. cities, with values such as San Francisco and Los Angeles that are valid for the independent value CA, and New York City and Albany that are valid for the independent value NY. In the UI, only the valid cities can be selected for a given state.

Because you define a subset value set from an existing independent value set, you must define the independent value set first. End users do not need to choose a value for another segment first to have access to the subset value set.

**Table Validation**

Typically, you use a table-validated set when the values you want to use are already maintained in an application table (for example, a table of vendor names). Table validation allows you to enable a segment to depend upon multiple prior segments in the same context or structure.

Table-validated value sets have unique values across the table, irrespective of bind variables. The WHERE clause fragment of the value set is considered if it does not have bind variables. If it has bind variables, the assumption is that the values are unique in the value set.

**Range**

In the case of format, independent, or dependent value sets, you can specify a range to further limit which values are valid. You can specify a range of values that are valid within a value set. You can also specify a range validated pair of segments where one segment represents the low end of the range and another segment represents the high end of the range.

For example, you might specify a range for a format-only value set with format type Number where the user can enter only values between 0 and 100. If you use a table value set, you cannot reference flexfield segments in the WHERE clause of the value set. For example, the WHERE clause cannot reference a segment or a value set.

**Security**

In the case of independent and dependent values, you can specify that data security be applied to the values in segments that use a value set. Based on the
roles provisioned to users, data security policies determine which values of the flexfield segment end users can view or modify.

When you enable security on a table-validated value sets, the security rule that is defined is absolute and not contingent upon the bind variables (if any) that may be used by the WHERE clause of the value set. For example, suppose a table-validated value set has a bind variable to further filter the value list to x, y and z from a list of x, y, z, xx, yy, zz. The data security rule or filter written against the value set should not assume anything about the bind variables; it must assume the whole list of values is available and write the rule, for example, to allow x, or to allow y and z. By default in data security all values are denied, and show only rows to which access has been provided.

**Maintenance**

There is no need to define or maintain values for a table-validated or subset value set, as the values are managed as part of the referenced table or independent value set, respectively.

If your application has more than one language installed, or there is any possibility that you might install one or more additional languages for your application in the future, select **Translatable**. This does not require you to provide translated values now, but you cannot change this option if you decide to provide them later.

For more information about defining value sets, see the Oracle Fusion Applications Extensibility Guide.

**Define Talent Profile Content**

**Rating Models: Explained**

Use rating models to rate workers on their performance and level of proficiency in the skills and qualities that are set up on the person profile. You can also use rating models to specify target proficiency levels for items on a model profile, so that the model profile can be compared to workers’ profiles.

To rate workers on their performance and proficiency, you attach rating models to the content types that are included in the person profile, and then workers can be rated on the items within the type. For example, you can rate workers on the Communication content item within the Competencies content type.

For model profiles, you can specify target proficiency levels for items on the profile, so that the model profile can be compared to workers’ profiles. Using the ratings, managers can compare a model profile to workers’ profiles to determine the best person suited to fill a position. Workers can compare their profile to model profiles to identify other positions within the organization that they are suited for, or to identify gaps in skills that they need to fill before applying for other positions.

Rating models that measure workers’ potential and the impact and risk of loss are also available.

Rating models can include some or all of the following components, depending on the use for the model:

- Rating levels
• Review points
• Rating categories
• Distributions

**Rating Levels**
Rating levels identify the qualitative values, such as 1, 2, 3, or 4, that you use to rate a worker.

For rating models that are used by Oracle Fusion Performance Management, the following applies:

- You must define numeric ratings for rating models that you use with performance documents that use calculated ratings.
- You must define rating levels using whole numbers, with the highest number indicating the best rating, for the Performance Management analytics to render correctly. Rating levels determine high and low ratings in the analytics.

**Review Points**
Define review points for rating models that you use with performance documents that use the sum or band calculation method. The review points and point ranges that you define for the rating model are used to calculate ratings.

**Rating Categories**
Rating categories enable you to group rating levels together for analysis tools used in the talent review process, such as the box chart that is used in the talent review process. You can group rating levels into categories such as low, medium, and high, and those categories then become the labels for the analytic. You should not change rating categories after setting them up, as the changes could affect the analytic.

**Distributions**
Oracle Fusion Compensation Management and Oracle Fusion Performance Management both use rating model distributions to determine the targeted minimum and maximum percentage of workers that should be given each rating level. Compensation Management uses the distribution values that you set up directly on rating models. However, you can set up distributions at the performance template level for rating models that are used in Performance Management.

**Content Types: Explained**

Content types are the skills, qualities, and qualifications that you want to track in talent profiles. The content library contains predefined content types such as competencies, languages, and degrees, but you can create new content types as needed. You can also create free-form content types.

Content types contain:

- Properties
- Relationships
- Subscribers
Properties

For each content type, you define the properties that all content items of the content type can or must have. To define properties of the content type, you select fields to be displayed when setting up the content items and the attributes of those fields. The attributes that you specify for each field are: field label, default value, whether the field is required, and whether the field is hidden, display-only, or editable. If the field is attached to a predefined list of values, you also specify the source of the list.

Relationships

Specify where one content type is a parent of another, or where one content type supports another. Content items of content types with relationships inherit the relationship. You cannot create two kinds of relationships between two types or create a relationship between a type and itself. For example, content type A cannot be both the parent and child of content type B. A content type cannot be related to itself.

Subscribers

Specify the subscriber codes of the applications or other Oracle Fusion products that use each content type. If you do not specify a subscriber code for the content type, you cannot view the content type in other applications. For example, if you add a new content type called Corporate Citizenship to the person profile type, you cannot view the content section for Corporate Citizenship in person profiles until you add the new content type to the HRMS content subscriber code.

Content Type Relationships: Examples

Content relationships enable you to associate content items of related content types with each other. The following scenarios illustrate the use of content type relationships.

Tracking Product Expertise

The Resource Manager component of Oracle Fusion Trading Community Model uses content type relationships to track the areas of expertise of workers. Using the predefined content type relationship where the Categories content type is a parent of Products, and Products is a parent of Components, resource managers can keep track of the categories, products, and components that are considered to be their areas of expertise for their resources.

Note

Because these content types and relationships are applicable only to the Resource Manager component of Oracle Fusion Trading Community Model, this product is the only predefined content subscriber to these content types.

Specifying Target Outcomes for Goals

To help your workers manage their goals, you want them to associate their goals with target outcomes, which are content types such as Competencies.
and Memberships. To accomplish this, you can set up a relationship on the Competencies content type where Competencies is supported by Goals. Workers can then set up goals that have a specific competency as a target outcome.

Content Items: Explained

Content items are the individual skills, qualities, and qualifications within the content types in the content library. For example, within the Competencies content type, communication is a content item. You can create content items to meet your business needs.

This topic discusses:

- Item properties
- Related content items
- Proficiency descriptions

Item Properties

Content items inherit the fields and field properties that you define for the content type to which the item belongs. For example, one of the fields defined for the Memberships content type is ITEM_DESCRIPTION field. The attributes of this field are set up so that the label is Description, the field is editable, and the field does not require an entry. When you set up a content item for the Memberships content type, you will see a field labeled Description, in which you can enter text to describe the agency, but the field will not be required.

Related Content Items

If the content type for which you are creating an item has related content types, then you can enter the related content items for the item. For example, if you have a content type relationship where the Competencies content type is supported by the Goals content type, then on the content items for competencies, you can enter related goals.

Proficiency Descriptions

If the content item belongs to a content type that has a rating model defined for it, then you can either use the existing descriptions for the ratings within the model, or define descriptions for the ratings that are specific to the content item. When ratings are given for the content item, the descriptions defined for the item are used instead of those on the rating model.

Creating Content Types and Content Items: Worked Example

This example demonstrates how to set up a new content type and content items to track the corporate citizenship activities of your workers so that you can rate them on their involvement in the organization. This example also demonstrates how to set up a rating model to be used with the content type and add the new content type to the person profile.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can a predefined rating model be used to rate corporate citizenship?</td>
<td>No. The predefined rating models do not have relevant rating descriptions.</td>
</tr>
</tbody>
</table>
Should the content type be a free-form content type?

No. Content items are needed, and the content should be stored in the content library.

What field and properties should the content type contain?

Add two fields to the content type:
- ITEM_TEXT_20
- RATING_MODEL_ID

The ITEM_TEXT_20 field will have a label of Comments, and will be used to enter comments about the workers’ corporate involvement. The RATING_MODEL_ID field will have a label of Company Contribution and will be used to attach the rating model for corporate citizenship to the content type.

Both fields should require entry and should be editable.

Does the content type need any content subscribers?

Yes. In order to be visible on the person profile, the new content type must be added to the HRMS content subscriber code.

What content items are needed to track the required information?

- Corporate social responsibility
- Corporate environmental responsibility
- Corporate industrial citizenship
- Corporate state citizenship
- Corporate borough, council, or municipal citizenship

When the content type is added to the person profile as a content section, what properties should the fields contain?

Both the Comments field and the Company Contribution fields should display in the detail view of the content section, they should be required, and they should be included in search results.

To track corporate citizenship for your workers, complete the following tasks:

- Create a rating model.
- Create a content type.
- Create content items.
- Add the content type to the person profile type.

**Creating a Rating Model**

1. In the Setup and Maintenance work area, search for the Manage Profile Rating Models task and click Go to Task.
2. On the Manage Rating Models page, click Create.
3. On the Create Rating Model page, complete the following fields, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Citizenship</td>
</tr>
<tr>
<td>Rating Name</td>
<td>Corporate Citizenship</td>
</tr>
</tbody>
</table>
4. On the Rating Levels tab, complete the following fields, as shown in this table.

<table>
<thead>
<tr>
<th>Rating Level</th>
<th>Name</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrates limited or unused influence.</td>
<td>Limited</td>
</tr>
<tr>
<td>2</td>
<td>Demonstrates clear evidence of influence.</td>
<td>Clear Evidence</td>
</tr>
<tr>
<td>3</td>
<td>Provides a successful image of the company as socially responsible in limited environments.</td>
<td>Successful Image</td>
</tr>
<tr>
<td>4</td>
<td>Actively called upon to use influence as a corporate representative in selected environments.</td>
<td>Influential in Selected Environments</td>
</tr>
<tr>
<td>5</td>
<td>Demonstrates high level of influence and is able to operate effectively in all environments.</td>
<td>High Level of Influence</td>
</tr>
</tbody>
</table>

5. Click **Save and Close**.

**Creating a Content Type**

1. In the Setup and Maintenance work area, search for the Manage Profile Content Types task and click **Go to Task**.

2. On the Manage Content Types page, click **Create**.

3. On the Create Content Type page, add a content type by completing the following fields, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Citizenship</td>
</tr>
<tr>
<td>Name</td>
<td>Corporate Citizenship</td>
</tr>
<tr>
<td>Description</td>
<td>Ratings for corporate citizenship behaviors for workers.</td>
</tr>
</tbody>
</table>

4. Set up the following field properties, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Field Label</th>
<th>Required</th>
<th>Display Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT_20</td>
<td>Comments</td>
<td>Selected</td>
<td>Editable</td>
</tr>
<tr>
<td>RATING_MODEL_</td>
<td>Company Contribution</td>
<td>Selected</td>
<td>Editable</td>
</tr>
</tbody>
</table>
5. Click **Save and Close**.

6. On the Manage Content Types page, select the **Corporate Citizenship** content type and click **Edit**.

7. On the Edit Content Type page, select the **Subscribers** tab.

8. On the Subscribers tab, click **Add**.

9. In the Subscriber Code field, select **HRMS**.

10. Click **Save and Close**.

### Creating Content Items

1. In the Setup and Maintenance work area, search for the **Manage Profile Content Items** task and click **Go to Task**.

2. On the Manage Content Items page, click **Create**.

3. In the Create Content Item dialog box, complete the following fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Type</td>
<td>Corporate Citizenship</td>
</tr>
<tr>
<td>Content Item</td>
<td>Corporate Social Responsibility</td>
</tr>
</tbody>
</table>

4. On the Create Content Item: Corporate Social Responsibility page, select the **Corporate Citizenship** rating model in the **Rating** field.

5. Click **Save and Close**.

6. Repeat steps 2 through 5 to add content items for Corporate Environmental Responsibility, Corporate Industrial Citizenship, Corporate State Citizenship, and Corporate Borough, Council, or Municipal Citizenship.

### Adding the Corporate Citizenship Content Type to the Person Profile Type

1. In the Setup and Maintenance work area, search for the **Manage Profile Types** task and click **Go to Task**.

2. On the Manage Profile Types page, locate the Person profile type and click **Edit**.

3. On the Edit Profile Type: Person page, select the **Content Sections** tab.

4. In the Content Sections region, click **Add Content Section**.

5. In the Content Types dialog box, select **Citizenship**.

6. In the Content Sections region, click **Citizenship**.

7. On the Content Section page, set up the following field properties, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Display Flag</th>
<th>Required</th>
<th>Searchable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT240_1</td>
<td>Detail</td>
<td>Selected</td>
<td>Selected</td>
</tr>
<tr>
<td>RATING_LEVEL_ID1</td>
<td>Detail</td>
<td>Selected</td>
<td>Selected</td>
</tr>
</tbody>
</table>
8. On the Edit Profile Type: Person page, click **Save and Close**.
9. In the Content Access Section region, click **Add**.
10. In the Role field, select **Employee**.
11. Select the **Update** check box.
12. Click **Add**.
13. In the Role field, select **Manager**.
14. Click **OK**.
15. Click **Add**.
16. In the Role field, select **HR Specialist**.
17. Click **OK**.
18. On the Edit Profile Type: Person page, click **Save and Close**.

**Free-Form Content Types: Worked Example**

This example demonstrates how to set up a free-form content type, add it to the HRMS content subscriber code, and then add the content type to the person profile type.

Your company wants to track the previous employment information for workers, including employer name, dates of employment, and job description. However, you do not want to set up and maintain content items for each employer, and this information applies only to person profiles. You decide to use a free-form content type for this information. You can set up the free-form content type with minimal information, and then when you add it to the person profile as a content section, you can define properties for employer name, dates of employment, and job description. Workers can complete their employment information on their profile based on how you set up the content section. The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should the content type be a free-form content type?</td>
<td>Yes. Content items are not needed, and the content should not be stored in the content library.</td>
</tr>
<tr>
<td>Does the content type need any content subscribers?</td>
<td>Yes. In order to be visible on the person profile, the new content type must be added to the HRMS content subscriber code.</td>
</tr>
<tr>
<td>When the content type is added to the person profile as a content section, what fields are needed?</td>
<td>To capture the previous employer, a text field is needed. To capture employment dates, two date fields are needed. To capture job description, another text field is needed. Therefore, the following fields must be added:</td>
</tr>
<tr>
<td></td>
<td>• ITEM_TEXT30_1</td>
</tr>
<tr>
<td></td>
<td>• ITEM_DATE_1</td>
</tr>
<tr>
<td></td>
<td>• ITEM_DATE_2</td>
</tr>
<tr>
<td></td>
<td>• ITEM_TEXT240_1</td>
</tr>
</tbody>
</table>
What properties are needed for the ITEM_TEXT30_1 field?
The field should not be required and the information should not be available as search criteria, so you need only set up these field properties as follows:

- **Label**: Previous Employer
- **Display**: Detail (section should appear in detail view of profile)

What properties are needed for the ITEM_DATE_1 field?
The field should not be required and the information should not be available as search criteria, so you need only set up these field properties as follows:

- **Label**: From Date
- **Display**: Detail

What properties are needed for the ITEM_DATE_2 field?
The field should not be required and the information should not be available as search criteria, so you need only set up these field properties as follows:

- **Label**: To Date
- **Display**: Detail

What properties are needed for the ITEM_TEXT240_1 field?
The field should not be required and the information should not be available as search criteria, so you need only set up these field properties as follows:

- **Label**: Job Description
- **Display**: Detail

What role access should be granted for the content section?
Employees, managers, and HR specialists should all have access to update the section.

To set up a free-form content type to track previous employment information for workers, you must:

- Set up a free-form content type
- Add the free-form content type to the person profile type

### Setting Up a Free-Form Content Type

1. In the Setup and Maintenance work area, search for the Manage Profile Content Types task and click Go to Task.

2. On the Manage Content Types page, click Create.

3. On the Create Content Type page, complete the following fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>PREVEMP</td>
</tr>
<tr>
<td>Name</td>
<td>Previous Employment</td>
</tr>
<tr>
<td>Description</td>
<td>Track previous employment information for workers.</td>
</tr>
</tbody>
</table>

4. Select the Free-Form Type check box.
5. Click **Save and Close**.
6. On the Manage Content Types page, select the **Previous Employment** content type and click **Edit**.
7. On the Edit Content Type page, select the **Subscribers** tab.
8. On the Subscribers tab, select HRMS in the **Subscriber Code** field.
9. Click **Save and Close**.

**Adding the Free-Form Content Type to the Person Profile Type**
1. In the Setup and Maintenance work area, search for the **Manage Profile Types** task and click **Go to Task**.
2. On the Manage Profile Types page, select the **Person** profile type, and click **Edit**.
3. On the Edit Profile Type: Person page, select the **Content Sections** tab and click **Add Content Section**.
4. In the Content Types dialog box, select the **Previous Employment** content type.
5. In the Content Sections region, click the **Previous Employment** content type and enter the following properties on the Content Section page, as shown in this table.

<table>
<thead>
<tr>
<th>Column Name</th>
<th>Label</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_TEXT30_1</td>
<td>Previous Employer</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_DATE_1</td>
<td>From Date</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_DATE_2</td>
<td>To Date</td>
<td>Detail</td>
</tr>
<tr>
<td>ITEM_TEXT240_1</td>
<td>Job Description</td>
<td>Detail</td>
</tr>
</tbody>
</table>

6. In the Content Access Section region, click **Add**.
7. In the Role field, select **Employee**.
8. Select the **Update** check box.
9. Click **Add**.
10. In the Role field, select **Manager**.
11. Click **OK**.
12. Click **Add**.
13. In the Role field, select **HR Specialist**.
14. Click **OK**.
15. On the Edit Profile Type: Person page, click **Save and Close**.

**FAQs for Define Talent Profile Content**

**What's a rating category?**

A label for a grouping of rating levels. Rating categories are used in talent management processes such as performance management and talent reviews to group ratings for analysis tools such as the performance and potential box chart.
Why are some content type relationships not editable?

You can edit any content type relationships that you define. However, the relationships that are predefined cannot be changed.

How can I define a relationship between the Goals content type and other content types?

Set up the relationship on the content type that you want to relate to goals using the relationship type: Is supported by. For example, if you want to define a relationship between the Goals content type and the Competencies content type, set up the relationship on the Competencies content type, instead of the Goals content type.

What's a free-form content type?

Free-form content types enable you to capture information in a profile that you do not need to store in the content library. For example, you can set up a free-form content type to store information about the previous employment information for your workers.

A free-form content type contains only a code, name, and a description, and does not have any properties defined for it until you add it to a profile type. Free-form content types do not include any content items.

Why can't I change the relationship type of a content item?

A content item’s relationship type is derived from its content type, and you cannot change it. You can only change relationships at the content type level. You cannot change predefined relationships.

Define Talent Profiles

Profile Types: Explained

Profile types include person profile types and model profile types. The person profile type is the template that you use to create profiles of your workers. The person profile contains the skills, qualities, and qualifications that you want to track for your workers. The person profile type is predefined, and you can have only one. Model profile types are templates for workforce structures such as jobs and positions. Model profiles identify the targeted and required skills and qualifications for a job or position, and also identify work requirements, such as work schedule and travel frequency. You can set up multiple model profile types.

To define profile types, you first specify whether the profile type is a person or model profile. For model profiles, you also specify the workforce structures for which the model profile can be used. For example, if you specify that the model profile can be used for jobs and positions, then you can use the profile type to create both job and position profiles. To define the structure of the profile type, you add one or more content sections using content types from the content library and free-form content types. Define the following for each content section:

- Instance qualifier sets
- Section properties
• Role access

**Instance Qualifier Sets**

If you have defined instance qualifier sets for the content type, you select the instance qualifier set to use for the sections.

**Section Properties**

The properties determine the fields and how they are displayed when you create profiles based on the type. For example, properties determine the label for the field, whether the field is required, and whether the field should be included in profile searches. For sections with content types from the content library, you can use the field properties as they have been defined in the content library, or add, remove, or change the properties to suit the content section. You define all of the properties for free-form content types.

**Role Access**

You can specify the user roles, such as Employee or Manager, that can view the content section, and which user roles have access to update the section.

**Adding Common Lookup Types to a Content Section Property: Explained**

When defining content sections for a profile type, you can associate common lookup types with a content section property, enabling you to provide a list of values for the content section property. For example, you can add a list of industries to a content section called Industry Expertise. You can use existing common lookup types, or create your own. Common lookups can be associated with these content section properties: ITEM_TEXT30_6 through ITEM_TEXT30_15.

**Note**

This functionality does not apply to these content section properties when they are associated with the following content sections: Career Preferences, Potential, Risk, Advancement Readiness, Career Statement, Talent Score, Performance Rating, and Work Requirements.

**Adding Common Lookup Types to a Content Section Property: Explained**

When defining content sections for a profile type, you can associate common lookup types with a content section property, enabling you to provide a list of values for the content section property. For example, you can add a list of industries to a content section called Industry Expertise. You can use existing common lookup types, or create your own. Common lookups can be associated with these content section properties: ITEM_TEXT30_6 through ITEM_TEXT30_15.

**Note**

This functionality does not apply to these content section properties when they are associated with the following content sections: Career Preferences, Potential, Risk, Advancement Readiness, Career Statement, Talent Score, Performance Rating, and Work Requirements.
**Instance Qualifier Sets: Explained**

An instance qualifier set is a group of codes that you use to uniquely identify different occurrences of the same profile item within the Competency content type. Instance qualifiers typically identify the role of the person who edited a competency. For example, if a worker, the worker’s peer, and the worker’s manager all enter a rating for a competency on the worker’s profile, instance qualifier sets uniquely identify each instance, or, the rating given by each different role. Uniquely identifying different instances of competencies enables you to specify which instance is used when you view or compare profiles.

Each instance qualifier contains a code and a description, which indicate the role or the application that updated the competency. For example, P is the code that is used when an employee’s peer rates the employee and T is used for the rating that results from the talent review meeting. You can use the predefined codes and descriptions, or you can create your own.

In addition to the code and description, each instance qualifier has the following properties:

- **Priority**
- **Employer and manager views**
- **Search ability**
- **Default instance qualifier for employer and manager**

**Priority**

Priority determines the order in which different instances of a competency are displayed, and also determines which instance to use when searching and comparing profiles. The lowest number indicates the highest priority.

**Employer and Manager Views**

Employer and manager views determine which instances are visible to employees and to managers.

**Search Ability**

You can specify whether items that have been assigned the instance qualifier code should be included in profile searches. For example, you might not want the ratings for competencies given by peers to display when other workers are searching person profiles.

**Default Instance Qualifier for Employee and Manager**

You can specify the default instance qualifier to use when managers and employees update a competency. Each time an employee or manager updates a competency, the record is assigned the instance qualifier code that is identified as the employee or manager default code.

**FAQs for Define Talent Profiles**

**How can I hide or delete an attribute on the person profile?**

You must have the human resource (HR) specialist role to hide or delete an attribute on the person profile.
Define Security for Customer Relationship Management

Oracle Fusion CRM Security: Functional Overview

Oracle Fusion CRM Applications come secured using the industry standard for access control that is called role-based access control (RBAC). This topic discusses key aspects of the RBAC approach that are specific to an Oracle Fusion CRM implementation. You must review other documentation to understand how RBAC is designed to handle a broad range of security needs.

The RBAC standard supports the enforcement of user access control that is based on the role of the user within the organization rather than the user’s individual identity. In RBAC, you assign users with roles that represent the job functions in your enterprise. These roles provide access both to the application functions that users need to perform their jobs as well as the permissions to access the data where they need to perform those functions.

Oracle Fusion Applications, including Oracle Fusion CRM, are secured with a predefined set of enterprise roles. This security reference implementation fulfills the needs of midsize horizontal enterprises, generally between 250 and 10,000 employees. To enable users to perform specific jobs in your CRM enterprise, you provision them with the appropriate enterprise roles. For example, when you provision sales managers with the sales manager job role, they can perform all their job duties, including managing sales teams and their forecasts, setting quotas, and managing sales leads and opportunities.

You can change this security reference implementation if the roles in your enterprise are different or if you want to accommodate expansion into vertical industries, such as health care, insurance, automobiles, or food manufacturing. Application patching does not affect your changes.

Key Components of Oracle Fusion CRM Application Security

The following graphic provides an overview of the key components that determine what functions users can perform in the application (functional security) and on what data they can perform those functions (data security).
For Oracle Fusion CRM, the relevant security components are the following:

- **User**
  
  This document refers to security for human users, not background processes and other system users that are also secured with RBAC.

- **Autoprovisoning rules**

  Rules automatically provision users with enterprise roles that carry all the security settings that are appropriate for their duties. You can provision users based on their role in your organization and other factors, such as their status as an employee or contractor.

- **Enterprise roles**

  There are two types of enterprise roles:
  
  - **Job roles**
    
    Job roles permit users to perform activities specific to their job. For example, providing users with the Sales Manager job role permits them to manage salespersons within the organization, follow up on leads, generate revenue within a territory, build a pipeline, manage territory forecasts, and assist salespersons in closing deals.
  
  - **Abstract roles**
    
    Abstract roles permit users to perform functions that span the different jobs in the enterprise. For example, each user who is an employee must
be provisioned with the Employee abstract role to be able to update their employee profile and picture. For CRM, you must also provision users with the Resource abstract role, this permits users to be assigned to work on leads, opportunities, and other CRM work.

- Duty roles
  Job and abstract roles permit users to carry out actions by virtue of the duty roles they include. For example, the Sales Manager job role includes the Sales Lead Follow Up Duty and the Quota Management Duty. The Sales Management Duty makes it possible for the managers to create and update a sales lead, qualify a sales lead, and convert a sales lead into an opportunity. The Quota Management Duty enables the management of sales territory quotas and territory quota formulas.

- Functional security policies
  Duty roles include functional security policies that provide access to user interface elements, Web services, tasks flows, and other functions. For example, a sales manager who has the Delete Opportunity functional policy can view and click the Delete button. Removing that policy removes the button from view.

  A functional policy is made up of the duty role name and the Delete Opportunity functional privilege. The functional privilege specifies the application features that are being secured. In the security reference manuals, functional privileges are listed in the Privileges section.

- Data security policies
  Duty roles also include data security policies that specify which roles can perform an action under what conditions. For example, the Opportunity Sales Manager Duty includes a data security policy that specifies that sales managers can view opportunities if they are in the management chain or are members of the sales team on the opportunity.

  Each data security policy represents an underlying SQL query. Oracle Fusion CRM Applications evaluate the query at run time, and permit access to data that meets the condition.

  A data security policy is composed of the name of the duty where it applies, a data privilege, and a condition. A data privilege is the combination of the action users can take, the conditions under which they can carry them out, and the object they can act on. Data privileges are listed in the Data Security Policies section of the security reference manuals.

---

**Note**

Unlike other Oracle Fusion Applications, Oracle Fusion CRM Applications do not use data roles (not shown in this diagram) to provide users with data access. They rely strictly on data security policies.

Data roles, which inherit enterprise roles, are used in many Oracle Fusion Applications to restrict user access to a dimension of data, such as a business unit or a data reference set.

How enterprise roles work in practice is best illustrated with an example from the Sales Manager job role outlined in the following diagram:
• A provisioning rule automatically provisions employee sales managers with the enterprise roles they need to do their jobs.
• The rule provisions the Sales Manager job role and the Employee and Resource abstract roles.
• The Sales Manager job role includes the Quota Viewing Duty and the Sales Manager Duty.
• Duty roles inherit other duty roles. For example, the Sales Manager Duty inherits many other duty roles including the Marketing Lead Analysis Duty and the Opportunity Sales Manager Duty.
• The duty roles are associated with functional security policies and data security policies. For example, the inherited Opportunity Sales Manager Duty comes with the following:
  • Functional security policies that specify which application pages and functions sales managers can access for deleting, assigning, closing, creating, and viewing an opportunity. For example, the view opportunity policy permits sales managers to view all UIs, Web services, and task flows that are related to opportunities.
  • Data security policies that specify what actions opportunity sales managers can take on what opportunities and under what conditions. For example, opportunity sales managers can view all data related to opportunities where they are opportunity sales team members with view, edit, or full access.
The following diagram provides more detail about the composition of a policy. Each policy, such as the View Opportunity policy, is composed of a duty role name and a privilege:

- The view opportunity functional security policy is composed of the duty name and the View Opportunity functional privilege.

- The view opportunity data security policy is composed of the duty name, the View Opportunity data privilege, and a condition. It specifies that sales managers can view all data related to opportunities where they are an opportunity sales team member with view, edit, or full access.

About the Security Reference Implementation

Details about the available enterprise roles, duty roles, and policies in the security reference implementation are described in reference manuals organized by business process.

Each of the enterprise roles provided by Oracle is composed of a hierarchy of other roles and duties. The following diagram displays a portion of the hierarchy for the Sales Manager job role from the Oracle Fusion Applications Sales Security Reference Manual as an illustration.
The Sales Manager job role inherits the Business Intelligence Applications Worker abstract role. This abstract role comes with the Business Intelligence Applications Analysis Duty that permits the viewing of business analysis reports.

The Sales Manager job role also inherits the Sales Manager duty role. All job roles include a top-level duty role with the same name as the job role. This top-level duty role is the container for all of the duty roles assigned to a job role. As a general rule, the permissions are attached to the duties at the lowest level of the hierarchy.

The top-level duty roles make it easier for you to create job roles of your own. For example, if you want to create a new job role because you want to give additional functionality to a special class of sales managers, then you can assign the top-level Sales Manager duty to the new job role to give the users all the same permissions as a regular sales manager and then add whatever additional duty roles you want. (For an example of how to do this task, see the Enabling Salespeople to Obtain Microsoft Outlook Access to All Sales Accounts: Worked Example help topic.)

### How Opportunity Information Is Secured: Explained

This topic explains how the security reference implementation provided by Oracle determines who can access what opportunity information in your CRM organization.
Your CRM application data comes secured with Oracle's security reference implementation. The following diagram illustrates who can access what opportunity information:

- Named agents in the diagram (A, B, and C) can access the opportunity because they have created it, are on the sales team, or own a territory related to the opportunity.

- Unnamed agents (highlighted in yellow) cannot view the opportunity although they have the same manager as their peers who can view them.

- Managers can view the opportunity because a salesperson in their management chain can view it.

This figure shows who in a sales hierarchy can access an opportunity:

You can see the opportunity in this figure if you do the following:

- You create the opportunity.
  
  Agent A can access the opportunity because she created it. When you create an opportunity, you are the initial owner.

- You are on the opportunity sales team.
  
  Agent B can access the opportunity because he is on the sales team.

- You are the owner of the territory.
Agent C can access the opportunity because he is the owner of the NW territory.

• The opportunity owner is your direct or indirect report in the resource hierarchy.

Sales managers who are higher up in the management chain can also see the opportunity because access is provided through the resource hierarchy. Agent C’s manager can access the opportunity information, but agent C’s colleagues cannot.

• You can also access the opportunity if you are assigned to a territory for the sales account associated with the opportunity or if a territory is assigned to the revenue lines on the opportunity. (Revenue lines and sales accounts are not shown in this diagram).

Access differs between territory members and opportunity members:

• An opportunity owner gets full access to the opportunity, which includes the ability to edit as well as add and remove team members.

• Owners and members of territories assigned to the sales account of the opportunity get read-only access to the opportunity and are not added to the opportunity sales team.

• Owners and members of territories assigned to the opportunity revenue lines are added as a distinct list of territories to the opportunity sales team. Owners and members of these territories get full access to the opportunity. Depending on a profile option, either only the owner or all the members of the territory are added as resources to the opportunity sales team. Regardless of the access level for these members as a resource on the opportunity team, they will always have full access.

**Special Access**

Some access is not affected by the management hierarchy and membership in sales teams or territories. This special access includes:

• Administrators: Administrators get access to opportunities and other objects. This access is based on their privileges, regardless of where the administrators are in the management hierarchy. Administrators do not have to be on the sales team or members of territories.

• Deal Protection: Salespersons assigned to an opportunity retain the sales credit on an opportunity even if they are moved to another opportunity.

• Team Selling: You can configure the application to allow salespersons to see all opportunities related to their sales accounts.

**Oracle Fusion CRM Security: Architectural Overview**

Setting up Oracle Fusion CRM security involves the use of multiple application components outlined in this topic. For example, you create duty roles and enterprise roles in separate Oracle Fusion Middleware applications and the rules to provision them in Oracle Human Capital Management (HCM). While you can access all of these application components from the **Setup and Maintenance** work area, understanding what components are used for what purpose and terminology differences in these applications will help you with your setup.
Application Components Used for Implementing Oracle Fusion CRM Security

This diagram provides an overview of the key security setups and the application components that you use to configure them.

The following table provides an explanation of the application components:

<table>
<thead>
<tr>
<th>Application Component</th>
<th>What It Is Used For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common CRM Setups</td>
<td>Tasks such as creating resource roles and resource organizations are part of common CRM configuration tasks.</td>
</tr>
<tr>
<td>Oracle Fusion Human Capital Management (HCM)</td>
<td>Oracle Fusion HCM tasks permit you to manage CRM application users and create the rules that automatically provision users with the enterprise roles they need to do their jobs.</td>
</tr>
<tr>
<td>Oracle Authorization Policy Manager (APM)</td>
<td>You use Oracle Authorization Policy Manager to create duty roles and data security policies in a separate browser window. The Authorization Policy Manager is a separate Oracle Fusion Middleware application with many features that are not used in Oracle Fusion CRM. You can access this application from the Setup and Maintenance work area by using the Manage Duty Roles task.</td>
</tr>
</tbody>
</table>

Define Common Applications Configuration for Marketing  2-145
| **Oracle Identity Management (OIM)** | Use Oracle Identity Management to create new job and abstract roles for on-premise applications in a separate browser window.  
You can access this Oracle Fusion Middleware application from the **Setup and Maintenance** work area by using the **Manage Job Roles** task.  
OIM is a separate Oracle Fusion Middleware application with few features used by Oracle Fusion CRM.  
Because this application has not been extended to Oracle Sales and Marketing Cloud Service, you must ask your Service Administrator to create any new job roles for you.  

**Note**  
Creating a user in Oracle Identity Management is different from creating CRM application users in HCM. |
| **Application Access Controls Governor (AACG)** | The Governance, Risk, and Compliance Controls supports segregation of duties (SOD) using the Application Access Controls Governor.  
You can use the Application Access Controls Governor to manage application access controls designed to prevent conflicts of interest and potential fraud that could result from the duties you assign to job roles.  
For example, if you want to prevent the same users from being able to both create items and ship them to customers, then you can review the access controls provided by Oracle in the Segregation of Duties Policies Respected section of the security reference guides.  
When you assign incompatible duties to a job role that you are creating, the Application Access Controls Governor generates error messages and prevents the assignment. |
If you are implementing Oracle Fusion CRM on premise, then you must ensure that you synchronize the LDAP store with any of the changes you make by using the **Run User and Roles Synchronization Process** task, available from the **Setup and Maintenance** work area. If you are implementing Oracle Fusion CRM in the Oracle Sales and Marketing Cloud Service, then this step is done for you. |
Terminology Differences Between Applications

Oracle Fusion CRM applications use different terminology from Oracle Fusion Middleware applications. The key differences are described in the following table:

<table>
<thead>
<tr>
<th>Oracle Fusion CRM Term</th>
<th>Definition</th>
<th>Equivalent Oracle Identity Management Term</th>
<th>Equivalent Oracle Authorization Policy Manager Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job role</td>
<td>Job roles permit users to perform activities required for their job.</td>
<td>Role. You can distinguish preconfigured job roles by their technical names. Job roles include the term JOB at the end.</td>
<td>External role. You can distinguish preconfigured job roles by their technical names. Job roles include the term JOB at the end.</td>
</tr>
<tr>
<td>Abstract role</td>
<td>Abstract roles permit users to perform functions that span the different jobs in the enterprise.</td>
<td>Role.</td>
<td>External role.</td>
</tr>
<tr>
<td>Duty role</td>
<td>Duty roles provide all the privileges for the actions required to carry out a job.</td>
<td>Not applicable.</td>
<td>Application role. Duty roles include the term DUTY at the end of the technical name.</td>
</tr>
</tbody>
</table>

Oracle Fusion CRM Security: Implementation Planning

Users gain access to application functionality when you provision them with enterprise roles. Oracle provides you with the enterprise roles required for all the standard jobs in a CRM organization. This topic outlines the steps you must complete to provision users with the enterprise roles provided by Oracle and what additional steps you must complete if you are planning to make changes.

Implementing Security If You Plan to Use Enterprise Roles Provided by Oracle

Follow these steps if you want to provision users with the preconfigured enterprise roles provided by Oracle:

1. Create resource roles if the existing resource roles do not match the job titles in your organization.
   Resource roles indicate the role the resource plays in the CRM organization. When you create users for Oracle Fusion CRM applications, you must specify their resource role, which appears as the job title of the person in the resource directory and in social applications, such as the Activity Stream.
   You also use resource roles to trigger the provisioning rules you will set up in the next step.
   Oracle supplies the resource roles that correspond to the preconfigured job roles. For example, Oracle includes the Sales Vice President and the Marketing Vice President resource roles, which correspond to the Sales VP and the Marketing VP job roles.
   If your organization uses different titles, then you must create additional resource roles.
You can review a list of the existing resource roles and create additional resource roles by navigating to the **Setup and Maintenance** work area and searching for the **Manage Resource Role Lookups** task.

See the Creating Resource Roles: Worked Example help topic for step-by-step instructions on creating resource roles.

2. Create rules that automatically provision users with job roles and abstract roles.

   When you create users, the provisioning rules automatically provision users based on the user resource role and employment status.

   You must create the provisioning rules from the **Setup and Maintenance** work area, by using the **Manage HCM Role Provisioning Rules** task.

   See the following help topics for information on best practices to create the rules and step-by-step instructions:

   - Rules to Automatically Provision Oracle Fusion CRM Users with Enterprise Roles: Explained
   - Creating Rules to Automatically Provision Enterprise Roles to Oracle Fusion CRM Users: Worked Example

3. You are now ready to create users.

**Implementing Security If You Plan to Customize Enterprise Roles Provided by Oracle**

The following steps will help you plan your security implementation if you decide to make changes to the preconfigured job roles and abstract roles provided by Oracle:

1. Review the enterprise roles provided by Oracle.

   Details on the available job roles, abstract roles, duty roles, privileges, and data security roles are described in reference manuals organized by different business areas, such as sales, marketing, and partner relationship management.

   If the jobs in your organization do not match the job roles provided by Oracle, then you can modify access for users by assigning them with multiple existing job roles or creating new job roles. Creating new job roles makes it possible for you to select which duty roles to include and, in some cases, to configure new data security policies that govern on what data those duty roles grant access to.

2. Create any additional job roles.

   You create additional job roles in Oracle Identity Manager, an Oracle Fusion Middleware application, which can be accessed from the **Setup and Maintenance** work area by using the **Manage Job Roles** task.

---

**Note**

If you are implementing security in the Oracle Sales and Marketing Cloud Service, then you must request the Oracle provision administrator to create job
roles for you because access to this functionality has not been extended to the Oracle Sales and Marketing Cloud Service.

Before creating job roles, review the hierarchy of job roles and duty roles in the security reference manuals. The hierarchy of duty roles is not visible when you view them in Oracle Identity Manager.

Each job role includes a top-level duty role with the same name, which inherits all the other duty roles. If you want to give additional functionality to a group of users, for example, sales managers, then assign the Sales Manager Duty role to the job role you are creating to inherit all the current permissions and data access, and then add whatever additional duty roles you needed.

Tip

Oracle Identity Manager uses different terminology from Oracle Fusion CRM. Job roles and abstract roles are referred to as roles.

3. Create duty roles and add them to the job roles that you created.

If you do create a job role, then use the Oracle Authorization Policy Manager, which is a separate Oracle Fusion Middleware application, to do the following:

a. Create a top-level duty role for the job role.
b. Add the duty roles that you want to inherit to that top-level duty role.
c. Associate the job role that you created with your duty role on the External Role Mapping tab.

Tip

Oracle Authorization Policy Manager uses different terminology from Oracle Fusion CRM. Duty roles are referred to as application roles and job roles as external roles. You can identify duty roles by the word DUTY at the end of their names.

You can access Oracle Authorization Policy Manager from the Setup and Maintenance work area using the Manage Duties task.

Detailed steps on how to create a job role and duty role are provided in the following help topic: Enabling Sales Representatives to Obtain Microsoft Outlook Access to All Sales Accounts: Worked Example.

The duty role that you create inherits all of the data security policies from the duty roles that you add. You can create additional data security policies if you want to change user access to specific data. For example, the predefined data security policies for the duty roles inherited by the Sales Representative Duty permit salespeople to view only sales accounts if they are on the sales account team. If you want to give salespeople access to all sales accounts, then you can create a data security policy. The same example, Enabling Sales Representatives to Obtain Microsoft
Outlook Access to All Sales Accounts: Worked Example, provides the detailed steps.

4. Retrieve any security changes made in Oracle Identify Manager (stored in the Lightweight Directory Access Protocol (LDAP) store) so they are available for creating users.

Modifications to the reference become available only after the LDAP store is synchronized. The Oracle Sales and Marketing Cloud Service takes care of the synchronization for you. If you are implementing on premises, then you must run the synchronization process from the Setup and Maintenance work area using the Run User and Roles Synchronization Process task.

5. Follow the steps for implementing the preconfigured security described in the Implementing Security If You Plan to Use Enterprise Roles Provided by Oracle section.

Oracle Fusion CRM Security: Special Considerations

This topic explains what happens if you omit the security setups and highlights the differences between implementing security on premises and in the Oracle Sales and Marketing Cloud Service.

Minimum Required Security Setups

If you plan to use only the preconfigured enterprise roles provided by Oracle, then you must:

1. Review the existing resource roles to see if they correspond to the titles of the different resources in the CRM organization, and create any additional resource roles you need.

2. Create the provisioning rules to automatically provision the required job roles and abstract roles.

3. If you are implementing on premises, then you must Synchronize the Lightweight Directory Access Protocol (LDAP) store by using the Run User and Roles Synchronization Process task from the Setup and Maintenance work area.

   If you are implementing in the Oracle Sales and Marketing Service, then the process is run for you.

Differences Between Implementing Security On Premises and In the Cloud

The following table highlights the differences between implementing security on premises and in the Oracle Sales and Marketing Cloud Service:

<table>
<thead>
<tr>
<th>Task</th>
<th>On Premises</th>
<th>Oracle Sales and Marketing Cloud Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating additional job roles</td>
<td>You can create additional job roles from the Setup and Maintenance work area using the Manage Job Roles task.</td>
<td>You must request the service administrator to create additional job roles.</td>
</tr>
</tbody>
</table>
Synchronizing the LDAP store

You must synchronize any changes to security by using the Run User and Roles Synchronization Process task from the Setup and Maintenance work area. This process is run for you.

Siebel CRM and Oracle Fusion CRM Security Differences: Explained

Siebel CRM and Oracle Fusion CRM implement different methods of securing access to application functionality and data. This topic outlines the mechanisms provided by Siebel CRM to control the privileges or resources that users are entitled to after they have accessed a Siebel application and been authenticated. For additional information on Siebel CRM security, see Siebel Security Guide on Oracle Technology Network.

Siebel CRM uses two primary access-control mechanisms:

- View-level access control to manage the application functionality that a user can access
- Record-level access control to manage the data items that are visible to each user on a view

**View-Level Access control**

In Oracle Fusion CRM, access to functionality is provided by assigning enterprise roles to users. In Siebel CRM, access to functionality is provided by assigning responsibilities to users.

Within each Siebel application, screens provide a broad area of functionality. A screen is composed of views, and the collection of views to which users have access determines the application functionality available to them. Access to views is determined by responsibilities.

Organizations are generally arranged around job functions, with employees being assigned one or more functions. In Siebel CRM, these job functions are called responsibilities. Each responsibility is associated with more or more views, which represent data and functionality needed for a job function. Each user must be assigned at least one responsibility to access the Siebel application.

Siebel Business Applications ship with many predefined responsibilities. However, you can also define any additional responsibilities that you require that correspond to the major job functions in your organization.

**Record-Level Access Control**

Record-level access control is used to assign permissions to individual data items within an application so that only authenticated users who need to view particular data records have access to that information. In Oracle Fusion CRM, access to data is primarily determined by the data security policies that apply to specific enterprise roles. In Siebel CRM, the access control mechanism that applies to a view determines the data records that a user sees in a view.

Siebel CRM uses the following types of record-level access control mechanisms:

- Personal access control. Access to data associated with a user’s Person record in the database is restricted to that user.
• Position access control. Access to data that is specific to a job title is restricted to users assigned that job title, to their team members, or to their subordinates.

• Organization access control. Employees assigned to a position within an organization are granted access to the data assigned to that organization.

• Access-group access control. Access groups are used to control access to master data by diverse groups of individuals.

• All-access control. All-access control provides access to all records in a view that has a valid owner. If a view applies all-access control, then all users with access to the view see the same data in the view.

Business Components and Record-Level Access Control

Within Siebel CRM, views are based on business components and must use one of the view modes specified for the business component. A business component’s view mode determines which access control mechanisms can be applied to the business component in any view. Applet and view properties also determine the data available in a view. Applet visibility properties define the business component on which a view is based, and a view’s access control properties determine what access control mechanism is applied to the business component on which the view is based. For example, a business component might have personal or position access control available. The view access control property specifies which of these to use.

Creating Resource Roles: Worked Example

Follow the steps in this topic to create resource roles. Resource roles, for example, Sales Manager, Salesperson, or Vice President of Marketing, describe the role that a resource plays in the CRM organization and appear as job titles in the resource directory and in social applications, such as Activity Stream. Resource roles are also used to assign users with the enterprise roles they need to carry out the duties of their job.

After you create a resource role, you must create the appropriate provisioning rules to provision the user with the required enterprise roles. The resource role by itself is only a title.

Note

Common CRM resource roles are already set up for you. These are labeled as System roles in the application. To obtain a list, click Search in the Manage Resources page without entering any search criteria.

Steps to Create a Resource Role

1. Navigate to the Setup and Maintenance work area by selecting the link in the Navigator menu.

2. On the All Tasks tab, search for the Manage Resource Role task.

3. Click the Go to Task button.

The Manage Resource Roles page appears.

4. Click the Create button.
The Create Resource Role page appears.

5. In the **Role Name** field, enter the name of the resource role as it will appear in the application, for example, CEO.

6. In the **Role Code** field, enter a unique internal name. No spaces are permitted.

7. Select the **Manager** option if the resource role belongs to a manager, or the **Member** option if the resource role belongs to a single contributor.

8. In the **Role Type** list, select either **Sales** or **Marketing** to classify the role that you are creating. Your selection has no impact on the security functionality.

9. Click the **Save and Close** button.

**Rules to Automatically Provision Oracle Fusion CRM Users with Enterprise Roles: Explained**

By creating rules using the **Manage HCM Role Provisioning Rules** task from the **Setup and Maintenance** work area, you can automatically provision users with all the enterprise roles they need for their job. These roles ensure the users have access to all the application functions and data they need to carry out their job duties. The rules automatically provision the users when they are created or move positions within your organization. If resources leave your company, the roles can be automatically removed so the resources can no longer access the application.

You must ensure that the rules you create assign Oracle Fusion CRM application users with:

1. One or more job roles required to perform their job in the organization.

2. If the users work in the CRM organization, then you must assign them the **Resource** abstract role. This role permits users to be assigned to sales teams, territories, and other CRM work.

3. If the users are employees, then you must also assign them with the **Employee** abstract role. If they are temporary workers, then you must instead assign them with the **Contingent Worker** abstract role.

   In CRM, both abstract roles assure that users can update their personal profiles and other common tasks.

As a best practice:

- Create rules that provision the Resource abstract role and the job roles users need to perform their job based on the resource role assigned to them. Most resource roles will require just one job role, but some may have more than one. For example, the Sales and Marketing Vice President may require both the Sales VP and the Marketing VP job roles.

- Create one rule that provisions all users who are employees (**Person Type** of **Employee**) with the Employee abstract role.

- If you hire contractors, then create a separate rule to provision the **Contingent Worker** abstract role to all users with the **Person Type** of **Contingent Worker**.
For all rules you create, ensure that the privileges the users are granted are automatically removed when they are no longer with the company. You can do this by stipulating the condition that the rule apply only when the user has the **Assignment Status** of **Active**.

If you plan to create users to perform implementation tasks who are not resources in the CRM organization, then you must create a provisioning rule that is based not on the resource role but some other user attribute. For example, you can create a rule to provision the required Application Implementation Consultant and IT Security Manager job roles based on the user's job assignment.

The following figure provides an example of the rules you would create to provision employee users who are assigned the Sales Manager resource role:

- Rule one assigns the **Employee** abstract role to users who are employees with an **Assignment Status** of **Active**.
- Rule two assigns the **Sales Manager** job role and the **Resource** abstract role to users with the **Sales Manager** resource role and an **Assignment Status** of **Active**.

![Figure showing rules for assigning roles to users]

---

**Creating Rules to Automatically Provision Enterprise Roles to Oracle Fusion CRM Users: Worked Example**

Follow the steps in this example to create rules that automatically provision Oracle Fusion CRM application users with the necessary enterprise roles. The provisioning is based on the resource role that you assign to a user.

In this example, you create a rule to provision users with the Sales Vice President resource role with the enterprise roles they need to perform their jobs.
Steps to Create an Autoprovisioning Rule

1. From the Navigator menu, click the Setup and Maintenance link located under the Tools heading.

2. On the Overview page All Tasks tab, search for the Manage HCM Role Provisioning Rules task.

3. Click the Go to Task button for the Manage HCM Role Provisioning Rules task.

   The Manage HCM Role Provisioning page appears.

4. Click the Create button.

   The Create Role Mapping page appears.

5. In the Mapping Name field enter a name, for example, Sales Vice President.

6. In the Conditions region, enter the resource role as a condition. In this example, you enter Sales Vice President in the Resource Role field.

7. Enter Active for Assignment Status.

   This additional condition ensures that the provisioned enterprise roles are automatically removed if the user is terminated.

8. In the Associated Roles region, click Add to add the enterprise roles. For this example, you add the following:

   • Sales Vice President
   • Resource

   Note

   Each CRM resource who is an employee must be provisioned with both the Resource and Employee abstract roles. You must create a separate rule that assigns the required Employee abstract role to all users who are employees. You must always provision the Resource role along with the appropriate job roles. This provisioning ensures that the user can be assigned work in your CRM application.

9. Make sure the Autoprovision option is selected for all the job roles.

10. Click Save and Close.

Enabling Sales Representatives to Obtain Microsoft Outlook Access to All Sales Accounts: Worked Example

On premises implementations of Oracle Fusion CRM can use this example as a template for creating a new job role that provides sales representatives with the ability to use Microsoft Outlook to access and copy information on all sales accounts.

Provisioning sales representatives with the Sales Representative job role provides the ability to use Microsoft Outlook to access and copy sales account information
if they are on the sales account sales team. You are a member of the sales account sales team if you own the sales account or if someone else adds you to the sales team.

**Note**

If you are implementing in the Oracle Fusion Sales and Marketing Cloud Service, then you must request the service administrator to have new job roles created for you. If you want to enable a special class of inside sales representatives to use Microsoft Outlook to access all sales accounts regardless of assignment, then you must:

1. Create a new Inside Sales Representative job role for this special class of sales representatives.
2. Create an Inside Sales Representative Duty role.
3. Inherit the Sales Party Management Duty role. This is the duty role that provides the functional and data permissions for the Microsoft Outlook integration.
4. Associate to the Inside Sales Rep job role to the new duty role.
5. Create the data security policy to provide this job role with the additional access you want.

After you have completed the setup outlined in this example, you must then provision the new job role to the inside sales representatives along with the regular Sales Representative job role. The steps for setting up autoprovisioning rules are outlined in related topics.

**Create the Inside Sales Representative Job Role**

1. Navigate to the Setup and Maintenance work area, search for the Manage Job Roles task, and click the Go to Task button.
   
   The Identity Manager - Delegated Administration page appears.

   **Note**

   If the application instead displays the Identity Manager - Self Service page, select the Administration link at the top right of the page to navigate there.

2. In the Roles Region on the right side of the screen, select the Create Role link.
   
   The Create Role region appears in the right hand pane of the tab.

   Enter the following in the Basic Role Information region:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>INSIDE_SALES_REP_JOB</td>
<td>This internal technical name must be unique and contain no spaces.</td>
</tr>
</tbody>
</table>
3. Save.

The page displays a confirmation message that the role was created for you. You can now close the browser window.

**Create a Duty Role for Assignment to the New Job Role**

1. Navigate to the Setup and Maintenance work area, search for the Manage Duties task, and click the Go to Task button.

   The Oracle Entitlements Server page appears in a new browser window.

2. From the Application Name list on the Home tab, select crm.

3. Under the Application Roles heading, click New.

   The Untitled role creation page appears.

4. Enter the following:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>Inside Sales Representative Duty</td>
<td></td>
</tr>
<tr>
<td>Role Name</td>
<td>INSIDE_SALES_REP_DUTY</td>
<td>This internal technical name must be unique and contain no spaces.</td>
</tr>
<tr>
<td>Role Category</td>
<td>CRM_ENTERPRISE_DUTY</td>
<td></td>
</tr>
</tbody>
</table>

5. Save.

The new Inside Sales Representative Duty is created for you.

**Inherit the Sales Party Management Duty Role**

On the Application Role Hierarchy tab of the Inside Sales Representative Duty role you just created, add the Sales Party Management Duty. This inherits all the functional and data access for the Microsoft Outlook integration normally assigned to sales representatives.

**Note**

The duty roles that come with the preconfigured job roles in the security reference implementation are organized in a hierarchy which is documented in the security reference guides available in Oracle Fusion Applications Help or in the Oracle Fusion Applications Technology Library.

The duty role at the top of the hierarchy includes the name of the job role, so you can easily inherit all the duties of an existing job role. For example, the Sales Manager job role includes the Sales Manager Duty, which inherits all the duties required for the job role. You can choose to inherit duty roles at any level in the duty hierarchy. However you must consult the security reference guides to see...
how the hierarchy is organized. The application does not display the hierarchy, it shows all the duty roles as a list.

1. On the **Application Role Hierarchy** tab, make sure the **Inherits** link is selected.
2. Click the **Add** button.
   
   The **Add a Role** dialog appears.
3. Search for the **Sales Party Management Duty** role and select it from the search results.
4. Save.

### Map the Inside Sales Representative Job Role to the Inside Sales Representative Duty Role

Now that you have created the duty role and added all the duty roles it inherits, you will associate the job role you created.

1. Select the **External Role Mapping** tab.
2. Click the **Add** button.
   
   The **Add a Role** dialog appears.
3. Search for the Inside Sales Representative job role and select it from the search results.
4. Save.

### Create a New Data Security Policy to Provide Additional Access

The predefined data security policies for the Sales Party Management Duty you inherited permit sales representatives to view only sales accounts if they are on the sales account team. To provide Inside Sales Managers access to all sales accounts, you will create a new data security policy to permit this.

**Note**

Creating data security policies may require assistance from your Service Administrator.

1. While viewing the duty role, click the **Find Policies** button.
   
   The **Search Authorization Policies** tab appears.
2. Select the **Data Security** tab in the **Policies For:** region.
3. Click the **New** button.
   
   The Create Data Security Policy page appears.
4. On the **General Information** tab, enter the following information:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>DB Resource</td>
<td>Trading Community Person</td>
</tr>
</tbody>
</table>
5. On the Roles tab and verify that the duty role you created is assigned to this policy.

6. Select the Rules tab and enter the following:

7. Select Multiple Values from the Row Set list of values.

8. Select the condition by clicking on the magnifying glass icon to launch the Pick a Set of Database Row dialog.

9. Select the Action tab and select the action by moving it from the Available Actions list to the Selected Actions list.

Note
Understanding which condition and action to select may require Service Administrator assistance.

10. Save.

Define Users for CRM

Creating Oracle Fusion CRM Application Users: Functional Overview

This topic outlines concepts that will help you understand and plan the creation of Oracle Fusion CRM applications users.

Types of Users That You Can Create

The types of users that are available to you differs for Oracle Sales and Marketing Cloud Service implementations and on-premises implementations.

- On-premises implementations can use Oracle Identity Manager, an Oracle Fusion Middleware application, to create and provision enterprise roles to implementation users outside Oracle Fusion CRM applications.

- Oracle Sales and Marketing Cloud Service implementations do not have access to Oracle Identity Manager, so you must create and provision implementation users within Oracle Fusion CRM. The term setup user distinguishes the implementation users created from within the Oracle Fusion CRM applications from those created in Oracle Identity Manager.

The following table lists the different user types. Because permissions granted to users depend on the enterprise roles you assign them, you are not restricted to the user types listed in the table.

<table>
<thead>
<tr>
<th>Type of User</th>
<th>Description</th>
<th>Available in On-Premises Implementations of Oracle Fusion CRM</th>
<th>Available in the Oracle Sales and Marketing Cloud Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superuser (FAADMIN)</td>
<td>The initial superuser who sets up the Oracle Fusion Applications environment.</td>
<td>Yes, provided by Oracle after installation.</td>
<td>No.</td>
</tr>
</tbody>
</table>
| Implementation Users | The FAADMIN superuser can create other implementation users outside Oracle Fusion CRM applications using Oracle Identity Manager. These implementation users complete the enterprise setup required for Oracle Fusion Applications and are enabled to manage user security and carry out DBA tasks, such as environment maintenance as well as creating and managing user accounts. Implementation users are not created as employees or resources in Oracle Fusion CRM, so you cannot assign them CRM application job roles. They cannot view CRM transaction data or reports. Implementation users are provisioned with the following enterprise roles:  
• Application Implementation Consultant job role  
• IT Security Manager job role | Yes. | No. Oracle Sales and Marketing Cloud Service implementations do not have access to Oracle Identity Manager. |
| Setup Users | Users with the same privileges as implementation users but who are created within Oracle Fusion Applications, using the same Create User page that is used to create other application users. Setup users can perform all of the same implementation setups for your CRM implementation, including managing security, setting up other users, and editing enterprise information. Setup users are not created as resources in Oracle Fusion CRM and are not provisioned with the Resource abstract role, so you cannot assign them CRM application job roles and they cannot view CRM transaction data or reports. Setup users are provisioned with the following enterprise roles:  
  - Application Implementation Consultant job role  
  - IT Security Manager job role  
  - Employee abstract role | Setup users are not provided for on-premises implementations. If you want to create a setup user, then you must create a provisioning rule to provision enterprise roles based on a property other than the resource role. See the Creating Setup Users for Oracle Fusion CRM: Worked Example help topic for details. | Oracle provides you with one initial user with the same access as a setup user based on the information you provided when you signed up with the service. If you want to create additional setup users, then you must create a provisioning rule to provision enterprise roles based on a property other than the resource role. See the Creating Setup Users for Oracle Fusion CRM: Worked Example help topic for details. |
| Sales Administrators | Sales administrators are CRM application users who are provisioned with the Sales Administrator job role. They can create other CRM application users, manage data import from legacy systems, and customize the application.

Unlike setup users, sales administrator users can view CRM transactional data and reports. They cannot configure CRM application security or perform tasks related to the enterprise setup.

Sales administrator users are provisioned with the following enterprise roles:

- Sales Administrator job role
- Resource abstract role
- Employee abstract role | Yes. | Yes. |
| CRM Application Users | Implementation users, setup users, and sales administrators can create CRM application users such as marketing managers and salespersons. Application users are provisioned using their role in the organization with the security settings they need to perform their jobs. They can perform only functional setup within the application, depending on their role. Application users are provisioned with the following enterprise roles:  
- The job roles required to perform their job  
- The Resource abstract role  
- The Employee or the Contingent Worker abstract role, depending on the status of the user as an employee or contractor. | Yes.  
On premises implementations can create application users in any of three ways:  
- Manually one-by-one from the Manage Users task from the Setup and Maintenance work area  
- By importing them from a file using file-based data import  
- By loading users directly into database interface tables using a loader of your choice. | Yes.  
Because the loader option is not available, Oracle Sales and Marketing Service Cloud implementations can create application users in one of two ways:  
- Manually one-by-one from the Manage Users task from the Setup and Maintenance work area  
- By importing them from a file using file-based data import. |

### Ways of Creating Oracle Fusion CRM Application Users

You can create Oracle Fusion CRM application users in multiple ways. You can:

- Create users individually in the user interface  
  Use this method for creating implementation and sales administrator users and for creating application users unless the number of the number users you are creating is very large.

- Import users from a file  
  Import users from a file using the file-based import feature only if you have a very large number. You cannot import implementation users because the import process requires you to import CRM resources.

- Load user records into the database tables  
  If you are implementing CRM on premises and you are creating a large number of users, then you can load users into the application using a loader of your choice.
**Tasks That Are Accomplished When You Create Users**

When you create CRM implementation and application users, you are accomplishing multiple tasks at the same time, depending on the type of user. The following table lists the tasks:

<table>
<thead>
<tr>
<th>Task Accomplished</th>
<th>CRM Application Users</th>
<th>Setup User</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sends automatic e-mail notifications with user names and automatically generated temporary passwords</td>
<td>Yes</td>
<td>Yes</td>
<td>The application sends the notifications to the user or to an administrator only once, either on creation or at a later time, depending on the setup.</td>
</tr>
<tr>
<td>Provisions the enterprise roles that provide the security settings that users need to do their jobs</td>
<td>Yes</td>
<td>Yes</td>
<td>Enterprise roles are provisioned based on the autoprovisioning rules you create as part of the security setup.</td>
</tr>
<tr>
<td>Creates resources that can be assigned CRM work</td>
<td>Yes</td>
<td>No</td>
<td>Only users created as resources can be assigned to sales teams and view reports.</td>
</tr>
<tr>
<td>Creates the resource reporting hierarchy used by Oracle Fusion CRM for reporting, forecasting, and work assignment</td>
<td>Yes</td>
<td>No</td>
<td>You create the hierarchy by specifying a manager for each resource.</td>
</tr>
<tr>
<td>Creates resource records that users can update with personal information to complete a directory of your CRM organization</td>
<td>Yes</td>
<td>No</td>
<td>Only resources have their information appear in the CRM directory.</td>
</tr>
<tr>
<td>Creates the hierarchy of resource organizations</td>
<td>Yes</td>
<td>Not applicable</td>
<td>Each resource is assigned to a resource organization. The application uses the resource reporting hierarchy to build a hierarchy of these organizations.</td>
</tr>
<tr>
<td>Creates rudimentary employee records for use by Oracle Fusion HCM.</td>
<td>Yes</td>
<td>Yes</td>
<td>All users you create in the user interface or by importing generate employee records.</td>
</tr>
</tbody>
</table>

**Setting Up E-Mail Notifications for New Users**

For each CRM user that you create, you must enter a unique e-mail address. By default, the application automatically sends an e-mail notification with the user name and temporary password to this address immediately after the user is created. Users then sign in and change their passwords.

If you do not want users to receive the notification e-mail right away because you are in the trial phase of your implementation project, then you can disable the automatic notification using the following steps:

1. Navigate to the **Setup and Maintenance** work area.
Define Common Applications Configuration for Marketing

2. Search for the task **Manage Enterprise HCM Information** on the All Tasks tab of the Overview page.

3. Click the **Go to Task** button.

4. In the Enterprise page, click the **Edit** button, and select **Update**.

5. In the User and Role Provisioning Information region, set the **Send User Name and Password** option to **No**.

6. Click **Done**.

When users are ready to receive their temporary passwords, you can send all of the notifications at the same time, using the following steps:

1. In the **Navigator** menu, select **Scheduled Processes** under the **Tools** heading.

2. In the Scheduled Processes Overview page, click **Schedule New Process**.

3. In the Schedule New Process dialog box, make sure the **Job** option is selected for **Type**.

4. Enter **Send User Name and Password E-Mail Notifications** in the Name field.

5. Click **OK**.

6. In the Process Details window, click **Submit**.

7. Click **Close**.

---

**Note**

The **Send User Name and Password E-Mail Notifications** process sends the notification e-mail only to those users who have never been sent the notification. The process does not reset passwords or resend the notification.

Alternately, you can send a notification to an individual user:

1. While editing the user in the Create User or Edit User page, select the **Send User Name and Password** check box in the **User Notification Preferences** region.

---

**Creating the Resource Reporting Hierarchy**

The resource reporting hierarchy provides the basis for CRM data security. The resource reporting hierarchy need not mirror the formal reporting hierarchy, which is captured separately in the Oracle Fusion HCM application if it has been implemented.

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**Note**

In Oracle Fusion CRM, you can have only one hierarchy reporting to one person. You build a resource reporting hierarchy when you create CRM application users by specifying the manager for each user. If you are creating users one-by-one in the user interface, then you must start by creating the user at the top of the hierarchy and work your way down. If you are importing users using file-based import, then the order does not matter provided that all of your users are in the same file.

---

**Creating Resource Organizations and the Resource Organization Hierarchy**

In Oracle Fusion CRM, you must assign each manager that you create as a user with his or her own resource organization. All direct reports who are individual contributors inherit their manager's organization.

In Oracle Fusion CRM, resource organizations serve a limited purpose. Their names appear in the application’s Resource Directory, which users can access.
to obtain information about their coworkers, and in social media interactions. Resource organizations are not used for work assignment.

The following screen capture shows the Resource Directory, which is available on the application Navigator. The resource organization names appear under each person’s title.

The application automatically builds a resource organization hierarchy, using the resource reporting structure.

Suppose, for example, that your CRM enterprise includes sales and marketing departments that report to the Executive VP of Sales and Marketing and its members as follows:

- Mathew Fullerton, Executive VP Sales and Marketing
- Bob Doyle, Sales VP
- Mateo Lopez, Sales Manager
- Gabrielle Lee, Sales Manager
- Jillian Henderson, Sales Representative (reporting to Mateo Lopez)
- Joseph Kerr, Sales Analyst (reporting to Gabrielle Lee)

A diagram of the reporting hierarchy looks like the following:
Now, also suppose that you create the following resource organizations and assign them to the managers.

<table>
<thead>
<tr>
<th>Manager</th>
<th>Assigned Resource Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathew Fullerton</td>
<td>Sales and Marketing</td>
</tr>
<tr>
<td>Bob Doyle</td>
<td>Sales</td>
</tr>
<tr>
<td>Lillian Jones</td>
<td>Marketing</td>
</tr>
<tr>
<td>Mateo Lopez</td>
<td>Sales West</td>
</tr>
<tr>
<td>Gabrielle Lee</td>
<td>Sales East</td>
</tr>
</tbody>
</table>

The application automatically builds the resource organization hierarchy, shown in the following figure, using the hierarchy of managers.

The resource organizations remain even if managers leave. You can reassign the resource organizations to their replacements.

The resource organization names do not have to reflect the names of departments. Departments are tracked along with employee records in the Oracle Fusion HCM application if it has been implemented. The resource organizations are not used in application security or to assign work to users. For example, you cannot include a resource organization on an opportunity sales team or as a territory owner.

**Creating Oracle Fusion Human Resources Employee Records**

When you create application users, you must include information that is used to create basic employee records for the Oracle Fusion HCM application. This requirement is part of the CRM application architecture. These records are used only if you are implementing this application now or plan to do so.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Definition</th>
<th>On Premises</th>
<th>Oracle Fusion Sales and Marketing Cloud Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Type</td>
<td>Enter either Employee or Contingent Worker, depending on whether the user you are creating is an employee or a contractor. The selection you make is used for provisioning either the Employee or the Contingent Worker abstract role.</td>
<td>Enter either Employee or Contingent Worker.</td>
<td>Enter either Employee or Contingent Worker.</td>
</tr>
</tbody>
</table>
Legal Employer | Enter the name of the legal entity that is the user's employer. | Enter the name of the legal entity that you defined as part of the enterprise setup. | Enter the legal entity that was set up for you based on the information you provided when you signed up with the service.
---|---|---|---
Business Unit | The business unit where your CRM applications are being used. All CRM applications must be implemented in the same business unit. | Enter the business unit that you defined as part of enterprise setup. | Enter the business unit that was set up for you based on the information you provided when you signed up with the service.

**Creating Oracle Fusion CRM Application Users: Architectural Overview**

This topic describes the different applications and application modules that you use when you create Oracle Fusion Customer Relationship Management (CRM) users. These include Oracle Fusion Human Capital Management (HCM), File-Based Data Import, Universal Messaging Service, and Oracle Identity Management, which is an Oracle Fusion Middleware application.

The following figure outlines the different application components that you use when you are creating and managing users:

- **Creating users**
  - You can create CRM application users in one of three ways. Each method involves different application components.
  - To create users individually in the user interface, you select the Manage Users option in the application Navigator. The Create User page is part of the Oracle Fusion HCM application, but you are not required to purchase or to implement Oracle Fusion HCM. The core Oracle Fusion HCM features that are required to create and manage CRM users are provided with Oracle Fusion CRM.
  - To import users from a file, use the tasks in the setup task group Define File-Based Data Import. You can search for this task group from the Setup and Maintenance work area. You can use the File-Based Data Import task group, which is described in a separate topic, to import many application objects, including customer records, opportunities, and leads.
  - If you are implementing CRM on premises, then you can also create users by importing them using a loader of your choice. To use a loader, select Data Import under the Customer Data Management heading in the Navigator menu, or use the Define Trading Community Import task list in the Setup and Maintenance work area.

- **Managing notifications**
  - When you create users using any of these methods, you can automatically send an e-mail notification with the user name and temporary password. The e-mails are sent by the User Messaging Service, a part of the Oracle Service-Oriented Architectures Suite, which is a separate Oracle Fusion Middleware application. If you are implementing your CRM application on premises, then a superuser can also manage the notifications and the notification templates from the User Messaging Service application.
- Managing users

When you create users, basic user information is copied to Oracle Identity Management, which is a separate Oracle Fusion Middleware application. If you are implementing CRM on premises, then you can use Oracle Identity Management for user management. For example, you can use Oracle Identity Management to reset user passwords and manage the enterprise roles that provision users with the security settings they require to carry out their duties. On premises implementations can use Oracle Identity Management to create implementation users, but not CRM application users.

The following table provides a breakdown by task or component:

<table>
<thead>
<tr>
<th>Component or Application</th>
<th>Description</th>
<th>Navigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define File-Based Data Import task group</td>
<td>Use the Define File-Based Data Import task group, which is a common component of Oracle Fusion Applications, to import users from a file.</td>
<td>Navigate to the Setup and Maintenance work area and search for the Define File-Based Data Import task group.</td>
</tr>
<tr>
<td>Oracle Fusion HCM</td>
<td>Use the Manage Users task to create and manage user records.</td>
<td>Select the Manage Users link in the Navigator.</td>
</tr>
<tr>
<td>User Messaging Service</td>
<td>If you are implementing CRM on premises, then you can use this application to manage the e-mail server that sends notifications to users. The notifications contain the user names and temporary passwords.</td>
<td>Sign in to the User Messaging Service as described in that application's documentation.</td>
</tr>
</tbody>
</table>
Oracle Identity Management

If you are implementing CRM on premises, then you can use Oracle Identity Management to create and manage job roles, as well as manage users and passwords. Although you can create users, you cannot create users as resources. This restriction means that you cannot create Oracle Fusion CRM application users in Oracle Identity Management alone.

You can use the Manage Job Roles task from the Setup and Maintenance work area to start the application in a separate browser window.

Creating Oracle Fusion CRM Application Users: Implementation Planning

This topic provides an overview of how to create Oracle Fusion Customer Relationship Management (CRM) application users and their resource organizations.

This topic covers:

- Creating the resource organization at the top of the CRM organizational hierarchy
- Creating the resource organizations that you must assign to each manager
- Creating the users

Prerequisites

Before you create CRM users you must:

- Make sure that all enterprise information has been set up.
- Complete the security setup. Make sure you have all the resource roles, enterprise roles, and autopropversioning rules you need for the users you are creating.

Creating the Resource Organization at the Top of the CRM Hierarchy

Before you can create resource organizations for your users, you must create the top-level organization in your hierarchy.

To create the top-level organization, do the following:

1. Create the top-level organization as you would create any other resource organization by using the Manage Sales and Marketing Organizations task from the Setup and Maintenance work area.

2. Specify the resource organization that you created as the top of your sales and marketing hierarchy by using the Manage Resource Organization Hierarchies task from the Setup and Maintenance work area.

For more information, see the Creating the Top Level of the CRM Resource Organization Hierarchy: Worked Example help topic.

Creating Resource Organizations for Manager Users

If you are creating users individually in the user interface using the Create User page, then you can create the resource organizations while you are creating the users, or you can create them before using the Manage Sales and Marketing Organizations task from the Setup and Maintenance work area.

If you are importing users, then you must have the resource organizations created before you import any data.

Note

When creating resource organizations:

- Do not use the name of the manager in the name of your resource organization because you can reassign the organization to a new manager if the current one changes or leaves.
• Create a separate resource organization for each manager user. This requirement applies even if the managers work in the same organization.

For more information, see the Creating Resource Organizations for Oracle Fusion CRM: Worked Example help topic.

Creating Users

This section provides an overview of the different methods of creating Oracle Fusion CRM users:

• To create users individually in the user interface:

  Navigate to the Manager Users work area, which is available as a selection on the application’s Navigator.

The Create User page, displays up to six regions, depending on your release version, your enterprise defaults, and the enterprise roles assigned to you. The following screen capture shows the page.

The following table describes the regions.

<table>
<thead>
<tr>
<th>Create User Page Region</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Details</td>
<td>You are required to enter the user’s last name, hire date, and a unique e-mail address for the initial e-mail notification.</td>
</tr>
<tr>
<td>User Details</td>
<td>Enter the user name that the user will use to sign in.</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>User Notification Preferences</td>
<td>Select the option in this region if you want to send the user name and password to the user you are creating. This region appears only if you decided to turn off automatic notifications by setting the <em>Send User Name and Password</em> option to <em>No</em> while editing the enterprise information using the Manage Enterprise HCM Information task.</td>
</tr>
<tr>
<td>Employment Information</td>
<td>The information you enter in this region is used to create the basic employee record for use with the Oracle Fusion Human Capital Management (HCM) application. Only the required fields are relevant to CRM.</td>
</tr>
<tr>
<td>Resource Information</td>
<td>Make entries in this region if you are creating a CRM application user who is a CRM resource. Leave this region blank for setup users who are not members of the CRM organization. You must enter a resource role and a manager for every CRM application user, because access to application data depends on the resource hierarchy. For every user with a manager resource role, you must enter a resource organization. The resource role you select determines the job roles that the user will be assigned when you click the Autoprovision Roles button.</td>
</tr>
<tr>
<td>Roles</td>
<td>Clicking the Autoprovision Roles button provisions the user with the enterprise roles that provide access to the application functions and data. If you are importing resources from a file, then the autoprovisioning is done automatically.</td>
</tr>
</tbody>
</table>

- To import users from a file:

  Use the Manage File Import Activities task from the Setup and Maintenance work area, and create an import activity. To import users, you must select the Employee Resource object when creating the import activity. Before you can import users, you must:

  - Understand what attributes are required, and what values are permitted.
  - Create a mapping between the user data that you are importing and the attributes in the application.
Refer to Define File-Based Data Import topics for more information on how to import users and other data.

- If you are implementing CRM on premises, then you can load user data into the application by using a loader of your choice.

Use the Import Worker Users task from the Setup and Maintenance work area.

Creating Oracle Fusion CRM Application Users: Special Considerations

This topic summarizes the main differences between creating users when you are implementing Oracle Fusion CRM on premises and in the Oracle Sales and Marketing Cloud Service.

The following table summarizes the main differences.

<table>
<thead>
<tr>
<th>Feature</th>
<th>On Premises</th>
<th>Oracle Sales and Marketing Cloud Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Oracle Identity Manager to create and manage users.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Loading users directly into interface tables using a loader of your choice</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Creating Resource Organizations for Oracle Fusion CRM: Worked Example

In Oracle Fusion CRM, you must assign a resource organization to each manager user that you create. All direct reports of that manager inherit the organization. You can create resource organizations before you create users according to the steps in this example.

Steps to Create a Resource Organization

1. Navigate to the Setup and Maintenance work area, and search for the Manage Sales and Marketing Organizations task.
2. Click the Go to Task button.
   
   The Manage Sales and Marketing Organization page appears.
3. Click the Create button.
   
   The Create Organization: Select Creation Method page appears.
4. Select Option 2: Create New Organization.
5. Click Next.
   
   The Create Organization: Enter Basic Information page appears.
6. Enter the name of the organization, for example, Sales.
7. In the Organization Usages region, click Add Row (green plus sign) to specify whether the organization is going to be used as a sales organization, a marketing organization, or both.
Specifying a usage determines whether the organization is visible when creating a sales manager or a marketing manager.

8. Click Finish.

Creating the Top Level of the CRM Resource Organization Hierarchy: Worked Example

Use this example as a guide for creating the resource organization at the top of the resource organization hierarchy. You must complete this setup before you create users.

When you create users who are managers in the Oracle Fusion CRM organization, you must assign a resource organization to each of them. The application automatically builds a resource organization hierarchy for you from the management hierarchy that you create.

Before you can create the resource organizations for the managers, you must create the top-level resource organization in your hierarchy following the steps in this example.

Creating the top-level resource organization in the resource organization hierarchy involves the following:

1. Creating the resource organization
2. Specifying the organization as the top of your sales and marketing hierarchy

Creating the Resource Organization at the Top of the Hierarchy

1. Search for the Manage Sales and Marketing Organizations task in the Setup and Maintenance work area.
2. Click the Go to Task button.
   
   The Create Organization: Select Creation Method page appears.
3. Click Create and select Option 2: Create New Organization.
4. Click Next.
5. Enter Global Organization (or another name of your choice) in the Name field.
6. In the Organization Usages region, click Add Row to add Sales Organization and Marketing Organization.
   
   This step identifies how the organization is being used.
7. Click Finish.

Specify the Organization as the Top of Your Sales and Marketing Hierarchy

1. Search for the Manage Resource Organization Hierarchies task in the Setup and Maintenance work area.
2. Click the Go to Task button.
   
   The Manage Resource Organization Hierarchies page appears.
3. Click Search.
4. In the Search Results, select the Sales and Marketing Organization Hierarchy link.
   You will associate the resource organization you created with the predefined hierarchy type.
5. From the Action menu at the top right-hand corner of the page, select Edit This Hierarchy Version.
   The Edit Organization Hierarchy Version page appears.
6. Click the Add button in the Global Sales and Marketing Organization Hierarchy region.
   The Add Tree Node window appears.
7. Click Search.
   The Search Node window appears.
8. Click Search.
9. Select Global Organization.
10. Click OK.
    The application returns you to the Edit Organization Hierarchy Version page.
11. Click Done.

Creating Setup Users for Oracle Fusion CRM: Worked Example

Follow the steps in this example to create a setup user, an application user with the privileges to set up application security, make changes to the enterprise setup, create other users, and complete most setup tasks. Because setup users are not created as CRM resources, they cannot view CRM data or reports and cannot be assigned to sales teams and territories.

Creating a Setup User Overview

Setup users do not work in the CRM organization and so should not appear in the CRM application directory or be available as resources for assignment to sales teams. For this reason, you do not specify a resource role or any other resource information for this type of user.

To provision these users with the required Application Implementation Consultant and IT Security Manager job roles, you must create a provisioning rule that is triggered not by the resource role assigned to the user, but by some other attribute. In this example, you will trigger the rule on the user’s job.

To create the setup user, you will:

1. Sign in as a user with implementation privileges. This can be another setup user.
2. Create the job that will trigger the rule, Customer Administrator in this example.
3. Synchronize the Lightweight Directory Access Protocol (LDAP) directory with any changes to the security setups by running a scheduled process. The LDAP directory enables quick access by CRM Fusion Applications to security settings, so it is a good idea to update the directory to make sure it reflects all the latest security changes.

4. Create the provisioning rule to provision the required enterprise roles to users with the Customer Administrator job.

5. Create a rule to provision the Employee abstract role to all employee users. This is a one-time setup, so you can ignore this step if you created the rule previously.

6. Create the user.

**Creating a Job**

To create the job:

1. Navigate to the Setup and Maintenance work area.
2. On the All Tasks tab search for the Manage Job task.
3. Click the Go to Task button for the Manage Job task.
   The Manage Job page appears.
4. Click the Create button.
5. Enter a name for job that will be displayed for selection in the Create User page. For example, Customer Administrator.
6. In the Code field, enter an internal code for the job, for example, CUSTADMIN. The code must be uppercase with no spaces.
7. For Job Set, select Common.
8. Click Next.
   The Create Job: Details page appears.
9. Click Submit.

**Updating the LDAP Directory**

To update the LDAP directory:

1. Select the Scheduled Processes link in the Navigator.
2. Click the Schedule New Process button.
   The Schedule New Process window appears.
3. Select Retrieve Latest LDAP Changes from the Name list.
4. Click OK.
5. Click Submit.

**Creating the Role Provisioning Rule for the Setup User**

To set up the provisioning rule that automatically assigns the appropriate enterprise roles:

1. Navigate to the Setup and Maintenance work area.
2. On the All Tasks tab search for the Manage HCM Role Provisioning Rules task.

3. Click the Go to Task button for the Manage HCM Role Provisioning Rules task.

   The Manage HCM Role Provisioning page appears.

4. Click the Create button.

5. In the Mapping Name field enter a name, for example, Customer Administrator.

6. In the Conditions region, enter the job you created earlier as a condition. In this example, you would enter Customer Administrator in the Job field.

7. Enter Active for Assignment Status. This additional condition ensures that the provisioned enterprise roles are automatically removed if the user is terminated.

8. In the Associated Roles region, use the Add button to add the following job roles:
   - Application Implementation Consultant
   - IT Security Manager

9. Make sure the Autoprovision option is selected for both job roles.

10. Click Save and Close.

Creating the Role Provisioning Rule for All Employees

You must create one rule to provision all users who are employees with the Employee abstract role. This is a one-time-only setup.

To create the provisioning rule for employees:

1. Navigate to the Setup and Maintenance work area.

2. On the All Tasks tab search for the Manage HCM Role Provisioning Rules task.

3. Click the Go to Task button for the Manage HCM Role Provisioning Rules task.

   The Manage HCM Role Provisioning page appears.

4. Click the Create button.

5. In the Mapping Name field enter the rule name, for example, Employee.

6. In the Conditions region, select Employee from the Assignment Type field.

7. Select Active for Assignment Status. This additional condition ensures that the role is automatically removed if the user is terminated.

8. In the Associated Roles region, use the Add Row button to add the Employee role.

9. Make sure the Autoprovision option is selected for the role.

10. Click Save and Close.
Creating the Setup User

To create the setup user:

1. On the Navigator select the Manage Users link under the Manager Resources heading.
   The Manage Users page appears.

2. Click the Create button.
   The Create User page appears.

3. In the Personal Details region, enter the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name</td>
<td>Enter the user’s last name. Entry is required.</td>
</tr>
<tr>
<td>First Name</td>
<td>Optionally, enter the user’s first name.</td>
</tr>
<tr>
<td>E-Mail</td>
<td>Enter a unique e-mail address. This e-mail address is used to send the initial notification to the user and can be changed later.</td>
</tr>
</tbody>
</table>

4. In the User Details region, enter the user name. If you leave the User Name field blank, the application creates a user name based on the entries you already made.

5. If the User Notification region appears and the Send User Name and Password is unselected, then select it if you want to send the e-mail notification with the login and password to the user when you save the record.
   If this region is not present in the page, then the notification will be sent automatically.

6. In the Employment Information region, enter the following:

<table>
<thead>
<tr>
<th>Field</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Type</td>
<td>Select Employee. Do not select Contingent Worker because enterprise role provisioning is based on the employee’s job, a field that appears only for employees.</td>
</tr>
<tr>
<td>Legal Employer</td>
<td>Select the legal employer created as part of enterprise setup. If you are implementing in the Oracle Sales and Marketing Cloud Service, then the legal employer was set up for you based on the information that you provided when you signed up for the service.</td>
</tr>
</tbody>
</table>
Define Common Applications Configuration for Marketing

Business Unit

Select the business unit created as part of enterprise setup.

If you are implementing in the Oracle Sales and Marketing Cloud Service, then the business unit was set up for you based on the information that you provided when you signed up for the service.

Job

Select the job you created earlier.

7. Click the Autoprovisioning Roles button.

The Roles region should now display the following roles:

• Application Implementation Consultant
• IT Security Manager
• Employee

8. Click Save and Close.

Define Automated Governance, Risk, and Performance Controls

Segregation of Duties: Explained

Segregation of duties (SOD) separates activities such as approving, recording, processing, and reconciling results so an enterprise can more easily prevent or detect unintentional errors and willful fraud. SOD policies, called access control policies in Application Access Controls Governor (AACG), exert both preventive and detective effects.

SOD policies constrain duties across roles so that unethical, illegal, or damaging activities are less likely. SOD policies express constraints among roles. Duty role definitions respect segregation of duties policies.

Application Access Controls Governor

You manage, remediate, and enforce access controls to ensure effective SOD using the Application Access Controls Governor (AACG) product in the Oracle Enterprise Governance, Risk and Compliance (GRC) suite.

AACG applies the SOD policies of the Oracle Fusion Applications security reference implementation using the AACG Oracle Fusion Adapter.

AACG is integrated with Oracle Identity Management (OIM) in Oracle Fusion Applications to prevent SOD control violations before they occur by ensuring SOD compliant user access provisioning. SOD constraints respect provisioning workflows. For example, when provisioning a Payables role to a user, the SOD policy that ensures no user is entitled to create both an invoice and a payment.
prevents the conflicting roles from being provisioned. AACG validates the request to provision a user with roles against SOD policies and provides a remediating response such as approval or rejections if a violation is raised.

Use AACG to for the following.

- Define SOD controls at any level of access such as in the definition of an entitlement or role.
- Simulate what-if SOD scenarios to understand the effect of proposed SOD control changes.
- Use the library of built-in SOD controls provided as a security guideline.

**Managing Segregation of Duties**

SOD policies express incompatible entitlement or incompatible access points into an application. In GRC, an access point is the lowest level access for a particular application. In GRC, entitlement is a grouping of access points. As a security guideline, group the lowest level access points or define the SOD policy at the access level causing the least amount of change. Business activities are enabled at access points. In Oracle Fusion Applications, the hierarchy of access points in descending levels is users, roles, and entitlement.

**Note**

AACG entitlements are logical groupings of security objects that represent Oracle Fusion Application access points such as roles or entitlement.

**Note**

In AACG, segregation of duties policies are called access controls.

Oracle Fusion Applications does not predefine business logic for dealing with SOD conflicts. Oracle Fusion Applications does define a set of states where role requests are suspended pending resolution of SOD violations the role request introduces. In most cases, Oracle Fusion Applications invokes OIM to handle role requests. Enterprises define SOD resolution rules when defining SOD policy.

**Remediating Segregation of Duties Policy Violations**

The risk tolerance of your enterprise determines what duties must be segregated and how to address violations.

AACG assists in remediation of violations with a guided simulation that identifies corrective action. You determine the exact effects of role and entitlement changes prior to putting them into production, and adjust controls as needed.

For information on managing segregation of duties, see the Oracle Application Access Controls Governor Implementation Guide and Oracle Application Access Controls Governor User's Guide.
Segregation of Duties in the Security Reference Implementation: Explained

Segregation of duties (SOD) is a special case of function security enforcement. A segregation of duties conflict occurs when a single user is provisioned with a role or role hierarchy that authorizes transactions or operations resulting in the possibility of intentional or inadvertent fraud.

The predefined SOD policies result in duty separation with no inherent violations. For example, an SOD policy prevents a user from entitlement to create both payables invoices and payables payments.

However, the most common duties associated with some job and abstract roles could conflict with the predefined segregation of duties. A predefined role hierarchy or job or abstract role may include such common duties that are incompatible according to a segregation of duties policy. For example, the predefined Accounts Payable Supervisor job role includes the incompatible duties: Payables Invoice Creation Duty and Payables Payment Creation Duty.

Every single predefined duty role is free from an inherent segregation of duties violation. For example, no duty role violates the SOD policy that prevents a user from entitlement to both create payables invoices and payables payments.

Jobs in the reference implementation may contain violations against the implemented policies and require intervention depending on your risk tolerance, even if you define no additional jobs or SOD policies.

Provisioning enforces segregation of duties policies. For example, provisioning a role to a user that inherits a duty role with entitlement to create payables invoices enforces the segregation of duties policy applied to that duty role and ensures the user is not also entitled to create a payables payment. When a role inherits several duty rules that together introduce a conflict, the role is provisioned with a violation being raised in the Application Access Controls Governor (AACG). If two roles are provisioned to a user and introduce a segregation of duties violation, the violation is raised in AACG.

**Note**

SOD policies are not enforced at the time of role definition.

Aspects of segregation of duties policies in the security reference implementation involve the following.

- Application Access Controls Governor (AACG)
- Conflicts defined in segregation of duties policies
- Violations of the conflicts defined in segregation of duties policies

**Application Access Controls Governor (AACG)**

AACG is a component of the Oracle Enterprise Governance, Risk and Compliance (GRC) suite of products where segregation of duties policies are defined.
• Define SOD controls at any level of access such as in the definition of an entitlement or role.

• Simulate what-if SOD scenarios to understand the effect of proposed SOD control changes.

• Use the library of built-in SOD controls provided as a security guideline.

Your risk tolerance determines how many duties to segregate. The greater the segregation, the greater the cost to the enterprise in complexity at implementation and during maintenance. Balance the cost of segregation with the reduction of risk based on your business needs.

Conflicts

An intra-role conflict occurs when a segregation of duties policy expresses constraints within the construct of a single role (entitlement and duties) that creates violations.

Tip

As a security guideline, use only the predefined duty roles, unless you have added new applications functions. The predefined duty roles fully represent the functions and data that must be accessed by application users and contain all appropriate entitlement. The predefined duty roles are inherently without segregation of duty violations of the constraints used by the Application Access Controls Governor.

Violations

A segregation of duties violation occurs when a policy is defined that allows a segregation of duties conflict to occur.

Notifications report conflicts to the requester of the transaction that raised the violation. Oracle Identity Management (OIM) shows the status of role requests indicating if a segregation of duties violation has occurred.

For information on configuring audit policies, see the Oracle Fusion Applications Administrator’s Guide.

For more information on managing segregation of duties, see the Oracle Application Access Controls Governor Implementation Guide and Oracle Application Access Controls Governor User’s Guide.

Defining Segregation of Duties Policies: Points To Consider

Segregation of duties (SOD) policies express incompatibilities enforced to control access in defined contexts.

In Oracle Fusion Applications, SOD policies protect against the following incompatibilities.

• Privilege X is incompatible with privilege Y

• Role A is incompatible with role B
• Any privileges in role A are incompatible with any privileges in role B.
• Privilege X is incompatible with any privileges in role B.

The following examples of SOD policies illustrate incompatible entitlement.
• No user should have access to Bank Account Management and Supplier Payments duties.
• No user should have access to Update Supplier Bank Account and Approve Supplier Invoice entitlement.

**Data Contexts**

You can extend SOD policies to control access to specific data contexts.

For example, no single individual must be able to source a supplier in a business unit and approve a supplier invoice in the same business unit.

**Exclusion and Inclusion Conditions**

SOD policies may include exclusion conditions to narrow the SOD scope and reduce false positive violations, or inclusion conditions to broaden the scope.

Conditions apply to access points globally, to policies, or to access paths defined by policies. Access path conditions can exclude a user from a role, an Oracle Fusion Applications entitlement from a role, or a permission from an Oracle Fusion Applications entitlement.

The following global exclusion conditions are predefined in Oracle Fusion Applications and available when creating SOD policies.

• User Status
• User Name
• Enterprise Role
• Action
• Business Unit
• Within Same Business Unit

**Enforcement**

Oracle Fusion Applications enforces SOD policies under the following circumstances.

• When granting entitlement to a role
• When provisioning a role to a user

For information on managing segregation of duties, see Oracle Application Access Controls Governor Implementation Guide and Oracle Application Access Controls Governor User's Guide.

---

**Note**

SOD policies are not enforced at the time of role definition.
A single SOD policy can include entitlement from multiple instances of a single enterprise resource planning environment. For example, one SOD policy is enforced in implementation, test, and production instances of Oracle Fusion Applications.

Managing Segregation of Duties Risks and Violations: Critical Choices

You assess and balance the cost of duty segregation against reduction of risk based on the requirements of your enterprise.

The types of people who resolve SOD conflicts include the following.

- Administrator of an external program such as the Procurement Administrator for the supplier portal or the Partner Manager for the PRM Program
- Senior executive spanning multiple organizations in an enterprise with opposing interests
- Risk management professional implementing an Oracle Enterprise Governance, Risk and Compliance (GRC) initiative
  - Predefines a set of conditions and informs access provisioning staff to approve requests and prove the exception based on certain conditions
  - Allows defining rules to route SOD violations for approval

You view and respond to risks and violations in the Application Access Controls Governor (AACG).

You may wish to override an SOD violation. For example, the Accounts Payable Supervisor includes incompatible duties to create both invoices and payments. When you provision this job role to a user, you may waive the violation in the AACG. You may waive the violation for the currently provisioned user, for the SOD policy that raised the violation, or for the SOD policy within a particular data set, such as a business unit.

The risk tolerance of your enterprise guides how you respond to conflicts. For example, a user may be provisioned with both the role of Order Manager and Shipping Agent. The Order Manager role entitles the user to enter orders, which could result in exploitation when filling shipping quotas. You can remove the entitlement to enter orders that the Order Manager job role inherits from the Orchestration Order Scheduling Duty role. Or you could segregate the shipping and order entry duties by defining an SOD policy that allows a user to have either job role but not both.

False Positives

False positives can be SOD policy violations that are not actually violations, or are violations within your risk tolerance and therefore do not require corrective action.
You can reduce false positives by the following methods.

- Define exclusion conditions that can be applied to individual or groups of policies.
- Define logically complex SOD policies that enforce more exacting specifications.
- Determine whether conflicts should be prevented, monitored, or subjected to approval during provisioning.

**Path Level Detection**

Conflict analysis detects a user’s multiple paths to one or more conflicting access points.

For example, a user may be able to reach a single access point through one or more roles, or by one entitlement leading to another through submenus to a function that represents a risk. The resulting conflict path shows if the conflict is generated by inappropriate role provisioning or configuration of applications. The audit shows the paths from any number of users to any number of access points involved in conflicts, which lets you visualize the root cause and remediate effectively.

AACG assigns one or more users to review all paths involved in a given conflict so that the entire conflict can be addressed in a coherent way.

**Waiving or Accepting Violations**

AACG lets you accept or waive a violation. Your reasons may include that you accept the risk or will define compensating controls.

A waiver may apply to the current user, constraint, or constraint within a dimension such as the business unit.

**Resolving Conflicts**

The risk tolerance of the enterprise determines whether a segregation of duties conflict must be removed from the security reference implementation.

The following approaches resolve conflicts.

- Change the segregation of duties policy.
- Ensure a job role does not contain incompatible duties.
- Define data security policies that restrict authorized access by incompatible duties.

Changing a segregation of duties policy may not be possible in most cases. For example, a policy that segregates creation of payables invoice from making payables payments should be preserved, even if the Accounts Payables Manager job role includes a duty role for each activity. To prevent an accounts payables manager from being authorized to perform both duties, or from being authorized to make payables payments to self and direct reports, the Accounts Payables Manager job role must be changed. The security implementation can be changed to include two job roles that segregate the incompatible duties. Added data security policy grants can restrict the access to at risk data.
For information on managing segregation of duties, see the Oracle Application Access Controls Governor Implementation Guide and Oracle Application Access Controls Governor User’s Guide.

**Role Provisioning and Segregation of Duties: How They Work Together**

Segregation of duties (SOD) checks occur when roles are assigned to users. The checks are based on Oracle Application Access Controls Governor (AACG) policies in Oracle Enterprise Governance, Risk and Compliance (GRC). The Oracle Identity Management (OIM) integration includes predefined routing rules for remediation in the Manage IT Security business process.

External users such as suppliers or partners need to be provisioned with roles to facilitate access to parent company interfaces and data. The process by which such provisioning requests are approved in Oracle Fusion Applications helps explain the request flows and possible outcomes.

**Note**

In Oracle Identity Management (OIM), external users means users who are not specific to applications, such as enterprise roles or the absence of entitlement to access an application.

The figure shows the role provisioning request flow. OIM uses AACG to check segregation of duties violations.
Tables

A supplier or partner requests admission to a program using an implementation of the Supplier Portal Submission. The submission is captured in one or both of the following tables in advance of approving or rejecting the supplier or partner.

- Oracle Fusion Trading Community Model
- Interface Staging

Oracle Fusion Applications collects the employee names for the supplier or partner company at the time the company submits its request to join the program so that all employees accessing Oracle Fusion Applications on behalf of the supplier or partner are provisioned.

AACG in the Oracle Enterprise Governance, Risk and Compliance (GRC) suite is certified to synchronize with the policy and identity stores for all pillars or partitions of Oracle Fusion Applications and integrated with the Oracle Fusion Applications security approach to roll up entitlements (by means of duty roles) to the roles that are provisioned to internal users. SOD policies can be defined and enforced at any level of authorization. For external users, SOD policies use attribute information stored in the Trading Community Model tables.

OIM and the SPML Client

Enterprise business logic may qualify the requester and initiate a role provisioning request by invoking the Services Provisioning Markup Language (SPML) client module, as may occur during onboarding of internal users with Human Capital Management (HCM), in which case the SPML client submits an asynchronous SPML call to OIM. Or OIM handles the role request by presenting roles for selection based on associated policies.

OIM recognizes the role provisioning request and initiates a call to AACG.

OIM apprises the SPML client of the current state of the role provisioning request as SOD_CHECK_IN_PROGRESS.

OIM stores the SOD check result as part of OIM audit data.

OIM apprises SPML client of the current state of the SPML request. The provisioning is either still in progress with segregation of duties being checked, or conflicts were found. If conflicts exist, AACG rejects the request and notifies the application.

<table>
<thead>
<tr>
<th>Status</th>
<th>Conflicts</th>
<th>Current State</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOD_CHECK_IN_PROGRESS</td>
<td>Unknown</td>
<td>Request sent to AACG and waiting for response</td>
</tr>
<tr>
<td>SOD_REMEDIATION_IN_PROGR</td>
<td>Conflict found</td>
<td>AACG detected violations and remediation is in progress</td>
</tr>
<tr>
<td>SOD_CHECK_APPROVED</td>
<td>No conflict found</td>
<td>No SOD violations found</td>
</tr>
<tr>
<td>SOD_CHECK_REJECTED</td>
<td>Conflict found</td>
<td>AACG detected violations that cannot be remediated</td>
</tr>
<tr>
<td>SOD_REMEDIATION_APPROVED</td>
<td>Conflict found</td>
<td>AACG detected violations that are approved</td>
</tr>
<tr>
<td>SOD_REMEDIATION_REJECTED</td>
<td>Conflict found</td>
<td>AACG detected violations that are rejected by approver</td>
</tr>
</tbody>
</table>

In the absence of an SOD exception, OIM provisions all relevant users.

**Note**

When a partner user is provisioned, all employees of the partner enterprise are provisioned. SOD checks occur when an external user requests to join a program, because SOD policies operate across Oracle Fusion Applications, not at the individual level. Supplier or partner company user requests are not approved if there is an SOD conflict against the supplier company.

OIM provides AACG with the details of SOD exception approval workflow. AACG audits the outcome for use in future detective controls and audit processes.

**Oracle Application Access Controls Governor**

AACG may respond with the following.

- Roles may be provisioned to the external user or its employees because no SOD conflict is found
- SOD conflict is found and request is denied because the relevant SOD policy is to be strictly enforced and no exception approval should be allowed
- SOD conflict is found and the exception to the policy is allowed, so the request goes through additional processing, such as an approval process.

Supplier or Partner Relationship Management responds to an SOD exception by updating Trading Community Model tables with the current state. An enterprise may elect to implement a landing pad that offers external users a means of addressing the SOD problem by providing more information or withdrawing the request.

SOD violation checking occurs during role implementation and provisioning, and can be turned on or off if AACG is provisioned and enabled as part of the Oracle Fusion Applications deployment.

**Segregation of Duties Exception Resolution or Approval Workflow**

Depending upon status, OIM kicks off an auditable SOD exception resolution workflow. Resolution can be conditional based on approval or requirements such as contracts being met.

If one of the paths for exception resolution is to get an approval, then the SOD exception resolution drives the approval using AMX. Standard AMX rules, not business rules, resolve the approval for the SOD exception, including the following.

- Organizational hierarchies
- Multiple mandatory and optional approvers
- Rerouting and approval delegation
The approver resolution uses AMX Rules Designer to access various user attributes and organizational hierarchies managed in Oracle Fusion Applications repositories. This information is typically not available in OIM or the LDAP identity store repository. Enterprises can define additional approval rules using AMX Thin Client.

The SOD Exception Approver gets a notification through supported channels that a new request is awaiting approval. The approver signs in to the global SOA federated worklist application that aggregates all pending worklist items for the user from all Oracle Fusion applications and logical partitions or pillars of applications. The SOD exception approval tasks show up in the same list.

The SOD exception approval task shows the details of the SPML request and SOD Provisioning results in a page rendered by OIM. The approver may take one of the following actions.

- Approve the request as it is
- Reject the request

If the approver approves the request, OIM sends an SOD_REMEDIATION_APPROVED status to the SPML client.

If the approver rejects the request, OIM sends an SOD_REMEDIATION_REJECTED status to the SPML client. The provisioning request is considered completed with a failure outcome and the external users is notified. Oracle Fusion Applications updates the Trading Community Model tables with the rejected status.

**Remediation Task Assignments**

The SOD remediation tasks are assigned based on the role being requested.

1. If the role requested is Chief Financial Officer, the SOD remediation task is assigned to the IT Security Manager role.

2. If the SOD violation results from a policy where the SOD control tag is the Information Technology Management business process and the control priority is 1, the SOD remediation task is assigned to Application Administrator role.

3. In all other scenarios, the SOD remediation task is assigned to the Controller role.

For more information about configuring audit policies, see the Oracle Fusion Applications Administrator's Guide.

For information on managing segregation of duties, see the Oracle Application Access Controls Governor Implementation Guide and Oracle Application Access Controls Governor User's Guide.

### Creating Partner User Accounts: Explained

When you create a partner user, you enable the partner member to access and use the deploying company’s resources for working on assigned tasks. You also
assign job and security roles to the partner member’s user profile and specify the organization to which the new user needs to belong.

**Assigning Job and Security Roles to Partner Users**

Every partner user needs to have an assigned job role. This job role can be used to create security roles for the user. Based on the security roles you assign, the user can access applications, locations, and data within the deploying company. You may choose to assign security roles automatically to a user; you can also assign additional security roles individually if needed.

**Assigning Partner Users to Organizations**

While assigning non-manager partner users to organizations, you can either select an organization or a manager. Once you select an organization, the manager of the selected organization becomes the new user’s manager. Similarly, once you select a manager, the new user automatically becomes a member of the organization to which the manager belongs.

**Assigning Manager-Level Partner Users to Organizations**

If the role of the new user is that of a manager, you need to assign the new user to an organization even after specifying a manager. This is because you granted the new user a managerial role, and you now need to specify the organization that the new user needs to manage. You can either select an organization from the list of available organizations, or you can create a new one if required.

**Define Approval Management for Customer Relationship Management**

**Approval Management: Highlights**

Use approval management to determine the policies that apply to approval workflows for particular business objects such as expense reports. For example, you can specify levels of approval for expense reports over a particular amount, to reflect your own corporate policies. You also determine the groups of users who act on these workflow tasks, for example, the chain of approvers for expense reports.

Approval management is fully described in the Oracle Fusion Middleware Modeling and Implementation Guide for Oracle Business Process Management. Though the concepts described there apply also to Oracle Fusion Applications, the only setup relevant to Oracle Fusion Applications involves approval groups and task configuration. Customization of approval workflows themselves is described in the Oracle Fusion Applications Extensibility Guide.

**Overview**

Define Common Applications Configuration for Marketing

See: Introduction to Approval Management

See: Understanding Approval Management Concepts

Approval Groups and Task Configuration

- An approval group consists of a name and a predefined set of users configured to act on a task in a certain pattern. Refer to the Oracle Fusion Middleware Modeling and Implementation Guide for Oracle Business Process Management.

See: Administering Approval Groups


See: Using Task Configuration

- To configure a predefined approval policy, select the predefined rule set and click the Edit task icon button.

- To disable a predefined rule set, select the Ignore this participant check box for that rule set.

- To edit the rules within a predefined rule set, you can insert, update, or delete from the seeded rules as needed while in edit mode.

- You can configure a specific rule to automatically approve without being sent to any approver. Modify the routing for that rule so that it is sent to the initiator (which means the requestor is the approver), set the Auto Action Enabled option to True, and enter APPROVE in the Auto Action field.

Customization

- You can optionally customize predefined approval workflows, for example add post-approval activities or additional stages. Refer to the Oracle Fusion Applications Extensibility Guide.

See: Customizing and Extending SOA Components

Define Help Configuration

Define Help Configuration: Overview

The Define Help Configuration task list contains tasks that let you set up and maintain Oracle Fusion Applications Help for all users. Use the Set Help Options task to determine if certain aspects of Oracle Fusion Applications Help are available to users and to control how aspects of the help site work. Use the Assign Help Text Administration Duty and Manage Help Security Groups tasks to set up customization of help content.

After performing the help configuration tasks, you can review the predefined help and consider whether to add or customize any content. You can also
customize help that is embedded in the application, for example hints and help windows, using other tools such as Oracle JDeveloper and Oracle Composer.

Use the Setup and Maintenance work area to access the tasks in the Define Help Configuration task list.

**Help Feature Choices and Help Options: Points to Consider**

Help feature choices on the Configure Offerings page in the Setup and Maintenance work area control the look and behavior of Oracle Fusion Applications Help, and also determine which help options are available. Help options are setup options on the Set Help Options page.

**Local Installation of Help**

Select the Local Installation of Help feature choice so that the Define Help Configuration task list appears in your implementation project, and you can select two additional features (Access to Internet-Based Help Features and Help Customization) to control the fields available on the Set Help Options page.

**Access to Internet-Based Help Features**

Select this feature choice to provide users access to features that involve navigation to sites on the Web. If you select this feature choice, then the Web Sites Available from Help Site section is available on the Set Help Options page. For Oracle Cloud, always leave this feature choice selected so that your users can access the Cloud Learning Center.

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**Important**

For non-Cloud implementations only: Some help includes links to the Oracle Fusion Applications Technology Library. If you select this feature, then these links open the library on the Oracle Technology Network Web site. If you do not select this feature, then your system administrator must download the library from Oracle Technology Network (http://www.oracle.com/technetwork/documentation/fusion-apps-doc-1508435.html) and put all the content from within the extracted folder (for example E28271_01) directly into the appmgr/APPLTOP/fusionapps/applications/ahc/afh/reference/TechLib folder.

---

**Help Customization**

Select the Help Customization feature choice if you intend to customize predefined help or add your own files to help. For example, you can add internal policies or procedures as help, and Oracle User Productivity Kit content, if any. Only users with job roles containing the Application Help Text Administration duty role have access to customize help.

If you select this feature choice, then the Custom Help Security feature choice is available, as well as all these sections on the Set Help Options page:
Custom Help

User Productivity Kit

Privacy Statement

Custom Help Security

Select this feature choice if you want certain help files to be available only to a restricted set of users. You can define the user groups allowed to view corresponding help files. Do not select this feature choice if you do not have this requirement, because the feature can have an impact on performance.

If you select the Custom Help Security feature choice, then the Manage Help Security Groups task is available in the Define Help Configuration task list in your implementation project. There are no help options associated with this feature choice.

Administering Collaboration Features and Announcements in Help: Points to Consider

Announcements and collaboration features (discussions, ratings and comments) allow users to share information regarding help and the subjects that particular help files cover. The collaboration features are also used elsewhere in Oracle Fusion Applications. Discussions may not be available in Oracle Cloud implementations.

Use the Set Help Options page in the Setup and Maintenance work area to enable the announcements and discussions features and to set options about ratings. When administering these features, consider the purpose of each feature and points that are specific to Oracle Fusion Applications Help.

Announcements

Use announcements to broadcast information to all users of your help site. You can provide information about help, for example new custom help that was recently added, or about anything that users should take note of, for example a change in company policy. Announcements can appear on any of the tabs on the home page of Oracle Fusion Applications Help. You can target specific user groups by posting announcements to specific tabs, for example, posting information related to implementation to the Functional Setup tab.

Only users with the Application Help Text Administration duty role have access to the Manage Announcements icon button in the Announcements sections. They can create, edit, and delete announcements for the tab that they are on, and set the date range for when each announcement is to be displayed.

Note

Use the full URL, for example http://www.oracle.com, when creating links.
Discussions

Users can use discussions to post questions or comments about subjects covered in specific help files. For example, after reading help on expense reports, users might have questions or comments about company policies or processes for expenses. Other users who later access this help file would benefit from the information in the discussion.

You can set a help option to enable discussions. Each help file would contain a Discuss link that all users can use to read discussions about that file. They can also start a discussion topic or post to existing topics. These discussions are visible only to users in your enterprise.

Important

Do not enable discussions until servers for discussions are up and running.

Only users with the appropriate administrator role can moderate discussions. For more information on granting the administrator role on the discussions server, see the Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter Portal.

Ratings and Comments

Users can rate any help file on a five star system and provide feedback about the content. This information is helpful to other users in deciding which help file to open. Help files with a higher average rating are listed first in help windows, and in the help listings you see as you browse using the help navigators.

The scope of ratings and reviews is limited to your enterprise.

Creating Help Security Groups: Worked Example

This example demonstrates how to create a help security group to define a set of job roles that have access to help. The help security group can then be assigned to particular help files so that only users with any of the defined roles have access to the help.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of users do you need to limit help access to?</td>
<td>Human resources (HR) specialists</td>
</tr>
<tr>
<td>Is there a specific time period for which this access is needed?</td>
<td>No, the help files should always be viewed only by the HR specialists</td>
</tr>
<tr>
<td>Where do you want this group to appear in the list of values for help security groups?</td>
<td>First</td>
</tr>
</tbody>
</table>
Define a help security group and assign a duty role to the group.

1. From the Setup and Maintenance work area, find the Manage Help Security Groups task and click Go to Task.


3. Complete the fields, as shown in this table. Leave the start and end dates blank.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help Security Group</td>
<td>HR</td>
</tr>
<tr>
<td>Meaning</td>
<td>HR Only</td>
</tr>
<tr>
<td>Description</td>
<td>Viewing by HR specialists only</td>
</tr>
<tr>
<td>Display Sequence</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Click Save.

5. With your new help security group selected, go to the Associated Roles section and add a new row.

6. Select PER_HUMAN_RESOURCE_SPECIALIST as the role name.

7. Click Save and Close.

You have created a new lookup code for the Help Security Groups lookup type, which is a standard lookup. The lookup code has the name, meaning, and description that you defined for the help security group.

You have also created a data security policy for the help database resource, specifying that the Human Resource Specialist role can view help that is defined with the HR security group. If you go to the Manage Database Resources and Policies page and find the database resource, or object, ATK_KR_TOPICS, then you can see the policy for the Human Resource Specialist role, with the condition that the column name, SECURITY_CODE, is equal to the value HR.

Help File Customization: Overview

If you have the appropriate job roles, then you can customize the help files in the help site. Use the Manage Custom Help page to maintain both predefined and custom help files. You can create, duplicate, edit, and delete custom files, or set their status to Active or Inactive. For predefined files, you can only duplicate them or set their status. For each help file, predefined or custom, use help locations to determine where the help file appears in the application and in the help site. You have various options in how you add custom help, for example by uploading a file or specifying a URL.

Note

To make a copy of all custom help for testing, migration, or other purposes, use the export and import feature in the Setup and Maintenance work area.
There are various ways to access help customization.

- Many help files can be accessed from help windows in the application. If you want to customize help in the context of a help window, for example, create a custom help file and add a link to it from a specific help window, then start by opening that help window. When you click the Manage Custom Help link, you go to the Manage Custom Help page, and the help location fields are automatically populated with values that correspond to the help window. This way you can easily select existing files to add to the same help location, and when you create a new file, the same help location appears by default.

- Open the Manage Custom Help page directly from the home page of Oracle Fusion Applications Help or from search result pages.

- To edit a specific file, you can either find it in the Manage Custom Help page, or open the file itself and click the Edit link.

- Likewise, you can find glossary terms in the Manage Custom Help page, or click the Glossary link in the global area to open the Glossary tab, search for the term, and click Edit.

Note

When you search in the Manage Custom Help page, make sure that the Custom Help Only check box is not selected if you are looking for predefined help.

If your enterprise has purchased Oracle User Productivity Kit (UPK) content, then your administrator can also add a UPK item to the Help menu in the global area of Oracle Fusion Applications. When users select this menu item, they access UPK content specific to the page that they are on.

Help Types: Explained

Oracle Fusion Applications Help contains various types of help content, including demos, examples, FAQs, glossary terms, help topics, and PDF guides. A business process or product can be supported by some or all of these help types.

Demo

Demos are Oracle User Productivity Kit (UPK) topics that visually demonstrate how to use the application to complete a short task or portion of a task. Demos can also provide an introduction to complex dashboards and work areas.

Example

Examples provide real use cases of features to illustrate how and when to use the feature, or scenarios to illustrate abstract concepts. Worked examples show exactly what you need to do to achieve a specific result, emphasizing decisions that you make and values that you enter.
FAQ

FAQs, or frequently asked questions, provide brief answers to questions that you might have regarding a task or page. For example, they can briefly explain what a term means, why something happened, how you can perform an action, or what happens if you perform the action.

Glossary

Glossary terms provide definitions for words or phrases used in help. You can search or browse glossary terms in the Glossary tab of Oracle Fusion Applications Help. Where the links are available, you can also see the definition when you hover over the term in help content for other help types.

Help Topic

Help topics explain key concepts, illustrate how application components work together, or assist in decision-making by explaining points to consider or the options you have. Help topics can also provide reference, overview, and other information.

PDF Guide

PDF guides present a collection of help content from the other help types, except demos, in an organized and logical format. For example, there are guides addressing specific business processes and setup offerings. You can see lists of all guides from the Guides menu in Oracle Fusion Applications Help.

Help Locations: Explained

Help locations determine where users can find help files, custom or not, from either the application or the help site.

Help locations include:

- Page or section values
- Help hierarchies
- Primary locations

Page or Section Values

The value in the Page or Section field on the help customization pages represents where users can click a help icon to open a help window that contains a link to the help file. In most cases, this value represents a page or region header in the application. Help windows are also available on specific tabs or windows, and in the Setup and Maintenance work area for specific task lists or tasks. You can associate a help file with multiple page or section values, or with none at all.
The page or section value reflects the logical navigation to the help window. For example, **Edit Opportunity page, Revenue tab, Recommendations window** does not mean that the help file is available in three different places. The help icon is in the Recommendations window, which is accessed from the Revenue tab on the Edit Opportunity page.

If the value suggests multiple locations, for example **Create and Edit Opportunity pages**, then the help file is available from the page header of both the Create Opportunity and Edit Opportunity pages. If the page or section value is, for example, a dashboard region that appears in multiple dashboards, then the value does not specify the page name but just the region. The help file is available from that region in multiple dashboards.

### Help Hierarchies

Help files are associated with help hierarchies, which are used to categorize help files and aid users in finding help. Each help file can have multiple hierarchies, with at least one of type Business Processes. The business process hierarchy is based on the Business Process Management model. Every page or section value is predefined with a specific business process hierarchy. If you select a page or section without entering a business process hierarchy, the predefined hierarchy appears by default.

The Search by Business Process navigator in the help site is based on the business process hierarchy. For example, if you assign two business process hierarchies to a help file, users can find the file in both locations in the navigator. When the user clicks **More Help** from a help window, all help files assigned to the same business process hierarchy as the page or section value are returned as search results.

Similarly, the Search by Product navigator is based on the Product hierarchy type, in which level 1 is the product family, level 2 is the product, and level 3 is the business activity owned by that product.

The Search by Functional Setup navigator is based on the Functional Setup hierarchy type. The level 1 nodes for this hierarchy are:

- Functional Setup Manager, which includes help about using the Setup and Maintenance work area.
- Guides, which contains level 2 nodes that correspond to business areas and setup offerings. All the user reference and functional setup PDF guides are included.
- Offerings, which contains level 2 nodes for each setup offering, and lower levels for the main task lists in the offerings. Help for the task lists and tasks are included.

The Search by Common Tasks navigator is based on the Welcome hierarchy type. The level 1 nodes represent categories of functional areas common to all users.

### Primary Locations

The primary location of a help file designates the hierarchy that is displayed for the help file in search results and within the help content as breadcrumbs.
You cannot change the primary location of a help file that came with your help installation. Primary locations of predefined help are based on the business process hierarchy, while custom help files can have primary locations based on hierarchies of any type.

**Editing Predefined Help and Glossary Terms: Points to Consider**

When you open any predefined help file, including glossary terms, that came with Oracle Fusion Applications Help, you can see an edit option if you have roles allowing edit access. When you edit predefined help, keep in mind:

- What happens to the original help file
- Where predefined help appears
- Considerations specific to glossary terms

**What Happens to the Original Files**

When you edit predefined help, you are actually creating a new custom help file based on the original file, with the same help locations. The customized version replaces the original, which becomes inactive and hidden from users. You can display both versions by reactivating the original in the Manage Custom Help page.

**Note**

In the Search Results: Existing Help region on the Manage Custom Help page, there is no option to edit predefined help. You can duplicate a predefined help file, edit the copy, and optionally inactivate the original.

**Where Predefined Help Appears**

All predefined help comes with preassigned help locations, including at least one based on the hierarchy of type Business Processes. Many also have predefined page or section values that indicate where the help can be accessed from help windows in the application.

To change where predefined help appears, either in the help site navigators or in the application, create a duplicate in the Manage Custom Help page. Change or add help locations to your custom copy, and inactivate the original.

Even though glossary terms do not appear in the help site navigators, you still need to enter at least one help location to categorize the glossary term.

**Considerations Specific to Glossary Terms**

When you edit a predefined glossary term, the original term becomes inactive. Existing links to the glossary term, from other predefined and custom help files, will automatically point to your custom version. If you later inactivate the custom glossary term, make sure to activate the original term so that the links still work.
Links in Custom Help: Points to Consider

When you create or edit custom help, follow best practices when you include links to help files or other content. If you are working on custom help created by duplicating a predefined help file, then you may see existing links from the original file in the Help Content section. The types of links that you can work with include:

- Related help links
- Standard hypertext links
- Links to documentation library content
- Glossary term links

For all link types, except the standard hypertext links, you must create or edit custom help with a Text or Desktop source type. In other words, you must type the help content directly in the application or use an HTML file that you upload to help. For standard hypertext links, the source type can also be URL.

Related Help Links

Related help is the section at the end of help files that contains links to other help files. The syntax for related help contains a comma-separated list of title IDs that represent help files.

This figure provides an example of related links code.

```
OfskelatedTopics(CREATE_AUTOMATIC_POSTING_CRITERIA_S_0000,
JOURNAL_ENTRIES_NON_TEXT_PK_REORDER_6666)
```

- You can delete this code to remove all related help, or delete title IDs to remove individual links (for example, CREATE_AUTOMATIC_POSTING_CRITERIA_S_0000).
- To replace existing links or add new links, you need to retain the code syntax and enter desired title IDs. To find title IDs, search for the help files on the Manage Custom Help page. Title IDs are displayed in the search results, but the Title ID column is hidden by default.

Standard Hypertext Links

You can create standard hypertext links to any file or Web site as long as you ensure the stability and validity of the links, including links to other help files, custom or not. These links can appear anywhere in the body of your help file as long as they come before any related help links.

In the Help Content section, highlight the text that you want to use as link text and click the Add Link icon button.

For links to other help files, open the file to which you want to link, and click the E-Mail link. Use the URL in the autogenerated e-mail text as the link to the file.

Note
Use the full URL, for example http://www.oracle.com, when creating links.

**Links to Documentation Library Content**

The syntax for links to HTML files in documentation libraries, for example the Oracle Fusion Applications Technology Library, is:

```
<span class="HP_topic-link_bridgeDocument-linkToSTDoc_">?ofa
linkToSTDoc(WCSUG4636) ?<span class="HP_topic-linktext_">Understanding
```

WCSUG4636 is the anchor ID and Understanding Tags is the link text. You can:

- Modify the link by replacing the existing anchor ID or editing the link text, or both.
- Remove the link by deleting all the code for it.
- Create links to documentation library content by following the same syntax. These links can appear anywhere in the body of your help file as long as they come before any related help links.

**Important**

To ensure that you are linking to a supported documentation library, enter anchor IDs only from documentation libraries that are linked from predefined help topics.

**Glossary Term Links**

Glossary term links provide definitions in a note box when users hover over the term in help files.

This figure shows an example of code for a glossary term link.

```
  $getGlossaryTerm("accounting_period", ACCOUNTING_PERIOD_001)
```

In this example, accounting period is the link text, or glossary term, and ACCOUNTING_PERIOD_001 is the identifier, or title ID.

- To remove the link but retain the text, delete all the code except the term itself.
- To add glossary term links, you must follow the link syntax and use the correct title ID for the glossary term. You can find title IDs in the search results of the Manage Custom Help page.

**Note**

If your custom help has glossary terms and the source type is Desktop File, then make sure before uploading that the quotes around the glossary term are actual quotation marks in raw HTML, not &quot. Otherwise, quotation marks will appear when users view the help file.
Customizing PDF Guides: Worked Example

This example demonstrates how to customize a PDF guide that came with Oracle Fusion Applications Help. This guide is currently not available from any help window in the application.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What changes do you need to make to the guide?</td>
<td>Change the title of a chapter and remove a section in that chapter, to hide content about a particular subject</td>
</tr>
<tr>
<td>Which help window should the customized guide appear in?</td>
<td>The help window for the entire Welcome dashboard of Oracle Fusion Applications</td>
</tr>
<tr>
<td>Which help navigators should the customized guide appear in, and on which node?</td>
<td>Same as the original guide, plus the path associated with the help window</td>
</tr>
<tr>
<td>Do you want to limit access to the customized guide?</td>
<td>No, same as the original guide</td>
</tr>
</tbody>
</table>

Edit a copy of the original PDF guide, and use the Manage Custom Help page to replace the original PDF guide with your new file.

Copying and Editing the PDF Guide

1. Open the original PDF guide from the help site and save a copy to your desktop. Leave open the help file for the guide.

2. Using a PDF editor application, change the title of the chapter wherever the chapter title appears. Delete the content you want to hide from users.

3. Make sure that your new PDF guide is less than 6 MB.

Replacing the Original PDF Guide

1. In the help file that you still have open for the original PDF guide, click the Edit link.

2. On the Create Help page, use the default values except where indicated.

3. Update the title to the name that you want to display to users.

4. In the File Name field, browse for and select your customized guide.

5. Delete any keywords or parts of the description relevant to the content you removed from the PDF guide.

6. Add a help location with the Business Processes hierarchy type and select Information Technology Management as the level 1 node, Manage Enterprise Application Software as the level 2 node, and Use Applications as the level 3 node.

7. Select Welcome page in the Page or Section column.

8. Click Save and Close. The help file for the original PDF guide is automatically set to inactive.
Adding Custom UPK Content to Help: Worked Example

This example demonstrates how to add custom Oracle User Productivity Kit (UPK) topics as demo help files. These help files function like any predefined help file for demos. You can search and include these files in help windows and navigators as you would other help.

In this scenario, you are adding two demos about social networking, to appear in help windows on the Welcome dashboard.

**Note**

Your demo must be made with UPK 3.6.1 or later to be added as help.

The following table summarizes key decisions for this scenario.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What UPK content do you want to add to help?</td>
<td>From a UPK module containing five topics, add two as custom demos on the help site</td>
</tr>
<tr>
<td>Which help navigators should each demo appear in, and on which node?</td>
<td>Because the two demos are about social networking:</td>
</tr>
<tr>
<td></td>
<td>• Search by Common Tasks navigator, under the Collaboration node</td>
</tr>
<tr>
<td></td>
<td>• Search by Business Process navigator, under Information Technology Management -</td>
</tr>
<tr>
<td></td>
<td>Manage Networking and Communications - Manage Social Networking Capabilities</td>
</tr>
<tr>
<td>Which help window should each demo appear in?</td>
<td>On the Welcome dashboard of Oracle Fusion Applications, one demo goes in the help window in the Activity Stream region, and the other in the People Connection region</td>
</tr>
<tr>
<td>Do you want to limit access to the help files for the demos?</td>
<td>No</td>
</tr>
<tr>
<td>Do you want the help files to appear in the New and Updated pane?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Generate a report of UPK document IDs, which you will use when creating custom help, to identify the UPK topics that you want to add. Publish the UPK module as a player package, then create custom help for the UPK topics that you want to use as help demos.

**Generating a UPK Document ID Report**

1. In the UPK Developer, select Details View.
2. Right-click any column header, for example Name, and select Column Chooser.
3. In the Column Chooser dialog box, click and drag the Document ID column header and drop it after the Name column. Close the Column Chooser dialog box.
4. From the File menu, select to print, and save the output as a Microsoft Excel file to your desktop.

**Creating the Player Package**

1. From the UPK Developer, make sure that the topics that you want to add as demos have the See It play mode. The topics can also have other modes, but only the See It mode is included in the custom help file.

2. Publish the module, specifying any location for the output and selecting to publish the selection only.

3. In the Formats section of the Publish Content window, select the Player check box under the Deployment check box group.

4. In the Player section, select the Include HTML Web Site check box, to ensure that the custom help file includes a text-only version of the UPK topic.

5. Finish the publishing process, after optionally setting other options.

6. Navigate to the location where you specified the output to be generated.

7. In the Publishing Content folder, copy the PlayerPackage folder and add it to the web server where you store UPK content.

**Creating Custom Help for Demos**

1. Open the help window in the Activity Stream region on the Welcome dashboard of Oracle Fusion Applications, and click Manage Custom Help.

2. On the Manage Custom Help page, the page or section and hierarchy values are populated with the values for the Activity Stream region.

3. Click Create.

4. On the Create Help page, complete the fields in the General Information section, as shown in this table. Use the default values except where indicated.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>The name of the UPK topic.</td>
</tr>
<tr>
<td>Source Type</td>
<td>Oracle User Productivity Kit</td>
</tr>
<tr>
<td>File Location</td>
<td>The full URL of the player package folder on the Web server, for example, http://&lt;your domain&gt;.com/UPKcontent/PlayerPackage.</td>
</tr>
<tr>
<td>Document ID</td>
<td>The document ID of the UPK topic to add to the help window in the Activity Stream region. You can copy and paste this ID from the Microsoft Excel file that you generated earlier.</td>
</tr>
<tr>
<td>Help Type</td>
<td>Demo</td>
</tr>
<tr>
<td>Help Security Group</td>
<td>Unsecured</td>
</tr>
<tr>
<td>Keywords</td>
<td>Terms relevant to the demo.</td>
</tr>
</tbody>
</table>
The Help Location section contains values for the help window in the Activity Stream region. This help file will also appear in the Search by Business Process navigator under this predefined hierarchy.

5. Click **Save and Close**.

6. On the Manage Custom Help page, open the help locations for the help file that you just created.

7. Add a help location with the Welcome hierarchy type and select **Collaboration Features** as the level 1 node.

8. Add another help location with the Business Processes hierarchy type and select **Information Technology Management** as the level 1 node, **Manage Networking and Communications** as the level 2 node, and **Manage Social Networking Capabilities** as the level 3 node.

9. Click **Save and Close**.

10. Starting at the Connections region, repeat steps 1 to 9 for the other UPK topic that you want to add.

**Customizing Embedded Help: Highlights**

You can customize help that is embedded in the application, for example hints and help windows, for all users of Oracle Fusion Applications.

Embedded help customization is fully described in the Oracle Fusion Applications Extensibility Guide.

- Edit, create, or delete hint text that appears on hover over buttons, links, icons, or tab titles.

  See: Customizing or Adding Bubble Embedded Help

- Edit, create, or delete other types of embedded help. Refer to the Customizing or Adding Static Instructions, In-Field Notes, and Terminology Definitions section.

  See: Oracle Fusion Applications Extensibility Guide

**FAQs for Define Help Configuration**

**When do I link to the Oracle User Productivity Kit library from the help site?**

Provide a link to your Oracle User Productivity Kit (UPK) library if you have UPK licensed and custom UPK content to share with your users. You give them access to a library of custom UPK content in addition to any custom UPK demos that you added to the help site itself. UPK demos that you add as custom help are available only in the See It mode, so the library can include the same demo
in other modes. If you have UPK versions earlier than 3.6.1, then you cannot add UPK demos as custom help, so the link is the only way for users to access custom UPK content from the help site.

**How can I find the URL to the Oracle User Productivity Kit library?**

The URL to enter on the Set Help Options page should be the full path from the Web server where you are hosting your Oracle User Productivity Kit (UPK) content to the index.html file that opens the table of contents for the library, for example, http://<your domain>.com/UPKcontent/PlayerPackage/index.html. In this example, you or your UPK administrator would publish one UPK player package that contains all the content to be linked to from Oracle Fusion Applications Help, as well as the index.html file, and place the PlayerPackage folder in a manually created folder called UPKcontent on the Web server.

**Who can add and manage custom help?**

Users with the Application Help Text Administration duty role have access to customize help in Oracle Fusion Applications Help. This duty is assigned by default to various job roles, in particular the administrators for product families.

You can assign the duty role to other users who need access to customize help. Use the Manage Duties task in the Setup and Maintenance work area to search for the Application Help Text Administration duty role on the Role Catalog page, and map additional job roles to this duty role.

**How can I restrict help content to specific user roles?**

When you create or edit help, select a help security group that represents the set of roles that you want to have access to the help. If you do not see the Security Group field, then your administrator has not selected the Custom Help Security feature choice. The Unsecured group has no associated roles, so anyone can view the help. The predefined Secured group includes all internal employees and contingent workers, unless this group has been edited. You can create security groups and associate roles using the Manage Help Security Groups page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Help Security Groups task. Your new security groups are immediately available for use to secure new or edited help files.

**Why can't I select and add help to a location?**

You must specify a page or section to add the existing help to. To ensure that help is added to the correct help window, go to the page or section in the application, click the Help icon, and click the Manage Custom Help link in the help window. Alternatively, in the Manage Custom Help page, search for at least a page or section and a level 1 value for the Business Processes hierarchy type before selecting the Select and Add option.

You cannot select and add help to a particular hierarchy, on the Manage Custom Help page, without a page or section. To add just a hierarchy, search for the help file, add a new help location, and specify only the hierarchy information.
What happens to custom help when a help patch is applied?

Oracle Fusion Applications Help patches update all help files, both active and inactive, except custom help. Custom help files are not affected by patches. Consider reviewing inactive files to see if you want to activate the updated version, or to make similar edits to the custom versions of those files, if any.

Define Application Toolkit Configuration

Define Application Toolkit Configuration: Overview

Oracle Fusion Application Toolkit (ATK) is an application that provides various core components of Oracle Fusion Applications, including the Welcome dashboard, Oracle Fusion Applications Help, the Reports and Analytics pane, and the Watchlist feature. Use the Define Application Toolkit Configuration task list to set up and maintain some of these components for all users, and the Define Help Configuration task list for Oracle Fusion Applications Help.

Note

The Define Application Toolkit Configuration task list is available in implementation projects only if the Application Toolkit Component Maintenance feature choice is selected.

Use the Setup and Maintenance work area to access the tasks in the Define Application Toolkit Configuration task list.

Map Reports to Work Areas

Additional Report Setup in the Context of the Reports and Analytics Pane: Highlights

Aside from determining which work areas a specific report is mapped to, you can perform additional setup for reports in the context of the Reports and Analytics pane. You can set up report permissions, and enable Oracle Business Intelligence (BI) Publisher reports for scheduled submission.

This additional setup is described in the Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition (Oracle Fusion Applications Edition) and the Oracle Fusion Applications Extensibility Guide.

Report Permissions

- You can restrict access to specific reports for specific users, and this security is not limited to the Reports and Analytics pane. Refer to the Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition (Oracle Fusion Applications Edition).

See: Assigning Permissions
Oracle Business Intelligence Publisher Reports Submission

- Oracle BI Publisher reports must be registered as processes with Oracle Enterprise Scheduler to be enabled for scheduling. This registration also enables a Schedule link for the report in the Reports and Analytics Pane. Refer to the Oracle Fusion Applications Extensibility Guide, and perform the following steps in the specified order.

  - Create an Oracle Enterprise Scheduler job definition for the report.
    
    See: Tasks Required to Run Custom Reports with Oracle Enterprise Scheduler Service

  - Specify the job definition details in the report's properties.
    
    See: Enabling Reports for Scheduling from the Reports and Analytics Pane

FAQs for Map Reports to Work Areas

How can I set up the Reports and Analytics pane for all users?

You can remove any currently mapped report from the Reports and Analytics pane, or add mappings to reports from the Oracle Business Intelligence (BI) Presentation catalog. To access the setup, click Edit Settings in the Reports and Analytics pane, or use the Map Reports to Work Areas task in the Setup and Maintenance work area. If you do the former, then you can set up only the Reports and Analytics pane on the work area that you are in.

If you do the latter, then you can select a work area to set up. If you do not see the desired work area, most likely you do not have access to it due to security. You can request to be granted a role that has access to the work area, or another administrator or business user with access to the work area can be granted the Reports and Analytics Region Administration Duty to be able to map reports to the work area.

Tip

On the Map Reports to Work Areas page only, you can also use the Synchronize button to remove mappings to reports that are no longer in the catalog, for all work areas at once.

Any changes you make in either UI apply to all users with access to the mapped work area.

Why can't I see reports when mapping reports to work areas for the Reports and Analytics pane?

It is possible that there are no reports currently mapped to the work area that you select in the Map Reports to Work Areas page. Alternatively, reports are mapped, but you do not see them due to security.
Similarly, in the list of all available reports from the catalog, you can see only the reports that you have access to. You can request to be granted a role that has access to the reports that you want to map, or another administrator or business user with access to those reports can be granted the Reports and Analytics Region Administration Duty to be able to map reports to work areas.

**Why can’t I see reports when I edit settings for the Reports and Analytics pane?**

In the Edit Settings window, you may not be able to see a currently mapped report because you do not have access to it due to security.

Similarly, in the list of all available reports from the catalog, you can see only the reports that you have access to. You can request to be granted a role that has access to the reports that you want to map, or another administrator or business user with access to those reports can be granted the Reports and Analytics Region Administration Duty to be able to map reports to work areas.

**Set Watchlist Options**

**Watchlist Setup: Points to Consider**

For all users across the site, you can disable or enable predefined Watchlist categories and items, edit their names, and determine how often item counts refresh. You cannot delete predefined Watchlist categories and items, nor create any for the site. Users can create their own Watchlist items through saved searches.

Access the Set Watchlist Options page by starting in the Setup and Maintenance Overview page and searching for the Set Watchlist Options task.

**Disabling Predefined Categories and Items**

Use the Set Watchlist Options page to enable or disable predefined Watchlist categories and items. Disabling any category or item also disables associated processes involved in calculating the Watchlist item counts for all users. These processes include creating data caches, performing security checks, invoking services across domains, running queries, and so on.

An item with the **Predefined** type represents the actual predefined Watchlist item that appears in the Watchlist. If you disable this type of Watchlist item, then:

- The item is not available for users to display in their watchlist
- The item is removed from any watchlist where it is currently displayed

A Watchlist item with the **User-created saved search** type does not appear in the Watchlist; it controls the display of the **Manage Watchlist** button or menu item in pages with saved searches. If you disable this type of Watchlist item, then:

- The **Manage Watchlist** option is not available to users in the corresponding work area, so users cannot use their own saved searches as Watchlist items. A message is displayed to users when they try to use this option.
• Any user-defined saved searches from that work area already used as Watchlist items are no longer available in the users’ watchlist. The user-defined saved searches are still available to be used for searching, but not for the Watchlist.

If you disable a Watchlist category, then the category is not available for users to include in their watchlist, and all Watchlist items within the category are also disabled.

Ultimately, the Watchlist for any user contains the subset of categories and items that are enabled in the Set Watchlist Options page:

• Plus any items based on user-defined saved searches
• Minus any categories or items that the user chooses to hide using Watchlist preferences
• Minus any items with no results found, if the user chooses to hide such items using Watchlist preferences

**Specifying Refresh Intervals**

All Watchlist items have a predefined refresh interval, which controls how often the query that calculates the count for a Watchlist item can be run. Use the Set Watchlist Options page to edit the interval values. What you specify as the refresh interval for a Watchlist item of type User-created Saved Search applies to all Watchlist items based on saved searches created by users on the corresponding search page.

When the user is in the Welcome dashboard with the Watchlist open for at least two and a half minutes, the query automatically runs for all Watchlist items if no refresh already ran in this user session. To subsequently run the query again, users can manually refresh the Watchlist region. The Refresh icon is enabled after five minutes since the last refresh.

**Note**

During a refresh, the query runs for an individual Watchlist item only if the time since the last query for this item is equal to or greater than the specified refresh interval. Since the manual refresh of the entire Watchlist is not available until five minutes after the last refresh, you should not set a Watchlist item refresh interval that is less than five minutes.

When users open Watchlist from the global area, a refresh automatically runs if five minutes have passed since the last refresh. During this refresh, the query runs for an individual Watchlist item only if the time since the last query for this item is equal to or greater than the specified refresh interval.

For example, you set the interval to eight minutes for a particular Watchlist item. When the user signs in and goes to the Welcome dashboard, with the Watchlist open, the query automatically runs for this Watchlist item after two and a half minutes. Every two and a half minutes after, a check is performed for stale counts and new cached counts are displayed.

Five minutes after the query ran, the Refresh icon is enabled and the user performs a manual refresh. However, the query does not run for this Watchlist
item, because the refresh interval is eight minutes. The user navigates away from the Welcome dashboard and opens the Watchlist from the global area six minutes later. A refresh automatically runs because more than five minutes have passed since the last refresh. This time, the query runs for this Watchlist item because it has been more than eight minutes since the query last ran for this item.

**Editing predefined category and item names**

Predefined Watchlist category and item names are stored as meanings of standard lookups. Lookup types for predefined categories end with WATCHLIST, for example EXM_EXPENSES_WATCHLIST. Edit the lookup type meaning to change the category name. To change item names, edit lookup code meanings for that lookup type.

**Maintain common reference objects**

**Maintain common reference objects: overview**

The Maintain Common Reference Objects task list contains Oracle Fusion Middleware Extensions for Applications (Applications Core) tasks that support implementation of common behaviors, such as data security or reference data sets.

Use this task list to manage common reference objects that are defined centrally and shared across applications, in addition to those that are specific to Applications Core functionality. You can access this task list by starting in the Setup and Maintenance Overview page and searching for common reference object task lists.

**Note**

Offerings also include application-specific tasks for managing Applications Core objects. For example, the Financials offering includes tasks such as Manage Receivables Descriptive Flexfields, and Manage Receivables Lookups.

For more information on configuring custom objects, see the Oracle Fusion Applications Extensibility Guide.

To make the Maintain Common Reference Objects task list available in your implementation project, go to **Setup and Maintenance Overview - Configure Offerings**, and for a specific offering, select the Maintain Common Reference Objects feature choice.

**Define application taxonomy**

**Application taxonomy: highlights**

Application taxonomy is the organization of Oracle application components and functions in a hierarchical structure, from product lines to logical business areas.
This hierarchy represents a breakdown of products into units based on how applications are installed and supported. Maintain this hierarchy on the Manage Taxonomy Hierarchy page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Taxonomy Hierarchy task.

A detailed introduction to application taxonomy is provided in the Oracle Fusion Applications Developer’s Guide.

**Hierarchy**

- The application taxonomy hierarchy contains various levels and types of nodes, or modules.
  
  See: Characteristics of the Level Categories
  
  See: Benefits of a Logical Hierarchy

**Usage**

- Use application taxonomy to understand relationships among applications and between an application and its files. This information is helpful in managing various phases of the product lifecycle.

  See: How to Manage the Lifecycle

**Modules in Application Taxonomy: Explained**

A module is any node in the application taxonomy hierarchy. The top level of the hierarchy is product line, followed by product family, application, and logical business area. There can be multiple levels of logical business areas, with one or more nested within a parent logical business area.

**Product Line**

A product line is a collection of products under a single brand name, for example, Oracle Fusion.

**Product Family**

A product family is a collection of products associated with a functional area that may or may not be licensed together as a single unit, for example Financials.

**Application**

An application is a single product within a product family, containing closely related features for a specific business solution, for example General Ledger.

**Logical Business Area**

A logical business area is a collection of business object definitions organized into a logical grouping. It contains the model objects, services, and UI components for those business objects. Logical business areas have their own
hierarchy levels and in some cases can be two or three levels deep. Each leaf node has at least one business object and service, up to a maximum of four business objects and associated services. A logical business area with more than four business objects are further refined with child logical business area levels. Each of these parent-child levels is represented by a directory in the physical package hierarchy.

Managing Modules in Application Taxonomy: Points to Consider

Manage modules on the Create Child Module or Edit Module page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Taxonomy Hierarchy task. When you create a module, it is a child of the currently selected node in the application taxonomy hierarchy. This determines which values are available, for example for module type. Once created, you cannot delete the module or move it elsewhere in the hierarchy. As you create or edit modules, consider the following points regarding specific fields.

Identifiers

Module ID is the unique primary key for nodes in the taxonomy table. When you create a module, an ID is automatically generated. Once the module is created, you cannot update the ID.

Module key and alternative ID are additional identifiers of the module, presented in a way that is easier to read than the module ID. The module key is a string identifier, for example AP for the Oracle Fusion Payables application. The alternative ID is a numeric identifier, for example 1 for the Oracle Fusion product line. These IDs are provided for the product line, product family, and application modules, but you can optionally add them for logical business areas and new custom modules.

Note

Do not change the module key or alternative ID for predefined modules.

The product code is relevant only to application and logical business area modules. You can leave the field blank for other module types. The product code for applications is the short name that can be displayed in lists of application values, for example FND for Oracle Fusion Middleware Extensions for Applications.

Names

Module name is the logical name for the module and is always available. The name must be unique among nodes in the same hierarchy level with the same parent, but try to make it as unique in the whole hierarchy as possible.

The user name and description can appear to users in other parts of Oracle Fusion Applications, so make sure that the values are something that users know to represent the module.
Usage Types

Though you can update the usage type to reflect the current state of the module, just doing so does not affect the actual state. For example, setting a module as installed does not mean it is actually installed if the installation itself has not taken place. Installation refers to operations related to laying down all the components needed to create an Oracle Fusion Applications environment, while deployment is the process that starts the managed servers and clusters and facilitates the actual use of product offerings. A licensed module is available for installation and deployment, and a deployed module is considered actively used when actually used by users.

Seed Data

If seed data is allowed, then seed data such as flexfields and lookups can be extracted for the module using seed data loaders. By default, extract is allowed for all predefined modules of type application and logical business area.

Associations

You can associate a logical domain to modules of type product family, as well as one or more enterprise applications to modules of type application. This association represents the relationship between the taxonomy modules and the corresponding domain and enterprise applications stored in the Oracle Fusion Applications Functional Core (ASK) tables.

Define Lookups

Lookups: Explained

Lookups are lists of values in applications. You define a list of values as a lookup type consisting of a set of lookup codes, each code’s translated meaning, and optionally a tag. End users see the list of translated meanings as the available values for an object.

Lookups provide a means of validation and lists of values where valid values appear on a list with no duplicate values. For example, an application might store the values Y and N in a column in a table, but when displaying those values in the user interface, Yes or No (or their translated equivalents) should be available for end users to select. For example, the two lookup codes Y and N are defined in the REQUIRED_INDICATOR lookup type.

In another example, a lookup type for marital status has lookup codes for users to specify married, single, or available legal partnerships.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Lookup Code</th>
<th>Meaning</th>
<th>Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR_STATUS</td>
<td>M</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>Single</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>Registered Partner</td>
<td>+NL</td>
</tr>
</tbody>
</table>
In this case, tags are used for localizing the codes. All legislations list Married and Single. Only the Dutch legislation lists Registered Partner. And all legislations except France and Australia also list Domestic Partner.

When managing lookups, you need to understand the following.

- Using lookups in applications
- Customization levels
- Accessing lookups
- Enabling lookups
- The three kinds of lookups: standard, common, and set enabled

**Using Lookups in Applications**

Use lookups to provide validation or a list of values for a user input field in a user interface.

An example of a lookup used for validation is a flexfield segment using a table-validated value set with values from a lookup type. An example of a lookup in a list of values is a profile option’s available values from which users select one to set the profile option. Invoice Approval Status gives the option of including payables invoices of different approval statuses in a report. The lookup code values include All so that users can report by all statuses: Approved, Resubmitted for approval, Pending or rejected, and Rejected.

**Customization Level**

The customization level of a lookup type determines whether the lookups in that lookup type can be edited. This applies data security to lookups.

Some lookup types are locked so no new codes and other changes can be added during implementation or later, as needed. Depending on the customization level of a lookup type, you may be able to change the codes or their meanings. Some lookups are designated as extensible, so new lookup codes can be created during implementation, but the meanings of predefined lookup codes cannot be modified. Some predefined lookup codes can be changed during implementation or later, as needed.

The customization levels are user, extensible, and system. The following table shows which lookup management tasks are allowed at each customization level.

<table>
<thead>
<tr>
<th>Allowed Task</th>
<th>User</th>
<th>Extensible</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deleting a lookup type</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Inserting new codes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Updating start date, end date, and enabled fields</td>
<td>Yes</td>
<td>Yes, only if the code is not predefined data</td>
<td>No</td>
</tr>
<tr>
<td>Deleting codes</td>
<td>Yes</td>
<td>Yes, only if the code is not predefined data</td>
<td>No</td>
</tr>
</tbody>
</table>
Predefined data means LAST_UPDATED_BY = SEED_DATA_FROM_APPLICATION.

If a product depends on a lookup, the customization level should be system or extensible to prevent deletion.

Once the customization level is set for a lookup type, it cannot be modified. The customization level for lookup types created using the Define Lookups page is by default set at the User level.

**Standard, Common, and Set-Enabled Lookups**

The available kinds of lookups are as follows.

<table>
<thead>
<tr>
<th>Lookup</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Lists the available codes and translated meanings</td>
</tr>
<tr>
<td>Set enabled</td>
<td>Additionally associates a reference data set with the lookup codes</td>
</tr>
<tr>
<td>Common</td>
<td>Legacy lookups</td>
</tr>
</tbody>
</table>

Standard lookups are the simplest form of lookup types consisting only of codes and their translated meaning. They differ from common lookups only in being defined in the standard lookup view.

Common lookups exist for reasons of backward compatibility and differ from standard lookups only in being defined in the common lookup view.

Set enabled lookup types store lookup codes that are enabled for reference data sharing. At runtime, a set-enabled lookup code is visible because the value of the determinant identifies a reference data set in which the lookup code is present.

**Accessing Lookups**

Standard, set-enabled, and common lookups are defined in the Standard, Set-enabled, and Common views, respectively. Applications development may define lookups in an application view to restrict the UI pages where they may appear.

In lookups management tasks, lookups may be associated with a module in the application taxonomy to provide a criteria for narrowing a search or limiting the number of lookups accessed by a product specific task such as Manage Purchasing Lookups.

**Enabling Lookups**

A lookup type is reusable for attributes stored in multiple tables.
Enable lookups based on the following.

- Selecting an **Enabled** check box
- Specifying an enabled start date, end date, or both
- Specifying a reference data set determinant

If you make changes to a lookup, users must sign out and back in before the changes take effect. When defining a list of values for display rather than validation, limit the number of enabled lookup codes to a usable length.

For more information on the predefined lookups and lookup codes, see assets with the Lookup type in the Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

**Managing a Standard Lookup: Example**

Creating a new standard lookup involves creating or selecting a lookup type to which the lookup code belongs, and determining appropriate values for the lookup codes and their meanings.

---

**Note**

You can only create or edit the lookup codes for a particular lookup type if its customization level supports it.

---

**Creating a Lookup Type Called COLORS**

Your enterprise needs a list of values for status to be used on various objects such as processes or users. The lookups are colors, so the lookup type you create is COLORS.

<table>
<thead>
<tr>
<th>Lookup type parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lookup type name</td>
<td>COLORS</td>
</tr>
<tr>
<td>Meaning</td>
<td>Status</td>
</tr>
<tr>
<td>Description</td>
<td>Status by color</td>
</tr>
<tr>
<td>Module</td>
<td>Oracle Fusion Middleware Extensions for Applications</td>
</tr>
</tbody>
</table>

The lookup codes you define for the COLORS lookup type are, BLUE, RED, GREEN, and YELLOW.

<table>
<thead>
<tr>
<th>Lookup Code</th>
<th>Meaning</th>
<th>Enabled</th>
<th>Display Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUE</td>
<td>Urgent</td>
<td>No</td>
<td>4</td>
</tr>
<tr>
<td>RED</td>
<td>Stop</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>GREEN</td>
<td>Go</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>YELLOW</td>
<td>Caution</td>
<td>Yes</td>
<td>2</td>
</tr>
</tbody>
</table>
Understanding the Resulting Data Entry List of Values

Users need to respond to a process question by indicating whether to stop it, use caution, go ahead, or complete it urgently.

The list of values for the COLORS lookup type includes the meanings for the enabled codes.

<table>
<thead>
<tr>
<th>Displayed Value</th>
<th>Hidden ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>RED</td>
</tr>
<tr>
<td>Caution</td>
<td>YELLOW</td>
</tr>
<tr>
<td>Go</td>
<td>GREEN</td>
</tr>
</tbody>
</table>

Analysis

The BLUE lookup code was not enabled and does not appear in the list of values. The display sequence of values in the list of values is alphabetical unless you enter a number manually to determine the order of appearance. Number 1 indicates the value listed first in the list of values.

Note

Only lookups that are enabled and active, meaning between start and end dates, are visible.

Understanding the Transaction Table

When users enter one of the values from the list of values for the lookup type COLORS, the transaction table records the lookup code. In this example, the code is stored in the Status column

<table>
<thead>
<tr>
<th>Transaction number</th>
<th>User name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jane</td>
<td>RED</td>
</tr>
<tr>
<td>2</td>
<td>Bob</td>
<td>YELLOW</td>
</tr>
<tr>
<td>3</td>
<td>Alice</td>
<td>BLUE</td>
</tr>
</tbody>
</table>

The status for one user is BLUE because at the time they entered a value, BLUE was enabled. Disabling a lookup code does not affect transaction records in which that code is stored. Data querying and reporting have access to disabled lookup codes in transaction tables.

FAQs for Define Lookups

How can I edit lookups?

You can edit the existing lookup codes of a lookup type or add new lookup codes on the Define Lookups pages, which you can access by starting in the Setup and Maintenance work area and searching for lookup tasks. You can edit the existing
lookup codes of a lookup type, or add new lookup codes to a lookup type, if the customization level for the lookup type supports editing

**Why can't I see my lookup types?**

Lookups are listed by lookup type. Typically lookup types are managed using tasks that handle a group of related lookups, such as Manage Geography Lookups. Each task gives you access only to certain lookup types. The generic tasks provide access to all lookups types of a kind, such as all common lookups using the Manage Common Lookups task.

If existing lookups are not available to the tasks of the Define Lookups activity, they may be validated for use in a lookup view that is not central to all applications or whose owning application has not been specified in a lookup view.

Lookups can only be managed in the Define Lookups tasks if the lookup’s view application is the standard lookups view, common lookups view, or set-enabled lookups view. Lookups defined in an application view can only be managed by following instructions provided by the owning application.

**Note**

A lookup type and its codes can only be defined in one lookup view.

**What's the difference between a lookup type and a value set?**

A lookup type consists of lookup codes that are the values in a static list of values. Lookup code validation is a one to one match.

A table-validated value set can consist of values that are validated through a SQL statement, which allows the list of values to be dynamic.

**Tip**

A table validated value set can be defined based on any table, including the lookups table. This allows a lookup type to be made into a table-validated value set that can be used in flexfields.

<table>
<thead>
<tr>
<th>Area of Difference</th>
<th>Lookup Type</th>
<th>Value Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of values</td>
<td>Static</td>
<td>Dynamic if Table validation</td>
</tr>
<tr>
<td>Validation of values</td>
<td>One to one match of meaning to code included in a lookup view, or through the determinant of a reference data set</td>
<td>By format or inclusion in a table</td>
</tr>
<tr>
<td>Format type of values</td>
<td>char</td>
<td>varchar2, number, and so on</td>
</tr>
<tr>
<td>Length of value</td>
<td>Text string up to 30 characters</td>
<td>Any type of variable length from 1 to 4000</td>
</tr>
<tr>
<td>Duplication of values</td>
<td>Never. Values are unique.</td>
<td>Duplicate values allowed</td>
</tr>
</tbody>
</table>
A lookup type cannot make use of a value from a value set.

Value sets can make use of standard, common, or set-enabled lookups.

Both lookup types and value sets are used to create lists of values from which users select values.

**What's a lookup tag used for?**

Tags on lookup codes allow you to add a label to your lookup codes.

Lookup tags are unvalidated and uninterpreted by lookups. A tag can be used to categorize lookups based on facilitating searches or guiding how a lookup should be used.

Document what the tag on a lookup represents and how to use it.

**Manage Messages**

**Messages: Highlights**

The message dictionary contains messages that tell users about business rule errors, such as missing or incorrect data, and how to resolve them, to warn users about the consequences of intended actions, and provide information in log files. These messages are defined for specific applications and modules, but a few are common messages that can be used in any application. All applications also use messages stored outside of the message dictionary.


**Managing Messages**

- Use the Manage Messages page to create and edit custom messages in the message dictionary, as well as edit predefined messages. Do not delete predefined messages unless you are sure that they are not used anywhere. Refer to the Oracle Fusion Applications Developer’s Guide.

  See: Introduction to Message Dictionary Messages

- Messages outside of the message dictionary, for example confirmations and field validations, are managed in Oracle Application Development...

See: Displaying Hints and Error Messages for Validation and Conversion
See: Internationalizing and Localizing Pages

Creating and Editing Messages: Highlights

Each message in the message dictionary has many attributes and components, including message properties, text, and tokens, that you define when creating or editing the message.

Details about these messages are described in the Oracle Fusion Applications Developer's Guide.

Message Properties

- The message type identifies the type of information that the message contains.

  See: Understanding Message Types

- The message name and number are identifiers for the message. There are specific message number ranges for predefined messages in each application, and you should not edit numbers assigned to predefined messages. When creating custom messages, use only message numbers within the 10,000,000 to 10,999,999 range.

  See: About Message Names
  See: About Message Numbers

- The translation notes for predefined messages might contain internal content that you can disregard.

  See: About Translation Notes

- The message category, severity, and logging enabled option are related to the incident and logging process.

  See: About Grouping Messages by Category and Severity
  See: Understanding Incidents and Diagnostic Logs with Message Dictionary

Message Text and Tokens

- The message text comprises various components, some of which are displayed only to select users. To determine which component of the message text is displayed to a particular user, set the Message Mode profile option (FND_MESSAGE_MODE) at the user level for that user. The message component short text is visible to all users and therefore, the profile option does not apply to this component. Also, the profile option applies only to messages in the message dictionary.

  See: About Message Components
• Tokens are variables that represent values to be displayed in the message text.

See: About Tokens

Common Messages: Points to Consider

Common messages, which have message names that begin with FND_CMN and message numbers between 0 and 999, are used throughout Oracle Fusion Applications. Each common message can appear in multiple places in any product family. For example, the FND_CMN_NEW_SRCH message can be used for any search to indicate that no results were found. Common messages that are of type error or warning are part of the message dictionary.

Editing Common Messages

Because a common message can be used in any application, consider the ramifications if you edit any aspect of the message, including incident and logging settings. Changes would be reflected in all instances where the message is used. For example, if you change the message text, make sure that the text would make sense to all users across Oracle Fusion Applications who might see it.

Creating Common Messages

You can create custom common messages for use in multiple places within a single product. Do not begin the message name with FND_CMN, but use another suitable convention. The message number should be within the range that is designated for the product.

Define ISO Reference Data

Defining Currencies: Points to Consider

When creating or editing currencies, consider these points relevant to entering the currency code, date range, or symbol for the currency.

Currency Codes

You cannot change a currency code after you enable the currency, even if you later disable that currency.

Date Ranges

Users can enter transactions denominated in the currency only for the dates within the specified range. If you do not enter a start date, then the currency is valid immediately. If you do not enter an end date, then the currency is valid indefinitely.
Symbols

Even if you enter a symbol for a currency, the symbol is not always displayed when an amount is displayed in this currency. Some applications use currency symbols when displaying amounts. Others, like Oracle Fusion General Ledger, do not.

Euro Currency Derivation: Explained

Use the Derivation Type, Derivation Factor, and Derivation Effective Date fields to define the relationship between the official currency (Euro) of the European Monetary Union (EMU) and the national currencies of EMU member states. For each EMU currency, you define its Euro-to-EMU fixed conversion rate and the effective starting date.

**Note**

If you need to use a different currency code for Euro, you can disable the predefined Euro currency and create a new one.

Derivation Type

The **Euro currency** derivation type is used only for the Euro, and the **Euro derived** derivation type identifies national currencies of EMU member states. All other currencies do not have derivation types.

Derivation Factor

The derivation factor is the fixed conversion rate by which you multiply one Euro to derive the equivalent EMU currency amount. The Euro currency itself should not have a derivation factor.

Derivation Effective Date

The derivation effective date is the date on which the relationship between the EMU currency and the Euro begins.

Natural Languages: Points to Consider

Natural languages are all the languages that humans use, written and spoken. If a language is enabled, then users can associate it with entities, for example as languages spoken by sales representatives. When managing natural languages, consider tasks to perform and best practices for entering particular values.

Tasks

Once you add a language, it cannot be deleted, just disabled. You can optionally associate natural languages with International Organization for Standardization (ISO) languages and territories, just for reference.
Values

When you create a natural language, use the alpha-2 ISO code as the language code, or, if not available, then alpha-3. If the language is not an ISO language, then use x- as a prefix for the code, for example x-ja for a Japanese dialect. Use the sgn code of ISO-639-2 for sign languages, followed by territory code, for example sgn-US for American Sign Language. You can also use Internet Assigned Numbers Authority (IANA) language tags.

The natural language description should be the language name with territory name in parenthesis where needed, for example English (Australia) and English (Canada).

FAQs for Define ISO Reference Data

When do I create or edit territories?

Edit territory descriptions to determine how they are displayed in lists of country values throughout Oracle Fusion Applications. The predefined territories are all countries from the International Organization for Standardization (ISO) 3166 standard. You usually would not edit territory names or codes.

Do not edit National Language Support (NLS) territory codes, which are identifiers used in the system, unless you need to change the association between ISO and system territory. You usually would not edit the default currency, which is the value that defaults in the Currency field in Oracle Fusion Applications user preferences after the user first selects a territory.

Create territories if new countries emerge and the system has not yet been patched with the latest ISO country values.

When do I create or edit industries?

Edit industry descriptions to determine how they are displayed in Oracle Fusion Applications. You usually would not edit industry names, which are from the North American Industry Classification System (NAICS). Enabled industries are mainly used in the context of customization, though these values can also appear in any application.

Create industries if you have particular ones you need, for example for customization, that are not included in the NAICS standard.

When do I associate industries with territories?

Optionally associate industries with territories to provide an industry in territory value, used for customization. For example, administrators can customize a page in one way for users within an industry in one country, and another way for users within the same industry in another country. The administrator would select the appropriate industry in territory value to set the customization context.
Define Common Applications Configuration for Marketing

When do I create or enable currencies?

Create currencies to use, for example for reporting purposes, if they are not already provided. All currencies from the International Organization for Standardization (ISO) 4217 standard are provided.

Enable any currency other than USD for use in Oracle Fusion Applications, for example for displaying monetary amounts, assigning to sets of books, entering transactions, and recording balances. Only USD is enabled by default.

What’s the difference between precision, extended precision, and minimum accountable unit for a currency?

Precision is the number of digits to the right of the decimal point used in regular currency transactions. Extended precision is the number of digits to the right of the decimal point used in calculations for this currency, and it must be greater than or equal to the standard precision. For example, USD would have 2 for precision because amounts are transacted as such, for example $1.00. For calculations, for example adding USD amounts, you might want the application to be more precise than two decimal digits, and would enter an extended precision accordingly.

**Note**

Some applications use extended precision. Others, such as Oracle Fusion General Ledger, do not.

Minimum accountable unit is the smallest denomination for the currency. For example, for USD that would be .01 for the cent. This unit does not necessarily correspond to the precision for all currencies.

What’s a statistical unit currency type?

The statistical unit currency type is used only for the Statistical (STAT) currency. The Statistical currency is used to record statistics such as the number of items bought and sold. Statistical balances can be used directly in financial reports, allocation formulas, and other calculations.

When do I create or edit ISO languages?

You can edit the names and descriptions of International Organization for Standardization (ISO) languages to determine how they are displayed in lists of ISO language values in Oracle Fusion Applications. The ISO languages are from the ISO 639 standard. If there were changes to the ISO standard and the system has not yet been patched with the latest ISO values, you can update the ISO alpha-2 code or add languages as needed.

When do I edit languages?

Installed languages automatically appear on the Manage Languages page, so you do not manually enter newly installed languages. This page contains
all languages available for installation and translation in Oracle Fusion Applications. Each dialect is treated as a separate language. The language codes and names are values used by the system.

You generally would not edit any of the detailed fields unless you really need to and know what they are.

**When do I create or edit time zones?**

Though all standard time zones are provided, optionally enable only a subset for use in lists of time zone values in Oracle Fusion Applications. You can add time zones if new zones became standard and the system has not yet been patched with the latest values.

**Manage Data Security Policies**

**Data Security in the Security Reference Implementation: Explained**

The reference implementation contains a set of data security policies that can be inspected and confirmed to be suitable or a basis for further implementation using the Authorization Policy Manager (APM).

The security implementation of an enterprise is likely a subset of the reference implementation, with the enterprise specifics of duty roles, data security policies, and HCM security profiles provided by the enterprise.

The business objects registered as secure in the reference implementation are database tables and views.

Granting or revoking object entitlement to a particular user or group of users on an object instance or set of instances extends the base Oracle Fusion Applications security reference implementation without requiring customization of the applications that access the data.

**Data Security Policies in the Security Reference Implementation**

The data security policies in the reference implementation entitle the grantee (a role) to access instance sets of data based on SQL predicates in a WHERE clause.

**Tip**

When extending the reference implementation with additional data security policies, identify instance sets of data representing the business objects that need to be secured, rather than specific instances or all instances of the business objects.

Predefined data security policies are stored in the data security policy store, managed in the Authorization Policy Manager (APM), and described in the Oracle Fusion Applications Security Reference Manual for each offering. A data security policy for a duty role describes an entitlement granted to any job role that includes that duty role.

**Warning**
Review but do not modify HCM data security policies in APM except as a custom implementation. Use the HCM Manage Data Role And Security Profiles task to generate the necessary data security policies and data roles.

The reference implementation only enforces a portion of the data security policies in business intelligence that is considered most critical to risk management without negatively affecting performance. For performance reasons it is not practical to secure every level in every dimension. Your enterprise may have a different risk tolerance than assumed by the security reference implementation.

**HCM Security Profiles in the Security Reference Implementation**

The security reference implementation includes some predefined HCM security profiles for initial usability. For example, a predefined HCM security profile allows line managers to see the people that report to them.

The IT security manager uses HCM security profiles to define the sets of HCM data that can be accessed by the roles that are provisioned to users.

**Data Roles**

The security reference implementation includes no predefined data roles to ensure a fully secured initial Oracle Fusion Applications environment.

The security reference implementation includes data role templates that you can use to generate a set of data roles with entitlement to perform predefined business functions within data dimensions such as business unit. Oracle Fusion Payables invoicing and expense management are examples of predefined business functions. Accounts Payable Manager - US is a data role you might generate from a predefined data role template for payables invoicing if you set up a business unit called US.

HCM provides a mechanism for generating HCM related data roles.

**Data Security: Explained**

By default, users are denied access to all data.

Data security makes data available to users by the following means.

- Policies that define grants available through provisioned roles
- Policies defined in application code

You secure data by provisioning roles that provide the necessary access.

Enterprise roles provide access to data through data security policies defined for the inherited application roles.

When setting up the enterprise with structures such as business units, data roles are automatically generated that inherit job roles based on data role templates. Data roles also can be generated based on HCM security profiles. Data role templates and HCM security profiles enable defining the instance sets specified in data security policies.
When you provision a job role to a user, the job role implicitly limits data access based on the data security policies of the inherited duty roles. When you provision a data role to a user, the data role explicitly limits the data access of the inherited job role to a dimension of data.

Data security consists of privileges conditionally granted to a role and used to control access to the data. A privilege is a single, real-world action on a single business object. A data security policy is a grant of a set of privileges to a principal on an object or attribute group for a given condition. A grant authorizes a role, the grantee, to actions on a set of database resources. A database resource is an object, object instance, or object instance set. An entitlement is one or more allowable actions applied to a set of database resources.

Data is secured by the following means.

<table>
<thead>
<tr>
<th>Data security feature</th>
<th>Does what?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data security policy</td>
<td>Grants access to roles by means of entitlement</td>
</tr>
<tr>
<td>Role</td>
<td>Applies data security policies with conditions to users through role provisioning.</td>
</tr>
<tr>
<td>Data role template</td>
<td>Defines the data roles generated based on enterprise setup of data dimensions such as business unit.</td>
</tr>
<tr>
<td>HCM security profile</td>
<td>Defines data security conditions on instances of object types such as person records, positions, and document types without requiring users to enter SQL code</td>
</tr>
<tr>
<td>Masking</td>
<td>Hides private data on non-production database instances</td>
</tr>
<tr>
<td>Encryption</td>
<td>Scrambles data to prevent users without decryption authorization from reading secured data</td>
</tr>
</tbody>
</table>

The sets of data that a user can access via roles are defined in Oracle Fusion Data Security. Oracle Fusion Data Security integrates with Oracle Platform Security Services (OPSS) to entitle users or roles (which are stored externally) with access to data. Users are granted access through the entitlement assigned to the roles or role hierarchy with which the user is provisioned. Conditions are WHERE clauses that specify access within a particular dimension, such as by business unit to which the user is authorized.

**Data Security Policies**

Data security policies articulate the security requirement "Who can do What on Which set of data," where 'Which set of data' is an entire object or an object instance or object instance set and 'What' is the object entitlement.

For example, accounts payable managers can view AP disbursements for their business unit.

<table>
<thead>
<tr>
<th>Who</th>
<th>can do</th>
<th>what</th>
<th>on which set of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable managers</td>
<td>view</td>
<td>AP disbursements</td>
<td>for their business unit</td>
</tr>
</tbody>
</table>
A data security policy is a statement in a natural language, such as English, that typically defines the grant by which a role secures business objects. The grant records the following.

- Table or view
- Entitlement (actions expressed by privileges)
- Instance set (data identified by the condition)

For example, disbursement is a business object that an accounts payable manager can manage by payment function for any employee expenses in the payment process.

Note

Some data security policies are not defined as grants but directly in applications code. The security reference manuals for Oracle Fusion Applications offerings differentiate between data security policies that define a grant and data security policies defined in Oracle Fusion applications code.

A business object participating in a data security policy is the database resource of the policy.

Data security policies that use job or duty roles refer to data security entitlement. For example, the data security policy for the Accounts Payable Manager job role refers to the view action on AP disbursements as the data security entitlement.

Important

The duty roles inherited by the job role can be moved and job roles reassembled without having to modify the data security.

As a security guideline, data security policies based on user session context should entitle a duty role. This keeps both function and data security policies at the duty role level, thus reducing errors.

For example, a Sales Party Management Duty can update Sales Party where the provisioned user is a member of the territory associated with the sales account. Or the Sales Party Management Duty can update Sales Party where the provisioned user is in the management chain of a resource who is on the sales account team with edit access. Or the Participant Interaction Management Duty can view an Interaction where the provisioned user is a participant of the Interaction.

For example, the Disbursement Process Management Duty role includes entitlement to build documents payable into payments. The Accounts Payable Manager job role inherits the Disbursement Process Management Duty role. Data security policies for the Disbursement Process Management Duty role authorize access to data associated with business objects such as AP disbursements within a business unit. As a result, the user provisioned with the Accounts Payable Manager job role is authorized to view AP disbursements within their business unit.

A data security policy identifies the entitlement (the actions that can be made on logical business objects or dashboards), the roles that can perform those actions,
and the conditions that limit access. Conditions are readable WHERE clauses. The WHERE clause is defined in the data as an instance set and this is then referenced on a grant that also records the table name and required entitlement.

Data Roles

Data roles are implemented as job roles for a defined set of data.

A data role defines a dimension of data within which a job is performed. The data role inherits the job role that describes the job. For example, a data role entitles a user to perform a job in a business unit.

The data role inherits abstract or job roles and is granted data security privileges. Data roles carry the function security privileges inherited from job roles and also the data security privilege granted on database objects and table rows.

For example, an accounts payables specialist in the US Business Unit may be assigned the data role Accounts Payables Specialist - US Business Unit. This data role inherits the job role Accounts Payables Specialist and grants access to transactions in the US Business Unit.

A data role may be granted entitlement over a set people.

For example, a Benefits Administrator A-E is allowed to administer benefits for all people that have a surname that begins with A-E.

Data roles are created using data role templates. You create and maintain data roles in the Authorization Policy Manager (APM). Use the Manage Data Roles and Security Profiles task to create and maintain HCM data roles in Oracle Fusion HCM.

HCM Security Profiles

HCM security profiles are used to secure HCM data, such as people and departments. You use HCM security profiles to generate grants for an enterprise role. The resulting data role with its role hierarchy and grants operates in the same way as any other data role.

For example, an HCM security profile identifies all employees in the Finance division.

Oracle Fusion Payroll uses HCM security profiles to secure project organizations. Applications outside of HCM can use the HCM Data Roles UI pages to give their roles access to HR people.

Masking and Encryption

Oracle Fusion Applications uses masking to protect sensitive data from view by unauthorized users. Encryption APIs mask sensitive fields in applications user interfaces. Additionally, Oracle Data Masking is available for masking data in non-production instances and Oracle Transparent Data Encryption is available for protecting data in transit or in backups independent of managing encryption keys.
**Database Resources and Data Security Policies: How They Work Together**

A data security policy applies a condition and allowable actions to a database resource for a role. When that role is provisioned to a user, the user has access to data defined by the policy. In the case of the predefined security reference implementation, this role is always a duty role. Data roles generated to inherit the job role based on data role templates limit access to database resources in a particular dimension, such as the US business unit.

The database resource defines an instance of a data object. The data object is a table, view, or flexfield.

The following figure shows the database resource definition as the means by which a data security policy secures a data object. The database resource names the data object. The data security policy grants to a role access to that database resource based on the policy’s action and condition.

**Database Resources**

A database resource specifies access to a table, view, or flexfield that is secured by a data security policy.

- Name providing a means of identifying the database resource
- Data object to which the database resource points

**Data Security Policies**

Data security policies consist of actions and conditions for accessing all, some, or a single row of a database resource.
• Condition identifying the instance set of values in the data object
• Action specifying the type of access allowed on the available values

Note
If the data security policy needs to be less restrictive than any available database resource for a data object, define a new data security policy.

Actions
Actions correspond to privileges that entitle kinds of access to objects, such as view, edit, or delete. The actions allowed by a data security policy include all or a subset of the actions that exist for the database resource.

Conditions
A condition is either a SQL predicate or an XML filter. A condition expresses the values in the data object by a search operator or a relationship in a tree hierarchy. A SQL predicate, unlike an XML filter, is entered in a text field in the data security user interface pages and supports more complex filtering than an XML filter, such as nesting of conditions or sub queries. An XML filter, unlike a SQL predicate, is assembled from choices in the UI pages as an AND statement.

Tip
An XML filter can be effective in downstream processes such as business intelligence metrics. A SQL predicate cannot be used in downstream metrics.

Securing Data Access: Points to Consider

Oracle Fusion Applications supports securing data through role-based access control (RBAC) by the following methods.

<table>
<thead>
<tr>
<th>Method of securing data</th>
<th>Reason</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data roles apply explicit data security policies on job and abstract roles</td>
<td>Appropriate for job and abstract roles that should only access a subset of data, as defined by the data role template that generates the data role or by HCM security profiles.</td>
<td>Accounts Payable Manager - US data role to provide an accounts payable manager in the US business unit with access to invoices in the US business unit.</td>
</tr>
<tr>
<td>Data security policies</td>
<td>Define data access for application roles and provide inheriting job and abstract roles with implicit data security</td>
<td>Projects</td>
</tr>
</tbody>
</table>

If a user has access to the same function through different roles that access different data sets, then the user has access to a union of those data sets.

When a runtime session is created, Oracle Platform Security Services (OPSS) propagates only the necessary user to role mapping based on Oracle Fusion Data Security grants. A grant can specify entitlement to the following.
• Specific rows of data (data object) identified by primary key
• Groups of data (instance set) based on a predicate that names a particular parameter
• Data objects or instance sets based on runtime user session variables

Data is either identified by the primary key value of the row in the table where the data is stored. Or data is identified by a rule (SQL predicate) applied to the WHERE clause of a query against the table where the data is stored.

Grants

Oracle Fusion Data Security can be used to restrict the following.

• Rows that are returned by a given query based on the intended business operation
• Actions that are available for a given row

Grants control which data a user can access.

Note

Attribute level security using grants requires a data security policy to secure the attribute and the entitlement check enforces that policy.

A grant logically joins a user or role and an entitlement with a static or parameterized object instance set. For example, \( \text{REGION='WEST'} \) is a static object instance set and \( \text{REGION=}&\text{GRANT_ALIAS.PA}\text{RAMETER1} \) is a parameterized object instance set. In the context of a specific object instance, grants specify the allowable actions on the set of accessible object instances. In the database, grants are stored in FND_GRANTS and object instance sets are stored in FND_OBJECT_INSTANCE_SETS. Object access can be tested using the privilege check application programming interface (API).

Securing a Business Object

A business object is a logical entity that is typically implemented as a table or view, and corresponds to a physical database resource. The data security policies of the security reference implementation secure predefined database resources. Use the Manage Data Security Policies task to define and register other database resources.

Data security policies identify sets of data on the registered business object and the actions that may be performed on the business object by a role. The grant can be made by data instance, instance set or at a global level.

Note

Use parameterized object instance sets whenever feasible to reduce the number of predicates the database parses and the number of administrative intervention required as static object instances sets become obsolete. In HCM, security profiles generate the instance sets.
Data Role Templates: Explained

You use data role templates to generate data roles. You generate such data roles, and create and maintain data role templates in the Authorization Policy Manager (APM).

Note

HCM data roles are generated using the Manage Data Roles and Security Profiles task, which uses HCM security profiles, not data role templates, to define the data security condition.

The following attributes define a data role template.

- Template name
- Template description
- Template group ID
- Base roles
- Data dimension
- Data role naming rule
- Data security policies

The data role template specifies which base roles to combine with which dimension values for a set of data security policies. The base roles are the parent job or abstract roles of the data roles.

Note

Abstract, job, and data roles are enterprise roles in Oracle Fusion Applications. Oracle Fusion Middleware products such as Oracle Identity Manager (OIM) and Authorization Policy Manager (APM) refer to enterprise roles as external roles. Duty roles are implemented as application roles in APM and scoped to individual Oracle Fusion Applications.

The dimension expresses stripes of data, such as territorial or geographic information you use to partition enterprise data. For example, business units are a type of dimension, and the values picked up for that dimension by the data role template as it creates data roles are the business units defined for your enterprise. The data role template constrains the generated data roles with grants of entitlement to access specific data resources with particular actions. The data role provides provisioned users with access to a dimensional subset of the data granted by a data security policy.

An example of a dimension is a business unit. An example of a dimension value is a specific business unit defined in your enterprise, such as US. An example of a data security policy is a grant to access a business object such as an invoice with a view entitlement.
When you generate data roles, the template applies the values of the dimension and participant data security policies to the group of base roles.

The template generates the data roles using a naming convention specified by the template’s naming rule. The generated data roles are stored in the Lightweight Directory Access Protocol (LDAP) store. Once a data role is generated, you provision it to users. A user provisioned with a data role is granted permission to access the data defined by the dimension and data security grant policies of the data role template.

For example, a data role template contains an Accounts Payable Specialist role and an Accounts Payable Manager role as its base roles, and region as its dimension, with the dimension values US and UK. The naming convention is [base-role-name]:[DIMENSION-CODE-NAME]. This data role template generates four data roles.

- Accounts Payable Specialist - US (business unit)
- Accounts Payable Specialist - UK (business unit)
- Accounts Payable Manager - US (business unit)
- Accounts Payable Manager - UK (business unit)

Making Changes To Data Role Templates

If you add a base role to an existing data role template, you can generate a new set of data roles. If the naming rule is unchanged, existing data roles are overwritten.

If you remove a base role from a data role template and regenerate data roles, a resulting invalid role list gives you the option to delete or disable the data roles that would be changed by that removal.

Making Changes to Dimension Values

If you add a dimension value to your enterprise that is used by a data role template, you must regenerate roles from that data role template to create a data role for the new dimension. For example if you add a business unit to your enterprise, you must regenerate data roles from the data role templates that include business unit as a dimension.

If you add or remove a dimension value from your enterprise that is used to generate data roles, regenerating the set of data roles adds or removes the data roles for those dimension values. If your enterprise has scheduled regeneration as an Oracle Enterprise Scheduler Services process, the changes are made automatically.

For information on working with data role templates, see the Oracle Fusion Middleware Administrator’s Guide for Authorization Policy Manager (Oracle Fusion Applications Edition).
Define Document Sequences

Document Sequences: Explained

In Oracle Fusion Applications, each business document or business event is uniquely identified by a document sequence number that you assign to it. However, the document sequencing feature must be turned on (enabled) on the business document or event to allow the assignment. For example, if document sequencing is enabled, you can assign a document sequence number to an invoice that gets generated in response to a purchase order. You can use document sequences as a proof to track successfully executed transactions as well as failed transactions. Additionally, a document sequence helps in generating an audit trail, which can be used to identify how a particular transaction passed through various applications.

Document sequencing can be managed automatically, manually, and gaplessly.

Note

Plan your document sequencing carefully before you use the options available in the application to apply sequence numbers. Avoid changes to the options after you saved your work on the Manage Document Sequences and Manage Document Sequence Categories pages.

Automatic Sequencing

Automatic document sequencing assigns a unique number to each document as it is generated, and this unique number is stored in the database. The numbering is sequential by date and time of creation. If you define a sequence to automatically number documents, you can provide an initial value to begin the sequence. In absence of a custom value, the default value 1 is used.

Manual Sequencing

Manual sequencing requires you to assign a unique number to each document before it is generated. In manual sequencing, the numerical ordering and completeness of a transaction is not enforced. Users can skip or omit numbers when entering the sequence value. However, each time that a number is assigned, the application validates its uniqueness.

Gapless Sequencing

Gapless sequencing is similar to automatic sequencing. It automatically generates a unique number for each document, but does that only for successfully generated documents. As a result, the sequence is maintained for all the documents that are generated, and no sequence numbers are lost due to incomplete or failed document generation.

Important

Use this type of sequencing only if necessary because it may affect the performance of the system and slow down transaction processing.
Document Sequence Categories: Explained

A document sequence category is a set of documents that share similar characteristics and that are formed into a logical group. Document sequence categories simplify the task of assigning number sequences to specific documents. Instead of assigning a number to each document, you assign a document sequence to one or more document sequence categories. The document sequence category automatically takes care of numbering the documents.

A document sequence category identifies the database table that stores documents resulting from transactions that your users enter. When you assign a sequence to a category, the sequence numbers the documents that are stored in a particular table. You must create document sequence categories to be able to manage the task of assigning document sequences.

Restriction

Once a document sequence category is created, you cannot change the application, the category code, or the table name. Therefore, carefully consider these details and plan your document sequencing requirement before you begin working with the application.

Once you create a document sequence category, it is available for use under the Document Sequences: Assignments section on the Manage Document Sequences page. The Category field contains the name of the document sequence category. After you create a document sequence, you can assign it to a document sequence category.

Document Sequences: Points to Consider

Sequencing documents is an important business and legal requirement. Certain aspects of the defining process are permanent and cannot be modified later. Therefore, it is important that you first decide the appropriate document sequence to use for a set of documents. You must also decide beforehand the type of document sequencing, because you are not allowed to switch to other types once a sequence is assigned to a document sequence category. Make a note of the details such as the document sequence and document sequence category so that you can refer to them at a later point in time. Also note if there are any restrictions or configuration prerequisites before you define document sequencing.

Note

Products that implement document sequencing have specifications about its usage. Refer to the corresponding product documentation for specific details and also to determine if there are any restrictions or configuration prerequisites.

Creating and Editing Document Sequences

You can create document sequences that are automatic, manual, or gapless, depending on the business or legal requirement. By default, the current date
is considered as the start date. If the end date is left blank, it means that the sequence definition never expires. Among the several options used in creating and editing document sequences, the following options are functionally more important and therefore need to be carefully determined:

- **Determinant Type**: Select to limit the document sequencing activity to certain documents that belong to a specific business entity, such as Ledger, Tax Registration, and so on.

- **Initial Value**: Enter a value for the first document in your sequence. This field applies only to sequences with automatic or gapless numbering types. Sequence numbers should not be greater than eight digits. If you leave this field blank, the first document is automatically assigned a value of 1. Once a document sequence is defined, you cannot change this initial value.

**Creating and Editing Document Sequence Categories**

Document sequence categories are defined to make it easy to assign document sequence definitions to a group of documents instead of to individual documents. Each document sequence category is mapped to a specific table, where the documents belonging to that category are stored. The table must already be enabled for document sequencing. When specifying the table, you must consider the following points:

- When the sequential numbering feature checks for completeness or generates a report, it locates the category’s documents in the table.

- You can select only tables belonging to the application associated with the category.

- Once a category is defined, you cannot change the choice of table.

**Assigning Document Sequences**

Identify the documents to be numbered before assigning them a document sequence. For each document sequence, there can be only one active assignment to a document sequence category, a method code, and a determinant value (if applicable). As part of the assignment, specify whether the document is created automatically (for example, due to a batch process, or manually through a form). If you do not specify an end date, the assignment continues to remain active throughout the process cycle. If a determinant type was specified for the document sequence, then enter a specific determinant value related to the selected determinant type.

At runtime, when users create documents, the document sequence to be assigned is determined by finding the active assignment that matches the correct combination of category, numbering method, and the date range containing the transaction date.

**Auditing Document Sequences**

You can audit document sequences, if required, to provide an audit trail of the document sequences used in a specific product. However, before enabling the audit functionality for a document sequence, you must have created an audit
table for the specific document sequence, using appropriate details. Enabling the audit functionality is permitted only for newly created document sequences. You cannot audit document sequences that are already in use by a specific product.

For more information about defining a document sequence audit table, see the Oracle Fusion Applications Developer’s Guide.

Public Unique Identifier: Explained

Oracle Fusion applications generate thousands of rows of data that require unique identifiers (UIDs). These automatically generated, 18-digit numbers are not easily read or used by humans. A cogent example is an electronic airline ticket whose numbers can be 13 digits long, such as, 0162128736572. There are also confirmation or itinerary numbers that relate directly to that ticket that are only six digits long, such as QDLG9S; these can be used interchangeably with the ticket number. These shorter confirmation numbers are much easier to read and process by passengers and employees alike. A separate Public Unique ID (PUID) is also generated by the document sequencing feature and is available for encoding into a more user-friendly, alphanumeric ID.

The Oracle Fusion default setup shows the automatically generated numeric private UIDs and PUIDs for data rows. To use an alphanumeric PUID instead of the delivered numeric, navigate to the Setup and Maintenance task Manage Public Unique Identifier Profile Options to enable the encoding process. There are two profile options to configure the PUID:

- **CRM Public Unique ID String Encoding** controls the characters used in the encoding of the PUID based on a radix, or base number.
- **CRM Public Unique ID Prefix** defines the optional prefix value for the PUID.

Document sequencing typically begins with the number one. You may choose to start the sequences of your PUIDs at a specific value. See the related links below to determine the document sequencing.

**CRM Public Unique ID String Encoding Profile Option**

This profile option determines the set of numbers and letters to be used in encoding the PUID generated by the document sequencing feature. The PUID is delivered with the encoding set to none. To enable the encoding of the PUID, choose a radix, or base conversion algorithm. The available values are stored in the lookup type ZCA_PUID_ENCODING. These encoding methods convert the PUID into user readable IDs using alphanumeric characters rather than just numeric digits. For example, if BASE_26 is chosen, only the upper case letters of the alphabet will be used.

There are seven delivered base values. These are not extensible.

<table>
<thead>
<tr>
<th>RADIX</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE_16</td>
<td>Numbers 0-9, letters A-F</td>
</tr>
<tr>
<td>BASE_26</td>
<td>Letters A-Z, Upper Case</td>
</tr>
<tr>
<td>BASE_29</td>
<td>Numbers 2-9, letters BCDFGHJKLMNPQRSTVWXYZ</td>
</tr>
</tbody>
</table>
CRM Public Unique ID Prefix Profile Option

A prefix may be defined as a site-level profile option. This profile option is delivered with no prefix defined. When defined, the inserted text is prepended to the PUID base encoded document sequence value. For example, if the PUID was CLE123 and the Prefix was ORA, the new PUID would be ORACLE123. Any delimiters or separation characters desired must be defined in the prefix itself. Ensure that the prefix length is short enough so that the concatenated PUID and prefix do not exceed the defined field length, usually no more than 30 characters. For example, you may want the records for the pharmaceutical divisions of your company to be denoted with PUIDs and the prefix Pharma- or Pharma1, Pharma2, and so on.

Define Trees

Trees: Overview

Use the tree management feature in Oracle Fusion applications to organize data into hierarchies. A hierarchy contains organized data and enables the creation of groups and rollups of information that exist within an organization. Trees are hierarchical structures that enable several data management functions such as better access control, application of business rules at various levels of hierarchies, improved query performance, and so on.

For example, XYZ Corporation has two departments: Marketing and Finance. The Finance department has two functional divisions: Receivables and Payables. Defining a tree for the XYZ Corporation establishes a hierarchy between the organization and its departments, and between the departments and their respective functional divisions. Such a hierarchical modeling of organizational data could be used for executing several data management functions within that organization.

You can create one or more versions of trees, and they can be labeled for better accessibility and information retrieval. You can create trees for multiple data sources, which allow the trees to be shared across Oracle Fusion applications.

Tree Structures

A tree structure is a representation of the data hierarchy, and guides the creation of a tree. A tree is an instance of the hierarchy as defined in the tree structure. Tree structures enable you to enforce business rules to which the data must adhere.

The root node is the topmost node of a tree. Child nodes report to the root node. Child nodes at the same level, which report to a common parent node, are called siblings. Leaves are details branching off from a node but not extending further down the tree hierarchy.
**Tree Versions**

A tree is created having only one version. However, users can create more than one tree version depending on the need, and they can make changes to those versions. Depending on varying requirements, users can create one or more tree versions and publish all of them or some of them by making the versions active at the same time. Similar to any other version control system, versions of trees are maintained to keep track of all the changes that a tree undergoes in its life cycle.

**Tree Labels**

Tree labels are short names associated with trees and tree structures and point directly to the data source. Tree labels are automatically assigned to the tree nodes. You can store labels in any table and register the label data source with the tree structure.

**Tree Structures: Explained**

A tree structure defines the hierarchy for creating trees and prescribes rules based on which trees are created, versioned, and accessed. You can associate multiple data sources with a tree structure. A tree is an instance of this hierarchy. Every tree structure can contain one or more trees.

You can create tree structures specific to an application but you can share tree structures across applications. If you apply version control to the tree structure, it is carried over to the trees that are based on the tree structure. Each tree version contains at least one root node. Occasionally, a tree version may have more than one root node.

An administrator controls the access to tree structures through a set of rules that are periodically audited for validity.

**Tree Structure Definition: Points to Consider**

Defining a tree structure involves specifying several important pieces of information on the Create Tree Structure: Specify Definition page.

**Tree Node Selection**

The Tree Node table displays data in nodes that exist in the data hierarchy. You must select the correct and most appropriate tree node table to be able to define the tree structure, based on the tree hierarchy you want to establish. This selection also affects the level of security that is set on a tree node and its child entities.

**Tree Sharing Mode**

The following options are used to determine the mode of sharing a tree structure across the applications.

- Open: Indicates that the tree is associated with all reference data sets.
• Set ID: Indicates that the tree will be associated with a specific reference data set.

Creation Mode

Indicates the source where the tree structure is being defined. For predefined tree structures select Oracle and for custom structures, select Customers.

Customization

You can customize the predefined tree structures as well as the ones that you created. However, customizing the predefined tree structures involves certain level of access restrictions, and will be limited to specific tree nodes and downwards in hierarchy.

Multiple Tree Versions

One or more trees and tree versions can be based on a tree structure. A tree structure can have one or more trees and tree versions based on it. Usually, only one active version is permitted at any given point of time. However, depending on the requirement, you can allow two or more tree versions to be in the active state for the same date range. This flexibility allows you to choose the tree version that you want to implement.

Managing Tree Structures: Points to Consider

You can create, edit, and delete tree structures depending upon the requirement. You can also audit and change the status a tree structure.

Creating and Editing Tree Structures

You can create trees on the basis of a tree structure. When you edit an active tree structure, the status of the tree structure and all associated trees and their versions change to draft. To reuse a tree structure, you can create a copy of it without copying the associated trees and tree versions. If you delete a tree structure, all the associated trees and tree versions are automatically deleted.

Note

For specific information on working with the predefined tree structures that exist in an Oracle Fusion application, refer to the specific product documentation.

Setting Status

If you change the status of a tree structure, the status of the trees and tree versions associated with that tree structure also changes.

The following table lists the different statuses of a tree structure.

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>Yet to be published or is in a modified state.</td>
</tr>
</tbody>
</table>
Define Common Applications Configuration for Marketing

<table>
<thead>
<tr>
<th>Active</th>
<th>In use and based on which one or more trees or tree versions are created.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>Not in use.</td>
</tr>
</tbody>
</table>

**Tree Structure Audit Results: Explained**

Use the tree structure audit results to verify the tree structure’s correctness and data integrity. The audit results include the following details:

- The name of the validator, which is a specific validation check
- The result of the validation, including a detailed message
- Corrective actions to take if there are any validation errors

**Running an Audit**

Setting the status of a tree structure to active automatically triggers an audit of that tree structure. You can also manually trigger an audit on the manage Tree Structures page, using **Actions - Audit**. The Tree Structure Audit Result table shows a list of validations that ran against the selected tree structure.

**Validation Details**

The following table lists the validators used in the audit process and describes what each validator checks for. It also lists possible causes for validation errors and suggests corrective actions.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Description (what is checked)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict By Set ID</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the Set ID check box is selected to enable the <strong>Restrict Tree Node List of Values Based on</strong> option for a tree structure, each of its data source view objects must have a reference data set attribute. This validation does not take place when the check box is not selected.</td>
<td>Even when the check box is selected, one or more of its data source view objects does not contain a reference data set attribute.</td>
<td>If reference data set restriction is required for this tree structure, include a reference data set attribute on all data sources. Otherwise, deselect the check box.</td>
</tr>
<tr>
<td>Row Flattened Table Name</td>
<td>On the Manage Tree Structures: Specify Performance Options page, a valid row flattened table must be specified for the tree structure. It can either be the standard row flattened table <code>FND_TREE_NODE_RF</code> or a custom table.</td>
<td>• The specified table does not exist in the database. • The specified table does not contain the same columns as the <code>FND_TREE_NODE_RF</code> table.</td>
<td>Correct the row flattened table definition.</td>
</tr>
</tbody>
</table>
| Available Label Data Sources | On the Manage Tree Structures: Specify Data Sources page, if a labeling scheme is specified for the tree structure by selecting a list item from the **Labeling Scheme** list box, the label data source view object specified for each data source must be accessible, and the primary keys must be valid. This restriction does not apply when you select **None** from the **Labeling Scheme** list box. | • Any of the specified label data source view objects do not exist.  
• Any of the specified label data source view objects do not have primary keys.  
• When a label data source view object is initially defined, the database registers the primary keys for the view object. If the view object is later modified such that its primary keys no longer match the primary keys that were registered earlier, this validation fails.  
• Correct the specified label data source view object.  
• Correct the primary keys of the specified label data source view object.  
• Either correct the primary keys in the label data source view object to match the primary keys that were earlier registered in `FND_TS_DATA_SOURCE`, or correct the primary keys registered in that table to match the new view object definition. |
| Available Data Sources | Each data source view object specified for the tree structure must be accessible, and all its primary key attributes must be valid. | • Any of the specified data source view objects do not exist.  
• When a data source view object is initially defined, the database automatically registers the primary keys for the view object if the **Use non-defined primary key columns** check box on the Data Source dialog box is not selected. If the check box is selected, the database registers the primary keys specified explicitly by the user on the Add Data Source dialog box. If the registered primary keys contain any duplicates, this validation fails.  
• The **Use non-defined primary key columns** check box is selected in a data source, but the list of specified primary key columns does not match the primary keys defined in the corresponding data source view object.  
• Any common attribute that exists in both the data source view object and the tree node view object is not of the same data type in both view objects. | • Correct the specified data source view object.  
• Correct the duplicate column in the registered primary keys.  
• Correct the primary keys of the specified data source view object.  
• Correct any mismatch in data types. |
| Column Flattened Table Name | On the Manage Tree Structures: Specify Performance Options page, a valid column flattened table must be specified for the tree structure. It can either be the standard row flattened table FND_TREE_NODE_CF or a custom table. | • The specified table does not exist in the database.  
• The specified table does not contain the same columns as the FND_TREE_NODE_CF table. | Correct the column flattened table definition. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict by Date</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the Date Range check box is selected to enable the Restrict Tree Node List of Values Based on option for a tree structure, each of its data source view objects must have effective start date and effective end date attributes. This validation does not take place when the check box is not selected.</td>
<td>Even when the check box is selected, one or more of its data source view objects does not contain effective start date and effective end date attributes.</td>
<td>If the date restriction is required for this tree structure, include the effective start date and effective end date attributes on all data sources. Otherwise, deselect the check box.</td>
</tr>
</tbody>
</table>
| Tree Node Table Name        | On the Manage Tree Structures: Specify Definition page, a valid tree node table must be specified for the tree structure. It can either be the standard row flattened table FND_TREE_NODE or a custom table. | • No table is specified in the Tree Node Table field.  
• The specified table does not exist in the database.  
• The specified table does not contain the same columns as the FND_TREE_NODE table. | Correct the tree node table definition. |
| Allow Node Level Security   | If the Allow Node Level Security option is set to No for the tree structure, the same option cannot be set to Yes on any of its data sources. This is a database setting that is not visible on the Manage Tree Structures page. | The option is set to No for the tree structure but one or more associated data sources have that option set to Yes. | Correct the option setting in the tree structure and their data sources. |

**Specifying Data Sources for Tree Structures: Points to Consider**

The data sources provide the items for establishing hierarchy in a tree structure. In the tree management infrastructure, these data sources are Oracle Application...
Development Framework (ADF) business components view objects, which are defined by application development.

**Labeling Schemes**

Selecting a labeling scheme determines how the tree nodes are labeled. You may select a labeling scheme to assign at the data source level, at the parent node level, or keep it open for customer assignment. You may also choose not to have any labeling scheme. However, if you decide to use any of the labeling schemes, you may need to select the following additional options, to restrict the list of values that appear under the selected tree node.

- **Allow Ragged Nodes**: To include nodes that have no child nodes, and are shorter than the remaining nodes in the entire hierarchy.
- **Allow Skip Level Nodes**: To include nodes that are at the same level but have parent nodes at different levels.

**Restriction of Tree Node Values**

You can decide the depth of the tree structure by selecting an appropriate value from the list. Keeping the depth limit open renders an infinite list of values. Using the following options, you can restrict the list of values that appear for selection under a specific tree node.

- **Date Range**: Specifies whether a selection of nodes should be restricted to the same date range as the tree version.
- **Allow Multiple Root Nodes**: Allows you to add multiple root nodes when creating a tree version.
- **Reference Data Set**: Specifies whether a selection of nodes should be restricted to the same set as the tree.

**Data Source Values and Parameters**

Tree data sources have optional data source parameters with defined view criteria and associated bind variables. You can specify view criteria as a data source parameter when creating a tree structure, and edit the parameters when creating a tree. Multiple data sources can be associated with a tree structure and can have well-defined relationships among them.

**Note**

Parameter values customized at the tree level override the default values specified at the tree-structure level.

The data source parameters are applied to any tree version belonging to that data source, when performing node operations on the tree nodes. Data source parameters also provide an additional level of filtering for different tree structures. The tree structure definition supports three data source parameter types:

- **Bound Value**: Captures any fixed value, which is used as part of the view criteria condition.
- **Variable**: Captures and binds a dynamic value that is being used by the data source view object. This value is used by the WHERE condition of the data flow.
- **View Criteria**: Captures the view criteria name, which is applied to the data source view object.
You can also specify which of the data source parameters are mandatory while creating or editing the tree structure.

View objects from the ADF business components are used as data sources. To associate the view object with the tree structure, you can pick the code from ADF business component view objects and provide the fully qualified name of the view object, for example, oracle.apps.fnd.applcore.trees.model.view.FndLabelVO.

**Specifying Performance Options for a Tree Structure: Points to Consider**

Tree structures are heavily loaded with data. As a tree management guideline, use the following settings to improve performance of data rendering and retrieval.

- Row Flattening
- Column Flattening
- Column Flattened Entity Objects
- ADF Business Component View Objects

**Row Flattening**

Row flattening optimizes parent-child information for run-time performance by storing additional rows in a table for instantly finding all descendants of a parent without initiating a CONNECT BY query. Row flattening eliminates recursive queries, which allows operations to perform across an entire subtree more efficiently.

To store row flattened data for the specific tree structure, users can either use the central FND_TREE_NODE_RF table or they can register their own row flattened table. For example, in a table, if Corporation is the parent of Sales Division (Corporation-Sales Division), and Sales Division is the parent of Region (Sales Division-Region), a row-flattened table contains an additional row with Corporation directly being the parent of Region (Corporation-Region).

**Column Flattening**

Column flattening optimizes parent-child information for run-time performance by storing an additional column in a table for all parents of a child.

To store column flattened data for the specific tree structure, users can either use the central FND_TREE_NODE_CF table or they can register their own column flattened table. For example, in a table, if Corporation is the parent of Sales Division (Corporation-Sales Division), and Sales Division is the parent of Region (Sales Division-Region), a flattened table in addition to these columns, contains three new columns: Region, Sales Division, and Corporation. Although positioned next to each other, the column Region functions at the lower level and Corporation at the higher level, retaining the data hierarchy.

**Column Flattened Entity Objects**

In the absence of a column-flattened table, if you need to generate the business component view objects for your tree structure for the flattened table, use the tree management infrastructure to correctly provide the fully qualified name of the entity object for the column flattened table.

**ADF Business Component View Objects**

View objects from the ADF business components can also be used as data sources, eliminating the need to create new types of data sources. This field
is to store the fully qualified name for the business component view object generated by the tree management for business intelligence reporting and usage. The business component view object is a combination of the tree data source and column flattened entity. Using this option prevents data redundancy and promotes greater reuse of existing data, thereby improving the performance of the tree structure.

**Tree Labels: Explained**

Tree labels are tags that are stored on tree nodes. You can store labels in any table and register the label data source with the tree structure. When a labeling scheme is used for trees, the selected labels are stored in the tree label entity and each tree node contains a reference to a tree label in the labeling scheme.

The following table lists the three ways in which tree labels are assigned to the tree nodes.

<table>
<thead>
<tr>
<th>Labeling Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Labels that are automatically assigned based on the data source to which the tree node belongs. A level label points to a specific data source. For example, in a tree that reflects the organizational hierarchy of an enterprise, all division nodes appear on one level and all department nodes on another.</td>
</tr>
<tr>
<td>Group</td>
<td>Labels that you can arbitrarily assign to tree nodes.</td>
</tr>
<tr>
<td>Depth</td>
<td>Labels that are automatically assigned based on the depth of the tree node within the tree. No manual assignment is performed.</td>
</tr>
</tbody>
</table>

**Note**

In an unbalanced hierarchy, a level may not be equal to depth.

**Managing Trees and Tree Versions: Points to Consider**

You can create and edit trees and tree versions depending upon the requirement. A tree can have one or more tree versions. Typically, when changes are made to an existing tree, a new version is created and published.

**Creating and Editing Trees**

Trees are created based on the structure defined in the tree structure. You can create trees, modify existing trees, and delete trees. If you want to copy an existing tree, you can duplicate it. However, only the tree is duplicated and not its versions.

Creating a tree involves specifying the tree definition and specifying the labels that are used on its nodes. If the selected tree structure has data sources and parameters defined for it, they appear on the page allowing you to edit the parameter values at the tree node level.

**Note**
Parameter values customized at the tree level will override the default values specified at the tree-structure level.

**Creating and Editing Tree Versions**

Tree versions are created at the time of creating trees. A tree must contain a version.

Editing an existing tree provides you the choice to update the existing version. You can also edit the existing version that lies nested under the tree in the search results.

When you edit a tree version bearing Active status, the status changes to Draft until the modifications are saved or cancelled.

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**Tree Version Audit Results: Explained**

Use the tree version audit results to verify the tree version’s correctness and data integrity. The audit results include the following details:

- The name of the validator, which is a specific validation check
- The result of the validation, including a detailed message
- Corrective actions to take if there are any validation errors
Running an Audit

An audit automatically runs whenever a tree version is set to active. You can also manually trigger an audit on the Manage Trees and Tree Versions page, using Actions - Audit. The Tree Version Audit Result table shows a list of validations that ran against the selected tree version.

Validation Details

The following table lists the validators used in the audit process and describes what each validator checks for. It also lists possible causes for validation errors and suggests corrective actions.

<table>
<thead>
<tr>
<th>Validator</th>
<th>Description (what is checked)</th>
<th>Possible Cause for Validation Failure</th>
<th>Suggested Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date</td>
<td>The effective start and end dates of the tree version must be valid.</td>
<td>The effective end date is set to a value that is not greater than the effective start date.</td>
<td>Modify the effective start and end dates such that the effective start date is earlier than the effective end date.</td>
</tr>
<tr>
<td>Root Node</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the Allow Multiple Root Nodes check box for the Restrict Tree Node List of Values Based on option is not selected, and if the tree structure is not empty, the tree version must contain exactly one root node. This validation does not take place if the check box is selected.</td>
<td>Even if the check box is deselected, the tree version has multiple root nodes.</td>
<td>Modify the tree version such that there is exactly one root node.</td>
</tr>
<tr>
<td>Data Source Max Depth</td>
<td>For each data source in the tree structure, on the Data Source dialog box, if the data source is depth-limited, the data in the tree version must adhere to the specified depth limit. This validation does not apply to data sources for which the Maximum Depth field is set to Unlimited.</td>
<td>The tree version has data at a depth greater than the specified depth limit on one or more data sources.</td>
<td>Modify the tree version such that all nodes are at a depth that complies with the data source depth limit.</td>
</tr>
<tr>
<td>Duplicate Node</td>
<td>On the Data Source dialog box, if the Allow Duplicates check box is not selected, the tree version should not contain more than one node with the same primary key from the data source. If the check box is selected, duplicate nodes are permitted.</td>
<td>Even when the check box is deselected, the tree version contains duplicate nodes.</td>
<td>Remove any duplicate nodes from the tree version.</td>
</tr>
<tr>
<td>Available Node</td>
<td>All nodes in the tree version should be valid and available in the underlying data source.</td>
<td>• A node in the tree version does not exist in the data source. Deleting data items from the data source without removing the corresponding nodes from the tree version can result in orphaned nodes in the tree version. For example, if you added node A into your tree version, and subsequently deleted node A from the data source without removing it from the tree version, the validation fails. • The tree version contains a tree reference node, which references another tree version that does not exist.</td>
<td>Remove any orphaned nodes from the tree version. Update tree reference nodes so that they reference existing tree versions.</td>
</tr>
<tr>
<td>Node Relationship</td>
<td>All nodes must adhere to the relationships mandated by the data sources registered in the tree structure.</td>
<td>The tree structure has data sources arranged in a parent-child relationship, but the nodes in the tree do not adhere to the same parent-child relationship. For example, if the tree structure has a Project data source with a Task data source as its child, Task nodes should always be under Project nodes in the tree version. This validation fails if there are instances where a Project node is added as the child of a Task node.</td>
<td>Modify the tree version such that the nodes adhere to the same parent-child relationships as the data sources.</td>
</tr>
</tbody>
</table>
### SetID Restricted Node

<table>
<thead>
<tr>
<th>Describe</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Manage Tree Structures: Specify Data sources page, if the <strong>Set ID</strong> check box is selected to enable the <strong>Restrict Tree Node List of Values Based on</strong> option for each tree node, the underlying node in the data source must belong to the same reference data set as the tree itself. This restriction does not apply when the check box is not selected.</td>
<td>Even when the check box is selected, the tree version has nodes whose data source values belong to a different reference data set than the tree.</td>
</tr>
<tr>
<td>Modify the tree version such that all nodes in the tree have data sources with reference data set matching that of the tree.</td>
<td>Assign a label to any node that does not have a label.</td>
</tr>
</tbody>
</table>

### Label Enabled Node

<table>
<thead>
<tr>
<th>Describe</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Manage Tree Structures: Specify Data Sources page, if a labeling scheme is specified for the tree structure by selecting a list item from the <strong>Labeling Scheme</strong> list box, all nodes should have labels. This restriction does not apply when you select <strong>None</strong> from the <strong>Labeling Scheme</strong> list box.</td>
<td>The tree structure has a labeling scheme but the tree version has nodes without labels.</td>
</tr>
<tr>
<td>Assign a label to any node that does not have a label.</td>
<td></td>
</tr>
<tr>
<td>Date Restricted Node</td>
<td>On the Manage Tree Structures: Specify Data Sources page, if the <strong>Date Range</strong> check box is selected to enable the <strong>Restrict Tree Node List of Values Based on</strong> option for a tree structure, each node in the underlying data source must have an effective date range same as the effective date range of the tree version. This restriction does not apply if the check box is not selected.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Multiple Active Tree Version</td>
<td>On the Manage Tree Structures: Specify Definition page, if the <strong>Allow Multiple Active Tree Versions</strong> check box is not selected for the tree structure, there should not be more than one active tree version under a tree at any time. This restriction does not apply if the check box is selected.</td>
</tr>
<tr>
<td>Range Based Node</td>
<td>On the Data Source dialog box, if the <strong>Allow Range Children</strong> check box is not selected, range-based nodes are not permitted from that data source. This restriction does not apply if the check box is selected.</td>
</tr>
<tr>
<td><strong>Terminal Node</strong></td>
<td>On the Data Source dialog box, if the <strong>Allow Use as Leaves</strong> check box is not selected, values from that data source cannot be added as leaves (terminal nodes) to the tree version. This restriction does not apply if the check box is selected.</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Usage Limit</strong></td>
<td>On the Data Source dialog box, if the <strong>Use All Values</strong> option is selected to set the <strong>Usage Limit</strong> for the data source, every value in the data source must appear as a node in the tree. This restriction does not apply if <strong>None</strong> option is selected.</td>
</tr>
</tbody>
</table>

**Trees and Data Sources: How They Work Together**

Data sources form the foundation for tree management in Oracle Fusion Applications. Tree structures, trees, and tree versions establish direct and real-time connectivity with the data sources. Changes to the data sources immediately reflect on the **Manage Trees and Tree Versions** page and wherever the trees are being used.

**Metadata**

Tree structures contain the metadata of the actual data that is used in Oracle Fusion Applications. Tree structures contain the core business logic that is manifested in trees and tree versions.

**Data Storage**

Trees and tree versions are built upon the tree structures. They employ the business rules defined in the tree structures and allow an application to select and enable a subset of trees to fulfill a specific purpose in that application.

**Access Control**

Source data is mapped to tree nodes at different levels in the database. Therefore, changes you make to the tree nodes affect the source data. Access control set on trees prevents unwanted data modifications in the database. Access control can be applied to the tree nodes or anywhere in the tree hierarchy.

**Adding Tree Nodes: Points to Consider**

Tree nodes are points of data convergence that serve as the building blocks of a tree structure. Technically, the node may be stored either in a product-specific table or in an entity that has been established by tree management as the default storage mechanism. However, since all data in Oracle Fusion Applications
usually have a storage home, only user-created data needs to be stored in an entity.

Nodes are attached to tree versions. Whenever you create or edit a tree version, you need to specify its tree node.

**Managing Tree Nodes**

You can create, modify, or delete tree nodes on the *Tree Version: Specify Nodes* page. To add a tree node, ensure that the tree structure with which the tree version is associated is mapped to a valid data source. You can also duplicate a tree node if the multiple root node feature is enabled.

**Node Levels**

In most trees, all nodes at the same level represent the same kind of information. For example, in a tree that reflects the organizational hierarchy, all division nodes appear on one level and all department nodes on another. Similarly, in a tree that organizes a user's product catalog, the nodes representing individual products might appear on one level and the nodes representing product lines on the next higher level.

When levels are not used, the nodes in the tree have no real hierarchy or reporting structure but do form a logical summarization structure. Strictly enforced levels mean that the named levels describe each node's position in the tree. This is natural for most hierarchies. Loosely enforced levels mean that the nodes at the same visual level of indentation do not all represent the same kind of information, or nodes representing the same kind of information appear at multiple levels. With loosely enforced levels, users assign a level to each node individually. The level is not tied to a particular visual position.

**Node Types**

A tree node has the following node types.

- Single: Indicates that the node is a value by itself.
- Range: Indicates that the node represents a range of values and possibly could have many children. For example, a tree node representing account numbers 10000 to 99999.
- Referenced Tree: Indicates that the tree node is actually another version for the tree based on the same tree structure, which is not physically stored in the same tree. For example, a geographic hierarchy for the United States can be referenced in a World geographic hierarchy.

**Define Profile Options**

**Profile Options: Explained**

Profile options manage configuration data centrally and influence the behavior of applications. Profile options serve as permanent user preferences and application configuration parameters. You configure profile options with settings for specific contexts or groups of users. Users customize how their user interfaces look and behave by changing the values of available profile options.
Profile options store the following kinds of information.

<table>
<thead>
<tr>
<th>Type of Information</th>
<th>Profile Option Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>User preferences</td>
<td>Settings to provide access to social networking features</td>
</tr>
<tr>
<td>Installation information</td>
<td>Setting to identify the location of a portal</td>
</tr>
<tr>
<td>Configuration choices</td>
<td>Settings to change user interface skins and behaviors</td>
</tr>
<tr>
<td>Processing options</td>
<td>Settings to affect how much information to log either for an entire site or a specific user</td>
</tr>
</tbody>
</table>

You can add and configure new profile options in addition to configuring predefined profile options that are implemented as updateable.

**Profile Option Definition and Configuration**

Application developers add new profile options and configure ones that are not to be updated by other users. Application administrators and implementation consultants configure profile options with profile option values that are implemented as updatable.

Profile option definitions consist of the following.

- Profile option name
- Application and module in the application taxonomy
- Profile option values
- Profile options categories
- Profile option levels
- Profile option level hierarchy

Profile options can appear on any user interface page without indication that a profile option is what is being set.

**Profile Option Values**

Some profile options have predefined profile option values.

The Manage Profile Option Values task flow allows an administrator to set updatable profile option values at the available levels, including the user level. You can access the Manage Profile Option Values task starting in the Setup and Maintenance Overview page and searching for profile option tasks.

You can set profile option values at different levels: site, product, and user. The following table provides examples.

<table>
<thead>
<tr>
<th>Profile Option Level</th>
<th>Value of the Profile Option Level</th>
<th>Profile Option Value</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Manager1</td>
<td>UK pound sterling</td>
<td>Access to site and all products shows UK pounds sterling in effect</td>
</tr>
</tbody>
</table>
Context such as user session or accessed product determines which profile option value is associated with the profile option name. In the example, if manager1 does not set a profile option value for this profile option, access to Financials for EMEA shows currency in Euros; and access to other products shows currency in UK pounds sterling.

### Profile Option Categories

Categories group profile options based on their functional area. Profile option categories facilitate searching and defining data security.

For example, in Oracle Fusion Receivables, the Transactions profile option category groups profile options related to setting how Receivables transactions are to be processed, such as Require Adjustment Reason.

A profile option can be in more than one category.

### Profile Option Hierarchies and Levels

Application developers specify at which hierarchy level a profile option is enabled. The predefined profile option hierarchy levels are site, product, and user.

The hierarchy levels specified in the profile option definition determine the context in which a profile option value may be set. If the profile option value at a particular level is updatable, an administrator can update the profile option value for that context.

**Note**

Profile options should only be enabled for context levels that are appropriate for that profile option. For example, a profile option indicating a global configuration setting should not be enabled at the user level, if users cannot choose a different value for that setting.

For security, one level in the hierarchy is designated as a user level. A profile option may be enabled at any or all hierarchy levels. When enabled at all levels, the predefined ordering of profile option hierarchy levels gives precedence to the values that are set at the user level over values set at the product and site levels, and precedence to values set at the product level to values set at the site level. If there is no value for the current user, then the product value applies. If there is no value for the user or product, then the site value applies.

The table shows the predefined profile option hierarchy and ordering.

<table>
<thead>
<tr>
<th>User</th>
<th>Manager2</th>
<th>US dollar</th>
<th>Access to site and all products shows US dollars in effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Financials for EMEA</td>
<td>Euro</td>
<td>Unless superseded by a user level value, Euros in effect for Financials for EMEA applications</td>
</tr>
<tr>
<td>Site</td>
<td>Site</td>
<td>UK pound sterling</td>
<td>UK pounds sterling in effect for all other users and products</td>
</tr>
<tr>
<td>Hierarchy Level</td>
<td>Priority When Multiple Levels Set</td>
<td>Effect on Applications</td>
<td>Example</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------</td>
<td>------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Site</td>
<td>Lowest</td>
<td>Affect all applications for a given implementation</td>
<td>Currency for the site is set to Euros.</td>
</tr>
<tr>
<td>Product</td>
<td>Supersedes Site</td>
<td>Affect all applications of a product family such as Financials</td>
<td>Currency for the Financials products set to UK pound sterling.</td>
</tr>
<tr>
<td>User</td>
<td>Highest, supersedes Product</td>
<td>Affect only the experience of the current user</td>
<td>Currency for the user of Financials applications set to US dollars.</td>
</tr>
</tbody>
</table>

You can configure updatable values for profile options at one or more levels depending on which levels are enabled in the profile option definition. When a profile is set at more than one level, higher levels of specificity override lower levels of specificity.

In the example, if the currency setting for the site is UK pounds sterling, but the Financials division works in the Netherlands using the Euro, a manager in the US can override that product level setting at the user level to use US dollars when accessing Financials applications.

In another example, if a profile option called Printer is set only at the site and product levels. When a user logs on, the Printer profile option assumes the value set at the product level, since it is the highest level setting for the profile.

---

**Tip**

Set site-level profile option values before specifying values at any other level. The profile option values specified at the site-level work as defaults until profile option values are specified at the other levels.

---

For more information on the predefined profile options, see assets with the Profile Option type in the Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

**Planning Profile Options: Points to Consider**

Plan profile options before defining and configuring them.

The following aspects assist you in better planning how to manage profile options.

- Profile option tasks
- Before creating a profile option
- Profile options data model

**Profile Option Tasks**

Users may be able to set their own profile options, depending on settings in the profile option definition. However, not all profile options are visible to end users, and some profile options, while visible, may not be updated by end users.
The following table lists tasks and considerations relevant to planning profile options.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Role</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning, creating, and editing a new profile option</td>
<td>Applications developer</td>
<td>Since profile options are for permanent settings, do not use profiles options to cache temporary session attributes. Add capacity for user preferences and system configuration. Customize profile options with values, value behaviors, validation, category values, and security. Define the levels at which the profile option is enabled.</td>
</tr>
<tr>
<td>Configure values in an existing profile option</td>
<td>Applications developer, application administrator, and implementation consultant</td>
<td>Manage the values for existing profile options.</td>
</tr>
<tr>
<td>Create and edit profile option categories</td>
<td>Applications developer, application administrator, and implementation consultant</td>
<td>Manage categories for organizing existing profile options.</td>
</tr>
</tbody>
</table>

**Note**

Since a profile option enables a behavior in an application user interface or across applications, a value change made by an end user is reflected in the UI page for managing profile option values.

**Before Creating a Profile Option**

Profile options are best defined for managing configuration data centrally and influencing the behavior of applications.

If the purpose of a profile option setting is specific to a piece of data (typically setup data), it is best implemented as an attribute of that data.

Do not use profile options for behavior that is not configurable.

Profile options exist independent of role.

Do not use profile options to implement function security. For example, an application should not check for a profile option value set to yes to provide access to a page. Do not use profile options to implement data security, such as a profile option value that must be set to a specific value to provide view access to an entity.

Do not use profile options to capture a dynamic system states, such as data stored in a temporary table. Use Global Variables for temporary states instead.

Evaluate if there is a genuine need before creating a profile option. Do not force users to make a decision about an aspect of their application use that is of no concern.

Evaluating need includes looking for duplicate or similar profile options, even in other products, before creating a new one. For example, you do not need multiple profile options to choose a preferred currency.
Profile Options Data Model

The profile option data model illustrates the relationships among profile option elements.

The figure shows the data model of profile option entities.

For more information about planning profile options, see the Oracle Fusion Applications Developer’s Guide.

Managing Profile Options: Points to Consider

A profile option definition consists of a name for the profile option and valid values. It is defined within a module of the application taxonomy. Application developers manage profile options to create new profile options or modify existing profile option definitions, which includes specifying the levels at which a profile option is enabled and defining values. Implementation consultants and application administrators configure existing profile options by managing the profile option’s updatable values, and creating categories that group profile options.

Configuring a Profile Option

A profile option definition includes information about the owning application and module in the application taxonomy. A start or end date, or both may limit when a profile option is active. The profile option definition may include an SQL validation statement that determines which values are valid, and the hierarchy levels at which the profile option is enabled and updatable.

To be visible to users, a profile option must be user enabled. You can also allow user updates of the profile option, which means users can make changes to the validation and the profile option level information.
Profile option levels specify at which context level profile values may be enabled or updated.

Profile options should only be enabled for context levels that are appropriate for that profile option. For example, a profile option indicating a global configuration setting should not be enabled at the user level, if users cannot choose a different value for that setting.

**SQL Validation**

The SQL validation of the profile option definition determines what valid profile option values are available. In the absence of validation, any value is valid.

For example, SQL validation provides a means of defining a list of values for the valid values of the profile option. The SQL validation can use lookups to provide the valid values for profile options, such as the lookup codes of the YES_NO lookup type.

With a profile option called DEFAULT_LANGUAGE, you can configure the following validation.

```sql
SELECT DESCRIPTION Language, NLS_LANGUAGE
FROM FND_LANGUAGES_VL
WHERE INSTALLED_FLAG IN ('B', 'I')
ORDER BY DESCRIPTION
```

This results in the following list of values based on data in `FND_LANGUAGE_VL`.

<table>
<thead>
<tr>
<th>Display Value</th>
<th>Hidden Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>American English</td>
<td>US</td>
</tr>
<tr>
<td>French</td>
<td>F</td>
</tr>
<tr>
<td>Spanish</td>
<td>E</td>
</tr>
</tbody>
</table>

Hidden values must be varchar2(2000).

Profile options generally provide configuration values within a particular context. Though you can create a profile option to be global, think of global values as default values to avoid storing inappropriate configuration information as profile option values. Create global profile options that have corresponding contextual levels.

**Managing Profile Option Categories: Points to Consider**

Use profile option categories to group profile options.

**Organizing Profile Options in Categories**

As a guideline, group profile options in a single category if the profile options affect the same feature, or if an administrator would likely want to see the profile options in the results of a single search.

Application developers are responsible for the initial groupings and then administrators can make changes based on their specific needs. Administrators
can categorize profile options and then easily search on profile options by category.

**Tip**
Define profile option categories first and assign new profile options to existing categories rather than defining profile options first and then defining categories to categorize them.

**Adding New Profile Option Categories**

You can add new categories or add profiles to an existing category.

You can create a profile option category by duplicating an existing category and editing it for a new grouping of profile options. You can add multiple profile options to a category. A profile option can exist in multiple categories.

**Profile Option Order in a Category**

Specify a profile option sequence to determine the order of profile options when queried by profile option category.

**Viewing and Editing Profile Option Values: Points to Consider**

A profile option value consists of the value and the context or level where the value is set. You specify the context with a pairing of the profile option value’s level and level value, such as the product level and the level value GL for Oracle Fusion General Ledger. Adding or modifying profile option values can include deciding which valid values are enabled or updatable at which level.

The SQL validation of the profile option definition determines what valid profile option values are available. In the absence of validation, any value is valid.

**Profile Option Levels and User Session Context**

Site level profile option values affect the way all applications run for a given implementation. Product level profile option values affect the way applications owned by a particular product code behave. For example, a product may use profile options set at the product level to determine how regions provided by a common module such as those available from Oracle Fusion Trading Community Model or Customer Relationship Management (CRM) display in a particular work area or dashboard. User level profile option values affect the way applications run for a specific application user.

Whichever profile option value is most specific to a user session, that is the value at which the profile option is set for the user session.

For example, the predefined FND_LANGUAGE profile option sets the default language. In addition to a site level value, you can define a value for various product or user levels.

<table>
<thead>
<tr>
<th>Level Name</th>
<th>Level Value</th>
<th>Profile Option Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>InFusion</td>
<td>American English</td>
</tr>
</tbody>
</table>
Values at the site level take effect for any user unless overridden by a different value set at the more specific levels of product and user. Product level profile option values affect the way applications owned by a particular product code behave. In addition to user level profile option values in applications, selections may be available in the user preferences workspace.

The following table demonstrates the FND_LANGUAGE profile option settings that would apply to specific users, based on the example above. For example, the user Hima is using the CRM Application Composer product, in the InFusion site. The example above shows that this profile option is set to Hindi at the user level for Hima. Because user is the highest applicable level for Hima, the applicable profile option value is Hindi for Hima.

<table>
<thead>
<tr>
<th>Site</th>
<th>Product</th>
<th>User</th>
<th>Highest Available Level</th>
<th>Active Profile Option Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>InFusion</td>
<td>CRM Application Composer</td>
<td>Hima</td>
<td>User</td>
<td>Hindi</td>
</tr>
<tr>
<td>Acme</td>
<td>Payables</td>
<td>Application Administrator</td>
<td>User</td>
<td>American English</td>
</tr>
<tr>
<td>InFusion</td>
<td>Customer Center</td>
<td>Guillaume</td>
<td>Product</td>
<td>French</td>
</tr>
<tr>
<td>InFusion</td>
<td>Payables</td>
<td>Implementation Consultant</td>
<td>Site</td>
<td>American English</td>
</tr>
<tr>
<td>Acme</td>
<td>Payables</td>
<td>Implementation Consultant</td>
<td>none</td>
<td>no value</td>
</tr>
</tbody>
</table>

**Note**

More than one site level value is relevant in an enterprise with multiple tenants using a single instance of Oracle Fusion Applications.

**Effect of Changes to Profile Option Values**

Any change you make to a user level profile option has an immediate effect on the way applications run for that session. When you sign in again, changes made to your user level profile options in a previous session are still in effect. When you change profile option value at the product level and no user level values are set, you see the update immediately, but other users may not see the changed value until signing out and back in. When you change a profile option value and the new value affects other users, the change takes effect only when users sign in the next time.

Changes to site level profile options take effect for any user session that is started after the setting has been changed. Changes to site or user level profile options do not affect any user sessions that are already in progress when the change is made.
Changes to site or user level profile options take effect for any C or PL/SQL processes, such as scheduled jobs, that are launched after the setting has been changed. Profile option changes do not affect C or PL/SQL processes that are already running.

Define Flexfields

Flexfields: Overview

Flexfields are a mechanism for configuring and extending applications to meet enterprise-specific needs by adding an attribute to a business component. Using flexfields, you can extend application objects to capture data that would not otherwise be tracked by the application, or configure intelligent key codes comprised of meaningful parts according to your business practices. Flexfields encapsulate all of the pieces of information related to a specific purpose, such as a key identifying a particular purchase, or the components of a student’s contact information, or the features of a product in inventory.

A flexfield is an extensible data field consisting of subfields Each subfield is a flexfield segment. You configure segments to capture enterprise-specific information. Each segment captures a single atomic value, has a name, and maps to a pre-reserved column in the applications database.

Flexfields allow enterprise requirements to be met without changing the data model. Different data can be captured on the same database table.

Application developers create a flexfield and register it so that it is available for configuration. Administrators and implementation consultants setup or configure segments and other properties of the available flexfields. End users see flexfield segments as attributes of information displayed in the application user interface. They enter a value for the attribute. The value may be selected from a list of valid values or entered as free-form text that complies with formatting rules.

Accessing Flexfields

Manage flexfields using tasks you access by starting in the Setup and Maintenance Overview page. This page is available from the Administrator menu.

Tip

Use the Business Object parameter to search Application Key Flexfields, Application Descriptive Flexfields, and Application Extensible Flexfields to find all tasks related to flexfields. To manage any flexfield across all Oracle Fusion Applications products, search for the Define Flexfields task list and access the Manage Descriptive Flexfields, Manage Extensible Flexfields, and Manage Key Flexfields tasks.

For lists of flexfields, see assets with the Flexfield: Descriptive, Flexfield: Extensible, or Flexfield: Key type in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).
Types of Flexfields

The following three types of flexfields are available in Oracle Fusion Applications and provide a means to customize applications features without programming.

- Key
- Descriptive
- Extensible

For example, in Oracle Fusion Financials, key flexfields represent objects such as accounting codes and asset categories. Generally, correct operations of a product depend on key flexfield setup. In Oracle Fusion Payables, a descriptive flexfield expands a customizable area of an invoices page by providing subfields for collecting invoice details. You can implement these subfields, which are descriptive flexfield segments, as context sensitive so they appear only when needed. Extensible flexfields are similar to descriptive flexfields, but provide additional advanced features. Generally setup of descriptive and extensible flexfields is optional because their segments capture additional information that is stored attributes on an entity.

Segments

All flexfields consist of segments. Segments represent attributes of information. They can appear globally wherever the flexfield is implemented, or based on a structure or context.

You define the appearance and meaning of individual segments when configuring a flexfield.

A key flexfield segment commonly describes a characteristic of the entity identified by the flexfield, such as a part number structured to include information about the type, color, and size of an item. A descriptive flexfield segment represents an attribute of information that describes a characteristic of the entity identified on the application page, such as details about a device containing components, some of which are globally present on the page while others are contextually dependent on the category of the device.

Value Sets

A value set is a predefined, named group of values that can be used to validate the content of a flexfield segment.

You configure a flexfield segment with a value set that establishes the valid values that an end user can enter for the segment. You define the values in a value set, including such characteristics as the length and format of the values. You can specify formatting rules, or specify values from an application table or predefined list. Multiple segments within a flexfield, or multiple flexfields, can share a single value set.

Structure and Context

Key flexfields have structure. Descriptive flexfields and extensible flexfields have context.
Each key flexfield structure is a specific configuration of segments. Adding or removing segments, or rearranging their order, produces a different structure. The database columns on which segments in different structures are based can be reused in as many structures as desired.

Descriptive flexfield segments can be context-sensitive, which means available to an application based on a context rather than globally available wherever the flexfield appears. A descriptive flexfield context is a set of context-sensitive segments that store information related to the same context value. You define contexts as part of configuring a descriptive flexfield. End users see global segments, as well as any context-sensitive segments that apply to the selected context value.

Extensible flexfield segments are made available to an application based upon a category value. An extensible flexfield context serves as a container for related segments, used to organize the various segments that are applicable to a category value. You define contexts with context-sensitive segments and associate them to categories as part of configuring an extensible flexfield. End users see the segments displayed in subregions, one for each context associated to the selected category value.

In descriptive flexfields and extensible flexfields, the database columns on which context-sensitive segments are based can be reused in as many contexts as desired.

**Deployment**

A flexfield must be deployed to display its current definition in a runtime application user interface. For example, if the deployment status is Edited, the flexfield segments may appear in the UI based on the flexfield definition at the time of last deployment, rather than the current definition.

You can deploy a flexfield as a sandbox for testing the configuration before deploying it to the mainline for all users. In the case of extensible flexfields, you can deploy offline as a background process.

**Runtime Appearance**

In an application user interface, descriptive flexfield segments appear as label and field pairs or as a table of fields where the column headers correspond to the labels. The fields represent the flexfield segments and accept entered input or a selection from a list of choices that correspond to the segment's assigned value set. Extensible flexfield segments appear grouped within labeled regions, where each grouping is a context and the region labels are the context names.

Use the **Highlight Flexfields** command in the Administration menu of the Setup and Maintenance work area to identify the location of the flexfields on the runtime page. Flexfields in highlight mode display an information icon to access details about the flexfield, an edit icon to manage the flexfield, and a quick create icon to add descriptive flexfield segments.

All segments of a single flexfield are grouped together by default. The layout and positions of the flexfield segments depend on where the application developer places the flexfield on the page. Flexfields may also be presented in a separate section of the page, in a table, or on their own page or subwindow.
You can use Oracle Composer to edit the layout, position, or other display features of the flexfield segments.

**Flexfields and Oracle Fusion Application Architecture: How They Work Together**

Administrators configure flexfield segments to capture data that represents the values of attributes. Flexfield segments represent attributes of entities (business objects). Most business objects are enabled for descriptive flexfields. Some business objects are enabled for extensible flexfields.

For example, an airline manufacturer might require very specific attributes for their orders that are not provided by the out-of-the-box implementation of an order. Because a flexfield exists for the order business component, you can use it to create and configure the desired attribute.

The figure shows the layers of a flexfield: the business entity table and metadata in the database, business components that are Application Development Framework (ADF) objects or ADF business component (ADFbc) objects derived from the metadata and stored in the Metadata Services Repository (MDS), and the user interface where the input fields defined by the flexfield segments are rendered. The flexfield definition consists of all the metadata defined during configuration and stored in the database.
segments and other properties of the available flexfields. This information is stored as additional flexfield metadata in the database. Deploying the flexfield generates ADF business components based on the flexfield metadata in the database.

**Integration**

The attributes that you add by configuring flexfields are available throughout the Oracle Fusion Middleware technology stack, allowing the flexfields to be used in user interface pages, incorporated into the service-oriented architecture (SOA) infrastructure, and, in the case of descriptive flexfields, integrated with Oracle Business Intelligence.

A flexfield affects the Web Services Description Language (WSDL) schemas exposed by ADF services and used by SOA composites. The Web services that expose base entity data also expose flexfield segment data.

Attributes incorporate into SOA infrastructure (BPEL, Rules) and integrate with business intelligence (Oracle Business Intelligence, Extended Spread Sheet Database (ESSbase)).

Flexfield configurations are preserved across Oracle Fusion Applications updates.

**Deployment**

The metadata for the flexfield is stored in the application database as soon as you save your configuration changes. Deploying the flexfield generates the ADF business components so that the runtime user interface reflects the latest definition of the flexfield in the metadata.

**Importing and Exporting**

You can export and import flexfields with a deployment status of Deployed or Deployed to Sandbox across instances of Oracle Fusion Applications using the Setup and Maintenance Overview page. Ensure a flexfield is eligible for migration (by verifying that it has successfully deployed) prior to attempting the migration.

**Runtime**

For a flexfield to reflect the latest flexfield definition at runtime it must be deployed. The user interface accesses a business object and the deployed flexfield definition indicates which business object attributes the flexfield captures values for. If you add display customizations for a flexfield using Oracle Composer, these are customizations on the page so that the same flexfield segments can appear differently on various different pages.

Values entered for segments are validated using value sets.

**Patching**

Flexfield configurations are stored in an MDS repository, and are preserved during patching and upgrading.
Managing Flexfields: Points to Consider

Managing flexfields involves, registering, planning, and configuring flexfields.

You plan and configure the registered flexfields provided in your applications by applications developers. How you configure flexfield segments determines how the flexfield segments appear to end users. Optionally, you can customize the UI page to change how the flexfield segments appear to end users on that page.

The figure shows the processes involved in making flexfields available to end users. The tasks in the Define Flexfields activity allow administrators to configure and deploy flexfields. If you deploy a flexfield to a sandbox and decide not to make further changes, you select the flexfield in the Manage Flexfields tasks of the Define Flexfields activity and deploy the flexfield in the mainline so it is available to users.

Registering Flexfields

Application development registers flexfields so they are available to administrators and implementation consultants for configuration.

Application development creates the capacity of database tables to support flexfields so an enterprise can capture specific information about an entity. Many flexfields are predefined in Oracle Fusion Applications.
A flexfield must be registered before it can be configured.

For more information on registering flexfields, see Oracle Fusion Applications: Developer's Guide.

**Planning Flexfields**

All flexfields consist of segments which represent attributes of an entity. The values an end user inputs for an attribute are stored in a column of the entity table. Application development enables columns of entity tables for use in flexfields during flexfield registration.

A flexfield must be registered before it can be configured. Before configuring new flexfield segments for your enterprise, be sure to plan their implementation carefully.

For more information on planning flexfield configuration, see Oracle Fusion Applications Extensibility Guide.

**Configuring Flexfields**

Administrators or implementors configure flexfields so they meet the needs of the enterprise. Some flexfields require configuration to make an application operate correctly.

You can configure flexfields using the following methods:

- Go to the manage flexfield tasks in the Setup and Maintenance work area.
- Use the Highlight Flexfields command in the Administration menu while viewing a runtime page.
  - Use the edit icon to manage a flexfield.
  - Use the quick create icon to add descriptive flexfield segments.

Configuring a flexfield includes the following.

- Defining value sets against which the values entered by end users are validated
- Defining the structure or context of the segments in the flexfield
- Specifying the prompt, length and data type of each flexfield segment
- Specifying valid values for each segment, and the meaning of each value within the application

Tip

You can create value sets while creating descriptive and extensible flexfield segments. However, define value sets before configuring key flexfield segments that use them, because you assign existing value sets while configuring key flexfield segments.

Some descriptive flexfields provide parameters that are attributes of the same or related entity objects. You use parameters to set the initial value or derivation...
value of an attribute from external reference data, such as a column value or a session variable, rather than from user input.

**Enabling a Flexfield Segment for Business Intelligence**

You can enable key flexfield segment instances and descriptive flexfield segments for business intelligence if the flexfield is registered in the database as an Oracle Business Intelligence-enabled flexfield. For more information on enabling segments for business intelligence, see points to consider when enabling key and descriptive flexfield segments for business intelligence.

**Deploying Flexfields**

After you configure or change a flexfield, you must deploy it to make the latest definition available to end users.

You deploy a flexfield in the mainline for general use in a test or production environment, or you can deploy a flexfield as a flexfield-enabled sandbox to confirm that it is correctly configured before deploying it to the mainline.

Deploying a flexfield results in a deployment status. Once deployed, the deployment status indicates the state of the currently configured flexfield relative to the last deployed definition.

**Optionally Changing How Flexfield Segments Appear in a User Interface Page**

The flexfield attributes you define integrate with the user interface pages where users access the attributes' business object. Application development determines the UI pages where business objects appear and the display patterns used by default to render flexfield segments.

You can customize the appearance of the flexfield segments in the UI page using Oracle Composer once the flexfield is deployed to the mainline.

**Identifying Flexfields on a Runtime Page**

The **Highlight Flexfields** command in the Administration menu of the Setup and Maintenance work area identifies the location of descriptive and key flexfields on the runtime page by displaying an information icon for accessing details about each flexfield.

Even if a flexfield has not yet been deployed and does not appear on the runtime page in normal view, it appears in the Highlight Flexfield view for that page. **Highlight Flexfields** accesses the current flexfield metadata definition.

Use the highlighted flexfield’s edit icon to manage the descriptive or key flexfield directly. Alternatively, note a highlighted flexfield’s name to search for it in the tasks for managing flexfields.

**Flexfield Segment Properties: Explained**

Independent of the value set assigned to a segment, segments may have properties such as validation.
Range Validation of Segments

Range validation enables you to enforce an arithmetic inequality between two segments of a flexfield. For example, a product must be ordered before it can be shipped, so the order date must be on or before the ship date, and consequently the order date segment value must be less than or equal to the ship date segment value. You can use range validation to ensure this relationship.

The conditions for range validation are as follows.

- Segments must be configured for range validation in pairs, one with the low value and one with the high value.
- Both segments must be the same data type.
- Both segments must be part of the same structure in a key flexfield or part of the same context in a descriptive flexfield or extensible flexfield.
- The low value segment must have a lower sequence number than the high value segment.
- Non-range validated segments can exist between a range validated pair, but range validated pairs cannot overlap or be nested.

You can configure as many range validated pairs as you want within the same flexfield. Your application automatically detects and applies range validation to the segment pairs that you define, in sequence order. It must encounter a low value segment first, and the next range validated segment it encounters must be a high value segment. These two segments are assumed to be a matching pair. The low value and the high value can be equal.

Code Naming Conventions

When entering codes such as segment code, enter a code consisting of the characters A-Z, a-z, 0-9, with a non-numeric leading character.

The code is used in the flexfield’s element in the XML schema for web services. You can maximize the readability of the schema by naming codes with a leading alphabetic character followed by alphanumeric characters. The use of spaces, underscores, multi-byte characters, and leading numeric characters, which are all encoded in XML schemas, make the codes in the schema element difficult to read.

This applies to context code in descriptive and extensible flexfields, and to structure instance code in key flexfields.

Flexfields and Value Sets: How They Work Together

Value sets are specific to your enterprise. When gathering information using flexfields, your enterprise’s value sets validate the values your users enter based on how you defined the value set.

You can assign a value set to any number of flexfield segments in the same or different flexfields. Value set usage information indicates which flexfields use the value set.
Defining and Assigning Value Sets

As a flexfield guideline, define value sets before configuring the flexfield, because you assign value sets to each segment as you configure a flexfield.

Caution

Be sure changes to a shared value set are compatible with all flexfield segments using the value set.

Shared Value Sets

When you change a value in a shared value set, the change affects the value set for all flexfields that use that value set. The advantage of a shared values set is that a single change propagates to all usages. The drawback is that the change shared across usages may not be appropriate in every case.

Deployment

When you deploy a flexfield, the value sets assigned to the segments of the flexfield provide end users with the valid values for the attributes represented by the segments.

Defaulting and Deriving Segment Values: Explained

To populate a flexfield segment with a default value when a row is created, specify a default type of constant or parameter and a default value.

To synchronize a segment’s value with another field’s value whenever it changes, specify the derivation value to be the flexfield parameter from which to derive the attribute’s value. Whenever the parameter value changes, the attribute's value is changed to match. If you derive an attribute from a parameter, consider making the attribute read-only, as values entered by users are lost whenever the parameter value changes.

When defaulting or deriving a default value from a parameter, only those attributes designated by development as parameters are available to be chosen.

Different combinations of making the segments read only or editable in combination with the default or derivation value or both, have different effects.

Initial runtime behavior corresponds to the row for the attribute value being created in the entity table. If the default value is read only, it cannot subsequently be changed through the user interface. If the default value is not read only, users can modify it. However, if the segment value is a derived value, a user-modified segment value is overwritten when the derivation value changes.

<table>
<thead>
<tr>
<th>Default Type</th>
<th>Default value specified?</th>
<th>Derivation value specified?</th>
<th>Initial runtime behavior</th>
<th>Runtime behavior after parameter changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>No initial segment value</td>
<td>Changed parameter derivation value updates segment value</td>
</tr>
</tbody>
</table>
Define Flexfields: Flexfield Deployment

Flexfield Deployment: Explained

To use a flexfield at runtime, the flexfield must have been deployed at least once. Deployment generates or refreshes the Application Development Framework (ADF) business component objects that render the flexfield in a user interface. Flexfields are deployed for the first time during the application provisioning process.

After you configure or change a flexfield, you must deploy it to make the latest definition available to end users. You can deploy a flexfield to a sandbox for testing or to the mainline for use. In the case of extensible flexfields, you can deploy offline as a background process.

Deployment Status

Every flexfield has a deployment status.

A flexfield can have the following deployment statuses.

<table>
<thead>
<tr>
<th>Deployment Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edited</td>
<td>The flexfield metadata definition has not been deployed yet. Updates of the metadata definition are not applied in the runtime environment yet.</td>
</tr>
<tr>
<td>Patched</td>
<td>The flexfield metadata definition has been modified through a patch or through a data migration action, but the flexfield has not yet been deployed so the updated definition is not reflected in the runtime environment.</td>
</tr>
<tr>
<td>Deployment Status</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Deployed to Sandbox</td>
<td>The current metadata for the flexfield is deployed in ADF artifacts and available as a flexfield-enabled sandbox. The status of the sandbox is managed by the Manage Sandboxes task available to the Administrator menu of the Setup and Maintenance work area.</td>
</tr>
<tr>
<td>Deployed</td>
<td>The current metadata for the flexfield is deployed in ADF artifacts and available to end users. There have not been any changes to the flexfield since it was last deployed in the mainline.</td>
</tr>
<tr>
<td>Error</td>
<td>The deployment attempt in the mainline failed.</td>
</tr>
</tbody>
</table>

**Note**

Whenever a value set definition changes, the deployment status of a flexfield that uses that value set changes to edited. If the change results from a patch, the deployment status of the flexfield changes to patched.

**Initial Deployment Status of Flexfields**

The Oracle Fusion Applications installation loads flexfield metadata into the database. This initial load sets the flexfield status to Edited to indicate that the flexfield has not been deployed yet. The application provisioning process during installation deploys the predefined flexfields of the provisioned applications, which sets their status to Deployed if no errors are encountered.

When accessing a provisioned application, deployed flexfields are ready to use. In some cases, flexfield availability at runtime requires setup, such as defining key flexfields.

**Metadata Validation**

Use the Validate Metadata command to view possible metadata errors before attempting to deploy the flexfield. Metadata validation is the initial phase of all flexfield deployment commands. By successfully validating metadata before running the deployment commands, you can avoid failures in the metadata validation phase of a deployment attempt. Errors in the metadata validation phase of deployment cause the deployment attempt to abort. Metadata validation results do not affect the deployment status of a flexfield.

**Flexfield Deployment Status: How It Is Calculated**

Flexfield deployment status indicates how the flexfield metadata definition in the Oracle Fusion Applications database relates to the Application Development Framework (ADF) business components generated into a Metadata Services (MDS) repository.

**Settings That Affect Flexfield Deployment Status**

If you have made a change to a flexfield and expect a changed deployment status, be sure you have saved your changes. No settings affect flexfield deployment status.
How Flexfield Deployment Status Is Calculated

If the flexfield definition has been edited through the Define Flexfields activity task flows, the status is Edited. The latest flexfield metadata definition in the Oracle Fusion application diverges from the latest deployed flexfield definition. Any change, including if a value set used in a flexfield changes, changes the deployment status to Edited. If a flexfield has never been deployed, its status is Edited.

Note

When an application is provisioned, the provisioning framework attempts to deploy all flexfields in that application.

If you deploy the flexfield to a sandbox successfully, the status is Deployed to Sandbox. The latest flexfield metadata definition in the Oracle Fusion application matches the metadata definition that generated ADF business components in a sandbox MDS repository. Whether the sandbox is active or not does not affect the deployment status. If the flexfield was deployed to a sandbox and has not been edited or re-deployed to the mainline since then, the status remains Deployed to Sandbox independent of whether the sandbox is active, or who is viewing the status.

If you deploy the flexfield successfully, meaning to the mainline, the status is Deployed. The latest flexfield metadata definition in the Oracle Fusion application matches the metadata definition that generated ADF business components in a mainline MDS repository. Change notifications are sent when a flexfield is deployed successfully to the mainline.

If either type of deployment fails so the current flexfield definition is not deployed, the status is Error. The deployment error message gives details about the error. The latest flexfield metadata definition in the Oracle Fusion application likely diverges from the latest successfully deployed flexfield definition.

If the flexfield definition has been modified by a patch, the status is Patched. The latest flexfield metadata definition in the Oracle Fusion application diverges from the latest deployed flexfield definition. If the flexfield definition was Deployed before the patch and then a patch was applied, the status changes to Patched. If the flexfield definition was Edited before the patch and then a patch was applied, the status will remain at Edited to reflect that there are still changes (outside of the patch) that are not yet in effect.

When a deployment attempt fails and you can access the Deployment Error Message for details.

Deploying a Flexfield-Enabled Sandbox: How It Works With Mainline Metadata

The flexfield definition in a sandbox corresponds to the flexfield metadata definition in the Oracle Fusion Applications database at the time the flexfield was deployed to the sandbox. When the flexfield is ready for end users, the flexfield must be deployed to the mainline.
A flexfield-enabled sandbox uses the following components.

- Flexfield metadata in the Oracle Fusion Applications database
- Flexfield business components in a sandbox Metadata Services (MDS) repository
- User interface customizations for the flexfield in the mainline MDS repository

The figure shows the two types of deployment available in the Manage Flexfield tasks of the Define Flexfields activity. Deploying a flexfield to a sandbox creates a sandbox MDS repository for the sole purpose of testing flexfield behavior. The sandbox is only accessible to the administrator who activates and accesses it, not to users generally. Deploying a flexfield to the mainline applies the flexfield definition to the mainline MDS repository where it is available to end users. After deploying the flexfield to the mainline, customize the page where the flexfield segments appear. Customization of the page in the sandbox MDS repository cannot be published to the mainline MDS repository.

**Sandbox Metadata Services Repository Data**

Deploying the flexfield to a sandbox generates the Application Development Framework (ADF) business components of a flexfield in a sandbox MDS repository for testing in isolation.

**Warning**
Do not make changes to flexfield segment display features in a flexfield-enabled sandbox as these changes will be lost when deploying the flexfield to the mainline.

**Mainline Metadata Services Repository Data**

The Oracle Fusion Applications database stores the single source of truth about a flexfield. From this the ADF business component objects that implement the flexfield in the runtime user interface are generated in the mainline MDS repository when the flexfield is deployed.

**Deploying a Flexfield-Enabled Sandbox: Points to Consider**

Deploying a flexfield to a sandbox creates a flexfield-enabled sandbox. Each flexfield-enabled sandbox contains only one flexfield.

You can test the runtime behavior of a flexfield in the flexfield-enabled sandbox. If changes are needed, return to the Define Flexfield tasks to change the flexfield definition.

When you deploy a flexfield to sandbox, the process reads the metadata about the segments from the database, generates flexfield Application Development Framework (ADF) business component artifacts based on that definition, and stores in the sandbox only the generated artifacts derived from the definition.

**Sandbox MDS Repository Data**

The sandbox data allows you to test the flexfield in isolation without first deploying it in the mainline where it could be accessed by users.

**Warning**

Do not make changes to flexfield segment display features in a flexfield-enabled sandbox as these changes will be lost when deploying the flexfield to the mainline.

**Managing a Flexfield-Enabled Sandbox**

When you deploy a flexfield as a sandbox, that flexfield-enabled sandbox automatically gets activated in your user session. When you sign back in to see the changes, the sandbox is active in your session.

You can only deploy a flexfield to a sandbox using the Define Flexfields task flow pages.

You also can use the Manage Sandboxes feature in the Administration menu of the Setup and Maintenance work area to activate, access, or delete a flexfield-enabled sandbox.

**Note**

Whether you use the Define Flexfields or Manage Sandboxes task flows to access a flexfield-enabled sandbox, you must sign out and sign back in before you can see the changes you deployed in the runtime.
You cannot publish the flexfield from the sandbox to the mainline. You must use the Define Flexfields task flow pages to deploy the flexfield for access by users of the mainline because the flexfield configuration in the mainline is the single source of truth.

**Deploying Flexfields Using the Command Line: Explained**

You can use the Manage Key Flexfields, Manage Descriptive Flexfields, and Manage Extensible Flexfields tasks to deploy flexfields. You can also use WebLogic Server Tool (WLST) commands for priming the Metadata Services (MDS) repository with predefined flexfield artifacts and for deploying flexfields.

The table describes the available commands.

<table>
<thead>
<tr>
<th>WebLogic Server Tool Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>deployFlexForApp</td>
<td>Deploys all flexfields for the specified enterprise application. Only flexfields whose status is other than deployed are affected by this command unless the option is enabled to force all flexfields to be deployed regardless of deployment status. &lt;br&gt;Initial application provisioning runs this command to prime the MDS repository with flexfield artifacts.</td>
</tr>
<tr>
<td>deployFlex</td>
<td>Deploy a single flexfield regardless of deployment status</td>
</tr>
<tr>
<td>deployPatchedFlex</td>
<td>Deploys flexfield changes that have been delivered using a flexfield Seed Data Framework (SDF)patch. Deploys flexfields that have a Patched deployment status.</td>
</tr>
<tr>
<td>deleteFlexPatchingLabels</td>
<td>Displays MDS label of flexfield changes for viewing and deleting patching labels.</td>
</tr>
<tr>
<td>ValidateFlexDeploymentStatus</td>
<td>Displays list including flexfields that are not deployed or failed deployment.</td>
</tr>
</tbody>
</table>

Executing these commands outputs a report at the command line. The report provides the following information for every flexfield that is processed.

- Application identity (APPID)
- Flexfield code
- Deployment result, such as success or error

In case of errors, the report lists the usages for which the errors were encountered. If a runtime exception occurs, the output displays the traceback information. For each WLST flexfield command, adding the reportFormat='xml' argument returns the report as an XML string.

Consider the following aspects of command line deployment.

- Preparing to use the WLST flexfield commands
- Using the deployFlexForApp command
- Using the deployFlex command
• Using the `deployPatchedFlex` command
• Using the `deleteFlexPatchingLabels` command
• Using the `validateFlexDeploymentStatus` command
• Exiting the WLST and checking the results

**Preparing To Use the WLST Flexfield Commands**

You can only execute the WLST flexfield commands on a WebLogic Administration Server for a domain that has a running instance of the Oracle Fusion Middleware Extensions for Applications (Applications Core) Setup application.

For more information on deploying the Applications Core Setup application, see the Oracle Fusion Applications Developer's Guide.

Ensure that the AppMasterDB data source is registered as a JDBC data source with the WebLogic Administration Server and points to the same database as the ApplicationDB data source.

Start the WebLogic Server Tool (WLST) tool, if it is not currently running.

UNIX:

```
sh $JDEV_HOME/oracle_common/common/bin/wlst.sh
```

Windows:

```
wst.cmd
```

Connect to the server, replacing the user name and password arguments with your WebLogic Server user name and password.

```
connect('wls_username', 'wls_password', 'wls_uri')
```

The values must be wrapped in single-quotes. The `wls_uri` value is typically T3://localhost:7101.

For more information on the WLST scripting tool, see the Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

**Using the `deployFlexForApp` Command**

The `deployFlexForApp` command translates the product application's predefined flexfield metadata into artifacts in the MDS repository.

---

**Important**

This command is run automatically when you provision applications. However, after custom applications development, you must run the `deployFlexForApp` command after you configure your application to read the flexfield artifacts from the MDS repository and before you log into the application for the first time, even if there is no predefined flexfield metadata.

---

This command does not deploy flexfields that have a status of Deployed unless the force parameter is set to 'true' (the default setting is 'false').
For more information on priming the MDS partition with configured flexfield artifacts, see the Oracle Fusion Applications Developer's Guide.

From the WLST tool, execute the following commands to deploy the artifacts to the MDS partition, replacing `product_application_shortname` with the application's short name wrapped in single-quotes.

```python
deployFlexForApp('product_application_shortname', [,'enterprise_id'][,'force'])
```

In a multi-tenant environment, replace `enterprise_id` with the Enterprise ID to which the flexfield is mapped. Otherwise, replace with 'None' or do not provide a second argument.

To deploy all flexfields regardless of their deployment status, set `force` to 'true' (the default setting is 'false'). If you want to deploy all flexfields in a single-tenant environment, you either can set `enterprise_id` to 'None', or you can use the following signature:

```python
deployFlexForApp(applicationShortName='product_application_shortname',force='true')
```

**Tip**

The application's short name is the same as the application's module name.

For more information about working with application taxonomy, see the Oracle Fusion Applications Developer's Guide.

**Using the deployFlex Command**

From the WLST tool, execute the following command to deploy a flexfield, replacing `flex_code` with the code that identifies the flexfield, and replacing `flex_type` with the flexfield's type, which is either DFF, KFF, or EFF.

```python
deployFlex('flex_code', 'flex_type')
```

The values must be wrapped in single-quotes.

**Using the deployPatchedFlex Command**

Use the `deployPatchedFlex` command for situations where the patching framework does not invoke the command, such as when an application has been patched offline.

If the installation is multi-tenant enabled, the command deploys all patched flexfields for all enterprises. This command is not intended to be invoked manually.

Check with your provisioning or patching team, or the task flows for managing flexfields, to verify that the flexfield has a Patched deployment status.

From the WLST tool, execute the following command to deploy the artifacts to the MDS partition of all flexfields that have a READY status.

```python
deployPatchedFlex()
```

Execute the following command to deploy all flexfields that have either a READY status or an ERROR status.
deployPatchedFlex(mode='RETRY')

**Using the deleteFlexPatchingLabels Command**

Whenever you deploy flexfield changes to MDS using the deployPatchedFlex() WLST command, an MDS label is created in the format FlexPatchingWatermarkdate+time. Use the deleteFlexPatchingLabels command to inquire about and delete these labels.

From the WLST tool, execute the deleteFlexPatchingLabels() command with no arguments to delete the flexfield patching labels.

To output a list of flexfield patching labels, execute the command with the infoOnly argument, as follows:

deleteFlexPatchingLabels(infoOnly='true')

**Using the validateFlexDeploymentStatus Command**

The validateFlexDeploymentStatus() WLST command checks the deployment status of all flexfields in an Oracle Fusion Applications deployment.

validateFlexDeploymentStatus()

Only the flexfields that belong to the current instance of provisioned Java EE applications are checked.

**Exiting the WLST and Checking the Results**

To exit the tool, execute the following command.

disconnect()

Optionally, sign into the application, access user interface pages that contain flexfields, and confirm the presence of flexfields for which configuration exists, such as value sets, segments, context, or structures.

**Define Flexfields: Manage Value Sets**

**Value Sets: Explained**

A value set is a set of valid values that you assign to a flexfield segment.

An end user enters a value into a flexfield segment while using the application. The flexfield validates the segment against the set of valid values that you configured as a value set and assigned to the segment.

For example, you can define a required format, such as a five digit number, or a list of valid values, such as green, red, and blue.

Flexfield segments are usually validated, and typically each segment in a given flexfield uses a different value set. You can assign a single value set to more than one segment, and you can share value sets among different flexfields.

**Caution**

Be sure changes to a shared value set are compatible with all flexfields segments using the value set.
Defining value sets involves making decisions about the following.

- Validation
- Security
- Precision and scale
- Usage and deployment

**Validation**

The following types of validation are available for value sets.

- Format only, where end users enter data rather than selecting values from a list
- Independent, a list of values consisting of valid values you specify
- Dependent, a list of values where a valid value derives from the independent value of another segment
- Subset, where the list of values is a subset of the values in an existing independent value set
- Table, where the values derive from a column in an application table and the list of values is limited by a WHERE clause

A segment that uses a format only value set does not present a list of valid values to users.

You can build a tree structure from the values in an independent value set whose data type is character.

**Note**

Adding table validated value sets to the list of available value sets available for configuration is considered a custom task.

For more information, see the Oracle Fusion Applications Extensibility Guide.

**Security**

Value set security only works in conjunction with usage within flexfield segments. If a value set is used standalone, meaning outside a flexfield, value set security is not applied, but Oracle Fusion data security is enforced.

You can specify that data security be applied to the values in flexfield segments that use a value set. Based on the roles provisioned to users, data security policies determine which values of the flexfield segment end users can view or modify.

Value set security applies at the value set level. If a value set is secured, every usage of it in any flexfield is secured. It is not possible to disable security for individual usages of the same value set.

Value set security applies to independent, dependent, or table-validated value sets.
Value set security applies mainly when data is being created or updated, and to key flexfield combinations tables for query purposes. Value set security does not determine which descriptive flexfield data is shown upon querying.

Security conditions defined on value sets always use table aliases. When filters are used, table aliases are always used by default. When predicates are defined for data security conditions, make sure that the predicates also use table aliases.

For key flexfields, the attributes in the view object that correspond to the code combination ID (CCID), structure instance number (SIN), and data set number (DSN) cannot be transient. They must exist in the database table. For key flexfields, the SIN segment is the discriminator attribute, and the CCID segment is the common attribute.

**Precision and Scale**

For a value set with the data type Number, you can specify the precision (maximum number of digits user can enter) or scale (maximum number of digits following the decimal point).

**Usage and Deployment**

The usage of a value set is the flexfields where that value set is used. The deployment status of flexfields in which the value set is used indicates the deployment status of the value set instance.

The figure shows a value set used by a segment in a key flexfield and the context segment of a descriptive flexfield.

For most value sets, when you enter values into a flexfield segment, you can enter only values that already exist in the value set assigned to that segment.
Global and context-sensitive segment require a value set. You can assign a value set to a descriptive flexfield context segment. If you specify only context values, not value sets for contexts, the set of valid values is equal to the set of context values.

Defining Value Sets: Critical Choices

Validation and usage of value sets determine where and how end users access valid values for attributes represented by flexfield segments.

Tip

You can create value sets while creating descriptive and extensible flexfield segments. However, define value sets before configuring key flexfield segments that use them, because you assign existing value sets while configuring key flexfield segments.

Value Sets for Context Segments

When assigning a value set to a context segment, you can only use table-validated or independent value sets. The data type must be character and the maximum length of the values being stored must not be larger than column length of the context.

Format Only Validation

The format only validation type enables end users to enter any value, as long as it meets your specified formatting rules. That is, the value must not exceed the maximum length you define for your value set, and it must meet any format requirements for that value set.

For example, if the value set allows only numeric characters, your user could enter the value 456 (for a value set with maximum length of three or more), but could not enter the value ABC. A format only value set does not otherwise restrict the range of different values that users can enter. For numeric values, you can also specify if a numeric value should be zero filled or how many digits should follow the radix separator.

Interdependent Value Sets

You cannot specify a dependent value set for a given segment without having first defined an independent value set that you apply to another segment in the same flexfield. You use a dependent value set to limit the list of values for a given segment based on the value that the end user has chosen for a related independent segment. The available values in a dependent list and the meaning of a given value depend on which value was selected for the independently validated segment.

For example, you could define an independent value set of U.S. states with values such as CA, NY, and so on. Then you define a dependent value set of U.S. cities, with values such as San Francisco and Los Angeles that are valid for the independent value CA, and New York City and Albany that are valid for the
Define Common Applications Configuration for Marketing

Because you define a subset value set from an existing independent value set, you must define the independent value set first. End users do not need to choose a value for another segment first to have access to the subset value set.

**Table Validation**

Typically, you use a table-validated set when the values you want to use are already maintained in an application table (for example, a table of vendor names). Table validation allows you to enable a segment to depend upon multiple prior segments in the same context or structure.

Table-validated value sets have unique values across the table, irrespective of bind variables. The WHERE clause fragment of the value set is considered if it does not have bind variables. If it has bind variables, the assumption is that the values are unique in the value set.

**Range**

In the case of format, independent, or dependent value sets, you can specify a range to further limit which values are valid. You can specify a range of values that are valid within a value set. You can also specify a range validated pair of segments where one segment represents the low end of the range and another segment represents the high end of the range.

For example, you might specify a range for a format-only value set with format type Number where the user can enter only values between 0 and 100. If you use a table value set, you cannot reference flexfield segments in the WHERE clause of the value set. For example, the WHERE clause cannot reference a segment or a value set.

**Security**

In the case of independent and dependent values, you can specify that data security be applied to the values in segments that use a value set. Based on the roles provisioned to users, data security policies determine which values of the flexfield segment end users can view or modify.

When you enable security on a table-validated value sets, the security rule that is defined is absolute and not contingent upon the bind variables (if any) that may be used by the WHERE clause of the value set. For example, suppose a table-validated value set has a bind variable to further filter the value list to x, y and z from a list of x, y, z, xx, yy, zz. The data security rule or filter written against the value set should not assume anything about the bind variables; it must assume the whole list of values is available and write the rule, for example, to allow x, or to allow y and z. By default in data security all values are denied, and show only rows to which access has been provided.

**Maintenance**

There is no need to define or maintain values for a table-validated or subset value set, as the values are managed as part of the referenced table or independent value set, respectively.
If your application has more than one language installed, or there is any possibility that you might install one or more additional languages for your application in the future, select Translatable. This does not require you to provide translated values now, but you cannot change this option if you decide to provide them later.

For more information about defining value sets, see the Oracle Fusion Applications Extensibility Guide.

**Define Flexfields: Manage Descriptive Flexfields**

**Descriptive Flexfields: Explained**

Descriptive flexfields provide a way to add custom attributes to entities, and define validation and display properties for them. These attributes are generally standalone. They don’t necessarily have anything to do with each other and are not treated together as a combination.

All Oracle Fusion Applications business entities that you can access are enabled for descriptive flexfields. Descriptive flexfields are optional. You can choose to configure and expose segments for the descriptive flexfield defined and registered in your database, or not. For lists of descriptive flexfields, see assets with the Flexfield: Descriptive type in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

A descriptive flexfield provides a set amount of segments for an entity. The segments of a descriptive flexfield are made available to end users as individual fields in the application user interface.

**Context**

A descriptive flexfield can have only one context segment to provide context sensitivity.

The same underlying column can be used by different segments in different contexts. For example, you can define a Dimensions context that uses the ATTRIBUTE1 column for height, the ATTRIBUTE2 column for width, and the ATTRIBUTE3 column for depth. You can also define a Measurements context that uses the same columns for other attributes: the ATTRIBUTE1 column for weight, the ATTRIBUTE2 column for volume, and the ATTRIBUTE3 column for density.

**Segments and Contexts**

Descriptive flexfield segments are of the following types.

<table>
<thead>
<tr>
<th>Segment Type</th>
<th>Runtime Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global segment</td>
<td>Always available</td>
</tr>
<tr>
<td>Context segment</td>
<td>Determines which context-sensitive segments are displayed</td>
</tr>
<tr>
<td>Context-sensitive segment</td>
<td>Displayed depending on the value of the context segment</td>
</tr>
</tbody>
</table>
In the figure, a descriptive flexfield has one context segment called Category for which there are three values: Resistor, Battery, and Capacitor. In addition, the descriptive flexfield consists of two global segments that appear in each of the contexts, and three context-sensitive segments that only appear in the context in which they are configured.

Application development determines the number of segments available for configuring. During implementation you determine which attributes to add using the available segments, and the context values and the combination of attributes in each context. A segment can be used for different attributes, such as Height in Context1 and Color in Context2. Each segment of a descriptive flexfield that you make available to end users is exposed in the user interface as an individual field.

**Value Sets**

For each global and context-sensitive segment, you configure the values allowed for the segment and how the values that end users enter are validated, including interdependent validation among the segments.

**Managing Descriptive Flexfields: Points to Consider**

Configuring descriptive flexfields involves managing the available flexfields registered with your Oracle Fusion Applications database and configuring their flexfield-level properties, defining and managing descriptive flexfield contexts, and configuring global and context-sensitive segments.

Every descriptive flexfield is registered to include a context segment, which you may choose to use or not.
Segments

You can assign sequence order numbers to global segments and to context-sensitive segments in each context. Segment display is always in a fixed order. You cannot enter a number for one segment that is already in use for a different segment.

Value sets are optional for context segments. The value set that you specify for a context segment consists of a set of context codes, each of which corresponds to a context that is appropriate for the descriptive flexfield. If you do not specify a value set for a context segment, the valid values for that context segment are derived from the context codes. The definition of each context segment specifies the set of context-sensitive segments that can be presented when that context code is selected by the end user.

For reasons of data integrity, you cannot delete an existing context. Instead, you can disable the associated context value in its own value set by setting its end date to a date in the past.

You can configure the individual global segments and context-sensitive segments in a descriptive flexfield. These segment types are differentiated by their usage, but they are configured on application pages that use most of the same properties.

Usages

Descriptive flexfield usages allow for the same definition to be applied to multiple entities. Descriptive flexfield tables define the placeholder entity where the flexfield segment values are stored once you have configured the descriptive flexfield.

Parameters

Parameters are public arguments to a descriptive flexfield. Parameters provide outside values in descriptive flexfield validation. Parameters can be referenced by the logic that derives the default segment value and in table-validated VALUE set WHERE clauses.

Delimiters

A segment delimiter or separator visually separates segment values when the flexfield is displayed as a string of concatenated segments.

FAQs for Define Flexfields

Why did my flexfield changes not appear in the runtime UI?

The ADF business components or artifacts of a flexfield, which are generated into an metadata services (MDS) repository when the flexfield is deployed, are cached within a user session. You must sign out and back in again to view flexfield definition changes reflected in the runtime application user interface page.
A flexfield’s status relative to its deployment determines whether the flexfield segments as currently defined in the metadata are available to end users. The flexfield segments seen by end users in the runtime correspond to the flexfield definition that was last deployed successfully.

**What happens if a value set is security enabled?**

Value set security is a feature that enables you to secure access to value set values based on the end user’s role in the system.

As an example, suppose you have a value set of US state names. When this value set is used to validate a flexfield segment, and users can select a value for the segment, you can use value set security to restrict them to selecting only a certain state or subset of states based on their assigned roles in the system.

For example, Western-region employees may choose only California, Nevada, Oregon, and so on as valid values. They cannot select non-Western-region states. Eastern-region employees may choose only New York, New Jersey, Virginia, and so on as valid values, but cannot select non-Eastern-region states. Value set security is implemented using Oracle Fusion Applications data security.

**How can I set a default value for a flexfield segment?**

When you define or edit a flexfield segment, you specify a default value from the values provided by the value set assigned to that segment.

You can set the default value to be a parameter, which means the entity object attribute to which the parameter you choose is mapped will provide the initial default value for the segment.

You can set to be a constant, if appropriate to the data type of the value set assigned to the segment.

In addition to an initial default value, you can set a derivation value for updating the attribute’s value every time the parameter value changes. The parameter you choose identifies the entity object source attribute. Any changes in the value of the source attribute during runtime are reflected in the value of the segment.

If the display type of the segment is a check box, you can set whether the default value of the segment is checked or unchecked.

**Define Attachments**

**Attachments: Explained**

Attachments are pieces of supplementary information that users can associate with specific business objects such as expense reports or purchase orders. Attachments can be URLs, desktop files, text, or in cases where available, repository folders. For any given business object, a user may be able to only view attachments, or also create, delete, or edit attachments, depending on security. For more information on an introduction to attachments, see the Oracle Fusion Applications Developer’s Guide.
Repository

Attachments are stored in a content management repository provided by Oracle WebCenter Content Server. Users managing attachments have no real interaction with the repository unless the repository mode is enabled for attachments on specific business objects. In that case, users can share attachments among objects, update attachments by checking them out of and back into the repository, and perform other tasks. Access to attachment files is controlled by a digital signing mechanism. Depending on security, users might have direct access to the repository.

Security

Data security that applies to a specific business object also applies to attachments for that object, as determined by the attachment entity defined for the object. For example, if a user has no access to a specific expense report, then the same user cannot access attachments for the expense report. You can also use attachment categories to control access and actions on attachments, based on roles associated with the category. For more information on securing attachments, see the Oracle Fusion Applications Developer’s Guide.

Attachment Entities: Explained

An attachment entity is usually a database entity, for example a table or view, that represents a business object attachments can be associated with. Each attachment UI must be defined with a corresponding attachment entity, which not only identifies the business object to attach to, but also controls what users can do. Attachment entities are used only in the context of attachments and exist separately from the database entities that they are based on.

Edit and create attachment entities on the Manage Attachment Entities page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Attachment Entities task. Though you would generally use predefined attachment entities with attachment UIs, you might need to create new entities, for example when developing custom UIs.

Entity Names

An attachment entity name should match the name of the table or view that represents the business object to attach to. The name is also used in the repository folder that is automatically created to store attachments for the entity. The attachment entity display name should be something that users know to represent the business object.

Database Resource

The data security policies associated with the database resource defined for the attachment entity would apply to attachments for that entity. For example, based on the database resource for the expense reports attachment entity, the same policies apply to attachments for expense reports. The database resource value
must match the value in the OBJ_NAME column in the FND_OBJECTS table for the business object that the entity represents.

**Enabling Security**

Security based on the database resource associated with the attachment entity is always in effect. What you can enable or disable is security based on attachment categories. If any of the attachment categories associated with the attachment entity has data security defined, then that security applies to this entity only if enabled.

**Attachment Entities and Attachment Categories: How They Work Together**

The association between attachment entities and categories determines which categories can be used for an entity. For example, categories associated with the expense report attachment entity are available to be implemented in attachment UIs for expense reports. You can define these associations when managing either entities or categories. Any association changes in either the Manage Attachment Entities or Manage Attachment Categories page are reflected on the other page. You can access either page by starting in the Setup and Maintenance Overview page and searching for attachment tasks.

**Managing Entities**

You determine which attachment categories are relevant to a particular entity on the Manage Attachment Entities page, and each entity must have at least one category. Depending on configuration, any or all of the available categories for that entity are used. For example, you assign three categories to the expense reports attachment entity. For a particular expense report page with attachments functionality, you can customize the attachments component to specify which of the three categories are used. Based on your selection, the data security defined for each category, if any, is applied to attachments on that page if the attachment entity has category-based security enabled.

**Managing Categories**

If you create an attachment category and need to assign it to multiple attachment entities, use the Manage Attachment Categories page. The association means the same as the association on the Manage Attachment Entities page.

**Attachments Troubleshooting: Explained**

Attachments UIs for users to add and manage attachments are fully functional as is, and users usually would not encounter issues. If you customize attachments in any way, for example by creating additional attachment categories and implementing data security on them, then some issues might arise.

**Issue: Unable to View, Add, Update, or Delete Attachments**

Users encounter issues when trying to view attachments or perform actions such as adding attachments.

- Users can no longer see specific attachments that they were previously able to see.
Likewise, they can no longer update or delete attachments.

Users get an error stating that they do not have permission to add attachments.

**Resolution**

Use the Manage Attachment Entities page to ensure that attachment categories are associated to the relevant attachment entity. For example, if users can no longer see attachments for an expense report, then search for the expense report attachment entity and assign all necessary categories to it. You might need to check with your system administrator or help desk to determine the exact entity used on the page with the expenses attachments or what categories to assign.

If data security is implemented on the categories for the attachment entity, then verify that the Enable Security check box is selected in the Manage Attachment Entities page for that entity. Make sure that users have a role with the privileges shown in the following table, to view, add, update, or delete attachments with a specific attachment category.

<table>
<thead>
<tr>
<th>Action</th>
<th>Privilege</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>Read Application Attachment</td>
</tr>
<tr>
<td></td>
<td>(FND_READ_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
<tr>
<td>Add or Update</td>
<td>Update Application Attachment</td>
</tr>
<tr>
<td></td>
<td>(FND_UPDATE_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
<tr>
<td>Delete</td>
<td>Delete Application Attachment</td>
</tr>
<tr>
<td></td>
<td>(FND_DELETE_APPLICATION_ATTACHMENT_DATA)</td>
</tr>
</tbody>
</table>

For example, if users have the Read Application Attachment privilege for all categories associated with the expense report attachment entity, except the Receipts attachment category, then they can view all expense report attachments except those created with the Receipts category. Likewise, if users do not have the Update Application Attachment privilege for any attachment categories tied to the expense report attachment entity, then they cannot create any attachments at all for expense reports.

For more information on attachment category data security, see the Oracle Fusion Applications Developer's Guide.

Finally, certain attachments UI for users have predefined restrictions on categories in place. Your developers can also introduce additional filters to determine which document categories are available for a specific page. Check with your developers or help desk.

**Issue: Missing Attachment Category**

Users can see existing attachments, but the attachments no longer have an attachment category value.

**Resolution**

When the attachment was added, at least one category existed for the corresponding attachment entity, as otherwise the attachment could not have
been added. Since then, the entity was edited so that it no longer has any assigned categories, so the user cannot see the category associated with that attachment.

Use the Manage Attachment Entities page to reassign attachment categories to the relevant attachment entity. For example, if users can no longer see the Receipts attachment category for an attachment to an expense report, then search for the expense report attachment entity and assign to it the Receipts category. You might need to check with your system administrator or help desk to determine the exact entity used on the page with the expenses attachments or what additional categories to assign.

Finally, certain attachments UI for users have predefined restrictions on categories in place. Your developers can also introduce additional filters to determine which document categories are available for a specific page. Check with your developers or help desk.

FAQs for Define Attachments

What's an attachment category?

An attachment category is used to classify and secure attachments. Each attachment user interface must be defined with at least one category for users to be able to add attachments. If there are multiple categories, users can view them and select one when adding attachments. For example, attachments for an expense report can be categorized as receipts, scanned invoice images, and so on.

You can also associate roles with categories to determine user access and actions for attachments, based on the categories assigned to the attachment entity. For example, security for expense report attachments can be based in part on the categories assigned to the expense report attachment entity. You can define multiple categories per module, and add and manage custom categories for your own purposes. For more information on attachment category data security, see the Oracle Fusion Applications Developer's Guide.

Use the Manage Attachment Categories page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Attachment Categories task.

Set Activity Stream Options

Activity Stream Options: Highlights

Activity Stream is a region on the Oracle Fusion Applications Welcome dashboard and other pages in various applications. Users track the activities and transactions of other users in this region. You can set options that affect the all Activity Stream regions for all users across your site. Individual users can still override your settings through Activity Stream preferences.

Activity stream settings are described in the Oracle Fusion Middleware User’s Guide for Oracle WebCenter Portal: Spaces. When you read content from that guide, note that:

- Your setup applies to all users, not just yourself or any individual user.
• You can disregard discussions about how to access the settings, because you access the Set Activity Stream Options page by starting in the Setup and Maintenance Overview page and searching for the Set Activity Stream Options task.

Setting Activity Stream Options

• Define the types of users to display activities about in the Activity Stream region, the types of activities to track, and other settings.

See: Setting Activity Stream Preferences

Manage Menu Customizations

Managing Menu Customizations: Highlights

You can customize the Navigator menu, which is the main menu of Oracle Fusion Applications and is always available in the global area. You can also customize the home page of Oracle Fusion Applications by adding tabs to display additional dashboards. Use the Manage Menu Customizations page, which you can access by starting in the Setup and Maintenance Overview page and searching for the Manage Menu Customization task.

An overview of customizing the Navigator menu and home page is provided in the Oracle Fusion Applications Extensibility Guide.

Navigator Menu and Home Page

• Navigator menu customization involves managing items, which are nodes in the menu that take the user to the desired destination, and groups, which are categories of items.

See: Customizing the Navigator Menu

• The Oracle Fusion Applications home page displays a set of dashboards as tabs. You can create more tabs and make them display additional dashboard content.

See: Customizing the Navigator Menu.

Manage Applications Core Common Reference Objects

Common Messages: Points to Consider

Common messages, which have message names that begin with FND_CMN and message numbers between 0 and 999, are used throughout Oracle Fusion Applications. Each common message can appear in multiple places in any product family. For example, the FND_CMN_NEW_SRCH message can be used for any search to indicate that no results were found. Common messages that are of type error or warning are part of the message dictionary.

Editing Common Messages

Because a common message can be used in any application, consider the ramifications if you edit any aspect of the message, including incident and
Define Common Applications Configuration for Marketing

logging settings. Changes would be reflected in all instances where the message is used. For example, if you change the message text, make sure that the text would make sense to all users across Oracle Fusion Applications who might see it.

Creating Common Messages

You can create custom common messages for use in multiple places within a single product. Do not begin the message name with FND_CMN, but use another suitable convention. The message number should be within the range that is designated for the product.

Creating and Editing Messages: Highlights

Each message in the message dictionary has many attributes and components, including message properties, text, and tokens, that you define when creating or editing the message.

Details about these messages are described in the Oracle Fusion Applications Developer's Guide.

Message Properties

- The message type identifies the type of information that the message contains.
  
  See: Understanding Message Types

- The message name and number are identifiers for the message. There are specific message number ranges for predefined messages in each application, and you should not edit numbers assigned to predefined messages. When creating custom messages, use only message numbers within the 10,000,000 to 10,999,999 range.

  See: About Message Names

  See: About Message Numbers

- The translation notes for predefined messages might contain internal content that you can disregard.

  See: About Translation Notes

- The message category, severity, and logging enabled option are related to the incident and logging process.

  See: About Grouping Messages by Category and Severity

  See: Understanding Incidents and Diagnostic Logs with Message Dictionary

Message Text and Tokens

- The message text comprises various components, some of which are displayed only to select users. To determine which component of the message text is displayed to a particular user, set the Message Mode
profile option (FND_MESSAGE_MODE) at the user level for that user. The message component short text is visible to all users and therefore, the profile option does not apply to this component. Also, the profile option applies only to messages in the message dictionary.

See: About Message Components

• Tokens are variables that represent values to be displayed in the message text.

See: About Tokens

Profile Options and Related General Preferences: How They Work Together

Some Oracle Fusion Middleware Extensions for Applications profile options are related to general preferences in the global area.

Preferences

The related general preferences are Default Application Language, Territory, Date Format, Time Format, Currency, and Time Zone. When the user changes any of these preferences, the stored values in LDAP are updated accordingly.

Profile Options

The corresponding profile options are Default Language, Default Territory, Default Date Format, Default Time Format, Default Currency, and Default User Time Zone. No matter what you set for these profile options at any level, the preferences settings, or LDAP values, take precedence. The profile option value is used only if the LDAP value is not available. Updating the profile option value does not automatically update the value in LDAP or preferences.
Define Common CRM Configuration

Define Source Systems

Source Systems: Explained

You can set up source systems to enable users to identify the source of the data they are importing into the Oracle Fusion database. You can specify whether the source system is a Spoke system, such as a legacy system, or a Purchased system, such as data from a third party provider. You can also specify what types of entities the source system contains, for example, you can specify that a source system will contain trading community member data.

You can configure the following for a source system:

- Source system code, name, and description
- Source system type
- Enable for Items, Trading Community Members, Order Orchestration and Planning, and Assets

Source System Code, Name, and Description

You can create a source system code to uniquely identify the source system. Source system codes are used by the application to create references between source IDs and the Oracle Fusion Applications database IDs. You can create a source system name and description to provide information that is more descriptive than the source system code.

Note

You cannot update the source system code once you have created the source system.

Source System Type

You must set up a source system as either a Spoke system, such as a legacy system, or a Purchased system, such as data from Dun & Bradstreet.
Enable for Items, Trading Community Members, Order Orchestration and Planning, and Assets

You should select which types of entities will be imported from the source system into the Oracle Fusion Applications database from the following:

- Items
- Trading Community Members
- Order Orchestration and Planning
- Assets

You can select one or more of these entity types as required for the source system. It is important to enable the correct entity types because each import UI filters source systems based on their entity type. For example, if a source system is enabled for Trading Community Members, Items, and Assets, then the source system can be selected as a data source in the Trading Community Members, Items, and Asset import UIs; however, the source system won’t be able to be selected in the Orchestration and Planning import UI.

Source System Entities: Explained

Source System Entities are the entities, such as addresses and parties, which can be imported using a specified source system.

When you import data from a source system, all of the entities in the source system data will be imported. Within the Source System Entities UI, you can chose to allow multiple source references, which allows multiple records from a source system to map to a single trading community record.

FAQs for Source Systems

What happens if I allow multiple source system references?

Allowing multiple source system references means that when you import data from a source system you can merge multiple, or duplicate, source system records and create one record in the Oracle Fusion Applications database.

If you do not allow multiple source system references then an Oracle Fusion Applications database record will be created for every source system record. This means that you could potentially create duplicate records in the Oracle Fusion Applications database.

Manage Public Unique Identifier Profile Options

Public Unique Identifier: Explained

Oracle Fusion applications generate thousands of rows of data that require unique identifiers (UIDs). These automatically generated, 18-digit numbers are
not easily read or used by humans. A cogent example is an electronic airline ticket whose numbers can be 13 digits long, such as, 0162128736572. There are also confirmation or itinerary numbers that relate directly to that ticket that are only six digits long, such as QDLG95; these can be used interchangeably with the ticket number. These shorter confirmation numbers are much easier to read and process by passengers and employees alike. A separate Public Unique ID (PUID) is also generated by the document sequencing feature and is available for encoding into a more user-friendly, alphanumeric ID.

The Oracle Fusion default setup shows the automatically generated numeric private UIDs and PUIDs for data rows. To use an alphanumeric PUID instead of the delivered numeric, navigate to the Setup and Maintenance task Manage Public Unique Identifier Profile Options to enable the encoding process. There are two profile options to configure the PUID:

- **CRM Public Unique ID String Encoding** controls the characters used in the encoding of the PUID based on a radix, or base number.
- **CRM Public Unique ID Prefix** defines the optional prefix value for the PUID.

Document sequencing typically begins with the number one. You may choose to start the sequences of your PUIDs at a specific value. See the related links below to determine the document sequencing.

### CRM Public Unique ID String Encoding Profile Option

This profile option determines the set of numbers and letters to be used in encoding the PUID generated by the document sequencing feature. The PUID is delivered with the encoding set to none. To enable the encoding of the PUID, choose a radix, or base conversion algorithm. The available values are stored in the lookup type ZCA_PUID_ENCODING. These encoding methods convert the PUID into user readable IDs using alphanumeric characters rather than just numeric digits. For example, if BASE_26 is chosen, only the upper case letters of the alphabet will be used.

There are seven delivered base values. These are not extensible.

<table>
<thead>
<tr>
<th>RADIX</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE_16</td>
<td>Numbers 0-9, letters A-F</td>
</tr>
<tr>
<td>BASE_26</td>
<td>Letters A-Z, Upper Case</td>
</tr>
<tr>
<td>BASE_29</td>
<td>Numbers 2-9, letters BCDFGHJKLMNPQRSTUVWXYZ</td>
</tr>
<tr>
<td>BASE_31</td>
<td>Numbers 0-9, letters ABCDEFGHJKLMNPQRSTUVWXYZ</td>
</tr>
<tr>
<td>BASE_36</td>
<td>Numbers 0-9, letters A-Z upper case</td>
</tr>
<tr>
<td>BASE_62</td>
<td>Numbers 0-9, letters A-Z, letters a-z</td>
</tr>
<tr>
<td>NONE (default)</td>
<td>No Encoding</td>
</tr>
</tbody>
</table>

### CRM Public Unique ID Prefix Profile Option

A prefix may be defined as a site-level profile option. This profile option is delivered with no prefix defined. When defined, the inserted text is prepended...
to the PUID base encoded document sequence value. For example, if the PUID was CLE123 and the Prefix was ORA, the new PUID would be ORACLE123. Any delimiters or separation characters desired must be defined in the prefix itself. Ensure that the prefix length is short enough so that the concatenated PUID and prefix do not exceed the defined field length, usually no more than 30 characters. For example, you may want the records for the pharmaceutical divisions of your company to be denoted with PUIDs and the prefix Pharma- or Pharma1, Pharma2, and so on.

Define Party Usages

Party Usage: Explained

Party usages describe how a party is used in the context of the implementing organization. For example, a person in the business community may be a consumer or contact. Rules can be associated to a party, and these rules determine when a party usage can and cannot be used.

These are the following rules that can be defined for a party usage:

- Assignment rules
- Exclusivity rules
- Incompatibility rules
- Transition rules

Assignment rules

Assignment rules are used to define how the party usage can and cannot be assigned to parties. You can choose to allow unconditional party usage assignment, enabling the assignment to be manually created, or updated, by an administrator.

Alternatively, you can restrict the manual assignment and update of a party usage, which will mean that the party usage can only be created, or updated, by a business event. For example, creating an account for a party record can automatically assign the Customer party usage to that record.

You can also specify whether the party usage assignment can also be created or updated by the assignment of a party relationship. For example, the party relationship Contact Of can assign a party usage of Organization Contact.

Exclusivity rules

Exclusivity rules enable you to restrict party usage assignment, so that between a specified date range the party usage can be the only usage allowed to be assigned to a party. For example, you can set up an exclusivity rule that between January 1 2011 and February 1 2011 parties that have the Manufacturer party usage cannot have any other party usage assigned to them.
Incompatibility rules

You can specify which party usages cannot be assigned concurrently to a party between a defined date range. For example, you can specify that you cannot assign a Sales Account usage to a party with a Sales Prospect usage, during January 1 2011 and December 31 2030.

Transition rules

You are able to define which party usages can transition to the party usage you are creating or editing. Once a party has transitioned to the current party usage, the previous party usage is set with an end date. For example, when a party with the Prospective Partner party usage is assigned the Partner party usage, the Prospective Partner usage is set with an end date.

Define Names

Additional Name Types: Explained

Define additional name types to capture alternative names for parties.

For example, create an additional name type NICK_NAME to capture the nick names of parties of type Person.

While creating an additional name type, specify the party type to which it applies. From then on, the additional name type will be available as a naming option for all parties of that party type within the deploying company. You can use additional name types to capture language-specific names as well.

Define Identifiers

Identifier Types: Explained

Create additional identifier types to provide extensions to party attributes. For example, you can create an additional identifier type to record a person’s passport number.

You can choose which party types can use the additional identifier type. These party types can be Person or Organization, or both. You can also specify whether the value of an identifier type must be unique. For example, the passport number listed under each person’s profile must be unique.

Additional identifier types do not automatically appear in the user interface. If you want to use identifier types in the application you will need to call the Trading Community Member Name and Identifier Setup web service.
Define Relationships

Relationships Types: Explained

A relationship type categorizes relationship phrases and roles that determine the nature and purpose of a relationship. A relationship type defines the aspects of a relationship such as the roles of the subject and object, business rules, and phrases that describe the relationship. A relationship, uses the relationship type, to define how a party is related to another party.

The components of a relationship type are:

- Relationship phrase pair and role pair
- Relationship characteristics

**Relationship phrase pair and role pair**

A relationship type contains a relationship phrase pair and a role pair. Relationship phrase pair and role pair define the mutual roles that the two parties play in a relationship. For example, for relationship type Employment the phrase pair contains Employee of and Employer of; and, the role pair contains Employee and Employer.

The role pair describes the roles of the entities immaterial of the direction of the relationship. For example, in an Employment relationship Bill has the role of an employee and Oracle Corporation has the role of an employer.

The phrase pair describes the roles of the entities in the relationship. For example, in an Employment relationship if Bill is the subject and Oracle is the object, then the phrase would be Employee of. Similarly, if Oracle is the subject and Bill is the object, then the phrase would be Employer of.

**Relationship characteristics**

Relationship types include characteristics or rules that define how the relationship type can be used.

While defining a relationship type, you can define if the relationship can be:

- Circular
- Related to self

Circular relationships have two parties related in a circle of relationships. For example, you can create a Competitor relationship type to link two organization parties. In this scenario, ABC Corp is a competitor to XYZ Corp, and XYZ Corp is also a competitor to ABC Corp.

You can create a self-relating relationship type, where the subject and the object of the relationship are the same. For example, you can create a Subsidiary relationship type, where a subsidiary organization ABC is linked to a parent
Define Common CRM Configuration

organization XYZ. The parent organization XYZ, in turn, could be linked to itself as a subsidiary using the same relationship type.

Creating Relationship Types: Worked Example

This example demonstrates how to create a relationship type, and add relationship roles and phrases to the relationship type.

The following table summarizes key decisions while relationship types.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the subject and object party types for the relationship?</td>
<td>The subject type and object type is organization.</td>
</tr>
<tr>
<td>Is the relationship circular?</td>
<td>Yes</td>
</tr>
<tr>
<td>Can the subject related to self in this relationship?</td>
<td>No</td>
</tr>
</tbody>
</table>

You must search for the relationship type to make sure it does not already exist, before you create a relationship type.

Searching for a relationship type

1. From the Setup and Maintenance work area, search for the Manage Relationship Types task and click Go to Task.

2. On the Manage Relationship Types page, in the Search region, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Operator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Type</td>
<td>Equals</td>
<td>Vendor</td>
</tr>
<tr>
<td>Subject Type</td>
<td>Equals</td>
<td>Organization</td>
</tr>
<tr>
<td>Object Type</td>
<td>Equals</td>
<td>Organization</td>
</tr>
</tbody>
</table>

3. Click Search.

Review the search results. Ensure that there is no existing Relationship Type for the criteria.

Creating a relationship type

1. In the Search Results region, click the Create icon to open the Create Relationship Type page.

2. On the Create Relationship Type page, in the Overview region, enter Vendor in the Relationship Type field.

3. Select the Circular check box.

4. In the Relationship Roles and Phrases region, click the Create icon to open the Create Relationship Role and Phrase Pair dialog box. When you create
a relationship with a relationship phrase or role, the reverse direction is automatically created with the other phrase or role in the pair.

5. Complete the fields, in the Create Relationship Role and Phrase Pair dialog box, as shown in this table.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Type</td>
<td>Organization</td>
</tr>
<tr>
<td>Subject Phrase</td>
<td>Vendor of</td>
</tr>
<tr>
<td>Subject Role Singular</td>
<td>Vendor</td>
</tr>
<tr>
<td>Subject Role Plural</td>
<td>Vendors</td>
</tr>
<tr>
<td>Object Type</td>
<td>Organization</td>
</tr>
<tr>
<td>Object Phrase</td>
<td>Vendee of</td>
</tr>
<tr>
<td>Object Role Singular</td>
<td>Vendee</td>
</tr>
<tr>
<td>Object Role Plural</td>
<td>Vendees</td>
</tr>
</tbody>
</table>

6. Click OK.

7. In the Create Relationship page, click Save and Close.

### Creating Relationship Groups: Worked Example

This example demonstrates how to create a relationship group. Relationship groups are used to categorize relationship roles and phrases, based on the user interfaces they appear in.

In this scenario, you will create group for relationship types that link an organization to an external organization.

#### Creating a relationship group

1. From the Setup and Maintenance work area, search for the Manage Relationship Groups task and click Go to Task.

2. On the Manage Relationship Groups page, in the Search Results region, click the Create icon to open the Create Relationship Group page.

3. Complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Related External Organizations</td>
</tr>
<tr>
<td>Code</td>
<td>REL_EXT_ORGS</td>
</tr>
<tr>
<td>Description</td>
<td>Indicates a group of relationships that link the organization to external entities.</td>
</tr>
</tbody>
</table>

4. In the Relationship Roles and Phrases region, click on the Add Row icon to add a relationship role and phrase pair.
5. For each relationship role and phrase pair, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Subject Type</th>
<th>Subject Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Supplier</td>
</tr>
<tr>
<td>Organization</td>
<td>Vendor</td>
</tr>
<tr>
<td>Organization</td>
<td>Competitor</td>
</tr>
</tbody>
</table>

6. Click **Save and Close**.

**Relationship Groups: Explained**

Relationship groups categorize relationship phrase and role pairs for functional purpose. For example, you can assign the relationship phrase Subsidiary Of to a group, and assign the phrase Headquarters Of to a different group.

**Uses of Relationship Groups**

Relationship groups are used to determine which relationship roles and phrases are displayed in specific user interfaces of the Oracle applications. A relationship group can correspond to one or more Oracle Applications user interfaces. For example, you can configure an Oracle application to display only the relationship types that pertain to the Party Contacts information.

**Creating Relationship Groups: Worked Example**

This example demonstrates how to create a relationship group. Relationship groups are used to categorize relationship roles and phrases, based on the user interfaces they appear in.

In this scenario, you will create group for relationship types that link an organization to an external organization.

**Creating a relationship group**

1. From the Setup and Maintenance work area, search for the Manage Relationship Groups task and click **Go to Task**.

2. On the Manage Relationship Groups page, in the Search Results region, click the **Create** icon to open the Create Relationship Group page.

3. Complete the fields, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Related External Organizations</td>
</tr>
<tr>
<td>Code</td>
<td>REL_EXT_ORGS</td>
</tr>
</tbody>
</table>
4. In the Relationship Roles and Phrases region, click on the **Add Row** icon to add a relationship role and phrase pair.

5. For each relationship role and phrase pair, complete the fields, as shown in this table.

<table>
<thead>
<tr>
<th>Subject Type</th>
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<tbody>
<tr>
<td>Organization</td>
<td>Supplier</td>
</tr>
<tr>
<td>Organization</td>
<td>Vendor</td>
</tr>
<tr>
<td>Organization</td>
<td>Competitor</td>
</tr>
</tbody>
</table>

6. Click **Save and Close**.

**Define Classifications**

**Classifications: Explained**

The classifications model provides you with a flexible tool to categorize entities such as parties, projects, tasks, and orders. Classifications enable you to classify an entity, such as a party, in a way that the rest of the world sees it, in addition to the way that it is referenced within your organization.

The major components of classifications are:

- Classification categories
- Classification rules
- Classification codes
- Classification code hierarchy
- Entity assignment

**Classification Categories**

Classification categories give you the ability to classify entities under a broad subject area. For example, you can classify organizations based on the industries they operate in. Classification categories are a logical grouping of one or more classification codes and allow classification code rules to be defined.

**Classification Rules**

Classification categories can have rules that define how classifications can be assigned to entities. When you set up classification categories specific rules can
Classification Codes

The individual values within the classification category are called classification codes. For example, in the 1987 SIC classification category there is a classification code of software that can be assigned to a party in the software industry. You can organize classification codes into a hierarchical tree, with a parent classification code at the top of the tree and child classification codes branching off from the parent code or other classification codes.

Classification Code Hierarchy

You can create hierarchies of classification codes within a classification category. For example, you can set up a classification category of IT containing the classification codes hardware, keyboards, and printers. You can then set up the classification code of hardware as the parent code at the top of the tree, with the classification codes of keyboards and printers as child codes underneath. You can create further child classification codes, such as dot matrix, ink-jet, and laser below the printer classification code.

Entity Assignment

Define which entities can be assigned to a classification category by entering the entity table name and creating a Where clause in SQL. Only entities that satisfy the Where clause are assigned the classification category. For example, a classification category called industries with the Where clause of where "party_type = ORGANIZATION" would have the result that only organizations can be classified with the industries classification category.

FAQs for Define Classifications

What happens if I allow parent code assignment?

You can assign the parent classification code to an object, as well as the child classification codes. The parent classification code is the code at the top of the classification code tree.

If you don’t allow parent classification codes to be assigned to an object, then you can assign only child classification codes, or codes that are below another classification code in the tree, to an object.

What happens if I allow multiple class code assignment?

You can assign more than one classification code from this classification category to an object.

If you don’t allow multiple classification codes to be assigned to an object, then you can assign only one classification code from this classification category to an object.
Can I update an existing entity assignment rule?

No. You can delete the entity assignment rule and create a new one.

Define Contact Points

How Setup Telephone Numbering Plans Fits in with the Other Setup Tasks

Telephone Numbering Plans allow you to define the telephone number format for a country. You can have multiple formats for a country, depending on the requirements.

How Telephone Number Plans Setup Fits in with other Setup Tasks

Phone number format, along with the other country-specific location information such as address and name formats, defines geographic-specific data formats. The Manage Telephone Numbering Plans page allows you to create and manage telephone number plans. Oracle Fusion uses the telephone number formats to display phone number in the appropriate style, and to validate phone numbers. You can define country-specific components of phone numbers, display format styles, and area codes. Oracle Fusion uses the phone formats to correctly parse phone numbers and determine the correct format style for displaying phone numbers in user interfaces.

Oracle Fusion validates phone numbers for a country, based on the format defined for the country. The phone numbers are also validated against a common set of rules that apply to all countries. You can also enter time zone information for a country, at the country code and area code level. The time zone information entered with phone number is validated against the time information defined for the country.

Telephone Numbering Plan: Explained

A telephone numbering plan defines the expected number and pattern of digits for a country phone number. It defines the country-specific components of phone numbers, display format styles, and codes. This includes country codes, international prefixes, area codes within a country, and mobile prefixes. You can specify country-specific mobile prefixes to determine if a phone number is mobile or not.

You can also create multiple telephone number display formats for a country. For example, for the US phone format, you define the phone country code as 01, fixed area code as three numbers in length, and subscriber number as seven digits in length. You can then create a telephone format for domestic display, such as (999) 999-9999. You can also create a telephone format for international display, such as 999-999-9999.
Updating Telephone Numbering Plans: Explained

You can update telephone number plans from the Edit Telephone Number Plan page. You cannot edit the country information if the country has area codes, mobile prefixes, or phone formats defined.

In the Edit Telephone Number Plan page, you can:

- Edit Scheme
- Edit Regional Information

Editing Scheme

You can edit the country-specific phone information in the Scheme section. You can edit the following fields in the section:

- Trunk Prefix: The code to dial before long distance numbers within the country, for example 1 for the US
- International Prefix: The code to dial before international numbers when calling from the country that you are setting up, for example 011 for the US
- Subscriber Number Length: The length of the subscriber number for countries where the subscriber length is fixed.
- Area Code Length: The length of the area code for countries where the area code length is fixed.

Editing Regional Information

You can edit the regional phone number information for the country in the Regional Information section.

The Regional Information section contains the following tabs:

- Area Codes: Allows you to define area codes that you want to use for the country.
- Mobile Prefixes: Allows you to define mobile prefixes that you want to use for this country. Mobile prefixes contain the area code and possible prefixes of the subscriber number. For example, the mobile prefix of 650506 consists of the 650 area code and the 506 subscriber number prefix.
- Telephone Number Formats: Allows you to define multiple telephone number display formats for a country.

FAQs for Define Contact Points

Why can’t I update the country information section in the Edit Telephone Numbering page?

You cannot update the country information for a country if the regional information such as area codes, mobile prefixes, and phone formats are defined.
for the country. For example, if area codes, mobile prefixes, and phone formats are defined for the United States, then you cannot edit the country information.

Define Data Formats

Data Formats and Setup Activities: How They Fit Together

Data Formats help you define address formats and name formats within your organization, and assign them to specific geographies. These data formats can be used to capture and validate party name and address information. In order to use geography-based validations for addresses, you must set up geography data in addition to the address formats.

Managing Data Styles

You can define new styles for name and address, which would categorize a name and address style format. A Data Style, such as Mailing Address or Concatenated Name, categorizes name and address style formats. Oracle Fusion uses Data Styles to identify a particular manner or situation for which an entity, such as name or address, is formatted. The application can be customized so that, for example, only certain name and address styles are displayed in the user interface.

How Data Formats ensure Data Quality

Use Data Formats to ensure party address and party name data quality. The format is used to present the address elements in the country specific formatting, and help users during address entry. This also provides the flexibility to specify the scope of address validation. Address formats are linked to the geographic data in order to provide address verification, at the data-import level. For example, when creating or editing an address for a party, selecting a country displays the address format for that country.

The use of Name formats ensures that name components are stored in a decomposed manner. This allows you to construct name representations from components in a variety of different styles. Name formats also allow you to store phonetic names that are required for certain geographies.

Data Formats simplify the storage of party address and party name, by storing them as components. Once you setup the address and name format for a geography, you can use the format to validate address and name data.

Setup Formats: Explained

Data Formats determine how names and addresses are displayed in the Oracle Fusion application. Name and address formats vary depending on usage, country, and language. You can create name formats and address formats, customize them to display the address and name components, and assign them
Define Common CRM Configuration

3-15

to specific locales. This allows you to create data formats for various countries, languages, and usages. Additionally, you can create variations of the formats, with each variation having its own layout. For example, an address format may have variations of a general address, rural address, and military address.

There are two types of data formats.

- Address format
- Name format

**Address Formats**

Address formats specify the layout of an address, including the address components and their position in the layout. For example, an address format for US postal address can include address, city, state, and zip code. Similarly, the address format for UK would include address, city, county, and post code.

**Name Formats**

Name formats, such as Informal or Mailing, allow you to specify how a name is displayed in the application, based on the usage, language, and country. A name format includes name elements, their position, and formatting. You can create a name style format for either an organization name or a person name.

**Creating an Address Style Format: Worked Example**

This example shows how to create an address style format for a specified address style.

Specify the address style format name and address style, create the format variation layout, and assign a locale.

**Creating the address style format name and specifying the address style**

Create the address style format code and name, choose which address style you want to use to define this address style format, and specify if you want this address style format to be the default format for the selected address style.

1. On the Manage Address Formats page, click **Actions** and then click **Create**.
2. On the Create Address Style Format page, complete the fields in the Overview section, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>CA_POSTAL_ADDR</td>
</tr>
<tr>
<td>Name</td>
<td>Canadian Postal Address Format</td>
</tr>
<tr>
<td>Address Style</td>
<td>Postal Address</td>
</tr>
<tr>
<td>Default</td>
<td>No</td>
</tr>
</tbody>
</table>
3. Click **Save**.

**Creating the format variation layout**

Specify the address lines you want in the address and the position of the lines in the address layout. You also want to specify if the address lines will be mandatory, whether the address lines will render in uppercase, and whether there will be blank lines after the address line.

1. In the Format section on the Create Address Style Format page, click on the **Format Layout** tab.
2. In the Format Variation section, click **Actions** and then click **New**.
3. Enter a variation number in the **Variation** field.
4. In the Format Variation Layout section, click **Actions** and then click **New**.
5. Complete the fields as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>1</td>
</tr>
<tr>
<td>Position</td>
<td>1</td>
</tr>
<tr>
<td>Prompt</td>
<td>Address line 1</td>
</tr>
<tr>
<td>Address Element</td>
<td>Address line 1</td>
</tr>
<tr>
<td>Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Uppercase</td>
<td>No</td>
</tr>
</tbody>
</table>

6. Click **Actions**, then click **New** to create another address line.
7. Complete the fields as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>2</td>
</tr>
<tr>
<td>Position</td>
<td>2</td>
</tr>
<tr>
<td>Prompt</td>
<td>City</td>
</tr>
<tr>
<td>Address Element</td>
<td>City</td>
</tr>
<tr>
<td>Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Uppercase</td>
<td>Yes</td>
</tr>
</tbody>
</table>

8. Click **Expand** on the City address line, then enter the value **1** in **Blank Lines Before**.
9. Continue to create as many address lines as you require. Click **Expand** if you want to enter blank lines and delimiters before, or after, an address line. In this section you can also create an Attribute Transform Function to change a data value into a different value.

**Assigning a locale**

Specify the relevant countries for this address style format.
1. In the Format section on the Create Address Style Format page, click on the **Locale Assignment** tab.

2. Click **Actions** and then click **New**.

3. Choose a country for the address style format.

4. Continue to add the countries that will use this address style format.

5. Click **Save and Close**.

---

**Creating a Name Style Format: Worked Example**

This example shows how to create a name style format for a specified name style.

Specify the name of the name style format and name style, create the format variation layout, and assign a locale.

**Creating the name of the name style format and specifying the name style**

You create the name style format code and name, and choose which name style you want to use to define this name style format. You also specify if you want this name style format to be the default format for the selected name style.

1. On the Manage Name Formats page, click **Actions** and then click **Create**.

2. On the Create Name Style Format page, complete the fields in the **Overview** section, as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>CONCAT_NAME_US</td>
</tr>
<tr>
<td>Name</td>
<td>United States Concatenated Name Format</td>
</tr>
<tr>
<td>Name Style</td>
<td>Concatenated Name</td>
</tr>
<tr>
<td>Default</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Click **Save**.

**Creating the format variation layout**

Specify the name parts you want in the name, and the position of the name parts in the name layout. You also want to specify if the name parts will be mandatory, define whether the name parts will render in uppercase, and whether there will be blank lines after the name part.

1. In the Format section on the Create Name Style Format page, click **Format Layout** tab.

2. In the Format Variation section, click **Actions** and then click **Add Row**.

3. Enter a variation number in the **Variation** field.

4. In the Format Variation Layout section, click **Actions** and then click **Create**.
5. Complete the fields as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>1</td>
</tr>
<tr>
<td>Position</td>
<td>1</td>
</tr>
<tr>
<td>Prompt</td>
<td>Person First Name</td>
</tr>
<tr>
<td>Name Element</td>
<td>First Name</td>
</tr>
<tr>
<td>Required</td>
<td>No</td>
</tr>
<tr>
<td>Uppercase</td>
<td>No</td>
</tr>
</tbody>
</table>

6. Click **Actions**, then click **Create** to create another address line.

7. Complete the fields as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>2</td>
</tr>
<tr>
<td>Position</td>
<td>2</td>
</tr>
<tr>
<td>Prompt</td>
<td>Person Last Name</td>
</tr>
<tr>
<td>Name Element</td>
<td>Last Name</td>
</tr>
<tr>
<td>Required</td>
<td>No</td>
</tr>
<tr>
<td>Uppercase</td>
<td>No</td>
</tr>
</tbody>
</table>

8. Continue to create as many name parts as you require. Click **Expand** if you want to enter blank lines and delimiters before, or after, a name part. In this section you can also create an Attribute Transform Function to change a data value into a different value.

**Assigning a locale**

Specify the relevant countries for this name style format.

1. In the Format section on the Create Name Style Format page, click on the **Locale Assignment** tab.
2. Click **Actions** and then click **Create**.
3. Choose United States in the **Country** field.
4. Choose American English in the **Language** field.
5. Click **Save and Close**.

**FAQs for Define Data Formats**

**How can I create an address style format layout?**

Click **New** in the Manage Address Formats page and add address lines in the Format Variation Layout section. If you require more than one address style
format layout, then you can create a format variation and add a different address format layout.

**How can I create a variation of an Address Style Format?**

You can create different variations of an address style format, with each variation having its own layout. For example, a country’s postal address may have variations such as general postal address, rural address, and military address. When you create an address style format, the layout defined for the format is assigned as the default variation. Click Add in the Format Variation region of the Edit Address Style Format page, for the address style format, to add a variation of the Address style. For each address style format variation, you can enter a variation rank to define the priority of the variation.

**How can I create a name style format layout?**

Click New in the Manage Name Formats page and add line entries for each part of the full name in the Format Variation Layout section, within the Create Name Style Format page. If you require more than one name style format layout, then you can create a format variation and add a different name format layout.

**How can I create another variation of a Name Style Format?**

You can create different variations of a name style format, with each variation having its own layout. For example, different regions in a country may have different name style formats. Click Add in the Format Variation region in the Edit Name Style Format page, for the name style format, to add a variation of the name style. For each name style format variation, you can enter a variation rank to define the priority of the variation.

**Define Resource Information**

**Defining Notes: Points to Consider**

A note is a record attached to a business object that is used to capture nonstandard information received while conducting business. When setting up notes for your application, you should consider the following points:

- **Note Types**
- **Note Type Mappings**

**Note Types**

Note types are assigned to notes at creation to categorize them for future reference. During setup you can add new note types, and you can restrict them by business object type through the process of note type mapping.

**Note Type Mappings**

After note types are added, you must map them to the business objects applicable to your product area. Select a business object other than Default Note
Types. You will see the note types only applicable to that object. If the list is empty, note type mapping doesn't exist for that object, and default note types will be used. Select Default Note Types to view the default note types in the system. Modifying default note types will affect all business objects without a note type mapping. For example, you have decided to add a new note type of Analysis for your product area of Sales-Opportunity Management. Use the note type mapping functionality to map Analysis to the Opportunity business object. This will result in the Analysis note type being an available option when you are creating or editing a note for an opportunity. When deciding which note types to map to the business objects in your area, consider the same issues you considered when deciding to add new note types. Decide how you would like users to be able to search for, filter, and report on those notes.

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**Note**

Extensibility features are available on the Note object. For more information refer to the article Extending CRM Applications: how it works.

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**Resource Directory: Explained**

The Resource Directory offers detailed information about all the resources within the deploying organization. The Resource Directory also enables you to find and communicate with other resources, and to network and collaborate with them.

Use the Resource Directory to perform the following tasks:

- View and modify your profile
- View your organization and team membership information
- View information related to other organizations and teams
- View the profiles of other resources
- Communicate with other resources

**Setting up Resources: Explained**

Setting up resources involves identifying a person as a resource and specifying optional profile details as needed. This is an important step because until you identify users as resources, you cannot assign work objects to them.

While identifying a resource is the only mandatory task in resource setup, you may also need to perform some of the following tasks while setting up resources.

- Specify the end date for a resource's engagement with the deploying company
- Assign roles to resources
- Assign resources to organizations
- Assign resources to teams
Identifying Resources: Explained

The Identify Resources step in the Manage Resources task is only needed to identify an existing employee, contingent worker, or partner member as a resource. Usually they are identified as resource in the Manage Users task, or in the Partner Center. If you have created partner members or internal users in the system without making them resources, you can identify them as resources in the Identify Resources step. Until you identify employees, contingent workers, and partner members as resources, you cannot assign them work objects.

Note

Resources need not necessarily belong to an organization, nor do they need to have specific roles assigned. However, it is best to always associate resources with an organization either as managers or as members. Similarly resources should also have at least one role as part of their organization membership. When you identify users as resources, all you indicate is that these new resources can now be assigned work within the deploying company.

Resource Skills and Resource Assignment: Explained

Resource skills help you assign resources to organizations and teams which can best utilize a specific set of skills. For example, if a resource is skilled in a specific technology, product, or business domain, you can assign the resource to teams and organizations that need resources possessing such skills. Use skill-based resource assignment to get the best out of the resources available to the deploying company.

Resources: How They Work within a Team

You can include resources from different resource organizations to work together on a work object as members of the same resource team. You can also include entire resource organizations into a resource team. Generally what resources can do is controlled by their resource organization membership and their hierarchy. Resource teams provide a flexible way of bringing resources together without any organizational or hierarchy-based restrictions.

Assigning Resources to Teams

You can assign identified resources to teams and assign them roles within the team. Each resource can have a specific role within a team. Thus, a resource may play different roles in different teams.

FAQs for Manage Resources

What happens if I add a resource to the organization?

When you add a resource to an organization, the resource becomes a member of the organization. This positions the resource within the organization hierarchy.
Organization membership information is part of the publicly visible details of a resource profile. This means that a resource’s organization membership and reporting structure are visible to all active resources within the organization.

If you assign the entire organization to a resource team, all member resources are automatically assigned to the team. This information also becomes part of the resource’s publicly visible profile.

**What happens if I delete a resource?**

When you delete a resource, the resource is deleted from the Resource Directory and from the organizations and teams with which the resource was associated. It is always best, though, to check a resource’s usage and remove the resource from all teams and organizations before deletion from the resource directory.

**What’s the difference between a partner resource and an internal resource?**

The main difference between an internal resource and a partner resource is the company for whom each works. While the internal resource is an employee or contingent worker of the deploying company, the partner resource is an employee of the partner company.

The methodology used to create resources of these two types is also different. While the partner administrator or channel manager creates a new partner resource through the Oracle Fusion Partner Management applications, internal resources are added using the Manage Users, Hire Employee, or Import Person and Organization task.

Another difference between partner resources and internal resources is that partner resources cannot access the Resource Directory while internal resources can.

**Can I create an employee or contingent worker resource?**

No. You can only identify existing employees and contingent workers as resources in the Manage Resources task, but you cannot create a new employee or contingent worker in the Manage Resources task.

You can create an employee or contingent worker using Manage Users task, Hire Employee task, or Import Person and Organization task.

**What happens when a resource quits?**

When resources quit, their status is set to inactive. This automatically removes these resources from all organizations and teams in the deploying company, and no new work objects can be assigned to them.

**How can I identify a resource?**

To identify specific employees, contingent workers, or partner contacts as resources, you need to search for them and enable them as resources. Once these
new resources have been identified, you can assign them to organizations and teams as needed.

Oracle Fusion CRM or MDM Application Administrators can use the Manage Users setup task to create new employees or contingent worker users. New employees or contingent workers can also be identified as resources similarly.

Define Resource Organization Information

Resource Organizations and Organization Usage: Explained

You can assign organization usage information to resource organizations to classify them based on how they can be used. For instance, resource organizations engaged in sales activities can be assigned the Sales Organization usage. This enables you to sort organizations based on their usage, simplifying your task of working with them.

Primary Resource Organization by Usage Explained

A resource can belong to multiple organizations, and can be assigned different resource roles for each organization. However, a resource can be assigned to one resource organization that becomes the primary organization for the resource as far as a specific usage is concerned.

A resource organization can be said to be a primary resource organization by usage for a resource if the following criteria are met.

- The resource must be a member of the concerned organization.
- The resource organization must be classified as an organization with the specific usage.

For example, a resource organization can be listed as a primary resource organization for marketing for a particular resource if the resource organization is classified as a marketing organization by usage, and has the concerned resource as a member.

Resource Organization Hierarchy Versioning: Explained

As organizations evolve, you may need to make changes to the existing organization hierarchy. Create organization hierarchies to capture these changes without impacting active hierarchies.

Depending on the urgency and nature of the changes within the deploying company, organization hierarchy changes can either be immediate or planned.
Implementing Immediate Resource Organization Hierarchy Changes

In case of immediate changes in the organization hierarchy, either make changes directly to the hierarchy or create a new version of the existing hierarchy and set it to become active when the new organization structure needs takes effect.

**Note**

Changes made to existing hierarchies are saved automatically and updated immediately.

Implementing Planned Resource Organization Hierarchy Changes

Create a new version of the active hierarchy and specify the date on which the new version needs to become active. Once the new version is saved, you can make and save the changes needed. Ensure that you have made all the changes needed to the new version before the date on which the new version needs to become active.

Organization Memberships and Role Assignments: Explained

When you assign a resource to an organization, you should also specify the role the resource needs to play in the organization. This ensures clarity on the kind of tasks that can be assigned to a resource, apart from defining where the resource is situated within the organization’s hierarchy.

**Note**

There can be only one manager in an organization. However, a resource can be a member of multiple organizations if needed.

Create an Organization with Sales Usage: Worked Example

This example demonstrates how to create a resource organization with sales usage.

you have two choices while creating resource organizations with sales usage:

- Create an organization from an existing department
- Create a new organization

Accessing the Managing Sales and Marketing Organizations Screen

These tasks can be accomplished using the Manage Sales and Marketing Organizations screen in the Setup and Maintenance section. To navigate to this screen, perform the following tasks.

1. Click the Navigator link at the top-left section of the Oracle Fusion screen.
2. Click the Setup and Maintenance link in the Navigator. This displays the Setup and Maintenance screen.
3. If the Manage Sales and Marketing Organization task is listed in the Assigned Implementation tasks, click the Go To Task button against it to access the Manage Sales and Marketing Organizations screen. You can also choose to search for the task in the All Tasks tab.

1. **Creating an Organization from an Existing Department**

You need to create an organization with sales usage from an existing department if the concerned department needs to be reused as a sales organization.

1. You can either search for the organization whose usage you wish to modify or click the Create button, select the Create from Existing Department option and specify the name of the organization in the Create Organization screen.

2. Specify the Business Unit to which the organization needs to belong and add Sales Organization under the Organization Usages section of the screen.

**Creating a New Organization with Sales Usage**

1. Select the Create New Organization option in the Create Organization screen and click Next.

2. Specify the name and business unit of the new organization and select Sales Organization as its usage.

3. Click Finish to save the new organization with sales usage.

**Adding a Sales Organization to a Sales Organization Hierarchy: Worked Example**

This example describes how you can add a sales organization to a sales organization hierarchy.

As new sales organizations are created within your company, you need to add these organizations to your company's sales organization hierarchy. To do so, perform the tasks detailed below.

**Decide whether to Create a New Version**

1. Navigate to the View Organization Hierarchies screen in the Resource Manager.

2. Search for and display the sales organization hierarchy you want to edit.

3. Click the Actions drop-down button. If the new organization needs to be added to the sales organization hierarchy with immediate effect, select the Edit this Hierarchy Version option. If the new organization needs to be displayed in the sales organization hierarchy only after a specific date, select the Create Hierarchy Version option. If you choose the latter option, you need to specify the date from which the new sales organization hierarchy version needs to be active.
Add a New Organization to the Sales Organization Hierarchy

1. In the Edit Organization Hierarchy Version page, select the node in the sales organization hierarchy where you need to add the new sales organization and click the Add button.

2. Search and select the new sales organization in the Add Tree Node popup screen. This adds the new organization to the sales organization hierarchy.

3. Click on the new organization in the hierarchy, drag it to the node where it needs to be placed, and release. The organization is now moved to the location you specified within the selected sales organization hierarchy.

4. Click Save and Close to save the changes made to the sales organization hierarchy version and exit the screen.

Assigning a Resource to an Organization: Example

Once you have identified a resource, you can assign the resource to organizations within the deploying company. This example explains how you can assign resources to organizations.

Scenario

You need to assign a resource to an organization. It is important to state here that a resource can belong to multiple organizations at the same time. This means that even if chosen resources already belong to organizations, you can assign them to other organizations as needed.

To assign a resource to an organization, perform the following tasks.


2. Display the concerned resource’s profile by clicking on the resource’s name in the search results.

3. Click the Organizations tab in the Resource Profile Details screen. This displays the list of organizations to which the resource belongs.

4. Click the Create button to display the Create Organization Membership popup screen. Use this screen to search and assign organizations to the concerned resource’s profile.

5. Click the Organization field and select the organization you need from the drop-down list displayed. You can also enter part of the name of the organization you need and search for it. You can also search for organizations using a range of search options available in the search screen. Click the OK button to add the organization you need to the Create Organization Membership screen.

6. Click the Add Row button in the Create Organization Membership screen. This adds a row to the screen, enabling you to specify the role the resource needs to play in the organization.

7. Click the Role field and, from the drop-down list displayed, select the role the resource needs to play in the organization. Depending on the
role settings created for the selected role, the role type is automatically indicated by a tick mark under the appropriate column.

8. The **From Date** field is automatically set to the current date. You can change this date to reflect the actual assignment date as required.

9. The **To Date** is empty by default. This means that the resource is assigned to the organization you chose infinitely. You can set the date to the actual end date by entering the required value in the mm/dd/yy format.

10. Click the **OK** button to save your changes. This assigns the resource to the organization you chose. You can add the resource to as many other organizations as needed.

You can also assign resources to organizations by searching for organizations and adding members to the concerned organization. To assign resources to organizations by searching for organizations, perform the following operations.

1. Click the **Search** field and, from the drop-down list displayed, select **Organizations**.

2. Search for the organization you need and click on the name of the required organization from the search results. This displays the **Organization** screen, where all the details of the selected organization are displayed.

3. Click the **Members** tab to edit the list of members assigned to the organization.

4. Click the **Create** button to assign a new resource to the organization. This displays the **Add Resource Member** popup screen.

5. Search for the resource by entering the resource's name in the **Resource** field. From the search results displayed, select the resource you wish to assign to the organization and click **OK**. This displays the **Add Resource Member** popup screen with the resource's name added.

6. Click the **Add Row button to add a role to the newly-added resource.**

7. Click the **Role** field and, from the drop-down list displayed, select the role the resource needs to play in the organization. Depending on the role settings created for the selected role, the role type is automatically indicated by a tick mark under the appropriate column.

8. The **From Date** field is automatically set to the current date. You can change this date to reflect the actual assignment date as required.

9. The **To Date** is empty by default. This means that the resource is assigned to the organization you chose infinitely. You can set the date to the actual end date by entering the required value in the mm/dd/yy format.

10. Click the **OK** button to save your changes. This assigns the resource to the organization you chose. You can add as many resources to the organization similarly.

**Note**

1. The date from which a resource is a member of an organization must be on or after the date on which the resource was hired.

2. If a resource was previously a member of the selected resource organization with an end date later than the current date, and if the
resource was removed from the organization before the end date, you cannot reassign the resource to the same organization.

---

**Scenario**

**FAQs for Define Resource Organization Information**

**Can I create a new organization?**

Yes. You can create new organizations using the Manage Sales and Marketing Organizations option in the Functional Setup Manager or the Oracle Fusion Partner Management user interface. You can also create new resource organizations from the User Management interface. You can also use the interface to manage user accounts and roles, and to create employee and partner-member users.

**How can I delete a resource from an organization?**

To delete a resource from an organization, you need to delete the concerned resource's membership from the organization.

To manage the membership of an organization, navigate to the Manage Resource Organization and select the organization concerned. Once the organization's membership details are listed, you can add, delete or edit them as required.

**What happens if I delete a resource from an organization?**

When you delete a resource from an organization, you effectively delete the concerned resource's membership with the organization. This also removes the resource from the organization hierarchy.

**What's a resource organization hierarchy?**

A resource organization displays the relationships between the resource organizations of the deploying company. The resource organization hierarchy is visible to all resources within the company.

**Can I create a new organization hierarchy?**

No. All organizations within your deploying company are part of a large overarching global hierarchy. Therefore, new organization hierarchies cannot be created. You can, however, move existing organizations or attach new organizations to the existing hierarchy and create a new version of the hierarchy. Once you have created a new version, specify the date from which the new
version needs to become active and, on the specified date, your new hierarchy version replaces the older hierarchy.

**Can I copy a resource organization hierarchy?**

No. You can only have one resource organization hierarchy active at a time within a deploying company. If you need to create a hierarchy for an organization, you will need to specify the reporting structure within the concerned organization and then make the organization a part of the existing hierarchy.

**Can I create a new organization hierarchy version?**

Yes. To create a new hierarchy version, navigate to the hierarchy whose new version you wish to create and click on the **Actions** button. From the drop-down list displayed, select **Create Hierarchy Version**. Make the changes to the hierarchy as required, specify the dates between which the organization hierarchy needs to be active, and click **Save and Close** to save your changes and exit the screen.

**How can I reuse a resource organization in multiple organization hierarchies at the same time?**

There is always one resource organization hierarchy for internal resource organizations and also one partner organization hierarchy for each partner company. You can have one active version and multiple inactive versions of resource organization hierarchies. Resource organizations can be included into any of the active or inactive organization hierarchies.

**Can I create multiple resources as managers within a resource organization?**

No. An organization can have only one manager.

### Define Resource Role Information

### Define Resource Roles: Explained

Defining resource roles involves defining and configuring the roles that a resource plays as an individual or within a resource organization or resource team in the deploying company. This requires you to specify who a resource is within the enterprise and what specific role the resource performs within the context of an organization or team.

You can assign defined roles to resources directly or to resources within an organization or team context. This action simplifies the task of individually assigning complex roles to resources within the organization.

You can also set several flags while defining roles. Use these flags along with the organization hierarchy information to define the reporting hierarchy of
resources. Use the Manager flag to tag a role as a supervisor role. Similarly, attach a Member tag to a role to make it a subordinate role in the hierarchy. Tag roles as Administrator or Lead to indicate the roles that the resource roles have within the hierarchy. Additionally, you can use these flags along with the organization hierarchy information to maintain manager-to-manager relationships within the organization.

**Assigning Resource Role Types**

Resource role types organize roles into logical groups. This simplifies role assignment and assignment tracking. For example, the Partner resource role type defines a set of partner-specific roles such as partner sales representative and partner sales manager. Use the Partner resource role type to determine the roles that are appropriate for partner members. Similarly, use the Sales resource role type and the Marketing resource role type to categorize the appropriate sales and marketing roles for internal employees or contingent worker resources.

**Provisioning Security Roles: Explained**

Security role provisioning is the process of automating the provisioning and de-provisioning of security roles based on resource role assignment to resources. Once security roles are provisioned to resources, they can access the tasks and data enabled for the security role.

**Difference between Resource Roles and Security Roles**

Resource roles indicate who a person is to the deploying company. As such, resource roles are used for filtering resources and for generating reporting hierarchies in addition to being used to define security policies. A key difference between a security role and resource role is that a resource role may be assigned to a resource without a user account, while a security role can only be provisioned to a resource who has a user account. So while in some cases the resource role may be defined at the same granularity as the security role and used to automate security role provisioning, the resource role concept remains separate from security roles.

**Job-to-Role Mapping: Explained**

In the Manage Resource Roles task, you can establish job mapping for a resource role. Job-to-resource-role mapping enables you to associate HCM jobs with specific resource roles. This mapping simplifies the task of assigning resource roles to new employees or contingent workers, resulting in time and costs efficiency.

For example, suppose a new employee joins the IT department as a data quality manager. If the new employee's job is already mapped to a resource role like Data Steward Manager, the resource role is automatically assigned when the employee is identified as a resource in the system. This enables you to place new employees faster in organizational and reporting hierarchies. If security roles are
also associated with the resource role, then the new employee's access privileges are also granted automatically.

**Resource Role Assignment: Explained**

Resource role assignment is the task of assigning roles to active resources within the deploying company. These roles are previously set up, and have associated security privileges. Thus, when you assign a specific role to resources, they automatically receive access to specific business functions within the company.

You can assign different roles to the same resource in different organizations. Thus, the same resource can have access to different business functions depending on the security roles associated with the resource roles assigned to them.

**Resource Team Membership and Role Assignment Components: How They Work Together**

Resources who are team members can be assigned different roles within the team. These roles do not necessarily need to reflect the roles these resources may play in resource organizations. Depending on the requirements of the tasks assigned to the team, resources may be assigned resource roles, and can accordingly access data related to the tasks in which the team is engaged.

**Resource Team Membership**

A resource can belong to multiple teams depending on the needs of these teams and the skills that the resource offers. This does not affect the resource's membership with organizations within the deploying company.

**Role Assignment**

Resources have specific roles to play in every team to which they are assigned. Each of these roles can be different. Also, these roles can be different from the roles assigned to the same resources in resource organizations. Thus, a resource can be a manager in one team, and a member in another simultaneously.

**FAQs for Define Resource Role Information**

**Can I add more than one resource role to a resource?**

Yes. While a resource can have only one resource role within a resource organization, a resource can have multiple roles in different organizations across the deploying company.
Can I assign more than one resource role to a resource organization member?

No. One resource can only have one role within an organization. However, a resource can belong to more than one team, and can have multiple roles in each.

Define Resource Team Information

Resource Setup and Resource Role Setup: How They Fit Together

Setting up resource roles helps you define the various roles within your organization so that they can be assigned to resources.

How Resource Role Setup Simplifies Resource Setup

Use the Resource Role Setup tasks to define specific roles that best reflect the way responsibilities are distributed within the deploying company. If your resource roles are created before you start setting up your resources, you can easily assign roles to resources, simplifying task assignment. Resource roles that are tagged as manager or member roles also determine how eventually the reporting hierarchy gets built.

Later, when you need to assign resources to organizations, resource roles can help you specify the precise roles that resources need to play within the organizations to which you assign them.

Resource roles also simplify security provisioning for resources. You can define security roles corresponding to resource roles using the role mapping interface. Once such mapping rules are setup, you can provision security roles by assigning the corresponding resource roles to resources.

FAQs for Define Resource Team Information

What's a resource team?

A resource team is a group of resources formed to work on work objects. A resource team may comprise resource organizations, resources, or both. A resource team cannot be hierarchically structured and is not intended to implement an organization structure. You can also use resource teams as a quick reference to groups of related resources that you can quickly assign work objects to.

Note

Members of teams can either be reassigned separately, or entire teams can be assigned to other tasks as required.
What's a duty role?

A duty role is a set of privileges associated with an aspect of a resource role, and one or more duty roles roll up into a resource role. Basically, resource roles can be said to comprise a set of duties, and each duty has its own set of privileges. Thus, privileges roll up into duty roles, and duty roles roll up into resource roles.

Define Products: Define Basic Items

Product Value Sets: Explained

Value sets are specific to the application in which they will be used. In the Oracle Product Information Management application, value sets are used primarily for defining attributes where the values that an attribute can have is limited to a specific set of values.

Value sets can be edited or new value sets can be created from the Manage Product Value Sets page. The Edit icon launches the Edit Value Sets page, which redraws in the same region of the local area. The Create icon launches the Create Value Sets page, which redraws in the same region of the local area.

A value set is defined by the value set code and is specific to the module of an application in which the value set is to be used, such as Item Class.

The validation type determines how the value of field is validated for the assigned value set. The following are the seeded values:

- Format Only
- Independent
- Dependent
- Subset
- Table

The value data type determines the data type for the value set. The following are the seeded values:

- Character
- Number
- Date
- Date/Time

Product Child Value Sets: Explained

The Manage Product Child Value Sets task uses the same page as the Manage Product Value Set task.
A child value set is used to define variants for stock-keeping units or SKUs. A SKU contains the common properties for an item. For example, a shirt can be produced with colors; white, red, yellow, and blue. The variant is used to represent the colors of the shirt.

You define child value sets as follows:

• Create a value set with validation type of independent, for example All Colors.

• Select the new value set in the Manage Product Value Sets results table, for example All Colors.

• Click Manage Values, create several values, for example Blue, Red, Green, Yellow, and Black.

• Create a value set with validation type of Subset and enter the first value set you created for the independent value set, for example: Summer Colors.

• Select the value set Summer Colors in the Manage Product Value Set result table.

• Click Manage Values and then click the Add icon. The dialog will show a list of values based on the value set named Summer colors. Select two of them.

The value set Summer Colors is a child of All Colors.

Managing Default Item Class: Explained

The Root Item Class is seeded and all item classes are created as children of the Root Item Class. For Oracle Fusion Product Model customers, only the Root Item Class is available. The Manage Default Item Class task enables Product Model customers to manage item class templates, descriptive flexfields, attachment categories and lifecycle phases. The Manage Default Item Class task launches an edit page for the Root Item Class.

The functionality for the Root Item Class is defined using three tabs:

• The Basic tab enables descriptive flexfields and attachment categories to be viewed and managed for the Root Item Class.

• The Lifecycle Phases tab enables one or more lifecycle phases of a lifecycle to be associated with an item class.

• The Templates tab is where you define and manage item templates for the item class.

Item Statuses: Explained

In the Item Status table, select a status code to display the associated attribute groups and attributes as well as control information.
You can create or edit or delete item statuses on the Manage Item Statuses page. Inactive dates are used to specify the date after which the item status will no longer be active. Operational attribute groups and attributes corresponding to the selected item status are displayed in the Details section. Select a value for the status from choice list for the attribute. Whenever the status is applied to the item, the value of the attribute may change. If the status will have no value, select No.

Select the Usage value of None or Defaulted or Inherited in the choice list for the Usage field that corresponds to how the attribute value will change based on the item status value:

- Defaulted-Sets the values of the item status attributes when the status value changes, but allows the overriding of the value during import and update of item.
- Inherited-Sets the values of the item status attributes when the status value changes, but overrides cannot occur.
- None-The item status attribute values will not be changed.

Any change made to an item status is not applied automatically to existing items, but will be applied during the editing of an item when the item status value is changed.

**Managing Item Types: Explained**

Item types are managed on the Manage Item Types page.

There are 32 seeded item types and you can edit them or create additional item types.

Item types are date-enabled and are made active or inactive by adjusting the Start Date and End Date.

To benefit from the use of item types, you must enable them by selecting the Enable checkbox.

**Cross-Reference Types: Explained**

Cross-References provide the functionality to map additional information about an item in the form of a value and cross-reference type. For example, the cross-reference can map between an item and an old part number, where the value is the value for the old part number and the type is Old Part Number. Cross-Reference Types are part of item relationships where the item relationship type is Cross-Reference. There are no values seeded for cross-reference types. You define the values using the Manage Cross Reference Types task. Cross-reference types are date-enabled and can be made active or inactive by adjusting the values of the Start Date and End Date. To benefit from using item relationship for cross-reference, you must enable cross-reference types by checking the Enable checkbox.
Item Imports: Explained

You can import items and item-related information using interface tables. This import data is loaded into the production tables using the Import Item task.

Import Item

The Import Item task creates an Enterprise Storage Server (ESS) process that takes the data that is loaded in the interface tables and uses the import process to move the data to the production tables. The import processes will perform all of the validations necessary to ensure the data imported is correct prior to moving the data into the production tables.

1. Access the Enterprise Storage Server and provide a process name (job definition) such as Item Import Process.
2. Select Setup and Maintenance from the Navigator.
   Access the All Tasks tab on the Overview page, and search for the Import Item task with the name of your ESS process definition.
3. Click the Go to Task icon in the search results for that Import Item task.
   The parameters for the item import process are
   • Batch ID: Associate the interface table to an item batch definition.
   • Organization: Select an organization to be used for the import.
   • Process Only: Determines how the data is processed. The choices are:
     • Create
     • Sync
     • Update
   • Process All Organizations: Select Yes if the import contains items that will be imported to multiple organizations.
   • Delete Processed Rows: Select Yes to delete rows that are imported without errors
4. Click Submit and the Request Number will be displayed.

Monitoring Import Items

Select Setup and Maintenance from the Navigator, then access Monitor Item Imports to search for specific Enterprise Storage Server processes and monitor their status in the search results table.

Related Item Subtypes: Explained

A related item is an item relationship between two existing items. How the two items are related is defined by a subtype. Multiple subtypes for related items
Define Common CRM Configuration

are seeded, and you define additional subtypes on the Manage Related Item Subtypes page.

Managing Descriptive Flexfields for Items: Explained

You can use descriptive flexfields to capture additional information about items beyond what is provided by the predefined set of operational attributes in Oracle Fusion Product Model.

**Item Descriptive Flexfields**

If you are not using Oracle Fusion Product and Catalog Management, then you cannot create user-defined attribute groups and attributes. However you can use descriptive flexfields associated at Item level to create fields to capture information about items. Like other descriptive flexfields, item descriptive flexfields have context segments and context-sensitive segments whose values are validated on entry by value sets. You can define the value sets to control what values users can enter in a descriptive flexfield segment. Examples of information that you might capture are size and volumetric weight.

Manage this flexfield type by using the Manage Item Descriptive Flexfields task, which you can access by searching for flexfield tasks on the Setup and Maintenance Overview page.

**Item Revision Descriptive Flexfields**

Use descriptive flexfields associated at Item Revision level to capture item revision information whose values may differ between revisions of the same item.

Manage this flexfield type by using the Manage Item Revision Descriptive Flexfields task, which you can access by searching for flexfield tasks on the Setup and Maintenance Overview page.

**Item Relationship Descriptive Flexfields**

When defining descriptive flexfields associated with item relationships, you must use certain prefixes when naming the context segments, in order for the segments to be displayed for the respective relationships.

The prefixes required for naming the context segments are listed in the following table, with their corresponding item relationship types. For example, if you define an item relationship descriptive flexfield with a context segment named RELATED_RELATIONSHIP_ATTRIBUTES, then the value segments of this context will be displayed for Related Item Relationships when users conduct transactions in that context. For another example, when users navigate to a UI of a particular object, such as a Competitor Item, they see the contexts whose internal name has the prefix COMP.

<table>
<thead>
<tr>
<th>Relationship Type</th>
<th>Prefix for Context Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitor Item Relationship</td>
<td>COMP</td>
</tr>
<tr>
<td>Customer Item Relationship</td>
<td>CUST</td>
</tr>
</tbody>
</table>
Manage this flexfield type by using the Manage Item Relationship Descriptive Flexfields task, which you can access by searching for flexfield tasks on the Setup and Maintenance Overview page.

**Trading Partner Item Descriptive Flexfields**

When defining descriptive flexfields associated with trading partner items, you must use certain prefixes when naming the context segments, in order for the segments to be displayed for the respective trading partner type.

The prefixes required for naming the context segments are listed in the following table, with their corresponding trading partner types. For example, if you define a trading partner item descriptive flexfield with a context segment named `COMP_TPI_ATTRIBUTES`, then the value segments of this context will be displayed for Competitor Item when users conduct transactions in that context.

<table>
<thead>
<tr>
<th>Trading Partner Type</th>
<th>Prefix for Context Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitor Item</td>
<td>COMP</td>
</tr>
<tr>
<td>Customer Item</td>
<td>CUST</td>
</tr>
<tr>
<td>Manufacturer Item</td>
<td>MFG</td>
</tr>
</tbody>
</table>

Manage this flexfield type by using the Manage Trading Partner Item Descriptive Flexfields task, which you can access by searching for flexfield tasks on the Setup and Maintenance Overview page.

**FAQs for Define Basic Items**

**What's the difference between lifecycle phase types and lifecycle phases?**

Lifecycle phase types are seeded and describe the type of lifecycle phase. They are Design, Obsolete, Preproduction or Prototype, and Production.

Lifecycle phases must be created by the user by selecting one of the seeded lifecycle phase types.

**Manage Units of Measure**

**Units of Measure, Unit of Measure Classes, and Base Units of Measure: How They Fit Together**

Define units of measure, unit of measure classes, and base units of measure for tracking, moving, storing, and counting items.
The Quantity unit of measure class contains the units of measure Box of 8, Box of 4, and Each. The unit of measure Each is assigned as the base unit of measure.

Unit of Measure Classes

Unit of measure classes represent groups of units of measure with similar characteristics such as area, weight, or volume.

Units of Measure

Units of measure are used by a variety of functions and transactions to express the quantity of items. Each unit of measure you define must belong to a unit of measure class.

Base Units of Measure

Each unit of measure class has a base unit of measure. The base unit of measure is used to perform conversions between units of measure in the class. For this reason, the base unit of measure should be representative of the other units of measure in the class, and should generally be one of the smaller units. For example, you could use CU (cubic feet) as the base unit of measure for a unit of measure class called Volume.

Assigning Base Units of Measure to Unit of Measure Classes: Examples

Each unit of measure class must have a base unit of measure.

Scenario

This table lists examples of unit of measure classes, the units of measure in each unit of measure class, and the unit of measure assigned as the base unit of measure for each unit of measure class. Note that each base unit of measure is the smallest unit of measure in its unit of measure class.
### Defining Unit of Measure Standard Conversions: Examples

A unit of measure standard conversion specifies the conversion factor by which the unit of measure is equivalent to the base unit of measure.

#### Scenario

This table lists examples of unit of measure classes, one unit of measure included in each class, the base unit of measure for the unit of measure class, and the conversion factor defined for the unit of measure.

<table>
<thead>
<tr>
<th>Unit of Measure Class</th>
<th>Unit of Measure</th>
<th>Base Unit of Measure</th>
<th>Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity</strong></td>
<td>dozen</td>
<td>each</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>box</td>
<td>each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>each</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>pound</td>
<td>gram</td>
<td>454</td>
</tr>
<tr>
<td></td>
<td>kilogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>gram</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td>hour</td>
<td>second</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>minute</td>
<td>second</td>
<td></td>
</tr>
<tr>
<td></td>
<td>second</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>cubic feet</td>
<td>cubic inches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cubic centimeters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cubic inches</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FAQs for Units of Measure

**What's a unit of measure standard conversion?**

A unit of measure standard conversion defines the conversion factor by which the unit of measure is equivalent to the base unit of measure that you defined for the unit of measure class. Defining a unit of measure standard conversion allows you to perform transactions in units other than the primary unit of measure of
the item being transacted. The standard unit of measure conversion is used for an item if an item-specific unit of measure conversion has not been defined.

**What's a UOM interclass conversion?**

A UOM interclass conversion defines the conversion between the source base unit of measure ("From Base UOM") in one unit of measure class ("From Class") and the destination base unit of measure ("To Base UOM") in a different unit of measure class ("To Class").

For example, the item is gasoline. The From Base UOM (of the From Class called "volume") is liters. The To Base UOM (of the To Class called "quantity") is Barrels. The conversion is 158.76 liters (volume) to 1 barrel of oil (quantity).

**What's a UOM intraclass conversion?**

A UOM intraclass conversion specifies the conversion between a unit of measure (the "From UOM") and the base unit of measure of the same class.

For example, the item is soda pop. The unit of measure class is Quantity. The From UOM is Case (CS). The base unit of measure is Each (EA). The conversion is 24, to specify that 1 CS = 24 EA.

**Define Products: Define Advanced Items**

**Transactional Attributes: Explained**

Attributes that exist for each instance of an item and the values for the attributes can be different.

For example:

- The number of megabytes (MB) or gigabytes (GB) of e-mail storage on a digital subscriber line (DSL) account.
- The monogram text on a shirt pocket.
- The color of a music player.

These attributes are defined at the item class and their attribute value is captured at the time of a transaction by downstream applications. The metadata values of these attributes are maintained at the item class. Order orchestration and order capture systems are two examples of downstream use. All transactional attributes must be associated with a value set.

The following metadata values can be defined for an attribute.

- Required: Indicates whether the attribute value is required at the transaction.
- Default Value: Indicates the default value of the attribute.
- Value Set: Indicates the value set associated with the attribute.
- Read Only: Indicates whether the attribute value is read only.
• Hidden: Indicates whether the attribute is not shown.

• Active: Indicates whether the attribute is active or inactive.

Transactional attributes are inherited across the item class hierarchy. The metadata is data-effective. Changes in the metadata will be reflected immediately at the item level. For example:

• Any of the metadata of a transactional item attribute belonging to a specific domain, if modified in the child item class would break the inheritance. Any changes done at the parent item class for this transactional item attribute would not get inherited. Multiple records with same date range can exist if they belong to different domains. For example, the transactional item attribute Memory is associated with a Domain and order capture. Each of the domains may use a different set of metadata for its own purpose. Hence, for the same date range, two different records can exist. Only Start Dates for a transactional item attribute would be entered by a user. End date would be calculated automatically based on the next Date Effective record.

• Users can modify (either Start Date and metadata) of a future effective record. Records with Starting date as Past cannot be modify or edited.

• Only start dates can be set to permit updating by a user, and the end date of a record will automatically be pulled from the next record.

• Any changes performed in the parent item class would be inherited by the child item class. If the corresponding record is modified in the child, then these changes will not be inherited.

Item pages provide a mechanism with which to customize the user interface.

**Pages and Attribute Groups**

Pages and attribute groups enable you to structure your data.

Benefits include:

• You can combine and sequence attribute groups into pages.

• There is no limit on the number of attribute groups associated with a page

• Pages can be created at item class and are inherited down the item class hierarchy.

• Attribute groups can be added to pages sequentially and based on this sequence, these attribute groups are shown in items

• Attributes groups can be added for an inherited page at the child item class.

Functional Item pages are another type of special pages which are used to associate pages already created for use in the application. Application scope indicates the application which uses these pages and the usage indicates the specific use of the configured pages.

**Data Quality**

You can associate attributes for the purpose of standardization and matching, to be performed when items are created. You restrict the attributes to be processed
for standardization or matching or both. Selecting Standardization allows the data quality engine to return the standardized values for these attributes. Matching allows the data quality engine to return any existing items which matches the value of these attributes and are potential duplicates.

**Lifecycle Phases**

Sequential lifecycles phases enable you to track and control the lifecycle phases of items. Each phase represents a set of tasks and deliverables that are required before promoting the item to the next phase. You can associate lifecycle phases to an item class which are created elsewhere. Lifecycle phases are inherited down the item class hierarchy and new lifecycle phases can be added to child item classes. For example, the lifecycle phases for a computer component item class might be: Concept, Prototype, Production, and Retirement.

**Templates**

Template is a defined set of attribute values used during item creation. When you apply a template to an item, you overlay or default-in the set of attribute values to the item definition. For example, every time users in a particular organization create new items, the attributes, as defined and approved by the organization appear in the appropriate fields. No user guesswork is required, and time is saved during the creation of items with a similar form, fit and function. Templates are created for each item class. Templates are specific to organization. Templates are inherited down the item class hierarchy. You can define both operational attributes and user defined attributes for each template.

**Search and Display Format**

Search formats provide a convenient way to save frequently used search criteria. Search formats created at item class will be available to all users. Search formats are always created in the context of item class. Display formats enable you to predefine search display views. You can use these views to look at different sets of item attributes that are returned by the search. Display formats created at item class will be available to all users. Display formats are always created in the context of item class.

**Import Format**

An import format identifies the base and user-defined attributes in an item class that are imported into the application using a spreadsheet. Consequently, when you import item business entities from a spreadsheet, the items are all imported into the particular item class defined in the import format. These imported item business entities inherit all the attribute groups defined for the specific item class. You cannot edit the layout of an import format once it is created.

**Item Classes: Explained**

When you are ready to create or edit an item class, you must decide whether to allow items to be created under the item class.

To create an item class, perform the following steps:

- Create a list of all items.
• Classify or categorize these items (item classes).
• Define any parent-child relationships (item class hierarchy).
• Gather the unique types of specifications required for each type of classification at a high level (user-defined attribute groups).
• Gather the unique specifications required within the group (user-defined attributes).
• If there are specified values that must be used, define them (value sets and values).

Item classes can be used for classification purposes and in some case, item creation may not be allowed. By optionally setting the Item Creation Allowed attribute to No, item creation under an item class can be prevented. However, a child item class of such an item class may be allowed for item creation. For example:

This prevents items from being created in Computers and Desktops, but allows items to be created for Green Desktops and Gaming Desktops. Optionally, specify a date on which the item class will become inactive. You cannot specify an inactive date that is later than the inactive date of an item class parent, nor can you specify an inactive date that has already passed. Also, all children of a parent item class with an inactive date should be made inactive at the same time or earlier.

Attachment categories enable you to categorize and classify attachments to an item. To classify item attachments, associate attachment categories with item catalog categories. Associated attachment categories are inherited down through the item class hierarchy.

Version control allows new versions to be created for all items in an item class. An integrated workflow definition permits the creation of custom new item request definitions. This workflow definition establishes a multistep process for routing the definition and approval of items. When a new item is created, various people in the organization use the workflow to define aspects of the item, like base operational attributes, user-defined attributes, structures, attachments, categories associated, and organization assignments.

Note

Versioning an item and creating a new item request are independent of each other. Versions can be added to a new item request and routed for approval if there is a business need.

When setting up definition steps for a new item request at the item class, you can identify various item details as mandatory, at each step. Definition of entire
entity can be made mandatory or just certain attributes. This ensures that the item information required for a downstream step is defined and available for use.

Required attributes can be inherited from parent and assignee access is validated.

You can control item creation, viewing and update access by assigning a role on the item class to a principal or group of users. Security allows a person or a group to have privileges to an item of item class in each organization. This is inherited and hence a person who has a privilege in a parent item class will automatically have the same privilege in the child item classes.

FAQs for Define Advanced Items

What are item classes?

The item class hierarchy provides a logical classification and grouping of similar products, and also acts as a template for product definition by enabling the association and inheritance of data elements and policies that are shared by products.

How can I create an item class?

To create an item class, select a parent item class on the Item Class Search Results page and select Create. Provide the required information, and optionally include additional details, such as attribute groups, pages, templates, and search and display formats.

Define Sales Catalogs

Functions and Miscellaneous Actions: Explained

You can set various options to customize the runtime instance of your product catalog.

The Functions and Miscellaneous tabs have several built-in features and options for you to choose from.

Functions

Select certain functions and specify how they should run depending on your processes.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability Engine</td>
<td>Determines the availability of a product in stock.</td>
<td>Do not run</td>
<td>Do not call the availability service.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quick availability</td>
<td>Show whether the product is available or out of stock</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add item button label</td>
<td>The selected value is shown next to the product in the runtime interface.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add category button label</td>
<td>The selected value is shown next to the catalog or category in the runtime interface.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add category enabled flag</td>
<td>Allows buttons to be shown next to the catalog or categories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Records per page</td>
<td>Number of records to be displayed per page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort by format text</td>
<td>Sort format of the entire label that you want displayed in the runtime interface. The default pattern is [ATTR]: [SORT_ORDER]. Example: Name: A to Z.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort by product label prefix</td>
<td>Sort format of the prefix label that you want displayed. Example: If the default is Name: A to Z, you can select an alternate label for Name. It could be Item: A to Z.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort by sequence product ascending label</td>
<td>Sort format of the ascending suffix label that you want displayed. Example: If the default is Name: A to Z, you can select an alternate for A to Z. It could be Name: Ascending.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort by sequence product descending label</td>
<td>Sort format of the descending suffix label that you want displayed. Example: If the default is Name: Z to A, you can select an alternate for Z to A. It could be Name: Descending.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort by sequence ascending first flag</td>
<td>Select Yes to display ascending labels first in the Sort By LOV.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show immediate child products only</td>
<td>Shows immediate products of a given category disregarding the standard behavior of showing all products (including child categories) if narrow by is defined on the category.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image server</td>
<td>Identifies the source of images for products and product groups.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image server alternate path</td>
<td>Identifies an alternate image source location (URL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enable transactional attribute</td>
<td>Allows transactional attributes to show up in product detail page. Transactional attributes are attributes that can be selected such as color and size of shirt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidden category optional attribute list</td>
<td>You can specify the attributes you would like to hide from the category UI here. This could be a comma separated list of attributes that needs to be hidden from the category list page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidden product optional attribute list</td>
<td>You can specify the attributes you would like to hide from the product UI here. This could be a comma separated list of attributes that needs to be hidden from the product pages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hide quantity</td>
<td>Set this to Yes, to hide the quantity field shown in the product page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hide unit of measure</td>
<td>Set this to Yes, to hide the unit of measure field shown in the product detail page.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Change Display Options for Product Group Categories: Worked Example**

Megan and the marketing team notice that when they browse the ComfyGooseCatalog, availability information is shown against each product. Since they have no visibility around the Loveseats product, the marketing team suggests to hide the availability information for the Loveseats category alone. Megan remembers from the training that Fusion Sales Catalog provides the ability to override the default behavior.

Megan recalls that she has to make this change from the Display Options for the Loveseats catalog.
Change the Display Options

1. Select the catalog from the Product Group Administration page and lock it.
   Megan chooses the Loveseats catalog.

2. Create a new entry in the Display Options tab.
   Megan creates a record and names it Hide Availability.

3. From the Applies To subtab, select the usage that this display option must be applicable to.
   Megan selects the Base usage.

4. From the Functions tab, select the Availability Engine Code function and assign Do Not Run as its value.

5. Save and publish the ComfyGooseCatalog.
   Megan validates the effect of this change at runtime.

Display Options: Explained

Use the display options to control various aspects of the published product group.

Modifying Product Group Information

You can make small but significant changes to a product group from these tabs. The changes here override default settings.

- Applies To
  Select the usage that this product group is applicable to. Usage defines the department or function within your organization for which this catalog is created.

  Apart from usage, you can also select the mode within the usage. Mode defines the department or function within your organization that uses the same catalog but with minor changes from other consumers.

- Narrow By
  Select Narrow By attributes and their appearance. These attributes appear as filters to narrow searches at runtime.

- Template
  Select templates for category, product list, and so on.

- Functions
  Define the changes to specific settings in certain functions such as pricing and eligibility.

- Miscellaneous
  Change basic settings for the product group such as button label, number of items per page, invocation of the configurator, and so on.
Creating a Sales Catalog: Worked Example

This example demonstrates how to create a sales catalog. In this example, ComfyGoose Inc is a state of the art outfit in the business of selling chairs and sofas. As part of their expansion plans, they recently bought Oracle Fusion CRM and are uptaking the best business practices and all the functionality it brings.

Megan works in the product marketing department and is excited about the sales catalog and the ease with which she can create products and catalogs. She gathers information about the categories to be created and the products that need to be associated to each category. She is familiar with the layouts and the navigation paradigm in the application.

As a first step, Megan decides to create a sales catalog.

Creating a Sales Catalog

1. Log in to the application and select the Product Group Administration tab.
2. Click Create from the Product Groups pane.
3. Enter data in the relevant fields.
   Megan enters the following details for her catalog.

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>ComfyGooseCatalog</td>
</tr>
<tr>
<td>Display</td>
<td>Comfy Goose Catalog</td>
</tr>
<tr>
<td>Description</td>
<td>Contains ergonomic chairs for your home or office needs, chairs for businesses such as call centers and offices; at attractive prices.</td>
</tr>
<tr>
<td>Root Catalog</td>
<td>Select to make this a root catalog. Only root catalogs can be added to a usage in Product Group Usage Administration.</td>
</tr>
</tbody>
</table>

4. Associate an image that should go with the catalog from the Details tab.
5. Add categories to this product catalog from the Subgroups tab.
   Megan creates the following subgroups for the ComfyGoose Catalog product group.

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Data</th>
</tr>
</thead>
</table>
   | Subgroup Name | • Chairs  
   |               | • Sofas    
   |               | • Medical Chairs  
   |               | • Sports Chairs  
   |               | • Chairs and Stools |
6. Add further categories to a subgroup, if required. To do so, change the view of the product group from List to Tree view from the Product Groups pane. Select the category within which you want a subgroup.

Megan creates further categories within some of the subgroups.

<table>
<thead>
<tr>
<th>Parent Subgroup</th>
<th>Sample Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairs</td>
<td>• Heavy Duty/Call Center Chairs</td>
</tr>
<tr>
<td></td>
<td>• Ergonomic Chairs</td>
</tr>
<tr>
<td></td>
<td>• Leather Chairs</td>
</tr>
<tr>
<td></td>
<td>• Event Chairs</td>
</tr>
<tr>
<td>Sofas</td>
<td>Sofas and Loveseats</td>
</tr>
<tr>
<td>Sofas and Loveseats</td>
<td>• Leather Sofas</td>
</tr>
<tr>
<td></td>
<td>• Reception and Lounge Sofas</td>
</tr>
<tr>
<td></td>
<td>• Loveseats</td>
</tr>
</tbody>
</table>

7. Add products from the Products tab to the respective subgroups that you just created

8. Click **Publish** to publish the product hierarchy that you just created

A published catalog is available for use by different departments which is done via Usage Administration

9. To associate a published catalog with a particular usage, click the **Product Group Usage Administration** link

10. Select the usage, click the Product Groups subtab. Search and add the product group you just created

Megan selects the Base usage and adds ComfyGooseCatalog to this usage.

**Reusing a Sales Catalog: Worked Example**

This example demonstrates how you can reuse a sales catalog. In the scenario used in this example, ComfyGoose Inc is a state of the art outfit in the business of selling chairs and sofas. As part of their expansion plans, they recently bought Oracle Fusion CRM and are uptaking the best business practices and all the functionality it brings. Megan works in the product marketing department.

Megan gets a call from another division of the company, after a few months of deploying the ComfyGooseCatalog. They have heard of the new catalog that she helped build for the marketing team and enquire if they can have a similar subset for their division. They want to leverage as much as possible having a consistent look-and-feel.

An application developer must create an application and should be able to consume the sales catalog task flows to achieve this example. This task is similar
to what the Sales module has done to consume the task flows provided by the sales catalog team.

Megan gathers the necessary information and identifies that this division primarily needs what is in the Chair category of the ComfyGooseCatalog. She is very excited because she knows that she can simply reuse the Chairs category. In the past, she would have had to create another catalog repeating the same data, a maintenance overhead.

**Reusing an Existing Catalog for Another Department**

1. Navigate to the Product Group Usage Administration page
2. Create a new usage
   Megan creates the Call Center Division usage
3. Click the Product Groups subtab for the usage that you just created
   You can choose only product groups that are catalogs by themselves here. In other words, the catalog must be a root catalog.
   Megan realizes that the Chairs catalog that she wants to reuse is a subgroup of the ComfyGooseCatalog. To make it a root catalog, she follows these steps:
   a. Navigate to the Product Group Administration page
   b. Select the product group Chairs from the Product Group pane
   c. From the Details tab, select Root Catalog
   d. Save and publish the catalog.
4. Add the product group to the new usage in the Product Group Usage Administration page.
   The Chairs catalog is now available for the Call Center Division.

**Enabling Filtering by Attributes: Worked Example**

This example demonstrates how to enable filtering by attributes. In the scenario used in this example, ComfyGoose Inc is a state of the art outfit in the business of selling chairs and sofas. As part of their expansion plans, they recently bought Oracle Fusion CRM and are uptaking the best business practices and all the functionality it brings. Megan works in the product marketing department. She has created the ComfyGooseCatalog and tried changing some usage attributes.

Megan now reviews the ComfyGooseCatalog with the team and decides that it will be nice to provide the user with few narrow by filters. After reviewing the definition of products associated to the Chairs category and its subcategories, it is decided that attributes Color and Material can be used for filtering.

The attributes must already be registered in the Product Group Attribute Administration page. These attributes must be present and associated in the Item Master.

**Associating Attributes for a Category**

1. From the Product Group Administration page, select the category to add the attributes for and lock it.
Megan selects the Chairs category.

2. From the Filter Attributes tab, click **New** to select the attribute that you wish to associate to Chairs product group. Select the Advanced Search, Narrow By and Sort flags for the attribute. By selecting these flags, this attribute will get displayed in those regions.

   **Note**
   
   The attribute is already registered in the Product Group Attribute Administration page.

Megan selects the Color and Material attributes.

3. Create values for the selected attributes from the Attribute Values region below.

   Megan creates Blue, Pink and Black as the values for the chair color. She also creates values for the chair material.

4. Megan saves the changes and publishes the Chairs product group.

   Megan validated the changes in the graphical catalog. She can see the attributes that she created and their values in the Advanced Search, Narrow By and Sort options of the catalog.

---

**Using a New Template in a Catalog: Worked Example**

This example demonstrates how to use a new template in a catalog. Megan informs the marketing team that the IT department has created a new template that gives a cool web 2.0 feeling and asks their permission to try it out. She informs them that it gives a carousel effect which is quite common while browsing songs, DVDs, and so on. The marketing team agrees to give it a try.

Using Fusion JDeveloper, application developers have to create a task flow using the Fusion ADF component and all necessary VOs to support the task flow. The task flow must be registered in the template administration.

Megan decides to use the template ComfyGoose Carousel template in the ComfyGoose Catalog’s browsing categories.

**Using a New Template in a Catalog**

1. On the Product Administration page, Megan searches for the ComfyGooseCatalog and locks it

2. In the Display Options tab for the selected catalog, create a new record

   Megan creates a record and names it Carousel.

3. From the Applies To subtab, select the usage that this change should be applicable to

   Megan selects the Base usage.

4. From the Templates subtab, create a record and select the appropriate template type and the new template
Megan selects the Category List Template as the type and the ComfyGoose Carousel template as the template.

5. Save your changes and publish the catalog.

Megan verifies the change in the catalog at runtime. The marketing team loves this cool effect and agrees to adopt it for the final catalog roll out.

**Changing Usage Attributes for an Application: Worked Example**

This example demonstrates how you can modify attributes for an application’s usage. In this scenario, the Call Center division only deals with call centers across the world, they have not seen if any product they have sold is not applicable to call center companies. Therefore, they decide to switch off the eligibility and availability messages that show up in their side of the catalog.

Megan knows that this is a fairly simple task because she can do these settings from the Product Group Usage Administration page.

**Modifying Attributes for an Application's Usage**

1. Navigate to the Product Group Usage Administration page, and select the usage to make changes.

   Megan selects the Call Center usage.

2. From the Functions subtab, select the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability Engine</td>
<td>Do not run</td>
</tr>
<tr>
<td>Eligibility Engine</td>
<td>Do not run</td>
</tr>
</tbody>
</table>

3. Save your changes and validate the effect in the catalog at runtime.

   Megan accesses the catalog and finds that the availability and eligibility messages do not appear anymore for the Call Center division’s catalog.

**Eligibility Rules for a Product Group: Explained**

An eligibility rule can be a physical eligibility rule or a marketing eligibility rule

Some points to remember when you create an eligibility rule:

- An eligibility rule can determine one of the two kinds of eligibility for a product group, physical or marketing. They cannot be combined.

- A rule can be of two types: Available and Not Available. If contradictory rules are defined for the same product group, the Not Available rule will prevail.

- All children of a product group inherit rules from the parent product group.
• Eligibility rules set at the product level have precedence over the rules set at the product group level.

Physical Eligibility

When you create a physical eligibility rule, select attributes from these: Country, State or Province, City and Postal Code.

Marketing Eligibility

When you create a marketing eligibility rule, select a value for Customer Type.

FAQs for Define Sales Catalogs

How can I customize button labels in the catalog?

You can add custom labels for your catalog by specifying them in the Miscellaneous tab of Display Options. For example, you can change the default Add to Cart label and can select a different label such as Add to Shopping Cart. You can add an additional value for the button label from the Manage Product Group Lookups page from the Setup and Maintenance Overview page. You can enter a new value using the lookup Add Item Label Values. Once done, you can navigate to the product group administration to either override the button label for the entire catalog via the usage functions or to a specific product group from the display options tab.

Apart from customizing button labels, you can also set the number of items to display per page from the Miscellaneous tab.

What's the difference between rollup and sales catalog hierarchies?

A rollup catalog does not have the same product appearing multiple times within its hierarchy. The primary purpose of a rollup catalog is to create a hierarchy more tailored to forecasting purposes where a particular product appears only once in the entire hierarchy.

A sales catalog can have the same product appearing multiple times within its hierarchy. For example, the product Toys can be part of the Children category as well as the Electronics category within the same catalog.

Note

The Allow Duplicate flag distinguishes between a rollup catalog and a sales catalog. By default, the flag is selected making it a sales catalog. The Allow Duplicate flag is in the Details tab of the Product Group Administration page.

Why did some of the products in my published catalog disappear?

Products in your catalog are active for a specified period. Once the period expires, the product becomes inactive and does not appear as part of the published catalog. Activate the products from the Products tab of the Product Group Administration page.
**What's a related group?**

Related groups show the relationship between two different product groups. For example, a group that contains extended warranty products is related to a group that contains laptops. There are various relations types supported such as revenue, service and so on. This relationship is used in the other applications.

**What's eligibility?**

Eligibility is the condition of being qualified or being entitled for a purchase or enrollment.

There are two types of eligibility.

- **Physical eligibility:** Determines whether a service is available in a given area.
- **Marketing eligibility:** Determines whether a company is willing to sell a product, service, or promotion to a customer.

Some examples of eligibility are:

- Video Conferencing is available in California.
- Liquor is not available to minors.
- ESPN pay-per-view Requires HD Package

**How can I change the labels for filter attributes at runtime?**

In the Filter Attributes tab of the Product Group page, change the value for the Display of the attribute. The attribute can have an internal name but the name displayed at runtime can be more meaningful and customer-friendly.

For example, if the attribute name is Laptop Color, you can change the display to Available Colors. This will display in the narrow by or advanced search options at runtime.

**Why can't I modify a product group?**

To modify a product group, you must first lock it. Click **Lock** in the Product Group page. If the product group is locked by another user, the **Lock** button is not visible and the **Locked** flag is enabled in the Details tab.

**How can I associate promotions to a product group?**

There may be several promotions running at any given time. You can associate active promotions to a product group from the Promotions tab. Coupons are a part of promotions and are added to the product group along with the promotion. You can also view the promotion's effective period.

**What's the difference between the administration and published product group versions?**

A product group can have two versions, Administration and Published. The Published version is visible to the end user in the graphical sales catalog.
The administrator must make any changes to the product group in the administration version.

After publishing the administration version, the changes are made available to the published version and to the consuming applications.

**When can I use product group mapping?**

Use product group mapping in the following situations:
If a product group is reused, find it in the target hierarchy.
Identify the right product group in the target hierarchy when the source product group is not recognized.
Do a reverse mapping by passing the target product group to get the source product group.

**How can I set exceptions for particular usages?**

You can set exceptions for a usage from the Modes tab of the Product Group Usage Administration page. Exceptions can be made when you need minor modifications for different departments in your organizations, for the same usage. The following modes are available: Lead Management, Campaign Management, Opportunity Management, Territory Management, Opportunity Landscape and Sales Prediction.

**How can I know if my catalog is used by other catalogs?**

You can get this information from the Product Groups Shared With region in the Product Groups pane. By default, all product groups are shared.

**Define File-Based Data Import**

**File-Based Data Import: How It Works**

The Define File-Based Data Import group of tasks relies on integration with different Oracle Fusion Applications and architecture components, such as interface tables and application base tables. This topic provides an overview of these components to help you understand the import process and the different import activity statuses.

The following figure provides an overview of the major application components used when you import data from a file. These components include:

- Import object
- Import mapping
- Import activity
- File repository
- Oracle Fusion CRM Application Composer
- Interface tables
• Application tables

### Import Objects, Import Mapping, and Import Activity

The import objects you select when you create an import activity are provided by Oracle. They are managed using the Manage File Import Objects task.

When you create an import activity, you must specify a mapping of the fields in your file to the attributes of the import object. You can create the mapping either while creating an import activity or separately using the Manage File Import Mappings task. The mapping is stored and managed as a separate object.

### File Repository

The text or XML data file you upload for import is stored in a file repository so that it is available for import processing when you schedule an import activity. Any attachments you upload are stored in the same repository.

### Application Composer and Customer Extensions

When you create additional attributes for import using Oracle Fusion CRM Application Composer, these extensions are stored in a separate repository and are available when you create your mapping.

### Interface Tables

The import activity populates the application interface tables with your data. This is an intermediate holding area for your data that permits you to correct any import errors. Oracle Fusion CRM application data is not changed at this point.
Application Tables
The import activity loads your data into Oracle Fusion CRM application tables to complete the import.

File-Based Data Import Tasks: How They Work Together

The tasks in the Define File-Based Data Import task group, available from the Setup and Maintenance work area, enable you to import data from text or XML files. This topic explains the role each task plays in the import process.

The following figure provides an overview of the File-Based Data Import group of tasks and their relationships. Each task is explained in the sections that follow.

Manage File Import Activities Task
Use this task to import your data by creating import activities and monitoring their progress. Creating an import activity involves completing the following steps:

1. Set up the import options.
   You select the object you are importing, specify the file format and different import options, and upload the file with your data. The options that are available depend on the object you are importing. Some import objects, for example, permit you to upload a ZIP or Java archive (JAR) file of attachments that will be attached to the records in the application after the data file import is complete.

2. Map the fields.
For this task, you create a mapping of the data in your file and the attributes in the application. You can also reuse a mapping you have created in past import activities or use the Manage File Import Mappings task. Any mapping you create in an activity is automatically saved and can be reused in subsequent imports and managed using the Manage File Import Mappings task.

3. Schedule the import.

You can schedule to run the import at a time you specify or run it immediately.

4. Review and activate the import activity.

You activate the import activity by clicking the **Activate** button.

**Manage File Import Mappings Task**

This task permits you to do the following:

- Manage existing mappings between the data in your import file and the application attributes. For example, you can lock a mapping so that it cannot be modified or edit the mapping to skip attributes during import.
- Create new mappings without a data file.

Creating a mapping using the Manage File Import Mappings task is equivalent to creating it in the import activity, but you must enter any import file column names manually. When you create a mapping as part of the import activity, you upload the file, and the column headings in your file are populated automatically.

**Manage File Import Objects Task**

This task lets you view all the import objects that have been created for you. All of the objects you can import are already created for you, so you do not have to create more import objects. Creating new objects is reserved for programmers.

**Understanding File-Based Data Import: Getting Started**

Using the **Define File-Based Data Import** group of tasks available from the **Setup and Maintenance** work area, you can import application data from text or XML files. Your import can be used to create or update records. The data you can import ranges from geography reference data, used to validate addresses in your application, to CRM transaction or legacy data, including customers, accounts, opportunities, and leads. This topic provides an overview of what you must understand to plan your import and prepare your import files. You must read the help topics for each specific import object to learn how to import it.

This topic covers:

- What objects you can import
- Tasks involved in import
- Application business logic associated to the object you are importing
- How data is split into objects and what IDs you must include in your file
- What attributes are available for you to import and their validation
Objects You Can Import

Using file import, you can import a wide range of data listed in the following table. Which of these objects are available to you for selection when you import depends on the applications you have licensed and your security permissions.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Marketing Activity</td>
<td>Specific instances of an advertising activity for a marketing campaign.</td>
</tr>
<tr>
<td>Agreement</td>
<td>Legacy service agreements for use in opportunities and the Oracle Fusion Sales Prediction Engine.</td>
</tr>
<tr>
<td>Asset</td>
<td>Legacy customer assets for use in opportunities and the Oracle Fusion Sales Prediction Engine.</td>
</tr>
<tr>
<td>Campaign</td>
<td>Marketing campaigns.</td>
</tr>
<tr>
<td>Campaign Members</td>
<td>The contacts identified to receive the marketing message for an instance of a marketing campaign activity.</td>
</tr>
<tr>
<td>Click-to-Dial Agents</td>
<td>Click-to-Dial agents, including telemarketers, salespersons, and customer service representatives, who use the Click-to-Dial feature.</td>
</tr>
<tr>
<td>Click-to-Dial Agents Connector Parameters</td>
<td>Agent connection parameters to access Click-to-Dial functionality.</td>
</tr>
<tr>
<td>Consumer</td>
<td>Individuals who are customers or prospects.</td>
</tr>
<tr>
<td>Contact</td>
<td>Individuals who are contacts for an existing customer or consumer, or contacts that do not yet have an established association with a customer or a consumer.</td>
</tr>
<tr>
<td>Contract</td>
<td>Contracts header information for Oracle Fusion Enterprise Contracts.</td>
</tr>
<tr>
<td>Country Structure</td>
<td>Geographical structures for a country.</td>
</tr>
<tr>
<td>Customer</td>
<td>Organizations who are sales accounts or prospects.</td>
</tr>
<tr>
<td>Customer Hierarchy</td>
<td>Hierarchical structures for customers, such as branches, subsidiaries, and paying relationships.</td>
</tr>
<tr>
<td>Customer Hierarchy Member</td>
<td>Identifies the members of the hierarchical structures for customers.</td>
</tr>
<tr>
<td>Employee Resource</td>
<td>Use this object to import new users into your CRM organization. You must create users as resources to make it possible for them to participate in CRM business processes.</td>
</tr>
<tr>
<td>Event Marketing Activity</td>
<td>Specific instances of a marketing event for a marketing campaign.</td>
</tr>
<tr>
<td>Geography</td>
<td>The geographical data for a country.</td>
</tr>
<tr>
<td>Group Customer</td>
<td>A group of organizations or persons, such as a household or co-op, with whom you have a selling relationship or a prospective selling relationship.</td>
</tr>
<tr>
<td>Incentive Compensation Transactions</td>
<td>Sales compensation data.</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Interaction</td>
<td>Records of contacts or communications between internal and external contacts.</td>
</tr>
<tr>
<td>Interaction Marketing Activity</td>
<td>Specific instances of an outbound marketing message for a marketing campaign.</td>
</tr>
<tr>
<td>Lead</td>
<td>The interest or the potential interest of prospects or existing customers in a product or service being sold.</td>
</tr>
<tr>
<td>Legal Entity</td>
<td>Legal entities that have rights and responsibilities under commercial law through the registration with the country’s appropriate authority. A legal entity can represent your internal legal structure or dependent authorities such as tax authorities.</td>
</tr>
<tr>
<td>Marketing Budget</td>
<td>Business objects that are used to manage funds set aside to fund partner incentives.</td>
</tr>
<tr>
<td>Note</td>
<td>Notes associated with objects, such as leads, customers, and opportunities.</td>
</tr>
<tr>
<td>Opportunity</td>
<td>Pending sales stored in the application. Opportunities are based on customer interest in a product or service, and can be forecasted.</td>
</tr>
<tr>
<td>Partner</td>
<td>Sales partners: independent companies that provide sales and services on behalf of the vendor. In Oracle Fusion Partner Relationship Management, a partner must also be enrolled in a partner program and must be active.</td>
</tr>
<tr>
<td>Partner Contact</td>
<td>Contacts for a sales partner.</td>
</tr>
<tr>
<td>Product Group</td>
<td>Product group hierarchies that represent the sales catalog for marketing and sales.</td>
</tr>
<tr>
<td>Program Enrollments</td>
<td>The enrollment of partners in partner programs, selling programs that provide benefits and incentives for partners.</td>
</tr>
<tr>
<td>Promotion</td>
<td>Promotions and coupons which are used to track the effectiveness of marketing campaigns.</td>
</tr>
<tr>
<td>Resource Team</td>
<td>Temporary group of resources formed to complete a business task. A resource team can contain both individual resources and resource organizations. A resource team cannot be hierarchically structured and is not intended to implement an organization.</td>
</tr>
<tr>
<td>Response</td>
<td>Responses to a marketing campaign.</td>
</tr>
<tr>
<td>Sales Account Resource</td>
<td>Employee or partner resources assigned to a customer.</td>
</tr>
<tr>
<td>Task</td>
<td>Task that can be assigned to a resource for business objects that support tasks.</td>
</tr>
</tbody>
</table>

**Tasks Involved in Import**

Importing data involves multiple tasks including the mapping of your data to Oracle Fusion CRM and preparation of the data files to make them ready for import.

The following figure lists the tasks you must perform to import data into Oracle Fusion CRM:
You must:

- Perform a data comparison.
  
  Compare the data you are importing with the attributes and valid values expected by Oracle Fusion CRM.

- Customize Oracle Fusion CRM if required.
  
  If you want to import attributes that do not have an equivalent in Oracle Fusion CRM, then you may be able to add additional fields by using Oracle Fusion CRM Application Composer. For some validated fields, you can change the range of values available for import by editing the lookup types where those values are stored.

- Prepare the source data.
  
  This includes cleaning the data, removing duplicates, and splitting your data into files that correspond to the available import objects. You must ensure that the data meets the specifications required by the attributes in Oracle Fusion CRM, and that the files include the appropriate unique IDs required for import of the object.

- Import the data.
  
  This involves creating import activities by using the Manage File Import Activities task from the Setup and Maintenance work area and creating maps between the columns in your files and the attributes in the application.

- Validate the imported data
  
  After the data is imported, you must validate the import by viewing the data in the application.
Understanding Application Business Logic for the Object You Are Importing

You must understand how the data you want to import is used in Oracle Fusion CRM by reviewing the user interfaces, data sheets, and application documentation. If you are importing geography information, for example, you must understand how that geography information is used to validate addresses and what role it plays in sales territories. If you are importing customer data, then you must understand that a sales account in Oracle Fusion applications is a customer with a sell-to address. A customer without a sell-to address is considered a prospect.

Tip

Some of the key business logic pertinent to import is described in the help topics that you can review by searching help or implementation guides on the term import followed by the object name.

Applications help is available as a selection in the Help menu on any application page.

Understanding How Data Is Split into Objects and What IDs You Must Include

Before you import, you must also understand how the information you import is represented in Oracle Fusion CRM application objects. Some objects have a simple structure, but others include many child objects, which can be shared with other objects. You must review documentation for each object to understand how to import it.

Importing geography information that forms the basis of address validation, for example, is relatively simple because the relationships between the geographical data is determined within the data itself and the number of attributes that determine an address is small.

Importing customer data is much more complex, requiring you to understand how customer information is broken down into different objects and how those objects must reference each other in your file.

Some legacy applications store information about customers and competitors as separate entities. If a competitor becomes a customer, you have to copy the information about the organization and create a customer record. In Oracle Fusion, you indicate a competitor is now a customer. Similarly, contact information is often part of the customer information so you must reenter the information about that person each time he changes employers. In Oracle Fusion, every individual and organization is a party in the model. If a contact moves to work for a different customer, you simply indicate that the contact works for someone else. You get to keep all the information you have about that contact. This means that customer data is split into many objects that all have to reference each other.

For example, customer contacts with phone numbers are made up of a hierarchy of three objects: the customer, the contact, and the phone number. Each object must have a unique ID and has to refer to the objects above it in the hierarchy when you import.

The following figure provides an illustration with a simple example.

- Oracle is the customer at the top of the hierarchy with its unique organization ID.
- The Oracle contact, John Tanaka, has its own unique ID and must also reference the organization ID for Oracle.
- The contact’s phone number, +1310-555-1212, must have its own ID and reference both the contact and the customer.
Splitting data into multiple objects impacts the content of the import file:

- **Your file must include many columns of IDs**
  
  If your legacy data does not already contain the required IDs, you can create them manually in Microsoft Excel.
  
- **Each row of your file must include the unique ID of the object you are importing and the IDs of all the parent objects.**
  
- **You must import data in a specific order to make sure that a parent object exists before you import the child object or you must include the parent object information in the same file.**
  
  For example, if you want to import customer contacts, then you must ensure that all the customer records already exist or that you include the customer data in the same file.

Having multiple reusable objects also affects the way you create the mapping between your file and the application attributes:

- **When you create an import activity and map the attributes in your file to the attributes in the application, you must select the child objects you are importing before selecting the attributes.**

- **You will need to review separate documentation for each object to find out which attributes are available for import and what values are accepted.**

**Understanding What Attributes Are Available for Import and Their Validation**

You must also understand what attributes you can import for each object, which attributes are required and must be present in your file, and what attributes values are permitted.

The list of attributes, their descriptions, and information about valid values are provided in application help topics by import object and in documentation available in the Oracle Enterprise Repository.

**Note**

The valid values that must be present in your import file are not necessarily the same as those you see in the application. For example, values stored in lookup types, require you to include the lookup code for each value rather than the meaning displayed in the user interface.

To obtain the list of valid import values for validated fields, you must consult the lookup types where those values are set. If the lookup type is extensible, then you can edit it to match the values you are importing.

Some import objects permit you to add additional attributes using Oracle Fusion CRM Application Composer. For these objects, you first create the additional attributes in the composer and then create your mapping.
Importing Data from a File: Getting Started

Using the Define File-Based Data Import group of tasks available from the Setup and Maintenance work area, you can import a wide range of application data from text or XML files. Your import can create or update application records. Use the steps outlined in this topic as a general guide only. Import options and other details differ by the type of data you are importing. Before you import, you must also understand how the data in your file will map to the attributes in the application and what values are expected as described in the related topics.

To help you get started, you can use the example templates provided in Document ID 1503223.1 on My Oracle Support. The templates include columns for the most common application attributes and reference numbers. To simplify mapping of source data to the target table columns, each template column is labeled with the combination of the target object and attribute you must select.

**General Steps for Importing Data from a File**

To import data from a file:

1. In the Navigator menu, click the Setup and Maintenance link located under the Tools heading.
   The Setup and Maintenance work area appears.

2. From the All Tasks tab in the Overview region, search for the Manage File Import Activities task.

3. Click the Go to Task button for the task.
   The Manage Import Activities page appears.

   **Tip**
   You can also navigate to the Manage Import Activities page by selecting the import task in the work areas for objects that support importing data.

4. Click the Create button.
   The Create Import Activity: Enter Import Options page appears.

5. In the Name field, enter a name for your import.

6. In the Object field, select the object you are importing.

7. In the Source File region, select one of the Upload From options.

   **Note**
   If you are importing a file into one of the Oracle Cloud services, then you must upload files from your desktop.

   - Desktop
     After you select this option, you must browse for the file.
   - URL
   - Network
Enter the path with the following preface file: //

For example, if the file is located at /tmp/sample.csv, then your entry is file: // /tmp/sample.csv. Note the extra slash in the entry.

8. If your data file includes a header row, then select the **Header Row Included** option.

While you can upload files without header rows, doing so makes it more difficult to complete the mapping between the data in your file and the application.

9. If your file does not use a comma to separate values, then select the correct delimiter in the **Data Type** field.

10. The import requires you to create a mapping between the data in the import file and the target attributes in the application. If you previously imported a file with the same format as the file you are importing now, then select an existing mapping from the **Import Mapping** list. By default, the application saves the import mapping under the import activity name appended with the activation date and time. If you are importing a file in this format for the first time, then you must create the mapping in the next step.

11. If you are importing one of the following objects, you can import attachments by selecting the **Browse** option in the **Attachments** region and selecting a Zip or JAR file of the attachments.

    The following import objects support the import of a single attachment for each record:
    - Assets
    - Interactions
    - Opportunities
    - Partners

    The following import objects support multiple attachments for each record:
    - Leads
    - Tasks

**Note**

You must include a column with the names of individual attachments in your import file as described in the Importing Attachments with File-Based Data Import: Explained topic.

12. In the Import Options region, some of the options in the following table may be available depending on the object you are importing
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Mode</td>
<td>For importing leads and employee resources only, you have the option of specifying if you want to create and update records or update only. If you select update, then any new records will be ignored by the import process. For all other import objects, both create and update are available.</td>
</tr>
<tr>
<td>Allowable Error Count</td>
<td>The maximum number of errors before you terminate import. Below the threshold, all records without errors are imported. Above the threshold, no records are imported.</td>
</tr>
<tr>
<td>Notification E-Mail</td>
<td>The e-mail address of the individual who will receive import processing notifications.</td>
</tr>
<tr>
<td>Customer Data Management</td>
<td>This option is available only if you have licensed Oracle Fusion Trading Community Data Quality. You can select different options for handling duplicates when you are importing customers, consumers, and legal entities either alone or as part of another object.</td>
</tr>
<tr>
<td>Duplicates</td>
<td></td>
</tr>
<tr>
<td>Decimal Separator</td>
<td>Decimal separator used in your import file.</td>
</tr>
<tr>
<td>Date Format</td>
<td>The formatting of the date fields in your file.</td>
</tr>
<tr>
<td>Time Stamp Format</td>
<td>The formatting of time fields in your file.</td>
</tr>
<tr>
<td>File Encoding</td>
<td>The overall encoding for your file.</td>
</tr>
</tbody>
</table>

13. Click **Next**.

The Create Import Activity: Map Fields page displays the attributes in your file with some sample data. If you are reusing an import mapping, then both the **Source** and **Target** columns are already populated. The **Source** columns represent your file. If you are creating a new mapping, then the **Target Object** and **Attribute** columns are blank.

14. For each column in your file that you want to import, select the target object and one of its attributes. Each import object comes with its own set of attributes.

You can choose not to import a column in your file by selecting the **Ignore** check box.
15. If you want to specify a constant value for an attribute in the application, you can add the object, the attribute, and its value in the **Set Constant Values** region.

**Note**
If you are importing data using the import templates provided on My Oracle Support, then each column header in your template includes the names of both the target object and the target attribute to simplify your mapping process.

16. Click **Next**
   The Create Import Activity: Schedule page appears.

17. By default, the import will start immediately after you click Activate in step 19. You can instead start the import at a time you specify by selecting **Specific Date** from the **Schedule** list and entering a start date.

18. Click **Next**.
   The Create Import Activity: Review and Activate page appears.

19. Click **Activate**.
   You return to the Manage Import Activities page where you can view the status of your import.
   An import activity with the status of **Completed** indicates that your data was loaded into the application tables.

20. If the process completes with the status of **Completed with Errors**, click the status link.
    You can view the errors at the bottom of the View Import Status page and by selecting the Attachments link in the Files Processed region.

**File-Based Import Objects: Explained**

Import objects represent the application and attribute information for business objects that can be imported using external source files.

This topic describes the following:
- Import object management options
- Custom objects

**Import Object Management Options**

A single import object can have multiple associated components that are considered objects by themselves. An object and associated objects that can be imported within the same source file are grouped together within the application module class.

**Note**
Each object includes the Import Activity object (MktImpJobs1). The Import Activity object is a required component of the application module but is not mapped to a source file. All values for this object are derived from the Import Activity definition. Consequently, do not update the **Map**, **Required**, and **Default Value** settings for the Import Activity object.
The following table includes information about the import object:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes</td>
<td>A view-only listing of object attributes that represent each column in the interface table for the object.</td>
</tr>
<tr>
<td>Length</td>
<td>A view-only listing of widths for the columns in the interface tables. If the source file values for the attribute have more characters than the attribute length, the source file row will not be imported.</td>
</tr>
<tr>
<td>Default Value</td>
<td>Optionally, specify an attribute value to use if a value is not available from the source file or Import Activity constant value.</td>
</tr>
<tr>
<td>Map</td>
<td>Enable the list of attributes that can be mapped to a source file or constant value in the Import Mapping and Import Activity Map Fields step.</td>
</tr>
<tr>
<td>Required</td>
<td>Specify the list of attributes that must be mapped to source file columns. Consequently, if you have selected an attribute as required, you must also enable the Map option for that attribute. When mapping the external source file, the required target attribute defined for the object are displayed with an asterisk.</td>
</tr>
</tbody>
</table>

**Custom Objects**

To use the file-based import feature for custom objects, you must first generate the artifacts required for import. You generate these required artifacts within Oracle Fusion CRM Application Composer, after making your object model extensions.

**File-Based Import Mapping: Explained**

Import mapping enables you to predefine a mapping between the columns provided in a source file and the attributes pertaining to the objects being imported. Once you create a mapping, it can be reused in the Import Activity definition.

This topic contains the following sections:

- Import options
- Source file options
- Target options

**Import Options**

The following attributes pertain to the import mapping.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The business object to be imported.</td>
</tr>
<tr>
<td>Name</td>
<td>The name that identifies the mapping in the Import Mapping and Import Activity UIs. If the mapping was initially created while mapping fields directly in the Import Activity user interface and automatically saved without providing a user-defined mapping name, the mapping name is derived from the Import Activity name and date.</td>
</tr>
</tbody>
</table>
Decimal Separator

The format of the fractional portion of numerical values in columns mapped to attributes with a decimal attribute type.

Date Format

The format of values in columns mapped to attributes with a date attribute type.

Timestamp Format

The format of values in columns mapped to attributes with a time stamp attribute type.

Lock

If selected, prevents any user, other than the creator of the mapping, from editing the mapping.

### Source File Options

Map each column that the source file is expected to contain with a specific attribute.

The following table describes the details pertaining to columns provided in the source file:

<table>
<thead>
<tr>
<th>Source Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>The sequence number in which the columns are expected to be provided in the source file. Two rows cannot have the same sequence number.</td>
</tr>
<tr>
<td>Column Name</td>
<td>The column name expected in the source file if a header row is included, or more generic values such as Column A, Column B, and so on, if the header row is not included for Text file types. The tagging structure is represented for XML file types.</td>
</tr>
<tr>
<td>Column Width</td>
<td>Use when the delimiter value is fixed width for Text file types only.</td>
</tr>
<tr>
<td>Ignore</td>
<td>Ignore the source file column to exclude the data from being imported.</td>
</tr>
<tr>
<td>Required</td>
<td>If selected, a value must exist in the source file or the row will not be imported.</td>
</tr>
</tbody>
</table>

### Target Options

The following table describes the details pertaining to corresponding attributes in the target application table:

<table>
<thead>
<tr>
<th>Target Attributes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The group of import objects that represent the components of the business object being imported.</td>
</tr>
<tr>
<td>Attribute</td>
<td>The attribute name that represents the corresponding interface table column for the object.</td>
</tr>
<tr>
<td>Duplicate Validation</td>
<td>If selected, the attribute, along with other selected attributes, determines what constitutes a duplicate object when comparing objects in the interface tables and existing objects in the target application tables. For example, to validate the uniqueness of an object in the target application tables by the combination of an object's name and date, select <strong>Duplicate Validation</strong> for both attributes in the mapping.</td>
</tr>
</tbody>
</table>
Import Activity Source File Options: Explained

The Import Activity consists of a step by step guided process to assist you with creating an import activity for a given object.

This topic describes the source file options defined in the Import Activity that are used by the import process to locate and parse the source file data.

Source File Data

Enter attribute details pertaining to the source file as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Type</td>
<td>Source file must be either Text or XML.</td>
</tr>
<tr>
<td>Data Type, Delimiter, and Header Row Included</td>
<td>A Text file type can further be defined based on how the data is delimited and if the source file is expected to include a row of headings for each column.</td>
</tr>
<tr>
<td>Import Mapping</td>
<td>Displays a list of predefined mappings for the object selected for this import activity. The selected mapping will be used as the basis for mapping your source file in the next Import Activity step.</td>
</tr>
</tbody>
</table>

Source File Location

The following outlines the options that are available to you when locating your source file for import.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Selection</td>
<td>Select from the following file selections:</td>
</tr>
<tr>
<td></td>
<td>• Specific file</td>
</tr>
<tr>
<td></td>
<td>Enables you to upload a specific source file from a local file system, such as your desktop, a URL address, or from a network path. A file name is required for this option.</td>
</tr>
<tr>
<td></td>
<td>• Most recent file</td>
</tr>
<tr>
<td></td>
<td>Enables you to schedule repeating import activities without having to select a new file every time. This selection is only available when you select Network from the Upload From options.</td>
</tr>
<tr>
<td></td>
<td>You need to copy the new file to the specified network path for repeating import activities. You do not need to enter a file name for this option and can only upload your source file from a network path. The asterisk wildcard is supported for multiple characters. The question mark wildcard is supported for a single character.</td>
</tr>
</tbody>
</table>
Upload From

You can upload the source file from three locations:
- Desktop
- URL
- Network

If you select Desktop, a File Name field with an associated Update button is displayed. Click Update and browse to search for and select the file you want to upload.

If you select URL, enter the address location as in the following example format: http://www.example.com/

If you select Network, enter the file name path as in the following example format: \ComputerName\SharedFolder\Resource\%

Note
If you selected the Specific File as your file selection option, then you will have to include the file name for both URL and Network file path locations.

---

Importing Attachments Using File-Based Data Import: Explained

When you import data from a file using the Manage File Import Activities task, you can include attachments for a subset of import objects, including leads, opportunities, tasks, and other objects. This topic lists the objects that support attachment import, explains how the import works, and provides guidelines.

**Objects That Support Importing Attachments**

A subset of import objects supports importing attachments. Some objects permit you to import only one attachment for each record. A few objects permit the import of multiple attachments.

The following table lists the import objects that support the import of attachments. A subset of these supports the import of multiple attachments for each record, as indicated in the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Single or Multiple Attachments for Each Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>Single</td>
</tr>
<tr>
<td>Interactions</td>
<td>Single</td>
</tr>
<tr>
<td>Leads</td>
<td>Multiple</td>
</tr>
<tr>
<td>Opportunities</td>
<td>Single</td>
</tr>
<tr>
<td>Partners</td>
<td>Single</td>
</tr>
<tr>
<td>Tasks</td>
<td>Multiple</td>
</tr>
</tbody>
</table>

**How You Import Attachments**

To import attachment, you:

1. Create a ZIP or JAR file of the attachment files.

---
The attachments can be organized in nested folders.

2. Add an additional column to the data file you are importing, and enter the names of the attachment files. The header of this column must always be: ATTACHMENT_FILE_NAME.

This reference column specifies which attachment file belongs to which record. Other optional columns listed in the following table can be used to upload other attachment information, such as a brief description.

The following table lists all of the available attributes with the header names you must use.

<table>
<thead>
<tr>
<th>Column Header</th>
<th>Required or Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTACHMENT_FILE_NAME</td>
<td>Required</td>
<td>Captures the file names in the ZIP file.</td>
</tr>
<tr>
<td>ATTACHMENT_FILE_DESC</td>
<td>Optional</td>
<td>Short description of the file.</td>
</tr>
<tr>
<td>ATTACHMENT_FILE_TITLE</td>
<td>Optional</td>
<td>File title. If you do not import a file title, then the application uses the file name as the title.</td>
</tr>
<tr>
<td>ATTACHMENT_CATEGORY_NAME</td>
<td>Optional</td>
<td>Attachment category.</td>
</tr>
</tbody>
</table>

3. Upload the ZIP or JAR file with the attachments when you create the file import activity.

You do not map the attachment attributes. The application identifies the special names in the column headers.

Note

You must upload one ZIP file of all the attachments. You cannot upload attachments in multiple files or add additional attachments after you upload the ZIP file the first time.

Importing Single Attachments

The following example illustrates the steps required for importing one attachment for each record.

1. Create a ZIP or Java archive (JAR) file of all of your attachments, for example: myfiles.zip:
   - file_1.doc
   - file_2.doc
   - file_3.doc
   - file_4.doc
Note

The numbers in the file names are provided for this example. They are not required.

2. In the import file, add the additional columns to capture the attachment information.

At a minimum, you must include a column with the header name: `ATTACHMENT_FILE_NAME` to capture the attachment file names. You must use this header name without variation so that the application will identify it.

Unlike the other attributes in your import file, you do not map the attachment columns to import objects and attributes when you create an import activity. The application does the mapping automatically. The mapping is based on the column name.

Your import file might contain data similar to that shown in the following table.

<table>
<thead>
<tr>
<th>LeadName</th>
<th>StatusCD</th>
<th>Score</th>
<th>ATTACHMENT_FILE_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 1</td>
<td>QUALIFIED</td>
<td>7</td>
<td>file_1.doc</td>
</tr>
<tr>
<td>Lead 2</td>
<td>QUALIFIED</td>
<td>8</td>
<td>file_2.doc</td>
</tr>
<tr>
<td>Lead 3</td>
<td>QUALIFIED</td>
<td>3</td>
<td>file_3.doc</td>
</tr>
<tr>
<td>Lead 4</td>
<td>QUALIFIED</td>
<td>7</td>
<td>file_4.doc</td>
</tr>
</tbody>
</table>

3. When you create the import activity to import your file, you upload the ZIP or JAR file from your desktop by clicking the **Browse** button in the Attachments region in the Import Options page.

The ZIP or JAR file is imported at the same time as the data file.

Note the following:

- If a record does not have an attachment, then leave the column value blank.
- You can specify a single file to be the attachment for more than one or for all records you are importing. For example, if you wanted the same file to be attached to all the four leads, then your import file structure would be like the data in the following table.

<table>
<thead>
<tr>
<th>LeadName</th>
<th>StatusCD</th>
<th>Score</th>
<th>ATTACHMENT_FILE_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 1</td>
<td>QUALIFIED</td>
<td>7</td>
<td>file_1.doc</td>
</tr>
<tr>
<td>Lead 2</td>
<td>QUALIFIED</td>
<td>8</td>
<td>file_1.doc</td>
</tr>
<tr>
<td>Lead 3</td>
<td>QUALIFIED</td>
<td>3</td>
<td>file_1.doc</td>
</tr>
<tr>
<td>Lead 4</td>
<td>QUALIFIED</td>
<td>7</td>
<td>file_1.doc</td>
</tr>
</tbody>
</table>
**Importing Multiple Attachments**

For import objects that support multiple attachments, you repeat the column header names.

**Note**

If you are adding any of the optional attachment columns, then you must repeat all the columns in the same order.

Suppose you are importing four leads:

- Lead 1 includes attachments file_1.doc, file_2.doc, file_3.doc.
- Lead 2 includes the attachment file_4.doc.
- Lead 4 has no attachments.

Your data file might look like the data in the following table.

<table>
<thead>
<tr>
<th>LeadName</th>
<th>StatusCD</th>
<th>ATTACHMENT_FILE_NAME</th>
<th>ATTACHMENT_FILE_NAME</th>
<th>ATTACHMENT_FILE_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 1</td>
<td>QUALIFIED</td>
<td>file_1.doc</td>
<td>file_2.doc</td>
<td>file_3.doc</td>
</tr>
<tr>
<td>Lead 2</td>
<td>QUALIFIED</td>
<td>file_4.doc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead 3</td>
<td>QUALIFIED</td>
<td>file_5.doc</td>
<td>file_6.doc</td>
<td>file_7.doc</td>
</tr>
<tr>
<td>Lead 4</td>
<td>QUALIFIED</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Import Activity Import Options: Explained**

This topic describes the import options available while creating import activities.

**Source File Data Transformation**

The following options are used to identify the formatting of source file data so the data can be correctly interpreted and transformed by the import process:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decimal Separator</td>
<td>The format of the fractional portion of numerical values in columns mapped to attributes with a decimal attribute type.</td>
</tr>
<tr>
<td>Date Format</td>
<td>The format for values in columns mapped to attributes with a date attribute type.</td>
</tr>
<tr>
<td>Time Stamp Format</td>
<td>The format for values in columns mapped to attributes with a time stamp attribute type.</td>
</tr>
<tr>
<td>File Encoding</td>
<td>The overall encoding of the characters within the file.</td>
</tr>
</tbody>
</table>

**Interface to Target Import Options**

Depending on the object you are importing and the application modules you have implemented, you can select one or more of these options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Mode</td>
<td>For importing leads and employee resources only, you have the option of specifying if you want to create and update records or update only.</td>
</tr>
<tr>
<td></td>
<td>If you select update, then any new records will be ignored by the import process.</td>
</tr>
<tr>
<td></td>
<td>For all other import objects, both create and update are available.</td>
</tr>
</tbody>
</table>
| Allowable Error Count | An error count above the threshold will stop the import process for all records. If the error count is below the threshold, records without errors are imported. In either case, records with errors will be reported in the Error and Exception files. Validation errors include:

- Missing required values
- Values that exceed the attribute length
- Invalid identifiers and lookup codes
- Duplicates to existing records in the destination tables based on the combination of attributes selected for duplicate validation in the predefined Import Mapping

Duplicates found using matching configurations for Customer Data Management objects do not contribute to the error count. |
| Notification E-Mail | The e-mail of the intended recipient of import processing notifications. |
Customer Data Management Duplicates

Using this option, which is available only if you have licensed Oracle Fusion Trading Community Data Quality, you can select different options for handling duplicates when you are importing customers, consumers, and legal entities either alone or as part of another object.

The duplicates are determined using the following matching configurations:

- Batch Location Basic Duplicate Identification
- Batch Person Basic Duplicate Identification
- Batch Organization Basic Duplicate Identification

You can select from one of the following:

- Do Not Import Duplicate Records
  
  If the main object of the Import Activity is a consumer, customer, or a legal entity object, rows that are matched to existing records will not be imported. These duplicates records are reported in the Exception and Error reports.

  If the Customer Data Management objects are components of another object and one or more matches are found, the existing duplicate records are evaluated to determine the most recent record. The most recent record will be associated with the main object being imported.

  For example, when importing a marketing response object, the consumer object is also a component of the response. If the consumer is matched to an existing record, the consumer in the interface tables is not imported. However, the response object will import and the most recent existing consumer record will be associated to the response.

- Import Duplicate Records
  
  The Customer Data Management objects will be imported even if matched records exist.

- Import Duplicate Records and Create Resolution Request
  
  The Customer Data Management objects will be imported even if matched records exist. In addition, a duplicate resolution request is created and displayed in the Customer Data Management, Duplicate Resolution work area.
Duplicate Look Back Days

This option applies only to the Lead import object. Only existing leads created within the period determined by the look back days value are evaluated for duplicates based on the attributes selected for duplicate validation in the predefined import mapping. If a duplicate is found, the lead will not be imported and the duplicate record will be reported on the Exception report. Duplicate leads are included in the calculation of the allowable error count threshold.

Import Activity Field Mapping: Explained

After entering your import options, the second step of the import activity process is to map fields in the source file to the corresponding target attributes.

This topic explains:

- Map Fields
- Saving the Import Mapping
- Constant Values

Map Fields

The Map Fields section can be subdivided into source file columns and target attribute columns.

The source column header value is derived from one of the following:

- Predefined mapping, if one is selected
- The source file, if the Header Row Included option is selected in the first step of the Import Activity definition (for Text file type only)
- Generic values of Column A, Column B, and so on, if the Header Row Included option is not selected (for Text file type only)
- XML tagging structure (for XML file type only)

The following table outlines the source columns:

<table>
<thead>
<tr>
<th>Source Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column Header</td>
<td>Represents the column header for Text file types and the tagging structure for XML file types.</td>
</tr>
<tr>
<td>Example Value</td>
<td>Values are derived from the first source file saved with the predefined mapping. If you did not select a predefined mapping, the example values are taken from the first data row in the source file selected in the first step of the Import Activity definition.</td>
</tr>
<tr>
<td>Ignore</td>
<td>Select this option if you do not want to import the source file data in that column.</td>
</tr>
</tbody>
</table>

The following table outlines the target columns:
### Target Column

<table>
<thead>
<tr>
<th>Target Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>The group of import objects that represent the components of the business object being imported.</td>
</tr>
<tr>
<td>Attribute</td>
<td>The attribute name that represents the corresponding interface table column for the object.</td>
</tr>
</tbody>
</table>

### Saving the Import Mapping

The mapping between source file information and target attributes is saved as a reusable mapping when the Import Activity is saved, using the import activity name and date to derive a mapping name. If you selected a predefined mapping, modifications made in the Import Activity to an unlocked mapping will update and save to the predefined mapping. If the predefined mapping is locked, a modified mapping will be saved as a new mapping. To specify a mapping name for new mappings, select the **Save As** option from the Map Fields **Actions** menu.

### Constant Values

Constant values provide a way to specify a value for a target attribute that all imported objects will inherit. For example, if a source file does not contain a column for business unit and all of the objects in the file belong to the same business unit, enter a constant value for the object and business unit attribute.

### File Import Activity Statuses: Explained

This topic explains the meaning of the different import activity statuses when you import data from a file using the Manage File Import Activities task.

The following table lists and describes the import activity statuses.

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No status displayed for the activity</td>
<td>The new import activity definition is not complete.</td>
</tr>
<tr>
<td>New</td>
<td>The import activity definition is complete, but the activity is not yet scheduled to run.</td>
</tr>
<tr>
<td>Scheduled</td>
<td>The import activity definition is complete and scheduled to run later.</td>
</tr>
<tr>
<td>Interface table upload in progress</td>
<td>The data file is being loaded into the interface tables.</td>
</tr>
<tr>
<td>Base table upload in progress</td>
<td>The data file is being loaded from the interface tables into the application tables.</td>
</tr>
<tr>
<td>Completed</td>
<td>All records were processed and loaded into the application tables.</td>
</tr>
<tr>
<td>Completed with errors</td>
<td>The import activity found errors in the data file that you must correct. You can view details about the errors by clicking the status link.</td>
</tr>
</tbody>
</table>

### File-Based Import Monitoring: Explained

You can monitor all file import activities that are currently scheduled to run, have completed successfully, or failed with errors. For each import activity, you can view the details pertaining to each underlying process and make necessary updates for any failed records to import again.
You can view the list of import activities from the Manage Import Activities page. Select the import activity that you want to monitor by clicking on the hyperlink in the corresponding Status column. The View Import Status results page is displayed which contains the following sections:

- Files Processed
- Import Processes

**Files Processed**

The Files Processed section displays a row for each source file that is processed. The import processing details are summarized and displayed for each source file and include the following:

<table>
<thead>
<tr>
<th>File Processing Summary Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records Read From File</td>
<td>The number of records read from the source file.</td>
</tr>
<tr>
<td>Format Errors</td>
<td>The number of errors found when processing data to insert into the interface tables from the source file, Import Activity constants, and Import Object value default values. View the error details in the Exception and Error files attached to the process.</td>
</tr>
<tr>
<td>Load Errors</td>
<td>The number of errors found when importing data from the interface tables to the destination application tables. View the error details in the Exception and Error files attached to the process.</td>
</tr>
<tr>
<td>Successfully Loaded</td>
<td>The number of import objects imported to the application destination tables. If the import object is made up of multiple components, each component is counted as successfully loaded. Consequently the Successfully Loaded count may be larger than the Records Read From File count. View the successful record details in the Log file attached to the process.</td>
</tr>
<tr>
<td>Attachments</td>
<td>Once an Import Activity process has completed, processing reports are included in the Attachments column. The Log file includes the records that were successfully imported plus the unique destination application table identifiers for the objects. The Exception file includes the records that were not imported plus a reference to one of the errors for each record that failed. The Error file includes all the errors for each record that failed validation.</td>
</tr>
</tbody>
</table>

**Import Processes**

From the Import Processes section, you can view details pertaining to each process involved in importing the objects in the source file. A listing of brief messages provides information on processing steps within each underlying process.

**Managing File-Based Import Exceptions: Worked Example**

This example demonstrates how to resolve errors found in source file data used for importing into interface tables and destination application tables.
The following table summarizes key decisions for this scenario:

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should the errors be corrected and submitted again for import?</td>
<td>Yes, for an invalid value error. No, for a duplicate record found.</td>
</tr>
<tr>
<td>Is the Import Activity processing source files on a repeating schedule?</td>
<td>Yes. An Import Activity is defined to process a new source file weekly. A second Import Activity is defined to process corrections to errors in the weekly file.</td>
</tr>
</tbody>
</table>

1. Review the Import Activity status and reports.
2. Correct the exception file data and save to your desktop.
3. Import the file with the corrected data.

**Prerequisites**

1. Create a mapping between the source file columns and the import object attributes by navigating to the Import Mappings page from the Manage File Import Mappings task in Functional Setup Manager. The mapping includes a combination of fields with **Duplicate Validation** selected to compare source file records and existing records for duplicates during import processing.

2. Create an Import Activity using the mapping. Since you expect a source file on a weekly basis, you select Latest File for the **File Selection** and URL for the **Upload From** choice. Specify a URL value. Define a repeating schedule to repeat once a week. Click **Activate** to save and activate the Import Activity.

3. Create a second Import Activity to use when importing exceptions found in the weekly import file. All settings are the same as the weekly Import Activity with the exception of the Source File Import Options and the Schedule. Since this is only for exception handling, you select Specific File for the **File Selection** and Desktop for the **Upload From** choice. Click **Save** to save the Import Activity but not to activate it.

**Review the Import Activity status and reports**

1. Navigate to the Manage Import Activities page from the Tasks region of your work area or Functional Setup Manager task to view the import status.
2. Click on the **Status** hyperlink for the import activity to navigate to the View Import Status page.
3. Open the exception and error files by navigating to the Files Processed section, **Attachment** column, and clicking on the file names.
4. Review the errors file for details on each error and determine the action to take. In this example, a record in the source file failed the duplicate validation. You verify that the source file record is a duplicate to an existing record and determine the source file record should not be imported. A second record failed due to an invalid date and should be corrected and imported.
Correct the exception file data and save to your desktop

1. With the exception file still open, locate the record with the invalid date and delete all other records. Locate and correct the invalid date value. Save the file to your desktop.

Import the file with the corrected data

1. From the View Import Status page click Cancel to return to the Manage Import Activities page.

2. Select the Import Activity that you defined for exception handling and click the Edit icon.

3. Navigate to the File Name in the Import Options, Source File region and click Update, and then click Browse to search and select the file with the corrected data that you saved to your desktop.

4. Click Next until you are viewing the Review and Activate page. Click Activate to save and activate the Import Activity.

FAQs for File-Based Data Import

What determines the list of objects displayed?

A single import object can have multiple associated components that are considered objects by themselves. Whether or not an associated object can be grouped as a component of another object for the purpose of file import is determined by the complexity of the object structure and how it is stored in the data model. Oracle Fusion provides import objects predefined to meet the file processing import requirements. Consequently, in some cases, more than one source file may be required to capture all associated components of an object.

What happens if I inactivate an Import Activity?

The Import Activity will not stop the currently running process. However, it will stop the next process that has not started plus any future repeating file import activities. You can always activate the process at a later stage.

What happens if I add a marketing list in the Import Activity definition?

File-based data import enables you to record consumers and organization contacts in a marketing list when importing consumer, lead, and response import objects. Select an existing list or create a new one. A marketing list is assigned the list type value of Imported if created while defining an import activity. After the objects are imported successfully, the consumers and contacts are added as members of the marketing list.

Import Objects for Marketing

Getting Started with File-Based Import: Documentation Overview

This topic provides an overview of the types of help available for importing legacy and other data into Oracle Fusion CRM using File-Based Data Import.

There are three main sources of information for import:

- Help topics about using the File-Based Data Import tool are linked to the application pages and available by clicking the help icon.
These topics provide general information about import.

- Help topics on individual import objects are available by searching Oracle Fusion Help Application.

Help topics provide information on the import objects, list the reference guides you must consult for information on individual attributes, and provide examples.

You can navigate to help by selecting **Applications Help** from the **Help** menu at the top right of every application page.

There you can view individual help topics or download implementation guides. In the implementation guides, you can find the import topics grouped under the File-Based Data Import heading in the Define Common CRM Configuration task group.

- Oracle Enterprise Repository, which contains reference guides with detailed information on individual attributes.

You can search for the reference guides by name in the repository, which is available at the following URL: [https://fusionappsoer.oracle.com/oer/index.jsp](https://fusionappsoer.oracle.com/oer/index.jsp)

To understand what attributes are available for import for each object, follow these steps:

1. Start by searching help using the key word **importing** and the name of the object you are importing.

   For example, to get help on importing customers, enter **importing customers**.

Depending on the complexity of the import, your search will return one or more of the following help topic types:

<table>
<thead>
<tr>
<th>Help Topic Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importing <code>&lt;import object name&gt;</code>: Explained</td>
<td>High-level topic that inform the user how each Oracle Fusion business object is structured and explains its relationship to the import object.</td>
</tr>
<tr>
<td><code>&lt;import object name&gt;</code> Import Objects: How They Work Together</td>
<td>This type of topic lists the target objects associated with each import object and provides the names of the Oracle Enterprise Repository reference guides that describe the attributes for those target objects. Target objects are the objects you select when you create the import activity mapping.</td>
</tr>
<tr>
<td>Importing <code>&lt;import object name&gt;</code>: Conceptual Example</td>
<td>This type of topic provides an example of how to import the object without detailed steps.</td>
</tr>
<tr>
<td>Importing <code>&lt;import object name&gt;</code>: Worked Example</td>
<td>This type of topic walks you through an example step by step.</td>
</tr>
</tbody>
</table>
2. Using the names of the reference guides listed in the <import object name> Import Objects: How They Work Together topic, search for and download the reference guides from the Oracle Enterprise Repository.

These guides include detailed descriptions of attributes and permitted values.

**Importing Appointments Using File-Based Import: Explained**

This topic explains how to prepare and import Appointment data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

An appointment is a business object that is used to record scheduled meetings, including participants and references to specific objects of interest such as a sales lead or an opportunity.

Consider the following questions when importing your data:

- How does your legacy system or source system represent an appointment compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

**Comparing Business Object Structures**

You must understand how your appointment data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. To start, you must understand how Oracle Fusion Applications represent the structure of an appointment.

In Oracle Fusion Applications, a single appointment contains information such as the date and time, subject, description, and reminder setting. Additionally, a single appointment can include one or more internal and external participants and one or more references to the objects of interest.

**Import Object for Appointments**

To facilitate the import of appointments, Oracle Fusion Applications incorporates the structure of the appointment into a single import object: Appointment.
Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the appointment.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments</td>
<td>Appointment Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing appointments to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

Oracle Fusion Applications does not support extensible attributes for the appointment object.

Importing Appointments Using File-Based Data Import

For the appointment business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables. The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import object, to create source-file mappings, and to schedule the import activities.

To associate appointments with internal and external participants and business objects, you must include in your source file the unique internal identifier for each participant and business object. Therefore, the associated participants and business objects must be entered or imported before submitting the Appointment import activity. The File-Based Data Import Activity log file typically includes the internal identifier for internal resources, external contacts, and business objects imported using the File-Based Data Import feature. Optionally, you can obtain the internal identifier for existing resources, contacts, and business objects by using the Manage Bulk Data Export, Schedule Export Processes Setup and Maintenance task.

Importing attachments is not supported for the appointment import object.
You must be assigned the Customer Relationship Management Application Administrator to access and submit the import activities for appointments.

Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Participants can view their appointments using the Fusion calendar. Users with access to the related business objects or sales accounts can also view the associated appointments.

Appointment Import Objects Components: How They Work Together

The File-Based Data Import feature supports importing appointment data from an external data source into Oracle Fusion Applications. You use the Appointment import object to submit a file-based import activity. This topic describes the following about the Appointment import object:

- Target import object concepts
- Target objects for the Appointment import object
- Target import object attributes
- Target object attribute reference guide files

Target Import Object Concepts

The Appointment import object is used to import records containing information about appointments representing scheduled meetings, including participants and references to specific objects of interest such as a sales lead or an opportunity.

The Appointment import object is split into separate target import objects for organizing the individual attributes of the appointment and to manage the one-to-many appointment structure. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Appointment Target Import Objects

The target import objects in the Appointment import object are generally grouped into information about the appointment, references to the internal and external participants, and references to the objects of interest. The following figure shows the target import objects included in the Appointment import object, each represented by their familiar name and their formal target import object name, shown in parentheses.
The AppointmentImport target object includes the attributes for the majority of the information captured for an appointment, such as the date and time, subject, description, and reminder setting. To import appointment participants, you will use the ActivityAssigneeImport target object to associate internal resources and the ActivityContactImport target object to associate external contacts. When appointments pertain to specific business objects, such as a sales lead or opportunity, the attributes pertaining to the association of the business objects for the appointment are included in the AppointmentAssociationImport target object.

**Target Import Object Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Target Import Object Attribute Resources**

To access the reference guide files for the Appointment's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Appointment File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>AppointmentImport</td>
<td>Appointment information</td>
<td>ZMM_ACTIVITIES_Reference</td>
</tr>
<tr>
<td>ActivityAssigneeImport</td>
<td>Appointment internal resource participants</td>
<td>ZMM_ACT_ASSIGNMENTS_Reference</td>
</tr>
<tr>
<td>ActivityContactImport</td>
<td>Appointment external contact participants</td>
<td>ZMM_ACT_CONTACTS_Reference</td>
</tr>
</tbody>
</table>

**Importing Click-to-Dial Agents and Agent Connector Parameters: Explained**

This topic explains how to prepare and import Click-to-Dial agent and agent connector parameter data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

Click-to-Dial Agent is a business object that enables the users to sign in to click-to-dial as an agent, establish the connection with their telephony system, then make or receive calls using the Click-to-Dial toolbar.

Consider the following questions when importing your data:
• How does your source system represent the agent compared to how Oracle Fusion Applications represent the same data?
• Do you have to configure values in Oracle Fusion Applications to map to your data values?
• Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
• What import features are available for importing your business object?
• How do you verify your imported data?

Comparing Business Object Structures

Before you import your legacy or source system agent information, you must understand how the Agent data correlates to Oracle Fusion. This starts with an understanding of how Oracle Fusion represents the structure of the data for a Click-to-Dial agent and the agent connector parameters.

The Oracle Fusion click-to-dial object structure is essentially flat as opposed to a deeply hierarchical structure. For any one agent there can be several connectors, each with one-to-many agent parameters.

The Click-to-Dial Agent contains the basic information about the agent and how the agent connects to the telephone system, such as the connector name, the Agent ID, Agent Group, Agent Password, a description, and the status of the agent.
Each agent can have several connector parameters. This information is also contained in the Click-to-Dial Agent import object. It includes such items as the Connector Reference First and Last Name (the agent name), the connector name, any agent connector parameters and their values, for example, the agent user ID or extension.

**Import Objects for the Enhanced Click-To-Dial Agent**

To facilitate the import of the click-to-dial agent, Oracle Fusion has organized the structure of the Agent information into import objects. The import object for the agent and the agent connector parameters is the Click-To-Dial Agent.

**Comparing Business Object Data**

Each import object is a collection of attributes that help to map your data to the Oracle Fusion Applications data and support one-to-many relationships between the structural components that make up the click-to-dial agent and connectors.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to select default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, see Click-to-Dial Agent and Agent Connector Parameter Components: How They Work Together.

**Extensible Attributes**

Oracle Fusion Applications do not support extensible attributes for click-to-dial objects. You can import only data for click-to-dial objects that already exist by default in Oracle Fusion Applications.

**Importing Click-to-Dial Agents and Agent Connector Parameters using File-Based Data Import**

For the click-to-dial business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables. The Define File-Based Data Import Setup and Maintenance task list includes the tasks to configure the import objects, create source-file mappings, and schedule the import activities. You submit file-based import activities for each import object. When creating an agent, you import the Agent object.

You must be assigned the Customer Relationship Management Application Administrator or Sales Administrator role to access and submit the import activities for Click-to-Dial.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with either the Customer
Relationship Management Application Administrator or Sales Administrator role can also navigate to the Click-to-Dial work area to view the imported agents and agent connector parameters.

Click-to-Dial Agent and Agent Connector Parameter Components: How They Work Together

You use the Click To Dial Agents import object to submit a file-based import activity to import your agents and agent connector parameters. This topic describes the following:

- Target import object concepts
- Target objects for the Agent import object
- Target import object attributes
- Target object attribute reference guide files

Target Import Object Concepts

The Click To Dial Agents import object is split into separate target import objects for organizing the individual attributes of the agent and to manage the one-to-many agent connector parameter structure. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object. The Agent import object is used to import click-to-dial agents and information to create or update associated connector parameters specific to the agent.

Agent Target Import Object

The target import object in the Agent import object contains information about agents and information about the agent parameters used by the named connector. The agent connector parameters relate to an agent and connector pairing. The following figure shows the target import objects included in the Click-to-Dial Agent import object, each represented by their familiar name and their formal target import object name, shown in parentheses.

![Click-to-Dial Agent Import Object Diagram]

Click-to-Dial Agent ($ImpCommUser$) is made up of the attributes that define that agent, such as Agent ID, Agent Group, Agent First Name, Agent last name,
a Description, status and Connector name. The Agent Connector Parameter import object (ImpConnUserParamValue) is associates with the Agent and consists of the Connector Reference First and Last names (the agent names), Connector Name, Connector User Parameter Name and Value, as well as the Connector Record Language Code. User parameters can be designated, such as the agent's extension (acdExtension) and it's value (ImportTestAcdExtension) or the User ID, (AcdUserid), and its value, (ImportTestAcdUser).

Target Import Objects Attributes

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

Target Import Objects Attributes Resources

To access the reference guide files for the agent and agent connector parameter target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Agent and Agent Connector Parameter File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Objects (Seeded)</th>
<th>Description</th>
<th>Associated OER Attribute File</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpCommUser</td>
<td>Agent information, such as Agent ID, Agent Group and so on.</td>
<td>MCT_IMP_COMM_USER_Reference</td>
</tr>
<tr>
<td>ImpConnUserParamValue</td>
<td>Agent connector parameters, such as the users ID or extension.</td>
<td>MCT_IMP_CONN_USR_PAR_VAL_Reference</td>
</tr>
</tbody>
</table>

Importing Consumers Using File-Based Import: Explained

This topic explains how to prepare and import consumer data from an external data source into Oracle Fusion Applications, using the File-Based Data Import feature. A consumer is a person who intends to purchase goods and services. Within Oracle Fusion Applications, a person with a selling relationship is referred to as a consumer. A consumer import object allows you to import all information about a consumer, such as the consumer profile, consumer address information, consumer contact point information, and consumer contact preference information.

You must consider the following questions before importing consumer information:
• How does your legacy or source system represent the consumer information compared to how Oracle Fusion Applications represent the same data?

• Do you have to configure values in Oracle Fusion Applications to map them to your existing data values?

• Do you have to customize Oracle Fusion Applications to capture attributes that are critical to the way you do business?

• What import features are available for importing your business object?

• How do I verify my imported data?

**Comparing Business Object Structures**

You must understand how your consumer data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a consumer.

The Oracle Fusion Applications consumer structure is hierarchical. The root of the hierarchy is the consumer profile, which must exist before you can import lower-level entities, such as e-mail, sell-to address, sales account profile, and fax. These child entities can have other entities as their child entities. This hierarchical structure supports one-to-many relationships between the components that make up the consumer.

The following figure shows the consumer and its child entities.

![Consumer Profile Diagram](image)

The person profile contains basic information about the consumer, such as the first name, last name, and party usage. For each consumer, you can have other information, such as sell-to addresses, phone details, and sales account profile.

**Note**

All entities referring to contact information, such as primary phone or e-mail, include a child entity that captures the contact preference. For example, the Primary Phone Contact Preference entity captures the contact preference of the consumer for the contact method primary phone.

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the consumer.
A good understanding of the import objects and attribute details is critical to preparing your import data. Oracle Fusion Applications attribute details are available for your reference in the Oracle Enterprise Repository. The reference guide files contain descriptions, default values, and validations for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correspond to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values.

**Extensible Attributes**

If you have to extend the Oracle Fusion Applications import object to import your legacy or source data, then you must use Oracle Fusion Applications CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Consumers Using File-Based Data Import**

For the consumers business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks required to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a consumer, you use the Consumer import object. An import activity defines the instructions for processing the import data, including the source file, import mapping from the source file to the Oracle Fusion Applications object and attribute, and the import schedule.

When importing consumer information, you first import the basic person profile information and then the child entities for the consumer. When importing child entities, you must provide the parent reference information for all parent levels for the entity. You must provide the PartyOrigSystem and PartyOrigSystemReference of the consumer when importing contacts for the consumer. PartyOrigSystem is the source system code that identifies the source of the information being imported. PartyOrigSystemReference is unique for each row of data within a single import, and is a combination of PartyOrigSystem and a unique reference. For example, you first import basic profile details, such as first name, last name, party type, and party usage. You then import other information, such as additional names, e-mail, sell-to address, and primary phone for the consumer.

**Verifying Your Imported Data**

You can view the list of import activities from the Manage Import Activities page. You can verify your imported data by clicking the **Status** column for your
import activity. Alternatively, you can also navigate to the Customer Center work area to view the consumer information that you have imported.

**Consumer Import Objects: How They Work Together**

The Consumer import object allows you to import consumers, their detailed information, and contacts related to the consumer. This topic describes the Consumer import object and introduces the following:

- Target import object concepts
- Target objects for the Consumer import object
- Target import object attribute
- Target object attribute reference guide files

**Consumer Target Import Object Concepts**

The Consumer import object imports consumer information, and is split into separate target import objects for organizing the individual attributes of the different aspects of the consumer. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

The target import objects included in the Consumer import object are grouped into information about the consumer. The person profile is the target import object containing attributes to import information about the consumer. When updating an existing consumer with additional information, you must provide the parent reference information for the existing consumer.

To update the information for an existing consumer or to create a consumer record, you can import consumer profile information, addresses, and contact points, such as phone and fax number. The following target import objects are for creating and updating the corresponding consumer information:

- PersonProfile
- PersonAddress
- PrimaryPhone
- Fax
- Mobile
- AdditionalName
- e-mail
- SellToAddress
- SalesAccountProfile

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target import object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**
If any of the attributes that you want to import do not have an equivalent target object attribute, then review the Oracle Fusion Applications CRM Application Composer extensibility features for the consumer.

**Target Import Objects Attributes Resources**

To access the reference guide files for the consumer target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Consumer File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>PersonProfile</td>
<td>Includes detailed person information such as person name, relationship type, gender, and marital status. Sample attributes: PersonFirstName, PersonLastName, DateOfBirth, PersonAcademicTitle, and PlaceOfBirth. Reference attributes: PartyId, PartyOrigSystem, PartyOrigSystemReference, RelOrigSystem, RelOrigSystemReference, and RelationshipId.</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td>SellToAddress</td>
<td>Includes consumer addresses and party sites information. If party site usage of an address is not defined, then the import process sets it to Sell-To. In case there are multiple addresses without party site usage information, then the import process designates one of the addresses as the Sell-To address. Sample attributes include Address1, Address2, City, Country, County, State, and PostalCode. Reference attributes for location: LocationOrigSystem, LocationOrigSystemReference, and LocationId1. Reference attributes for party sites: SiteOrigSystem and SiteOrigSystemReference, and PartysiteId1. Reference attributes for party site use: SiteuseOrigSystem, SiteuseOrigSystemRef, and PartySiteUseId.</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>PrimaryPhone</td>
<td>Indicates the primary phone number of the consumer. If the consumer has multiple phone numbers, one of the phone numbers is designated as the primary phone number. Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Mobile</td>
<td>Indicates the mobile phone number of the consumer. Sample attributes: PhoneAreaCode, PhoneCountryCode, and PhoneNumber. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Fax</td>
<td>Indicates the fax number of the consumer. Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Email</td>
<td>Indicates the e-mail of the consumer. Sample attributes: ContactPointPurpose, EmailAddress, and StartDate. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>InstantMessenger</td>
<td>Indicates the instant messenger or social networking information of a consumer. Sample attributes: ContactPointPurpose, EndDate, InstantMessagingAddress, and InstantMessengerType. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>SalesAccountProfile</td>
<td>Includes detailed information about a consumer sales account. A sales account is a specific sell-to entity within a given consumer. A consumer can have multiple sales accounts and sales account profiles. Sample attributes: AccountDirectorId, CreationDate, NamedAccountFlag, and AssgnExceptionFlag. Reference attributes: OwnerOrigSystem and OwnerOrigSystemReference.</td>
<td>ZCA_IMP_SALES_ACCOUNTS_Reference</td>
</tr>
<tr>
<td>AdditionalName</td>
<td>Indicates alternative name of a consumer. Sample attributes: NameId, PersonFirstName, PersonLastName, and PersonTitle. Reference attributes: AdditionalNameOrigSystem and AdditionalNameOrigSystemReference.</td>
<td>HZ_IMP_ADDTNLPARTYNAMES_T_Reference</td>
</tr>
<tr>
<td>Classification</td>
<td>Includes classification information for a consumer. Classification allows you to categorize entities such as parties, projects, tasks, and orders as hierarchies. Sample attributes: ClassificationCode, ClassificationCategory, PrimaryFlag, and Rank. Reference Attributes: ClassificationOrigSystem and ClassificationOrigSystemReference.</td>
<td>HZ_IMP_CLASSIFICS_T_Reference</td>
</tr>
<tr>
<td>Column</td>
<td>Description</td>
<td>Reference</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AdditionalIdentifier</td>
<td>Includes detailed information about an additional identifier for a consumer.</td>
<td>HZ_IMP_ADDTNLPARTYIDS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: IdentifierValue, IdentifierType, Country, and IssuingAuthorityName.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: IdentifierValue, AdditionalIdentifierOrigSystem and AdditionalIdentifierOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>Includes information about a relationship between the consumer and another entity, such as an organization or a person.</td>
<td>HZ_IMP_RELSHIPS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: RelationshipCode, RelationshipType, and DependentFlag.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: RelationshipID, RelOrigSystem and RelOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>PrimaryPhoneContactPreference</td>
<td>Indicates the consumer's preference about being contacted through phone.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference Attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>MobileContactPreference</td>
<td>Indicates the consumer's preference about being contacted through mobile phone.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference Attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
</tbody>
</table>
FaxContactPreference: Indicates the consumer’s preference about being contacted through fax.

Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.

Reference Attributes: CpOrigSystem and CpOrigSystemReference.

EmailContactPreference: Indicates the consumer’s preference about being contacted through mobile phone.

Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.

Reference Attributes: CpOrigSystem and CpOrigSystemReference.

**Importing Contacts Using File-Based Import: Explained**

This topic explains how to prepare and import contact data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature. A contact is a person party related to a customer, and the contact object contains information that identifies the contact and offers the contact points of the contact. Contact points can be geographical addresses, phone numbers, e-mail IDs, URLs, messenger IDs, and so on. The contact object also contains contact preference information for the contact.

You must create or import contacts before you can associate them with customer objects. You must consider the following questions before importing contact information:

- How does your legacy system or source system represent the contact compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

**Comparing Business Object Structures**

You must understand how your contact data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a contact.

In Oracle Fusion Applications, one table stores the contact information and another table optionally stores contact point details for that contact. A contact...
point is an identified means to contact a party. Contact points can be phone numbers, e-mail IDs, Web site addresses, or instant messenger IDs. The following figure shows the contact object and its child entities.

The contact profile contains basic information about the contact, such as the contact name, party type, and party usage. For each contact, you can assign classifications, phone details, and additional names. If the contact is a consumer, then the contact relationship of the consumer includes other child entities that capture information about the consumer contact, such as contact job, contact phone, contact address, and contact e-mail.

**Note**

All contact-related entities, such as phone or e-mail, include a child entity that captures the contact preference. For example, the Phone Contact Preference entity captures the contact preference of the consumer for the contact method phone.

**Import Objects for the Contact**

To facilitate the import of contacts, Oracle Fusion Applications incorporate the structure of the contact business object into import objects. The import object for contacts is Contact.

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the contact.
A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
<td>Contact Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing contacts to search for related topics in Oracle Fusion Applications Help.

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Contacts Using File-Based Data Import**

For the Contact business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new contact, you import the Contact object. You must be assigned the master Data Management Administrator job role to access and submit the import activities for contacts.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. You can also navigate to the Customer Center work area to view the contact information that you have imported.

**Contact Import Objects: How They Work Together**

You can import all your contact information using the Contact import object. This topic describes this import object and introduces the following:

- Target import object concepts
- Target objects for the Contact import object
- Target import object attributes
• Target import object attribute reference guide files

**Target Import Object Concepts**

The Contact import object is used to import a contact’s profile information, such as first name, last name, address, and so on, and contact point information, such as phone numbers, fax, e-mail IDs, and so on. The Contact import object is split into separate target import objects for organizing the individual attributes of the different aspects of the contact’s profile and contact points. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Contact Target Import Objects**

The target import objects included in the Contact import are grouped into information about the contact and the contact’s relationship with other parties. The contact profile is the target import object containing attributes to import information about the contact. You can have multiple contact relationships associated with a contact. There are multiple target import objects that include attributes to import contacts and their related information.

When updating an existing contact, you must provide the parent reference information of the existing contact. When importing contact profile or contact point information for a contact, you must provide relationship reference information in addition to the parent reference. You must provide this information because a contact can have multiple relationships with an organization, such as employee or board member. When importing information about a contact, you must refer to the specific relationship that you want to import information for. For example, you must specify whether you want to import information for John Smith the employee or John Smith the board member. If you do not include the reference information for a contact relationship, then the import process creates a new relationship.

To update the information for an existing contact or to create a contact record, you can import contact profile information, addresses, and contact points. The following target import objects are for creating and updating contact information: PersonProfile, Fax, PrimaryPhone, Url, SalesAccountProfile, Classification, AdditionalName, Relationship, and AdditionalIdentifier.

To update or create a contact point, use the following target import objects: ContactRelationship, ContactJob, ContactAddress, ContactEmail, ContactPhone, ContactMobile, ContactInstantMessenger, and ContactFax. All contact-point-related entities, such as phone or e-mail, include a child entity that captures the contact preference. For example, the ContactPhoneContactPreference entity captures the contact preference of the primary phone contact method.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping...
task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**
If any of the attributes that you want to import do not have an equivalent for the target object attribute, then review the Oracle Fusion CRM Application Composer Extensibility features for the marketing response.

**Target Import Objects Attributes Resources**
To access the reference guide files for the response's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Response File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>PersonProfile</td>
<td>Includes information that identifies a contact.</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PersonFirstName, PersonLastName, DateOfBirth, gender, HouseholdIncome, and PlaceOfBirth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>Indicates the fax number of the contact.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td>FaxContactPreference</td>
<td>Indicates the contact's preferences about being contacted through Fax.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td><strong>Phone</strong></td>
<td>Indicates the phone number of the contact. If the contact has multiple phone numbers, then the first phone number is designated as the primary phone number. The attributes of PrimaryPhone, Fax, and URL are the same. However, the value of the attribute ContactPointType is different for each of these contact point related entities. Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td><strong>PhoneContactPreference</strong></td>
<td>Indicates the contact’s preferences about being contacted by phone. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td>Indicates the e-mail of the contact. Sample attributes: ContactPointPurpose, EmailAddress, and StartDate. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td><strong>EmailContactPreference</strong></td>
<td>Indicates the contact’s contact preferences about being contacted through e-mail. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
</tbody>
</table>
| InstantMessenger | Indicates the instant messenger information of a contact.  
| Sample attributes: ContactPointPurpose, EndDate, InstantMessagingAddress, and InstantMessengerType.  
| Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_CONTACTPTS_T_Reference |
| Mobile | Indicates the mobile number of a contact.  
| Sample attributes: ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, PhoneNumber, and PrimaryFlag.  
| Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_CONTACTPTS_T_Reference |
| MobileContactPreference | Indicates the contact's preferences about being contacted through mobile phone.  
| Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode  
| Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_CONTACTPREFS_Reference |
| Classification | Includes classification information for a contact. Classification allows you to categorize entities, such as parties, projects, tasks, and orders as hierarchies.  
| Sample attributes: ClassificationCode, ClassificationCategory, PrimaryFlag, and Rank.  
<p>| Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_CLASSIFICS_T_Reference |
| <strong>Address</strong> | Indicates the address of a contact. If the contact has multiple addresses, then the first address is designated as the primary address. Sample attributes: Address1, Address2, City, Country, County, State, and PostalCode. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_PARTYSITES_T_Reference |
| <strong>AddressContactPreference</strong> | Indicates the contact’s preferences about being contacted at the primary address. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_CONTACTPREFS_Reference |
| <strong>AdditionalName</strong> | Indicates the alternative name of a contact. Sample attributes: Additional Name, Additional Name Type, and GlobalPreferredNameFlag. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_ADDTNLPARTYNAMES_T_Reference |
| <strong>AdditionalIdentifier</strong> | Includes the basic information about an additional identifier for the contact. Sample attributes: IdentifierValue, IdentifierType, Country, and IssuingAuthorityName. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId. | HZ_IMP_ADDTNLPARTYIDS_T_Reference |</p>
<table>
<thead>
<tr>
<th>Table Name</th>
<th>Description</th>
<th>Sample Attributes</th>
<th>Reference Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContactRelationship</td>
<td>Includes information about a relationship between the contact and other parties.</td>
<td>RelationshipCode, RelationshipType, and DependentFlag.</td>
<td>PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
</tr>
<tr>
<td>ContactEmail</td>
<td>Indicates the e-mail contact point of the contact.</td>
<td>ContactPointPurpose, EmailAddress, and StartDate.</td>
<td>PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
</tr>
<tr>
<td>ContactEmailContactPreference</td>
<td>Indicates the contact's preferences about being contacted through the e-mail contact point.</td>
<td>ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode</td>
<td>PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
</tr>
<tr>
<td>ContactFax</td>
<td>Indicates the number of the fax contact point of the contact.</td>
<td>ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, and PhoneExtension.</td>
<td>PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
</tr>
<tr>
<td>Table Title</td>
<td>Description</td>
<td>Table Reference</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>ContactFaxContactPreference</td>
<td>Indicates the contact’s preference about being contacted through the fax contact point. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactInstantMessenger</td>
<td>Captures information about a contact’s instant messenger contact point. Sample attributes: ContactPointPurpose, EndDate, InstantMessagingAddress, and InstantMessengerType. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactMobile</td>
<td>Indicates the number of a contact’s mobile contact point. Sample attributes: ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, PhoneNumber, and PrimaryFlag. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactMobileContactPreference</td>
<td>Indicates the contact’s preferences about being contacted through the mobile phone contact point. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactPhone</td>
<td>Indicates the number of the contact's phone contact point. If the contact has multiple phone numbers, then the first phone number is designated as the primary phone number. Sample attributes: ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, PhoneNumber, and PrimaryFlag. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactPhoneContactPreference</td>
<td>Indicates the contact's preferences about being contacted through the phone contact point. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
<td></td>
</tr>
<tr>
<td>ContactAddress</td>
<td>Indicates the address of a contact's address contact point. If the contact has multiple addresses, then the first address is designated as the primary address. Sample attributes: Address1, Address2, City, Country, County, State, and PostalCode. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
<td></td>
</tr>
</tbody>
</table>
Importing Country Structures Using File-Based Import: Explained

This topic explains how to prepare and import country structure data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature. A country structure is a hierarchical grouping of geography types for a country. For example, the geography structure for the United States has the geography type of State at the top, followed by the County, then the City, and finally the Postal Code.

You can use the country structure to set up the following:

- The relationships between geographies within a country
- The types of geographies that you can define for a country

Consider the following questions when importing your data:

- How does your legacy system or source system represent the country structure compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?
Comparing Business Object Structures

You must understand how your country structure data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a country structure.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country’s structure, organized in a hierarchy using geography level numbers. For example, if you are importing the country structure of Australia, the country structure could be the following: 1: Country, 2: State, 3: County, 4: Town, 5: ZIP.

Import Objects for the Country Structure

To facilitate the import of country structures, Oracle Fusion Applications incorporate the structure of the country structure into import objects. The import object for country structures is GeoStructureLevel.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the country structure.

A good understanding of the attribute details of the import objects is critical to preparing your import data. For information about the Oracle Fusion Applications attributes, see the Oracle Enterprise Repository. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Structure</td>
<td>Country Structure Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Extensible Attributes

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.
Importing Country Structures Using File-Based Data Import

For the country structure business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new country structure, you import the Country Structure object.

You must be assigned the Master Data Management Administrator job role to access and submit the import activities for country structures.

Verifying Your Imported Data

You can view the list of import activities from the Manage Import Activities page. You can verify your imported data by clicking the Status column for your import activity.

Country Structure Import Objects: How They Work Together

This topic describes the Country Structure import object. You use the Country Structure import object when you submit a file-based import activity to import your country structure information. This topic introduces the following:

- Target import object concepts
- Target objects for the Country Structure import object
- Target import object attributes
- Target object attribute reference guide files

Target Import Object Concepts

The Country Structure import object is used to import a country structure hierarchy, including details, such as geography type, geography type name, parent geography type, geography level numbers, and so on. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Country Structure Target Import Objects

The Country Structure import object contains one target import object that organizes the individual attributes of the different aspects of the geography structure. When updating an existing country structure, you must provide the parent reference information of the existing country structure. This reference information connects the imported geography structure to the existing one. Use the ImpGeoStructureLevel target import object to create and update country structure information.
Target Import Objects Attributes

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import does not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for country structures.

Target Import Objects Attributes Resources

To access the reference guide files for the country code's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

For detailed information on importing geographies using file-based import, refer to Document No. 1481758.1, Importing Master Reference Geography Data, on the Oracle Support site.

The following table lists the reference guide files that are available from the Documentation tab for the Country Code File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeoStructureLevel</td>
<td>Contains information that specifies a country’s geography structure. Sample attributes: GeographyType, GeographyTypeName, LevelNumber, and ParentGeographyType. Reference attribute: CountryCode</td>
<td>HZ_IMP_GEO_STRUCTURE_LEVELS_Reference</td>
</tr>
</tbody>
</table>

Importing Customers Using File-Based Import: Explained

This topic explains how to prepare and import customer data from an external data source into Oracle Fusion Applications, using the File-Based Data Import feature.
A customer is an entity with whom you have a selling relationship. Oracle Fusion Applications refer to sales account and sales prospects collectively as a Customer. A customer business object allows you to capture all information about a customer, such as the customer profile, customer contact relationships information, and customer contact points.

A sales account is a specific sell-to entity within a given customer. You can create leads and opportunities for sales accounts. An entity with a sales account in Oracle Fusion Applications can be one of the following:

- Sales Prospect: A prospective entity or person who does not have a sell-to address. This entity is used to define leads.
- Customer: A sales account or sales prospects.
- Legal Entity: A legal entity is a party that can enter into legal contracts or a business relationship. It can be sued if it fails to meet contractual obligations.

You can use the Customer import object to import sales accounts or sales prospects of the type organization. You can use the Group Customer import object to import customers of the type group, and the Consumer import object to import customers of the type person.

You must consider the following questions when importing your data:

- Did you identify the records that should be imported as sales prospects, and the records that should be imported as sales accounts?
- How does your legacy or source system represent the customer information compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map your existing data values to the Customer import object?
- Do you have to customize Oracle Fusion Applications to capture attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do I verify my imported data?

**Comparing Business Object Structures**

Before you can import your customer data from the legacy or source system, you must first analyze the data and see how it corresponds to the customer object structure of Oracle Fusion Applications. You must understand how Oracle Fusion Applications represent the structure of the data for a customer.

The Oracle Fusion Applications Customer import object structure is hierarchical. The root of the hierarchy is the organization profile, which must exist before you can import lower-level components, such as classifications, contacts, and sales account profiles. These child entities can have other entities as their child entities. This hierarchical structure supports one-to-many relationships between the components that make up the customer.

The following figure shows the customer object and its child entities.
The organization profile contains basic information about the customer, such as the customer name and party usage. For each customer, you can assign classifications, contacts, sell to addresses, phone details, and additional names. The contact of the customer, in turn, includes other child entities that capture information about the contact, such as contact job, contact primary phone, contact primary address, and contact e-mail.

**Note**

All contact entities, such as primary phone or e-mail, include a child entity that captures the contact preference. For example, the Primary Phone Contact Preference entity captures the contact preference of the customer for the contact method primary phone.

**Comparing Business Object Data**

After you understand the structure of the data, the next step is to compare the detailed attribute values of your data with the Oracle Fusion Applications data. Each import object is a collection of attributes organized to assist you when mapping your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the customer.

A good understanding of the import objects and attribute details is critical to preparing your import data. The reference guide files contain descriptions, default values, and validations for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correspond to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values.

**Extensible Attributes**

To extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your
extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Customers Using File-Based Data Import**

For the customer business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Import Setup and Maintenance task list includes the tasks required to configure the import objects, to create source file mappings, and to schedule the import activities. You submit file-based import activities for each import object. An import activity defines the instructions for processing import data including the source file, import data mapping from the source file to the Oracle Fusion Applications object and attribute, and the import schedule.

When importing customer information, you first import the basic customer profile information, followed by the child entities for the customer. When importing child entities, you must provide the parent reference information for all parent levels for the entity. For example, you first import basic profile details, such as customer name, party type, and party usage. You then import contacts and contact information, such as phone, address, contact points, and fax for the customer. You must provide the PartyOrigSystem and PartyOrigSystemReference of the customer when importing contacts for the customer. PartyOrigSystem is the source system code that identifies the source of the information being imported. PartyOrigSystemReference is unique for each row of data within a single import, and is a combination of PartyOrigSystem and a unique reference. When importing contact information for a customer, you must provide the relationship reference information. This information is required because a contact can have multiple relationships with a customer.

**Verifying Your Imported Data**

You can view the list of import activities from the Manage Import Activities page. You can verify your imported data by clicking the Status column for your import activity. Alternatively, you can also navigate to the Customer Center work area to view the customer information that you have imported.

**Customer Import Objects: How They Work Together**

The Customer import object allows you to import customers, their detailed information, and contacts related to the customer. This topic describes the Customer import object. It introduces the following:

- Target import object concepts
- Target objects for the Customer import object
- Target import object attribute
- Target import object attribute reference guide files for evaluating and mapping source file data

**Customer Target Import Object Concepts**

The Customer import object imports customer information and contacts related to customer. The Customer import object is split into separate target import
objects for organizing the individual attributes for the different aspects of the customer and customer contact. Before you import customer information, you must understand how the target objects are related and what attributes are included in each object. This understanding helps you create the appropriate mapping between the source data in your import file and the target attributes.

The target import objects included in the Customer import object are grouped into information about the customer and the customer contact. The organization profile is the target import object containing attributes to import information about the customer. You can have multiple contacts associated with a customer. The Customer import object has multiple target import objects that include attributes to import customer contacts and their related information.

When updating an existing customer with additional information, you must provide the parent reference information for the existing customer. When importing customer contacts or contact information for a customer, you must provide relationship reference information in addition to the parent reference. This information is required because a contact can have multiple relationships with an organization, such as an employee or board member. When importing information about a contact you must refer to the specific relationship that you want to import information for. For example, you might want to import information for John Smith the employee or John Smith the board member. If you do not include the reference information for a customer-contact relationship, then the import process creates a relationship.

To update the information for an existing customer or to create a customer record, you can import customer profile information, addresses, and contact points, such as a phone and fax. The following target import objects are for creating and updating the corresponding customer information: OrganizationProfile, Fax, PrimaryPhone, Url, SalesAccountProfile, Classification, AdditionalName, Relationship, SellToAddress, and AdditionalIdentifier.

To update or to create a customer contact, use the following target import objects: ContactPersonProfile, ContactJob, ContactPrimaryAddress, ContactEmail, ContactPrimaryPhone, ContactMobile, ContactInstantMessenger, and ContactFax. All contact-related entities, such as primary phone or e-mail, include a child entity that captures the contact preference. For example, the Primary Phone Contact Preference entity captures the contact preference of the legal entity for the contact method primary phone.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.
Note

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion Applications CRM Application Composer extensibility features for the customer.

**Target Import Objects Attributes Resources**

To access the reference guide files for the customer target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Customer File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrganizationProfile</td>
<td>Includes detailed customer information, such as, organization name and organization type.</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: OrganizationSize, UniqueNameAlias, CeoName, and CertificationLevel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td>PrimaryPhone</td>
<td>Indicates the primary phone number of the customer. If the customer has multiple phone numbers, one of the phone numbers is designated as the primary phone number.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td>Includes classification information for a customer. Classification allows you to categorize entities such as parties, projects, tasks, and orders as hierarchies.</td>
<td>HZ_IMP_CLASSIFICATIONS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ClassificationCode, ClassificationCategory, PrimaryFlag, and Rank.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: ClassificationOrigSystem and ClassificationOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
<td>Reference</td>
</tr>
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<td>------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AdditionalName</td>
<td>Indicates alternative name of a customer.</td>
<td>HZ_IMP_ADDTNLPARTYNAMES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: Additional Name, Additional Name Type, and GlobalPreferredNameFlag.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: AdditionalNameOrigSystem and AdditionalNameOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>Indicates the fax of the customer.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>FaxContactPreference</td>
<td>Indicates the customer preference about being contacted through Fax.</td>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Url</td>
<td>Indicates the Url of the customer organization.</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactPointType, PrimaryFlag, Url, and WebType.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
<td></td>
</tr>
<tr>
<td>Table Title</td>
<td>Description</td>
<td>Reference</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>SalesAccountProfile</td>
<td>Includes detailed information about a customer sales account. A sales account is a specific sell-to entity within a given customer. A customer can have multiple sales accounts and sales account profiles. Sample attributes: AccountDirectorId, NamedAccountFlag, and AssgnExceptionFlag. Reference attributes: OwnerOrigSystem and OwnerOrigSystemReference.</td>
<td>ZCA_IMP_SALES_ACCOUNTS_Reference</td>
</tr>
<tr>
<td>SellToAddress</td>
<td>Includes customer addresses and party sites information. If party site usage of an address is not defined, then the import process sets it to Sell-To. If there are multiple addresses without party site usage information, then the import process designates one of the addresses as the Sell-To address. Sample attributes: Address1, Address2, City, Country, County, and State. Reference attributes for location: LocationOrigSystem, LocationOrigSystemReference, and LocationId1. Reference attributes for party sites: SiteOrigSystem, SiteOrigSystemReference, and PartysiteId1. Reference attributes for party site use: SiteuseOrigSystem, SiteuseOrigSystemRef, and PartySiteUseId.</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td>AdditionalIdentifier</td>
<td>Includes detailed information about an additional identifier for the customer. Sample attributes: IdentifierValue, IdentifierType, Country, and IssuingAuthorityName. Reference attributes: IdentifierValue, AdditionalIdentifierOrigSystem, and AdditionalIdentifierOrigSystemReference.</td>
<td>HZ_IMP_ADDTNLPARTYIDS_T_Reference</td>
</tr>
</tbody>
</table>
| Relationship | Includes information about a relationship between the customer and another entity, such as an organization or a person. You must enter a relationship code in the RelationshipCode column, when creating a relationship.  
Sample attributes: RelationshipCode, RelationshipType, and DependentFlag.  
Reference attributes: RelationshipID, RelOrigSystem and RelOrigSystemReference. | HZ_IMP_RELSHIPS_T_Reference |
| ContactPersonProfile | Includes detailed information, such as, person name, relationship type, and marital status, of a customer contact.  
Sample attributes: Gender, MaritalStatus, PartyType, PartyUsageCode, PersonFirstName, and PersonLastName.  
Reference attributes: PartyID, PartyOrigSystem, PartyOrigSystemReference, RelOrigSystem, RelOrigSystemReference, and RelationshipId. | HZ_IMP_RELSHIPS_T_Reference |
| ContactAdditionalName | Indicates alternative name of a customer contact.  
Sample attributes: NameId, PersonFirstName, PersonLastName, and PersonTitle.  
Reference attributes: AdditionalNameOrigSystem and AdditionalNameOrigSystemReference | HZ_IMP_ADDTNLPARTYNAMES_T_Reference |
| ContactEmail | Indicates the e-mail of the customer contact.  
Sample attributes: ContactPointPurpose, EmailAddress, and StartDate.  
Reference attributes: CpOrigSystem and CpOrigSystemReference. | HZ_IMP_CONTACTPTS_T_Reference |
<table>
<thead>
<tr>
<th>ContactInstantMessenger</th>
<th>Indicates the instant messenger or social networking information of a customer contact.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample attributes: ContactPointPurpose, EndDate, InstantMessagingAddress, and InstantMessengerType.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>ContactPrimaryAddress</td>
<td>Indicates the primary address of a customer contact. If the contact has multiple addresses, one of the addresses is designated as the primary address.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: Address1, Address2, City, Country, County, and State.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes for location: LocationOrigSystem, LocationOrigSystemReference, and LocationId1.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes or party sites: SiteOrigSystem, SiteOrigSystemReference, and PartysiteId1.</td>
</tr>
<tr>
<td>ContactFax</td>
<td>Indicates the fax of the customer contact.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, and PhoneExtension.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>ContactJob</td>
<td>Includes job information of a customer contact.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: Comments, ContactNumber, Department, DepartmentCode, and JobTitleCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: RelationshipID, RelOrigSystem and RelOrigSystemReference.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HZ_IMP_CONTACTPTS_T_Reference</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
<td></td>
</tr>
<tr>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>HZ_IMP_CONTACTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ContactMobile</td>
<td>Indicates the mobile number of a customer contact.</td>
</tr>
<tr>
<td>ContactPrimaryPhone</td>
<td>Indicates the primary phone number of the customer contact. If the customer has multiple phone numbers, one of the phone numbers is designated as the primary phone number.</td>
</tr>
<tr>
<td>PrimaryPhoneContactPreference</td>
<td>Indicates the customer contact preference about being contacted through phone.</td>
</tr>
<tr>
<td>ContactEmailContactPreference</td>
<td>Indicates the customer contact preference about being contacted through e-mail.</td>
</tr>
<tr>
<td>ContactFaxContactPreference</td>
<td>Indicates the customer contact preference about being contacted through Fax.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>ContactMobileContactPreference</td>
<td>Indicates the customer contact preference about being contacted through mobile phone.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>ContactPrimaryAddressContactPreference</td>
<td>Indicates the customer contact preference about being contacted at the primary address.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>ContactPrimaryPhoneContactPreference</td>
<td>Indicates the customer contact preference about being contacted through the primary phone number.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
</tbody>
</table>

**Importing Employee Resources Using File-Based Import: Explained**

This topic explains how to prepare and import employee resource data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.
Employee resources are employees within the deploying company who can be assigned work objects. You must create or import employee resources before you can associate them with resource organizations, resource teams, or work objects. You enter your employee resource information using the Setup and Maintenance work area, Manage Resources task, or you can import data to create new or update existing employee resources.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the employee resource compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

Comparing Business Object Structures

You must understand how your employee resource data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for an employee resource.

In Oracle Fusion Applications, one table stores the employee resource definition and other tables optionally store profile details for that employee resource. Profile details for a resource include information about an employee resource's organization and team memberships.

The following figure illustrates the structure of the Employee Resource object.

![Employee Resource Diagram]

The worker profile contains basic information about the employee resource, such as the employee resource's primary address and resource profile details.

Import Objects for the Employee Resource

To facilitate the import of employee resources, Oracle Fusion Applications incorporate the structure of the employee resource into import objects. The import object for the employee resource is Employee Resource.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the employee resource.
A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Resource</td>
<td>Employee Resource Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing employee resources to search for related topics in Oracle Fusion Applications Help.

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Employee Resources Using File-Based Data Import**

For the employee resource business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new employee resource, you import the Employee Resource import object.

You must be assigned the Master Data Management Administrator job role to access and submit the import activities for employee resources.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with either the Master Data Management Administrator job role can also navigate to the Manage Resources work area to view the imported employee resources.
Employee Resource Import Objects: How They Work Together

Employee resources are employees to whom you can assign work objects, for example, service agents, sales managers, and so on. You can import all your employee resource information using the Employee Resource import object. This topic describes this import object.

This topic introduces the following:

- Target import object concepts
- Target objects for the Employee Resource import object
- Target import object attributes
- Target import object attribute reference guide files

Target Import Object Concepts

The Employee Resource import object is used to import an employee resource’s worker profile information, such as first name, last name, address, and so on, and the employee resource’s resource profile information, such as resource organization and resource team memberships. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Employee Resource Target Import Objects

The target import objects included in the Employee Resource import object are grouped into information about the employee resource’s profile and the employee resource’s address information. The Worker profile is the target import object containing attributes to import information about the employee resource.

When updating an existing employee resource, you must provide the parent reference information of the existing employee resource. When importing an employee resource’s resource team information, you must provide relationship reference information in addition to the parent reference, because an employee resource can belong to more than one team simultaneously.

To update the information for an existing employee resource or to create an employee resource record, you can import employee resource profile information and addresses. The following target import objects are for creating and updating employee resource information: WorkerProfile, ResourceProfile, and PrimaryAddress.

To update or create an employee resource’s resource profile, use the following target import objects: ResourceOrganizationMembership and ResourceTeamMembership.

Target Import Objects Attributes

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.
To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the marketing response.

### Target Import Objects Attributes Resources

To access the reference guide files for the employee resource's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Employee Resource File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>WorkerProfile</td>
<td>Contains information that identifies an employee.</td>
<td>HRC_LOADER_BATCH_LINES_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ResourceProfile and PrimaryAddress.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td>ResourceProfile</td>
<td>Contains information about a resource.</td>
<td>HZ_IMP_RESOURCES_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PartyId, FirstName, LastName, Department, and JobCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
<tr>
<td>PrimaryAddress</td>
<td>Indicates the address of a resource. If the resource has multiple addresses,</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>then the first address is designated as the primary address.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample attributes: Address1, Address2, City, Country, County, State, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PostalCode.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td></td>
</tr>
</tbody>
</table>
## Importing Geographies Using File-Based Import: Explained

This topic describes the tasks you must perform to import geography information. A geography is any region with a boundary around it, regardless of its size. It might be a state, a country, a city, a county, or a ward. You must create or import geographies before you can associate them with custom zones and addresses.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the geography compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- What import features are available for importing your business object?
- How do you verify your imported data?

### Comparing Business Object Structures

You must understand how your geography data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a geography.

You must import a separate country structure import object for each country. Each of these import objects must contain the geography types that are used in the country’s structure, organized in a hierarchy using geography level numbers. For example, if you are importing the country structure of Australia, the country structure could be the following: 1: Country, 2: State, 3: County, 4: Town, 5: ZIP.
Import Objects for the Geography

To facilitate the import of geographies, Oracle Fusion Applications incorporate the structure of the geography into import objects. The import object for the geography is ImpGeography.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the geography.

A good understanding of the attribute details of the import objects is critical to preparing your import data. For information about the Oracle Fusion Applications attributes, see the Oracle Enterprise Repository. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>Geography Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing geographies to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

Oracle Fusion Applications do not support extensible attributes for geographies. You can only import data for attributes provided by Oracle Fusion Applications.

Importing Geographies Using File-Based Data Import

For the geography business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new geography, you import the Geography object. You must be assigned the Master Data Management Administrator job role to access and submit the import activities for geographies.

When importing geography information, you must provide the parent reference information for all parent levels for the entity.

Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Master Data Management
Administrator job role can also navigate to the Manage Geographies work area to view the imported geographies.

**Geography Import Objects: How They Work Together**

This topic describes the Geography import object. You use the Geography import object to import geography information.

This topic introduces the following:

- Target import object concepts
- Target objects for the Geography import object
- Target import object attributes
- Target import object attribute reference guide files

**Target Import Object Concepts**

The Geography import object is used to import geography hierarchy information to create or update the geography data of a country. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Geography Target Import Objects**

The target import objects in the Geography import object contain information about the geography hierarchy. When updating an existing geography, you must provide the parent reference information of the existing geography, which connects the geography to the country of which it is a part.

Use the ImpGeography target import object to create and update geography information.

**Note**

Before you import geography data for a country, you must define the country's geography structure.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Target Import Objects Attributes Resources**

To access the reference guide files for the geography's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).
For detailed information on importing geographies using file-based import, refer to Document No. 1481758.1, Importing Master Reference Geography Data, on the Oracle Support site.

The following table lists the reference guide files that are available from the Documentation tab for the Geography File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Attribute Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImpGeography</td>
<td>Contains information that captures a country’s geography hierarchy details.</td>
<td>HZ_IMP_GEOGRAPHIES_T_Reference</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: CountryCode, GeoDataProvider, GeographyType, PrimaryGeographyCode, PrimaryGeographyCodeType, and PrimaryGeographyName.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reference attribute: CountryCode</td>
<td></td>
</tr>
</tbody>
</table>

Importing Group Customers Using File-Based Import: Explained

This topic explains how to prepare and import group customer data from an external data source into Oracle Fusion Applications, using the File-Based Data Import feature.

A group customer is a party consisting of a collection of persons and organizations. A group, similar to a person or organization, can enter into a business relationship with other parties and can be assigned to opportunities and leads. A group can have members of party type person or organization. You can maintain group customers information in Oracle Fusion Applications CRM to create leads and opportunities for a group, or capture information about a group to know them better. However, maintaining this information may not let you assign all sales and marketing activities to a group.

You must consider the following questions before importing group customer information:

- How does your legacy or source system represent the group customer information compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map your existing data values to the Group Customer import object?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do I verify my imported data?

Comparing Business Object Structures

You must understand how your group customer data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a group customer.
The Oracle Fusion Applications Group Customer structure is hierarchical. At the top level is the group profile, which must exist before you can import lower-level components, such as classifications, additional names, additional identifier, and members. These child entities can have other entities as their child entities. This hierarchical structure supports one-to-many relationships between the components that make up the group customer.

The following figure shows the Group Customer import object and its child entities.

The group customer profile contains basic information about the group customer, such as the group name, group type, and the group-party usage. For each group customer, you can assign classifications, members, relationships, additional identifier, and additional names.

Note

All entities referring to contact information, such as primary phone or e-mail, include a child entity that captures the contact preference. For example, the Phone Contact Preference entity captures the contact preference of the group for the phone contact method.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the group customer.

A good understanding of the import objects and attribute details is critical to preparing your import data. Oracle Fusion Applications attribute details are available for your reference in the Oracle Enterprise Repository. The reference guide files contain descriptions, default values, and validations for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correspond to a choice list in Oracle Fusion Applications, then the validation information for that attribute will provide the task name in the Setup and Maintenance work area where you can define your values.

Extensible Attributes

If you want to extend the Oracle Fusion Applications object data to import your legacy or source data, then you must use Oracle Fusion Applications CRM.
Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Group Customers Using File-Based Data Import**

For the group customer business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks that are required to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. An import activity defines the instructions for processing import data, including the source file, import mapping from the source file to the Oracle Fusion Applications object and attribute, and the import schedule.

When importing group customer information, you must first import the basic group customer profile information, followed by the child entities for the group customer. When importing child entities, you must provide the parent reference information for all parent levels for the entity. You must provide the PartyOrigSystem and PartyOrigSystemReference of the group customer when importing contacts for the group customer. PartyOrigSystem is the source system code that identifies the source of the information being imported. PartyOrigSystemReference is unique for each row of data within a single import, and is a combination of PartyOrigSystem and a unique reference. For example, you first import basic profile details, such as first name, last name, party type, and party usage. You then import contact information, such as phone, address, contact points, and fax for the group customer.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which you can use to verify imported data. You can view the list of import activities from the Manage Import Activities page. You can verify the status of the import activity by clicking the **Status** column for your import activity. Alternatively, you can also navigate to the Party Center work area to view the customer information that you have imported.

**Group Customer Import Objects: How They Work Together**

The Group Customer import object allows you to import group customers, their basic information, and members of the group. This topic describes the Group Customer import object and introduces the following:

- Target import object concepts
- Target objects for the Group Customer import object
- Target import object attributes
• Target import object attribute reference guide files for evaluating and mapping source file data

**Group Customer Target Import Objects Concepts**

The Group Customer import object imports group customers and its members. The Group Customer import object is split into separate target import objects for organizing the individual attributes for the different aspects of the group customer. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Group Customer Target Import Objects**

The target import objects in the Group Customer import object are grouped into information about the group customer and information about the member. The group profile is the target import object containing attributes to import information about the group customer. You can have multiple members associated with a group customer. You can assign only an organization or a person as a member of a group. You cannot assign a group as a member of another group.

When updating an existing group customer with additional information, you must provide the parent reference information for the existing group customer. When importing contacts or contact information for a group customer, you must provide relationship reference information in addition to the parent reference. When importing information about a member, you must refer to the specific relationship that you want to import information for. For example, you might want to import information for John Smith the employee or John Smith the board member. If you do not include the reference information for a relationship, then the import process will create a relationship.

To update the information for an existing group customer or to create a group customer record, you can import group customer profile information, addresses, and contact points, such as phone and fax. The following target import objects are for creating and updating the group customer information: GroupProfile, Fax, Mobile, Phone, e-mail, InstantMessenger, Relationship, Member, Address, Classification, AdditionalName, and AdditionalIdentifier.

All contact-related entities, such phone or e-mail, include a child entity that captures the contact preference. For example, the Phone Contact Preference entity captures the contact preference of the group customer for the contact method primary phone. Additionally, the Address import object for a group customer includes another child entity, AddressPurpose, that captures the purpose of the current group customer address.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can
predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion Applications CRM Application Composer extensibility features for the group customer.

**Target Import Objects Attributes Resources**

To access the reference guide files for the group customer target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Group Customer File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>GroupProfile</td>
<td>Includes detailed group customer information, such as, group name and group type. The default party usage for a group customer is SALES_PROSPECT. Sample attributes: AnnualIncome, NumOfDependents, MedianAge, and CertificationLevel. Reference attributes: PartyOrigSystem, PartyOrigSystemReference, and PartyId.</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td>Relationship</td>
<td>Includes information about the relationship between the group customer and the group member. You must enter a relationship code in the RelationshipCode column, when creating a relationship. Sample attributes: RelationshipCode and RelationshipType. Reference attributes: RelOrigSystem RelationshipID, and RelOrigSystemReference.</td>
<td>HZ_IMP_RELSHIPS_T</td>
</tr>
<tr>
<td>Member</td>
<td>Includes information about the group customer member. Sample attributes: ObjectKey and SubjectId. Reference attributes: RelOrigSystem RelationshipID, and RelOrigSystemReference.</td>
<td>HZ_IMP_RELSHIPS_T</td>
</tr>
</tbody>
</table>
| Classification          | Includes classification information for a group customer. Classification allows you to categorize entities such as parties, projects, tasks, and orders as hierarchies.  
|                        | Sample attributes: ClassificationCode, ClassificationCategory, PrimaryFlag, and Rank.  
|                        | Reference Attributes: ClassificationOrigSystem and ClassificationOrigSystemReference. | HZ_IMP_CLASSIFICS_T |
| AdditionalIdentifier   | Includes detailed information about an additional identifier for the group customer.  
|                        | Sample attributes: IdentifierValue, IdentifierType, Country, and IssuingAuthorityName.  
|                        | Reference attributes: IdentifierValue, AdditionalIdentifierOrigSystem, and AdditionalIdentifierOrigSystemReference. | HZ_IMP_ADDTNLPARTYID_T |
| AdditionalName          | Indicates alternative name of a group customer.  
|                        | Sample attributes: Additional Name, Additional Name Type, and GlobalPreferredNameFlag.  
|                        | Reference Attributes: AdditionalNameOrigSystem and AdditionalNameOrigSystemReference. | HZ_IMP_ADDTNLPARTYNAMES_T |
| Url                     | Indicates the Url of the group customer.  
|                        | Sample attributes: ContactPointType, PrimaryFlag, Url, and WebType.  
<p>|                        | Reference attributes: CpOrigSystem and CpOrigSystemReference. | HZ_IMP_CONTACTPTS_T_Reference |
| InstantMessenger | Indicates the instant messenger or social networking information of a customer contact. Sample attributes: ContactPointPurpose, EndDate, InstantMessagingAddress, and InstantMessengerType. Reference attributes: CpOrigSystem, CpOrigSystemReference, and Objectkey. | HZ_IMP_CONTACTPTS_T_Reference |
| Fax | Indicates the fax of the group customer. Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber. Reference attributes: CpOrigSystem and CpOrigSystemReference. | HZ_IMP_CONTACTPTS_T_Reference |
| FaxContactPreference | Indicates the group customer preference about being contacted through fax. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode. Reference attributes: CpOrigSystem and CpOrigSystemReference. | HZ_IMP_CONTACTPREFS_Reference |
| Mobile | Indicates the mobile number of group customer. Sample attributes: ContactPointPurpose, ContactPointType, PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, PhoneNumber, and PrimaryFlag. Reference attributes: CpOrigSystem and CpOrigSystemReference. | HZ_IMP_CONTACTPTS_T_Reference |</p>
<table>
<thead>
<tr>
<th>MobileContactPreference</th>
<th>Indicates the group customer’s preference about being contacted through mobile phone.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>Indicates the primary phone number of the group customer. If the group has multiple phone numbers, one of the phone numbers is designated as the primary phone number.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: PhoneAreaCode, PhoneCountryCode, PhoneExtension, PhoneLineType, and PhoneNumber.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>PrimaryPhoneContactPreference</td>
<td>Indicates the group customer’s preference about being contacted through phone.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>HZ_IMP_CONTACTPREFS_Reference</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>Indicates the e-mail of the group customer.</td>
</tr>
<tr>
<td></td>
<td>Sample attributes: ContactPointPurpose, EmailAddress, and StartDate.</td>
</tr>
<tr>
<td></td>
<td>Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
<td></td>
</tr>
<tr>
<td>Table Heading</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>EmailContactPreference</td>
<td>Indicates the group customer's preference about being contacted through e-mail. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode. Reference attributes: CpOrigSystem and CpOrigSystemReference.</td>
</tr>
<tr>
<td>Address</td>
<td>Indicates the address of a group customer. If the group has multiple addresses, one of the addresses is designated as the primary address. Sample attributes: Address1, Address2, City, Country, County, State, and PostalCode. Reference attributes for location: LocationOrigSystem, LocationOrigSystemReference, and LocationId1. Reference attributes or party sites: SiteOrigSystem, SiteOrigSystemReference, and PartysiteId1.</td>
</tr>
<tr>
<td>AddressContactPreference</td>
<td>Indicates the group customer's preference about being contacted at the primary address. Sample attributes: ContactType, PreferenceCode, PreferenceEndDate, PreferenceStartDate, and ReasonCode. Reference attributes: CpOrigSystem, CpOrigSystemReference.</td>
</tr>
<tr>
<td>AddressPurpose</td>
<td>Indicates the purpose of a group customer's address. Sample attributes: SiteUseType, EndDate, and StartDate. Reference attributes: SiteOrigSystem and SiteOrigSystemReference.</td>
</tr>
</tbody>
</table>

**Importing Interactions Using File-Based Import: Explained**

This topic explains how to prepare and import Interaction data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.
An interaction is a business object that is used to record interactions between your internal resources and external contacts, including references to specific objects of interest such as a sales lead or an opportunity. You enter your interaction information within the same user interface as the associated business object or sales account, or you can import data to create new or update existing interactions.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the interaction compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

### Comparing Business Object Structures

You must understand how your interaction data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. To start, you must understand how Oracle Fusion Applications represent the structure of an interaction.

In Oracle Fusion Applications, a single interaction contains information such as the date and time, customer, description, and outcome. Additionally, a single interaction can include one or more internal and external participants and one or more references to the objects of interest. You can attach a file to your interaction using the Attachment feature.

### Import Object for Interactions

To facilitate the import of interactions, Oracle Fusion Applications incorporates the structure of the interaction into a single import object with the name of Interaction.

### Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the interaction.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions,
logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction</td>
<td>Interaction Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing interactions to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

Importing Interactions Using File-Based Data Import

For the interaction business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, imports the data into the application destination tables, and associates any attachments. The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import object, to create source-file mappings, and to schedule the import activities.

To associate interactions with internal and external participants and business objects, you must include in your source file the unique internal identifier for each participant and business object. Therefore, the associated participants and business objects must be entered or imported before submitting the Interaction import activity. The File-Based Data Import Activity log file typically includes the internal identifier for internal resources, external parties, and business objects imported using the File-Based Data Import feature. Optionally, you can obtain the internal identifier for existing resources, parties, and business objects by using the Manage Bulk Data Export, Schedule Export Processes Setup and Maintenance task.

Importing attachments is supported for the Interaction import object, however, you are limited to one attachment per interaction. You include the attachment file name in your source file along with the other data about the interaction. You
select the files when defining your Interaction File-Based Import Activity for import processing.

You must be assigned the Customer Relationship Management Application Administrator to access and submit the import activities for interactions.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with access to the associated business objects or sales accounts can also view the interactions.

**Interaction Import Objects: How They Work Together**

You use the Interaction import object to submit a file-based import activity to import your Interactions. This topic describes the following:

- Target import object concepts
- Target objects for the Interaction import object
- Target import object attributes
- Target object attribute reference guide files

**Target Import Object Concepts**

The Interaction import object is used to import records containing information about interactions between your internal resources and external contacts, including references to specific objects of interest such as a sales lead or an opportunity.

The Interaction import object is split into separate target import objects for organizing the individual attributes of the Interaction and to manage the one-to-many relationship structure. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Interaction Target Import Objects**

The target import objects in the Interaction import object are grouped into information about the interaction, references to the internal and external participants, and references to the objects of interest. The following figure shows the target import objects included in the Interaction import object, each represented by their familiar name and their formal target import object name, shown in parentheses.

![Interaction Import Objects Diagram](image)
The InteractionImport target object includes the attributes for the majority of information captured for an interaction, such as the date and time, customer, description, and outcome. The InteractionParticipantImport target object includes the attributes to associate internal resources and external contacts who participated in the interaction. When interactions pertain to specific business objects, such as a sales lead or opportunity, the attributes pertaining to the association of the business objects to the interaction are included in the InteractionAssociationImport target object.

**Target Import Object Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the Interaction.

**Target Import Object Attribute Resources**

To access the reference guide files for the Interaction target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Interaction File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionImport</td>
<td>Interaction information</td>
<td>ZMM_INTER_INTERACTIONS_Reference</td>
</tr>
<tr>
<td>InteractionAssociationImport</td>
<td>Interaction business objects</td>
<td>ZMM_INTER_ASSOCIATIONS_Reference</td>
</tr>
<tr>
<td>InteractionParticipantImport</td>
<td>Interaction participants</td>
<td>ZMM_INTER_PARTICIPANTS_Reference</td>
</tr>
</tbody>
</table>

**Importing Marketing Budgets Using File-Based Import: Explained**

This topic explains how to prepare and import marketing budget data from an external data source into Oracle Fusion Applications using the File-Base Data Import feature.
Define Common CRM Configuration

A marketing budget is a business object that is used to manage funds set aside to fund partner incentives. You enter your budget information using the Budgets work area or you can import data to create or update marketing budgets.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the budget compared to how Oracle Fusion Applications represent same data?
- Do you have to configure values in Oracle Fusion to map to your data values?
- Do you have to customize Oracle Fusion to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

Comparing Business Object Structures

You must understand how your marketing budget data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a marketing budget.

In Oracle Fusion Applications, the marketing budget structure is hierarchical. At the top level is the marketing budget summary, which must exist before you can import lower level components such as notes and attachments. This hierarchical structure supports one-to-many relationships between the components that make up the marketing budget. For example, a marketing budget can have many notes.

The marketing budget summary contains basic information about the budget such as the type, start and end dates, and budget amount. For each marketing budget, you can post notes and attach documents relevant to the budget.

Import Objects for the Marketing Budget

To facilitate the import of marketing budgets, Oracle Fusion Applications incorporate the structure of the promotion into import objects. The import objects for the marketing budget are shown in the following table.

<table>
<thead>
<tr>
<th>Import Objects</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Budget</td>
<td>Marketing Budget</td>
</tr>
<tr>
<td>Note</td>
<td>Note</td>
</tr>
</tbody>
</table>
Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and so support one-to-many relationships between the structural components that make up the marketing budget.

A good understanding of the attribute details of the import objects is critical to your import data. The reference guide files contain descriptions, logic used to select default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Budget</td>
<td>Marketing Budget Import Objects and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Note</td>
<td>Note Import Objects and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword "importing marketing budgets" to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

If you need to extend the Oracle Fusion object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both custom attributes and the standard import object attributes.

Importing Marketing Budgets Using File-Based Data Import

For the marketing budget business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a marketing budget, you first import the Marketing Budget object, follow by subsequent import activities for each of the other import objects (in this case, notes). The exception is attachments, which are imported by including the file names in your source file for the Marketing Budget object and selecting the files when defining the import activity.
You must be assigned the Channel Account Manager, Channel Sales Director, or Channel Sales Manager job role to access and submit the import activities for marketing budgets.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Marketing Budget Maintenance Duty role can also navigate to the Budgets work area to view the imported marketing budgets. Oracle Fusion Applications assign this role to the following predefined job roles: Channel Account Manager, Channel Sales Director, and Channel Sales Manager.

**Marketing Budget Import Object: How It Works**

You use two main import objects, Marketing Budget and Note, when you submit a file-based import activity to import your marketing budgets. This topic describes the Marketing Budget import object. It introduces the following:

- Target import object concepts
- Target objects for the Marketing Budget import object
- Target import object attributes
- Target object attribute reference guide files

**Target Import Object Concepts**

The Marketing Budget import object is used to import marketing budgets. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Marketing Budget Target Import Object**

The target import object in the Marketing Budget import object is ImportBudgets1. The target import object includes information about the budget, such as the budget type, initial amount, currency, and fund request submission deadlines.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.
Note

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the marketing response.

Target Import Object Attributes Resources

To access the reference guide files for the marketing budget's target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Marketing Budget File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportBudgets1</td>
<td>Marketing budgets of interest</td>
<td>MKT_IMP_BDT_BUDGETS_Reference</td>
</tr>
</tbody>
</table>

Importing Marketing Campaigns Using File-Based Import: Explained

This topic explains how to prepare and import marketing campaign data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

A marketing campaign is a business object that is used to capture the plan and design that allows a marketer to achieve a specific marketing goal or objective through customer interaction, strategic advertisements, and lead generation. You enter your campaign information using the Campaigns work area or you can import data to create or update campaigns.

Consider the following questions when importing your data:

- How does your legacy or source system represent the marketing campaign compared to how Oracle Fusion Applications represent the same data?
- Do you need to configure values in Oracle Fusion Applications to map to your data values?
- Do you need to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

Comparing Business Object Structures

You must understand how your marketing campaign data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a campaign.

In Oracle Fusion Applications, the marketing campaign structure is hierarchical. At the top level is the campaign summary, which must exist before you can import lower level components such as team members, tasks, and stages. This hierarchical structure supports one-to-many relationships between the
components that make up the campaign. For example, a campaign can have many team members, tasks, and stages.

The campaign summary contains basic information about the campaign such as the planned dates, owner, and overall purpose. For each campaign, you can assign team members, assign tasks and due dates, attach documents relevant to the campaign, and post notes for the campaign or for specific tasks.

Each campaign can have one or more stages. A stage is a unit of the marketing campaign design representing a single purpose that contributes to the overall objective of the campaign. The stage purpose can be for events, advertising, and outbound communication, such as e-mail, direct mail, or automated lead generation. Campaign members are the intended recipients of the marketing message and lead follow-up.

**Import Objects for the Marketing Campaign**

To facilitate the import of marketing campaigns, Oracle Fusion Applications incorporate the structure of the campaign into import objects. The import objects for the marketing campaign are shown in the following table.

<table>
<thead>
<tr>
<th>Import Objects</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign</td>
<td>Campaign Summary</td>
</tr>
<tr>
<td></td>
<td>Team Members</td>
</tr>
<tr>
<td></td>
<td>Attachments</td>
</tr>
<tr>
<td>Interaction Marketing Activity</td>
<td>Outbound Communication Stages</td>
</tr>
<tr>
<td>Event Marketing Activity</td>
<td>Event Stages</td>
</tr>
<tr>
<td>Advertising Marketing Activity</td>
<td>Advertising Stages</td>
</tr>
<tr>
<td>Campaign Members</td>
<td>Campaign Members</td>
</tr>
<tr>
<td>Task</td>
<td>Team Tasks</td>
</tr>
<tr>
<td></td>
<td>Notes</td>
</tr>
<tr>
<td>Note</td>
<td>Notes</td>
</tr>
</tbody>
</table>

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the marketing campaign.
A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to select default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

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<th>Related Import Object Topic</th>
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<tbody>
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<td>Campaign Import Objects and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Campaign Members</td>
<td>Campaign Members Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Task</td>
<td>Task Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Note</td>
<td>Note Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Interaction Marketing Activity</td>
<td>Interaction Marketing Activity Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Event Marketing Activity</td>
<td>Event Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Advertising Marketing Activity</td>
<td>Advertising Marketing Activity Import Object and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword "importing campaigns" to search for related topics in Oracle Fusion Applications Help.

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both custom attributes and the standard import object attributes.

**Importing Campaigns Using File-Based Data Import**

For the campaign business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables based on your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks required to configure the import objects, to create source file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a marketing campaign, you first import the
Campaign object, followed by subsequent import activities for each of the other import objects. The exception is attachments, which are imported by including the file names in your source file for the Campaign object and selecting the files when defining the import activity.

You must be assigned the Customer Relationship Management Application Administrator or the Marketing Operations Manager job role to access and submit the import activities for marketing campaigns.

Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Marketing Analysis Duty role can also navigate to the Campaigns work area to view the imported campaigns. Oracle Fusion assigns this role to the following, predefined job roles: Marketing VP, Corporate Marketing Manager, Marketing Operations Manager, and Marketing Analyst.

Campaign Import Objects: How They Work Together

You use the following main import objects when you submit file-based import activities to import your marketing campaigns:

- Campaign
- Campaign Members
- Advertising Marketing Activity
- Event Marketing Activity
- Interaction Marketing Activity

This topic describes each of these import objects. It introduces the following:

- Target import object concepts
- Target objects for the campaign import objects
- Target import object attributes
- Target object attribute reference guide files

Two additional import objects, Note and Task, are described in separate topics.

Target Import Object Concepts

The campaign import objects are used to import marketing campaign information. The main import objects are split into separate target import objects for organizing the individual attributes of the different aspects of the campaign. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Campaign Target Import Objects

The Campaign import object is broken down into two target import objects: Campaign Summary and Campaign Team. The Campaign Summary includes three stages: Outbound Communications, Event, and Advertising, each of which includes its own import object: Interaction Marketing Activity, Event Marketing
Activity, and Advertising Marketing Activity, respectively. The following figure shows the hierarchy of the import objects and target import objects for the marketing campaign, each represented by their familiar name and their formal target import object name, shown in parentheses.

A single campaign summary includes specific information about the stages of the campaign and the marketing team members. The multiple campaign stages can include information about outbound communications and the campaign members to whom the communications are sent, events associated with the campaign, and campaign advertising.

- The Interaction Marketing Activity import object includes two target import objects: InteractionStage and AllocationActivity.
- The Event Marketing Activity import object includes two target import objects: EventStage and EventActivity.
- The Advertising Marketing Activity import object includes two target import objects: AdvertisingStage and AdvertisingActivity.

The Campaign Members import object includes information about campaign members to whom the communications are sent, and includes a single target import object, StageMembers. You must import the Interaction Marketing Activity import object before importing the Campaign Members import object.

The Campaign import object includes one additional target import object, Campaign Team, which includes information about the marketing team members associated with the campaign.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data...
and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the marketing response.

**Target Import Objects Attributes Resources**

To access the reference guide files for the campaign’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Campaign File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Marketing Activity</td>
<td>AdvertisingStage</td>
<td>The association with the campaign and the advertising activity dates.</td>
<td>MKT_IMP_STAGES_Reference</td>
</tr>
<tr>
<td>Advertising Marketing Activity</td>
<td>AdvertisingActivity</td>
<td>The advertising treatment.</td>
<td>MKT_IMP_ADVTG_ACTIVITY_Reference</td>
</tr>
<tr>
<td>Campaign</td>
<td>Campaigns</td>
<td>Campaigns of interest.</td>
<td>MKT_IMP_CAMPAIGNS_Reference</td>
</tr>
<tr>
<td>Campaign</td>
<td>CampaignTeam</td>
<td>Marketing team members associated with the campaign.</td>
<td>MKT_IMP_CAMP_TEAM_Reference</td>
</tr>
<tr>
<td>Campaign Members</td>
<td>StageMembers</td>
<td>Campaign members to whom outbound communications are sent.</td>
<td>MKT_IMP_STG_MEMBERS_Reference</td>
</tr>
<tr>
<td>Event Marketing Activity</td>
<td>EventStage</td>
<td>The association with the campaign and the event activity dates.</td>
<td>MKT_IMP_STAGES_Reference</td>
</tr>
<tr>
<td>Event Marketing Activity</td>
<td>EventActivity</td>
<td>The event venue information.</td>
<td>MKT_IMP_EVT_ACTIVITY_Reference</td>
</tr>
<tr>
<td>Interaction Marketing Activity</td>
<td>InteractionStage</td>
<td>The association with the campaign and the outbound communication activity dates.</td>
<td>MKT_IMP_STAGES_Reference</td>
</tr>
</tbody>
</table>
Importing Marketing Responses Using File-Based Import: Explained

This topic explains how to prepare and import marketing response data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

A marketing response is a business object that is used to record the reaction of a prospect or customer to a marketing activity. You enter your response information using the Response Management work area or you can import data to create or update responses.

Consider the following questions when importing your data:

- How does your legacy or source system represent the response compared to how Oracle Fusion Applications represent the same data?
- Do you need to configure values in Oracle Fusion Applications to map to your data values?
- Do you need to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

Comparing Business Object Structures

You must understand how your response data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a marketing response.

An Oracle Fusion marketing response consists of two import objects: Response and Notes. You import your marketing response, followed by a subsequent import activity for any associated notes.

The Oracle Fusion marketing response structure is hierarchical. At the top level is the response summary, under which are lower level components such as products, surveys, and notes. This hierarchical structure supports one-to-many relationships between the components that make up the response. For example, a response can have many products, surveys, and notes.
The response summary contains basic information about the response such as the response method, marketing source code, and responder information. For each response, you can associate products and surveys, attach documents relevant to the response, and post notes for the response.

**Import Objects for the Response**

To facilitate the import of responses, Oracle Fusion Applications incorporate the structure of the response into import objects. The import objects for the marketing response are shown in the following table.

<table>
<thead>
<tr>
<th>Import Objects</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>Response Summary and Responder Details</td>
</tr>
<tr>
<td></td>
<td>Note</td>
</tr>
<tr>
<td></td>
<td>You can create customers, consumers, and contacts or associate existing ones to capture your responder information.</td>
</tr>
<tr>
<td></td>
<td>Products</td>
</tr>
<tr>
<td></td>
<td>Surveys</td>
</tr>
<tr>
<td></td>
<td>Attachments</td>
</tr>
<tr>
<td>Note</td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td>Attachments</td>
</tr>
</tbody>
</table>

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the response.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to select default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>Response Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Note</td>
<td>Note Import Object and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>
Hint: You can use the keyword "importing responses" to search for related topics in Oracle Fusion Applications Help.

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both custom attributes and the standard import object attributes.

**Importing Responses Using File-Based Data Import**

For the response business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source file mappings, and to schedule the import activities. You submit file-based import objects, create source file mappings, and schedule the import activities. You submit file-based import activities for each import object. When creating a marketing response, you first import the Response object, followed by subsequent import activities for any associated notes. The exception is attachments, which are imported by including the file names in your source file for the Response object and selecting the files when defining the import activity.

You must be assigned the Marketing Operations Manager or the Customer Relationship Management Application Administrator job role to access and submit the import activities for marketing responses.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Marketing Response Data Review Duty role can also navigate to the Response Management work area to view the imported responses. Oracle Fusion assigns this role to the following predefined job roles: Marketing VP, Corporate Marketing Manager, Marketing Operations Manager, and Marketing Analyst.

**Response Import Objects: How They Work Together**

You use two main import objects, Response and Note, when you submit a file-based import activity to import your marketing responses. This topic describes the Response import object. It introduces the following:

- Target import object concepts
- Target objects for the Response import object
Define Common CRM Configuration

Target Import Object Concepts

The Response import object is used to import marketing responses and information to create or update associated organization or person information for the customer, consumer, or contact who responded. The Response import object is split into separate target import objects for organizing the individual attributes of the different aspects of the response and respondent. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Response Target Import Objects

The target import objects in the Response import object are generally grouped into information about the response and information about the respondent. The respondent information is further broken down, depending on whether the respondent is a customer organization, a person who is a consumer, or a person who is a contact of the customer or consumer. The following figure shows the grouping and the target import objects included in the Response import object, each represented by their familiar name and their formal target import object name, shown in parentheses.

A single response includes specific information about how the customer, consumer, or contact responded to a marketing activity. The response can include one or more products of interest and survey questions and answers, such as a telemarketer script. The Response, ResponseProducts, and ResponseSurvey target objects include the attributes to import this information for your marketing response.
If the respondent is an organization and an existing customer, then you can associate the customer with the response by using the Response target object. However, if you want to update the information for an existing customer or create a customer record, then you must use additional target objects to import customer profile information, addresses, and contact points, such as a phone and fax number. The following target import objects are for creating and updating customer information for a respondent: OrganizationProfile, OrganizationAddress, PrimaryPhone, Fax, and Url.

Similarly, you can associate an existing consumer with the response by using the Response target object. To update the information for an existing consumer or create a consumer record, use the following target import objects: PersonProfile, PersonAddress, Email, PrimaryPhone, Mobile, InstantMessenger, and Fax.

To associate an existing contact for the responding consumer or customer with the response, you use the Responses target object. To update or create a contact, use the following target import objects: ContactPersonProfile, ContactJob, ContactPrimaryAddress, ContactEmail, ContactPrimaryPhone, ContactMobile, ContactInstantMessenger, and ContactFax.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the marketing response.

**Target Import Objects Attributes Resources**

To access the reference guide files for the response’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Response File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ResponseProduct</td>
<td>Response products of interest</td>
<td>MKT_IMP_RESP_PRODUCT_T_Reference</td>
</tr>
<tr>
<td>Table Heading</td>
<td>Description</td>
<td>Reference</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>ResponseSurvey</td>
<td>Response survey questions and answers</td>
<td>MKT_IMP_RESP_SVY_LOG_T_Reference</td>
</tr>
<tr>
<td>Response</td>
<td>Response summary and associated respondent information</td>
<td>MKT_IMP_RESPONSES_T_Reference</td>
</tr>
<tr>
<td>OrganizationProfile</td>
<td>Customer profile information</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td>PersonProfile</td>
<td>Consumer summary information</td>
<td>HZ_IMP_PARTIES_T_Reference</td>
</tr>
<tr>
<td>ContactPersonProfile</td>
<td>Contact summary information</td>
<td>HZ_IMP_RELSHIPS_T_Reference</td>
</tr>
<tr>
<td>OrganizationAddress</td>
<td>Customer address</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td>PersonAddress</td>
<td>Consumer address</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td>ContactPrimaryAddress</td>
<td>Contact address</td>
<td>HZ_IMP_PARTYSITES_T_Reference</td>
</tr>
<tr>
<td>PrimaryPhone</td>
<td>Customer primary phone</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>PrimaryPhone</td>
<td>Consumer primary phone</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>ContactPrimaryPhone</td>
<td>Contact primary phone</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Mobile</td>
<td>Consumer mobile</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>ContactMobile</td>
<td>Contact mobile</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Email</td>
<td>Consumer e-mail</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>ContactEmail</td>
<td>Contact e-mail</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>InstantMessenger</td>
<td>Consumer social network</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>ContactInstantMessenger</td>
<td>Contact social network</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Fax</td>
<td>Customer fax</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Fax</td>
<td>Consumer fax</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>ContactFax</td>
<td>Contact fax</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
<tr>
<td>Url</td>
<td>Customer Web site URL</td>
<td>HZ_IMP_CONTACTPTS_T_Reference</td>
</tr>
</tbody>
</table>

**Importing Notes Using File-Based Import: Explained**

This topic explains how to prepare and import Note data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

A note is a business object that is used to record notes, including references to specific objects of interest such as a sales lead or an opportunity. You enter your note information within the same user interface as the associated object or you can import data to create new notes.

Consider the following when importing notes:

- How does your legacy system or source system represent the note compared to how Oracle Fusion Applications represent the same data?

- Do you have to configure values in Oracle Fusion Applications to map to your data values?

- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?

- What import features are available for importing your business object?
• How do you verify your imported data?

Comparing Business Object Structures

You must understand how your note data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a note. In Oracle Fusion Applications, the structure is a single level (non-hierarchical) and contains information about the note such as the note type, text, author, and associated object.

Import Object for the Notes

To facilitate the import of notes, Oracle Fusion Applications incorporates all the data elements of the note into a single import object: Note.

Comparing Business Object Data

Each import object has one or more target import objects. A target import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data. For the Note import object, all the attributes are contained in the ImportNote target object.

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To access the reference guide file for the Note’s target import object, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com). The following table lists the reference guide file that is available from the Documentation tab for the Note File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Target Import Object</th>
<th>Reference Guide File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
<td>NoteImport</td>
<td>ZMM_IMP_NOTES_Reference</td>
</tr>
</tbody>
</table>

Extensible Attributes

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.
Importing Notes Using File-Based Data Import

For the note business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables. The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities.

To associate notes with business objects, you must include the unique internal identifier for each business object in your source file. The File-Based Data Import Activity log file typically includes the internal identifier for imported business objects or you can obtain the internal identifier for an existing business object by exporting it using the Manage Bulk Data Export, Schedule Export Processes Setup and Maintenance task.

You must be assigned the Customer Relationship Management Application Administrator to access and submit the import activities for notes.

Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with access to the associated business objects can view public notes and note authors can view all of their notes.

Importing Product Groups Using File-Based Import: Explained

This topic explains how to prepare and import product group data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

A product group is a business object that groups related products, so that you can work with them together. You can use product groups to create a multilevel hierarchy that can be used as a sales catalog, a rollup hierarchy, or a promotion catalog. For example, you might create a product group named Consumer Electronics that includes all of your consumer electronics products so that customers can browse through all the products in this group in your product catalog.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the promotion compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?
Comparing Business Object Structures

You must understand how your promotion data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a promotion.

The structure of the Oracle Fusion Applications product group is hierarchical. At the top level is the product group, which must exist before you can associate lower-level components, including products, promotions, and subgroups. A subgroup is another product group that is lower in the hierarchy.

The hierarchical structure of product groups import objects supports one-to-many relationships between the root product group and the subgroups and products for that product group. For example, a product group can have many subgroups and products. The subgroups can have many subgroups and products. The following diagram shows that product groups can contain products or can contain other product groups.

![Diagram of product group hierarchy]

Import Objects for the Product Group

To facilitate the import of product groups, Oracle Fusion has incorporated the structure of the product group into import objects. The import object for the product group is Product Group.

If you want products (also known as items) to be visible in a catalog that is represented by a product group hierarchy, then those products must be imported before the product groups are imported, or they must already exist in the Oracle Fusion Product Information Model. In other words, products must be present in Oracle Fusion before you import the product groups with which those products are associated. The objects of the product group hierarchy do not have to be imported in any specific order. However, you must make sure that all product groups referenced in a product group hierarchy are imported.

Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the product group.

For information about the Oracle Fusion attributes, see the Oracle Enterprise Repository. The reference files contain descriptions, logic used in choosing default values, and validation information for each of the Oracle Fusion
attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion. For example, if you have values in your data that correspond to a choice list in Oracle Fusion, then the validation information for that attribute provides the task name in the setup work area where you can define your values. For additional information including a list of reference file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Group</td>
<td>Product Group Import Object and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>

**Extensible Attributes**

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

**Importing Product Groups Using File-Based Data Import**

For the promotion business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new promotion, you import the Promotion object.

You must be assigned the Sales Catalog Administrator or Customer Relationship Management Application Administrator job role to access and submit the import activities for product groups.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with either the Customer Relationship Management Application Administrator or Marketing Operations Manager job role can also navigate to the Product Group work area to view the imported product groups.

**Product Group Import Objects: How They Work Together**

You use one main import object, Product Group, when you submit a file-based import activity to import your product groups. This topic describes the Product Group import object. It introduces the following:
• Target import object concepts
• Target objects for the Product Group import object
• Target import object attributes
• Target object attribute reference guide files

**Target Import Object Concepts**

A single product group can include associated products and subgroups. You can use product groups to create a multilevel hierarchy of product groups and products that can be used as a sales catalog, a rollup hierarchy, or a promotion catalog.

The Product Group import object is used to import product groups and associated subgroups. The Product Group import object is split into separate target import objects for product groups, product group products, and product group subgroups associated with the product groups. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Product Group Target Import Objects**

The target import objects in the Product Group import object are generally grouped into information about the Product Group, Product Group Products, and Product Group Subgroups business objects, which are represented by the ProductGroupBulkImport, ProductGroupItemBulkImport, ProductGroupRelationBulkImport target import objects, respectively. The Product Group Item business object holds the products in the product group, and the Product Group Relation business object holds other product groups that are subgroups of the product group. The following figure shows the grouping and the target import objects included in the Product Group import object, each represented by their familiar name and their formal target import object name, shown in parentheses.

Before importing product groups, ask yourself the following questions:

• Do you have a product group to import? ProductGroupBulkImport includes the basic definition of the product group, such as name, description, active flag, dates, and so on.

• Do you have any product associated with this product group? ProductGroupItemsBulkImport allows you to identify the products that
must be associated with the product group. It includes the product ID that must be associated with the product group.

- Do you have any product groups that are subgroups of this product group? ProductGroupRelationsBulkImport allows you to identify the product groups that must be associated with this product group as its children.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefined and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the product group.

**Target Import Objects Attributes Resources**

To access the reference guide files for the product group’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Product Group File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductGroup BulkImport</td>
<td>Product Group</td>
<td>QSC_IMP_PROD__GROUPS__Reference</td>
</tr>
<tr>
<td>ProductGroup ItemBulkImport</td>
<td>Product Group Product</td>
<td>QSC_IMP_PROD__GROUP_ITEMS__Reference</td>
</tr>
<tr>
<td>ProductGroup RelationBulkImport</td>
<td>Product Group Subgroup</td>
<td>QSC_IMP_PROD__GROUP_REL__Reference</td>
</tr>
</tbody>
</table>

**Importing Promotions Using File-Based Import: Explained**

This topic explains how to prepare and import marketing promotion data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.
A promotion is a business object that is used to offer special pricing to your customers to promote products, such as a percentage discount, free shipping, or a coupon. For details of how promotion information can be imported into Oracle Fusion Applications, see "Importing Promotions Using File-Based Import: Example."

Consider the following questions when importing your data:

- How does your legacy system or source system represent the promotion compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

**Comparing Business Object Structures**

You must understand how your promotion data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a promotion.

In Oracle Fusion Applications, one table stores the promotion definition and another table optionally stores coupon details for that promotion. A coupon is an entitlement to a specific discount, which businesses give to their customers as part of a promotion. Zero, one, or many coupons can be associated with any given promotion.

**Import Objects for the Promotion**

To facilitate the import of promotions, Oracle Fusion Applications incorporate the structure of the promotion into import objects. The import object for the promotion is Promotion.

**Comparing Business Object Data**

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the promotion.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used in choosing default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information including a list of reference guide file names and locations that you need to complete this task, see the following table.
Define Common CRM Configuration

Import Object

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>Promotion Import Object and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>

Note

You can use the keyword importing promotions to search for related topics in Oracle Fusion Application Help.

Extensible Attributes

Oracle Fusion Applications do not support extensible attributes for promotion objects. You can import data only for promotion model objects that already exist by default in Oracle Fusion Applications.

Importing Promotions Using File-Based Data Import

For the promotion business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new promotion, you import the Promotion object.

You must be assigned the Customer Relationship Management Application Administrator or Marketing Operations Manager job role to access and submit the import activities for promotions.

Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with either the Customer Relationship Management Application Administrator or Marketing Operations Manager job role can also navigate to the Promotions work area to view the imported promotions.

Promotion Import Objects: How They Work Together

You use one main import object, Promotion, when you submit a file-based import activity to import your promotions. This topic describes the Promotion import object. It introduces the following:

- Target import object concepts
- Target objects for the Promotion import object
- Target import object attributes
• Target object attribute reference guide files

**Target Import Objects Concepts**

The Promotion import object is used to import promotions and coupons associated with the promotions. The Promotion import object is split into separate target import objects for the promotion and the coupon. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

**Promotion Target Import Objects**

The target import objects included in the Promotion import object and the business objects that each target import object represents are shown in the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Business Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>PromotionBulkImport</td>
<td>Promotions</td>
</tr>
<tr>
<td>PromotionCouponBulkImport</td>
<td>Coupons</td>
</tr>
</tbody>
</table>

A single promotion includes specific pricing that is used as part of a marketing promotion and may also include coupons offered to customers as part of that promotion.

**Target Import Objects Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

---

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the promotion.

---

**Target Import Objects Attributes Resources**

To access the reference guide files for the response’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).
The following table lists the reference guide files that are available from the Documentation tab for the Promotion File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>PromotionBulk Import</td>
<td>Promotions</td>
<td>MOP_IMP_PROMOTIONS_Reference</td>
</tr>
<tr>
<td>PromotionCoupon BulkImport</td>
<td>Coupons associated with promotions</td>
<td>MOP_IMP_Promo_COUPONS_Reference</td>
</tr>
</tbody>
</table>

**Importing Resource Teams Using File-Based Import: Explained**

This topic explains how to prepare and import resource team data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature. A resource team is a temporary group of resources that is formed to work on work objects. A resource team may contain a resource organization or resources or both. A resource team cannot be hierarchically structured and is not intended to implement an organization. You enter your resource team information using the Setup and Maintenance work area, Manage Resource Teams task, or you can import data to create new or update the existing resource teams.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the resource team compared to how Oracle Fusion Applications represent the same data?
- Do you have to configure values in Oracle Fusion Applications to map to your data values?
- Do you have to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
- What import features are available for importing your business object?
- How do you verify your imported data?

**Comparing Business Object Structures**

You must understand how your resource team data corresponds with the data in Oracle Fusion Applications in order to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a resource team.

In Oracle Fusion Applications, one table stores the resource team definition and other tables optionally store profile details for that resource team. Profile details for a resource include information about a resource team’s organization and team memberships.

**Import Objects for the Resource Team**

To facilitate the import of resource teams, Oracle Fusion Applications incorporate the structure of the resource team into import objects. The import object for the resource team is Resource Team.
Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the resource team.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to choose default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for that attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Team</td>
<td>Resource Team Import Objects: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword importing resource teams to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

If you need to extend the Oracle Fusion Applications object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both extensible custom attributes and the standard import object attributes.

Importing Resource Teams Using File-Based Data Import

For the resource team business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source-file mappings, and to schedule the import activities. You submit file-based import activities for each import object. When creating a new contact, you import the Resource Team object.

You must be assigned the Master Data Management Administrator job role to access and submit the import activities for resource teams.
Verifying Your Imported Data

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Master Data Management Administrator job role can also navigate to the Manage Resource Teams work area to view the imported resource teams.

Resource Team Import Objects: How They Work Together

This topic describes the Resource Team import object. You use two main import objects, ResourceTeam and ResourceTeamUsage, when you submit a file-based import activity to import resource team information.

This topic introduces the following:

- Target import object concepts
- Target objects for the Resource Team import object
- Target import object attributes
- Target object attribute reference guide files

Target Import Object Concepts

The Resource Team import object is used to import resource teams and information to create or update associated organizations or persons. The Resource Team import object is split into separate target import objects for organizing the individual attributes of the different aspects of the resource team and the resource team’s usage. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand how the target objects are related and what attributes are included in each target object.

Response Target Import Objects

The target import objects in the Resource Team import object are generally grouped into information about the resource team and its usage. The ResourceTeam target import object contains information that identifies the resource team, such as the team’s name, ID, active dates, and so on. The ResourceTeamUsage target import object contains information that captures the usage of the resource team.

To import or update a resource team, use the ResourceTeam target import object. To import or update a resource team’s usage, use the ResourceTeamUsage target import object.

Target Import Objects Attributes

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.
To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the marketing response.

### Target Import Objects Attributes Resources

To access the reference guide files for the resource team’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

The following table lists the reference guide files that are available from the Documentation tab for the Resource Team File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Description</th>
<th>Reference Guide File Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ResourceTeam</td>
<td>Captured information that identifies a resource team. Sample attributes: TeamId, TeamName, TeamDescription, and Language.</td>
<td>HZ_IMP_TEAMS_Reference</td>
</tr>
<tr>
<td>ResourceTeamUsage</td>
<td>Contains information that indicates the usage of the resource team. Sample attributes: RequestId, TeamUsageId, TeamId, and Usage.</td>
<td>HZ_IMP_TEAM_USAGES_Reference</td>
</tr>
</tbody>
</table>

### Importing Sales Leads Using File-Based Import: Explained

This topic explains how to prepare and import sales lead data from an external data source into Oracle Fusion Applications using the File-Based Data Import feature.

A sales lead is a business object that is used to represent the interest of a new prospect or existing customer in a product or service being sold. You enter your lead information using the **Lead Qualification** work area or you can import data to create or update sales leads.

Consider the following questions when importing your data:

- How does your legacy system or source system represent the sales lead compared to how Oracle Fusion Applications represent the same data?
- Do you need to configure values in Oracle Fusion Applications to map to your data values?
- Do you need to customize Oracle Fusion Applications to capture additional attributes that are critical to the way you do business?
• What import features are available for importing your business object?
• How do you verify your imported data?

Comparing Business Object Structures

You must understand how your sales lead data corresponds with the data in Oracle Fusion Applications to be able to map your legacy data to the data needed by Oracle Fusion Applications. First, you must understand how Oracle Fusion Applications represent the structure of the data for a sales lead.

In Oracle Fusion Applications, the sales lead structure is hierarchical. At the top level is the lead summary, which must exist before you can import lower level components such as team members, tasks, and appointments. This hierarchical structure supports one-to-many relationships between the components that make up the lead. For example, a lead can have many sales team members, tasks, and appointments.

The lead summary contains basic information about the lead such as the customer or prospect, status, and deal size. For each lead, you can add contacts, assign sales team members, and associate products. As you pursue the lead, you can track appointments and interactions, assign tasks and due dates, attach documents relevant to the lead, and post notes for the lead or for specific tasks.

Import Objects for the Sales Lead

To facilitate the import of sales leads, Oracle Fusion Applications incorporate the structure of the sales lead into import objects. The following table lists the import objects for the lead.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Contacts</td>
</tr>
<tr>
<td>Note</td>
<td>You can create new customers, consumers, and contacts or associate existing ones.</td>
</tr>
<tr>
<td>Sales Team</td>
<td></td>
</tr>
<tr>
<td>Products</td>
<td></td>
</tr>
<tr>
<td>Attachments</td>
<td></td>
</tr>
<tr>
<td>You can optionally create marketing responses that are associated with the leads.</td>
<td></td>
</tr>
</tbody>
</table>
Comparing Business Object Data

Each import object is a collection of attributes that helps to map your data to the Oracle Fusion Applications data and to support one-to-many relationships between the structural components that make up the sales lead.

A good understanding of the attribute details of the import objects is critical to preparing your import data. The reference guide files contain descriptions, logic used to select default values, and validation information for each of the Oracle Fusion Applications attributes. The validation information includes the navigation to the task where you can define values in Oracle Fusion Applications. For example, if you have values in your data that correlate to a choice list in Oracle Fusion Applications, then the validation information for the attribute provides the task name in the Setup and Maintenance work area where you can define your values. For additional information, including a list of reference guide file names and locations that you need to complete this task, see the following table.

<table>
<thead>
<tr>
<th>Import Object</th>
<th>Related Import Object Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Lead Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Task</td>
<td>Task Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Note</td>
<td>Note Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Appointment</td>
<td>Appointment Import Object and Attributes: How They Work Together</td>
</tr>
<tr>
<td>Interaction</td>
<td>Interaction Import Object and Attributes: How They Work Together</td>
</tr>
</tbody>
</table>

Hint: You can use the keyword "importing leads" to search for related topics in Oracle Fusion Applications Help.

Extensible Attributes

If you need to extend the Oracle Fusion object to import your legacy or source data, you must use Oracle Fusion CRM Application Composer to design your object model extensions and to generate the required artifacts to register your
extensions and make them available for importing. The corresponding import object is updated with the extensible attributes, which can then be mapped to your source file data. You can use the same source file to import both custom attributes and the standard import object attributes.

**Importing Sales Leads Using File-Based Data Import**

For the lead business object, you must use the File-Based Data Import feature. You prepare XML or text source data files in a form that is suitable for file-based import. The file-based import process reads the data included in your source file, populates the interface tables according to your mapping, and imports the data into the application destination tables.

The Define File-Based Data Import Setup and Maintenance task list includes the tasks needed to configure the import objects, to create source file mappings, and to schedule the import activities. You submit file-based import objects, create source file mappings, and schedule the import activities. You submit file-based import activities for each import object. When creating a marketing lead, you first import the Lead object, followed by subsequent import activities for each of the other import objects. The exception is attachments, which are imported by including the file names in your source file for the Lead object and selecting the files when defining the import activity.

You must be assigned the Corporate Marketing Manager, Marketing Analyst, Marketing Manager, Marketing Operations Manager, Marketing VP, or Sales Lead Qualifier job role to access and submit the import activities for sales leads.

**Verifying Your Imported Data**

Oracle Fusion Applications provide File-Based Import activity reports, which can be used to verify imported data. Users with the Sales Lead Data Access Duty role can also navigate to the **Lead Qualification** work area to view the imported lead. Oracle Fusion Applications assign this role to the following predefined job roles: Marketing VP, Corporate Marketing Manager, Marketing Operations Manager, and Marketing Analyst.

**Lead Import Objects: How They Work Together**

You use two main import objects, Sales Lead and Note, when you submit a file-based import activity to import your sales leads. This topic describes the Sales Lead import object. It introduces the following:

- Target import object concepts
- Target objects for the Lead import object
- Target import object attributes
- Target object attribute reference guide files

**Target Import Object Concepts**

The Sales Lead import object is used to import sales leads and information to create or update associated organization or person information for the customer, consumer, or contact associated with the lead. The Sales Lead import object is split into separate target import objects for organizing the individual attributes of the different aspects of the lead. To map the source data in your import file to the target attributes in Oracle Fusion Applications, you must understand
how the target objects are related and what attributes are included in each target object.

**Lead Target Import Objects**

The target import objects in the Lead import objects are generally grouped into information about the lead, the originating marketing response, and the contact, consumer, or customer associated with the lead. The following figure shows the grouping and the target import objects included in the Lead import object, each represented by their familiar name and their formal target import object name, shown in parentheses.

A single lead includes information about the lead such as the interested party, lead rank, and qualification status. The lead can include one or more products of interest. You can add specific resources to the sales team responsible for the lead or use assignment rules to assign resources.

The Lead, LeadProduct, and LeadResource target objects include the attributes to import this information for your sales lead.

If the lead customer is an organization and an existing customer, then you can associate the customer with the lead by using the Lead target object. However, if you want to update the information for an existing customer or create a customer record, then you must use additional target objects to import customer profile information, addresses, and contact points, such as a phone and fax number. The following target import objects are used for creating and
updating customer information for a lead respondent: OrganizationProfile, OrganizationAddress, PrimaryPhone, Fax, and Url.

Similarly, you can associate an existing consumer with the lead by using the Lead target object. To update the information for an existing consumer or create a consumer record, use the following target import objects: PersonProfile, PersonAddress, Email, PrimaryPhone, Mobile, InstantMessenger, and Fax.

To associate an existing contact for the responding consumer or customer with the lead, you use the Lead target object. To update or create a contact, use the following target import objects: ContactPersonProfile, ContactJob, ContactPrimaryAddress, ContactEmail, ContactPrimaryPhone, ContactMobile, ContactInstantMessenger, and ContactFax.

You can also import the marketing response that is the source for your lead. The response can include one or more products of interest and survey questions and answers, such as a telemarketer script. The Response, ResponseProduct, and ResponseSurvey target objects include the attributes to import this information for your marketing response. If you are importing the lead contact and the customer or consumer, the same information is used as the respondent information for the marketing response.

**Target Import Object Attributes**

You must compare the attributes that you want to import with the target object attributes that are available and their valid values. To evaluate your source data and Oracle Fusion Applications attributes for mapping and validation, you use an Oracle Enterprise Repository reference guide, which is available for each target import object. The reference guide file includes attribute descriptions, default values, and validations performed by the import process. Review the validation for each attribute to determine whether there are functional prerequisites or setup tasks that are required.

To import your source file data, you define a mapping between your source file data and the combination of the target object and target object attribute. You can predefine and manage import mappings using the File-Based Import Mapping task, or you can define the mapping when you define the import activity using the File-Based Import Activity task. Both tasks are available in the Setup and Maintenance work area.

**Note**

If any of the attributes you want to import do not have an equivalent target object attribute, then review the Oracle Fusion CRM Application Composer extensibility features for the sales lead.

**Target Import Object Attribute Resources**

To access the reference guide files for the lead’s target import objects, see the File-Based Data Import assets in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.com).

The following table lists the reference guide files that are available from the Documentation tab for the Lead File-Based Data Import asset.

<table>
<thead>
<tr>
<th>Target Import Object</th>
<th>Short Description</th>
<th>OER Attribute Reference File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Sales lead summary information</td>
<td>MKT_IMP_LEADS_T_Reference</td>
</tr>
</tbody>
</table>
Manage Bulk Data Export

Bulk Export: Overview

The Bulk Export application provides a mechanism to extract large volumes of data from Fusion CRM objects. These extracts can be the full set of records for an object or incremental extracts. For example, data extracted for a specific period of time, from the hosted CRM system to an on-premise database that resides behind a user's fire-wall. The system will create comma separated variable or tab delimited files with the extracted data, which will be available to users as attachments to the batch records that have been executed.

The following figure depicts the process of selecting data for export, scheduling and finally delivering the exported data file.
**Bulk Export Process Definition: Explained**

This solution provides a mechanism to extract large volumes of data from Fusion CRM objects, both as extracts of a full set of records for an object as well as incremental extracts. The system will create comma or tab delimited files with the extracted data which will be available to users as attachments to the batch records that have been executed.

In order to create the extracts, two steps must be completed. First, mapping files for the full and incremental extract processes must be defined in the Fusion CRM system. These maps will specify which columns and filters will be applied to each export process for each export object. For the incremental extracts, filters can be created that leverage time stamps to determine which rows will be queried out of the system. All mapping files will be saved in the system and reused for each extract.

Next, the hourly and weekly data export processes are scheduled in the Fusion export tool. For any required incremental and scheduled export, the export task should either exist or created through the UI. Oracle Web Services would only be used to schedule the export and start it. After each export process executes and completes, a comma or tab delimited data file will be created and stored in the Fusion system as an attachment. The formatted file can be downloaded by using the `getAttachment()` web service or by using the interactive UI in the export tool.

There are no transactional steps for this process in the Fusion CRM application, there are only prerequisite setup steps. Once these steps are complete the process
should run automatically. The prerequisite steps in Fusion are to create an export map and export job schedule for each object to be extracted (this only needs to be done once).

The Bulk Export Process Definition is made up of the Export Map and the processing schedule. See the steps below.

Select the Export Object

The export object is the Fusion data base object where the data resides. It is made up of attributes. If you need to export data from a custom table, you must register the object as an export object. This is accomplished from the Manage Export Process UI, Manage Export Objects action. All the delivered tables and their attributes are available for export.

Select Attributes

The export object is made up of attributes. These attribute may be selected for export or not included. You can edit the header text of the attribute to make its meaning more clear to other users of this process.

Filter Criteria

Each attribute may have limits or conditions enforced. Various operators are available for selecting the data to precisely select the data required for the export. You can save the filter criteria and then modify the criteria and save it under a new name. You can then change the filter by coming here to select an alternate filter name. Because the filters are related to the export object, if you reuse a map and change the filter, you are changing it for any Export Process Definition that
uses that map. The attributes you use for the map have no bearing on what is available in the filter. All fields from the VO are available for use in the filter. For example, you can filter by TYPE but not show TYPE in the output.

**Schedule the Export Process**

Once defined, the export process is scheduled. You can run the process immediately or at the time and date of your choosing. If you decide to schedule the job at a later date you can also choose to set up a recurring schedule of extracts.

**Activate the Job**

By clicking on the Activate button, you make the job available to be run. It does not start an export process.

**Bulk Export Process Components: How They Work Together**

In the two step process used by Oracle Fusion Bulk Export, the first is the mapping of files for the full and incremental extract processes. The second step is the scheduling of the export. You create a process definition that includes both of these steps.

The process definition has three components that together make exporting data easier by leveraging the export maps that you have already built. The process name, the export process ID and the export map ID all serve to identify the specific process definition as well as leverage your work with reusable export maps.
Process Name

A user-supplied, natural language way to refer to the Export Process Definition. This enables you to refer to the export process definition easily rather than using the machine generated ID. For example, use Customer or some other meaningful name as the export process name instead of the export process ID 100000019897192.

Export Process ID

A unique, system generated identifier for the export process definition that ties together the export map, with its export objects and filters, and the defined export schedule.

Export Map ID

A unique identifier for the export map itself. You can name the export map or leave the field blank for a system generated map name to be entered. You can reuse the export map in different process definitions. For example, you could create a process definition to export all the data from the Customer export object. You could then reuse that export map and apply a new filter on the data to create an incremental export, such as data accrued since the last export date.

FAQs for Manage Bulk Data Export

How can I tell which objects to select?

Review the requirements for the data to be exported and determine the source view object that holds the attributes you want.

How can I create a subset of data for export?

Full sets of data are not always required for export. To create a subset of data, use filter criteria to determine the time frame or scope of data, based on values of the attributes. For example, to find activities for a certain period, use a project start date from 1/1/11 through 3/31/11, navigate to the Export Objects Detail Sub Page and click the filter icon. Fill in the filter criteria dialog for the project start dates to select the data to be exported. You run the export by navigating to the Setup and Maintenance menu, selecting Manage Task Lists and Tasks. Then, search for Schedule Export Processes and click the Go to Task icon on the line for this task.

How can I see my exported data?

You can look on the Schedule Export Processes, Overview page to see the History subpage. The column Exported Data File shows a hyperlink to your output file. This file will be a comma separated variable or a tab delimited file. Click that link to open the file and see the exported data.

How can I use my own View Object for export?

You can use your own defined view objects as a source for Bulk Export. To register your view objects for export, select Setup and Maintenance from the Tools menu and search for the Manage Export Objects task. Click the Go to Task icon and on the Manage Export Objects page click the Create icon to add your View Object, making it available for use.
What happens if I change the sequence number or header text?

Changing the sequence number changes the order of the attributes in the exported data file. Changing the header text enables you to give a more intuitive meaning to the attribute and the associated data.

What happens if I need data from more than one view object?

Select as many view objects as required to be export objects for the export process. Choose the individual attributes required from each export object.

Manage Calendar Profile Option

Creating the CRM Common Calendar: Worked Example

The Oracle Fusion Customer Relationship Management (CRM) common calendar is used across CRM applications. The calendar utilizes the Accounting Calendar Default profile option that is not set when the delivered product is installed. First, create an accounting calendar with calendar periods appropriate for your CRM needs, and give it a unique name, CRM Calendar, for example. Then, you must specify that calendar in the Accounting Calendar Default profile option. Use the following tasks to set up the CRM calendar.

Creating the Accounting Calendar

1. In the Setup and Maintenance area, Overview page, All Tasks tab, search for the topic names containing Accounting Calendar
   Manage Accounting Calendars will show up in the results box.
2. Click the Go To Task icon.
3. On the Managing Accounting Calendars page, click the Create icon.
4. Fill in the required fields as appropriate for the calendar, and click Next.
   Make note of the name utilized because this name will be required in the next topic.

Note

When creating the calendar, the first calendar date must be the first date of the period of the oldest historical data on which you will be reporting. For example, if you select January 1, 2010 as your first calendar date, then you would only be able to enter or import historical data associated with this date and later.

5. Ensure that the calendar data is correct, and click Save.

Managing the CRM Common Calendar Profile Option

The CRM calendar profile option must be associated with the new accounting calendar. Follow these steps:

Note
While the Common Financial Calendar feature of Oracle Fusion Applications supports the creation of more than one calendar, Oracle Fusion CRM may only be associated with one calendar. Many features of Fusion CRM utilize this common calendar profile option and changing it could result in the loss of data for one or more applications. Oracle strongly recommends that you do not change the selected Accounting Calendar Default (ZCA_COMMON_CALENDAR) profile option calendar value when it is set.

1. Navigate to the Setup and Maintenance work area, Overview page, All Tasks tab, and search for task names containing Calendar.

2. Locate Manage Calendar Profile Option, and click the Go To Task icon.

3. On the Manage Calendar Profile Option page, locate the ZCA_COMMON_CALENDAR: Profile Values subpage and click the profile option value line.

4. Click the Profile Value list, and select the calendar name that you created when you created the accounting calendar. Click Save and Close.

Define Sales Prediction Configuration

Oracle Fusion Sales Prediction Engine: Overview

Oracle Fusion Sales Prediction Engine enables organizations to capture and leverage predictive sales intelligence. Predictive models analyze sales data to evaluate buying patterns. After the evaluation of model results, lead generation can be scheduled to disseminate lead recommendations to users. Each lead recommendation includes win likelihood, average expected revenue, and sales cycle duration.

Summary of Features

The key features of Oracle Fusion Sales Prediction Engine include the following:

- Application Home Page: The application home page provides sales analysts with a summary of the prediction model results. Additionally, reports on the dashboard provide overviews of model performance and leads adoption.


- Rule-based Recommendations: When new products are launched or during initial deployment, historical data is sparse. In such cases, the sales analyst can create customer-, industry-, or product-specific rules to drive the recommendation of new products.

- Higher Lead Adoption Rate: By utilizing a combination of data mining, segmentation, prediction and business rules, Sales Prediction Engine ensures that the recommendations have a higher likelihood of being converted to a win.

- Analyze Recommendation Performance: Built-in analytical reports verify whether the recommendations are being accepted by the sales organization. If adoption is low, then the predictive models can be fine-tuned by selecting different attributes for model learning or editing the
Define Common CRM Configuration

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rules. Simulation can then be performed to assess the impact of these new changes before publishing new recommendations.

- Usage across CRM Applications: The recommendations generated are integrated with and can be viewed in other CRM applications and features, such as Opportunity Landscape, Customer Center, Territory Management, and Lead Qualification. In Opportunity Landscape, the recommendations can be ranked and qualified as leads after being reviewed. In Customer Center, recommended products display next to a customer, and the rationale for the recommendations is provided in the context of creating a deal for the customer. Territory managers can use the metrics output to set sales targets by territory and assign them to salespeople. The metrics ranking determines whether leads can be qualified in Lead Qualification.

Configuring Data Warehouse to Run the Oracle Fusion Sales Prediction Engine: Procedures

To run the Oracle Fusion Sales Prediction Engine in Oracle Fusion Applications Customer Relationship Management (CRM), perform the following post-installation tasks if you deployed Oracle Business Intelligence Applications and have created the Oracle Business Analytics Warehouse. For information on deploying and setting up Oracle Business Intelligence Applications, refer to the Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Applications.

However, if you deployed only Oracle Transactional Business Intelligence, you need not perform these steps to run the Oracle Fusion Sales Prediction Engine.

Creating Data Warehouse Objects

You can create the Data Warehouse objects using the Sales Predictor Repository Creation Utility (RCU). To run the Sales Predictor RCU, ensure that the Oracle Business Intelligence Application (OBIA) Data Warehouse database and the related schema including database objects such as tables, are available. The Sales Predictor RCU creates Sales Predictor related Data Warehouse database objects such as Oracle Data Mining tables, views, packages, Oracle Real-time Decisions (RTD) Inline Service Processing tables, and the purge package in the existing OBIA schema.

Initiate the Sales Predictor RCU following these instructions.

1. Access the rcuBIZSPAApps.zip file from the following location, and extract its contents to a local directory.
   - In Windows NT, the location is FAINTEG_BASE/fainteg/shiphome/rcu/nt/rcuBIZSPAApps.zip
   - In Linux, the location is FAINTEG_BASE/fainteg/shiphome/rcu/linux/rcuBIZSPAApps.zip

2. Run the following command pointing to the BIN folder within the local directory:
   - In Windows NT, use `rcu -variables BI_SCHEMA_NAME=<OBIA Schema name>`
• In Linux, use "./rcu -variables BI_SCHEMA_NAME=<OBIA Schema name>"

Note

<OBIA Schema name> refers to the name of the OBIA schema that is used, and is an input parameter for the Sales Predictor RCU.

The Sales Predictor RCU wizard appears.

3. On the Welcome page, click Next and on the Create Repository page, ensure that the default option Create is selected and click Next.

4. On the Database Connection Details page, provide the following information and click Next.
   - Host Name: Name of the server where the database is located.
   - Port: The database port number.
   - Service Name: The service name of the database.
   - Username: SYS. It is the user name associated with an administrative role.
   - Password: Password used in combination with the user name to access the database.
   - Role: SYSDBA. It is the role with administrative access rights.

The provided information is processed through a prerequisite check.

5. On the confirmation dialog box, click OK.

6. On the Select Components page, select the Oracle Application Components, and click Next.

7. On the confirmation dialog box, click OK.

8. On the Schema Passwords page, ensure that the Use same passwords for all schemas option is selected. Selecting this option provides the password used with the existing OBIA Schema Name.

9. Enter the password again to confirm it, and click Next.

10. On the Map Tablespaces page, click Next and on the confirmation box that subsequently appears, click OK.

11. On the Summary page, review the database information provided until this point. If necessary, click Back to change details in the previous pages.

12. Click Create to create the Data Warehouse objects. The Completion Summary page confirms the successful creation of the objects.

Create Data Warehouse Data Source in RTD WebLogic Server

The Data Warehouse requires a Java Naming and Directory Interface (JNDI) data source connection named DWDS that points to the Online Analytical Processing (OLAP) database residing on Oracle BI server. To create the data source using the RTD WebLogic Server console, follow these instructions.
1. In the WebLogic Server console, open Services - JDBC - Data Sources and click New.

2. On the JDBC Data Source Properties page, provide the following details and click Next.
   - Name: Fusion_OLAP_DS
   - JNDI Name: DWDS
   - Database Type: Oracle
   - Database Driver: Oracle Driver (Thin) for Instance connections

3. On the Transaction Options page, ensure that the default property Supports Global Transactions is selected, and click Next.

4. On the Connection Properties page, provide the following values, and click Next.
   - Database Name: The Unique System ID (SID) of the database
   - Host Name: The name of the computer that hosts the database
   - Port: The port number of the database
   - Database User Name: User credential to access the database
   - Password: The password used in combination with the Database User Name to access the database

5. On the Test Database Connections page, review the details provided until this point, test the connectivity to the database, and click Next.

6. Select the Oracle BI Server where you want to make the data source available, and click Finish.

**Modifying the Profile Option**

To enable connectivity to Data Warehouse, you must set the value for the profile option.

**Note**

You can set the value for this profile option using Applications Core Setup, if you have roles allowing access to do so. The Application Implementation Administrator abstract role provides the necessary access.

1. Sign in to the Oracle Fusion Applications Core Setup.

2. Under the Tasks menu on the left side of the page, click Manage Administrator Profile Values. The Manage Administrator Profile Values tab appears.

3. In the Profile Option Code field, enter ZCA_WAREHOUSE_ENABLED_BI and click Search. The profile option appears in the search results.

4. In the Profile Values region, select the result item associated with the searched profile option, and under the Profile Value column, set the value to Yes.
5. Click **Save**.

**Pointing RTD to the Data Warehouse**

The Sales Predictor Inline Service within RTD uses the profile option to point to the Data Warehouse tables.

You can point RTD to the Data Warehouse in one of the following ways:

- Restart the RTD application server. The Sales Predictor Inline Service is reloaded and points to the Data Warehouse.

- Manually redeploy the Sales Predictor Inline Service if restarting the RTD application server does not work. Before you manually redeploy, ensure that the following prerequisites are met:
  - You have roles allowing access to deploy the Sales Predictor Inline Service.
  - Java Development Kit (JDK) 1.6 or higher version is available and running on the same server.
  - You must have access to the command line tool zip file rtd-deploytool-11.1.1.zip. The zip file resides within the RTD client zip file (rtd_client_11.1.1.3.0.zip), which is available in the BI_MW_HOME/Oracle_BI1/clients/rtd directory.

To manually redeploy the Sales Predictor Inline Service, follow these instructions.

1. Extract the contents of the file rtd_client_11.1.1.3.0.zip to a local directory.
2. In the local directory, go to the folder ./client/CommandLineDeploy, locate rtd-deploytool-11.1.1.zip and extract its contents to a folder.
3. In that folder, locate ./OracleBI/RTD/deploytool folder and within that folder, open a command prompt terminal.
5. When prompted, provide the user name and password to connect to the RTD server.

The message Deploymentstateid: id. Deployed SPE_ILS.zip to server port in state: Development appears indicating completeness of deployment of the Sales Predictor Inline Service.

**Running the Schedule Predictive Model Training Process**

The Oracle Fusion Sales Prediction Engine can also use data from the following Data Warehouse entity tables to make more accurate predictions:

- Assets
• Service Agreements

• Orders

Also, it is necessary to load either Assets or Orders tables into the corresponding Data Warehouse table. Once the data in the Data Warehouse entity tables are ready, you can go to the Schedule Predictive Model Training page to run the model training process.

For more information on OBIA, see Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Applications.

Selecting Model Entities and Attributes: Examples

Oracle Fusion Sales Prediction Engine leverages the power of predictive analytical models to identify patterns and correlation of data for the purpose of identifying what products to consider positioning next to your customers. The application leverages multiple mathematical models in order to formulate the likelihood a given customer will purchase a specific product, the estimated revenue which can be expected, and the duration of the estimated sales effort.

After the statistical model generates against the historical sales data based on the selected entities and attributes, summary and detail reports show critical insights as to what customers buy and can be used to predict the right products for the right customers. You can then use these insights to refine the process of generating leads based on what the customers are more likely to buy. Moreover, the same model can be used to predict the win likelihood of current opportunity revenue based on analysis of similar opportunities in the past. Also, product domain or market experts can write prediction rules to recommend products based on a set of rules conditions, utilizing all available customer profile attributes as well as other metrics.

The statistical analysis will identify which data has an influence in determining a likelihood to buy. After the statistical model generates against the historical sales data based on the selected entities and attributes, summary and detail reports show critical insights as to what customers buy and can be used to predict the right products for the right customers. As such, the decision regarding the selection of entities and attributes is critical. While the selection of certain entities and attributes may seem logical based on the awareness of sales behavior (customers in certain industries have a stronger affinity for certain products, for example), where there is uncertainty, the statistical model analysis will provide the necessary insight into whether patterns and correlation emerge. As such, as much available data as possible should be leveraged for the purpose of evaluation. Some factors which weight into the decision include the availability and accuracy of the data.

While selecting attributes, you must not select similar attributes for model training. For example, Annual Revenue and Annual Revenue Category. Your customer’s annual revenue might range from 250,000 dollars to 50 million dollars. However, for efficient management, you decide to target only five customer types based on the Annual Revenue Category such as, Nano (250,000 dollars to 1 million dollars), Small (1-5 million dollars), and so on. The Annual Revenue Category uses Annual Revenue for this classification. Therefore, you must use either Annual Revenue or Annual Revenue Category but not both as
they are redundant. Similar duplicate attributes could manifest in multiple areas such as Number of Employees and Company Size, Location and Zip Code, and so on.

Additionally, the application allows for the inclusion of expert insight from product management and sales and marketing operations. These expert insights can be captured via prediction rules. The same data made available to and leveraged by the predictive model, is also available for rule authoring.

Scenario

Your company sells a service that appeals mostly to larger companies, and another service that targets smaller customers. If a customer purchased one of your product packages, then the customer already has all service needs covered by the package. You want to know, given a product recommendation, if credit score, asset, and customer size are important predictors when it comes to recommending this particular product.

You select the following entities and attributes:

- Customer Profile
- Annual Revenue
- Credit Score
- Customer Size Code
- Past Purchased Products or Services
- Assets and Service Contracts

These entities and associated attributes entail the data available to the enterprise which the predictive models can evaluate for identifying correlation, and which you can use to create prediction rules. Over time, you can further refine the selections based on availability of data and the cost to integrate that data for evaluation.

Define Outlook Integration

Implement Oracle Fusion CRM for Microsoft Outlook: Explained

Before using the Oracle Fusion CRM for Microsoft Outlook application, several setup tasks must be performed. Some of these are Fusion-specific tasks that are done by the environment hosting team or the customer implementation team. Other tasks are related to setting up the users’ computers to use the application, including the install and initialization of the extensions to Microsoft Outlook (Outlook). These tasks are described in more detail in the sections that follow.

For information on supported software versions, see the related topic, Supported Software for Oracle Fusion CRM for Microsoft Outlook: Explained.

Overview of Fusion-specific Setup Tasks

At a high level, the following are the Oracle Fusion-specific setup tasks involved in implementing CRM for Microsoft Outlook:
• Required: Install Fusion CRM, including the CRM for Microsoft Outlook application.
• Required: Perform Fusion setup tasks for Oracle Fusion Common Components, Oracle Fusion Customer Center, Oracle Fusion Sales, and Oracle Fusion Marketing.
• Optional: Perform customization and security changes for CRM for Microsoft Outlook, after initial setup.

Overview of Setup Tasks Required for Each Computer Running CRM for Microsoft Outlook

At a high level, the following are the setup tasks required for each computer that will run CRM for Microsoft Outlook:

• Required: If not already present, install Microsoft .NET framework version 3.5 SP1 (or later).
• Required: Download and install the Fusion CRM server certificate.
• Required: Download and run the CRM for Microsoft Outlook installer.
• Required: Complete First Run Assistant to set up application options and perform initial synchronization to get Outlook configuration and user data from the Fusion CRM application.

Implementation Task Flow Overview

The overall process flow for implementing CRM for Microsoft Outlook is shown in this section.

Fusion-specific Implementation Tasks

Following are the CRM for Microsoft Outlook implementation tasks specific to Oracle Fusion.
1. Install Oracle Fusion CRM Applications suite

As a prerequisite setup task, provision the server environment and install the Fusion CRM Applications suite. This task is typically completed by the hosting operations team or customer implementing the Oracle Fusion CRM Applications suite and is the basis for the rest of the setup steps described in this section.

2. Perform CRM setup tasks for functionality used by CRM for Microsoft Outlook

Because CRM for Microsoft Outlook allows users to access and manage their CRM data in Microsoft Outlook, it is necessary to complete the required setup tasks for the relevant CRM functionality. For example, the following setup tasks must be completed before using CRM for Microsoft Outlook:

- Set up reference data, such as: address and phone formats, currencies, geographies, and resources.
- Set up CRM functional areas exposed in CRM for Microsoft Outlook, such as: calendar and task management, customer and contact management, lead management, and opportunity and revenue management, including the sales product catalog.

3. Optionally, CRM for Microsoft Outlook can be configured by completing these Outlook-specific setup tasks:

- Configure CRM for Microsoft Outlook client configuration files: Configure only if Outlook client customizations are needed
- Configure CRM for Microsoft Outlook client deployment packages: Configure only if Outlook client customizations are needed
- Configure CRM for Microsoft Outlook server configuration file: Configure only if Outlook configuration includes references to new services

Other, security-related tasks, performed in Oracle Fusion Authorization Policy Manager (APM), may be necessary depending upon your applications configuration. Perform these tasks after initial setup, as needed. If new job roles are created, you will need to associate these new roles with the predefined data privileges and Outlook configuration packages. If you create custom Outlook deployment packages, there are additional steps required. See the "Related Topics" section at the end of this topic for more information.

Non-Fusion Implementation Tasks

Following are the non-Fusion implementation tasks for CRM for Microsoft Outlook.

- Verify Microsoft .NET Framework 3.5 SP1 or higher is installed on all computers that run CRM for Microsoft Outlook.
- Verify each user has a Microsoft Exchange mail profile configured with Cached Exchange Mode (which supports offline storage in an .OST file format) or has a separate personal folders storage (in .PST file format) to store CRM data.
• Deploy the Fusion public certificate into users' Personal and Trusted Root Certificate Authorities directories on users' computers. The certificate is provided by the environment hosting team or the group implementing Fusion CRM. See the related topic, Options for Deploying the Public Certificate: Explained, for steps describing how users can import the certificate themselves or how to automate the process.

• Verify that each user can access the CRM for Microsoft Outlook installer from the download page in the Sales application. The download page is accessible from the application preferences menu.

Run CRM for Microsoft Outlook Installer

Each user must run the CRM for Microsoft Outlook installer on his/her computer. See the related topic, Deploying and Installing Oracle Fusion CRM for Microsoft Outlook: Explained, for more information.

Creating Deployment Packages: Explained

In Oracle Fusion CRM for Microsoft Outlook, deployment packages contain metadata files that describe the CRM application extensions deployed to users' computers. To provide users access to a new client configuration, you can either create a new deployment package or create a new instance of an existing package, as discussed in the following sections.

Create New Deployment Package

When you create a new package, in addition to activating it, you must configure a data security policy that allows users to access the package. This secondary task is done in Oracle Fusion Authorization Policy Manager (APM) and involves the following steps:

1. In the top left section of the APM application window, use global search to search for Database Resources using search criteria equal to Outlook. This should return the result, Outlook Edition Metadata Package.

2. Select the Edit button on the Search Results pane to edit the Outlook Edition Metadata Package database resource.

3. In the Edit Database Resource tab, select the Condition tab and create a new condition on the database resource. Specify any unique name/display name, and set the SQL predicate to `package_name = '<name_of_deployment_package>'` (for example, `package name = 'NewOutlookPackage'`).

4. Select the Submit button to commit the change.

5. Repeat step 2. In the search results pane, select Edit to reopen the Edit Database Resource page to edit the Outlook Edition Metadata Package database resource.

6. In the Edit Database Resource tab, select the Policy tab, and select the policy that should have access to the new package (for example, ZOE_SALES_MGR_OUTLOOK_DUTY), and then select Edit.

7. In the lower section of the page, select the Rule tab.
8. Select the lookup control next to the condition field and select the new condition created in step 3.

9. Select Submit to commit the changes.

**Create New Instance of Existing Package**

When you use an existing package, you create a new instance of the package with different configuration files. When using this method, you must inactivate the previous instance and activate the new instance. There is no need to configure a data policy when creating a new instance of an existing deployment package.

**Options for Deploying the Fusion Public Certificate: Explained**

Before using the Oracle Fusion CRM for Microsoft Outlook application, several setup tasks must be performed. One of these tasks is to deploy the Fusion Public Certificate to each user's machine in order to support secure exchange of data between Outlook and Oracle Fusion CRM during synchronization. The Fusion CRM application public certificate is available from the CRM for Microsoft Outlook preference page in the Oracle Fusion Sales application.

**User-Managed Deployment using Microsoft Machine Console**

If users have sufficient privileges and knowledge to import the certificate themselves, they need to make sure the certificate is imported to both the Personal and Trusted Root Authority certificate stores. This can be done by following these steps:

1. In the Windows Start menu select Run, and type mmc to open the Microsoft Machine Console application.

2. In the console window, select File, then Add/Remove Snap-in.

3. In the Add/Remove Snap-in window, select Add, and then select the Certificates snap-in. Select the Add button to add it.

4. Select the option to manage certificates for My user account and select Finish.

5. Select Close and OK to complete adding the Certificate snap-in.

6. Expand the Certificates - Current User group to review all the certificate stores.

7. Expand the Personal store, right-select the Certificates child folder and select All Tasks - Import.

8. In the next several windows, find the certificate file and complete the import into the Personal certificate store.

9. Repeat step 7 using the Trusted Root Certification Authorities store, and repeat step 8 to import the certificate file.

**Automate Deployment with CertMgr.exe and Batch Scripting**

Alternatively, to automate the installation of the public certificate into the appropriate certificate stores on the users' computers, deploy the CertMgr.exe
program available from Microsoft in the Windows SDK to users’ computers, along with the certificate file, and a batch script that implements the following commands:

- `certmgr.exe -add -c <cert_name> -s root -r localMachine`
- `certmgr.exe -add -c <cert_name> -r CurrentUser -s My`

In the script above, the placeholder for the certificate name would be replaced with the name of the certificate file (for example, oracle.cer).

### Deploying and Installing Oracle Fusion CRM for Microsoft Outlook: Explained

Oracle Fusion CRM for Microsoft Outlook includes a Microsoft Outlook add-in that must be deployed and installed on each user's computer. The installer file is available from the CRM for Microsoft Outlook preference page in the Oracle Fusion Sales application.

#### User-Managed Deployment

Users can complete the installation by running the Oracle Fusion CRM for Microsoft Outlook.msi file on their computers. The Outlook application must be closed during this process. During the install, the user will specify:

- The install directory
- The Outlook mail profile to use

#### Automated Deployment using Batch Scripting

An alternative to users installing CRM for Microsoft Outlook themselves is for the installer to be deployed to user computers by the administrator using Windows Group policies, Microsoft System Center Configuration Manager (SCCM), or other desktop software deployment mechanisms. In this case, the administrator will access the installer file from the appropriate preference page in the Oracle Fusion Sales application and write a batch script to run the installer with several default parameters, such as the install directory, the mail profile to install to, and all of the elements of the connect string.

The following sample batch script shows how the installer installation can be automated:

```bash
msiexec /i "Oracle Fusion CRM for Microsoft Outlook.3.00.50.msi"
OL_PROFILE=$DEFAULT FUSION_SERVER_HOST="hostedappserver.com"
FUSION_SERVER_PORT="443" FUSION_SERVER_SUFFIX="outlookEditionConnector/OutlookRequestHandlerService" FUSION_SERVER_PROTOCOL="https" /QR
```

The parameters in the script include the following:

- The name and relative path to the installer file. In the example, the script assumes that the .msi file is in the same directory as the batch script.
- OL_PROFILE: This is the name of the user's Outlook mail profile. Besides the mail profile name itself, predefined values can be provided (for
example, $DEFAULT and $PREFERRED). When using $DEFAULT, the default mail profile will be selected. When using $PREFERRED, the installer will try to use the default profile first, but if it doesn't satisfy the mail profile configuration requirements (if it doesn't use Cached Exchange Mode or use Personal Folders storage) then the installer will try to use another profile.

- **FUSION_SERVER_HOST**: This is the server name or IP address.

- **FUSION_SERVER_PORT**: This is the port that CRM for Microsoft Outlook is configured to use.

- **FUSION_SERVER_SUFFIX**: This is the URL suffix for accessing the CRM for Microsoft Outlook Web services. The one provided in the example above is the default deployment path for the CRM for Microsoft Outlook application, and it will typically be used.

- **FUSION_SERVER_PROTOCOL**: This is either "http" or "https", depending on whether the application is deployed with SSL enabled or not.

Note that the script is using the standard switches provided by the Microsoft Installer executable, msiexec.exe. Documentation of the switches can be reviewed by typing `msiexec.exe /?` at the command prompt.

### Completing the Application Setup after Installation

Once the installer finishes, the first time the user opens Outlook there will be additional dialogs that prompt the selection of various application options. This process is called the First Run Assistant, and each user will specify:

- The Fusion CRM username and password.

- The CRM for Microsoft Outlook connect string. Note that if the installation was completed with the various **FUSION_SERVER_*** variables, the connect string will be pre-filled and the user will not need to specify those details.

Once the user credentials and connect string are provided, the application will connect to Fusion to download and apply the Outlook configuration available to the user. Once the configuration is applied the user is presented with additional First Run Assistant dialogs to complete the personalization process and perform an initial synchronization. In this second phase of the First Run Assistant, the user will specify:

- Synchronization settings, including the default synchronization frequency and synchronization filters. The application synchronizes data based on synchronization filters, and will automatically initiate a synchronization on the specified frequency.

- Whether to share new Appointments, Contacts, and Tasks in CRM for Microsoft Outlook by default.

- Whether to convert his contact list to Fusion contacts.

Once the user completes the First Run Assistant, the application will begin the first synchronization.
Supported Software for Oracle Fusion CRM for Microsoft Outlook: Explained

Before using the Oracle Fusion CRM for Microsoft Outlook application, several setup tasks must be performed. One of these tasks is to verify each user's computer has the necessary supported software prior to installing CRM for Microsoft Outlook.

**Supported Client Computer Operating Systems**

The following are the supported client computer operating systems:

- Microsoft Windows XP SP3 (32 bit) and higher
- Microsoft Vista SP1 (32 and 64 bit) and higher
- Microsoft Windows 7 and higher

**Microsoft Office Versions Supported**

The following are the supported Microsoft Office versions:

- 2007 SP2 and higher
- 2010 and higher

**Supported Outlook Profiles**

The following are the supported Outlook profiles:

- Profile with a Microsoft Exchange e-mail account configured in cached mode with single mailbox. Outlook needs to be run with this profile at least once.
- Profile with an Internet e-mail account. Outlook needs to be run with this profile at least once.

**Note**

CRM for Outlook can only be installed into one of the Outlook profiles.

Depending on what data file is set as the default mail delivery location in the Outlook profile selected for CRM for Outlook installation, it can be either:

- .ost file
- .pst file

**IMAP Not Supported**

Only POP protocol is supported. IMAP is not supported for the following reasons:

- The IMAP protocol has a unique structure. Whether or not a custom folder can be created in this protocol depends on the mail server. The CRM for Outlook platform requires the ability to add custom folders, and needs to be able to synchronize custom CRM objects (for example, accounts or opportunities) with Outlook.
• The IMAP protocol cannot be made the default mail delivery location in Outlook, and the CRM for Outlook platform installs to the default mail delivery location in the profile. Either Exchange mailbox or POP .pest can be made the default mail delivery location. A default mail delivery location is required for the platform, as all Outlook activity processing happens there (for example, meeting participants receive notification from the organizer only in this location).

Note
Changing the default mail delivery location in the Outlook profile where CRM for Outlook is installed is not supported because doing so will cause the CRM for Outlook add-in to fail.

Microsoft Exchange Server Versions Supported
The following are the supported versions of Microsoft Exchange Server:

• Microsoft Exchange Server 2003
• Microsoft Exchange Server 2007

Other Required Components
Microsoft .NET Framework 3.5 SP1 or higher is required to support the client application.

Oracle Fusion CRM for Microsoft Outlook and the Fusion Server: How They Fit Together

Oracle Fusion CRM for Microsoft Outlook is a composite application that allows users to work with Oracle Fusion CRM data inside Microsoft Outlook. The application is deployed to Outlook using the add-in framework and extends the Outlook data model and UI framework in order to store and render CRM data to the user.

How Oracle Fusion CRM Data is Displayed in CRM for Microsoft Outlook
Oracle Fusion CRM data is synchronized to users’ computers and maintained in native Microsoft Outlook storage. While working in Outlook, users access CRM data that is stored locally, even when connected to the corporate network. The changes made to the CRM data are periodically synchronized with the Oracle Fusion CRM application. There are two options for storing the CRM data:

• A Microsoft Outlook mail profile configured to use a Microsoft Exchange service with the Use Cached Exchange Mode enabled to allow data to be stored in an offline storage file (.ost file format)
• A Microsoft Outlook mail profile configured to use the Internet E-Mail service with personal folder storage (.pst file format)

Because CRM data is maintained in Outlook storage, it can be displayed and accessed like any other Outlook item. For instance, CRM data types will appear in the folders for the user’s mailbox alongside other native Outlook types, and users can select the CRM folder and view the CRM records there as they would
work with other Outlook information. Within a given folder, the user can select and open a single record to view the data. In this case, the user will have access to CRM data that appears within an Outlook form or inspector window.

In addition to accessing CRM data in Outlook explorer views and inspector windows where the CRM data is the primary focus, users will also be able to access CRM context when viewing standard Outlook items like appointments, e-mails, and tasks. For these Outlook types, the user will be able to specify the CRM customer, related sales item, contacts, and resources associated with the Outlook item, and will be able navigate to the related CRM item to review additional details.

Data that is stored in either cached Exchange mode in .ost file format, or in personal folders in .pst format, is accessible to the CRM for Microsoft Outlook user while disconnected. The user interacts with the CRM data that is stored locally on his computer and periodically synchronizes data between Outlook and the Fusion CRM server. Synchronization happens when the user is connected to the corporate network and can access the CRM application server. Because the user always works with the local set of CRM data, he will have access to the data from the server immediately following the synchronization process, but doesn’t directly access or update the data on the server. Changes are made to the local data set, and then the synchronization process takes care of making changes to the local or server data sets to align the two.

**Overview of the Synchronization Process**

After CRM for Microsoft Outlook is installed, the user must perform an initial synchronization to retrieve his accessible CRM data. Several synchronization settings are configured as part of the First Run Assistant process that influence the initial synchronization. These include the frequency of automatic synchronization, the synchronization filters to use, and which objects are enabled or disabled from synchronization. These settings can be changed by the user after the initial synchronization. Once the user completes the First Run Assistant process, the initial synchronization will begin. The duration of the synchronization process will depend on the number of records that will be synchronized, network bandwidth, load on the server, as well as processing speed and memory available on the user’s computer. A rule of thumb is to try to configure synchronization filters so that no more than five to ten thousand records are synchronized.

During the synchronization process, the application performs the following steps:

1. Connects to the Fusion CRM server CRM for Microsoft Outlook synchronization services using SOAP over HTTP and authenticates the user.
2. Performs a check to determine the configuration for which the user possesses access. Access to an Outlook configuration is established based on a privilege associated with a user’s job role that allows access to an Outlook client deployment package.
3. If a user has access to a deployment package, it is downloaded, and the configuration is applied to the Outlook mailbox.
4. The final step is to synchronize data. The records that are retrieved depend on the internal filters configured on the server, data security applied to the objects that are synchronized, and the user filters.
Subsequent synchronization cycles follow a process that includes these steps:

1. CRM for Microsoft Outlook sends a request to the Fusion CRM server with a list of objects and the current user filters and requests a snapshot of IDs and timestamps for all records that are within the scope of the object list and specified filters.

2. The server sends a response with the requested information.

3. CRM for Microsoft Outlook makes a local snapshot of IDs and timestamps and compares that to the server snapshot.

The differences between the local snapshot of IDs and timestamps and the server snapshot result in a few possible actions:

- Inserts, updates, or deletes data on the Fusion server based on changes that occurred in CRM for Microsoft Outlook since the prior synchronization.

- Inserts, updates, or deletes data in CRM for Microsoft Outlook based on changes that occurred on the Fusion server since the prior synchronization.

In all cases, changes that are made to data locally in the CRM for Microsoft Outlook client are only sent to the Fusion server during the subsequent synchronization session; however, users who want to synchronize a change or set of changes immediately can start the synchronization cycle manually to avoid waiting for the next scheduled synchronization.

About Web Services Usage During Synchronization

The synchronization process on the Fusion server is supported by CRM for Microsoft Outlook accessing Web services. CRM for Microsoft Outlook accesses two Web services directly -- one that provides access to data during synchronization processing, and one that provides access to metadata. The synchronization process is initiated by CRM for Microsoft Outlook within the Outlook application, and the Fusion server accepts synchronization requests, routes them to the appropriate services within the service, and returns the appropriate responses. The work that each part of the synchronization architecture performs is summarized as:

1. CRM for Microsoft Outlook synchronization engine and connector that are deployed to Microsoft Outlook perform the following:

   - Initiates a new synchronization request based on a preconfigured automatic synchronization interval or by an ad hoc user request to start a new synchronization cycle.

   - Uses the stored details about username, password, server connection information, and CRM public security certificate stored on the user’s computer to format and send requests to the CRM application server.

   - Based on the configuration deployed to a user’s computer (including object types deployed), fields defined as part of those objects, synchronization filters and the like, the application generates the appropriate SOAP message content and expects the corresponding
response when using the HTTP or HTTPS transport to communicate with the CRM application server.

2. The Fusion server hosts an application that listens for CRM for Microsoft Outlook synchronization requests, and the synchronization services perform the following:

- The OutlookRequestHandlerService Web service processes all incoming requests for data synchronization, and the OutlookMetadataService Web service handles requests to retrieve metadata.

- Incoming SOAP messages are routed to the appropriate service. These messages include one or more requests to invoke a method on the target service.

- Requests sent to the OutlookRequestHandlerService in particular are routed to other services to perform the action expected from the synchronization process. For instance, a request to get appointment data sent to the OutlookRequestHandlerService will be routed to the appointment Web service that will process the request and return the requested data, and the OutlookRequestHandlerService will send this back to the CRM for Microsoft Outlook client that sent the request.

A synchronization cycle will include requests to get a server snapshot, and can then include many additional requests to query, insert, update, and delete data based on the changes detected when CRM for Microsoft Outlook compares the local and server snapshots.

- Each of these requests is processed based on the type of request, and is either managed within the OutlookRequestHandlerService processing directly or is routed to the appropriate target service to be fulfilled.

**Extensions to the Standard Outlook User Interface**

In addition to standard Outlook data storage mechanisms and the synchronization engine, several extensions to the standard Outlook user interface provide a way to access and manage CRM data inside of Outlook. Examples of extensions to the standard Outlook user interface include custom toolbar buttons, menu items, inspectors that display Fusion CRM data, controls that are embedded on standard Outlook item inspectors, the personalization options dialog box, and so forth. The CRM for Microsoft Outlook client can use these extensions to perform a variety of tasks.

The following are some examples of tasks that the user can perform:

- Create, view, and edit CRM data in Outlook.
- Mark an Outlook item to be shared with CRM Desktop and associated sales data.
- Initiate a standard Outlook action, such as sending an e-mail or scheduling a meeting in the context of a sales item.

The behavior of the extended Outlook user interface is influenced by custom CRM business logic that performs a variety of validations during data entry. The following are some examples of validation that are performed:
• Confirm that the data type is valid for a given field.
• Make sure fields that are required are populated.
• Prevent changes to fields or records that are configured to be read-only.
• Validate field values based on comparisons with other fields or static values.
• Apply conditional validation so that a field may be required or read-only based on other criteria.

Physical Components that CRM for Microsoft Outlook Architecture Uses

Following are the major physical components that CRM for Microsoft Outlook uses:

1. CRM Database
   This is the database accessed by the CRM application that stores data about customers, contacts, business opportunities, and so on.

2. CRM Application Server
   This is the server that hosts the CRM for Microsoft Outlook application and the related Outlook Web services, and therefore is the main entry point for synchronization requests coming from the CRM for Microsoft Outlook add-in running on users’ computers.

3. Laptop or Desktop
   This is the computer where the CRM for Microsoft Outlook add-in is installed, and where users are working with CRM data in Outlook. The Outlook add-in will install binary files that support synchronization of CRM data and integration with Outlook, including support to extend the Outlook data model and user interface, and resource files containing images and strings to initialize the application. The CRM for Microsoft Outlook add-in will connect to the CRM application server and download the appropriate configuration and CRM data for the user which are also stored on this computer.

4. Corporate Messaging Infrastructure
   The corporate messaging infrastructure encompasses all of the server computers and other network topology that support the transmission of e-mail messages, and other personal information management capabilities such as the corporate calendar, contact and task lists.

CRM for Microsoft Outlook Functional Components

Following are the CRM for Microsoft Outlook functional components:

1. CRM Extensions in Outlook
   Extensions integrate with Outlook data storage and deliver additional business logic and extensions to the Outlook user interface to allow users to access and modify CRM data. CRM data is viewed with extensions to the Outlook user interface. Changes to CRM data are controlled by business logic and custom controls and then finally stored in Outlook.
data storage (for example, in a user’s mailbox storage file). The user works with a version of the CRM application, as defined in the configuration deployed to the user’s computer. Changes to CRM data since the last synchronization cycle are calculated by the synchronization engine during data synchronization with the CRM application server.

2. Synchronization Engine

The synchronization engine handles requests to initiate a synchronization cycle and is responsible for structuring the requests that are sent to the server. For the initial and incremental synchronization cycles, the synchronization engine manages requests to count records available to the user; sends a request to generate a server snapshot; initiates the process to generate a local snapshot; compares the results; and calculates the necessary requests to be sent to the CRM application server to complete the synchronization of local and server data sets. The synchronization engine works in tandem with the connector to correctly format and transmit messages with the CRM application server.

3. CRM Connector

This part of the CRM for Microsoft Outlook add-in is responsible for knowing how to connect and communicate with the CRM application server. The connector uses details such as the username, password, connect string, public security certificate, and client metadata to interpret requests from the synchronization engine to correctly format and send requests to the CRM application server. All details of the requests to send to the server are orchestrated by the synchronization engine, but the transmission of the requests and retrieval of the responses is done by the connector. The connector uses the details in the connect string to know where to send requests to the CRM application Web services.

4. CRM Application Web Service

CRM Web Service provides functionality to handle the user session, and to add, delete, modify, count, and list data objects that are required by the Web service connector.

**Customizing the Product Name: Example**

You can customize the product name displayed by the Oracle Fusion CRM for Microsoft Outlook client, by modifying the package_res.xml client configuration file.

Use an XML editor to open the package_res.xml client configuration file. Create or modify any of the following attributes, as required:

```xml
<str key="app_name">CRM for Microsoft Outlook</str>
<str key="pim_name">Outlook</str>
<str key="remote_app_name">Oracle Fusion</str>
```

For example, in the remote_app_name attribute, change Oracle Fusion to the name of your company.
Customizing the Support Team E-Mail Address: Example

When a user clicks **Send Feedback** on the Feedback tab within Oracle Fusion CRM for Microsoft Outlook, a new e-mail message is created, and the e-mail is automatically addressed to the support team. You can customize the support team’s e-mail address by modifying the package_res.xml client configuration file.

Use an XML editor to open the package_res.xml client configuration file. In the following code, change **email_address** to the required e-mail address.

```xml
<!-- Feedback page -->
<str key="support_email">email_address</str>
```

For example:

```xml
<str key="support_email">support@your_company.com</str>
```

Scenario

Making a Field or Form Read-Only: Example

You can make Oracle Fusion CRM for Microsoft Outlook fields and forms read-only by modifying the forms.js client configuration file.

Locate the Relevant Section of the Client Configuration File

Use a JavaScript editor to open the forms.js client configuration file. Find the following code in the configuration file:

```javascript
// LEAD FORM SCRIPTS //
function lead_form(ctx) {

The example above shows how to make the **Lead** field read-only.

**Making a Field Read-Only**

To make a field read-only, add the following code below the section of code you have just located:

```javascript
ctx.form[control_id].enabled = false;
```

The **control_id** should be the identifier of the field that you want to make read-only.

**Making a Form Read-Only**

To make a form read-only, add the following code below the section of the client configuration file you have just located:

```javascript
ctx.form.enabled = false;
```
Scenario

Customizing Text That Appears in the Oracle Fusion CRM for Microsoft Outlook Client: Example

You can customize the text that appears in the Oracle Fusion CRM for Microsoft Outlook application, by modifying the text strings in the package_res.xml client configuration file.

Use an XML editor to open the package_res.xml client configuration file, and find the text string you want to change. For example, in the following code you want to change the text string "Customer name is required":

```xml
<str key="msg_customer_required">Customer name is required.</str>
```

You change the text string to "Enter a customer name for this organization", and so the code now appears as follows:

```xml
<str key="msg_customer_required">Enter a customer name for this organization.</str>
```

Scenario

Displaying a custom Oracle Fusion field in a Oracle Fusion CRM for Microsoft Outlook form: Worked Example

This example demonstrates how to display a custom Oracle Fusion field in a Oracle Fusion CRM for Microsoft Outlook form. This example specifically shows you how to display the Opportunity Number field on the Opportunity form.

Firstly, you need to make the field Opportunity Number available through the Oracle Fusion API, and then customize CRM desktop to synchronize and display the field.

Define the field to synchronize

1. Open the MetaInfo.xml file using an XML editor.
2. Find the following tag:

```xml
<Type Key="OptyId" Label="#obj_opportunity"...>
```

3. Add the following field tag as a child to this object:

```xml
<Field FieldName="OptyNumber" FieldType="xsd:string"></Field>
```

Define the field on Opportunity object type

1. Open the fusion_basic_mapping.xml file using an XML editor.
2. Find the following tag:

```xml
<type id="opportunity" display_name="#obj_opportunity_plural" folder_type="10">

3. Map OptyNumber to Opportunity type. To do this, add the following snippet as a child to this Opportunity type:

```xml
<field id="OptyNumber">
  <reader>
    <mapi_user>
      <user_field id="fsn Opportunity Number" ol_field_type="1"></user_field>
    </mapi_user>
    <convertor>
      <string/>
    </convertor>
    </mapi_user>
  </reader>
  <writer>
    <outlook_user>
      <user_field id="fsn Opportunity Number" ol_field_type="1"></user_field>
    </outlook_user>
  </writer>
</field>

4. To map the display name, open the package_res.xml file and add the following code below the <res_root> section.

```xml
<str key="lbl_opty_number">Opportunity Number:</str>
```

**Insert a label and the OptyNumber field**

1. Open the forms_12.xml file using an XML editor.
2. Insert the label and the OptyNumber field below the comment `<!--end opportunity reason win los-->` on the Opportunity form.

```xml
<!-- opportunity number -->
<cell size="20">
  <stack layout="horz" spacing="3">
    <cell size="4"/>
    <cell size="100">
      <stack layout="vert" padding="2">
        <cell>
          <static id="lbl_opty_number" tab_order="150">
            <text>#{lbl_opty_number}</text>
          </static>
        </cell>
        <cell>
          <edit id="opty_number" tab_order="151">
            <field value="string">OptyNumber</field>
          </edit>
        </cell>
      </stack>
    </cell>
  </stack>
</cell>
```

---

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Define Common CRM Configuration

3. Find the following comment and the cell containing a list of controls extended in the previous step and resize its value to 220.

<cell size="197">

FAQs for Define Outlook Integration

What's a client configuration file?

In Oracle Fusion CRM for Microsoft Outlook, a client configuration file describes a part of the application configuration that resides on the user computer, and it extends the desktop application. Client configuration files can either describe a portion of the application logic implemented as Java script, or can be a declarative configuration of items, such as UI components or synchronization mappings implemented as XML. Each configuration file has a particular type. There can be more than one version of any file type at one time as long as the names differ, and only one file of any given type can be included in a deployment package.

What's a client deployment package?

In Oracle Fusion CRM for Microsoft Outlook, a client deployment package is a collection of metadata files that describe the CRM application extensions deployed to users' computers. Access to a given deployment package is given to CRM application users through a privilege associated with their job role. When a user connects to the CRM application server to synchronize data from a desktop application like Microsoft Outlook, the application determines if any changes to the package have occurred, and if so, downloads any changes.

What's a client configuration validation file?

In Oracle Fusion CRM for Microsoft Outlook, the client configuration validation file (.xsd) describes the structure of a valid client configuration file (.xml). The application uses the client configuration validation file to check that any client configuration file imported to the server is structured correctly and complies with the requirements of the validation file. The validation process happens automatically during the import of any client configuration file, and helps catch misconfigured files.

What's a server configuration file?

The Oracle Fusion CRM for Microsoft Outlook application uses a file to identify and map services and view objects that are used when processing synchronization requests, and to correctly query, insert, update, and delete data on the server. There is only ever one of these files used at a given time, and changes made to it are recognized by the application and loaded immediately.

Set Up Customer Center
Customer Center: Explained

Oracle Fusion Customer Center enables the comprehensive management of customer information. Customer Center collects data from various systems and presents them for management in one location.

Following are some of the capabilities of Customer Center:

- Create customers and contacts
- Update customers and contacts
- Maintain customer hierarchies
- Maintain competitor information

When working with Customer Center, be aware of the following terminology used throughout the application:

- Sales prospect
- Sales account
- Customer
- Legal entity
- Billing account

Sales Prospect

A sales prospect is a prospective sell-to entity, or person, at an existing or potential customer used to define Leads. A prospect is the lowest level representation of a business entity that your company’s marketing processes will track and act upon. The sales prospect does not have a sell-to address. You can create a sales prospect from a party that does not have a sell-to address when you create the first lead for that party. You can also create sales prospects in Customer Center and by importing them in bulk.

You can create leads against sales prospects, but a sales prospect must be qualified and converted to a sales account before you can create opportunities for it. To qualify and convert a sales prospect, a set of business criteria or rules must be satisfied. For example, the prospect may be required to meet the criteria for account assignment.

Sales Account

A sales account is a specific sell-to entity within a given customer. You can create leads and opportunities against sales accounts. A single customer might have a collection of sales accounts. To avoid confusion when assigning territories to the account, each sales account has only one sell-to address. Typically, a sales team manages a sales account. The sales team is comprised of resources assigned to the territories associated with the sales account. Additionally, a profile option determines whether a sales account is a named sales account, an existing sales account, and the account owner. Named sales accounts are typically strategic accounts assigned to dedicated territories. An existing sales account is one where
there is an existing financial relationship or had previous installs. You can create sales accounts in Customer Center and by importing them in bulk.

**Customer**

Within Customer Relations Management (CRM), sales accounts and sales prospects are collectively referred to as Customers. There are three types of customers: Organization, Person, and Group. Additionally, a Customer also can have representations as a legal entity and a billing account that are expressed as root nodes in a hierarchy to the respective sales accounts for that customer.

View the Customer Hierarchy: A customer’s hierarchy represents a holistic view of the customer’s structure, showing you the customer type, the parent for the customer, the subsidiaries of the customer, as well as rolled up revenue analysis data.

**Legal Entity**

A legal entity is a party that can enter into legal contracts or a business relationship, and be sued if it fails to meet contractual obligations. There are two types of legal entities: internal and external. A customer with a party usage of Legal Entity is considered an internal legal entity and is used for interdivisional selling within your own company. A customer with a party usage of External Legal Entity is any external customer who fits the definition of legal entity. Legal entities may also be used to group multiple sales accounts, sales prospects and other classes of entities or parties.

**Billing Account**

A billing account is a party that represents the financial account transactional entity for a given Customer.

**Manage Customer Center Trees**

**Customer Center Trees: Explained**

There are two types of Oracle Fusion Customer Center trees. Each tree displays a different set of nodes based on party type. The information that you are able to view and edit on each node depends upon your security privileges and your membership status on the sales account team.

The two types of Customer Center trees are:

- **Customer Tree**
- **Contact Tree**

**Customer Tree**

The customer tree displays similar nodes for the three customer types, organization, person, and group, such as Profile, Contacts, Sales Account Team, or Assessment. If you are a member of the sales account team with at least Edit level access or you have the Sales Party Administration duty, you can update information on the following nodes: contacts, organization chart, classifications, assessments, and notes. Only those users with Sales Party Administration duty or Full level access on the sales account team and profile nodes can update the members of the sales account team.
Contact Tree

The contact tree displays nodes for contacts with the contact profile and other related information such as the Profile (contact details), interactions with the contact, notes, and so on. Leads and Opportunity applications can be accessed here. All nodes on the contract tree are visible to all users.

Manage Customer Center Trees: Explained

Customer center tree is a navigation paradigm which enables quick and easy access to various related information in one central place. Seen on the regional area of the page, the tree is made up of object nodes such as Profile or Contacts. These object nodes can be categorized into logical categories. Categories enable you to organize those object nodes to fit your needs, for example, the Sales category or Service category. Each implementation can customize the Customer Center tree by showing or hiding the various nodes as required, and configuring node names and other parameters. When saved, the personalizations for this view of the tree are kept for all users of the application. Individual users will have capability to further personalize the tree as desired.

Managing Customer Center Trees

Set these attributes for each node in the Customer Center Tree:

• Name - the name shown in the customer center tree UI.

• Visible - indicates whether the node will be visible in the customer center tree.

Important

All tree nodes that render portlets are delivered with the Visible check box unselected. To show the portlet, select the Visible check box.

• Default - the node shown when a user drills down into the customer center tree.

• Portlet - indicates whether the node is a portlet or a local task flow. A portlet is a non-local task flow residing in another business process. For example, when accessing the Opportunities node in the Lead Management application, the Opportunities node is a portlet because the Opportunities task flow resides in the Sales applications, outside of the local Lead Management application. Each Fusion application using Customer Center is delivered with the appropriate portal information already configured and should not be changed. All tree nodes that render portlets have the 'Visible' flag turned off. If the portlet is required to be visible, the 'Visible' flag needs to be changed to show the node.

• Parameters - specify input variables and values for the node. There are only three nodes that require parameters. These nodes are specifically for third-party integration: OneSource Profile, Service Requests, and Snapshot:
• **OneSource Profile parameters:** replace {OneSource token} with your OneSource access token. For example, if your OneSource token is 'token', set the OneSource Profile parameter as: token=#{'token'}. Or, if you do not require a token to access OneSource, simply replace {OneSource token} with NULL; set the OneSource Profile parameter as: Token=#{''}

• **Service Requests parameters:**
  ```java
  HostName=#{'{Siebel server path}'}; SSLEnabled=#{'[true|false]'}; UserName=#{'{username}'}; Password=#{'{password}'}; System Name=#{'{reference system name''}
  ```
  1. Set host name to be your Siebel server path, for example, `HostName=#{'hostname.siebel.com/ CALLCENTER_enu/start.swe'}`.
  2. Set SSLEnabled to true or false, for example, `SSLEnabled=#{'false'}`.
  3. Set UserName to be your Siebel system login, for example, `UserName=#{'USER'}`.
  4. Set Password to be your Siebel system password, for example, `Password=#{'PWD'}`.
  5. Set System Name to be your source system name as defined in the Original System References mapping table, for example, `System Name=#{'SIEBEL'}`. The default value is 'SIEBEL' if this parameter is not specified.

Example Service Requests parameter:
```
HostName=#{'hostname.siebel.com/ CALLCENTER_enu/start.swe'}; SSLEnabled=#{'false'}; UserName=#{'USER'}; Password=#{'PWD'}; System Name=#{'SIEBEL'}
```

• **Snapshot node parameter:**
  ```java
  HostName=#{'{Siebel server path}'}; SSLEnabled=#{'[true|false]'}; UserName=#{'{username}'}; Password=#{'{password}'}; System Name=#{'{reference system name''}
  ```
  The Snapshot node parameter is the same as the Service Requests node and thus needs the same parameters as those for the Service Requests node.

---

**Third-Party Integrations in Customer Center: Explained**

Oracle Fusion Customer Center is a central location to access a comprehensive and multifaceted view of customer information. It unifies Fusion applications data as well as relevant third-party content.

**Third-Party Integrations in Customer Center**

OneSource and Siebel Service are two third-party integrations readily configured in Customer Center. This topic explains how third-party customer content is mapped to Fusion customer.
• **OneSource to Fusion Mapping**

OneSource, an online source of business and company data, can be accessed directly from the OneSource node in Customer Center.

Customer Center conducts searches for OneSource company data in the following order:

a. Look up based on mappings defined in `HZ_ORIG_SYS_REFERENCES` table where `orig_system` is `ONESOURCE`.

b. Look up based on Fusion customer stock symbol. This is checked if mapping is not found in `HZ_ORG_SYS_REFERENCES`.

c. Look up based on Fusion customer name. This is checked if mapping is not found by stock symbol lookup. If there are multiple OneSource companies match the Fusion customer name, user can choose from the list of matching OneSource companies.

• **Siebel Service to Fusion Mapping**

Mappings for Siebel accounts to Fusion customers are maintained in the `HZ_ORIG_SYS_REFERENCES` table, where `orig_system` is `SIEBEL`.

---

**Note**

Customer Center does not include licenses for OneSource and Siebel applications. Third-party application licenses may be acquired separately. If you want to enable OneSource and you have a web proxy for external HTTP(S) traffic, you must select Enable Web Proxy on the Web Proxy Configuration screen and specify your web proxy configuration.

**See Also**: "Web Proxy Configuration" in the chapter "Creating a New Provisioning Plan" of the Oracle Fusion Applications Installation Guide

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**FAQs for Manage Customer Center Trees**

**How can I personalize the customer center tree?**

Personalizing the Oracle Fusion Customer Center tree enables you to have a more intuitive navigation experience. The tree, located in the regional area of the page, is made up of object nodes such as Profile or Contacts. To personalize the tree, use the Action menu located directly above the tree or right click on any tree node, and click Manage Customer Tree in the menu popup. The Manage Customer Tree window will pop up. Select the node you wish to modify. You can change the name, whether the node is visible or not and if it should the default node that will display upon opening the tree. When you save, the customization will be associated to your user name.

**Manage Customer Center Assessment Template**

**Assessment Templates: Points to Consider**

Assessment templates let you analyze the health of a business object, such as a lead or an opportunity, and suggest appropriate next steps based on its
diagnosis. To best plan and create assessment templates, you should consider the following points:

- Ratings
- Questions, Question Groups, and Question Weights
- Responses and Scores
- Associated Task Templates

**Ratings**

A rating is a textual qualification such as Excellent. There are three delivered ratings in the assessment template: Excellent, Average, and Poor. Ratings provide a metric other than a numerical score for qualifying the outcome of an assessment. Ratings are created at the beginning of the assessment template creation process. They are later applied to possible responses to questions in the template, which associates each rating with a score. An appropriate feedback will be displayed to you based on the completed assessment score once you submit an assessment. When setting up ratings and applying them to possible responses, it is important to remember that they and their associated feedback text will eventually display as part of the overall assessed health of a business object.

**Questions, Question Groups, and Question Weights**

Questions are the main components of an assessment template. They are written such that they aid in systematically determining the health of a business object, and they are grouped into logical collections called Question Groups. Each question in the template is assigned a question weight, expressed as a percentage, which is the relative importance of the question within the template. When an assessment template is used to perform an assessment, a question’s weight is multiplied by the normalized response score given for the question to produce a weighted score for that question. When setting up questions, question groups, and question weights, it is important to carefully analyze which factors determine the health of a particular business object (like a lead or an opportunity) in your organization. Use those factors to create your question groups; and then, for example, write three to five questions per group that are weighted according to your analysis. There is no limit to the number of questions that can be in a question group, but each question group must have at least one question.

**Responses and Scores**

Responses are attached to questions in the template. Each question should have at least two responses, unless it’s a free-form only question. More than one response can be tied to the same rating but, between all of its responses, each question should accommodate at least two ratings, unless it’s a free-form only question. For example, if your ratings are Excellent, Average, or Poor you may, for each question, include two responses that correspond to at least one of those ratings, such as average. There must be enough responses to cover at least two of the ratings such as Excellent and Average. You assign a score to each response for a question, and the application normalizes the score based on a standard
scoring scale. When an assessment template is used to perform an assessment, a question's weight is multiplied by the normalized score of the response given for the question to produce a weighted score for that response. When adding responses to questions, ensure that the scores and ratings you assign to each response correlate. In other words, the higher the score you assign to the response, the higher the rating should be so that you have a strong quantitative relationship between the two. Also note that you can allow free-form responses for one or more questions in the template, but free-form responses are never scored.

**Associated Task Templates**

A task template is an instruction to generate a group of related activities. You can associate task templates with an assessment template in order to recommend tasks that should be performed after an assessment has been done for a business object. When you associate task templates with an assessment template, you can indicate a score range for each task template, and based on the total score of any assessment that uses your template, one or more task templates will be recommended as follow-up activities. In order for a task template to be available to associate with an assessment template, it must be assigned to the same business object type as that assigned to the assessment template, and it must have a subtype of Assessment. Ensure that you have set up task templates correctly before attempting to associate them to assessment templates.

**Assessment Template Status Codes: Explained**

Throughout the life of an assessment template, it can be assigned several different status codes.

These status codes control the actions you are allowed to make against an assessment template.

- In Progress
- Active
- Retired

**In Progress**

This is the initial status of an assessment template. When an assessment template is at this status, you can edit any part of it. This is the only status at which you can delete a template. If the template is not deleted, it moves to the Active status next.

**Active**

This is the status assigned when the assessment template has been deployed for general usage. When an assessment template is at this status, you can make only minor textual edits to it, including, but not limited to, template description, question text correction, question sequencing change, response description, and score range feedback. From this status, you can move the template to Retired; you cannot delete it.
**Retired**

When an assessment template is at this status, it is no longer available for general usage. You cannot edit any part of it, and you cannot move it to any other status; however, it can still be copied. Active templates that are deleted revert to this status.

**Assessment Template Score Range: How It’s Calculated**

The application calculates the score range for an assessment template using the question weights and the ratings and scores assigned to the possible responses for all the questions in the template. This topic explains when the score range is calculated and the components that are used in the calculation, so that you can make the best decision regarding the feedback text to apply to each score range. In addition to the automatic score range calculation, a manual method for adjusting score range is also available on the administration UI.

**Settings That Affect Score Range**

In order for the application to calculate the assessment template score range, you must:

- Apply weights to all template questions.
- Configure ratings and apply them to possible responses for all template questions.
- Apply a score to each of the possible responses for all template questions.

**How Score Range Is Calculated**

The score ranges for each rating in an assessment template are determined using the lowest and the highest weighted response scores for each question. So for each rating score range, the lower end of the range starts where the previous rating range ended, and the higher end of the range is the sum of the highest weighted scores that can be attained for that rating.

This table displays a simple example of the components used in the score range calculation.

<table>
<thead>
<tr>
<th>Question (Weight)</th>
<th>Response (Normalized Score)</th>
<th>Weighted Score</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the customer win? (20%)</td>
<td>Lower Operating Cost (100)</td>
<td>20</td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>Higher Revenues (80)</td>
<td>16</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Other (53)</td>
<td>11</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Don't Know (27)</td>
<td>5</td>
<td>Poor</td>
</tr>
<tr>
<td>What is our win? (80%)</td>
<td>Reference (60)</td>
<td>48</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Resale (50)</td>
<td>40</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Partnership (100)</td>
<td>80</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
This table displays the score range calculation based on the components from the first table.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>65 - 100</td>
</tr>
<tr>
<td>Average</td>
<td>46 - 64</td>
</tr>
<tr>
<td>Poor</td>
<td>0 - 45</td>
</tr>
</tbody>
</table>

**Note**

If a template administrator does not use a particular rating while assigning ratings to possible responses, this could result in improper score range calculations. To counteract this problem, the score range calculation uses a built-in correction algorithm to ensure proper score ranges. The correction algorithm works like this: For a question where a particular rating is skipped, the low score for the skipped rating is calculated to be equal to the high score of the next lower ranked rating. The high score for the skipped rating is calculated to be equal to the low score of the next higher ranked rating.

Using the ratings displayed in the tables above, if the rating Average is not used for a question's possible responses, the score range calculation assigns a low score to Average for that question that is equal to the high score of Poor for that question. It also assigns a high score to Average for that question that is equal to the low score of Excellent for that question. This ensures that the overall template score range for Average is calculated to fall between the score ranges for Poor and Excellent.

**Defining Tasks: Points to Consider**

A task is a unit of work to be completed by one or more people by a specific completion date. When using tasks in your application, you should consider the following points:

- **Tasks**
  - Task Templates

**Tasks**

A task is defined with a description, due date and category. Each task has an owner, who oversees or is responsible for the task, and one or more assignees who perform the work. The task can be related to a business object, such as an Opportunity, a customer or, one or more external contacts. Tasks may also have Notes for general information, Attachments for tracking e-mail or project documents and Interactions which record customer communications.

**Task Templates**

Often a set of Tasks are performed repeatedly for a particular process and to support this administrators can define Task Templates, which represent a group
of tasks. These task templates can be invoked by users working on a particular business object, for example a lead, campaign, or an opportunity. The user selects the appropriate task template for the goal they want to achieve and this creates the tasks and associates them with the business object being worked on. This saves the user from creating multiple tasks when an Opportunity reaches a particular sales stage, or the same set of tasks each time a marketing campaign is created.

Note

Extensibility features are available on the Task object. For more details refer to the article Extending CRM Applications : How It Works

Assessment Templates and Task Templates : How They Fit Together

One of the steps for creating an assessment template is associating task templates. You would take this step if you want to recommend sets of tasks to be done after an assessment is performed using your template. You associate task templates to ranges of scores in the assessment template, and where the overall assessment score falls within those ranges determines the tasks that are suggested to be performed after the assessment.

Assessment Template

An assessment template is a set of weighted questions and possible responses used to evaluate the health of a business object such as an opportunity or a lead. An assessment template can be associated with one or more task templates that are recommended based on the outcome of an assessment.
Task Template

A task template is an instruction to generate a group of related activities. By marking a task template with a subtype of Assessment, you make that task template available for association with assessment templates. The task template's business object type should be the same as that assigned to the assessment template. When an assessment is performed using an assessment template that has associated task templates, one or more task templates are recommended based on the total score of that assessment and can be used to generate a list of activities to perform.

For example, you can associate a task template called Engage Business Development Manager with your assessment template called Potential for Win-Win. Associate the task template with the score range of 86 to 100, so if an assessment using the assessment template Potential for Win-Win scores within that range, the application recommends the Engage Business Development Manager task template and a list of follow-up activities based on that template can be generated.

FAQs for Manage Customer Center Assessment Template

What happens if I include a free-form response for a question?

A score of 0 is assigned for free-form responses.

A free-form response option will have no effect on the overall assessment score. The free-form response offers the opportunity to enter a textual response to a question that does not conform to any of the pre-populated responses provided by the assessment template.

What's a Question Group?

A question group is a logical grouping of questions within an assessment template, and it is used strictly as a category header for those questions. Through careful naming of a question group, you can achieve the benefit of providing the user of the template with an approximate idea of the type of questions to expect in each group.

Why am I being asked to enter question weights again?

This step lists all of the assessment template questions in one place, and provides you with the opportunity to edit weights as necessary to ensure that the sum of all weights totals 100.

Manage Customer Center Assignment Objects

Sales Account Team Member Access Level: Explained

There are three types of sales account team memberships known as access levels.
These access levels control the team member’s privileges for the sales account:

- View Only
- Edit
- Full

When a resource is initially added to the sales account team, a profile option setting determines the member’s default access level. If that member is removed from the sales account resource team, she no longer has access to the sales account, unless she is still a member of a territory that is assigned to the sales account. Resources in the management hierarchy of a newly added team member inherit the same access level of the subordinates.

**View Only**

View Only is the minimum level assigned to a sales account team member. This access level enables the team member to view the contents of the sales account child attributes such as sales account team, snapshot, assessments, discussion forums, notes, interactions, appointments, and tasks. This assumes, however, that the team member also has functional access to view that child attribute. If the team member’s resource role does not provide functional access to view a particular child attribute of a sales account, that member cannot view the attribute, regardless of her sales account team access level. A team member with View Only access level for a sales account can view only the opportunities, leads, and revenue lines to which she has relevant data privileges.

**Edit**

Sales account team members with the Edit access level can view and edit all customer-related objects. They can view and edit only the opportunities, leads, and revenue lines to which they have the relevant data privileges. The Edit access level provides a sales account team member with the ability to run the territory reassignment process, but she cannot change the composition of the sales account resource team.

**Full**

The Full access level allows team members to do everything that the Edit access level allows, with the addition of being able to change the composition of the sales account resource team. A team member with Full access can manually add and remove team members, change a member’s access level, and mark the lock assignment setting for team members. When a sales account is created, only the sales account owner and sales administrators are granted the Full access level, but they can grant Full access to other team members.

**Sales Account Territory Member Access: Explained**

Access for the Territory owners and members parallels that of the Sales Team members.

These access levels control the internal and partner territories privileges for the sales account:
- Internal territory owner: Full access
- Internal territory members (non-owner): Edit access
- Partner territory owner and members: View-only access

**Note**
Territory Management must be implemented to utilize this feature.

**Assignment Object Components: How They Work Together**

The work object, candidate object, and attributes are components that fit together to create assignment objects that are used in rule-based and territory-based assignment. Work objects are business objects that require assignment, such as leads and opportunities. Candidate objects are business objects, such as resources and territories, that are assigned to work objects.

When you create candidate objects, you can select attributes for them that are later used in rules or mappings. These candidate objects also become candidates that are available for association when you create work objects. When you create work objects, you can select attributes for them also, as well as associating one or more candidates.
**Work Objects**

A work object is a business object that requires assignment such as a lead or an opportunity. Creating a work object involves entering its application information, selecting its attributes to use during assignment, and associating one or more candidates.

**Candidate Objects**

A candidate object is a business object, such as a resource or a territory, that is associated with one or more work objects for eventual assignment. Creating a candidate object involves entering its application information and selecting its attributes to use in rules or mappings. A special type of candidate object is a classification object. This type of candidate object does not represent a business object that gets assigned to a work object. It is used only with classification rules and is used primarily to rank or qualify leads.

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**Note**

As candidate objects are created, they become available as candidates that can be associated with one or more work objects as part of the work object creation process.

The administrator needs to define the association between the work object and candidate object. For example, the Lead work object may have an association with both the Territory candidate object and the Resource candidate object. This implies that Assignment Manager can be used to assign Territories and Resources to a lead.

In the related Candidates tab for the Revenue work object an administrator can define the association between the work object and candidate object. For example, the revenue work object may have an association with both the territory candidate object and the credit allocation template candidate object. This association indicates that Assignment Manager can be used to assign both territories and credit allocation templates to revenue lines.

**Related Candidates**

To relate a candidate object to a work object, use the following fields:

- **Assign Candidates**: Indicates that Assignment Manager performs the assignment. If not set, then Assignment Manager is used to find the matching candidates, which are then passed to the calling application to update the work object.

- **Custom Logic**: Indicates that Assignment Manager passes the result of the assignment matching to the callback function of the work object. For example, Opportunity Management uses custom logic that updates the sales team with the territory members. It stamps the territories onto the revenue line and adds the territory team members (resources) to the opportunity sales team.

- **Merge Assignment Candidates**: Controls whether the matching assignment candidates identified from processing each set of mappings should be merged. This is used to drive the merging of matching
candidates when multiple mapping sets are used in assignment processing. If the check box is checked, then the candidates are merged. The default is unchecked.

- Keep Manual Candidates: Indicates that manually assigned candidates are retained during assignment processing. This option can be used to prevent the removal of manually added candidates during reassignment. Sales Account and Opportunity Management have implemented their own lock assignment features.

- Replace Candidates: Determines whether unqualified candidates are removed from a team when an assignment runs. For example, the first time that Assignment Manager runs, a territory is assigned to a sales lead. When the reassignment process runs following a territory proposal activation, the territory is no longer valid. If Replace Candidates is set, then the territory is removed from the sales lead.

- Candidate Exclusion: Sales leads have a related object, which stores the excluded candidates for each sales lead. Assignment Manager accesses this information, which prevents assignment of the work object to an excluded candidate.

- Parent Attribute: Used by territory based assignment to determine the hierarchy of matching territories, eliminate all parent territories, and only return and assign the matching leaf node Territories. If this attribute is not used, then all matching territories (parent or leaf) are returned and assigned.

- Candidate Differentiation Attribute: Stores the attribute on the candidate object that is used for discriminating matching candidates. For example, in Revenue line assignment, this attribute enables matching leaf territories of many territory types (such as Prime, Channel Sales Manager, and so on) to be assigned. The Candidate Discriminator Attribute is only relevant for territory-based assignment and can only be selected if a parent attribute has been selected.

- Coverage Attribute: The territory attribute used to denote whether the candidate in the matching candidate list has a regular, included, or excluded coverage.

- Maximum Number of Candidates: The maximum number of candidates returned for the work object and candidate object combination. The default value is 100.

- Manual Attributes: The attribute that identifies a candidate was manually assigned, rather than by the system. This attribute is used with the Keep Manual Candidates attribute.

- Keep Manual Candidates: A flag to retain manually assigned candidates when assigning or re-assigning a work object. This option is only relevant if the manual attribute is defined and the Assigned Candidates option is checked.

Replace Candidates: Indicates whether non matching candidates will be removed when re-assigning a work object. In an example scenario, in the first time assignment runs, territory A is assigned to a sales lead and there is a change within the territory definition. When the sales lead is
reassigned, territory A is no longer valid. If this option was selected, then territory A is removed from the sales lead.

- Score Attribute: The score attribute in which the calculated score is stored.
- System Attribute: The attribute that identifies a candidate was assigned by the system, rather than manually.

Selecting Attributes

Attributes are elements in the view object defined for an assignment object. For each assignment object, you can select one or more attributes that you want to use when configuring assignment rules or mappings. For example, for a work object like sales account, you might choose the attributes of Named Account Flag, Customer Size, and Organization Type. When you configure assignment mappings for the sales account work object, your chosen attributes are available. You could create a mapping for Sales Account using the Named Account Flag attribute.

When selecting attributes for a candidate object, you will not only select the attributes you want to use when configuring assignment rules and mappings that involve that candidate object, but you also want to select the attributes for that candidate object that you want to appear in the screen that displays recommended candidates after assignment manager is run. For example, if a candidate object is resource (sales representative), and you want to show sales representatives' first names, last names, and phone numbers when they are recommended during assignment processing, you need to select the attributes for the resource candidate object that correspond to first name, last name, and phone number, and specify the order in which these attributes appear in the recommended candidates screen.

Note

This feature is not used by any CRM applications at this time.

Adding an Assignment Object

The Manage Assignment Objects pages enable you to define and edit the Work and Candidate objects as well as define any territory-based mappings. The figure above shows the relationship between the work and candidate objects and the mapping of the matching candidates to work objects.

When you add or edit a work or candidate object there are several key pieces of information that are required in the definition:

- Name: a unique name for the object with an optional description.
- Code: a unique code used in processing the object.
- Work/Candidate Object check boxes: indicates if the object is a work object, candidate object or both.
- Application Module: an Oracle Application Development Framework (ADF) business component that encapsulates the business service methods and UI-aware data model for a logical unit of work related to an end-user task. Enter the fully qualified definition name of the consumer application, Application Module. Valid for top level Work and Candidate objects. Child objects automatically inherit this value from its parent.
• Application Module configuration: Valid for Top Level Work and Candidate objects except Classification Candidate objects. Child objects will automatically inherit this value from its parent.

• View Object Instance: used to define the data model of a view object component when designing an application module, for example, Opportunity. Valid for all levels of Work and Candidate objects except Classification Candidate objects.

• View Criteria may be defined to filter the information for the rows of a view object collection. Valid for top level Work and Candidate objects except Classification Candidate objects.

• Primary Key Attribute 1: First or only attribute that makes up the object primary key. Valid for top level Work and Candidate objects except Classification Candidate objects.

• Refresh Interval: the number of minutes between refreshes of candidate object data. The default setting is 0 minutes. Valid for top level Candidate objects except Classification Candidate objects.

• Initial Caches: The initial size of the cache when processing an object. This value will be used the first time the engine processes objects or following a server bounce. The default value is 2, and the maximum value is 20. Only valid for top level Candidate objects except Classification Candidate objects. All Work Objects that are used for scoring, Lead, for example, use the Product Level (MOW_SCORING_INITIAL_CACHES) Initial caches for scoring rules profile option value.

• Maximum Caches: The maximum size of the pool/cache when processing the object. The default value is 5, and the maximum value is 25. Only valid for top level Candidate objects.

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**Note**

All Work Objects that are used for scoring, Lead for example, use the Product Level (MOW_SCORING_MAX_CACHES) Maximum caches for scoring rules profile option value.

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• Score Attribute: The attribute on the object that stores the total calculated score after an assignment request has been processed. Valid for top level Work objects only.

• Assignment Date Attribute: The attribute on the object that stores the assignment date after an assignment request has been processed. Valid for top level Work objects.

• Exclude Assignment Attribute: The attribute on the object that stores the setting for excluding a work object from assignment. Valid for top level Work objects.

### Adding Assignment Object Attributes

Assignment Manager allows users to specify a set of attributes from the assignment object VO to be used during the assignment evaluation. The assignment engine will load these Assignment Object Attributes for each
assignment object VO row, in addition to any primary key or assignment attributes. This is designed to improve performance by not loading those attributes not used for the assignment evaluation.

Assignment Object Attributes should be defined for each work object and any child objects as well as each candidate object to be used by the Assignment Engine.

- View Object Attribute: Name of each attribute in the view object defined for the assignment object. Assignment Rules or Mappings can be configured using these attributes. For Candidates Objects, the attributes that appear in the interactive assignment UI should also be selected.

- Candidate Information Sequence: The sequence that this attribute is displayed in the Interactive Assignment UI.

**Setting Up Assignment Mappings**

Assignment mappings drive territory-based assignments. These mappings identify the dimensions, attributes, and territory filtering used in territory-based assignment processing. Dimension mappings and some attribute mappings have a sequence which controls the order in which these mappings are used during territory matching. Mappings that do not have a sequence are used together at the end of the matching process. A default set of mappings is seeded. This seeding assumes that opportunities, leads, and sales accounts use the same territory hierarchy.

Assignment Manager has an indicator in the related **Candidates** region to control whether to merge the matching assignment candidates identified from processing each set of mappings. This indicator is used to drive the merging of matching candidates when multiple mapping sets are used in assignment processing. If the box is checked, then the candidates are merged. The default is unchecked.

You can use the following assignment mappings:

- Attribute Mapping: An example is assigning territories to a sales lead where the territory partner program ID is the same as the sales lead partner program ID. In this case, the territory is matched when the territory program ID is equal to the sales lead attribute program ID.

- Dimension Mapping: An example is assigning territories to opportunity revenue lines based on the product associated with the revenue line. In this case, the product dimension is selected as the mapping type. The candidate object low attribute and high attribute correspond to the names of the low sequence and high sequence attributes for product on the territory. The work object low attribute and high attribute correspond to the names of the low sequence and high sequence attributes for product on the revenue line.

- Mapping using alternative attributes: Using the same scenario, if a revenue line does not have a product assigned to it, but has a product group assigned, add the low sequence and high sequence attributes for product group are entered for the work object alternate low and high attributes.

- Mapping using default values: Using the same scenario, if the low sequence and high sequence attributes for product on a specific revenue
line do not contain values, then the low and high default values for the product attribute for all revenue lines are used.

- Literal Mapping: A way of filtering the matched territories based on specific values of a territory attribute. For example, by only matching with territories that have a sales account centric coverage model. For example, territory coverage model equals `SALES_ACCOUNT_CENTRIC`.

### Configuring Assignment Manager: Critical Choices

Assignment is the process for selecting a candidate as an object and executing the association to a work object. Assignment consists of two phases. The first phase is the matching phase, where matching rules or mappings are evaluated to find the right assignees from a list of possible candidates. The second phase is the disposition phase, where the disposition, or assignment, of matching candidates is handled. Assignment Manager is the tool used to establish the business objects that require assignment, and to create the rules and mappings that dictate the selection and assignment of resources and territories. Candidates are potential assignees for a work object. A work object is a representation of an application business object inside Assignment Manager. A work object captures the attributes of a business object and associated child objects to be used for matching purpose. To best plan the configuration of Assignment Manager, you should consider the following points:

- Business objects
- Attributes
- Resources and territories
- Assignment disposition
- Mappings sets and mappings
- Rules

### Business Objects

A business object is a data entity or a collection of data treated as a unit, such as a sales account, an opportunity, or a lead. Any business object that requires the assignment to act upon it is considered a work object by Assignment Manager. The work object is a representation of the business object, and mappings and rules are developed to ensure timely and accurate assignment of candidates (for example, territories or resources) to those work objects. When configuring Assignment Manager, carefully consider which of your business objects require assignment, and create work objects only for those that do.

A set of business or assignment objects is seeded for the assignment of territories or resources to sales accounts, opportunities, and leads.

### Assignment Disposition

After you determine the business objects (work objects) that require assignment and the candidate objects that you will assign to them, you must decide how the
matching candidate assignment disposition will be carried out. Consider these questions:

- Do you want to assign a single resource or multiple resources?
- Do you want to automatically assign matching candidates or run custom logic against matching candidates?
- Do you want to record the matching candidate score on the work object?
- Do you want to retain manually assigned candidates when assignments are processed?
- Do you want to replace disqualified candidates when assignments are processed?

Attributes

To ensure that candidates are properly assigned to work objects, create mappings and rules. These mappings and rules employ attributes to determine the best assignments. As you set up work objects and candidate objects in Assignment Manager, also select the attributes of those objects that you want to use in your mappings and rules. For example, you might want to assign a resource such as a specific sales representative to a business object, such as opportunity, based on the risk level of the opportunity. In this case, when you create the opportunity work object and the sales representative candidate object, you will select the attribute of opportunity that corresponds with risk level, and the attribute of the sales representative that corresponds with skill name or e-mail address. Selecting these attributes makes them available for mappings and for conditions on your rules, so ensure that you select the attributes that reflect the criteria that you want to use for matching candidate objects to work objects.

Mappings Sets and Mappings

Assignment mapping sets and their related mappings drive territory-based assignment. The mapping sets determine which mappings are used and the sequence mapping sets are used in territory-based assignment. The mappings identify the dimensions, attributes, and territory filtering used in the assignment processing. Default mapping sets and their related mappings are seeded. This seeding assumes that opportunities, leads, and sales accounts use the same territory hierarchy.

Create the mappings using the work objects, candidate objects, and attributes that you already established. When designing your mappings, carefully consider the dimensions and attributes you use in your territory structure and how you want to match these territory candidates to work objects. Also consider the shape of the information used in the territory structure; this may affect the sequence of each mapping. The sequence of the dimension mappings used in territory matching can affect performance. The most selective dimension mapping should be given lowest sequence number. By default, this dimension is the Geography Dimension. By using the lowest sequence number, it is performed earliest in the matching process which results in the smallest number of territory matches. This same approach should be followed for the remaining dimension and applicable attribute mappings.
Rules

Rules are defined for the execution of rule-based assignment. Rules are designed to return candidates based on whether these candidates match a set of criteria, are within a defined scoring range, or are of a specific classification.

Create the rules using the work objects, candidate objects, and attributes that you already established. When designing your rules, carefully consider how you want to match candidates to work objects. For example, would you want resources assigned based on their geographic location, their product knowledge, on the status or score of an object, or a combination of any of these attributes? Do you want to match candidates only, or would you like to match candidates and score them? In a multiple-candidate scenario, do you want to assign all matching candidates or only those who achieve higher than a specific score? Consider these questions before creating rules.

Sales Account Assignment Object: Explained

Territory-based assignment is based on intelligent mapping of sales account assignment object attributes and sales territory dimensions. The Sales Account Assignment object is used by Assignment Manager to identify the sales accounts and then determine which territories to assign. The table below lists sales account assignment object attributes and corresponding customer attributes as shown in Customer Center Profile and Classification nodes. See Configuring Assignment Manager: Critical Choices for more information about the assignment process.

<table>
<thead>
<tr>
<th>Sales Account Assignment Object Attribute</th>
<th>Corresponding Customer Center Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography ID</td>
<td>Sell-to Address</td>
</tr>
<tr>
<td>Industry</td>
<td>Primary Industry: the primary classification code for the classification category defined in profile option Industry Classification Category.</td>
</tr>
<tr>
<td>Organization Type</td>
<td>Primary Organization Type: the primary classification code for the classification category Organization Type defined in profile option Industry Classification Category.</td>
</tr>
<tr>
<td>Customer Size</td>
<td>Customer Size</td>
</tr>
<tr>
<td>Named Account Type</td>
<td>Named Sales Account Indicator</td>
</tr>
<tr>
<td>Party ID</td>
<td>Party ID</td>
</tr>
<tr>
<td>Auxiliary Dimension 1</td>
<td>the primary classification code for the classification category defined in profile option Industry Classification Category for Auxiliary Dimension 1.</td>
</tr>
<tr>
<td>Auxiliary Dimension 2</td>
<td>the primary classification code for the classification category defined in profile option Industry Classification Category for Auxiliary Dimension 2.</td>
</tr>
<tr>
<td>Auxiliary Dimension 3</td>
<td>the primary classification code for the classification category defined in profile option Industry Classification Category for Auxiliary Dimension 3.</td>
</tr>
</tbody>
</table>
Creating Assignment Mappings: Examples

For territory-based assignment, you create work-object-to-candidate-object mappings during assignment object creation. These mappings are used to make candidate assignments. You can create multiple types of mappings for assignments. The following scenarios illustrate these different mappings:

- Creating an attribute mapping
- Creating a dimension mapping
- Creating a literal mapping

Creating an Attribute Mapping

You want to assign territories to a sales lead when the territory program ID is the same as the sales lead program ID. Create a mapping where the work object is sales lead and the candidate object is sales lead territory. Select the territory when the attribute territory program ID is equal to the sales lead attribute program ID.

Another example would be if you want to assign territories to a sales lead based when the territory manual account inclusion or exclusion is the same as the account on the sales lead. Create a mapping where the work object is sales lead and the candidate object is sales lead territory. For this example, select the product attribute as the mapping type and enter the value Acct for the function code. Enter a value for the sequence which determines the order in which the mapping is used when matching territories. The most selective dimension or attribute mapping should be given lowest sequence number, the next most selective dimension or attribute mapping should be given the next sequence number. This mapping matches the territory when the territory partner attribute account node integration ID, AccountNodeIntgId, is equal to the sales lead attribute party ID.

Creating a Dimension Mapping

You want to assign territories to opportunity revenue lines based on the product associated with the revenue line. Create a mapping where the work object is opportunity revenue line, and the candidate object is territory. Select dimension as the mapping type and enter the value Prod for the function code. Enter a value for the sequence which determines the order in which the mapping is used when matching territories. The most selective dimension mapping should be given lowest sequence number. The candidate object low and high attributes correspond to the names of the low sequence and high sequence attributes for product on the territory. The work object low and high attributes correspond to the names of the low sequence and high sequence attributes for product on the revenue line. For example, the low sequence attribute for product on the revenue line might be called InventoryItemId.

- Mapping using alternative attributes: Using the same scenario of assigning territories to opportunity revenue lines based on the product associated with the revenue line, you might encounter a situation where a revenue line does not have a product assigned to it, but it does have a product group assigned to it. Create the same mapping that you created for the dimension mapping scenario, and add the names of the low sequence and high sequence attributes for product group for the work
object alternate low and high attributes. For example, the alternate low sequence attribute for product group on the revenue line might be called ProdGrpId.

- Mapping using default values: Using the same scenario of assigning territories to opportunity revenue lines based on the product associated with the revenue line, you might encounter a situation where the low sequence and high sequence attributes for product on a revenue line do not contain values when assignments are processed. Create the same mapping that you created for the dimension mapping scenario, and add low and high default values for the product attribute for revenue lines.

Creating a Literal Mapping

Literal mappings are a way of filtering the matched territories based on specific values of a territory attribute. You want to find only territories that have a sales account centric coverage model. For example, territory coverage model equals SALES_ACCOUNT_CENTRIC.

Defining Tasks: Points to Consider

A task is a unit of work to be completed by one or more people by a specific completion date. When using tasks in your application, you should consider the following points:

- Tasks
- Task Templates

Tasks

A task is defined with a description, due date and category. Each task has an owner, who oversees or is responsible for the task, and one or more assignees who perform the work. The task can be related to a business object, such as an Opportunity, a customer or, one or more external contacts. Tasks may also have Notes for general information, Attachments for tracking e-mail or project documents and Interactions which record customer communications.

Task Templates

Often a set of Tasks are performed repeatedly for a particular process and to support this administrators can define Task Templates, which represent a group of tasks. These task templates can be invoked by users working on a particular business object, for example a lead, campaign, or an opportunity. The user selects the appropriate task template for the goal they want to achieve and this creates the tasks and associates them with the business object being worked on. This saves the user from creating multiple tasks when an Opportunity reaches a particular sales stage, or the same set of tasks each time a marketing campaign is created.

Note

Extensibility features are available on the Task object. For more details refer to the article Extending CRM Applications: How It Works.
Scheduling Sales Account Assignment: Explained

The Sales Account assignments process can be scheduled and run on the Scheduled Process page. You need to have the 'Run Sales Party Batch Assignment' privilege to be able to define and run sales account batch assignment.

To access the Scheduled Process page, start on the Fusion Home page and click Navigator. Under the Tools heading, click Scheduled Processes.

1. Click Schedule New Process then click type Job. Choose the process named SalesAccountBatchAssignRequest. If needed, use the Search link at the bottom of the Search window.

2. Enter your process details. The following table shows the view criteria and its description, as well as any bind values that are required.

   - **Work Object code**: Sales_Account_Work_Object
   - **Candidate Object Code**: SalesAccountTerritory_Candidate_Object
   - **Assignment Mode**: Territory
   - **View Criteria Name**: (see table below)
   - **View Criteria Bind Values**: (see table below)

<table>
<thead>
<tr>
<th>View Criteria Name</th>
<th>View Criteria Description</th>
<th>View Criteria Bind Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>SalesAccountsUpdatedSinceVC</td>
<td>Use this view criteria to assign sales accounts which have not been previously assigned and have LAST_UPDATE_DATE (in the ZCA_SALES_ACCOUNTS table) greater than the specified date. For newly created sales accounts, LAST_UPDATE_DATE is the same as the creation date.</td>
<td>BindLastUpdateDate=[YYYY-MM-DD HH:MM:SS]</td>
</tr>
<tr>
<td>SalesAccountsAssignedBeforeVC</td>
<td>Use this view criteria to reassign sales accounts which have been previously assigned and have LAST_ASSIGNED_DATE (in the ZCA_SALES_ACCOUNTS table) less than the specified date.</td>
<td>BindLastAssignedDate=[YYYY-MM-DD]</td>
</tr>
</tbody>
</table>
SalesAccountTerritoryBatchVC

Use this view criteria to reassign sales accounts impacted by the specified territory and territory dimensional realignment batch.

This view criteria is also used internally to invoke immediate/automatic assignments after territory proposal activation and territory dimension updates.

BindReassignmentBatchId=[Territory Reassignment Batch ID]

SalesAccountBulkImportVC

Use this view criteria to assign sales accounts created in a given customer import batch.

This view criteria is also used internally to invoke immediate/automatic assignments after customer import.

BindReassignmentBatchId=[Import Activity ID]

SalesAccountDimsForPartyVC

Use this view criteria to assign the sales account with the specified sales account ID.

BindPartyId=[Sales Account ID]

3. Define a schedule as needed using the Advanced button on the Process Details page. You can schedule the process to run as soon as possible, or to run at a given frequency and start date.

4. Submit your job and monitor it using the Scheduled Processes list, refreshing it to view the latest status updates.

FAQs for Manage Customer Center Assignment Objects

What happens if I mark an assignment object or one of its attributes as inactive?

When the assignment object inactive box is checked the selected work or candidate assignment object is not available for assignment processing. When the assignment attribute inactive box is checked the selected work or candidate object attribute is not available for assignment processing.

**Note**

The object or attribute cannot be set to inactive if there is a mapping set, mapping, or rule defined using the object or attribute.

What's the difference between literal, dimension, and attribute mapping?

Dimension Mapping: Dimension mapping should be used when the work object and candidate object attributes in the comparison are dimension attributes,
such as Geography, Product, or Account. When creating the mapping, use the Function Code field to specify a unique identifier for the dimension. This identifier is passed to the translation function, in case the same function is used for multiple dimensions.

Attribute Mapping: This mapping enables you to compare and match attribute values between a work object attribute and a candidate object attribute. When the value of the candidate object attribute matches the work object attribute the candidate is selected. Attribute mappings should be used when the work object and candidate object attributes in the comparison are non-dimensional attributes. For example, consider a lead work object with a program ID attribute and the territory object with program ID attribute. The selection criterion is:

```
select Sales Lead Territories where Sales Lead Territory.ProgramID equals Sales Lead.LeadProgramID
```

The assignment engine will use this mapping data to construct a query on the candidate object that is equivalent to the selection criteria. When creating the mapping, the Function Service and Function Code are only needed if a translations function is used. The function code field is used to specify a unique identifier for the attribute, and this identifier is passed to the translation function.

Literal Mapping: Literal Mapping is used almost exclusively to filter the candidate objects. This form of mapping enables the comparison of candidate attributes against a specific value chosen by the user. The assignment engine will compare the mapped candidate object attribute against the specified literal value. For example, select the Territory Candidate object that has the attribute TerrStatusCode that equals the value FINALIZED.

**Note**

For Literal Mappings ensure that the value entered corresponds to the Lookup Type Value code, not the meaning.

**What's the difference between an internal territory and a partner territory?**

An internal, or deploying company, territory is defined, created, and assigned internal resources.

Examples of two internal territories are:

- **Sales Representative Territory (SRT)** is the jurisdiction of responsibility of a sales representative over a set of sales accounts, leads and opportunities.

- **Lead Triage Territory (LTT)** is the jurisdiction of responsibility of channel manager to triage partner Leads, that is approve leads and route to the right Partner.

A Partner territory is the jurisdiction of the reselling partner and contains partner resources. Specific Partner territories can be assigned to a sales account as needed.

**Note**
Territory Management must be implemented to utilize this feature.

**How can I add territories to a sales account?**

Assignment Manager (part of Oracle Fusion Work Management) is used to determine matching territories for a given sales account. A sales account can also be assigned to one or more internal and partner territories.

All internal territories, such as Prime, Overlay and Sales Channel Manager territories, which match a given sales account’s assignment attributes are assigned to the sales account. Internal territory assignment can be run immediately and automatically whenever sales account assignment or reassignment is required. For example, you can run assignment manager when a sales account is created or updated, or when territories are realigned. Internal territory assignment can also be scheduled to run in a batch, or it can be run on-demand via the Assign Territories action in the sales account team page.

Partner territories are applicable to Partner Relationship Management implementations. When a partner lead is approved, any partner territories associated to the lead are automatically assigned to the lead’s sales account. Channel sales manager can also select specific partner territories to assign to a sales account via the Add Partner Territories action in the sales account team page.

**Note**

Territory Management must be implemented to utilize this feature.

**When do territories get assigned to sales accounts?**

Internal territories get assigned to sales accounts in the following scenarios.

- When sales accounts are created.
- When a sell-to address is added to an existing sales party.
- When sales accounts are imported in bulk.
- When certain attributes on sales accounts that correspond with territory assignment dimensions are updated.
- When batch assignment is run.
- When you select the Assign Territories menu action on the Sales Account Team node for the sales account.
- When territories are realigned or when personnel leave the territory or the company.

**Note**

The following profile options determine whether territory assignment and reassignment is automatic for sales accounts. The default setting for both is YES.

- Sales Account Automatic Assignment on Create Enabled
- Sales Account Automatic Assignment on Update Enabled
Automatic assignments are always enabled following an import, party merge and territory realignment.

During initial implementation and migration, it is possible to create sales accounts before territories have been set up in the system. These sales accounts will not receive any territory assignment because there are no territories. These accounts need to be explicitly assigned when territories are configured and activated in the system. This is one exception which does not have immediate/automatic assignment. The recommendation is to run a batch assignment to assign these sales accounts created at the beginning of the implementation using the view criteria SalesAccountsUpdatedSinceVC.

Partner territories get assigned to sales accounts in the following scenarios.

- When a partner-generated lead is approved, all partner territories associated to the partner-generated lead are automatically assigned to the sales account.
- Users with the privilege Manage Sales Party Partner Territory can assign partner territories from the sales account team UI.

**Note**

Territory Management must be implemented to utilize this feature.

---

**Manage Customer Center Task Template**

**Turning a Business Process into a Task Template: Example**

This example illustrates how to create a task template that represents a business process.

**Scenario**

A sales manager wants to create a task template for her department’s client product demonstration process.

**Client Product Demonstration Activities**

The client product demonstration process occurs regularly. The sales manager does not want to manually create tasks for this process every time it occurs, so she decides to create a task template that includes the business process activities. Each time she repeats the business process, she can use the task template to automatically generate the appropriate tasks that need to be performed.

**Analysis**

The business process consists of the following activities:

- Book a conference room.
- Create an agenda.
- Confirm the date and time with the client.
- Make arrangements with presenters.
- Deliver product demonstration.
• Follow up with client.

**Resulting Task Template**

Based on the analysis of the business process, the following task template is created:

Task Template Name: Client Product Demonstration

<table>
<thead>
<tr>
<th>Task</th>
<th>Category</th>
<th>Lead Days</th>
<th>Duration Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book conference room</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Create agenda</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Confirm date and time with client</td>
<td>Call</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Schedule presenters</td>
<td>Preparation</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Deliver demonstration</td>
<td>Demonstration</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Follow up with client</td>
<td>Call</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

**Scenario**

**Analysis**

**Defining Notes: Points to Consider**

A note is a record attached to a business object that is used to capture nonstandard information received while conducting business. When setting up notes for your application, you should consider the following points:

- Note Types
- Note Type Mappings

**Note Types**

Note types are assigned to notes at creation to categorize them for future reference. During setup you can add new note types, and you can restrict them by business object type through the process of note type mapping.

**Note Type Mappings**

After note types are added, you must map them to the business objects applicable to your product area. Select a business object other than Default Note Types. You will see the note types only applicable to that object. If the list is empty, note type mapping doesn't exist for that object, and default note types will be used. Select Default Note Types to view the default note types in the system. Modifying default note types will affect all business objects without a note type mapping. For example, you have decided to add a new note type of Analysis for your product area of Sales-Opportunity Management. Use the
Define Common CRM Configuration

note type mapping functionality to map Analysis to the Opportunity business object. This will result in the Analysis note type being an available option when you are creating or editing a note for an opportunity. When deciding which note types to map to the business objects in your area, consider the same issues you considered when deciding to add new note types. Decide how you would like users to be able to search for, filter, and report on those notes.

Note
Extensibility features are available on the Note object. For more information refer to the article Extending CRM Applications: how it works.

FAQs for Manage Customer Center Task Template

How can I create a task template that is available to associate with assessment templates?

Create the task template with a subtype of Assessment.

What happens if I include a free-form response for a question?

A score of 0 is assigned for free-form responses.

A free-form response option will have no effect on the overall assessment score. The free-form response offers the opportunity to enter a textual response to a question that does not conform to any of the pre-populated responses provided by the assessment template.

What’s a Question Group?

A question group is a logical grouping of questions within an assessment template, and it is used strictly as a category header for those questions. Through careful naming of a question group, you can achieve the benefit of providing the user of the template with an approximate idea of the type of questions to expect in each group.

Why am I being asked to enter question weights again?

This step lists all of the assessment template questions in one place, and provides you with the opportunity to edit weights as necessary to ensure that the sum of all weights totals 100.

Define Enhanced Click-to-Dial

Enhanced Click-to-Dial Setup: Explained

Click-to-Dial is the feature that enables the user to initiate outgoing calls via hyperlinks. Extended Click-to-Dial enhances the click-to-dial experience by adding an agent communication toolbar. The communication toolbar is a real-time dashboard for the agent’s voice communications. It displays the agent’s telephony state, current status of a call (during call setup and actual conversation) and provides a set of voice controls as well as ability to access
and modify the current interaction. This toolbar displays when a call is made or received, allows the agent to transfer the call or consult with another agent and return to the original call.

When a call is received, Enhanced Click-to-Dial displays the identity of the inbound caller via a reverse directory search and can open an interaction page for logging the call. If a search fails for the contact name, the company may be identified and a search dialog will be displayed that enables you to search for your contact to initiate the interaction logging. If the company is not identified, you can still search all contacts to generate the interaction. You can manually call up the interaction dialog at anytime from the toolbar.

When a call is complete, the application can display a wrap up interaction dialog to record the results of the call.

The communications toolbar and the communication services provided use a slightly different infrastructure than previously delivered. To enable this infrastructure there are four tasks:

- Manage Click-to-Dial Profile Options
- Manage Communications Connectors
- Manage Agent Connector Settings
- Manage Contextual Navigation Rules

**Manage Click-to-Dial Profile Options**

This is the first task for setting up the Oracle Fusion Enhanced Click-to-Dial feature.

These profile options determine if the feature is available, whether individuals have access to the toolbar, and the in and outbound logging preferences.

<table>
<thead>
<tr>
<th>User Profile Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Enhanced Click-to-Dial</td>
<td>Enables the site wide Enhanced Click-to-dial functionality. It is recommended that this profile option be only enabled after completing associated setup tasks for Click to dial.</td>
</tr>
<tr>
<td>Enable Click to Dial Toolbar</td>
<td>Indicates whether the Click to Dial toolbar should be displayed for a user with a click-to-dial enabled job role. It is default at the Site level to Yes. Individual users can be opted out of the toolbar display by adding a User level entry with the profile value set to No.</td>
</tr>
<tr>
<td>Automatic Inbound Interaction Logging</td>
<td>When set to Yes, interactions are automatically logged for <strong>inbound</strong> calls. If set to No, no wrap up dialog will be displayed at the end of a call.</td>
</tr>
<tr>
<td>Inbound Interaction Logging Type</td>
<td>When &quot;Automatic Inbound Interaction Logging&quot; is set to Yes, controls how interactions are logged for <strong>inbound</strong> calls. Can be set for All Communications or by the Party Usage Filter Rules, for example: all eligible customers. If left blank an interaction is created for all inbound calls.</td>
</tr>
<tr>
<td>Automatic Outbound Interaction Logging</td>
<td>When set to Yes, interactions are automatically logged for <strong>outbound</strong> calls. If set to No, no wrap up dialog will be displayed at the end of a call.</td>
</tr>
</tbody>
</table>
Outbound Interaction Logging Type

When "Automatic Outbound Interaction Logging" is set to Yes, controls how interactions are logged for outbound calls. Can be set for All Communications or by the Party Usage Filter Rules, or example: all eligible customers. If left blank an interaction is created for all outbound calls.

Enable Inbound Screen Pop

If set to Yes, the contextual navigation for inbound call is performed unless the toolbar option Contextual Navigation is set to no. If set to No, no screen pop or interaction dialog is displayed.

Enable Outbound Screen Pop

If set to Yes, the interaction dialog for outbound calls is displayed when an interaction is automatically logged, unless the toolbar option Contextual Navigation is set to no. If this profile option is set to No, the interaction dialog is not displayed.

Click to Dial Toolbar Auto Login

Click-to-Dial automatic log in is not used at this time.

Manage Communications Connectors

The communications connectors provide the parameter settings required to establish connectivity between the Fusion application and a telephony system. The Oracle Contact On Demand connector, and a software development kit (SDK) for developing additional connectors are delivered.

The Manage Communications Connectors user interface enables you to add other connectors and connector types as required by your specific communications needs.

Define the connector types before designating the connectors and parameters. You can add Agent specific connector parameters such as their agent ID or extension number. These parameters are passed to the connector and used as needed to communicate with the telephony system.

Define the connectors. There are four parameters that are provided to pass location information for the various downloads and servers. A fifth parameter is available to pass any connector specific parameters to the telephony system.

- **JavaScript Location** - The location from where 3rd party JavaScript will be downloaded. The JavaScript will be run within the browser and can be either a transport library implementation for communication to a vendor specific connector or the actual connector itself. If left blank, Oracle’s default transport library will be used.

- **Runtime Location** - The connectors runtime location, an internet protocol (IP) address or domain name for the connector or URL. This is used by Fusion Click to Dial toolbar to communicate with a connector that runs outside the browser.

- **Download URL** - The location /URL from where a connector will be downloaded and is reserved for the use of the Oracle Contact On Demand Connector.

- **Server Location** - The telephony system server runtime location, an IP address or domain name.
• Parameter String - Additional connector parameters for the specific telephony system in addition to the parameters above. This is reserved for the specific use of the connector.

Manage Agent Connector Settings

An Agent is required to sign in to a connector to establish the connection to the telephony system to make and receive calls. This task establishes the relationship between the connector, the agent, the agent group, identifier and password.

After adding a new row to the connector settings, you can search for the agent name using the orange glyph that opens a search dialog. The assignment of the agent groups, an agent ID, and password are usually defined and entered by the administrator. An agent can also self-provision themselves through the agent sign in dialog box. This dialog box is not available through the setup UI. It can be launched in the transaction flow from the toolbar UI. On the sign in dialog box, click on edit connector. User can then create a connector for himself and also provide additional agent parameters for the connector. These data values are used exclusively for an agent signing in to a connector. There is also a sub-page for entering any other parameters specific to that agent that are required by the third party telephony system and not covered in the delivered configuration parameters. Some examples required for Oracle Contact On Demand Connector are the `AcdUserID` and `AcdExtension`. These two parameters are used in the agent transfer scenario where a list of agents together with the Extension will be available for the user to choose to which agent the call will be transferred. `AcdUserID` is a special id that Oracle Contact On Demand (COD) assigns to each COD user. `AcdExtension` is the virtual extension that COD assigns to each user. Therefore, instead of knowing the exact number to dial in order to reach out to an agent, the extension can be used. COD determines the phone number to call from that virtual extension. The agent connector parameters will differ from one connector to another.

Note

An Agent also has the ability to set this information through the Connect button in the toolbar. Therefore, the Manage Agent Connector Settings task can be skipped and delegated to each agent if so desired.

Manage Contextual Navigation Rules

Upon receiving an incoming call, the connector will follow a set of rules to determine which UI to open upon connecting. This feature can be turned on or off on the Click-to-Dial toolbar by choosing the Yes or No radio button for Contextual Navigation.

Navigation rules are organized in Rule Sets. There can only be one active contextual Navigation rule set at a time. The navigation rules themselves are comprised of a Call Data Token and the Target Navigation Page. One way the call data token is set is by using the values returned by Automatic Number Identification (ANI) and the Dialed Number Identifier Service (DNIS) from the telephony system, in combination with IVR data provided by the caller such as Organization ID or account number. Call data token value or a default value are used as the value for task flow parameter in order to launch the target navigation page when the connection is established.
The Target Navigation Page is the page that will open upon accepting the call. Target Navigation Pages are defined by a name and a task flow identifier. Each navigation page, or task flow, can have one or more parameters. The parameter can be set with either a default value or set with a call data token so that a value is set at runtime using the call data token name.

Enhanced Click-to-Dial Components: How They Work Together

Oracle Fusion Click-to-Dial is a user friendly way to receive calls from your customers and contacts and to record those interactions. Outgoing calls are made through the hyper-linked phone numbers seen displayed with customer and contact information and through contextual action dialogs. A Click-to-Dial tool bar is used as a dashboard for call status and taking actions on inbound and outbound calls. The tool bar is supported by an infrastructure of connectors and telephony systems that enable this to happen. A delivered generic application program interface (API) enables Click-to-Dial to work with any switch or telephony vendor. Oracle does not author or maintain these connectors, except for Oracle Contact Center On Demand (COD), which is also a reference implementation. For this release, the COD connector is supported only on Windows desktops and Linux. This restriction will be removed in later releases.
Agents

An agent initiates their availability for inbound voice communications by signing in to a connector via the tool bar. The agent signs in via a single connector for that toolbar session. Each connector is associated with an agent or agents. The agent has an assigned agent group, agent identifier and password for each connector. This enables the Agent to sign on to a connector and use the tool bar to receive and transfer calls to other agents and customers or contacts. There may also be other parameters required at this agent level for the telephony system. These can be designated at the agent connector parameter level and passed by the connector to the telephony system. Agents may also record each of these transactions via the Oracle Fusion Interaction features.

Connectors

Connectors perform the linking of the agent to the telephony system that enables the outgoing and incoming calls via Click-to-Dial. The Oracle Contact on Demand Connector is delivered. Contact On Demand is a multichannel, all-in-one call center application that itself connects to the Public Switched Telephony Network (PSTN) to provide voice communication capability. Other connectors may be added using the delivered template.

Telephony Systems

These are third party systems used to establish telephone communications to and from the customer site. They can operate over the internet protocol layer or on hard wired telephony networks.

Tool Bar

This user interface to the Click to Dial feature enables you to establish the connection with the software connector to the telephony system. You may receive, ignore, hold, or transfer a call from your customers and contacts. You can also consult with another agent with the calling party on the line or on hold.

The Oracle Fusion Interactions application can be used to record the particulars of the call using the interactions user interface. Upon receiving a call the tool bar will use the incoming phone number to identify the caller. If the caller is known, an interaction window will be created and opened. If the caller is unknown, the tool bar will popup a window allowing you to search the customers or contacts available to you. If the company is known but not the caller, the list of contacts available to you from that company will be searched. You can also manually open a search dialog. Once the call is completed the Interaction wrap-up screen can be programmed to popup at the end of the call enabling the Agent to finish noting any further call details.
Define Territory Management Configuration

Territory Components: How They Work Together

Territories are used to define the jurisdiction of responsibility of a salesperson over a set of sales accounts. Sales managers use territory proposals to change territory definitions. Managers can create more than one territory proposal and use metrics and graphs to compare and analyze their proposed territories for fairness, effectiveness, and alignment with current sales goals. Managers then activate the best territory proposals.

This figure shows the use of territory proposals to add, change, and delete territories. After analysis, managers activate final territory proposals.

Territories

A territory, whether active or part of a territory proposal, includes several elements. One or more dimensions, such as geography, define the boundaries...
of a territory according to selected dimension members, such as Europe or Asia. Every territory is assigned an owner and can have additional territory team members.

This figure shows two territories defined using the same two dimensions but different dimension members. Each territory has an owner and a sales team.

![Territory Diagram](image)

**Define Territory Management Dimensions**

**Territory Dimensions: Explained**

Dimensions are attributes that define jurisdictional boundaries of territories. For example, the geography dimension can be used to define territories by country or postal code. Territory dimensions are used to assign sales accounts, partners, leads, and opportunities to the correct territories.

Each territory dimension is matched to an attribute of the object being assigned. Product and Sales Channel dimensions are matched to lead and opportunity attributes directly. The rest of the dimensions are matched to sales account attributes either when assigning sales accounts to territories, or when assigning leads and opportunities to territories, in which case the sales account for the transaction is used. All dimension values combine to define the territory boundaries. For example, if Geography = United States and Product = Green Servers, then the territory boundaries are United States AND Green Servers.

The dimensions available for defining territories are:

- Account
- Account Type
  - Named or Not Named
- Customer Size
  - From the Organization Size lookup
- Geography
- Industry
- Organization Type
  - The organization type hierarchy is from the customer classification module.
• Partner

• Product

A hierarchy from the Sales Catalog. Used to assign leads and opportunities, but not accounts.

• Sales Channel

Used to assign leads and opportunities, but not accounts.

• Auxiliary 1, 2, 3

Your administrator enables the dimensions your organization uses for defining territories. The administrator also selects the dimension members that appear in the selection list when defining territory dimensions. All invisible dimension members appear in an Others category in the selection list. An Unspecified dimension member captures objects with insufficient matching values.

Dimension members are populated through synchronization with the source data. For example, products synchronize from the product catalog. Changes to the source data can impact the assignment of sales accounts, leads, and opportunities after the changes are synchronized with territory dimension members. For example, a sales account that was designated as not named is changed to named account, or a product line is removed from the sales catalog. Therefore, it is a good practice to run full reassignment processes for leads, opportunities, and accounts after synchronizing dimension changes.

Account

Sales accounts and their hierarchies are maintained in the Oracle Fusion Customer Center application.

Sales accounts are Parties with the usage Sales Account and a sales account profile containing sales information specific to the party. When a party has one sell-to address, it ceases to be a sales prospect and becomes a new sales account. When the party purchases something, it changes from a new to an existing sales account. When defining a territory, you can select an individual account to include in the territory despite the fact that it does not meet the boundaries set in the regular coverage. You also have the option to select the individual account to exclude it from the territory despite the fact that it does meet the dimension selections in the regular coverage for that territory. The selection for inclusion or exclusion does not contain the hierarchy for the sales account.

The account must be designated as Named in Customer Center before it can be selected as a named account using the Account dimension in the regular coverage for the territory definition. When defining territories, you can select named accounts that fall within the other dimension definitions for the hierarchy. You can also select named accounts that do not fall within the other dimension definitions. The accounts must be higher in the customer hierarchy above a selected named account that does fall within the other dimension definitions.

The administrator can enable the Account dimension using the following choices:

• Enable for both named accounts in regular coverages and selected sales account inclusions and exclusions.

• Enable only for selecting individual sales accounts for inclusions and exclusions. Named accounts are not available in the regular coverage.
• Disable the Account dimension so neither named accounts are available in regular coverages nor sales accounts available for inclusions or exclusions.

**Geography**

Geography is defined as a physical space, with boundaries, on the surface of the earth.

Geography Type is a divisional grouping of geographies, and can be either one of two types:

• Master: Any record or object in Fusion that has a street address, in any country in the world, uses Master Reference Geography Types to define that address. Master reference geography data is imported into the application, not set up manually. It can be imported into the application using the Manage File Import Activities setup task in Setup and Maintenance.

• Zones: A convenient, customized grouping of geographies. For example, you can group several states into a zone called Northwest. Zones have to be defined and created manually, so they are optional. No other Fusion application uses them besides Territory Management. You only want to use zones to define your sales territories if the boundaries of your sales territories do not strictly follow the Master Geography structure. That is, if they are regional and go outside the official country specific structure. For example, the country-specific structure of the United States is state, county, city, and postal code.

The geography dimension value in territories is derived from sell-to addresses of sales accounts. To use geography dimensions in territories, ensure that the geography elements in addresses, such as state, city, and postal code, are validated. You can do so by enabling geography validation for each country using the Manage Geographies task. While doing so, ensure that at least one level in the geography hierarchy is enabled for geography validation. It is recommended that you enable geography validation for all geography levels that you intend to use for territory definition for each country. You can enable a list of values containing specific geography elements. This helps users search and select appropriate geography values during address entry and eliminate all possibilities of wrong address entry. You can also set geography validation control to Error in the Manage Geography Validation page. This ensures that users can only use valid geography elements in addresses. If you have already created addresses before setting up geography validation for a country, then you must execute the Run Maintain Geography Name Referencing task for that country after enabling geography validation to ensure that all your geography elements are validated.

Since zones are user defined, they are subject to interpretation. Therefore, you need company-wide consensus on their definition. This means across all business units, and all lines of business that sell to the same account.

Zones together with master geographies are organized in a hierarchy. Setting up the territory hierarchy using Manage Territory Geographies is a prerequisite to enabling the geography dimension, whether or not you choose to include zones in the hierarchy.

**Industry**

The industry hierarchy is from the customer classification module.
The profile option Industry Classification Category must be set to the classification category that you want to use as the basis for the industry dimension before you can enable the dimension. The available selections include only classification categories belonging to the Industrial Categories grouping.

**Partner**

A partner is an organization party with a partner profile associated and an assigned Partner usage. Partners are defined in the Partner Center. You can select individual partners to include in the definition of a partner centric territory. You can also select individual partners to exclude from the partner centric territory coverage.

The administrator can enable the Partner dimension for manual inclusions and exclusions. The Partner dimension is not available for regular coverages.

**Sales Channel**

The sales channel dimension supports indirect sales through channel partners. You can create partner specific territories, structured by the sales channel dimension, in addition to the other available dimensions. The available sales channels are Direct, Indirect, and Partner. The sales channel dimension applies to leads and opportunities, but not to sales accounts.

**Auxiliary 1, 2, 3**

You can define up to three auxiliary dimensions based on the customer classification model. Define classification categories first and associate them to the Customer Categories grouping.

The following steps must be done before you can enable auxiliary dimensions:

1. Use the Manage Classification Categories task to create a new classification category. You can allow parent code assignment. If you allow multiple class code assignments, then the classification that is designated as Primary in the customer record is the one that is matched to assign the customer to a territory.
2. Add classification codes for the new category. You can form a hierarchy with the codes or not.
3. Use the Manage Classification Groups task and search for the CUSTOMER_GROUP category group code. Edit the group and add your new classification category to the group.
4. Using the setup task Define Classification Category for Auxiliary Dimension 1 (or 2 or 3), you change the value of one of the profile options to point to the classification category you just created. Then this classification category becomes the source for dimension members for the auxiliary dimension.

**Territory Coverage: Explained**

A territory coverage is a set of boundaries that define what is included or excluded in the territory and what can be sold. For example, you can use product and geography dimensions to create a territory coverage for selling laptops in North America.
A coverage includes the following parts:

- **Regular Coverage**: The combination of one or more territory dimensions.
- **Inclusion Coverage**: A list of included sales accounts or partners, regardless of the defined regular coverage. The sales accounts do not have to be designated as Named accounts in Customer Center in order for you to add them for inclusion.
- **Sales Account Hierarchy**: You can choose to include the sales accounts in the hierarchy below the selected sales account. Use the Actions menu in the Selected Accounts table to view, include, or exclude the hierarchy.
- **Sales Account Filtering Conditions**: Defined dimensions apply to the included sales accounts and their hierarchies so that only sales accounts that match the dimension definitions get assigned to the territory.
- **Other Dimensions**: Product or sales channel dimensions defined for all of the included sales accounts or partners. Product and channel selections must fall within the jurisdiction of the parent territory if you select Restrict by parent in the dimension selection window.
- **Exclusion Coverage**: A list of excluded sales accounts or partners, regardless of the defined regular coverage. All dimensions are ignored. The account hierarchy is ignored. The sales accounts do not have to be designated as Named accounts in Customer Center.
- **Inheritance Dimension Overrides**: If the territory inherits its coverage from another territory, then its coverage exactly matches that of the source territory. But, you can enter override definitions for one or more dimensions. Dimension definitions added to the override supersede the definitions for the same dimensions contained in regular coverage. The overrides are also added to the sales account inclusion Filtering Conditions and Other Dimensions tables. Inheritance applies only to sales accounts, not to partners.

When you activate a territory proposal, a reassignment of sales account, leads, and opportunity revenue lines occurs for territories affected by changes in regular coverages. Changes to manual inclusions and exclusions require a full reassignment process.

**Territory Coverages for Partners**

A partner is an organization party with a partner profile associated and an assigned Partner usage.

Similar to direct sales, channel managers have corresponding sales territories that define their jurisdiction pertaining to sales activities. Some channel managers are assigned to specific partners. Some channel managers are assigned to manage and oversee the sales activities that involve partners. The jurisdiction of channel manager territories is typically defined by one or more of the following coverage models.

- **Coverage Defined by End Customer Characteristics**
  
  In this coverage model, the jurisdiction of the channel manager is solely defined based on the characteristics of the end customer, irrespective of
which partner is associated with the transaction. As an example, a channel manager is assigned to cover all the indirect opportunities where the end customer is located in California. You define territories for this coverage using sales account characteristics and you can include or exclude specific sales accounts.

• Coverage Defined by Partner Characteristics

In this coverage model, the jurisdiction of the channel manager is defined based on some characteristics of the partner, such as where the partner is located or the type of the partner (reseller, system integrator, distributor). As an example, a channel manager is assigned to cover all the indirect opportunities where the partner is located in California.

To define this territory, you designate the coverage model to be Partner Centric instead of Sales Account Centric. In the Partner Centric model, the regular coverage is defined using the following attributes of a partner organization:

• Primary geographical location of the partner
• Organization Type of the partner (private, public, government owned, nonprofit)
• Industries served by the partner (high tech, manufacturing, banking, pharmaceutical)
• Size of the partner
• Three auxiliary dimensions defined for the partner object that are based on the customer categories classification model

You can also use the Product and Sales Channel dimensions to match attributes from sales transactions (leads and opportunities).

• Coverage Defined by Manually Included Partners

In this coverage model, the jurisdiction of the channel manager is defined based on an explicit list of partners that are directly assigned to his territory. As an example, a channel manager is assigned to a partner named AA Solutions. This channel manager's territory should be assigned to all indirect opportunities where AA Solutions is the partner. Partners are defined in the Partner Center. You can select individual partners to include in the definition of a partner-centric territory. You can also select individual partners to exclude from the partner-centric territory coverage.

This jurisdiction can be additionally qualified by product and sales channel.

No Coverage

You can create a territory that has no coverage. The territory is defined by the coverages of its descendant territories. You can assign quota to the territory and it can participate in forecasting. The territory cannot be automatically assigned to sales accounts, leads, and opportunities, but you can see the assignments of its descendant territories. You can also assign the territory to an opportunity revenue item as an override.
**Dimension Parameters: Explained**

Use parameters to refine the definition of each dimension so it best fits business requirements.

Three dimensions use parameters:

- **Industry**
- **Time**
- **Product**

**Industry**

Use the parameter to set the number of levels in the industry hierarchy that display in the dimension member selection screen.

**Time**

Set the start of the time period used in calculating metrics using the Calendar Start parameter. Set the number of years prior to today’s date when the calendar starts for metrics.

**Product**

Use the parameter to set the number of levels in the product hierarchy that display in the dimension member selection screen.

**Populating Dimension Members: Explained**

Dimension members are populated and synchronized in Oracle Business Intelligence Suite Enterprise Edition Plus either through the data warehouse, or without the use of data warehouse. You must repopulate dimension members when source data changes, such as changes in the product catalog and the addition of new customers.

**Non-Data Warehouse Option**

When you do not use data warehouse, dimension and transaction data are populated directly from Fusion Applications into territory dimension members and the Oracle Essbase cube. The structure of the cube reflects the enabled dimensions in Territory Management and their members. The cube provides metrics information for defined territories.

This figure shows the population of the dimension members data and the Oracle Essbase cube using the Repository Project Design (RPD) view from Business Intelligence.
Data Warehouse Option

(On-Premise implementations only.) In the Data Warehouse option, the data warehouse Extract-Transform-Load (ETL) logic extracts transaction and dimension data from Oracle Fusion Applications into the data warehouse first. The data warehouse stores dimensions and metrics data. Metrics data is based on transaction information. Territory Management contains only a subset of the dimensions stored in data warehouse.

This figure shows the use of ETL to load data from Fusion Applications to the data warehouse, and RPD to provide data to the cube and to Territory Management. ETL also loads the settings for visible and invisible dimension members from Territory Management to the data warehouse.

Use ETL to load data to the data warehouse when:

- There are changes in the dimension members sources (Fusion Application), so that the new structure of the dimensions is reflected in the data warehouse and consequently in Territory Management.
• After changing visibility settings for dimension members.

Cube

Territory Management generates the cube based on the enabled dimensions and their members. In the case of the data warehouse option, Territory Management loads the cube with dimension members and metrics directly from the data warehouse. In the case of the non-data warehouse option, the application loads the cube from Fusion Applications. The cube provides metrics information for defined territories.

Sequence

There are several aspects to enabling and populating dimension members, including setting profile options for certain dimensions.

Following is the sequence for populating dimensions for use in defining territories:

1. Set up source data for the dimensions you plan to use. This includes:
   - Master geography and territory geography zone hierarchies
   - Customers with a sell-to address and Named Sales Account selected
   - Product catalog
   - Customer sizes lookup
   - Classification codes for the Organization Type classification category
   - Industry classification category and codes
   - Customer classification categories and codes for auxiliary dimensions
2. Change profile options for industry classification category or the classification category for auxiliary dimensions 1, 2, or 3.
3. If you are using data warehouse, then run ETL to populate the data warehouse with the dimension members and transactional data.
4. In Territory Management, identify the dimension members you want visible in selection lists for defining territories. Refresh the members before making visibility selections.
5. If you are using data warehouse, then run ETL to populate the data warehouse with visibility settings.
6. Use the stage environment in Territory Management to enable dimensions. Execute the Stage action that synchronizes the Territory Management stage environment with the data source. You can start defining territories using newly enabled and populated dimensions after you promote the stage environment to production.

Using Territory Dimensions: Examples

The sales administrator enables only the dimensions the organization requires for defining territories. The following examples illustrate the use of different
dimensions to assign sales accounts, leads, and opportunities to the correct salespeople using defined territories.

**Geography**

For most of your sales activities, you want to assign salespeople by city and postal code.

**Account**

You have a few key accounts that should belong to top salespeople. Use the account dimension to create territories for individual sales accounts.

**Account Type**

You want to assign major sales accounts to Named accounts territories. A named account territory can have child territories identified by other criteria, such as geography. You also have territories with the account type of Not Named that include no major named sales accounts in the hierarchy.

**Customer Size**

One product line is suitable only for organizations above a certain size. Use the customer size dimension to target only the larger customers for the product line.

**Industry**

You sell one type of service to telecommunications companies, another service to utilities, and a third service for insurance companies. You can create territories for each using the industry dimension.

**Product**

You sell a product line that requires salespeople to have a high degree of technical knowledge. Create separate territories for this product line.

**Sales Channel**

You delegate sales accounts that are small to partner sales organizations by geography.

**FAQs for Manage Territory Management Synchronization**

**What's an error correction proposal?**

A validation routine compares changes in the stage environment with active territories and identifies problems with active territories caused by the dimension members in the stage environment. Use the generated error correction proposal to correct active territories that require changes before the stage environment can move to production.

An Invalid icon appears next to every territory in the active territories list that the changes in the stage environment will make invalid. The error correction
proposal owner needs to add the invalid territories to the error correction proposal and change definitions to correspond with the dimension member changes in the stage environment. For example, delete a newly disabled dimension from the territory. When the stage environment is promoted to production, the validation process is run again and if all is valid, the territories in the error correction proposal get activated.

**What's the difference between staging an environment and automatically staging and promoting the environment?**

The Stage Only process runs checks for errors, and the administrator can then analyze the environment and make any corrections before promoting it to an active environment, or deleting the stage environment.

The stage process synchronizes the dimensions and metrics with the source and checks for any errors that occur if the current territory definitions were based on the stage data. If a change in enabled dimensions causes a currently active territory to become invalid, then the error must be corrected either by changing the enable selection or changing the territory definition before promoting the stage environment to production.

In a stage environment, the administrator changes dimension parameters and enables or disables dimensions and metrics, without affecting current territory management activities. The production environment provides enabled dimensions and metrics for ongoing territory definition activities.

Automatically staging and promoting the environment synchronizes the stage environment with the data source, runs validation checks, and if no errors, promotes (moves) the stage environment data to production.
Define Lead Management

How Lead Components Fit Together

A lead follows a path which ends either with converting the lead to an opportunity, or retiring the lead when no possibility exists of converting the lead to a sales opportunity. The lead lifecycle includes an automated process to first capture the leads, then prioritize the leads for sales engagement through a scoring and ranking process. Leads are then distributed to appropriate sales resources for further lead qualification, follow-up and conversion.

Leads Lifecycle

Leads are monitored, reassigned as appropriate and the lead quality is continuously reviewed and adjusted as the lead progresses through its lifecycle. Marketing and Sales departments both share the ownership of leads, where the focus on the leads shifts from Marketing to Sales and back to Marketing based on the lead status. The lead lifecycle is captured in the following topics:

- Lead Generation
- Lead Qualification
- Lead Distribution
- Lead Assessment
- Lead Conversion

Lead Generation

Leads are generated and captured from many different sources such as:

- Campaign responses
- Campaign stages handled by telemarketing
- Third-party lead sources
- Sales prediction application through the creation of new leads

Flexible lead import, customer and contact creation, and de-duplication ensure marketing lead generation efforts are optimized. For example, the lead import process checks whether leads represent new or existing customers. For new customers, data needs to be created for the lead. If the lead is an existing customer, part of the lead import process checks to ensure customer and lead information is not duplicated.
Lead Qualification

Marketing departments help with the lead qualification process to ensure that only qualified leads are handed over to sales. Leads are typically ranked as Hot, Warm, or Cool. Leads are further qualified by the use of company specific standard questions to score a lead. Lead scores are numeric values typically ranging from 1 to 100, where a high score represents high quality.

It is not good practice to let stale leads build up. Standardized criteria for lead qualification ensure that quality leads reach the salesperson and help maximize the conversion rate from leads to opportunities. For example, your organization has criteria and processes for ensuring that leads are either developed or retired within 30 days. When the lead age is greater than 30 days and the rank is A or B, Marketing reassigns the leads for follow-up by an internal telemarketing group. If the leads cannot be qualified or further developed to revenue opportunities, the rejected leads can be reassigned or can be retired manually.

Lead Distribution

As the qualification of leads progresses into real potential prospects, assignment manager uses expression-based rules to associate one or more internal salespersons with each lead. If the lead is associated with an existing Sales Account, then assignment manager uses territory definitions to associate (typically one) internal territory with each lead. The salesperson newly assigned to the lead may be related to the lead record directly through the lead team or indirectly through a territory associated with the lead. They can view and update those leads to which they are assigned in the lead work area and can claim ownership of the lead by using the Accept Lead action.

Other assigned resources can view and update the lead, but cannot make themselves the owner. As the lead is qualified further, for example, if a sales prospect changes to a sales account by adding an address, assignment manager is automatically invoked during the next automated assignment cycle. Depending on the assignment logic, the lead may be reassigned to a different territory or sales resource. If the assigned salesperson takes no action on a lead for several days, then the lead can be manually reassigned to another salesperson.

Lead Assessment

The salesperson must evaluate the quality of information they have received for the lead. They determine if the details are sufficient to reach out to the customer and assess whether a lead is worth pursuing with the help of preconfigured assessment templates. Assessment templates can further qualify the lead by:

- Reviewing the content shared with the customer during a campaign
- Framing the lead in the context of the campaign
- Ensuring the salesperson understands the information that has already been sent to the customer

Lead Assessment enables leads to be further assessed through predefined questions that help determine the likelihood of the lead being accepted by Sales. In this scenario, a salesperson named Mike begins asking the customer a series of questions created by Marketing and Sales to assess the quality of the lead. As each question is asked, Mike records the answer and the lead assessment tool
automatically factors the answer into the assessment score of the lead. At the end of the call, Mike notes that the assessment lead score is high. He requests the lead be assigned to the direct sales team for that customer. If the lead score was low, then Mike could retire the lead, or if the lead needed further qualifying, he could leave it in his list of leads for follow-up at a later date. If the lead is good, but the potential revenue opportunity is less than a predetermined monetary amount, for example, twenty-five thousand dollars, then Mike can convert the lead to an opportunity that he works himself.

**Lead Conversion**

A lead’s life cycle ends either when a lead is converted to a sales opportunity, or when the lead is retired. Conversion to an opportunity stage allows the salesperson to pursue the account in the sales cycle. After establishing that the lead has potential, the salesperson converts the lead to an opportunity. Contact is established and meetings and presentations are scheduled to move the opportunity along the sales pipeline. To track the progress, contact notes are captured as interactions and associated with the contact and opportunity.

As the lead progresses through its life cycle, decisions to retire the lead are based on the following.

- You cannot verify customer and lead details
- The customer is not interested in pursuing the lead any further

**Implementing Lead Management: Critical Choices**

This topic lists some of the considerations to take into account when planning your implementation of Oracle Fusion Lead Management. No setup tasks are mandatory for Lead Management. You can manage the necessary configuration, integration, and metadata settings through profile options and lookups to tailor lead management functionality to match your business requirements.

**Job Roles and Associated Duty Roles**

The Sales Lead Processing Duty gives access to all the underlying processing duties and processing tasks. The Sales Lead Qualification duty provides access to all underlying qualification duties and qualification tasks.

**Profile Option Decision Points**

Profile options are configurable options that affect application operations. The following table provides you with some decisions that you might need to make and the associated profile option that you access to make the appropriate change. If you want to change the default setup, decisions include:

<table>
<thead>
<tr>
<th>Decision Question</th>
<th>Profile Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which assignment rules do you want to use to assign individual resources to the lead sales team?</td>
<td>Manage Sales Lead Assignment Rules</td>
</tr>
<tr>
<td>Which assignment rules do you want to use to assign a territory team to a lead?</td>
<td>Assignment Rule for Territory-Based Lead Assignment</td>
</tr>
<tr>
<td></td>
<td>Rule for Rule-Based Lead Assignment</td>
</tr>
</tbody>
</table>
Which lead ranking rules do you want to use? | Assignment Rule for Ranking Leads
---|---
Which lead qualification rules do you want to use? | Assignment Rule for Qualifying Leads
Which leads scoring rules do you want to use? | Assignment Rule for Scoring Leads
Do you want to display the assessment tab in the Edit Lead page? | Lead Assessment Enabled
Which assessment template do you want to use for lead qualification? | Lead Assessment Template Default
| Advanced Lead Qualification Enabled
| Lead Qualification Template
How many days should you look back when querying leads in Search? | Lead Query Maximum Number of Days
| Lead Query Default Number of Days
| Lead Query Warning Threshold Number of Days

**Lookup Decision Points**

Lookups enable quick selection from drop-down menus. Oracle Lead Management lookups are incorporated into its application to speed the process of entering data into forms. You might want to change or add some of the values that are used in the lookup tables. Some of the values you can change include:

<table>
<thead>
<tr>
<th>Lookup</th>
<th>Description and Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Retire Reason</td>
<td>Possible reasons for retiring leads. Retired leads are considered closed leads. Values include: Duplicate lead or No purchase interest Lead</td>
</tr>
<tr>
<td>Reject Reason</td>
<td>Possible reasons specified for rejecting leads. Rejected leads can be reassigned or retired. Values include: Duplicate lead, Failed to reach contact, and Incorrect data</td>
</tr>
<tr>
<td>Lead Time Frame</td>
<td>Lead cycle duration that usually coincides with a typical sales cycle duration for products and services offered. Values include: 3 months, 6 months, 9 months, 12 months, 15 months, and 18 months</td>
</tr>
<tr>
<td>Lead Reassignment Reason</td>
<td>Possible reasons specified for reassigning leads. Values include: No activity, Other, and Workload</td>
</tr>
<tr>
<td>Lead Rank</td>
<td>Lead rank values used as a measure of lead quality and prioritization. Values include: Cool, Hot, and Warm</td>
</tr>
<tr>
<td>Lead Channel</td>
<td>Source channel responsible for lead generation. Values include: Direct mail, E-Mail, Fax, Phone, Sales visit, Web, Wireless message, Prediction, Model based prediction, and Rule based prediction</td>
</tr>
</tbody>
</table>
Configure Assignment Manager for Lead Processing

Assignment Object Components: How They Work Together

The work object, candidate object, and attributes are components that fit together to create assignment objects that are used in rule-based and territory-based assignment. Work objects are business objects that require assignment, such as leads and opportunities. Candidate objects are business objects, such as resources and territories, that are assigned to work objects.

When you create candidate objects, you can select attributes for them that are later used in rules or mappings. These candidate objects also become candidates that are available for association when you create work objects. When you create work objects, you can select attributes for them also, as well as associating one or more candidates.

![Assignment Objects and Mappings Diagram]

Work Objects

A work object is a business object that requires assignment such as a lead or an opportunity. Creating a work object involves entering its application
information, selecting its attributes to use during assignment, and associating one or more candidates.

**Candidate Objects**

A candidate object is a business object, such as a resource or a territory, that is associated with one or more work objects for eventual assignment. Creating a candidate object involves entering its application information and selecting its attributes to use in rules or mappings. A special type of candidate object is a classification object. This type of candidate object does not represent a business object that gets assigned to a work object. It is used only with classification rules and is used primarily to rank or qualify leads.

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**Note**

As candidate objects are created, they become available as candidates that can be associated with one or more work objects as part of the work object creation process.

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The administrator needs to define the association between the work object and candidate object. For example, the Lead work object may have an association with both the Territory candidate object and the Resource candidate object. This implies that Assignment Manager can be used to assign Territories and Resources to a lead.

In the related Candidates tab for the Revenue work object an administrator can define the association between the work object and candidate object. For example, the revenue work object may have an association with both the territory candidate object and the credit allocation template candidate object. This association indicates that Assignment Manager can be used to assign both territories and credit allocation templates to revenue lines.

**Related Candidates**

To relate a candidate object to a work object, use the following fields:

- **Assign Candidates**: Indicates that Assignment Manager performs the assignment. If not set, then Assignment Manager is used to find the matching candidates, which are then passed to the calling application to update the work object.

- **Custom Logic**: Indicates that Assignment Manager passes the result of the assignment matching to the callback function of the work object. For example, Opportunity Management uses custom logic that updates the sales team with the territory members. It stamps the territories onto the revenue line and adds the territory team members (resources) to the opportunity sales team.

- **Merge Assignment Candidates**: Controls whether the matching assignment candidates identified from processing each set of mappings should be merged. This is used to drive the merging of matching candidates when multiple mapping sets are used in assignment processing. If the check box is checked, then the candidates are merged. The default is unchecked.

- **Keep Manual Candidates**: Indicates that manually assigned candidates are retained during assignment processing. This option can be used to
• Prevent the removal of manually added candidates during reassignment. Sales Account and Opportunity Management have implemented their own lock assignment features.

• Replace Candidates: Determines whether unqualified candidates are removed from a team when an assignment runs. For example, the first time that Assignment Manager runs, a territory is assigned to a sales lead. When the reassignment process runs following a territory proposal activation, the territory is no longer valid. If Replace Candidates is set, then the territory is removed from the sales lead.

• Candidate Exclusion: Sales leads have a related object, which stores the excluded candidates for each sales lead. Assignment Manager accesses this information, which prevents assignment of the work object to an excluded candidate.

• Parent Attribute: Used by territory based assignment to determine the hierarchy of matching territories, eliminate all parent territories, and only return and assign the matching leaf node Territories. If this attribute is not used, then all matching territories (parent or leaf) are returned and assigned.

• Candidate Differentiation Attribute: Stores the attribute on the candidate object that is used for discriminating matching candidates. For example, in Revenue line assignment, this attribute enables matching leaf territories of many territory types (such as Prime, Channel Sales Manager, and so on) to be assigned. The Candidate Discriminator Attribute is only relevant for territory-based assignment and can only be selected if a parent attribute has been selected.

• Coverage Attribute: The territory attribute used to denote whether the candidate in the matching candidate list has a regular, included, or excluded coverage.

• Maximum Number of Candidates: The maximum number of candidates returned for the work object and candidate object combination. The default value is 100.

• Manual Attributes: The attribute that identifies a candidate was manually assigned, rather than by the system. This attribute is used with the Keep Manual Candidates attribute.

• Keep Manual Candidates: A flag to retain manually assigned candidates when assigning or re-assigning a work object. This option is only relevant if the manual attribute is defined and the Assigned Candidates option is checked.

Replace Candidates: Indicates whether non matching candidates will be removed when re-assigning a work object. In an example scenario, in the first time assignment runs, territory A is assigned to a sales lead and there is a change within the territory definition. When the sales lead is reassigned, territory A is no longer valid. If this option was selected, then territory A is removed from the sales lead.

• Score Attribute: The score attribute in which the calculated score is stored.

• System Attribute: The attribute that identifies a candidate was assigned by the system, rather than manually.
Selecting Attributes

Attributes are elements in the view object defined for an assignment object. For each assignment object, you can select one or more attributes that you want to use when configuring assignment rules or mappings. For example, for a work object like sales account, you might choose the attributes of Named Account Flag, Customer Size, and Organization Type. When you configure assignment mappings for the sales account work object, your chosen attributes are available. You could create a mapping for Sales Account using the Named Account Flag attribute.

When selecting attributes for a candidate object, you will not only select the attributes you want to use when configuring assignment rules and mappings that involve that candidate object, but you also want to select the attributes for that candidate object that you want to appear in the screen that displays recommended candidates after assignment manager is run. For example, if a candidate object is resource (sales representative), and you want to show sales representatives' first names, last names, and phone numbers when they are recommended during assignment processing, you need to select the attributes for the resource candidate object that correspond to first name, last name, and phone number, and specify the order in which these attributes appear in the recommended candidates screen.

Note

This feature is not used by any CRM applications at this time.

Adding an Assignment Object

The Manage Assignment Objects pages enable you to define and edit the Work and Candidate objects as well as define any territory-based mappings. The figure above shows the relationship between the work and candidate objects and the mapping of the matching candidates to work objects.

When you add or edit a work or candidate object there are several key pieces of information that are required in the definition:

- Name: a unique name for the object with an optional description.
- Code: a unique code used in processing the object.
- Work/Candidate Object check boxes: indicates if the object is a work object, candidate object or both.
- Application Module: an Oracle Application Development Framework (ADF) business component that encapsulates the business service methods and UI-aware data model for a logical unit of work related to an end-user task. Enter the fully qualified definition name of the consumer application, Application Module. Valid for top level Work and Candidate objects. Child objects automatically inherit this value from its parent.
- Application Module configuration: Valid for Top Level Work and Candidate objects except Classification Candidate objects. Child objects will automatically inherit this value from its parent.
• View Object Instance: used to define the data model of a view object component when designing an application module, for example, Opportunity. Valid for all levels of Work and Candidate objects except Classification Candidate objects.

• View Criteria may be defined to filter the information for the rows of a view object collection. Valid for top level Work and Candidate objects except Classification Candidate objects.

• Primary Key Attribute 1: First or only attribute that makes up the object primary key. Valid for top level Work and Candidate objects except Classification Candidate objects.

• Refresh Interval: the number of minutes between refreshes of candidate object data. The default setting is 0 minutes. Valid for top level Candidate objects except Classification Candidate objects.

• Initial Caches: The initial size of the cache when processing an object. This value will be used the first time the engine processes objects or following a server bounce. The default value is 2, and the maximum value is 20. Only valid for top level Candidate objects except Classification Candidate objects. All Work Objects that are used for scoring, Lead, for example, use the Product Level (MOW_SCORING_INITIAL_CACHES) Initial caches for scoring rules profile option value.

• Maximum Caches: The maximum size of the pool/cache when processing the object. The default value is 5, and the maximum value is 25. Only valid for top level Candidate objects.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Work Objects that are used for scoring, Lead for example, use the Product Level (MOW_SCORING_MAX_CACHES) Maximum caches for scoring rules profile option value.</td>
</tr>
</tbody>
</table>

• Score Attribute: The attribute on the object that stores the total calculated score after an assignment request has been processed. Valid for top level Work objects only.

• Assignment Date Attribute: The attribute on the object that stores the assignment date after an assignment request has been processed. Valid for top level Work objects.

• Exclude Assignment Attribute: The attribute on the object that stores the setting for excluding a work object from assignment. Valid for top level Work objects.

**Adding Assignment Object Attributes**

Assignment Manager allows users to specify a set of attributes from the assignment object VO to be used during the assignment evaluation. The assignment engine will load these Assignment Object Attributes for each assignment object VO row, in addition to any primary key or assignment attributes. This is designed to improve performance by not loading those attributes not used for the assignment evaluation.
Assignment Object Attributes should be defined for each work object and any child objects as well as each candidate object to be used by the Assignment Engine.

- View Object Attribute: Name of each attribute in the view object defined for the assignment object. Assignment Rules or Mappings can be configured using these attributes. For Candidates Objects, the attributes that appear in the interactive assignment UI should also be selected.

- Candidate Information Sequence: The sequence that this attribute is displayed in the Interactive Assignment UI.

**Setting Up Assignment Mappings**

Assignment mappings drive territory-based assignments. These mappings identify the dimensions, attributes, and territory filtering used in territory-based assignment processing. Dimension mappings and some attribute mappings have a sequence which controls the order in which these mappings are used during territory matching. Mappings that do not have a sequence are used together at the end of the matching process. A default set of mappings is seeded. This seeding assumes that opportunities, leads, and sales accounts use the same territory hierarchy.

Assignment Manager has an indicator in the related Candidates region to control whether to merge the matching assignment candidates identified from processing each set of mappings. This indicator is used to drive the merging of matching candidates when multiple mapping sets are used in assignment processing. If the box is checked, then the candidates are merged. The default is unchecked.

You can use the following assignment mappings:

- Attribute Mapping: An example is assigning territories to a sales lead where the territory partner program ID is the same as the sales lead partner program ID. In this case, the territory is matched when the territory program ID is equal to the sales lead attribute program ID.

- Dimension Mapping: An example is assigning territories to opportunity revenue lines based on the product associated with the revenue line. In this case, the product dimension is selected as the mapping type. The candidate object low attribute and high attribute correspond to the names of the low sequence and high sequence attributes for product on the territory. The work object low attribute and high attribute correspond to the names of the low sequence and high sequence attributes for product on the revenue line.

- Mapping using alternative attributes: Using the same scenario, if a revenue line does not have a product assigned to it, but has a product group assigned, add the low sequence and high sequence attributes for product group are entered for the work object alternate low and high attributes.

- Mapping using default values: Using the same scenario, if the low sequence and high sequence attributes for product on a specific revenue line do not contain values, then the low and high default values for the product attribute for all revenue lines are used.
• Literal Mapping: A way of filtering the matched territories based on specific values of a territory attribute. For example, by only matching with territories that have a sales account centric coverage model. For example, territory coverage model equals SALES_ACCOUNT_CENTRIC.

Lead Ownership and Sales Team Resources: Explained

The market is typically organized into territories that comprise customers and prospects. Marketing is closely aligned with sales, and marketing activities are launched to generate leads and maintain the strength of the sales pipeline.

Resources who access leads have different roles as follows:

• Operations support for an automated process to capture leads, prioritize leads for sales engagement, and distribute the leads to appropriate sales or territory team resources.

• Marketing and the lead qualifier role involves lead monitoring, lead reassignment, and continuous review and adjustment of lead quality.

• Sales and territory teams enable lead qualification, perform follow-up lead activities, and convert leads to opportunities.

This topic explains:

• Lead, Sales, and Territory Resources

• Assignment of Leads to Marketing and Sales Resources

• Sales Resource Role

• Resource Privileges and Access Levels

Lead, Sales, and Territory Resources

Sales resources are organized into flexible teams and are associated with the sales territories. These sales territories are then assigned to customers, leads, and opportunities to carry out the sales process. The lead follow-up process includes a lead team comprised of individual sales resources who are predominantly active during the lead qualification stage. A lead is then assigned to the appropriate sales team, and a territory team is created for the lead. All sales resources who are assigned to the territory team can view and follow up the lead.

Assignment of Leads to Marketing and Sales Resources

Qualified leads are assigned to a sales team based on sales territories. Unqualified leads are assigned to individual lead qualifiers either manually or based on rules defined in Assignment Manager.

Sales Resource Role

The sales resource performs the following activities:

• Review quality leads which are augmented with sales collateral, marketing content, customer contact interactions, and references.
• Qualify and assess the lead quality further with the help of customized assessment templates.

• Use the resource picker to manually select a resource to add to the team.

  Include a description to indicate what role the resource has on the sales team. Many sales team members can access each lead, and each team member is identified as either an internal (sales force), or an external (channel partner sales force) resource. Each sales team member can be associated with a specific resource role to indicate what capacity the member has on the lead.

• Add additional contacts and products to the lead as the lead moves further down the sales cycle.

**Resource Privileges and Access Levels**

Leads have three levels of access as follows:

<table>
<thead>
<tr>
<th>Access</th>
<th>Privilege</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>Read and update the lead and all child objects of the lead. Full access level allows you to update the sales lead team by adding or removing individual resources, or by updating the access level for any member.</td>
</tr>
<tr>
<td>View Only</td>
<td>View the lead and add lead notes. View the sales account associated with the lead, but no other leads or opportunities associated with the sales account. The View Only privilege also allows you to view most of the lead tabs.</td>
</tr>
<tr>
<td>Edit</td>
<td>Update all data on the lead except for Lead Team membership data and Lead Owner data.</td>
</tr>
</tbody>
</table>

When the lead does not have any owner, you must Accept the lead which makes you the lead owner. Only the lead owner and the management chain of the lead owner can change the lead owner.

Territory team members inherit the access level of the territory. All members of the sales territories assigned to the lead have full access to the lead. Owners of ancestor territories of all sales territories assigned the lead also have full access to the lead.

**Sales Team Examples**

A lead sales team comprises assigned territories and individual team members. The following examples illustrate some of the features available for the lead sales team:

• Automate assignment of territories to lead territory team

• Automate assignment of individual salespersons to sales team

• Add ad hoc members to sales team
• Update access rights based on the resource
• Change the lead owner

Automate assignment of territories to lead territory team

A lead exists with XYZ Company to purchase 50 large wind generator units in several Western Region states. To ensure that Western Region salespersons get assigned to the lead, the administrator has set up Assignment Manager to automatically add the Western Region territory to the lead territory team.

Sales departments arrange the sales force based on sales territories. Sales resources are organized into flexible teams and are associated with the sales territories. These sales territories are then assigned to customers, leads, and opportunities to carry out the sales process. A territory is the range of responsibility of salespersons over a set of sales accounts. Territories are assigned to sales accounts when the sales accounts are created. The lead sales team comprises the assigned territories and special resources who are manually assigned to the team on an ad hoc basis.

Automate assignment of individual salespersons to sales team

The lead sales team for XYX company want to add a support person to the lead. Typically, support people are not part of any sales territory. There is a rule set group which assigns support team members as individual resources based on rules which match the lead product with the specific support team members.

Add ad hoc members to sales team

Generally, sales team resources are automatically assigned to leads based on configured assignment rules. The following scenarios provide examples for when you may want to manually add additional team members to assist with the lead.

The lead owner, who has full access to the XYZ lead, wants to add one of his company’s contractual experts to his team to help pursue the lead. The lead owner manually invokes a resource picker and selects the ad hoc resource that he wants to add to his team.

When pursuing a lead for an insurance policy, the customer contact requests a unique and complex combination of policy components that require an expert in the company to review. The lead owner adds the expert resource to the lead with full access so they can update the lead with valid combinations of products and services, and, if required, add more team members to the team.

Finally, a salesperson is pursuing a lead that requires the export of products outside the country. The salesperson wants to ensure there are no legal issues with exporting the products and adds a member of their company’s legal counsel to the lead to review the details before contacting the customer again.

Update access rights based on the resource

When a resource is initially added to the lead sales team through rules-based assignment, a profile option setting determines the member’s default access level. Resources in the management hierarchy of a newly added team member have the same level of access to the sales leads as the team member.
All members of the sales territories assigned to the lead have full access to the lead. Owners of ancestor territories of all sales territories assigned the lead also have full access to the lead.

**Change the lead owner**

Only the lead owner or the resources in the management hierarchy of the lead owner can change the lead owner.

**Defining Automatic Assignment of Lead Team Resources: Example**

Using a concurrent program, administrators can set up assignment manager to automatically assign lead team members and appropriate sales territories to leads. The concurrent program accepts criteria to determine the batch of leads to be assigned. During the rule-based assignment phase of the batch process, matching candidates are automatically added to the lead team. During the territory-based assignment phase of the batch process, territories are automatically added to the lead territory team.

**Scenario**

The Automotive sector uses geography data and overall lead quality to periodically assign leads to automotive dealers. Leads can be automatically scored and ranked before being assigned a resource. Leads can be automatically assigned through Assignment Manager by associating assignment criteria to assignment rules. Leads can be assigned based on Lead Source, Geography, Lead Score, Named Accounts, (such as the top 20), Industry, and Product. For cases where partners need to engage with customers, Assignment Manager can automatically assign partner leads to internal channel managers to ensure a timely sales follow up.

**Manual Setup Assignment Manager Tasks**

The following setup tasks are performed manually through the Assignment Manager user interface:

- Define lead distribution rules
- Define partner matching rules
- Define what makes a quality lead for sales follow up
- Setup lead qualification rules
- Setup lead classification rules to assign leads to specific sales channel
- Setup lead routing rules to route leads to sales resources in a selected sales channel
- Setup lead distribution rules to assign leads to a specific salesperson or partner sales territories

**Analysis**

If the lead needs rule-based assignment, then rule sets are used. If the lead needs territory-based assignment only, then rule sets are not used. During lead import,
either ranking or scoring is used as the default qualification criteria. However, lead scoring can be followed by lead ranking where score is used to determine lead rank, and both Lead Score and Lead Rank can also be used as criteria for lead assignment.

Provided that the following tasks are set to occur one after another by scheduling in sequence, then, when invoked in batch mode, Assignment Manager will automatically:

- Assign leads to sales channel
- Route leads to sales organizations and sales territories
- Assign leads to individual salespersons or partners

You can also manually assign leads to specific internal or external resources. The lead processing activity user interface supports the selection of the type of job, selection of rule set, filtering criteria for selecting leads, and scheduling options.

**Territory Lead Assignment: Examples**

Leads are assigned to the appropriate territories based on matching lead attributes to territory dimensions.

A territory is the jurisdiction of responsibility of a sales resource over a set of sales accounts. Use territory-based assignment to assign sales territories to leads.

**Assign territories to lead territory team**

Assignment Manager can be set up to automatically assign sales territories to the lead using territories defined in Territory Manager. For example, a salesperson navigates to the leads list and opens the newly created lead. Using the Reassign action, the salesperson invokes Assignment Manager and selects an option to run automatic assignment immediately to reassign the lead to the appropriate territories.

**Territory-based assignment mapping**

Territory-based assignment mappings are predetermined and are available as part of the Lead Management functionality. Predefined mapping are leveraged for matching the correct territories with each lead. For example, you can choose to map the location attribute on the lead to the geography attribute on the territory. Any territories where the geography value matches the location of the lead is matched and assigned the lead.

**Analysis**

Ensure you have defined your territory boundary based on dimensions. There is only one set of mappings for a work object and candidate object combination. The mappings for various assignment scenarios (such as assignment of a territory to a lead) must be setup through a mapping that assigns appropriate sales territories to a lead territory team. If the lead needs rule-based assignment, then rule sets are used. If the lead needs territory assignment only, then the rules may not need to be used.
You can enable only the dimensions that your organization requires for defining territories. The following examples illustrate different dimensions used to assign sales leads to the correct sales territories.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>For most of your sales activities, you want to assign salespeople by city and postal code.</td>
</tr>
<tr>
<td>Account</td>
<td>You have a few key accounts that should belong to top salespeople. Use the account dimension to create territories for individual sales accounts.</td>
</tr>
<tr>
<td>Customer Size</td>
<td>One product line is suitable only for organizations above a certain size, and you have a few skilled salespeople for that product line. Use the customer size dimension to assign skilled salespeople to the larger customers for the product line.</td>
</tr>
<tr>
<td>Industry</td>
<td>You sell one type of service to telecommunications companies, another service to utilities, and a third service for insurance companies. You can create territories for each using the industry dimension.</td>
</tr>
<tr>
<td>Product</td>
<td>You sell a product line that requires salespeople to have a high degree of technical knowledge. Create separate territories for this product line.</td>
</tr>
<tr>
<td>Sales Channel</td>
<td>Your sales department prefers to engage partners as indirect sales channel, and telesales functions in addition to the direct sales force. You can create territories for these different sales channels such as telesales, direct, and indirect sales channels.</td>
</tr>
</tbody>
</table>

**Lead Scoring: Example**

A lead score is used only when the lead is easily quantified. The score may be used to calculate the lead rank. You can schedule when and how often to process lead scoring through Assignment Manager.

**How Lead Score is Determined**

Lead scoring capability requires the rules engine to determine a numerical score based on the value of the lead attribute participating in the rule. For example, consider the following rule.

If a lead contact is a high level Executive, then add a score of 100. If the lead contact is an Operations Manager, then add a score of 50.

When this rule evaluates, it determines the score of the lead based on job title of the lead contact. Once the rules engine evaluates all such rules, the end result of the scoring process is the aggregate score, which is then recorded in the Lead Score attribute.

**Data Points for Lead Scoring**

The following data points form part of the overall score evaluation:
• All data included on the lead and Primary product
• Lead source data such as campaign attributes
• All customer profile data including industry
• All contact profile data

Lead Ranking: Explained

During lead management setup, you can predefine criteria to rank leads and automate the assignment of leads to the appropriate resource in your organization.

You can define lead rank to categorize leads into buckets such as Hot, Warm, or Cool.

The following data points are available to help evaluate lead ranking rules:

• All data included on the lead and lead primary product data
• All customer profile data including industry and customer size classifications
• All contact profile data
• All lead qualification data

Although lead rank and lead score are not the same, they serve a very similar purpose. Score is often used only when the lead is easily quantified, and then may be used to calculate the lead rank.

Setting Up Lead Ranking

The following summarizes the lead ranking process for predefined lead work objects, rank candidates and associations:

• Select predefined lead work object in Assignment Manager.
• Select predefined ranking candidate object in Assignment Manager.
• Associate ranking candidate objects to lead work object.

Note

There is no seeded mapping for the rank candidate object in the Assignment Objects. Mapping is only for territory-based assignment.

• Use the predefined objects during the creation of assignment rules (rule-based assignment).
• Assign rules to determine the appropriate classification of a work object that will provide a rank value for the lead.

Creating Ranking Rules

Create a rule set with a rule set type of Classification Rule. Set the work object as lead and the candidate object as lead rank. Create a rule with conditions that
match the attribute settings you want a lead to have in order to give it a rank value. For example, you might choose the "Decision Maker Identified" attribute name and then select the equal (=) operator. Finally, enter the value of True. Create your remaining conditions, and then enter the action for your rule, such as "Return the candidate value as Hot".

Calculating Lead Rank Based On Score

You can schedule when and how often to process lead ranking where the lead rank value or score is calculated and displayed on screen. Ranking rules, used by Assignment manager, determine what rank to assign to a lead. You can also create ranking rules that use the lead score as the criteria to name each range of scores with a specific rank. For example, if lead score is between a value range of 0 and 39, create a rule to rank the lead as low priority. If the lead score is between a value of 40 and a value of 60, then you might want to create a ranking rule that assigns a medium rank to the lead. Assignment Manager passes the rank value to the Lead Management application and is presented in the user interface as a list. You can choose to override the value by select a different predefined rank code or value from the list. You can also choose the Rank option from the Actions menu to automatically assign a rank for your selected lead.

Lead Ranking: Examples

You can define lead rank to categorize leads into buckets such as Hot, Warm, or Cool leads. Such categorization of leads enables a salesperson to quickly prioritize leads for follow-up activities.

Creating a Lead Rank Rule

Your organization wants to assign a rank of Hot to those leads that have a set time frame and a decision maker identified. Assignment Manager for leads has predefined the lead work object and lead candidate object and you will set up an assignment rule to determine the appropriate classification to apply a rank to all leads for your organization.

1. From the Manage Sales Lead Assignment Rules page, create a new rule set.
2. Select the classification rule type, Sales Lead work object, and Lead Rank as the candidate object.
3. From the Associated Rule Set Groups tab, create a rule set group and name it Ranking. You can search and select another rule set group (if one exists), to associate to the classification rule type.
4. Set the conditions for each rule that the rules engine checks during assignment processing. For example, enter the following rule conditions:
   - Object: Sales Lead Work Object
   - Attribute: Time Frame
   - Operator: Equals
   - Value: Three months
5. Click Add Row icon in Conditions and enter the following details:
   - Object: Sales Lead Work Object
   - Attribute: Decision Maker Identified
   - Operator: Equals
   - Value: True
   - Action: Return the candidate value as Hot
6. Click Save and Close.

Assignment Manager will:
   - Find the matching leads
   - Execute the rules
   - Assign the rank value
   - Pass the rank value onto the lead

Lead Status: How it Automatically Gets Set

Lead quality is assessed as soon as a lead is generated. Lead quality of a newly created lead is mainly determined based on the characteristics of the customer contact on the lead, the type of response which caused the lead to get generated, and the nature of the campaign. Lead quality is further assessed based on the added qualification data such as customer need, urgency or time frame for the project, and whether the customer has set aside a budget for this product.

Settings That Affect Lead Qualification Status

Leads can get their qualification status from:
   - Assignment Manager rules
     Rules-based leads qualification process helps standardize the lead qualification process. Based on the positive results to conditional rules, the value of the Lead Status attribute is set to Qualified. For example, a rule can be defined to update the lead as qualified if the customer’s budget status is approved, the project time frame is three months, a decision maker is identified, and the response type is that they attended an event.
   - A specified value in the campaign lead generation stage
     A multistage campaign design can include lead generation stages. Lead options include the ability to designate a value for the qualification status. When the campaign is executed, the leads will be created with the value provided.
   - An imported value
Leads imported through file import can include a designated lead qualification status.

**How Lead Qualification Status Is Calculated**

In some companies, the lead qualification data gathered by lead qualifiers is considered in the scheduled automated process that calculates lead score or lead rank as well as assigning sales team territories. For such companies, a simple rule to move leads to a Qualified status when the lead score reaches a specific threshold is sufficient.

**Configuring Assignment Manager: Critical Choices**

Assignment is the process for selecting a candidate as an object and executing the association to a work object. Assignment consists of two phases. The first phase is the matching phase, where matching rules or mappings are evaluated to find the right assignees from a list of possible candidates. The second phase is the disposition phase, where the disposition, or assignment, of matching candidates is handled. Assignment Manager is the tool used to establish the business objects that require assignment, and to create the rules and mappings that dictate the selection and assignment of resources and territories. Candidates are potential assignees for a work object. A work object is a representation of an application business object inside Assignment Manager. A work object captures the attributes of a business object and associated child objects to be used for matching purpose. To best plan the configuration of Assignment Manager, you should consider the following points:

- Business objects
- Attributes
- Resources and territories
- Assignment disposition
- Mappings sets and mappings
- Rules

**Business Objects**

A business object is a data entity or a collection of data treated as a unit, such as a sales account, an opportunity, or a lead. Any business object that requires the assignment to act upon it is considered a work object by Assignment Manager. The work object is a representation of the business object, and mappings and rules are developed to ensure timely and accurate assignment of candidates (for example, territories or resources) to those work objects. When configuring Assignment Manager, carefully consider which of your business objects require assignment, and create work objects only for those that do.

A set of business or assignment objects is seeded for the assignment of territories or resources to sales accounts, opportunities, and leads.
Assignment Disposition

After you determine the business objects (work objects) that require assignment and the candidate objects that you will assign to them, you must decide how the matching candidate assignment disposition will be carried out. Consider these questions:

- Do you want to assign a single resource or multiple resources?
- Do you want to automatically assign matching candidates or run custom logic against matching candidates?
- Do you want to record the matching candidate score on the work object?
- Do you want to retain manually assigned candidates when assignments are processed?
- Do you want to replace disqualified candidates when assignments are processed?

Attributes

To ensure that candidates are properly assigned to work objects, create mappings and rules. These mappings and rules employ attributes to determine the best assignments. As you set up work objects and candidate objects in Assignment Manager, also select the attributes of those objects that you want to use in your mappings and rules. For example, you might want to assign a resource such as a specific sales representative to a business object, such as opportunity, based on the risk level of the opportunity. In this case, when you create the opportunity work object and the sales representative candidate object, you will select the attribute of opportunity that corresponds with risk level, and the attribute of the sales representative that corresponds with skill name or e-mail address. Selecting these attributes makes them available for mappings and for conditions on your rules, so ensure that you select the attributes that reflect the criteria that you want to use for matching candidate objects to work objects.

Mappings Sets and Mappings

Assignment mapping sets and their related mappings drive territory-based assignment. The mapping sets determine which mappings are used and the sequence mapping sets are used in territory-based assignment. The mappings identify the dimensions, attributes, and territory filtering used in the assignment processing. Default mapping sets and their related mappings are seeded. This seeding assumes that opportunities, leads, and sales accounts use the same territory hierarchy.

Create the mappings using the work objects, candidate objects, and attributes that you already established. When designing your mappings, carefully consider the dimensions and attributes you use in your territory structure and how you want to match these territory candidates to work objects. Also consider the shape of the information used in the territory structure; this may affect the sequence of each mapping. The sequence of the dimension mappings used in territory matching can affect performance. The most selective dimension mapping should
Rules

Rules are defined for the execution of rule-based assignment. Rules are designed to return candidates based on whether these candidates match a set of criteria, are within a defined scoring range, or are of a specific classification.

Create the rules using the work objects, candidate objects, and attributes that you already established. When designing your rules, carefully consider how you want to match candidates to work objects. For example, would you want resources assigned based on their geographic location, their product knowledge, on the status or score of an object, or a combination of any of these attributes? Do you want to match candidates only, or would you like to match candidates and score them? In a multiple-candidate scenario, do you want to assign all matching candidates or only those who achieve higher than a specific score? Consider these questions before creating rules.

Manage Sales Lead Assignment Objects

Lead Assignment Objects: Explained

Fusion Lead Management provides preconfigured work objects, candidate objects, and attributes to automate the process of assigning leads to salespersons, partners, sales resources, and sales territories through assignment manager.

Lead assignment selects a candidate for a work object and processes the association. You create rules with conditions that need to be met in order to make the appropriate candidate assignments. This is called rule-based assignment. Alternatively, you create attribute to attribute mappings between a work object and a candidate object in order to make the appropriate territory candidate assignment and this process is called territory-based assignment.

This topic outlines the following:

- Lead Work Objects
- Candidate Objects Available for Lead Assignment
- Lead Assignment Attributes
- Score Attribute

Lead Work Objects

The lead work object is a representation of the lead business object. Creating a lead work object involves entering application information, selecting attributes to use during assignment, and associating one or more candidates. The Lead Management application has preconfigured the following lead work objects to ensure timely and accurate assignment of territories or resources to leads:
### Lead Work Object Name | Represents ...
---|---
Sales Lead | A sales lead.
Sales Lead Partner | A partner associated with the lead or associated with the marketing campaign that generated the lead.
Sales Lead Partner Type | The primary sales channel associated with the lead or associated with the marketing campaign that generated the lead.

When implementing the Lead Management application, consider which leads require resource assignment. For example, you might decide that you do not want to assign resources to leads that are less than 100 dollars in value, but want to assign resources to leads that have a deal size of 100 dollars or more.

### Candidate Objects Available for Lead Assignment

A candidate object is a business object such as a resource or a territory that is associated with one or more work objects for eventual assignment. As candidate objects are created, they become available as candidates that can be associated with one or more work objects as part of the work object creation process. Lead candidate objects are resources, such as a salesperson, or might be a virtual entity such as a territory, that are assigned to a lead work object. The Lead Management application has preconfigured the following lead candidate objects to ensure timely and accurate assignment of territories or resources to leads:

| Lead Candidate Object Name | Represents ...
---|---
Sales Lead Territory | A territory evaluated for assignment to the sales lead team.
Sales Lead Resource | An individual resource evaluated for assignment to the sales lead team.
Sales Lead Rank | The rank value to assign to the sales lead based on rules.
Sales Lead Qualification Status | The qualification status value to assign to the sales lead based on rules.

Creating a candidate object involves entering application information and selecting attributes to use in rules or mappings. Consider the following questions when you enter candidate details and disposition information for your lead work object:

- Assign a single resource or multiple resources?
- Automatically assign matching candidates or run custom logic against matching candidates?
- Record matching candidate score on the work object?
- Replace disqualified candidates when assignments are processed?

### Note

A special type of candidate object is a classification object. This type of candidate object does not represent a business object that gets assigned to a work object.
It is used only with classification rules and is used primarily to rank or qualify leads.

You can choose to select multiple candidates and exclude other candidates when setting up assignment manager for leads. If you want to assign more than one candidate, select the combined work object and candidate object view instance that captures information for the candidate.

For mapping-based lead assignments, you can select from the following generation types:

<table>
<thead>
<tr>
<th>Generation Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension</strong></td>
<td>Create dimension mappings between a work object and a candidate object in order to make the appropriate candidate assignment. In this scenario, a mapping is created between an attribute on the lead work object and the territory candidate object. The mapping is set up to map the Primary Product attribute on the lead to the Product attribute on the territory. Any territories where the Product Dimension value matches the Primary Product on the lead will be matched and lead is assigned to that territory.</td>
</tr>
<tr>
<td><strong>Literal</strong></td>
<td>Create literal mappings on a candidate object in order to make the appropriate candidate assignment. In this scenario, a literal mapping is created on the territory candidate object to exclude territories that are not Active. As a result, any territories which are not Active will not be matched.</td>
</tr>
<tr>
<td><strong>Attribute</strong></td>
<td>Create attribute to attribute mappings between a work object and a candidate object in order to make the appropriate candidate assignment. In this scenario, a mapping is created between the lead work object and the territory candidate. The mapping is set up to map the Partner attribute on the lead to the Partner attribute on the territory. Any territories where the Partner value matches with the Partner on the lead will be matched and lead is assigned to that territory.</td>
</tr>
</tbody>
</table>

**Lead Assignment Attributes**

Attributes are elements in the view object defined for an assignment object. To ensure that resources are properly assigned to business objects, you create mappings and rules. These mappings and rules employ attributes to determine the best assignments. As you set up your lead work objects and lead candidate objects in Assignment Manager, choose from the preconfigured attributes for those lead work and candidate objects that you want to use in your mappings and rules.

For example, you might want to assign a candidate such as a salesperson to a lead work object based on the geographical location of the salesperson. In this case, you select the attributes of the lead work object and the salesperson candidate object that correspond with geographical location. Selecting these attributes makes them available for mappings and for conditions on your rules,
so ensure that you select the attributes that reflect the criteria you want to use for matching resources to business objects.

The following table shows the preconfigured lead candidate objects and associated lead attributes excluding ID attributes.

<table>
<thead>
<tr>
<th>Lead Candidate Objects</th>
<th>Associated Lead Attributes (ID’s excluded)</th>
<th>Updated Attribute</th>
</tr>
</thead>
</table>
| Territory              | • ChannelType  
                          • ClassCode  
                          • DecisionMakerIdentified  
                          • OrganisationSize  
                          • PartnerChannel |                  |
| Resource               | • PartnerType  
                          • Rank  
                          • Score  
                          • SourceCode  
                          • Status  
                          • StatusCd  
                          • Timeframe  
                          • ToReassignFlg |                  |
| Lead Qualification     | • PartnerType  
                          • Rank  
                          • Score  
                          • SourceCode  
                          • Status  
                          • StatusCd  
                          • Timeframe | StatusCd |

**Score Attribute**

Score attribute is used to store the calculated score after a scoring request (based on Assignment Manager) has been processed.

Lead scoring associates a value to each lead based on weighted criteria and scoring attributes appropriate to your organization. It might be as simple as scoring based upon a certain lead attribute such as deal size, or it could be a combination such as, time frame, deal size and budget status. It can also depend on whether data is entered for some attributes or not. For example, at the initial stages, a lead that has a contact number may get 100 points, then if time frame is entered, it may get 200 more points. As a salesperson works on the lead and enters additional data for the lead, the score is automatically recalculated.
to reflect the latest truth. By giving a numerical score value for each lead, a salesperson can better prioritize their lead lists and focus on those leads with the greatest score value.

Creating Assignment Mappings: Examples

For territory-based assignment, you create work-object-to-candidate-object mappings during assignment object creation. These mappings are used to make candidate assignments. You can create multiple types of mappings for assignments. The following scenarios illustrate these different mappings:

- Creating an attribute mapping
- Creating a dimension mapping
- Creating a literal mapping

Creating an Attribute Mapping

You want to assign territories to a sales lead when the territory program ID is the same as the sales lead program ID. Create a mapping where the work object is sales lead and the candidate object is sales lead territory. Select the territory when the attribute territory program ID is equal to the sales lead attribute program ID.

Another example would be if you want to assign territories to a sales lead based when the territory manual account inclusion or exclusion is the same as the account on the sales lead. Create a mapping where the work object is sales lead and the candidate object is sales lead territory. For this example, select the product attribute as the mapping type and enter the value AccoutnNodeIntgId for the function code. Enter a value for the sequence which determines the order in which the mapping is used when matching territories. The most selective dimension or attribute mapping should be given lowest sequence number, the next most selective dimension or attribute mapping should be given the next sequence number. This mapping matches the territory when the territory partner attribute account node integration ID, AccoutnNodeIntgId, is equal to the sales lead attribute party ID.

Creating a Dimension Mapping

You want to assign territories to opportunity revenue lines based on the product associated with the revenue line. Create a mapping where the work object is opportunity revenue line, and the candidate object is territory. Select dimension as the mapping type and enter the value Prod for the function code. Enter a value for the sequence which determines the order in which the mapping is used when matching territories. The most selective dimension mapping should be given lowest sequence number. The candidate object low and high attributes correspond to the names of the low sequence and high sequence attributes for product on the territory. The work object low and high attributes correspond to the names of the low sequence and high sequence attributes for product on the revenue line. For example, the low sequence attribute for product on the revenue line might be called InventoryItemId.

- Mapping using alternative attributes: Using the same scenario of assigning territories to opportunity revenue lines based on the product
associated with the revenue line, you might encounter a situation where a revenue line does not have a product assigned to it, but it does have a product group assigned to it. Create the same mapping that you created for the dimension mapping scenario, and add the names of the low sequence and high sequence attributes for product group for the work object alternate low and high attributes. For example, the alternate low sequence attribute for product group on the revenue line might be called ProdGrpId.

- Mapping using default values: Using the same scenario of assigning territories to opportunity revenue lines based on the product associated with the revenue line, you might encounter a situation where the low sequence and high sequence attributes for product on a revenue line do not contain values when assignments are processed. Create the same mapping that you created for the dimension mapping scenario, and add low and high default values for the product attribute for revenue lines.

Creating a Literal Mapping

Literal mappings are a way of filtering the matched territories based on specific values of a territory attribute. You want to find only territories that have a sales account centric coverage model. For example, territory coverage model equals SALES_ACCOUNT_CENTRIC.

Disposition Logic: How It Is Processed

Assignment Manager, a part of Oracle Fusion Management of Work, uses a two-step process to assign candidates. The first step is the selection of Candidates with the Assignment Manager application. Candidates to be assigned to the work object are determined by territory-based mapping, rule-based assignment, or territory-based mapping with rule-based filtering.

Disposition is the second step. The selected candidates are written to the work object table or the work object child table based on the selected disposition logic. This has several possible outcomes, but it is based on two principal logic features. The first is the delivered Assign Candidate logic. The second is Run Custom Logic, a way for you to define the assignment disposition of the candidate object. For example, you may want to e-mail a specific list of candidates, or write the selected candidates to a specific table. Run Custom Logic can be used in conjunction with the Assign Candidate logic.

Settings That Affect Disposition

By designating Assign Candidate, Assignment Manager can work with one or multiple candidates that have been returned in the selection process.

- Single Candidate Returned: Assignment Manager writes the candidate back to the work object table based on the primary key attribute fields that you must enter for that work object table.

- Multiple Candidates Returned: A work object child table is designated to record these candidates. Then you indicate at least one and up to three attributes that serve as the primary key fields. There are two choices for how to write the resulting candidates, Replace Candidates and Keep Manual Candidates.
• Replace Candidates: When the Assign Candidates logic is run, the results are compared to any results already in the work object child table. If Replace Candidates is checked, any existing candidates are removed and replaced with the new results. No manually entered candidates will be affected.

• Keep Manual Candidates: Some applications using Assignment Manager allow manual entry of candidates. When a candidate is entered manually, there is an attribute that indicates manual entry that is set to Y or Yes. When Keep Manual Candidates is checked and the manual attribute indicated, Assign Candidates logic will disregard these candidates when writing to the work object child table.

Selecting Run Custom Logic allows you to develop your own code to perform specific actions on or with the candidates that are returned from the selection process. When this option is chosen, after the selection process, Assignment Manager will use a callback function in the application module which will call your custom logic code and pass on the information received from the selection process.

How Disposition Logic Is Processed

Assignment manager selects the candidates and then passes in the results from the selection phase to either the assign candidate or custom logic or both.

If you check both Run Customer Logic and Assign Candidates on the user interface, the assignment engine will invoke the Assign Candidates logic first and then execute the Custom logic.

Note

If you are using credit allocation templates in Oracle Fusion Opportunity Management, you may wish to leave both Run Custom Logic and Assign Candidate unchecked. Opportunity Management uses Assignment Manager to find matching credit allocation templates. In this process, Assignment Manager passes the template IDs back to Opportunity Management which does the assignment. No custom logic is involved and Assignment Manager does not perform the assignment.

Defining Tasks: Points to Consider

A task is a unit of work to be completed by one or more people by a specific completion date. When using tasks in your application, you should consider the following points:

• Tasks

• Task Templates

Tasks

A task is defined with a description, due date and category. Each task has an owner, who oversees or is responsible for the task, and one or more assignees
who perform the work. The task can be related to a business object, such as an Opportunity, a customer or, one or more external contacts. Tasks may also have Notes for general information, Attachments for tracking e-mail or project documents and Interactions which record customer communications.

**Task Templates**

Often a set of Tasks are performed repeatedly for a particular process and to support this administrators can define Task Templates, which represent a group of tasks. These task templates can be invoked by users working on a particular business object, for example a lead, campaign, or an opportunity. The user selects the appropriate task template for the goal they want to achieve and this creates the tasks and associates them with the business object being worked on. This saves the user from creating multiple tasks when an Opportunity reaches a particular sales stage, or the same set of tasks each time a marketing campaign is created.

**Note**

Extensibility features are available on the Task object. For more details refer to the article Extending CRM Applications : How It Works

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**Manage Sales Lead Assignment Rules**

**Lead Assignment Rules: Explained**

You can specify assignment rules and rule sets for assignment of resource candidate objects to the lead work object. Assignment Manager uses rules to evaluate and recommend candidate assignments for your specified lead work objects.

Assignment rules are created using work objects, candidate objects, attributes, and conditions. You can use multiple types of assignment rules and rule sets for assignment of candidate objects, such as rank, qualification status, and resources, to the lead work object. For example, you can specify the assignment rule that assigns resources to sales leads by assigning individual sales resources that meet the rule criteria.

**Assignment Rule Criteria**

An assignment rule can have one or more assignment criteria. For example, all leads lower than a certain deal size, and for a specific product are all assigned to a specific Partner resource. Another example of creating an assignment rule might be if you want all leads that are generated based on a specific campaign, such as a CEO round table discussion event, assigned to a specific salesperson.

**Assignment Rule Considerations**

When designing rules, carefully consider how you want to match the lead candidates to the lead work objects. For example, would you want resources assigned based on their geographic location, or their product knowledge, or their skill level, or a combination of any of these attributes? Do you want to match
candidates only, or would you like to match them and score them? In a multiple candidate scenario, do you want to assign all matching candidates or only those who achieve higher than a specific score? These are the basic decisions you should make before creating rules.

**Using Territory-Based Assignment with Rule-Based Filtering: Example**

In this example, sales leads with sales accounts can be assigned one or more territories and supplemental lead team resources. Prospect leads can be assigned one or more resources. Assignment Manager is used to determine matching territories as well as matching resources. In Oracle Fusion Partner Relationship Management implementations, all territories (prime, overlay, partner, and so on) matching a given lead may be identified. Rule filtering may then be used to affect the type of territories (partner versus prime) that are assigned based on the value of specific attributes (for example, sales channel or deal size) on the lead.

**Scenario**

Acme, Inc., wants to assign new leads to the correct territory and then assign them to the correct sales lead. If there is no sales channel assigned, determine if the deal should go to a partner or remain internal. If the deal is internal then only the prime territories are assigned. If the deal is pushed to a partner, a channel manager is also assigned to oversee the deal.

**Transaction Details**

The primary marketing business objects processed by the Assignment engine are Leads. The assignment of territories is the primary means of assigning the appropriate sales people to the lead. Rule filtering may also be used to filter the territories when the sales channel is not identified. Prospect leads are processed by the assignment engine in order to identify additional resources based on the information on the leads (such as deal size).

Oracle Fusion Lead Management calls the Assignment Manager with the Work Object designated as Lead and territory as the Candidate Object with the assignment type of territory-based assignment. This determines the list of territories. Assignment processing then calls the Rule Set Group that contains the rules for the territory-based assignment with rule filtering.

While the territory-based assignment delivers a list of territories, the rules can fine tune the assignment process:

1. Rule for SALES CHANNEL Does Not Equal NULL
   a. SalesLead.Sales Channel Does Not Equal NULL
   b. Action: Return matching candidates
2. RULE for SALES CHANNEL Equals NULL, Assign Channel Manager
   a. Sales Lead.Sales Channel Equals NULL
   b. Sales Deal.Deal Size Greater Than 1,000,000
   c. Territory.Territory Type In Partner, Sales Channel Manager
d. Action: Return matching candidates

3. RULE for SALES CHANNEL Equals NULL, Assign Prime
   a. Sales Lead.Sales Channel Equals NULL
   b. Sales Deal.Deal Size Greater Than 1,000,000
   c. Territory.Territory Type Equals Prime
   d. Action: Return matching candidates

Analysis

When the lead comes in, it needs to be assigned to a territory for follow up. Based on the above rules, you can determine if this is a smaller deal that can be handled by your partners (and a Sales Channel Manager to oversee), or it is a larger deal that needs to be followed up by the internal sales force.

Resulting Assignments

The assignment engine first identifies the list of territories for the lead. The rules then determine who gets the deal:

1. This first rule determines if a sales channel value exists. If it does, then all territories identified (by way of territory-based assignment) are assigned.

2. The second rule says if there is no sales channel assigned, and the deal is under one million dollars, assign the Lead to a Partner and Sales Channel Manager.

3. And the final rule is used when there is no Sales Channel value, and the deal is greater than one million dollars, the lead is assigned to the prime (internal) territories.

FAQs for Configure Assignment Manager for Lead Processing

What's the difference between rule-based and territory-based assignment?

Territory-based assignment is the primary means of assignment for CRM objects. For territory-based assignment, you create work object to candidate object mapping sets during assignment object creation that are used to make candidate assignments.

Rule-based assignment is used for identifying supplemental resources or filtering the matching territories. Rules can also be used for scoring work objects and also for classification. For rule-based assignment, you use the rules editor to create expression-based rules that the assignment engine uses to make candidate assignments.

Territory plays a fundamental role in Fusion CRM. Using attributes it defines how a company is going to market. That is, how is that company deciding to deploy its Sales Resources to sell to Customers? Every Sales Account, Lead, and Opportunity has a territory or territories assigned. In many cases, customers will implement Territories down to the level of individual Sales Representative.
(that is, each Sales Representative will have his or her own Territory) in order to enable these capabilities at the granularity that they want, as well as the Sales Planning/Territory Alignment capabilities at the granularity that they want.

In a territory-based assignment scenario, you typically create a mapping set between a work object and a candidate object to make the appropriate candidate assignment. This mapping set can consist of 1 or more mappings between the work object attributes and the candidate object attributes.

A simple example territory-based assignment setup is a single mapping set between the opportunity revenue line work object and the candidate object of territory. This mapping set contains a single mapping which maps the attribute of location on the opportunity (the parent of the revenue line) to the geography attribute on the territory. Any territories where the geography value matches the location of the parent opportunity are matched and assigned to that opportunity revenue line. Another example would be two mapping sets defined between the lead work object and the territory candidate object. The first mapping set determines the assignment of territories to each lead based on a mapping between the industry of the customer on the lead and the territory industry dimension. This would be a literal mapping that filters the territories to those that have a status of finalized and a literal mapping that filters the territories to those that have a sales centric coverage model. The second mapping set is conditional and determines the assignment of partner channel manager territories. This mapping set consists of a mapping between the geography of the primary partner on the lead and the territory geography dimension. This would be a literal mapping that filters the territories to those that have a status of finalized and a literal mapping that filters the territories to those that have a partner centric coverage model.

In a rule-based assignment scenario, you create rules with conditions that need to be met in order to make the appropriate candidate assignments. For example, a rule is created with the condition that the candidate object (resource) has a product skill rating that is greater than or equal to intermediate in order to be matched to the work object and be assigned.

The following chart compares the features and pros and cons of territory-based assignment and rule-based assignment:

<table>
<thead>
<tr>
<th>Territory-Based Assignment</th>
<th>Rules-Based Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros:</strong></td>
<td><strong>Pros:</strong></td>
</tr>
<tr>
<td>• User-friendly territory management</td>
<td>• Familiar concept with expression-based rules</td>
</tr>
<tr>
<td>• Minimal assignment configuration</td>
<td>• Any attribute can drive an assignment</td>
</tr>
<tr>
<td>• Support for hierarchies</td>
<td>• Easy to define and maintain a small number of straightforward rules</td>
</tr>
<tr>
<td>• Preview of assignment</td>
<td>• Scoring and classification</td>
</tr>
<tr>
<td>• Reports to identify gaps and overlaps</td>
<td><strong>Cons:</strong></td>
</tr>
<tr>
<td><strong>Cons:</strong></td>
<td><strong>Cons:</strong></td>
</tr>
<tr>
<td>• Additional administration required even with simple territory models</td>
<td>• Unable to navigate hierarchies</td>
</tr>
<tr>
<td>• Single territory structure for CRM</td>
<td>• Requires intensive effort to manage complex or large numbers of rule</td>
</tr>
</tbody>
</table>
What's the difference between literal, dimension, and attribute mapping?

Dimension Mapping: Dimension mapping should be used when the work object and candidate object attributes in the comparison are dimension attributes, such as Geography, Product, or Account. When creating the mapping, use the Function Code field to specify a unique identifier for the dimension. This identifier is passed to the translation function, in case the same function is used for multiple dimensions.

Attribute Mapping: This mapping enables you to compare and match attribute values between a work object attribute and a candidate object attribute. When the value of the candidate object attribute matches the work object attribute the candidate is selected. Attribute mappings should be used when the work object and candidate object attributes in the comparison are non-dimensional attributes. For example, consider a lead work object with a program ID attribute and the territory object with program ID attribute. The selection criterion is:

```sql
select Sales Lead Territories where Sales Lead Territory.ProgramID equals Sales Lead.LeadProgramID
```

The assignment engine will use this mapping data to construct a query on the candidate object that is equivalent to the selection criteria. When creating the mapping, the Function Service and Function Code are only needed if a translations function is used. The function code field is used to specify a unique identifier for the attribute, and this identifier is passed to the translation function.

Literal Mapping: Literal Mapping is used almost exclusively to filter the candidate objects. This form of mapping enables the comparison of candidate attributes against a specific value chosen by the user. The assignment engine will compare the mapped candidate object attribute against the specified literal value. For example, select the Territory Candidate object that has the attribute TerrStatusCode that equals the value `FINALIZED`.

**Note**

For Literal Mappings ensure that the value entered corresponds to the Lookup Type Value code, not the meaning.

What happens if I mark an assignment object or one of its attributes as inactive?

When the assignment object inactive box is checked the selected work or candidate assignment object is not available for assignment processing. When the assignment attribute inactive box is checked the selected work or candidate object attribute is not available for assignment processing.

**Note**
The object or attribute cannot be set to inactive if there is a mapping set, mapping, or rule defined using the object or attribute.

**How can I identify a Classification candidate object?**

Enter the word Classification in the Application Module field. This will create a candidate object that you can use when setting up classification-type rules; for example, rules that qualify or rank leads.

**How can I exclude a candidate from an assignment?**

You can exclude candidates during the assignment process by navigating to the Candidates tab. Scrolling down the section Exclude Candidates. Enter the View Object that controls which candidates are to be excluded and enter the selection criteria for up to three key fields.

**Note**

The application using Assignment Manager needs to support a View Object that controls which candidates are to be excluded in order to use this feature.

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**Configure Assessment Reference Data for Sales Leads**

**Sales Lead Qualification Template: Explained**

Lead qualification templates enable a uniform lead qualification process across leads.

Using lead qualification templates, you can:

- Define Lead Qualification Templates
- Assign Lead Qualification Templates
- Gather Lead Quality Information

**Define Lead Qualification Templates**

Qualification templates are collections of questions and answers that can be weighted and scored to evaluate the quality of gathered information about the sales lead. The templates are used to define consistent and specific qualification criteria for leads.

**Assign Lead Qualification Templates**

Once the qualification template is defined, the template is assigned to the Lead Qualification Template profile available from the Manage Sales Lead Administrator Profile Values implementation task. If defining more than one qualification template, assign templates at the profile Site level.
Gather Lead Quality Information

Along with other key qualification fields available in the lead, the qualification template questions display on the lead Qualification tab if you have enabled the Advanced Lead Qualification profile option. Lead qualification is typically conducted through phone conversations. As responses are entered for qualification questions, the qualification template's weighted score is calculated and a progress bar provides immediate rating and feedback.

Defining a Sales Lead Qualification Template: Example

This example illustrates defining a lead qualification template to assess the basic quality of a lead.

Scenario

XYZ Company sells alternative energy solutions to small businesses. They employ a group of people that qualify the basic information about a lead plus gather information needed by the sales team to prepare for follow-up sales calls. Unqualified leads are generated from various sources and include when customers have requested more information from their website. Before creating the qualification template, XYZ Company evaluates the following:

- To verify the customer's intent in requesting more information and to ensure a consistent and thorough communication with the customer, a set of questions each lead qualifier is expected to ask is compiled.

- Once the initial information is gathered, only leads with a greater potential for a sale are transferred to the sales team. To assist the lead qualifier in identifying the leads to transfer to sales, the qualification information is categorized into four basic levels ranging from "very little information was obtained from the customer" to "a high potential of the customer working on an alternative energy project". Question responses are determined for each question including responses such as "Not applicable" and "Information not available" to ensure the full range of possible responses.

- Question responses and questions are analyzed and modeled to effectively place the qualification template weighted score ranges into the four categories. For example, a budget that expires less than ten days may score low if the average sales cycle is greater than 10 days but any answer to a budgeting question has higher weight in the overall questionnaire than a question about the customer's project team. If a qualification template's weighted score is 90 or above, the customer would be categorized as a high potential for an energy project and should be transferred to a sales resource to pursue.

Defining the Qualification Template

Navigate to Manage Assessment Templates from the Manage Sales Lead Qualification Template implementation task. The following categories of qualification levels are entered as ratings of:
• Little Information Available
• Low Project Potential
• Medium Project Potential
• High Project Potential

Questions about the customer's budget, time frame, decision maker, and project drive the sale potential and resulting lead rank. These questions are not included in the qualification template since the lead qualifier will enter those directly in the lead user interface.

Analysis

Since the qualification template will be used to better evaluate the customer's project and prepare the sales team to progress on the lead if the lead is qualified. A set of questions and responses are entered to qualify the time frame including what phase the customer's implementation project is in. To gather information to meet export policies, questions are added about implementation projects outside of the country. Questions are added to determine if and when a customer's budget will expire. To identify competition, questions and responses are entered about competing suppliers or in-house solutions and satisfaction levels. A free-form response is allowed to enable the lead qualifier to capture specific customer comments about their greatest issue they are trying to solve.

Next, the weighed scores ranges are assigned to the four ratings. To provide a visual queue and feedback to the lead qualifier to guide them in their decision to update the lead as qualified, a color and feedback phrase is entered for the four ratings. The color-coded bar, score, and feedback appear at the top of each qualification questionnaire in the lead.

Once the qualification template is defined, the template is assigned to the Lead Qualification Template profile available from the Manage Sales Lead Administrator Profile Values implementation task. Because there is only one business unit for XYZ Company and only one qualification template, the template is assigned at the profile Site level.

As XYZ Company continues to grow into a global company with a broader set of business units and products, Qualification templates are created in different languages and assigned to business unit sets. The appropriate qualification template is assigned to corresponding lead qualification users through the Lead Qualification Template profile.

Note

The Advanced Lead Qualification Enabled profile option must be set to enable you specify the template name to display the collection of questions, possible answers, and questionnaire feedback in the Edit Lead user interface.

Assessment Templates: Points to Consider

Assessment templates let you analyze the health of a business object, such as a lead or an opportunity, and suggest appropriate next steps based on its
diagnosis. To best plan and create assessment templates, you should consider the following points:

- Ratings
- Questions, Question Groups, and Question Weights
- Responses and Scores
- Associated Task Templates

**Ratings**

A rating is a textual qualification such as Excellent. There are three delivered ratings in the assessment template: Excellent, Average, and Poor. Ratings provide a metric other than a numerical score for qualifying the outcome of an assessment. Ratings are created at the beginning of the assessment template creation process. They are later applied to possible responses to questions in the template, which associates each rating with a score. An appropriate feedback will be displayed to you based on the completed assessment score once you submit an assessment. When setting up ratings and applying them to possible responses, it is important to remember that they and their associated feedback text will eventually display as part of the overall assessed health of a business object.

**Questions, Question Groups, and Question Weights**

Questions are the main components of an assessment template. They are written such that they aid in systematically determining the health of a business object, and they are grouped into logical collections called Question Groups. Each question in the template is assigned a question weight, expressed as a percentage, which is the relative importance of the question within the template. When an assessment template is used to perform an assessment, a question’s weight is multiplied by the normalized response score given for the question to produce a weighted score for that question. When setting up questions, question groups, and question weights, it is important to carefully analyze which factors determine the health of a particular business object (like a lead or an opportunity) in your organization. Use those factors to create your question groups; and then, for example, write three to five questions per group that are weighted according to your analysis. There is no limit to the number of questions that can be in a question group, but each question group must have at least one question.

**Responses and Scores**

Responses are attached to questions in the template. Each question should have at least two responses, unless it’s a free-form only question. More than one response can be tied to the same rating but, between all of its responses, each question should accommodate at least two ratings, unless it’s a free-form only question. For example, if your ratings are Excellent, Average, or Poor you may, for each question, include two responses that correspond to at least one of those ratings, such as average. There must be enough responses to cover at least two of the ratings such as Excellent and Average. You assign a score to each response.
for a question, and the application normalizes the score based on a standard scoring scale. When an assessment template is used to perform an assessment, a question's weight is multiplied by the normalized score of the response given for the question to produce a weighted score for that response. When adding responses to questions, ensure that the scores and ratings you assign to each response correlate. In other words, the higher the score you assign to the response, the higher the rating should be so that you have a strong quantitative relationship between the two. Also note that you can allow free-form responses for one or more questions in the template, but free-form responses are never scored.

**Associated Task Templates**

A task template is an instruction to generate a group of related activities. You can associate task templates with an assessment template in order to recommend tasks that should be performed after an assessment has been done for a business object. When you associate task templates with an assessment template, you can indicate a score range for each task template, and based on the total score of any assessment that uses your template, one or more task templates will be recommended as follow-up activities. In order for a task template to be available to associate with an assessment template, it must be assigned to the same business object type as that assigned to the assessment template, and it must have a subtype of Assessment. Ensure that you have set up task templates correctly before attempting to associate them to assessment templates.

**Assessment Template Status Codes: Explained**

Throughout the life of an assessment template, it can be assigned several different status codes.

These status codes control the actions you are allowed to make against an assessment template.

- **In Progress**
- **Active**
- **Retired**

**In Progress**

This is the initial status of an assessment template. When an assessment template is at this status, you can edit any part of it. This is the only status at which you can delete a template. If the template is not deleted, it moves to the Active status next.

**Active**

This is the status assigned when the assessment template has been deployed for general usage. When an assessment template is at this status, you can make
Define Lead Management

only minor textual edits to it, including, but not limited to, template description, question text correction, question sequencing change, response description, and score range feedback. From this status, you can move the template to Retired; you cannot delete it.

**Retired**

When an assessment template is at this status, it is no longer available for general usage. You cannot edit any part of it, and you cannot move it to any other status; however, it can still be copied. Active templates that are deleted revert to this status.

**Assessment Template Score Range: How It's Calculated**

The application calculates the score range for an assessment template using the question weights and the ratings and scores assigned to the possible responses for all the questions in the template. This topic explains when the score range is calculated and the components that are used in the calculation, so that you can make the best decision regarding the feedback text to apply to each score range. In addition to the automatic score range calculation, a manual method for adjusting score range is also available on the administration UI.

**Settings That Affect Score Range**

In order for the application to calculate the assessment template score range, you must:

- Apply weights to all template questions.
- Configure ratings and apply them to possible responses for all template questions.
- Apply a score to each of the possible responses for all template questions.

**How Score Range Is Calculated**

The score ranges for each rating in an assessment template are determined using the lowest and the highest weighted response scores for each question. So for each rating score range, the lower end of the range starts where the previous rating range ended, and the higher end of the range is the sum of the highest weighted scores that can be attained for that rating.

This table displays a simple example of the components used in the score range calculation.

<table>
<thead>
<tr>
<th>Question (Weight)</th>
<th>Response (Normalized Score)</th>
<th>Weighted Score</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the customer win? (20%)</td>
<td>Lower Operating Cost (100)</td>
<td>20</td>
<td>Excellent</td>
</tr>
<tr>
<td>What is our win? (80%)</td>
<td>Higher Revenues (80)</td>
<td>16</td>
<td>Average</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>---</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Other (53)</td>
<td>11</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Don’t Know (27)</td>
<td>5</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Reference (60)</td>
<td>48</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Resale (50)</td>
<td>40</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Partnership (100)</td>
<td>80</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

This table displays the score range calculation based on the components from the first table.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>65 - 100</td>
</tr>
<tr>
<td>Average</td>
<td>46 - 64</td>
</tr>
<tr>
<td>Poor</td>
<td>0 - 45</td>
</tr>
</tbody>
</table>

**Note**

If a template administrator does not use a particular rating while assigning ratings to possible responses, this could result in improper score range calculations. To counteract this problem, the score range calculation uses a built-in correction algorithm to ensure proper score ranges. The correction algorithm works like this: For a question where a particular rating is skipped, the low score for the skipped rating is calculated to be equal to the high score of the next lower ranked rating. The high score for the skipped rating is calculated to be equal to the low score of the next higher ranked rating.

Using the ratings displayed in the tables above, if the rating Average is not used for a question's possible responses, the score range calculation assigns a low score to Average for that question that is equal to the high score of Poor for that question. It also assigns a high score to Average for that question that is equal to the low score of Excellent for that question. This ensures that the overall template score range for Average is calculated to fall between the score ranges for Poor and Excellent.

**Assessment Template Components: How They Fit Together**

The question weight, response score, and response rating are the assessment template components that fit together to calculate and display the overall assessment score, rating, and feedback text.

A question weight is multiplied by a response score to achieve a weighted score for an assessment template response. The weighted scores for all responses are added together to determine the total assessment score. This score will fall within a precalculated score range that is associated with a response rating and feedback text. Therefore, the score range within which the total assessment score falls determines the rating and feedback text to display for a completed assessment.
**Question Weight**

The question weight is the relative importance of a question within an assessment template, and it is expressed as a percentage. All of the question weights within a template must total to exactly 100. When an assessment template is used to perform an assessment, a question’s weight is multiplied by the score of the response given for the question to produce a weighted score for that response.

**Response Score**

A response score is the score assigned to a possible response to a question in the template. The template administrator sets response scores with no upper or lower bounds, and each score is normalized in order to accurately score an assessment that uses the template. The response scores are normalized by assigning a score of 100 to the highest response score, and then all other responses are assigned a normalized score relative to that highest score.

When an assessment template is used to perform an assessment, the normalized score of the response given for the question is multiplied by the question’s weight to produce a weighted score for that response.

**Response Rating**

A response rating is the rating assigned to a possible response to a question in the template. A rating is a textual qualification like Excellent or Poor that provides a metric other than a numerical score for qualifying the outcome of an assessment. A response rating is directly related to a response score, and this relationship should ensure that a higher score will translate to a higher rating.
Early in the template creation process, the administrator configures ratings to assign to responses. The administrator then assigns scores and ratings to responses, and the system calculates score ranges based on those entries. Each rating is assigned to a score range, and the administrator is given the opportunity to apply feedback text to the rating-score range combination.

When an assessment template is used to perform an assessment, the weighted scores from all responses are added to determine the total assessment score. That score will fall somewhere within the calculated score ranges, which then determines which rating is assigned to the assessment and what feedback text to display. The maximum total assessment score is 100.

Assessment Templates and Task Templates: How They Fit Together

One of the steps for creating an assessment template is associating task templates. You would take this step if you want to recommend sets of tasks to be done after an assessment is performed using your template. You associate task templates to ranges of scores in the assessment template, and where the overall assessment score falls within those ranges determines the tasks that are suggested to be performed after the assessment.

Assessment Template

An assessment template is a set of weighted questions and possible responses used to evaluate the health of a business object such as an opportunity or a lead. An assessment template can be associated with one or more task templates that are recommended based on the outcome of an assessment.

Task Template

A task template is an instruction to generate a group of related activities. By marking a task template with a subtype of Assessment, you make that task template available for association with assessment templates. The task template’s business object type should be the same as that assigned to the assessment.
Define Lead Management

template. When an assessment is performed using an assessment template that has associated task templates, one or more task templates are recommended based on the total score of that assessment and can be used to generate a list of activities to perform.

For example, you can associate a task template called Engage Business Development Manager with your assessment template called Potential for Win-Win. Associate the task template with the score range of 86 to 100, so if an assessment using the assessment template Potential for Win-Win scores within that range, the application recommends the Engage Business Development Manager task template and a list of follow-up activities based on that template can be generated.

FAQs for Configure Assessment Reference Data for Sales Leads

What happens if I include a free-form response for a question?

A score of 0 is assigned for free-form responses.

A free-form response option will have no effect on the overall assessment score. The free-form response offers the opportunity to enter a textual response to a question that does not conform to any of the pre-populated responses provided by the assessment template.

What's a Question Group?

A question group is a logical grouping of questions within an assessment template, and it is used strictly as a category header for those questions. Through careful naming of a question group, you can achieve the benefit of providing the user of the template with an approximate idea of the type of questions to expect in each group.

Why am I being asked to enter question weights again?

This step lists all of the assessment template questions in one place, and provides you with the opportunity to edit weights as necessary to ensure that the sum of all weights totals 100.

Configure Notes for Sales Leads

Defining Notes: Points to Consider

A note is a record attached to a business object that is used to capture nonstandard information received while conducting business. When setting up notes for your application, you should consider the following points:

• Note Types
  • Note Type Mappings

Note Types

Note types are assigned to notes at creation to categorize them for future reference. During setup you can add new note types, and you can restrict them by business object type through the process of note type mapping.
Note Type Mappings

After note types are added, you must map them to the business objects applicable to your product area. Select a business object other than Default Note Types. You will see the note types only applicable to that object. If the list is empty, note type mapping doesn't exist for that object, and default note types will be used. Select Default Note Types to view the default note types in the system. Modifying default note types will affect all business objects without a note type mapping. For example, you have decided to add a new note type of Analysis for your product area of Sales-Opportunity Management. Use the note type mapping functionality to map Analysis to the Opportunity business object. This will result in the Analysis note type being an available option when you are creating or editing a note for an opportunity. When deciding which note types to map to the business objects in your area, consider the same issues you considered when deciding to add new note types. Decide how you would like users to be able to search for, filter, and report on those notes.

Note

Extensibility features are available on the Note object. For more information refer to the article Extending CRM Applications: how it works.

Configure Tasks for Sales Leads

Turning a Business Process into a Task Template: Example

This example illustrates how to create a task template that represents a business process.

Scenario

A sales manager wants to create a task template for her department’s client product demonstration process.

Client Product Demonstration Activities

The client product demonstration process occurs regularly. The sales manager does not want to manually create tasks for this process every time it occurs, so she decides to create a task template that includes the business process activities. Each time she repeats the business process, she can use the task template to automatically generate the appropriate tasks that need to be performed.

Analysis

The business process consists of the following activities:

- Book a conference room.
- Create an agenda.
- Confirm the date and time with the client.
- Make arrangements with presenters.
- Deliver product demonstration.
- Follow up with client.
Based on the analysis of the business process, the following task template is created:

**Task Template Name: Client Product Demonstration**

<table>
<thead>
<tr>
<th>Task</th>
<th>Category</th>
<th>Lead Days</th>
<th>Duration Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book conference room</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Create agenda</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Confirm date and time with client</td>
<td>Call</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Schedule presenters</td>
<td>Preparation</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Deliver demonstration</td>
<td>Demonstration</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Follow up with client</td>
<td>Call</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

**Defining Tasks: Points to Consider**

A task is a unit of work to be completed by one or more people by a specific completion date. When using tasks in your application, you should consider the following points:

- **Tasks**
- **Task Templates**

**Tasks**

A task is defined with a description, due date and category. Each task has an owner, who oversees or is responsible for the task, and one or more assignees who perform the work. The task can be related to a business object, such as an Opportunity, a customer or, one or more external contacts. Tasks may also have Notes for general information, Attachments for tracking e-mail or project documents and Interactions which record customer communications.

**Task Templates**

Often a set of Tasks are performed repeatedly for a particular process and to support this administrators can define Task Templates, which represent a group of tasks. These task templates can be invoked by users working on a particular business object, for example a lead, campaign, or an opportunity. The user selects the appropriate task template for the goal they want to achieve and this creates the tasks and associates them with the business object being worked on. This saves the user from creating multiple tasks when an Opportunity reaches a particular sales stage, or the same set of tasks each time a marketing campaign is created.

**Note**

Extensibility features are available on the Task object. For more details refer to the article Extending CRM Applications : How It Works

**How can I create a task template that is available to associate with assessment templates?**

Create the task template with a subtype of Assessment.
Configure Sales Leads

Sales Lead Lookups: Explained

Lookups enable quick selection from drop-down menus. Oracle Lead Management lookups are incorporated into its application to speed the process of entering data into forms.

The lookups listed in the following table display the lookup name and its associated values and description by lookup type and in alphabetical order.

<table>
<thead>
<tr>
<th>Lookup Type</th>
<th>Lookup Values</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Access Level</td>
<td>• Edit</td>
<td>Access levels for lead team members for a specific lead.</td>
</tr>
<tr>
<td></td>
<td>• Full</td>
<td>Full access level allows the user to update sales lead team by adding or removing individual resources or by updating the access level for any member.</td>
</tr>
<tr>
<td></td>
<td>• View only</td>
<td></td>
</tr>
<tr>
<td>Lead Assignment Process Type</td>
<td>• Assignment</td>
<td>Lead processing types supported by Assignment Manager.</td>
</tr>
<tr>
<td></td>
<td>• Qualification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ranking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Realign with territories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Scoring</td>
<td></td>
</tr>
<tr>
<td>Lead Registration Approval Status</td>
<td>• Approved</td>
<td>Approval status for leads registered by partners.</td>
</tr>
<tr>
<td></td>
<td>• Pending approval</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rejected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Submitted</td>
<td></td>
</tr>
<tr>
<td>Lead Registration Type</td>
<td>• Co-sell</td>
<td>Types of leads available for partners.</td>
</tr>
<tr>
<td></td>
<td>• Referral</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Resale</td>
<td></td>
</tr>
<tr>
<td>Lead Acceptance Status</td>
<td>• No</td>
<td>Status that indicates whether or not a lead is accepted by sales departments.</td>
</tr>
<tr>
<td></td>
<td>• Yes</td>
<td></td>
</tr>
<tr>
<td>Lead Assignment Status</td>
<td>• Assigned</td>
<td>Assignment status indicating whether sales team resources are assigned.</td>
</tr>
<tr>
<td></td>
<td>• Reassigned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rejected</td>
<td></td>
</tr>
<tr>
<td>Lead Qualification Budget Status</td>
<td>• Approved</td>
<td>The approval status of a customer budget. Data used to assess lead qualification status.</td>
</tr>
<tr>
<td></td>
<td>• Pending</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Unknown</td>
<td></td>
</tr>
<tr>
<td>Lead Channel</td>
<td>Source channel responsible for lead generation.</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Direct mail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Mail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wireless message</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prediction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model based prediction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule based prediction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Rank</th>
<th>Lead rank values used as a measure of lead quality and prioritization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool</td>
<td></td>
</tr>
<tr>
<td>Hot</td>
<td></td>
</tr>
<tr>
<td>Warm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Reassignment Reason</th>
<th>Possible reasons specified for reassigning leads.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No activity</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Registered Status</th>
<th>Status that indicates whether or not a partner lead is registered.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Processing Activity Schedule Mode</th>
<th>Scheduling options for lead processing activities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td></td>
</tr>
<tr>
<td>Schedule date</td>
<td></td>
</tr>
<tr>
<td>Repeats</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Processing Activity Progress Status</th>
<th>Progress details indicating lead current and end processing status.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Completed with error</td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
</tr>
<tr>
<td>In progress</td>
<td></td>
</tr>
<tr>
<td>Scheduled</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Status</th>
<th>Lead status values based on specific actions performed on a lead. Used to mark the milestones in the lead life cycle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converted</td>
<td></td>
</tr>
<tr>
<td>Qualified</td>
<td></td>
</tr>
<tr>
<td>Retired</td>
<td></td>
</tr>
<tr>
<td>Unqualified</td>
<td></td>
</tr>
</tbody>
</table>
| Lead Time Frame | • 3 months  
|                | • 6 months  
|                | • 9 months  
|                | • 12 months  
|                | • 15 months  
|                | • 18 months  |
|                | Lead cycle duration that usually coincides with a typical sales cycle duration for products and services offered.

| Lead Reject Reason | • Duplicate lead  
|                    | • Failed to reach contact  
|                    | • Incorrect data  |
|                    | Possible reasons specified for rejecting leads. Rejected leads can be reassigned or retired.

| Lead Retire Reason | • Duplicate lead  
|                    | • No purchase interest  |
|                    | Possible reasons for retiring leads. Retired leads are considered closed leads.

| Lead Process Scheduling Operators | • Equal to  
|                                   | • Greater than  
|                                   | • Greater than or equal to  
|                                   | • Less than  
|                                   | • Less than or equal to  |
|                                   | Operators used for lead processing scheduling options.

| Recommended Lead Actions Type | • Accept leads  
|                               | • Create personal campaign  |
|                               | Type of actions to perform on recommended leads.

| Lead Processing Repeat Frequency | • Days  
|                                 | • Months  
|                                 | • Weeks  
|                                 | • Years  |
|                                 | The time intervals between lead processing activities.

Lookups in applications are used to represent a set of codes and their translated meanings. For example, a product team might store the values ‘Y’ and ‘N’ in a column in a table, but when displaying those values they would want to display “Yes” or “No” (or their translated equivalents) instead. Each set of related codes is identified as a lookup type. There are many different examples of these across Oracle Fusion Applications. You can add lookups and add values to the default lists.

**Sales Lead Profile Options: Explained**

Profile options are configurable options that affect application operations. Values defined at the user level take precedence over those at the site level. If a value is not defined at the user level, the site level value is used.

Sales lead profile options are categorized into the following:

- Lead Assignment
- Lead Qualification and Assessment
• Partner Leads
• Lead and Recommended Lead Display in Sales Targeting
• Lead Searches

Lead Assignment
The following table lists the profile options that affect the assignment of lead status, rank, score, resources, and territories to the lead. The values provided are used by the Sales Lead Processing Activities for scheduled assignment processing and the rank, score, and reassign actions from the lead. The Configure Assignment Manager for Lead Processing task list is a prerequisite.

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment Rule for Qualifying Leads</td>
<td>Rules to evaluate the lead and assign the lead status per rule conditions.</td>
</tr>
<tr>
<td>Assignment Rule for Ranking Leads</td>
<td>Rules to evaluate the lead and assign the lead rank per rule conditions.</td>
</tr>
<tr>
<td>Assignment Rule for Rule-Based Lead Assignment</td>
<td>Rules to evaluate the lead and assign the sale team resources per rule conditions.</td>
</tr>
<tr>
<td>Assignment Rule for Scoring Leads</td>
<td>Rules to evaluate the lead and assign a score per rule conditions.</td>
</tr>
<tr>
<td>Assignment Rule for Territory-Based Lead Assignment</td>
<td>Rules to evaluate the lead and further filter territories derived using territory-based assignment per rule conditions.</td>
</tr>
</tbody>
</table>

Lead Qualification and Assessment
The following table lists the profile options that affect the qualification and assessment of the lead. The Configure Assessment Reference Data for Leads task list is a prerequisite.

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Assessment Enabled</td>
<td>Enable the display of Assessments, a tab containing the sets of predefined questions and answers collected to assist in evaluating the lead.</td>
</tr>
<tr>
<td>Lead Assessment Template Default</td>
<td>Specify the assessment template questionnaire to default when creating a new lead assessment.</td>
</tr>
<tr>
<td>Advanced Lead Qualification Enabled</td>
<td>Enable advanced lead qualification by specifying the template name to display the collection of questions, possible answers, and questionnaire feedback.</td>
</tr>
<tr>
<td>Lead Qualification Template</td>
<td>Specify the assessment template to use for evaluating and qualifying leads.</td>
</tr>
</tbody>
</table>

Partner Leads
The following table lists the profile options that affect sales partner leads.

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Registration Approval Administrator</td>
<td>Select the recipient of notifications when an approver cannot be determined, who is qualified to respond to the notification, and can modify approval configurations.</td>
</tr>
</tbody>
</table>
Lead Registration Expiration Date

Specify the number of days, after the lead registration creation date, used to derive the lead registration expiration date.

---

### Lead and Recommended Lead Display in Sales Targeting

The following table lists the profile options that affect the number of leads and recommended leads displayed in the leads work areas and sales targeting heat maps. The four top product profiles are evaluated together to group products into a subset used as the basis for sales targeting analysis. The four top sales account profiles are evaluated together to group customer sales accounts into a subset used as the basis for sales targeting analysis.

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Products for Sales Targeting</td>
<td>Specify the maximum number of retrieved products, using the top product dimension attribute minimum and maximum criteria, to display and analyze for potential leads.</td>
</tr>
<tr>
<td>Top Product Dimension Attribute for Sales Targeting</td>
<td>Select the product dimension attribute used to compare corresponding profile minimum and maximum values when retrieving and sorting the top products.</td>
</tr>
<tr>
<td>Top Product Dimension Attribute Maximum for Sales Targeting</td>
<td>Specify the upper limit of the product dimension attribute value, identified in the corresponding profile, used when retrieving the top products.</td>
</tr>
<tr>
<td>Top Product Dimension Attribute Minimum for Sales Targeting</td>
<td>Specify the lower limit of the product dimension attribute value, identified in the corresponding profile, used when retrieving the top products.</td>
</tr>
<tr>
<td>Top Sales Account Attribute Maximum for Sales Targeting</td>
<td>Specify the upper limit of the sales account attribute value, identified in the corresponding profile, used when retrieving the top sales accounts.</td>
</tr>
<tr>
<td>Top Sales Account Attribute Minimum for Sales Targeting</td>
<td>Specify the lower limit of the sales account attribute value, identified in the corresponding profile, used when retrieving the top sales accounts.</td>
</tr>
<tr>
<td>Top Sales Accounts Attribute for Sales Targeting</td>
<td>Select the sales account attribute used to compare corresponding profile minimum and maximum values when retrieving and sorting the top sales accounts.</td>
</tr>
<tr>
<td>Top Sales Accounts for Sales Targeting</td>
<td>Specify the maximum number of retrieved sales accounts, using the top sales account dimension attribute minimum and maximum criteria, to display and analyze for potential leads.</td>
</tr>
</tbody>
</table>

---

### Lead Searches

The following table lists the profile options used to manage sales lead searches.

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Query Maximum Number of Days</td>
<td>Specify the maximum number of days allowed when searching leads based on the creation date range. The value for the maximum number of days must be a positive number. If the value is not a positive number or left blank, the value of 360 days is used.</td>
</tr>
</tbody>
</table>
| Lead Query Default Number of Days | Specify the default number of days used to derive the creation date range for searching leads. The search criteria is derived by using the current date for the creation end date value and the profile option to derive the creation start date value.

For example, if you want leads for the last 15 days to be the default query behavior, then set the profile value to 15. The default creation date search criteria will have an end date for the current date and the start date will be 15 days prior to the current date. The values can be overridden in the search criteria.

The value for the default number of days must be a positive number. If the value is not a positive number or left blank, the value of 30 days is used.

This profile option can be defined at both the site and user levels. |
| --- | --- |
| Lead Query Warning Threshold Number of Days | Specify the number of days for the lead creation date search criteria before issuing an alert to the user.

To disable the warning, delete the profile option value. |
Define Common Marketing Configuration

Manage Marketing Standard URLs

How Standard URLs and Marketing Content Fit Together

When creating marketing content, you can insert various types of URLs. Standard URLs are one type that you predefine and that can be used across many campaigns. Additional URLs are common response forms predefined by Oracle and ad hoc URLs that can be defined while creating content, if a predefined URL does not already exist. An Ad Hoc URL is not reusable.

Standard URLs

Navigate to the Manage Standard URLs task in the Functional Setup Manager application to define Standard URLs that can be easily selected when creating marketing content.

Enable tracking if you want to track e-mail recipient clicks. If enabled, every time a contact clicks a link in a campaign e-mail, the click is recorded as a response, together with details pertaining to the URL.

A dynamic URL is not a URL that recipients will click, but used instead as a source for content to be automatically inserted when the e-mail is sent. Consequently, tracking does not apply to dynamic URLs.

Managing URL Categories

The Marketing URL Category lookup provides the choices for Standard URL categories. Your application administrator can add categories by navigating to the Manage Marketing Standard Lookups task in the Functional Setup Manager application.

Marketing Content

To include these predefined URLs in your marketing content, select the Element toolbar button and then select Standard URL or Dynamic URL. This feature is available for content created or edited in Treatments, Treatment Templates, Mini Campaigns, and Sales Campaigns.
Importing Marketing Standard URLs: Explained

You can create or update marketing standard URLs by navigating to Setup and Maintenance and selecting the Manage Marketing Standard URLs task or by importing data through interface tables. To import marketing standard URLs, you use the tool of your preference to load the data then use scheduled processes to import the data. Having a good understanding of the application object, interface table, and destination table will help you prepare your import data.

Consider the following when importing marketing standard URLs:

- Import interface table, destination table, and application object
- Scheduled processes

Import Interface Table, Destination Table, and Application Object

Importing marketing standard URLs involves one interface table and one destination table.

Note

A spreadsheet containing detailed information about the interface table, including the interface table columns, defaults, and validations, is available from the Oracle Enterprise Repository by searching on the interface table name or initiating a search using the FusionApps: Interface Table asset type.

The following table lists the interface table, destination table, and resulting application object:

<table>
<thead>
<tr>
<th>Interface Tables</th>
<th>Destination Tables</th>
<th>Application Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_IMP_URLS</td>
<td>MKT_TM_URLS</td>
<td>Marketing Standard URLs</td>
</tr>
</tbody>
</table>

To obtain the unique IDs of existing application data, use the Define Data Export Setup and Maintenance task list.

Scheduled Processes

Navigate to Scheduled Processes to schedule the import of data from the interface tables to the destination tables.

The following table displays the process you can schedule to import marketing standard URLs:

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Process Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BulkURLsJob</td>
<td>Import Marketing Standard URLs</td>
</tr>
</tbody>
</table>

Review Diagnostics for Marketing
Marketing Source Codes: Explained

A marketing source code is a unique identifier that represents a campaign or marketing activity and is used to track marketing effectiveness.

**Source Codes**

Marketing source codes are automatically generated for every campaign and marketing activity. In a multistage campaign, you can override the generated source code value with your own value at the campaign level and for stages of type Event.

To view a listing of source codes and associated campaign components, navigate to the Review Marketing Source Codes task in Functional Setup Manager. Note that a source code can be listed more than once in this page to support querying on specific promotions and coupons. Consider the following scenario:

- Two segments are defined, Gold Customers and Silver Customers, representing the two highest levels of preferred customers.

- Two treatments are defined. One intended for Gold Customers that includes a promotion with two coupons. Another intended for Silver Customers that includes a promotion with one coupon.

- A campaign is created for the Summer product catalog. A stage is designed with a fixed date and does not repeat. Each segment is allocated to the corresponding treatment in the stage design.

The source codes for the stage are generated based on the combination of stage instance, audience, and treatment. Since the Gold Customer Product Promotion treatment has two coupons, the source code that represents the stage instance, audience, and treatment combination is listed twice.

The following table illustrates the source codes displayed in the Review Marketing Source Codes page for this scenario.

<table>
<thead>
<tr>
<th>Source Code</th>
<th>Campaign</th>
<th>Stage</th>
<th>Audience</th>
<th>Treatment</th>
<th>Promotion</th>
<th>Coupon</th>
</tr>
</thead>
<tbody>
<tr>
<td>19999800</td>
<td>Seasonal Product Lines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19999866</td>
<td>Seasonal Product Lines</td>
<td>Summer</td>
<td>Gold</td>
<td>Gold Customer Product Promotion</td>
<td>Preferred Customer</td>
<td>Limited Time Discount</td>
</tr>
<tr>
<td>19999866</td>
<td>Seasonal Product Lines</td>
<td>Summer</td>
<td>Gold</td>
<td>Gold Customer Product Promotion</td>
<td>Preferred Customer</td>
<td>Gold Customer Advantage</td>
</tr>
<tr>
<td>20000046</td>
<td>Seasonal Product Lines</td>
<td>Summer</td>
<td>Silver</td>
<td>Silver Customer Product Promotion</td>
<td>Preferred Customer</td>
<td>Limited Time Discount</td>
</tr>
</tbody>
</table>
Using this same example, you can determine all campaign activities that include the Limited Time Discount by using **Query by Example** and entering the coupon name in the field provided above the **Coupon** column.

**Associating Source Codes to Responses and Leads**

Source codes associated with responses and leads provide a reference to marketing campaign activities for tracking campaign effectiveness.

You can provide a source code when creating, editing, or importing a marketing response. A response generated as a result of an e-mail campaign trackable URL or an e-mail bounce inherits the source code derived from the originating e-mail marketing campaign.

A source code can be associated with leads when designing a lead generation stage in a multistage campaign, when manually creating or editing a lead, or when importing a lead. A lead created from a converted response will inherit the source code from the response.

**Define Marketing Promotions**

**Marketing Promotions and Coupons: Explained**

Promotion names and associated coupon codes provide tracking for offers extended to customers.

This topic includes the following:

- Promotions, Coupons, and Marketing Treatments
- Promotions and Mini Campaigns
- Promotions, Coupons, and Source Codes
- Promotions, Coupons, and Marketing Responses

**Promotions, Coupons, and Marketing Treatments**

You can add promotion names and selective coupon codes to a treatment, where you design the promotional message and coupon content. You allocate the treatment to specific customer segments or lists of contacts when designing your multistage campaign. You can design one treatment per promotion, per coupon, or combinations of promotions and coupons. You can also assign promotions and coupons to more than one treatment.

**Promotions and Mini Campaigns**

You can add promotion names to your mini campaign, where you design the promotional message and coupon content to be delivered to the customer segments and lists of contacts selected for the campaign. You can design one mini campaign per promotion or multiple promotions; all coupons for the selected promotion are automatically included. You can also design many mini campaigns using the same promotion.
Promotions, Coupons, and Source Codes

A marketing source code is a unique identifier that represents a campaign or marketing activity and is used to track marketing effectiveness. While a source code does not represent individual promotions or coupons, it does represent the campaign stage instance, audience segment or list, and treatment combination of a multistage campaign, and the instance, campaign content, and audience segment or list combination of a mini campaign.

To view a listing of source codes and associated campaign components, navigate to the Review Marketing Source Codes task in Functional Setup Manager. Note that a source code can be listed more than once in this page to support querying on the related promotions and coupons.

Promotions, Coupons, and Marketing Responses

You can provide a source code when creating, editing, or importing a marketing response. A response generated as a result of an e-mail campaign trackable URL or an e-mail bounce inherits the source code derived from the originating e-mail marketing campaign.

By providing a source code on the marketing response, associated promotions and coupons are also added as informative information on the response. You can search responses by promotion name and coupon code.

Define Campaign and Response Notes for Marketing

Defining Notes: Points to Consider

A note is a record attached to a business object that is used to capture nonstandard information received while conducting business. When setting up notes for your application, you should consider the following points:

- Note Types
- Note Type Mappings

Note Types

Note types are assigned to notes at creation to categorize them for future reference. During setup you can add new note types, and you can restrict them by business object type through the process of note type mapping.

Note Type Mappings

After note types are added, you must map them to the business objects applicable to your product area. Select a business object other than Default Note Types. You will see the note types only applicable to that object. If the list is empty, note type mapping doesn't exist for that object, and default note types will be used. Select Default Note Types to view the default note types in the
system. Modifying default note types will affect all business objects without a note type mapping. For example, you have decided to add a new note type of Analysis for your product area of Sales-Opportunity Management. Use the note type mapping functionality to map Analysis to the Opportunity business object. This will result in the Analysis note type being an available option when you are creating or editing a note for an opportunity. When deciding which note types to map to the business objects in your area, consider the same issues you considered when deciding to add new note types. Decide how you would like users to be able to search for, filter, and report on those notes.

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**Note**

Extensibility features are available on the Note object. For more information refer to the article Extending CRM Applications: how it works.

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**Define Campaign Tasks for Marketing**

**Turning a Business Process into a Task Template: Example**

This example illustrates how to create a task template that represents a business process.

**Scenario**

A sales manager wants to create a task template for her department's client product demonstration process.

**Client Product Demonstration Activities**

The client product demonstration process occurs regularly. The sales manager does not want to manually create tasks for this process every time it occurs, so she decides to create a task template that includes the business process activities. Each time she repeats the business process, she can use the task template to automatically generate the appropriate tasks that need to be performed.

**Analysis**

The business process consists of the following activities:

- Book a conference room.
- Create an agenda.
- Confirm the date and time with the client.
- Make arrangements with presenters.
- Deliver product demonstration.
- Follow up with client.

Based on the analysis of the business process, the following task template is created:

Task Template Name: Client Product Demonstration
<table>
<thead>
<tr>
<th>Task</th>
<th>Category</th>
<th>Lead Days</th>
<th>Duration Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book conference room</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Create agenda</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Confirm date and time with client</td>
<td>Call</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Schedule presenters</td>
<td>Preparation</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Deliver demonstration</td>
<td>Demonstration</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Follow up with client</td>
<td>Call</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

**Defining Tasks: Points to Consider**

A task is a unit of work to be completed by one or more people by a specific completion date. When using tasks in your application, you should consider the following points:

- **Tasks**
- **Task Templates**

**Tasks**

A task is defined with a description, due date and category. Each task has an owner, who oversees or is responsible for the task, and one or more assignees who perform the work. The task can be related to a business object, such as an Opportunity, a customer or, one or more external contacts. Tasks may also have Notes for general information, Attachments for tracking e-mail or project documents and Interactions which record customer communications.

**Task Templates**

Often a set of Tasks are performed repeatedly for a particular process and to support this administrators can define Task Templates, which represent a group of tasks. These task templates can be invoked by users working on a particular business object, for example a lead, campaign, or an opportunity. The user selects the appropriate task template for the goal they want to achieve and this creates the tasks and associates them with the business object being worked on. This saves the user from creating multiple tasks when an Opportunity reaches a particular sales stage, or the same set of tasks each time a marketing campaign is created.

**Note**

Extensibility features are available on the Task object. For more details refer to the article Extending CRM Applications : How It Works

**How can I create a task template that is available to associate with assessment templates?**

Create the task template with a subtype of Assessment.
Define Marketing Templates: Manage Marketing Campaign Templates

Turning a Business Process into a Task Template: Example

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Task Template Name: Client Product Demonstration

<table>
<thead>
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<th>Category</th>
<th>Lead Days</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Book conference room</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Create agenda</td>
<td>Preparation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Confirm date and time with client</td>
<td>Call</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Schedule presenters</td>
<td>Preparation</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Deliver demonstration</td>
<td>Demonstration</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Follow up with client</td>
<td>Call</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>
Campaign Stage Design Elements: Explained

The campaign design interface provides the components you use to create stages and specify audiences, treatments, allocation, schedule, event details, additional options, and lead options. The elements available to specify for each stage are determined by the stage type you select.

The following table lists the stages and corresponding elements.

<table>
<thead>
<tr>
<th>Stage Type</th>
<th>Design Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outbound</td>
<td>Audience</td>
</tr>
<tr>
<td></td>
<td>Treatments</td>
</tr>
<tr>
<td></td>
<td>Allocations</td>
</tr>
<tr>
<td></td>
<td>Schedule</td>
</tr>
<tr>
<td></td>
<td>Additional Options</td>
</tr>
<tr>
<td>Event</td>
<td>Event Details</td>
</tr>
<tr>
<td>Advertisement</td>
<td>Treatments</td>
</tr>
<tr>
<td>Lead Generation</td>
<td>Audience</td>
</tr>
<tr>
<td></td>
<td>Additional Options</td>
</tr>
<tr>
<td></td>
<td>Lead Options</td>
</tr>
<tr>
<td>Social site</td>
<td>Event Details</td>
</tr>
</tbody>
</table>

The stage types and corresponding standard design elements are described in the sections that follow.

**Note**

Since this campaign design functionality is extensible, your enterprise may have customized design elements that are different from the standard set. For example, your enterprise may add additional attributes to an existing tab, or may add an additional tab to capture more stage attributes.

**Outbound Stage**

An Outbound stage has the following design elements:

- **Audience**
  
  The audience collectively describes all the contacts you want to target in the campaign. For an Outbound stage, the audience can include any combination of segment trees, segments, and lists. After the campaign is launched, you can view the audience members on the campaign members page.

- **Treatments**
Treatment is a marketing term describing the content that is to be delivered to the target audience of a marketing campaign. You can add any number of treatments from the Treatments tab. Optionally, you can create one or more treatments to include in your campaign.

- **Allocations**

Allocation describes the process of relating the selected audience members to the corresponding treatments, to determine what content each contact will receive.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>You must allocate 100 percent of the selected audience row, whether segment or list, to a treatment.</td>
</tr>
<tr>
<td>Advanced</td>
<td>You can allocate by count or by percentage, and you can allocate a specific count or percentage of audience members to a control group. The control group is a random sampling of contacts who will not receive the campaign marketing material. You can evaluate the effectiveness of the campaign by comparing responses from control group members to responses from contacts who received the marketing material. In order to have your supplier process the full volume of transactions, you allocate more than 100 percent of the audience. For example, if your supplier is to send 5000 e-mails, and you want a control group of 500, you would allocate 5500 audience members and specify the control group size. When the stage executes, 5500 audience members will be loaded, but 500 will be identified as control group members, and excluded from the launch.</td>
</tr>
</tbody>
</table>

- **Activities**

The Activities tab shows activities and dates for the stage.

- **Schedule**

The schedule shows the start and end times of each system task that will be executed as part of the Load, List Export and Launch processes. By default, the Load, List Export and Launch processes run consecutively on the date scheduled for the stage, each step immediately following completion of its predecessor.

Optionally, you can enable manual tasks, which can be run by customized BPEL process. You can specify the duration of each process, and can request notification to the owner when it has completed. The dates of all
subsequent steps are adjusted automatically to allow for the duration of added processes.

**Note**

Customized BPEL processes are not available to Oracle Fusion Marketing, Cloud Service customers.

- Additional Options
  
  This page provides additional choices for loading campaign members.

- Monitor
  
  This page shows details of stage execution and provides the option to re-execute a stage.

**Event Stage**

An event stage has the Event Details design element, where you can select from the list of event types, select the venue, and optionally, add attachments.

**Advertisement Stage**

An Advertisement stage has the following design elements:

- Treatments
  
  Treatment is a marketing term describing the content that is to be delivered to the target audience of a marketing campaign. You can add any number of treatments from the Treatments tab. Optionally, you can create one or more treatments to include in your campaign.

- Monitor
  
  This page shows details of stage execution and provides the option to re-execute a stage.

**Lead Generation Stage**

A Lead Generation stage has the following design elements:

- Audience
  
  The audience collectively describes all the contacts you want to target in the campaign. For a Lead Generation stage, the audience can include segment trees and segments, but not lists.

- Additional Options
  
  This page provides additional choices for loading campaign members.

- Monitor
  
  This page shows details of stage execution and provides the option to re-execute a stage.
• Lead Options

After you have added audience segments and trees, select the audiences from which leads are to be created. For each audience, select the source code, so that the resultant leads can be tracked back to the corresponding marketing activity.

Social Stage

When you publish a social campaign in Oracle Fusion Social Marketing, a multistage campaign with a Social site stage is created automatically, to enable response tracking.

Repeating Campaign Stages: Points to Consider

Within a single campaign, you can define stages that repeat on a daily, weekly or monthly basis for the duration you specify, and can funnel customers through stages that repeat at different intervals.

You can create and manage repeating stages with varying degrees of complexity, such as the following:

• Repeating a single stage
• Repeating two stages with simple funneling
• Repeating two stages with complex funneling
• Pausing a campaign with repeating stages

Repeating a Single Stage

You can create a very simple campaign to target customers who have bought a subscription to your ABC product, to remind them when their subscription is about to expire, and offer a discount if they choose to renew for a longer term.

Repeating Two Stages with Simple Funneling

Your campaign has two repeating stages:

• Stage One, which repeats monthly, looks for all customers who buy your ABC product, to send them an e-mail with a link to the online user forum for ABC product. Every time a user finds an answer from the forum, rather than making a support call, your company saves money.

• Stage Two, which repeats quarterly, is funneled from Stage One, and looks for all customers who accessed the online user forum, to send them an offer to purchase one year of support for ABC product at a 50 percent discount.

When the first instance of Stage Two begins, Stage One has already repeated three times. All customers who were targeted in the first three instances of Stage One, and who subsequently visited the online forum, qualify for the discount offer, which is sent to them in the first instance of Stage Two.
When the second instance of Stage Two begins, Stage One has already repeated six times. The first instance of Stage Two has already targeted customers from the first three instances of Stage One. To ensure that no eligible customer gets a duplicate e-mail with the same discount offer, Stage Two must compute a segment which includes only those customers targeted in the last three instances of Stage One.

**Repeating Two Stages with Complex Funneling**

Again, your campaign has two repeating stages:

- Stage One, which repeats quarterly, targets customers who have attended your webinar during the last three months, and sends them a coupon that is valid for one year and which they can redeem online at any time within the year.

- Stage Two, which repeats monthly, is funneled from Stage One to find customers who redeemed their coupon online, plus those who also attended your webinar, and send them invitations to a company event, scheduled near their location, where they can share their experience with other customers from the same area.

Stage Two repeats frequently, to ensure that customers have the opportunity to attend an event soon after they purchase the product and redeem the coupon. The first instance of Stage Two starts soon after the first instance of Stage One, but Stage Two then repeats more frequently than Stage One.

When the third instance of Stage One begins, six instances of Stage Two have already occurred. When the seventh instance of Stage Two begins, it is not enough to target the same customers as in the second instance of Stage One, since there may be some customers who were targeted in the first instance of Stage One but who redeemed their coupons later.

It is therefore better to compute a segment for every instance of Stage Two that:

- includes all customers targeted in all previous instances of Stage One and
- excludes all customers targeted in all previous instances of Stage Two

In this way, all customers who were ever targeted by Stage One are considered for Stage Two, but no customer gets duplicate treatment for Stage Two.

**Pausing a Campaign with Repeating Stages**

If a campaign is paused, all repeating stages are skipped for the duration of the pause. When the dialog resumes after the pause, any repeating stages execute on their next scheduled occurrence.

**Stage Schedule Automatic Tasks: Explained**

You can monitor the execution status of all completed and active processes in your campaign, to check that the campaign stages are on track in terms of completion dates and times.
Campaign execution tasks are grouped in three categories:

- Load
- List Export
- Launch

Each category has a mandatory automatic task plus optional, configurable tasks.

**Load**

The load task uses segments or lists to build the audience of campaign members targeted in a particular stage. Every segment has an associated load format, that determines which campaign member attributes are to be loaded. Optionally, you can override this default format by selecting a different load format on the Additional Options tab.

You can tailor the load schedule by enabling optional tasks, either for manual intervention or for a custom action to be executed automatically. Once the load process completes successfully, you can view individual campaign members in the Campaign Execution details for the stage.

**Note**

All segments defined for a stage are loaded at the same time. If a stage has multiple extremely large segments, it will take longer to load. In such cases, you may want to create duplicate stages, and add only one large segment to each iteration, for faster processing.

**List Export**

The list export task takes the data from the load task, generates a text file of recipients, and uploads the file to the Universal Content Manager (UCM). The ID of this text file, together with the ID of the treatment stored in UCM, is made available to the supplier associated with the treatment, in the Launch task.

**Launch**

The launch task does the following:

- If the supplier is Oracle Fusion E-Mail and Web Marketing, the e-mails are delivered using the content and campaign member data uploaded in the List Export phase.

- For third party suppliers, the list of campaign members and content is delivered to them based on their distribution profile settings.

**Campaign Stage Additional Options: Explained**

Additional options are available for Interaction and Lead Generation campaign stages.
This page has the following fields.

- Purge Cache
- Allowable Error Count
- Original System Reference
- Load Format
- Duplicate Look Back Days

**Purge Cache**

During the load process, the campaign members for each stage are loaded into the database. For segments, the selected contacts are also stored in the segmentation cache. The segmentation cache is purged automatically 24 hours after loading, so there is no need to select this option if more than 24 hours have elapsed since the last load cycle.

**Allowable Error Count**

Applies only to Lead Generation stages. Specify the maximum number of errors to allow before stopping the lead import process and the corresponding execution of the stage.

**Original System Reference**

Applies only to Lead Generation stages. Provide a source reference for the newly imported records.

**Load Format**

Specify the path and file name to a new mapping that will override the default load format for all segments in the stage.

**Duplicate Look Back Days**

Applies only to Lead Generation stages. Specify the number of days in the immediate past that the import process will check for duplicates, when importing new leads.

**FAQs for Manage Marketing Campaign Templates**

**What happens if I create a campaign from a template or an existing campaign?**

Most planning and design attributes are copied. When creating from a previous campaign or from a template, the following elements are copied:

- Attachments
- Stages
- Audiences associated with stages
• Treatments associated with stages

When creating a campaign from a template, the following additional elements are copied:

• Tasks from any task template associated with the campaign template

**Note**

It is the task template, rather than the campaign template, that determines which tasks are added to your copy. If the task template has changed since the campaign template was created, the tasks in your copy may not match those in the original.

The following elements are not copied:

• Campaign team
• Notes
• Allocations
• Schedules

**What happens to existing campaigns if I update the campaign template?**

Existing campaigns that were created from the template are unaffected. Your changes will only affect campaigns created after the template is updated.

Campaign templates provide models to use as a basis when planning and designing multistage campaigns. When you use a template to create a multistage campaign, the template values are copied to the new campaign and the template’s purpose then ends for that campaign.

**How can I change the quick add list when designing multistage campaigns?**

The **Quick Add** lists contain collections of favorite treatments and audiences. The lists reflect the most recent changes, as users add and remove items. In the contextual area, click the **Edit List** link below the Quick Add list you want to change. A window opens, showing all the items available for that list. You can select one or more items and use the arrow buttons to move your selection into or out of the Quick Add list.

**What’s the difference between updating the count and refreshing the allocation?**

Updating the count recalculates the number of members in segments and segment trees. This is useful when the segment rules have been changed, or if you are revisiting the campaign design after an interval where many more contacts may have been added to the segment.

Refreshing the allocation recalculates the matrix where audience members are allocated to treatments. You can refresh your allocation of numbers or of percentages, or you can change between numbers and percentages.
What's a campaign stage custom action?

A custom action is a BPEL workflow that your enterprise has created and registered, to extend the automated load capabilities and extend or replace the automated launch capabilities of an interaction stage in a multistage campaign. During campaign design, you can optionally select custom actions when you schedule the execution activities for the stage.

What happens if I select the notify option for a stage schedule activity?

When the activity completes, or if it encounters an error condition, an e-mail notification is sent to the owner named for this step in the schedule.

What happens if I deselect the Enforce Approvals check box after campaign approval has started?

While approval is pending, a campaign cannot be changed. If you have authority to deselect Enforce Approvals, and decide that you do not want to seek approval for your campaign, you must first withdraw the approval request.

Campaign approval is enabled by a profile option. If approval is enforced, you must obtain approval before the campaign can be activated. You can override the requirement for mandatory approval only if you have the marketing vice president role.

Define Marketing Templates: Manage Marketing Treatment Templates

Importing Marketing Treatments: Explained

You can create or update marketing treatments by navigating to the Treatments work area and treatment templates by navigating to Setup and Maintenance and selecting the Manage Marketing Treatment Templates task, or by importing data through interface tables. To import treatments and treatment templates, you use the tool of your preference to load the data then use scheduled processes to import the data. Having a good understanding of the application objects, interface tables, and destination tables will help you prepare your import data.

Consider the following when importing treatments:

- Import interface tables, destination tables, and application entities
- Scheduled processes

Import Interface Tables, Destination Tables, and Application Entities

The treatment and treatment templates consists of many entities that form the treatment. Each entity is tied to an interface table.
Spreadsheets containing detailed information about each interface table, including the interface table columns, defaults, and validations, are available from the Oracle Enterprise Repository by searching on a specific interface table name or initiating a search using the FusionApps: Interface Table asset type.

The following table lists the interface tables, destination tables, and resulting application entities:

<table>
<thead>
<tr>
<th>Interface Tables</th>
<th>Destination Tables</th>
<th>Application Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_IMP_TREATMENTS</td>
<td>MKT_TM_TREATMENTS</td>
<td>Marketing Treatment and Treatment Template</td>
</tr>
<tr>
<td>MKT_IMP_TRMT_ITEM_ASSOC</td>
<td>MKT_TM_TRMT_ITEM_ASSOC</td>
<td>Treatment and Treatment Template Product and Product Group</td>
</tr>
<tr>
<td>MKT_IMP_TRMT_PROM_ASSOC</td>
<td>MKT_TM_TRMT_PROM_ASSOC</td>
<td>Treatment Promotion</td>
</tr>
<tr>
<td>MKT_IMP_TRMT_URLS_ASSOC</td>
<td>MKT_TM_TRMT_URLS_ASSOC</td>
<td>Treatment and Treatment Template Marketing URL</td>
</tr>
</tbody>
</table>

To obtain the unique IDs of existing application data, use the Define Data Export Setup and Maintenance task list.

You can import extensible, custom attributes in the same process as your treatment object. Design your object model extensions in Oracle Fusion CRM Application Composer and generate the required artifacts to register your extensions and make them available for importing before you populate the corresponding extensible columns in the interface tables.

**Scheduled Processes**

Navigate to Scheduled Processes to schedule the import of data from the interface tables to the destination tables.

The following table displays the process you can schedule to import treatments and treatment templates:

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Process Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BulkTreatmentsJob</td>
<td>Import Marketing Treatments</td>
</tr>
</tbody>
</table>

**Marketing Promotions and Coupons: Explained**

Promotion names and associated coupon codes provide tracking for offers extended to customers.

This topic includes the following:

- Promotions, Coupons, and Marketing Treatments
- Promotions and Mini Campaigns
- Promotions, Coupons, and Source Codes
• Promotions, Coupons, and Marketing Responses

Promotions, Coupons, and Marketing Treatments

You can add promotion names and selective coupon codes to a treatment, where you design the promotional message and coupon content. You allocate the treatment to specific customer segments or lists of contacts when designing your multistage campaign. You can design one treatment per promotion, per coupon, or combinations of promotions and coupons. You can also assign promotions and coupons to more than one treatment.

Promotions and Mini Campaigns

You can add promotion names to your mini campaign, where you design the promotional message and coupon content to be delivered to the customer segments and lists of contacts selected for the campaign. You can design one mini campaign per promotion or multiple promotions; all coupons for the selected promotion are automatically included. You can also design many mini campaigns using the same promotion.

Promotions, Coupons, and Source Codes

A marketing source code is a unique identifier that represents a campaign or marketing activity and is used to track marketing effectiveness. While a source code does not represent individual promotions or coupons, it does represent the campaign stage instance, audience segment or list, and treatment combination of a multistage campaign, and the instance, campaign content, and audience segment or list combination of a mini campaign.

To view a listing of source codes and associated campaign components, navigate to the Review Marketing Source Codes task in Functional Setup Manager. Note that a source code can be listed more than once in this page to support querying on the related promotions and coupons.

Promotions, Coupons, and Marketing Responses

You can provide a source code when creating, editing, or importing a marketing response. A response generated as a result of an e-mail campaign trackable URL or an e-mail bounce inherits the source code derived from the originating e-mail marketing campaign.

By providing a source code on the marketing response, associated promotions and coupons are also added as informative information on the response. You can search responses by promotion name and coupon code.

E-mail Campaign Content : Explained

To create the content of your e-mail campaign, you can add any combination of the elements that follow.

• Images
• Merge Fields
• Response Forms
• Standard, Dynamic, and Ad Hoc URLs
• Conditional Content
• Attachments

Images

Add graphic images to your e-mail. You can provide a link to an image already on a server, select a local file and upload it to the server, or use the Content Library to host images in a public location. Specify the size and placement of the image.

Merge Fields

Personalize your e-mail message body by adding place holders from a list of merge fields, such as the recipient's first name. Merge fields are standard sets of attributes pertaining to an individual contact. You can insert them into your e-mail content. When you launch the campaign, merge fields are dynamically populated directly from the database.

Sales campaigns have a special feature you can use to compose a personalized text message for each recipient. This feature is not available for mini campaigns or multistage campaigns.

Response Forms

Insert response forms as active links in your e-mail content. When a contact clicks one of the links, a specific response is automatically generated. All such responses are gathered and monitored, to track contacts' actions.

Available response forms for marketing campaigns are:

• Forward to Friend
• Request Call Back
• Request More Information
• Subscription Confirmation Request
• Unsubscribe Confirmation Request
• Subscribe to List
• Unsubscribe from List
• One Click Unsubscribe
• Profile Update
• E-mail as Link
• Add Address to E-mail Client

Note
Only the first three response forms are available in a sales campaign or mini campaign.

**Standard, Dynamic, and Ad Hoc URLs**

You can add any of the following types of URL:

- Standard URLs are predefined and commonly used across the enterprise.
- A dynamic URL is a type of standard URL where content is inserted when the e-mail is sent.
- An Ad Hoc URL can be created when you define your e-mail content.

By default, all standard URLs are tracked automatically. You can optionally enable tracking for Ad Hoc URLs, or disable tracking for standard URLs. With tracking enabled, every time a contact clicks a link in a campaign e-mail, the click is recorded as a specific response, together with details pertaining to the URL.

**Conditional Content**

Conditional content is inserted or omitted based on the results of a rule. There are two elements that you can use to generate conditional content within an e-mail:

- If-Then-Else cases are used to determine if a block of text or HTML is removed from an outgoing e-mail, by verifying if a Merge field value is defined. The merge field is defined if it is NOT an empty string or, for numeric merge fields, if it is not a value of 0 (zero). If the merge field is defined, the block of text or HTML remains in the outgoing e-mail. If the merge field is not defined, the block of text or HTML is removed from the outgoing e-mail.
- Named Blocks are used to decide whether or not to insert a block of text or HTML into an outgoing e-mail, by comparing one string to another. If the two strings are identical, the block is inserted.

**Attachments**

To send documents, such as product literature, as e-mail attachments with your campaign, you can select a file from your own desktop; the file will be added to the content repository for use during delivery.

**Configure Marketing Campaigns and Responses**

**Marketing Profile Options: Explained**

Profile options are configurable options that affect application operations. Values defined at the user level take precedence over those at the site level. If a value is not defined at the user level, the site level value is used.

Marketing profile options are categorized into the following:
• Define Treatments
• Design Multistage Campaigns
• Execute Campaigns
• Manage Budgets
• Manage Responses
• Define File-Based Data Import
• Define Segmentation Manager

Define Treatments

The following table lists the profile options that affect Treatments:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Mail Treatment Distribution Profile Default</td>
<td>Select the fulfillment supplier’s distribution profile used as the default value when creating e-mail treatments.</td>
</tr>
<tr>
<td>E-Mail Treatment Supplier Default</td>
<td>Select the fulfillment supplier used as the default value when creating e-mail treatments.</td>
</tr>
<tr>
<td>Read Receipt Response Form Default</td>
<td>Enable automatic defaulting of read receipt tracking to HTML e-mail treatment content. This profile option can be updated at the user level.</td>
</tr>
<tr>
<td>SMS Treatment Distribution Profile Default</td>
<td>Select the fulfillment supplier’s distribution profile used as the default value when creating short message service treatments.</td>
</tr>
<tr>
<td>SMS Treatment Supplier Default</td>
<td>Select the fulfillment supplier used as the default value when creating short message service treatments.</td>
</tr>
<tr>
<td>Treatment Content Directory</td>
<td>Specify the folder path in Oracle Universal Content Management to store marketing treatment content.</td>
</tr>
<tr>
<td>Treatment Template Directory</td>
<td>Specify the folder path in Oracle Universal Content Management to store marketing treatment templates.</td>
</tr>
<tr>
<td>Treatment Template Name Prefix</td>
<td>Specify a default prefix for treatment template names. This profile option can be updated at the user level.</td>
</tr>
</tbody>
</table>

Design Multistage Campaigns

The following table lists the profile options that affect multistage campaigns:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Hoc Campaign Approval</td>
<td>Enable the campaign owner to select the approver from a list of resources. If not enabled, the first approver is the campaign owner’s manager.</td>
</tr>
<tr>
<td>Enabled Approval Timeout Interval</td>
<td>Specify the number of days an approver has to respond before the approval request times out.</td>
</tr>
<tr>
<td>Enforce Campaign Approval Enabled</td>
<td>Enable application verification of the campaign approved status before the campaign is launched.</td>
</tr>
</tbody>
</table>
Execute Campaigns

The following table lists the execute campaigns profile options:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign Lead Generation Load Format Default</td>
<td>Select the default path and name of the file containing the column mapping used to load sales leads during campaign stage execution. The default load formats are displayed in the Additional Options tab when designing a lead generation stage. This profile option can be updated at the user level. Fusion passes the campaign lead generation load format to the segmentation server when a stage is being loaded and launched.</td>
</tr>
<tr>
<td>Campaign Member Load Format Default</td>
<td>Select the default path and name of the file containing the column mapping used to load campaign members during campaign stage execution. The default load formats are displayed in the Additional Options tab when designing an interaction stage. This profile option can be updated at the user level. Fusion passes the campaign member load format to the segmentation server when a stage or mini campaign is being loaded and launched.</td>
</tr>
<tr>
<td>Recipient File Folder Default</td>
<td>Specify the Oracle Universal Content Management directory path for member list files used for marketing campaign fulfillment.</td>
</tr>
<tr>
<td>Search Marketing Campaigns Enabled</td>
<td>Enable the display of Search Marketing Campaigns, a tab in the Campaigns Overview user interface containing marketing campaigns using search engine providers.</td>
</tr>
</tbody>
</table>

Manage Budgets

The following table lists the profile options that affect the management of budgets:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Fund Request and Claim Approval Administrator</td>
<td>Select the recipient of notifications when an approver cannot be determined, who is qualified to respond to the notification, and can modify approval configurations.</td>
</tr>
<tr>
<td>Budget Funding Tolerance Default</td>
<td>Specify the funding tolerance percent to default when creating budgets. The percentage is used to calculate an allowable amount that total fund requests can exceed the budgeted amount.</td>
</tr>
<tr>
<td>Claim Submission Deadline Default</td>
<td>Specify the number of days added to the budget creation date to determine the default claim submission deadline date.</td>
</tr>
<tr>
<td>Fund Request Submission Deadline Default</td>
<td>Specify the number of days added to the budget creation date to determine the default fund request submission deadline date.</td>
</tr>
</tbody>
</table>
Manage Responses

The following table lists the profile options for the management of responses:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Suspect Synchronization Batch Size</td>
<td>Specify the number of rows to batch during synchronization of records between the marketing suspects table and the customer party table.</td>
</tr>
<tr>
<td>Marketing Suspect Synchronization Segment Name</td>
<td>Specify the name of the segment that identifies the marketing suspect contacts to be excluded from the customer party table during the campaign load process.</td>
</tr>
</tbody>
</table>

Define File-Based Data Import

The following table lists the profile option for define file-based data import:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Content Management Applet Enabled</td>
<td>Enable Oracle Universal Content Management applet to browse and load large files when creating file import processing activities.</td>
</tr>
</tbody>
</table>

Define Segmentation Manager

The following table lists the profile option for the segmentation manager:

<table>
<thead>
<tr>
<th>Option Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segmentation Server Default</td>
<td>Specify the default segmentation server host name.</td>
</tr>
</tbody>
</table>

Manage Social Marketing Connectors

Oracle Social Marketing and Oracle Fusion Marketing: How They Work Together

Using Oracle Social Marketing, you can create social media content (web forms on Facebook pages, Twitter Tweets, and so forth) and then track visitors’ responses to this content in an Oracle Fusion marketing campaign.

You can also use Oracle Fusion Marketing to create outbound e-mail campaigns that point to social media content (such as Facebook pages or tabs), and then track visitors' interactions with the content in an Oracle Fusion marketing campaign.

This topic describes the interaction between Oracle Social Marketing and Oracle Fusion Marketing.

The following diagram illustrates the interaction.
Define Common Marketing Configuration

Setting Up

You must perform setup tasks on both the Oracle Social Marketing and Oracle Fusion Marketing sides before you can use Oracle Fusion Marketing to track responses to your Oracle Social Marketing campaigns. This provides the information that Oracle Fusion and Oracle Social Marketing need to communicate with each other, as well as verifying that a valid connection can be established between them.

- In Oracle Fusion Marketing, you specify your Oracle Fusion user name and password, as well as the URL you use to sign in to your Oracle Fusion CRM account.
- In Oracle Social Marketing, you specify the location to connect to Oracle Fusion, as well as your Oracle Fusion user name and password.

You can perform a test to determine whether the information you provided will result in a valid connection to Oracle Social Marketing.

Defining Facebook Tabs

After you have successfully connected to Oracle Social Marketing, you can create a Facebook tab that includes one or more web forms that visitors can complete. In Oracle Social Marketing, navigate to Forms > Fusion CRM Forms. On the Enter Your Fusion CRM Information page, you can specify your Oracle
Fusion CRM user name and password and the URL to your Oracle Fusion service. You click the Link to Campaign button on the Enter Your Fusion CRM Information page to publish the campaign to Facebook and set up an Oracle Fusion Marketing campaign to collect the responses. After the form is published to Facebook, respondents can visit the page. Their responses when filling out your web form are sent to your Oracle Fusion Marketing campaign.

When you publish a web form to Facebook that you have created using Oracle Social Marketing, Oracle Fusion automatically defines a new Marketing campaign. Marketing campaigns defined by Oracle Fusion Marketing are set up as multistage campaigns, but only a subset of the campaign's fields are displayed. Multistage campaign fields that are not displayed in campaigns set up by Oracle Fusion Marketing include:

- Template
- Design Status
- Status
- Execution Status
- Enforce Approvals
- Execution Start Date
- Planned End Date

The campaign set up by Oracle Fusion contains only a single stage, of the type Social Site. The purpose of this campaign is to collect the responses from visitors who visit your Facebook page and fill out your web form. Responses are tracked based on unique source codes assigned to each web form. Your Facebook tab can contain multiple web forms, or you can have multiple Facebook tabs, but each response includes its own unique code for tracking purposes.

If you choose, you can associate the campaign containing the Social Site stage with another Oracle Fusion Marketing multistage campaign.

**Visiting the Campaign and Viewing Responses**

After your Facebook tab has been published, visitors can view it and complete the web form. When a visitor submits a web form, a response is automatically generated and included in the Fusion Marketing campaign.

When a visitor to the site provides a response such as filling out a web form, the relevant information is passed back to Oracle Fusion. Responses are captured using special tracking information that is embedded in the links that a visitor clicks to access the campaign content. Using this tracking information, Oracle Fusion can determine which visitors responded to which campaigns, and what sort of responses they made.

Marketers can go to the Campaign work area in Oracle Fusion Marketing and view the responses in the Results area of the social campaign. The Responses tab shows all responses to the campaign, including the date and the name of the respondent.

**Customizing E-Mail and Web Pages for Outbound Campaigns**

When creating e-mail or Web pages as part of an Oracle Fusion outbound campaign, you can include links to Facebook pages that include your content,
or provide links that allow your recipients to send your content to their contacts using Twitter.

**Responses to Outbound Campaigns**

When you include links to Facebook pages, Fusion Marketing tracks when the recipient clicks on the link in your e-mail or on your Web page and visits your page. Oracle Fusion Marketing also tracks visitor response if a recipient fills out a Web form that you have created using Oracle Social Marketing.

When you include a preconfigured Twitter Tweet, recipients who click the link are sent to their Twitter home page, where they can sign in and view your preconfigured Tweet content. They have the option to edit the preconfigured content or to send the Tweet as is to their Twitter feed.

In either case, Oracle Fusion Marketing automatically tracks the responses and, as is the case with responses to web forms, includes the response information in the Results area of the social campaign. Marketers can visit the campaign's Responses tab to view the results.
Importing Marketing Suppliers: Explained

You can create or update marketing suppliers by navigating to Setup and Maintenance and selecting the Manage Marketing Supplier Details and Distribution Profiles task or by importing data through interface tables. To import suppliers, you use the tool of your preference to load the data then use scheduled processes to import the data. Having a good understanding of the application object, interface tables, and destination tables will help you prepare your import data.

Consider the following when importing marketing suppliers:

- Import interface tables, destination tables, and application entities
- Scheduled processes

Import Interface Tables, Destination Tables, and Application Entities

The marketing supplier consists of many entities that form the supplier. Each entity is tied to an interface table.

**Note**

Spreadsheets containing detailed information about each interface table, including the interface table columns, defaults, and validations, are available from the Oracle Enterprise Repository by searching on a specific interface table name or initiating a search using the FusionApps: Interface Table asset type.

The following table lists the interface tables, destination tables, and resulting application entities:

<table>
<thead>
<tr>
<th>Interface Tables</th>
<th>Destination Tables</th>
<th>Application Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_IMP_VENDORS</td>
<td>MKT_TM_VENDORS</td>
<td>Marketing Supplier</td>
</tr>
<tr>
<td>MKT_IMP_VENDOR_PROFILES</td>
<td>MKT_TM_DLV_PROFILE</td>
<td>Distribution Profile and Delivery Channel Parameters</td>
</tr>
<tr>
<td></td>
<td>MKT_TM_DLV_PRF_PARAMS</td>
<td></td>
</tr>
</tbody>
</table>
To obtain the unique IDs of existing application data, use the Define Data Export Setup and Maintenance task list.

Scheduled Processes

Navigate to Scheduled Processes to schedule the import of data from the interface tables to the destination tables.

The following table displays the process you can schedule to import marketing suppliers:

<table>
<thead>
<tr>
<th>Process Name</th>
<th>Process Display Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BulkVendorJob</td>
<td>Import Marketing Suppliers</td>
</tr>
</tbody>
</table>
E-Mail Architecture for Marketing: How It Fits Together

E-mail marketing includes a combination of components designed to support high volume, personalized e-mail messages and track e-mail bounces and click-through responses. This topic provides an overview of the following e-mail marketing installation components and how they fit together:

- Business Intelligence and Universal Content Management
- E-Mail Sending Daemon (ESD) and the Mail Transfer Agent (MTA)
- Bounce Handling Daemon (BHD)
- Click-Through Daemon (CTD)

The following figure displays an example of a typical architectural structure for e-mail marketing server components:
Business Intelligence and Universal Content Management

Segmentation is the practice of dividing a customer base into groups that are similar in specific ways such as demographics or past purchases. Marketers use segmentation to target groups of customers and allocate marketing resources effectively. Segments and segment trees are selected in marketing campaigns to receive marketing communications and to generate leads. Oracle Marketing Segmentation is fully integrated with Oracle Business Intelligence and uses the same metadata as the Business Intelligence reporting tools. When an e-mail campaign is launched, the contact details are collected using the information in the Business Intelligence Repository, formatted using the Business Intelligence server, and then stored in Universal Content Management. Universal Content Management also stores the campaign e-mail content, headers, footers, and attachments specified during campaign design.

E-Mail Sending Daemon and the Mail Transfer Agent

The e-mail sending daemon assembles each outbound e-mail message for a campaign. It then sends each message to the outbound mail transfer agent (MTA) for delivery.

The e-mail sending daemon listens for SOAP requests from the marketing E-Mail Server. A SOAP request includes the required file names found in Universal Content Management. The e-mail sending daemon must be able to communicate with one or more outbound mail transfer agents to send mailings over the Internet. The e-mail sending daemon must also be able to inform the marketing E-Mail Server when it has completed as well as details of synchronous e-mail bounces for delivery errors that occurred while it communicated using simple mail transfer protocol (SMTP) to the mail transfer agents.

The most common placement for the e-mail sending daemon is within the corporate network, behind the DMZ. However, the e-mail sending daemon can be placed inside the DMZ or outside the firewall, if there is a port opened to connect to the marketing E-Mail Server and Universal Content Management.

Bounce Handling Daemon

The bounce handling daemon tracks e-mail messages that cannot be delivered, parses the returned e-mail messages, and records the cause of the e-mail bounce.

It is recommended that you place the bounce handling daemon in the DMZ. However, you can place the bounce handling daemon behind an inbound mail transfer agent. The approach that you choose depends on the configuration of your network, DMZ, existing inbound mail transfer agent, and firewall.

Click-Through Daemon

The click-through daemon tracks clicks made by the e-mail recipient on trackable URLs included in the e-mail content. It listens for HTTP requests, such as forward to a friend, subscribe to list, and one click unsubscribe.

You can place the click-through daemon in the DMZ, inside or outside the firewall, if a port is opened that allows it to connect to the marketing E-Mail Server using SOAP. Web proxy servers can be used to route the HTTP requests to the click-through daemon server.
Manage Marketing E-Mail Sending Daemon: Explained

The E-Mail Marketing Server is a combination of components designed to support high volume, personalized e-mail messages, and to track e-mail bounces and click-through responses. The e-mail sending daemon is the outbound component for campaign e-mail messages.

Installing the e-mail sending daemon is part of the provisioning process. For more information on provisioning, see the Oracle Fusion Applications Quick Installation Guide.

This topic includes the following:

- Outbound mail transfer agents
- Universal Content Management connection
- Volume thresholds and throughput
- Spam scoring server settings
- E-mail sending daemon properties file

Outbound Mail Transfer Agents

The e-mail sending daemon (ESD) needs one or more outbound mail transfer agents (MTAs) to deliver e-mail over the Internet. You specify the host and port numbers of your MTAs in the ESD properties file. If you specify multiple MTAs, then the e-mail sending daemon uses the additional MTAs as backup. For example, when the e-mail sending daemon starts, it uses the first MTA listed in the properties file. If the MTA fails, the next MTA listed is used. To use the first MTA again, you must restart the e-mail sending daemon, usually by rebooting the server.

Universal Content Management

The e-mail sending daemon listens for SOAP requests from the marketing E-Mail Server. A SOAP request includes the required file names found in Universal Content Management. You specify access information for Universal Content Management in the ESD properties file.

Volume Thresholds and Throughput

You can specify or adjust the threshold value property that determines when the campaign priority needs to be honored. When the threshold is reached, the priority value specified during campaign design is used. Processing for campaigns with less priority is temporarily paused until the processing for higher priority campaigns is completed.

You can limit the maximum throughput rate for the e-mail sending daemon, specified in messages per second.

- A value of -1 is highest throughput rate possible and is the default setting.
- A value of 250-350 supports a medium level of throughput.
- A value of 250-50 supports a low level of throughput.

**Spam Scoring Server Settings**

You can install SpamAssassin, an open-source spam scoring software provided by Apache Software Foundation, to assist marketers in creating campaign content that is less likely to be identified as junk mail by the recipients' e-mail software. Once you have completed the installation steps provided by Apache Software Foundation, update the e-mail sending daemon properties file with the software location and to enable the reporting of a spam score and score reasons when testing e-mail campaign content.

**ESD Properties File**

You can modify the e-mail sending daemon properties file if changes are required after installation.

The following table describes the e-mail sending daemon properties file `esd.properties`:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>esd.mailServers</code></td>
<td>The MTA server, including host name and port number, used by the ESD to deliver e-mails. When listing more than one MTA, use a comma between each MTA.</td>
</tr>
<tr>
<td><code>esd.contentHandler.server</code></td>
<td>The Universal Content Management URL used to access the content server.</td>
</tr>
<tr>
<td><code>esd.mountPoint</code></td>
<td>The absolute path of the file directory where the ESD writes the content files.</td>
</tr>
<tr>
<td><code>esd.handler.bounce.webservice.url</code></td>
<td>The web service URL used by the ESD to log a bounced e-mail message. To locate this web service, search for <code>MktDialogsCampMemberUpdateComposite</code> composite deployed within the Marketing SOA environment.</td>
</tr>
<tr>
<td><code>esd.handler.updateStatus.webservice.url</code></td>
<td>The web service URL used by the ESD to log a completed process. To locate this web service, search for <code>MktDialogsCampFulfillmentStatusComposite</code> composite deployed within Marketing SOA environment</td>
</tr>
<tr>
<td><code>esd.priorityThreshold</code></td>
<td>The threshold that determines when the campaign priority needs to be honored.</td>
</tr>
<tr>
<td><code>esd.smtp.throttleVal</code></td>
<td>This property will determine the e-mail throughput rate for the system.</td>
</tr>
<tr>
<td><code>esd.spamPort</code></td>
<td>The port number of the server where SpamAssassin is installed. The default port number is 783.</td>
</tr>
<tr>
<td><code>esd.spamServer</code></td>
<td>The host name or IP address of the server where SpamAssassin is installed.</td>
</tr>
<tr>
<td><code>esd.reportSpamErrors</code></td>
<td>The Boolean value used to enable the display of SpamAssassin scoring when previewing marketing e-mails.</td>
</tr>
</tbody>
</table>
Oracle Fusion Marketing Segmentation: Architectural Overview

Oracle Fusion Marketing Segmentation is fully integrated with Oracle Business Intelligence Enterprise Edition (OBIEE) and uses the same metadata as the Oracle Business Intelligence Applications (OBIA) reporting tools.

Oracle Fusion Marketing Segmentation Architecture

You interact with information in Oracle Business Intelligence Applications (OBIA) and Oracle Transactional Business Intelligence (OTBI) using Oracle BI (Business Intelligence) Enterprise Edition components.

The following figure outlines the marketing segmentation architecture.
The OBIA warehouse is a unified data repository for all customer-centric data and is used to support the analytical requirements of Oracle Business Intelligence Applications.

OTBI is real-time self service component reporting directly off Fusion application data where you can create your own reports using pre-packaged functional metadata. OTBI is co-located and semantically integrated with the data warehousing metadata and can read security, flex fields and trees from the Oracle Fusion CRM Marketing application.

The RPD layer is the repository file that stores metadata. In order to use any BI tool that depends on its own metadata layer, such as BI Answers and BI Dashboards, the metadata repository must describe how queries should be constructed against the relational data sources. RPD files are used to define the physical layer.

The BI presentation layer stores the Segment, Segment Tree and List Format definitions in the Web Catalog. The catalog stores content created with the Segment Designer, Segment Tree Designer, and List Format designer. Content can be organized into folders, which are either shared or private. Types of content that can be stored in the Web Catalog include segments, segment trees, list formats, as well as reports, filters, and dashboards created with Oracle BI Answers.

Oracle Fusion Marketing Segmentation: Implementation Planning

This topic lists some of the considerations to take into account when planning your implementation of Oracle Fusion Marketing Segmentation.

You need to manage the necessary configuration, integration, and metadata settings to fully enable marketing segmentation functionality. Segmentation setup and configuration is done in two parts.

Define Segmentation Manager

The first part of the configuration happens when the OBIEE server is being implemented and configured. These tasks are outlined as follows:

- Manage Segmentation Manager Configuration Parameters
  Configure deployment parameters, default values, and connection pools to the database server and list output to database tables for the underlying business intelligence infrastructure.

- Manage Segmentation Manager Enterprise Content Management Integration
  You can configure deployment and connection parameters for Oracle Enterprise Content Management server repository using Oracle Enterprise Manager. You do not need to configure any connections for Fusion Application users. When campaigns are launched, the target audience contact details are collected using the information in the Business Intelligence Repository, formatted using the Business
Intelligence server, and then stored in a content server. You, as the administrator, can configure for connections to the Oracle Content Server for non Fusion application users.

- Manage Segmentation Manager Metadata for Marketing

Create and maintain segmentation metadata, such as target levels, presentation catalog subject areas, and schema mappings, used when creating segments, segment trees, and list formats.

**Marketing Operations Manager Role**

The second part of the configuration is done by a Marketing Operations Manager role within the Oracle Fusion Marketing Segmentation application.

- Manage List Formats

Marketing Segmentation comes with pre-seeded list formats to output segments for campaign execution, e-mail personalization and lead creation. If there is a need to output a segment in a different format, such as including different or custom attributes in the output, then a new List Format can be created to accommodate that need.

- Manage Segmentation Manager Contact Planning Rules

Define frequency and volume constraints that can be applied globally or against a specific customer communication channel. Use segment inclusion criteria to define the conditions where the rules apply. Allow a company to place volume, frequency and recency rules on all forms of communication across customer, channel and program dimensions. Define a set of segments which represent the segments of the population that will be included. For example, a segment which includes all the customers that are opted into e-mail.

**Marketing Segmentation Administration: Highlights**

Marketing integrates with Oracle Marketing Segmentation to provide customer segments, personalization merge fields, contact planning rules, and list formats.

Oracle Marketing Segmentation is fully integrated with Oracle Business Intelligence and uses the same metadata as the Business Intelligence reporting tools. Consequently, Marketing Segmentation has access to a library of available customer attributes, calculations, derived metrics, and data mining models.

Oracle Enterprise Manager incorporates the integration points between Oracle Marketing Segmentation and Universal Content Repository for the storage of lists generated for export.

Configuring segmentation for Marketing includes the management of the following tasks:

- Segmentation Manager Configuration Parameters
- Marketing List Formats
• Content Management Integration
• Contact Planning Rules
• Marketing Module Metadata
• Security Mappings for Fusion Users of Marketing Segmentation


Segmentation Manager Configuration Parameters

• For information about setting up marketing module parameters, see the chapter on Installing and Administering Segmentation and List Generation in the Marketing Segmentation Guide. Refer to the Oracle Marketing Segmentation Guide on Oracle Technology Network at http://www.oracle.com/technetwork.

Marketing List Formats

List Formats define the layout of files that you can use for a variety of purposes. While Marketing Segmentation supports five list format types, Oracle Fusion Marketing uses four formats. List Export Formats are used to define the customer data and other campaign-related information that is exported so that the campaign stage can be executed. For example, a list export format may provide a list file containing customers and addresses to a direct mail fulfillment supplier for printing and mailing or to create a call list to distribute to employees in a sales organization. E-Mail Server Formats are used to export the members of an e-mail campaign to the Oracle E-Mail Marketing Server. The e-mail personalization format is the type of E-Mail Server format that provides the columns that can be used as merge fields to personalize the e-mail message sent to each recipient. Campaign Load Formats are used to load the individual members of a segment or a segment tree to the campaign. Data Load Formats are used to import leads resulting from a multistage campaign, lead generation stage.

• For information about marketing list formats, see the chapter on Designing Marketing List Formats in the Marketing Segmentation Guide. Refer to the Oracle Marketing Segmentation Guide on Oracle Technology Network at http://www.oracle.com/technetwork.

• To provide default campaign load and data load formats for campaigns, navigate to Setup and Maintenance and select the Manage Marketing Profile Options task to update the Campaign Member Load Format Default and Campaign Lead Generation Load Format Default profiles.

Content Management Integration

Configure deployment and connection parameters for Oracle Enterprise Content Management server repository using Oracle Enterprise Manager.

• For information about content management integration, refer to the Configuring for Connections to the Marketing Content Server section in the Configuring Connections to External Systems chapter of the Oracle
See: Configuring for Connections to the Marketing Content Server

Contact Planning Rules

Contact planning rules allow you to define contact frequency and volume constraints that can be applied globally or against a specific customer communication channel. Contact planning rules use segment inclusion criteria to define the conditions where the rules apply.

- For information about contact planning rules, see the Manage Marketing Contact Planning Rules section in the Using Marketing Segments and Segment Trees chapter in the Marketing Segmentation Guide. Refer to the Oracle Marketing Segmentation Guide on Oracle Technology Network at http://www.oracle.com/technetwork.

Marketing Module Metadata

To support the segmentation process, the Oracle Business Intelligence Administration Tool provides a set of Marketing metadata, such as target levels, presentation catalogs, sampling factors, and schema mappings.

- For information about marketing segmentation metadata, see the chapter on Configuring Marketing Segmentation Metadata, and the appendix on Marketing Segmentation Metadata Content in the Marketing Segmentation Guide. Refer to the Oracle Marketing Segmentation Guide on Oracle Technology Network at http://www.oracle.com/technetwork.

Security Mappings for Fusion Users of Marketing Segmentation

- For information about the security mappings and access levels specific for Fusion users of Marketing Segmentation, see the appendix on Security Mappings for Fusion Users of Marketing Segmentation in the Marketing Segmentation Guide. Refer to the Oracle Marketing Segmentation Guide on Oracle Technology Network at http://www.oracle.com/technetwork.

Marketing Segments and Segment Trees: Highlights

Segmentation is the practice of dividing a customer base into groups that are similar in specific ways such as demographics or past purchases. Marketers use segmentation to target groups of customers and allocate marketing resources effectively. Segments and segment trees are selected in marketing campaigns to receive marketing communications and to generate leads. Marketing Segmentation supports the creation and management of segments and segment trees.

Oracle Marketing Segmentation Guide describes how to create segments and segment trees.

Manage Marketing Segments and Segment Trees

- For information about marketing segments and segment trees, see the Using Marketing Segments and Segment Trees chapter in the Marketing
Define Transactional Business Intelligence Configuration:

Highlights

Configure Oracle Transactional Business Intelligence for ad hoc reporting, review certain setup objects to be used in Transactional Business Intelligence, and manage the presentation catalog and currency type display.

Defining Transactional Business Intelligence Configuration

- Review details about the Transactional Business Intelligence tasks. Refer to the Oracle Fusion Transactional Business Intelligence Administrator’s Guide.

Manage Security for Transactional Business Intelligence

Assigning Security Profiles to Job Roles for Oracle Fusion Transactional Business Intelligence Users: Explained

Users of Oracle Fusion Transactional Business Intelligence (Transactional Business Intelligence) need access to some person data for reporting purposes. To provide this access, you assign a predefined security profile to relevant job or abstract roles using the Oracle Fusion Human Capital Management (HCM) setup task Manage Data Role and Security Profiles. On completion of this task, Oracle Fusion Data Security is updated automatically for roles being used to access Transactional Business Intelligence.

Job or Abstract Roles and Related Security Profiles

The following table identifies, by Oracle Fusion product, the job and abstract roles that need access to person data and the predefined security profile that you assign to each role.

<table>
<thead>
<tr>
<th>Product</th>
<th>Job or Abstract Role</th>
<th>Security Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Fusion Assets</td>
<td>Asset Accountant</td>
<td>View All Workers</td>
</tr>
<tr>
<td>Oracle Fusion Asset(s)</td>
<td>Job Role(s)</td>
<td>Security Profile(s)</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Asset Accounting Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Budget Analyst</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Budget Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Consolidation Accountant</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Consolidation Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Intercompany Accountant</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Financial Analyst</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>General Accountant</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>General Accounting Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Incentive Compensation Participant</td>
<td></td>
<td>View Manager Hierarchy</td>
</tr>
<tr>
<td>Warehouse Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Project Accountant</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Project Administrator</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Project Billing Specialist</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Buyer</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Category Manager</td>
<td></td>
<td>View All Workers</td>
</tr>
<tr>
<td>Sourcing Project Collaborator</td>
<td></td>
<td>View All Workers</td>
</tr>
</tbody>
</table>

For example, as part of their Transactional Business Intelligence setup:

- **Oracle Fusion Assets** implementors must assign the predefined security profile View All Workers to the Asset Accountant and Asset Accounting Manager job roles.

- **Oracle Fusion Incentive Compensation** implementors must assign the predefined security profile View Manager Hierarchy to the abstract role Incentive Compensation Participant Manager.

The security profiles that HCM roles need to access Transactional Business Intelligence are assigned during the setup of HCM data security: no additional setup is required for Transactional Business Intelligence purposes.

### Enabling an Oracle Fusion Transactional Business Intelligence User to Access Person Data: Worked Example

This example shows how to assign a security profile to a job or abstract role to enable users with that role to access person data. This task is required for users of Oracle Fusion Transactional Business Intelligence (Transactional Business Intelligence) who do not also use Oracle Fusion Human Capital Management (HCM).
The following table summarizes key decisions for this scenario. When performing this task, use the job or abstract role for your product and the name of the relevant predefined person security profile in place of those shown here.

<table>
<thead>
<tr>
<th>Decisions to Consider</th>
<th>In This Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the name of the Transactional Business Intelligence job or abstract role?</td>
<td>Warehouse Manager</td>
</tr>
<tr>
<td>What is the name of the person security profile?</td>
<td>View All Workers</td>
</tr>
</tbody>
</table>

To perform these tasks, you must have the role IT Security Manager.

1. Launch the task Manage Data Role and Security Profiles.
2. Search for the job or abstract role.
3. Assign the relevant predefined security profile to the job or abstract role.

**Launching the Task Manage Data Role and Security Profiles**

1. On the Overview page of the Setup and Maintenance work area, click the All Tasks tab.
2. In the Search region, complete the fields as shown in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search</td>
<td>Tasks</td>
</tr>
<tr>
<td>Name</td>
<td>Manage Data Role and Security Profiles</td>
</tr>
</tbody>
</table>

3. Click Search.
4. In the search results, click Go to Task for the Manage Data Role and Security Profiles task.

**Searching for the Job or Abstract Role**

1. On the Manage HCM Data Roles page, enter the job name Warehouse Manager in the Role field.
2. Click Search.
3. In the search results, highlight the entry for the Warehouse Manager job role.
4. Click Assign.

**Assigning the Security Profile to the Job Role**

1. In the Person Security Profile field on the Assign Data Role: Security Criteria page, select the security profile View All Workers.
2. Click Review.
3. On the Assign Data Role: Review page, click Submit.
Define Extensions for Marketing

Define Custom Enterprise Scheduler Jobs

Managing Job Definitions: Highlights

Oracle Enterprise Scheduler jobs are run in Oracle Fusion Applications to process data and, in some cases, to provide report output. A job definition contains the metadata that determines what the job does and what options are available to users who run the job. You can create and maintain job definitions for use in Oracle Fusion Applications.

Managing job definitions is fully described in the Oracle Fusion Applications Administrator's Guide. As you read content from that guide, note that the guide describes managing Oracle Enterprise Scheduler, including job definitions, from Oracle Enterprise Manager Fusion Applications Control. You can also access job definitions by starting in the Setup and Maintenance Overview page and searching for the Enterprise Scheduler job tasks for your applications.

Selecting the Appropriate Implementation Task

Each Enterprise Scheduler job definition task uses one Java EE application, which is referenced in the task name. You must use the right task because, to access the product job definition that you want to view or work on, the view objects must be contained in the application. If you do not select the right task, then the job definition will not be displayed properly or function correctly. The application name is usually the same as the product that the job definition belongs to, but not always.

- For example, the Oracle Fusion Payables Java EE application contains the Oracle Fusion Expenses product view objects. To create or maintain a job definition for use in Expenses, you select the Manage Custom Enterprise Scheduler Jobs for Payables and Related Applications task.

- In another example, the Oracle Fusion Payments product view objects are contained in both Oracle Fusion Payables and Oracle Fusion Receivables Java EE applications. You need to select the task appropriate to the job definition for Payments. Use the Manage Custom Enterprise Scheduler Jobs for Receivables and Related Applications task if the job is for receivables functionality, or the Manage Custom Enterprise Scheduler Jobs for Payables and Related Applications task if the job is for payables functionality.
Use the task description to see the products that correspond to the Java EE application specified in the task name. For example, the description for the Payables task lists Oracle Fusion Payables, Assets, Expenses, and Payments.

You can view task descriptions in the help window for the task, if any, or in the generated setup task lists and tasks report from the Getting Started page.

If you have access to the Manage Task Lists and Tasks page, you can also open the details for specific tasks to see the description.

For general information about product and Java EE application relationships, use Oracle Enterprise Manager Fusion Applications Control (Fusion Applications Control).

See: Topology Section

**Viewing and Creating Job Definitions**

- You can access predefined and custom job definitions.

  See: Viewing Job Definitions

- You can create jobs based on Java, PL/SQL, or any other supported technology.

  See: Creating a Job Definition

  - If you are using the Setup and Maintenance work area, then the Enable submission from Enterprise Manager check box is available for the job definition.
    
    - If you do not select this check box, then the job cannot be run from Enterprise Manager.
    
    - If you select this check box, then you can define parameters for this job definition only in Enterprise Manager. Save the rest of your work on the job definition, and then go to Enterprise Manager if you need to define parameters.

**Managing List of Values Sources: Highlights**

A list of values source for Oracle Enterprise Scheduler job definitions determines where a list of values comes from and what the specific values are. These lists of values are used in parameters and user properties of job definitions. For example, you can use a source of country values for a Country job parameter.

Managing list of values sources is fully described in the Oracle Fusion Applications Administrator's Guide. As you read content from that guide, note that the guide describes managing Oracle Enterprise Scheduler, including list of values sources, from Oracle Enterprise Manager Fusion Applications Control. You can also access list of values sources by starting in the Setup and Maintenance Overview page and searching for Enterprise Scheduler job tasks.

**Registering and Searching for List of Values Sources**

- Create list of values sources to register them for use in job definitions.
See: Registering Sources for Lists of Values

- Search for list of values sources to edit or delete, or to make sure a particular source does not already exist before you create it.

See: Searching for List of Value Sources

**Customization and Sandboxes**

### Customizing Pages Using Page Composer: Highlights

You can customize dashboards and some work areas, where available, for all or some users based on a selected customization layer, for example only for users in a specific country or with a specific job role. When you select to customize a page from the **Administration** menu in the global area, you invoke Page Composer, which enables the customization. The Administration menu is only available if you have appropriate roles.

From the same menu, you can also:

- Customize the global area.

- Manage customizations by accessing a list of components in the current page and details about the layers in which each component is customized.

- Access sandboxes to make customizations to a runtime use session before deploying your changes to the mainline.

Customizing pages using Page Composer, managing customizations, and using sandboxes are described in the Oracle Fusion Applications Extensibility Guide. For more information on customization layers, see assets with the Customization Layer type in Oracle Enterprise Repository for Oracle Fusion Applications (http://fusionappsoer.oracle.com).

### Editing Pages

- Customizations that you can make to existing pages include adding content and changing layout.

  See: Editing a Page in Page Composer

- You can also update display and other options for specific components within the page.

  See: Editing Component Properties in Page Composer

### Global Page Template

- Customize the global area at the site layer.

  See: Editing the UI Shell Template Used by All Pages

### Managing Customizations

- Use the Manage Customizations dialog box to analyze and diagnose customization metadata, and to perform customization related tasks that cannot be done in the user interface, for example to revert customizations to a previous version. You can also do direct customization by manipulating the metadata and uploading it back.
See: Viewing and Diagnosing Runtime Customizations

**Sandboxes**

- Create or select an appropriate sandbox, and set it as active to capture your customizations using Page Composer. When you are ready, you publish the sandbox to make your changes available to users.

See: Using the Sandbox Manager

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### Customizing CRM Applications Using the Application Composer: Explained

The Oracle Fusion CRM Application Composer provides a series of task flows which let you customize and extend an Oracle Fusion CRM application according to the needs of your users. For example, you can create fields for an existing standard object, and expose those new fields on the object’s work area. Or, create a brand new custom object and related fields, then create a work area where that object and its fields are exposed to users. The task flows available to you are dependent upon the CRM application that you are customizing.

#### Available Customization Task Flows

Different sets of customization task flows are available to you, depending on the CRM application that you are customizing. See Customizing Oracle Fusion CRM Applications Using Oracle Fusion CRM Application Composer (Doc ID 1516151.1) on My Oracle Support at https://support.oracle.com. This document provides a list of which task flows are available for use in these CRM applications:

- **Oracle Fusion Common CRM**
  
  This includes Master Data Management (MDM) and Common Party User Interface (CPUI) objects.

- **Oracle Fusion Customer Center**

- **Oracle Fusion Marketing**

- **Oracle Fusion Sales**

- **Oracle Fusion Sales Catalog**

You can also refer to the product-specific implementation guides to learn more about how a particular application works with the Application Composer.

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### Customizing Oracle Fusion Customer Center Using Page Composer: Explained

You can customize a variety of pages and regions in Oracle Fusion Customer Center using the Oracle Fusion CRM Application Composer. The Application Composer lets you create custom fields and objects, which you then add for display in the run time Customer Center application. To access the Application Composer, select **Application Composer** from the Navigator menu, under the Tools category.
Customizing Oracle Fusion Customer Center Pages Using the Application Composer

In general, every top-level CRM object has a work area, which includes an overview page, a creation page, and a details page. When you make changes to the object, those changes can be reflected in the object’s associated work area. Customer Center, however, is unique in that its user interface pages do not include the traditional work area combination of overview page, creation page, and details page. Instead, Customer Center has a series of tree nodes that, when selected, display user interface pages, and even a single page can be associated with multiple business objects.

This table lists Customer Center pages, and the related objects that you can access in the Application Composer to customize those pages.

<table>
<thead>
<tr>
<th>Customer Center Page</th>
<th>Customer Center Region</th>
<th>Application</th>
<th>Underlying Business Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Profile</td>
<td>Addresses region</td>
<td>Common</td>
<td>Trading Community Address</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>Consumer Basic Information region</td>
<td>Common</td>
<td>Trading Community Person Profile</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>Consumer Details region</td>
<td>Common</td>
<td>Trading Community Person Profile</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>Sales Account region</td>
<td>Customer Center</td>
<td>Sales Account</td>
</tr>
<tr>
<td>Contact Profile</td>
<td>Address region</td>
<td>Common</td>
<td>Trading Community Address</td>
</tr>
<tr>
<td>Contact Profile</td>
<td>Basic Information region</td>
<td>Common</td>
<td>Trading Community Org Contact</td>
</tr>
<tr>
<td>Contact Profile</td>
<td>Contact Details region</td>
<td>Common</td>
<td>Trading Community Org Contact</td>
</tr>
<tr>
<td>Contact Profile</td>
<td>Contacts region (also known as the Contacts List)</td>
<td>Common</td>
<td>Trading Community Org Contact</td>
</tr>
<tr>
<td>Create Consumer page and also the Quick Create Consumer page</td>
<td>New fields are added at the bottom of the page</td>
<td>Customer Center</td>
<td>Sales Account</td>
</tr>
<tr>
<td>Create Consumer page and also the Quick Create Consumer page</td>
<td>No specific region</td>
<td>Common</td>
<td>Trading Community Person Profile</td>
</tr>
<tr>
<td>Create Contact page and also the Quick Create Contact page</td>
<td>No specific region</td>
<td>Common</td>
<td>Trading Community Org Contact</td>
</tr>
<tr>
<td>Create Customer page and also the Quick Create Customer page</td>
<td>Contact Information region</td>
<td>Common</td>
<td>Trading Community Org Contact</td>
</tr>
<tr>
<td>Create Customer page and also the Quick Create Customer page</td>
<td>Customer Information region</td>
<td>Common</td>
<td>Trading Community Org Profile</td>
</tr>
<tr>
<td>Create Customer page and also the Quick Create Customer page</td>
<td>New fields are added at the bottom of the page.</td>
<td>Customer Center</td>
<td>Sales Account</td>
</tr>
</tbody>
</table>
Customer Profile | Addresses region | Common | Trading Community Address
Customer Profile | Basic Information region | Common | Trading Community Org Profile
Customer Profile | Customer Details region | Common | Trading Community Org Profile
Customer Profile | Sales Account region | Customer Center | Sales Account
Edit Customer page | Team Members region | Customer Center | Sales Account Resource (child object to the Sales Account)
Overview > Summary tab | Sales Accounts region (also known as the Sales Account List) | Customer Center | Sales Account
Real-Time Search: Customers page | Search region, by way of Advanced Search > Add Fields | Customer Center | Sales Account

**Note**
To make only minor user interface changes to Customer Center pages without creating objects or fields, use Page Composer instead of the Application Composer.

**Oracle Fusion Common CRM Objects**
The Oracle Fusion Common CRM objects that are associated with Customer Center pages are:
- Trading Community Org Profile
- Trading Community Person Profile
- Trading Community Address
- Trading Community Org Contact

This table indicates which Common objects populate which Customer Center pages and regions, as well as the Application Composer configuration pages where you can make user interface changes on those pages and regions.

<table>
<thead>
<tr>
<th>Business Object</th>
<th>Configuration Page in Application Composer</th>
<th>Related Customer Center Page</th>
<th>Related Customer Center Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading Community Org Profile</td>
<td>Edit Customer Quick Creation Form</td>
<td>Create Customer page and also the Quick Create Customer page</td>
<td>Customer Information region</td>
</tr>
<tr>
<td>Trading Community Org Profile</td>
<td>Edit Read Only Form</td>
<td>Customer Profile</td>
<td>Basic Information region</td>
</tr>
<tr>
<td>Trading Community Org Profile</td>
<td>Edit Details Form</td>
<td>Customer Profile</td>
<td>Customer Details region</td>
</tr>
<tr>
<td>Trading Community Person Profile</td>
<td>Edit Contact/Consumer Quick Creation Form</td>
<td>Create Consumer page and also the Quick Create Consumer page</td>
<td>No specific region</td>
</tr>
<tr>
<td>Trading Community Person Profile</td>
<td>Edit Read Only Form</td>
<td>Consumer Profile</td>
<td>Consumer Basic Information region</td>
</tr>
</tbody>
</table>
### Oracle Fusion Customer Center Objects

The Oracle Fusion Customer Center objects that are associated with Customer Center pages are:

- Sales Account
- Sales Account Resource (child of the Sales Account)

This table indicates which Customer Center objects populate which Customer Center pages and regions, as well as the Application Composer configuration pages where you can make user interface changes on those pages and regions.

<table>
<thead>
<tr>
<th>Business Object</th>
<th>Configuration Page in Application Composer</th>
<th>Related Customer Center Page</th>
<th>Related Customer Center Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Account</td>
<td>Edit Creation Form</td>
<td>Create Customer page and also the Quick Create Customer page</td>
<td>New fields are added at the bottom of the page.</td>
</tr>
<tr>
<td>Sales Account</td>
<td>Edit Creation Form</td>
<td>Create Consumer page and also the Quick Create Consumer page</td>
<td>New fields are added at the bottom of the page.</td>
</tr>
<tr>
<td>Sales Account</td>
<td>Edit Details Form</td>
<td>Customer Profile</td>
<td>Sales Account region</td>
</tr>
<tr>
<td>Sales Account</td>
<td>Edit Details Form</td>
<td>Consumer Profile</td>
<td>Sales Account region</td>
</tr>
<tr>
<td>Sales Account</td>
<td>Edit Summary Table</td>
<td>Overview, then Summary tab</td>
<td>Sales Accounts region (also known as the Sales Account List)</td>
</tr>
<tr>
<td>Sales Account</td>
<td>Not applicable. Custom fields are automatically available from the list of additional fields</td>
<td>Real-Time Search: Customers page</td>
<td>Search region, by way of Advanced Search, then Add Fields</td>
</tr>
</tbody>
</table>
**Using the Pages Overview Page**

To add custom fields to the Customer Center pages listed in the tables above, use the Application Composer’s various configuration pages. You access the configuration pages in the Application Composer from each object’s Pages Overview page. Before you access the configuration pages, you must have already created your custom fields using the Application Composer.

To access the Pages Overview page:

1. Select either the Common or Customer Center application on the main Overview page.
2. In the object tree, select the object you want to customize.
3. Select the Pages node.
4. On the Pages Overview page, select the configuration page hyperlink related to the Customer Center page that you want to customize.

**Adding Custom Reports Using Page Composer**

The customizations that you can make in Customer Center also include the creation of reports. This type of customization does not involve the creation of fields or objects within the Application Composer. Instead, create a report using BI Answers, save the report to the Resource Catalog, and then use Page Composer to add the report to two pages: the Customer Snapshot and the Customer Overview, Analysis tab.

**Note**

The reports that you add to the Customer Snapshot are within the context of a single customer, because you view a single customer when viewing the Snapshot. The reports that you add to the Analysis tab on the Customer Overview provide context across multiple customers, because you are viewing multiple customers on the Analysis tab.

**Customizing Oracle Fusion CRM Pages Using Page Composer: Explained**

Page Composer is a page editor that lets you easily edit the user interface composition at run time. In Oracle Fusion CRM, Page Composer is intended for simple user interface editing functions, such as showing and hiding regions, fields, and tables, changing the order of regions, or changing a dashboard page layout. You can also use it for adding or removing predefined content from the
Resource Library. All changes are done and stored in the UI layer. Oracle Fusion CRM transactional pages and dashboards are enabled for runtime customization using Page Composer. These pages and regions are delivered already enabled for page editing. Administration and setup pages are not Page Composer-enabled.

---

**Note**

Page Composer does not support the customization of custom object pages and custom fields. You can customize extended pages and fields only with the Application Composer.

---

The following figure shows how Page Composer affects only the UI layer.

---

**Page Composer Customization Modes**

Page Composer supports two editing modes: Design View and Source View. In Design View mode, editing is done by direct manipulation of the target components and their properties. In the Source View mode, editing can be done from the programmatic code of the target component. In Oracle Fusion CRM, Page Composer is launched in Design View mode by default. Customizations can be done only in Design View mode. The only exception is the Partner Relationship Management’s Partner Portal UI Shell customization, which is done in Source View mode.

The Page Composer Design View mode has two selection submodes. Design mode is launched by default when opening a page with Page Composer. You can also select this mode by clicking the Design tab on the top left corner of a page in Page Composer mode. Direct Selection mode is activated when you click the Select tab that is next to the Design tab.
The following figure shows a Page Composer-enabled dashboard in Design View mode and Design Selection mode.

The Direct Selection mode is mainly used to select and edit UI components, such as form fields and table columns. In Direct Selection mode, the enabled UI components become apparent when you move the cursor over the component. Enabled UI components get focus on hovering and are highlighted by a light blue border for editing. When you click the highlighted component, the border changes to dark blue and an Edit popup window appears.

The popup window allows you to select whether to edit the selected component or the parent component. Examples of parent components include tables that hold columns and forms that hold fields.

**Note**

In Oracle Fusion CRM, the Direct Selection mode is available when you customize pages through the Administration link, but not when you personalize them from the Personalization link.

### Accessing Page Composer

You access Page Composer from the Administration global menu. Access to the Administration menu is controlled through the Administration Link View Duty. The following table lists examples of duty and job roles that must be assigned to you so that you can access the Page Composer editor.

<table>
<thead>
<tr>
<th>Application</th>
<th>Duty Role</th>
<th>Job Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDH</td>
<td>Master Data Management</td>
<td>Master Data Management</td>
</tr>
<tr>
<td></td>
<td>Application Administrator</td>
<td>Application Administrator</td>
</tr>
<tr>
<td>Sales Catalog</td>
<td>Sales Catalog Administrator Duty</td>
<td>Sales Catalog Administrator</td>
</tr>
<tr>
<td>Sales</td>
<td>Sales Administrator Duty</td>
<td>Sales Administrator</td>
</tr>
<tr>
<td>PRM</td>
<td>Channel Administrator Duty</td>
<td>Channel Administrator</td>
</tr>
<tr>
<td>PRM</td>
<td>Channel Partner Portal</td>
<td>Channel Partner Portal</td>
</tr>
<tr>
<td></td>
<td>Administrator Duty</td>
<td>Administrator</td>
</tr>
</tbody>
</table>
Contact your security administrator for additional details on these security privileges.

Sandbox support is also available through Page Composer. The sandbox provides temporary storage for your customization changes until you are ready to commit them to the back end. Before working with sandboxes, review the guidelines and recommendations on using sandboxes, available in related help topics.

To launch Page Composer:

1. Navigate to the Page Composer-enabled page.
2. Before making changes using Page Composer, confirm that you are working in the desired sandbox. If not, create a sandbox before making your changes.
3. Select the Administration global menu.
4. On the Customize <page name> Pages popup dialog, select the MDS layer that you want to customize.
5. Click OK.
6. Click Customize <page name>.
7. Select Custom Work Areas for dashboard customization.

Page Composer is now launched.
8. Customize the page.
9. When you are done, click the Close button in the header to leave the Page Composer editor.

Available Customization Options

In Oracle Fusion CRM, you can use the following customization options:

- Transactional, landing, and dashboard page customizations. Only administrators can do these customizations.
- Partner Portal UI shell and branding customizations. Only Partner Portal administrators can do these customizations.
- User-level page personalization for limited personalization tasks, such as hiding or adding content. Personalization changes are only visible to the user who is doing them.

Additionally, you can do Page Composer customizations in any of these MDS customization layers:

- Site: Your customizations are visible to all site users.
- Job Role: Your customizations are visible to users who have the selected job role.
- External or Internal: Depending on your selection, your customizations are visible to either external or internal users. External users could be your partners or anonymous users. Internal users could be your employees.
When Page Composer is launched, the Customize <page name> Pages dialog opens, where you can select the MDS layer to customize. The layer that is selected in the Edit column is the layer that you want to edit. The layers that are selected in the Include column inherit any changes you make to the layer you edit.

By default, changes made at higher levels (Site) are propagated to lower level layers (External or Internal and Job Role), unless you uncheck these layers in the Include column.

The following figure shows selecting the MDS layer for customization.

---

**Note**

The Fusion Welcome dashboard does not support job role or External or Internal layer changes. All customizations to this dashboard are applied at the site level.

---

**Available Customization Tasks**

Design and Direct Selection modes support different sets of customization tasks (although in some instances a task can be performed in either mode). The Design mode is intended for overall UI composition customizations, such as adding content, changing the dashboard layout, and changing region properties. The Direct Selection mode is intended for customizations at the component rather than the region level, mainly for fields, forms, tables, and tree nodes customizations.

---

**Tip**

It might be necessary to toggle between Direct Selection and Design mode to navigate between pages when performing Direct Selection customizations, since you can only navigate in Design mode.

---

All Oracle Fusion CRM dashboard pages support the design mode of the Page Composer-enabled regions. External facing landing and transactional pages that are expected to need customizations also support the design mode for Page Composer-enabled regions:

- Partner Snapshot
- Edit Partner Profile
- Edit Partner Public Profile
- Edit Personal Profile
- Partner Landing
• Partner Registration Landing
• Partner Registration: Partner Information
• Partner Registration: Review and Accept Terms
• Partner Registration Information

In general, the following customizations are meant to be done using Direct Selection mode:

• Fields (input text fields, output fields, list of values fields):
  • Show or hide component
  • Make read-only
  • Make required
  • Edit label

• UI Containers (forms, tables and trees):
  • Show or hide child components (for example, fields in the form)
  • Reorder child components (for example, reorder fields in a form)

**Note**

UI components can be protected from updates to preserve the product business logic (for example, a field is read-only or not based on a security privilege already defined in the application). If protected from updates, the UI components are grayed out and cannot be customized in Page Composer.

The following table lists the customization tasks available through Page Composer and the modes in which they are supported.

<table>
<thead>
<tr>
<th>Customization Task</th>
<th>Design View - Standard Mode</th>
<th>Design View - Direct Selection Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change local area layout. For example, change a two-column layout to three-column layout (eight layouts are available).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Add, rename, remove dashboard tabs (except for Home tab).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Expand, collapse dashboard Regional pane (or move splitter location).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Add, remove panel boxes to or from the dashboard local area.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Add predefined content to dashboard panel boxes (Business Intelligence reports, CRM portlets, and common components such as Calendar).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Edit dashboard panel box properties: show, hide box, reorder child regions, display options, and style.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Add, remove ADF Components to or from dashboards (for example, regions, hyperlinks, images, text boxes, movable boxes, and Web pages) and edit their properties.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Customize saved searches (create and edit).</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hide or show field.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Change field label.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Make field required or not.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Make field read-only or updateable.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Reorder fields in a form.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Reorder table columns.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hide or show table columns.</td>
<td>Yes (end users can optionally display columns at run time)</td>
<td>Yes (end users cannot display columns at run time)</td>
</tr>
<tr>
<td>Set table column width with the mouse.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Set table column width and minimum width in percent or pixels.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Enable, disable column sorting.</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Customizing the Oracle Fusion CRM Welcome Dashboard**

Also known as the Oracle Fusion CRM Home page, the Welcome dashboard is the application suite's default starting page. It is composed of a collection of tabs that are visible based on the roles assigned to users. The Welcome dashboard provides a collection of high-level data summaries meant for quick monitoring and navigation to key business objects. You can customize this page.

To customize the Welcome dashboard:

1. Navigate to the dashboard.
2. Click the Administration global menu.
3. Select the Customize Workarea Pages... menu item.

The Welcome dashboard consists of a local area only. The supported customization tasks, which you do in Design mode, are:

- Change local area layout.
- Add or remove panel boxes.
- Add seeded content to dashboard panel boxes.
- Edit dashboard panel box properties: show or hide a box, reorder child regions, change display options and style.
Define Extensions for Marketing

- Add, edit, and remove ADF components to or from dashboards, such as regions, hyperlinks, images, text boxes, movable boxes, and Web pages.

**Note**

The Welcome dashboard does not support role-based or External or Internal interface customization. All customizations are site-wide.

---

**Sandbox: Highlights**

Use a sandbox to commit customizations to a runtime use session for validation before deploying changes to the mainline. Administrators create and manage sandboxes. An active sandbox isolates changes from the mainline and other users.

Sandboxes can contain the following types of customization changes.

- Metadata, such as non-flexfield UI page customizations
- Data security
- Generated flexfields business components

Metadata changes are captured in a metadata sandbox. Data security changes are additionally captured in a data security enabled sandbox. Changes to a flexfield are captured in a flexfield that is deployed as a single flexfield sandbox. Once you are ready to make sandbox changes available in the mainline, you either publish the metadata or data security sandbox, or deploy the flexfield. Only metadata and data security sandboxes can be downloaded as a sandbox file for import to another Oracle Fusion Applications instance.

The following table lists the differences among the types of sandboxes.

<table>
<thead>
<tr>
<th>Type of Changes</th>
<th>Type of Sandbox</th>
<th>Method for Making Changes Available in Mainline</th>
<th>Downloadable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata</td>
<td>Sandbox</td>
<td>Publish sandbox</td>
<td>Yes</td>
</tr>
<tr>
<td>Data security</td>
<td>Sandbox enabled for data security changes</td>
<td>Publish sandbox</td>
<td>Yes</td>
</tr>
<tr>
<td>Flexfield</td>
<td>Flexfield deployed as a flexfield-enabled sandbox</td>
<td>Deploy flexfield</td>
<td>No</td>
</tr>
</tbody>
</table>

Only one sandbox can be active at a time. Changes made while a sandbox is active are captured in that sandbox.

For more information on using the Sandbox Manager, and customizing and securing pages, business objects, data, and custom objects in a sandbox, see the Oracle Fusion Applications Extensibility Guide.
Managing a Page Customization Sandbox

You can make metadata (MDS) type changes in a sandbox, including menu customizations, changes to the personalization menu, implicit ADF customizations, or changes made with Oracle Composer or CRM Application Composer.

- If you are entitled to do so, manage sandboxes in the Sandbox Manager.
  
  See: Using the Sandbox Manager
- Implement customizations on an existing page to change the metadata of a sandbox before deploying the changes to the mainline.
  
  See: Customizing Existing Pages
- Using CRM Application Composer, customize business objects in a sandbox before deploying the changes to the mainline.
  
  See: Customizing Objects

Managing a Data Security Sandbox

You can create a sandbox for data security testing, or designate an existing sandbox to become enabled for data security testing.

- If you are entitled to do so, manage data security-enabled sandboxes in the Sandbox Manager.
  
  See: Using the Sandbox Manager
- If you customize business objects in CRM Application Composer, you may need to define data security policies to make them accessible to users.
  
  See: Defining Security Policies for Business Objects
- If you create new business objects, you need to secure them.
  
  See: Customizing Security for Custom Business Objects

Managing a Flexfield Sandbox

You create a flexfield-enabled sandbox by deploying one flexfield to a sandbox using the Manage Flexfield task flow. The flexfield sandbox gets its name from the flexfield you deploy. You cannot test two flexfields in the same sandbox. Once you deploy a flexfield as a sandbox, you must sign out and back in to view how the sandbox runtime reflects the flexfield changes, such as new segments. You can redeploy the same flexfield to the same sandbox repeatedly as you make incremental changes to the flexfield setup.

- Since a flexfield sandbox cannot be published, any page customizations or data security in the flexfield sandbox cannot reach the mainline when the flexfield is deployed to the mainline. If you have entitlement to do so, see Deploying a Flexfield to a Sandbox: Points to Consider.
- If you are entitled to do so, manage flexfield-enabled sandboxes in the Sandbox Manager.
What's the difference between Page Composer and Application Composer?

Page Composer is an Oracle Fusion tool you can use to modify Oracle Fusion user interface (UI) pages and components for all products designated for use with Page Composer. Page Composer uses two different modes of Design View. The first mode, Design View: Standard mode, is selected by default in all CRM pages when opening a page with Page Composer with the Design button selected. The second mode, Design View: Direct Selection mode, is activated when you click the Select tab for the UI page you want to customize. In CRM, Direct Selection mode is available when you customize pages, but not when you personalze a dashboard page. With the Design View: Direct Selection mode, you can select and edit UI elements such as form fields and table columns. In Direct Selection mode, selectable UI components become apparent when you move your cursor over the UI component. Selectable UI components are highlighted and can be edited.

This table describes how you can use each mode of Page Composer to customize dashboard pages and other select pages (such as the Partner Public Profile page, Partner Landing page, Partner Registration, Customer Snapshot, and Customer Overview - Analysis tab), and customize transactional pages (all other non-dashboard pages):

<table>
<thead>
<tr>
<th>Use Cases</th>
<th>Design View - Standard mode</th>
<th>Design View - Direct Selection mode</th>
<th>Page Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add content (Business Intelligence reports,</td>
<td>Yes</td>
<td>No</td>
<td>Dashboard and other select pages</td>
</tr>
<tr>
<td>CRM portlets such as Calendar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete region</td>
<td>Yes</td>
<td>No</td>
<td>Dashboard and other select pages</td>
</tr>
<tr>
<td>Move region</td>
<td>Yes</td>
<td>No</td>
<td>Dashboard and other select pages</td>
</tr>
<tr>
<td>Change page layout (for example, change a two</td>
<td>Yes</td>
<td>No</td>
<td>Dashboard and other select pages</td>
</tr>
<tr>
<td>column layout to three column layout)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Default region state (open or close)</td>
<td>Yes</td>
<td>No</td>
<td>Transactional pages (all non-dashboard pages)</td>
</tr>
<tr>
<td>Manage save queries (create and edit)</td>
<td>Yes</td>
<td>No</td>
<td>Transactional pages (all non-dashboard pages)</td>
</tr>
<tr>
<td>Hide or show field</td>
<td>No</td>
<td>Yes</td>
<td>Transactional pages (all non-dashboard pages)</td>
</tr>
<tr>
<td>Change field label</td>
<td>No</td>
<td>Yes</td>
<td>Transactional pages (all non-dashboard pages)</td>
</tr>
<tr>
<td>Make field required or not</td>
<td>No</td>
<td>Yes</td>
<td>Transactional pages (all non-dashboard pages)</td>
</tr>
</tbody>
</table>
The Oracle Fusion CRM Application Composer also lets you make UI changes at run time. However, the types of UI changes that you can make using the Application Composer are quite different. Specifically, your primary focus when using the Application Composer is to make actual object model changes. For example, you can create a new business object and related fields, and then create new application pages where that object and its fields are exposed to users. The ability to make these types of object model extensions is available only in Oracle Fusion CRM applications. Also, using the Application Composer, you cannot access the Resource Catalog to add new content to a page. With Application Composer, administrators can make customizations at the site level only.

This table describes some of the primary differences between Page Composer and the Application Composer:

<table>
<thead>
<tr>
<th>Customization Task</th>
<th>Available in Page Composer (site, job role, external or internal level)?</th>
<th>Available in Application Composer (site level only)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make object model extensions and expose your customizations by creating or modifying work area pages</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Reorder subtabs</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Customize dashboard pages</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Add content from the Resource Catalog</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Simple field customizations (show, hide, make read only, make required)</td>
<td>Yes (WYSIWYG - what you see is what you get)</td>
<td>Yes (non-WYSIWYG)</td>
</tr>
<tr>
<td>Select the MDS layer where you want to author customizations, such as at the site layer or job role layer</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>View results of customizations immediately</td>
<td>Yes, in the Page Composer design interface</td>
<td>Yes, in the CRM application that you are customizing</td>
</tr>
</tbody>
</table>
How can I change the web mapping service for displaying contextual addresses?

Edit the Mapping Service for Contextual Addresses profile option value. A contextual address is marked with an orange square icon that can be clicked to display the address on a map. The profile option value represents the web mapping service used to display the map. To update this value, use the Manage Administrator Profile Values task in the Setup and Maintenance work area.
Importing and Exporting Setup Data

Configuration Packages: Explained

Almost all Oracle Fusion application implementations require moving functional setup data from one instance into another at various points in the lifecycle of the applications. For example, one of the typical cases in any enterprise application implementation is to first implement in a development or test application instance and then deploy to a production application instance after thorough testing. You can move functional setup configurations of applications from one application instance into another by exporting and importing Configuration packages from the Manage Configuration Packages page.

A Configuration Package contains the setup import and export definition. The setup import and export definition is the list of setup tasks and their associated business objects that identifies the setup data for export as well as the data itself. When you create a configuration package only the setup export and import definition exists. Once you export the configuration package appropriate setup data is added to the configuration package using the definition. Once a configuration package is exported, the setup export and import definition is locked and cannot be changed.

You generate the setup export and import definition by selecting an implementation project and creating a configuration package. The tasks and their associated business objects in the selected implementation project define the setup export and import definition for the configuration package. In addition, the sequence of the tasks in the implementation project determine the export and import sequence.

Exporting and Importing Setup Data: Explained

A configuration package is required to export setup data. You can export a configuration package once you create it, or at any time in the future. During export, appropriate setup data will be identified based on the setup export definition and added to the configuration package. The setup data in the configuration package is a snapshot of the data in the source application instance at the time of export. After the export completes, you can download the configuration package as a zipped archive of multiple XML files, move it to the target application instance, and upload and import it.

Export

You can export a configuration package multiple times by creating multiple versions. While the export definition remains the same in each version, the setup
data can be different if you modified the data in the time period between the different runs of the export process. Since each version of the configuration package has a snapshot of the data in the source instance, you can compare and analyze various versions of the configuration package to see how the setup data changed.

**Import**

In the target application instance, the setup import process will insert all new data from the source configuration package that does not already exist and update any existing data with changes from the source. Setup data that exists in the target instance but not in source will remain unchanged.

**Export and Import Reports**

You can review the results of the export and import processes using reports. The results appear ordered by business objects and include information on any errors encountered during the export or import process. If a setup export or import process paused due to errors encountered or for a manual task to be performed outside of the application, then you can resume the paused process.

These reports show what setup data was exported or imported and by which specific process. You can change the reports to validate the setup data as well as to compare or analyze it. A report is generated for each business object. These reports show the same information as the export and import results seen directly in the application.

Process status details are available as text files showing the status of an export or import process including the errors encountered during the process.

### Moving Common Reference Objects

#### Moving Common Reference Objects: Overview

The common reference objects in Oracle Fusion Middleware Extensions for Applications are used by several setup tasks in the Setup and Maintenance work area. The common reference objects become a part of the configuration package that is created for an implementation project. While moving the application content, for example, from the test phase to the production phase of an implementation, you must pay special attention to the nuances of these common reference objects.

**Parameters**

The common reference objects are represented as business objects. A single object can be referenced in multiple setup tasks with different parameters. In the configuration package that is created for the implementation project, parameters passed to a setup task are also passed to the business objects being moved. As a result, the scope of the setup tasks is maintained intact during the movement.

**Dependencies**

Common reference objects may have internal references or dependencies among other common reference objects. Therefore, it is necessary that all the dependencies are noted before the movement of objects so that there are no broken references among the objects.
Business Objects for Moving Common Reference Objects: Points to Consider

Common reference objects in Oracle Fusion Functional Setup Manager are represented by business objects. These business objects are the agents that contain the application content and carry them across whenever the application setup is moved from one environment to another, for example, test environment to production environment.

Choice of Parameters

The following table lists the business objects, the corresponding movement details, and the effect of the setup task parameter on the scope of the movement.

Note

- Only the translation in the current user language is moved.
- The Oracle Social Network business objects and the Navigator menu customizations are moved using the customization sets on the Customization Migration page instead of using the export and import function in the Setup and Maintenance work area.

<table>
<thead>
<tr>
<th>Business Object Name</th>
<th>Moved Functional Item</th>
<th>Effect on the Scope of Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Message</td>
<td>Messages and associated tokens</td>
<td>No parameters: all messages are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only messages belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>messageName/applicationId: only the specified message is moved.</td>
</tr>
<tr>
<td>Application Taxonomy</td>
<td>Application taxonomy modules and components</td>
<td>No parameters: all taxonomy modules and components are moved.</td>
</tr>
<tr>
<td>Application Attachment Entity</td>
<td>Attachment entities</td>
<td>No parameters: all attachment entities are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only attachment entities belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td>Application Attachment Category</td>
<td>Attachment categories and category-to-entity mappings</td>
<td>No parameters: all attachment categories and category-to-entity mappings are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only attachment categories belonging to the specified module and its descendant modules in the taxonomy hierarchy along with the respective category-to-entity mappings are moved.</td>
</tr>
</tbody>
</table>
| Application Document Sequence Category | Document sequence categories | No parameters: all categories are moved.  
| | | moduleType/moduleKey: only categories belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
| | | code/applicationId: only the specified document sequence category code is moved.  |
| Application Document Sequence | Document sequences and their assignments | No parameters: all sequences are moved.  
| | | moduleType/moduleKey: only document sequences belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved  
| | | name: only the specified document sequence is moved.  |
| Application Descriptive Flexfield | Descriptive flexfield registration data and setup data | No parameters: all descriptive flexfields are moved.  
| | | moduleType/moduleKey: only descriptive flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
| | | descriptiveFlexfieldCode/applicationId: only the specified descriptive flexfield is moved.  |

**Note**

Importing a flexfield’s metadata can change its deployment status and therefore, the affected flexfields must be redeployed. The import process automatically submits affected flexfields for redeployment.

**Note**

Only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.
| Application Extensible Flexfield | Extensible flexfield registration data and setup data, including categories | No parameters: all extensible flexfields are moved  
moduleType/moduleKey: only extensible flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
extensibleFlexfieldCode/applicationId: only the specified extensible flexfield is moved. |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Note</td>
<td>Importing a flexfield’s metadata can change its deployment status and therefore, the affected flexfields must be redeployed. The import process automatically submits affected flexfields for redeployment.</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>Only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.</td>
<td></td>
</tr>
<tr>
<td>Application Key Flexfield</td>
<td>Key flexfield registration data and setup data</td>
<td>No parameters: all key flexfields are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only key flexfields belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>keyFlexfieldCode/applicationId: only the specified key flexfield is moved.</td>
</tr>
<tr>
<td>Note</td>
<td>Importing a flexfield’s metadata can change its deployment status and therefore, the affected flexfields must be redeployed. The import process automatically submits affected flexfields for redeployment.</td>
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</tr>
<tr>
<td>Note</td>
<td>Only flexfields with a deployment status of Deployed or Deployed to Sandbox are eligible to be moved.</td>
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<tr>
<td>Application</td>
<td>Data Type</td>
<td>Parameters</td>
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</tr>
<tr>
<td>Flexfield Value Set</td>
<td>Value set setup data</td>
<td>No parameters: all value sets are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only value sets belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>valueSetCode: only the specified value set is moved.</td>
</tr>
<tr>
<td>Reference Currency</td>
<td>Currency data</td>
<td>No parameters: all currencies are moved.</td>
</tr>
<tr>
<td>Reference ISO Language</td>
<td>ISO language data</td>
<td>No parameters: all ISO languages are moved.</td>
</tr>
<tr>
<td>Reference Industry</td>
<td>Industry data including industries in territories data</td>
<td>No parameters: all industries are moved.</td>
</tr>
<tr>
<td>Reference Language</td>
<td>Language data</td>
<td>No parameters: all languages are moved.</td>
</tr>
<tr>
<td>Reference Natural Language</td>
<td>Natural language data</td>
<td>No parameters: all natural languages are moved.</td>
</tr>
<tr>
<td>Reference Territory</td>
<td>Territory data</td>
<td>No parameters: all territories are moved.</td>
</tr>
<tr>
<td>Reference Time zone</td>
<td>Time zone data</td>
<td>No parameters: all time zones are moved.</td>
</tr>
<tr>
<td>Standard Lookup</td>
<td>Standard lookup types and their lookup codes</td>
<td>No parameters: all standard lookups are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only standard lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lookupType: only the specified common lookup is moved.</td>
</tr>
</tbody>
</table>
| Application Common Lookup | Common lookup types and their lookup codes | No parameters: all common lookups are moved.  
moduleType/moduleKey - only common lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
lookupType: only the specified common lookup is moved. |
|---------------------------|------------------------------------------|------------------------------------------------------------------------------------------------|
| Application Set-Enabled Lookup | Set-enabled lookup types and their lookup codes | No parameters: all set-enabled lookups are moved.  
moduleType/moduleKey: only set-enabled lookups belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
lookupType: only the specified set-enabled lookup is moved. |
| Application Profile Category | Profile categories | No parameters: all profile categories are moved.  
moduleType/moduleKey: only categories belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.  
name/applicationId: only the specified category is moved. |
| Application Profile Option | Profile options and their values | No parameters: all profile options and their values are moved.  
moduleType/moduleKey: only profile options and their values belonging to the specified module are moved.  
profileOptionName: only the specified profile option and its values are moved. |
<table>
<thead>
<tr>
<th>Application Profile Value</th>
<th>Profile options and their values</th>
<th>No parameters: all profiles and their values are moved.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only profiles and their values belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>categoryName/categoryApplicationId: only profiles and their values belonging to the specified category are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>profileOptionName: only the specified profile and its values are moved.</td>
</tr>
<tr>
<td>Application Reference Data Set</td>
<td>Reference data sets</td>
<td>No parameters: all sets are moved.</td>
</tr>
<tr>
<td>Application Reference Data Set Assignment</td>
<td>Reference data set assignments</td>
<td>determinantType: only assignments for the specified determinant type are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>determinantType/referenceGroupName: only assignments for the specified determinant type and reference group are moved.</td>
</tr>
<tr>
<td>Application Tree Structure</td>
<td>Tree structures and any labels assigned to the tree structure</td>
<td>No parameters: all tree structures (and their labels) are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only tree structures (and their labels) belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>treeStructureCode: only the specified tree structure (with its labels) is moved.</td>
</tr>
<tr>
<td>Application Tree</td>
<td>Tree codes and versions</td>
<td>No parameters: all trees are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moduleType/moduleKey: only trees belonging to the specified module are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>treeStructureCode: only trees belonging to the specified tree structure are moved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TreeStructureCode/TreeCode: only trees belonging to the specified tree structure and tree code are moved.</td>
</tr>
</tbody>
</table>
Application Tree Label

<table>
<thead>
<tr>
<th>Tree structures and any labels assigned to the tree structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No parameters: all tree structures (and their labels) are moved.</td>
</tr>
<tr>
<td>moduleType/moduleKey: only tree structures (and their labels) belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td>treeStructureCode: only the specified tree structure (with its labels) is moved.</td>
</tr>
</tbody>
</table>

Application Data Security Policy

<table>
<thead>
<tr>
<th>Database resources, actions, conditions, and data security policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>No parameters: all database resources/actions/conditions/policies are moved.</td>
</tr>
<tr>
<td>moduleType/moduleKey: only database resources/actions/conditions/policies belonging to the specified module and its descendant modules in the taxonomy hierarchy are moved.</td>
</tr>
<tr>
<td>objName: only the specified database resource along with its actions/conditions/policies is moved.</td>
</tr>
</tbody>
</table>

Note

- If the policies being moved contain reference to newly created roles, move the roles before moving the policies.
- If the source and target systems use different LDAPs, manually perform the GUID reconciliation after moving the data security policies.

Application Activity Stream Configuration

<table>
<thead>
<tr>
<th>Activity stream options</th>
</tr>
</thead>
<tbody>
<tr>
<td>No parameters: all activity stream options are moved.</td>
</tr>
</tbody>
</table>

Moving Related Common Reference Objects: Points to Consider

Certain common reference objects may use other common reference objects creating dependencies among the objects. During the movement of common reference objects, these dependencies or references need to be taken care of.

Dependencies

The dependencies among the common reference objects may be caused by any of the following conditions.

- Flexfield segments use value sets
• Value sets may make use of standard, common, or set-enabled lookups
• Key flexfields may have an associated tree structure and key flexfield segments may have an associated tree code
• Tree codes and versions may be defined over values of a value set
• Data security policies may be defined for value sets that have been enabled for data security

You may choose to move one, some, or all of the business objects by including the ones you want to move in your configuration package. For example, you may choose to move only value sets and not lookups, or you may choose to move both value sets and their lookups as part of the same package. Whatever be the combination, it is recommended that during the movement of objects, you follow an order that maintains the dependencies among the objects.

While moving the business objects, adhere to the guidelines and exactly follow the order as listed below.

1. Move created taxonomy modules before moving any objects that reference them, such as flexfields, lookups, profiles, attachments, reference data sets, document sequences, messages, and data security.
2. Move created currencies before moving any objects that reference them, such as territories.
3. Move created territories before moving any objects that reference them, such as languages and natural languages.
4. Move created ISO languages before moving any objects that reference them, such as languages, natural languages, and industries.
5. Move created tree structures before moving any objects that reference them, such as trees or tree labels.
6. Move created profile options before moving any objects that reference them, such as profile categories or profile values.
7. Move created attachment entities before moving any objects that reference them, such as attachment categories that reference them.

Note

In scenarios where there may be dependencies on other objects, you must move the dependencies before moving the referencing object. For example, if data security policies being moved have dependencies on newly created security roles, you must move the security roles before moving the security policies.

Using Seed Data Framework to Move Common Reference Objects: Points to Consider

To move the common reference objects, you can use the Seed Data Framework (SDF). You can also use the command line interface of SDF to move the object
setup data. For more information about seed data loaders including common reference object loaders, see Oracle Fusion Applications Developer’s Guide.

**Movement Dependencies**

The seed data interface moves only the setup metadata. For example, if you use SDF to import flexfield metadata, the flexfield setup metadata is imported into your database. However, you must invoke the flexfield deployment process separately after seed data import to regenerate the runtime flexfield artifacts in the target environment. Similarly, if you use SDF to import data security metadata, you must first move any new referenced roles and then manually run the GUID reconciliation where required.

To ensure that the reference data is not lost during the movement, certain guidelines are prescribed. It is recommended that you perform the movement of object data exactly in the order given below.

**Note**

Only the translation in the current user language is moved.

1. Move created taxonomy modules before moving any objects that reference them, such as flexfields, lookups, profiles, attachments, reference data sets, document sequences, messages, and data security.
2. Move created currencies before moving any objects that reference them, such as territories.
3. Move created territories before moving any objects that reference them, such as languages and natural languages.
4. Move created ISO languages before moving any objects that reference them, such as languages, natural languages, and industries.
5. Move created tree structures before moving any objects that reference them, such as trees or tree labels.
6. Move created profile options before moving any objects that reference them, such as profile categories or profile values.
7. Move created attachment entities before moving any objects that reference them, such as attachment categories that reference them.
8. Move created reference data sets before moving any objects that reference them, such as reference data set assignments and set-enabled lookups.
9. Move created document sequence categories before moving any objects that reference them, such as document sequences.
10. Move created tree labels before moving any objects that reference them, such as trees.
11. Move created data security objects and policies before moving any objects that reference them, such as value sets.
12. Move created value sets before moving any objects that reference them, such as flexfields.
13. Move created trees before moving any objects that reference them, such as key flexfields.
abstract role
A description of a person's function in the enterprise that is unrelated to the person's job (position), such as employee, contingent worker, or line manager. A type of enterprise role.

action
The kind of access named in a security policy, such as view or edit.

address style format
Specifies the layout of an address, such as how many address lines it contains, and whether a city name is mandatory.

ADF
Acronym for Application Developer Framework. A set of programming principles and rules for developing software applications.

application identity
Predefined application level user with elevated privileges. An application identity authorizes jobs and transactions for which other users are not authorized, such as a payroll run authorized to access a taxpayer ID while the user who initiated the job is not authorized to access such personally identifiable information.

application module
An application module is the transactional component that UI clients use to work with application data. It defines an updatable data model and top-level procedures and functions (called service methods) for a logical unit of work related to an end-user task.

application module class
Includes service methods or extended code required by the application module configuration.

application role
A role specific to applications and stored in the policy store.

Applications Core
Abbreviation for Oracle Fusion Middleware Extensions for Applications. The technical product code is FND.

assignment
A set of information, including job, position, pay, compensation, managers, working hours, and work location, that defines a worker's or nonworker's role in a legal employer.
balancing segment
A chart of accounts segment used to automatically balance all journal entries for each value of this segment.

BPEL
Business Process Execution Language; a standard language for defining how to send XML messages to remote services, manipulate XML data structures, receive XML messages asynchronously from remote services, manage events and exceptions, define parallel sequences of execution, and undo parts of processes when exceptions occur.

business function
A business process, or an activity that can be performed by people working within a business unit and describes how a business unit is used.

business object
A resource in an enterprise database, such as an invoice or purchase order.

business unit
A unit of an enterprise that performs one or many business functions that can be rolled up in a management hierarchy.

calendar event
A period that signifies an event, such as a public holiday or a training course, that impacts worker availability.

chart of accounts
The account structure your organization uses to record transactions and maintain account balances.

competency
Any measurable behavior required by an organization, job, or position that a person may demonstrate in the work context. A competency can be a piece of knowledge, a skill, an attitude, or an attribute.

condition
An XML filter or SQL predicate WHERE clause in a data security policy that specifies what portions of a database resource are secured.

confirm subscribe request
A marketing response form that can be inserted into an e-mail. When e-mail recipients click the link, a second e-mail is sent, requesting them to confirm their intent to subscribe to a list.
**confirm unsubscribe request**

A marketing response form that can be inserted into an e-mail. When e-mail recipients click the link, a second e-mail is sent, requesting them to confirm their intent to unsubscribe from a list.

**content item**

An individual quality, skill, or qualification within a content type that you track in profiles.

**content library**

A repository of the content types and individual content items that can be associated with person profiles and profiles for workforce structures such as jobs and positions.

**content type**

An attribute such as a skill, quality, or qualification that is added to a profile.

**context**

A grouping of flexfield segments to store related information.

**context segment**

The flexfield segment used to store the context value. Each context value can have a different set of context-sensitive segments.

**context-sensitive segment**

A flexfield segment that may or may not appear depending upon a context such as other information that has been captured. Context-sensitive segments are custom attributes that apply to certain entity rows based on the value of the context segment.

**corporate rate type**

Rate you define to standardize rates used in conversion of one currency to another over a period of time. This rate is generally a standard market rate determined by senior financial management for use throughout the organization.

**cost center**

A unit of activity or group of employees used to assign costs for accounting purposes.

**cost organization**

A grouping of inventory organizations that indicates legal and financial ownership of inventory, and which establishes common costing and accounting policies.
**country holding company**

A legal entity that acts on behalf of several divisions within an enterprise, and is the legal employer in a country.

**data dimension**

A stripe of data accessed by a data role, such as the data controlled by a business unit.

**data instance set**

The set of human capital management (HCM) data, such as one or more persons, organizations, or payrolls, identified by an HCM security profile.

**data role**

A role for a defined set of data describing the job a user does within that defined set of data. A data role inherits job or abstract roles and grants entitlement to access data within a specific dimension of data based on data security policies. A type of enterprise role.

**data role template**

A template used to generate data roles by specifying which base roles to combine with which dimension values for a set of data security policies.

**data security**

The control of access to data. Data security controls what action a user can taken against which data.

**data security policy**

A grant of entitlement to a role on an object or attribute group for a given condition.

**database resource**

An applications data object at the instance, instance set, or global level, which is secured by data security policies.

**deal size**

Total monetary amount the customer is expected to spend.

**descriptive flexfield**

Customizable expansion space, such as fields used to capture additional descriptive information or attributes about an entity, such as customer cases. Information collection and storage may be configured to vary based on conditions or context.
**descriptive flexfield**
An extendable field that captures additional information.

**determinant**
A value that determines which reference data set will be used in a specific business context.

**determinant type**
An additional and optional field within transactional columns (besides category and application) that is used to assign document sequences. The available determinant types are Business Unit, Ledger, Legal Entity, and Tax Registration.

**determinant value**
A value specific to the determinant type dimension of a document sequence. The determinant value is relevant in a document sequence assignment only if the document sequence has a determinant type. If Ledger is the determinant type for a document sequence, the determinant value is the specific ledger number whose documents are numbered by the document sequence.

**dimension**
A data category used to define territory boundaries, such as geography. Dimensions contain related dimension members usually organized in hierarchies. For example, a geography dimension often includes members, such as countries, and cities that belong to countries. Defined dimensions determine how to assign objects, such as sales accounts, leads, and opportunities.

**dimension member**
Individual components of a dimension.

**division**
A business-oriented subdivision within an enterprise. Each division is organized to deliver products and services or address different markets.

**DMZ**
Acronym for demilitarized zone. An isolated internal network used for servers that are accessed by external clients on the Internet, such as web servers, to provide a measure of security for internal networks behind the firewall.

**document sequence**
A unique number that is automatically or manually assigned to a created and saved document.

**duty role**
A group of function and data privileges representing one duty of a job. Duty roles are specific to applications, stored in the policy store, and shared within an Oracle Fusion Applications instance.
**e-mail bounce**
An e-mail that is returned due to a temporary or permanent error condition.

**educational establishment**
A school, college, university, or other learning institution.

**employment terms**
A set of information about a nonworker's or employee's job, position, pay, compensation, working hours, and work location that all assignments associated with the employment terms inherit.

**enterprise**
An organization with one or more legal entities under common control.

**enterprise role**
Enterprise roles provide users with access both to the application functions they need to perform their jobs as well as the permissions to access the data where they need to perform those functions. There are two types of enterprise roles: job roles and abstract roles. Job roles permit users to perform activities specific to their job. Abstract roles permit users to perform functions that span the different jobs in the enterprise.

**enterprise role**
Abstract, job, and data roles are shared across the enterprise. An enterprise role is an LDAP group. An enterprise role is propagated and synchronized across Oracle Fusion Middleware, where it is considered to be an external role or role not specifically defined within applications.

**entitlement**
Grants of access to functions and data. Oracle Fusion Middleware term for privilege.

**ESS**
Acronym for Enterprise Storage Server. An application that optimizes data storage.

**extensible flexfield**
Customizable expansion space, as with descriptive flexfields, but able to capture multiple sets of information within a context and multiple contexts grouped to appear in a named region of a user interface page. Some extensible flexfields allow grouping contexts into categories.

**feature choice**
A selection you make when configuring offerings that modifies a setup task list, or a setup page, or both.
**fixed rate type**
Rate you set between two currencies that remains constant. For example, a rate set between the euro currency and each Economic and Monetary Union (EMU) currency during the conversion to the euro currency.

**flexfield**
Grouping of extensible data fields called segments, where each segment is an attribute added to an entity for capturing additional information.

**flexfield segment**
An extensible data field that represents an attribute on an entity and captures a single atomic value corresponding to a predefined, single extension column in the Oracle Fusion Applications database. A segment appears globally or based on a context of other captured information.

**free-form content type**
A content type that contains a code, name, and description only, and does not contain any properties until you add it to a profile type.

**function security**
The control of access to a page or a specific widget or functionality within a page. Function security controls what a user can do.

**global area**
The region across the top of the user interface. It provides access to features and tools that are relevant to any page you are on.

**GTIN**
Abbreviation for Global Trade Identification Number

**HCM**
Abbreviation for Human Capital Management.

**HCM data role**
A job role, such as benefits administrator, associated with specified instances of Oracle Fusion Human Capital Management (HCM) data, such as one or more positions or all persons in a department.

**hierarchy version**
Hierarchy version refers to a specific version of a hierarchy. You can create any number of versions, but only one hierarchy version can be active on a specific date. In tree terminology, hierarchy versions are also called tree versions.
HR
Abbreviation for human resource.

HTTP
Acronym for Hypertext Transfer Protocol. A request and response standard typical of client-server computing. In HTTP, web browsers or spiders act as clients, while an application running on the computer hosting the web site acts as a server. The client, which submits HTTP requests, is also referred to as the user agent. The responding server, which stores or creates resources such as HTML files and images, may be called the origin server. In between the user agent and origin server may be several intermediaries, such as proxies, gateways, and tunnels.

identifier type
An identifier type is a specific category of additional identifiers, numeric or otherwise, which can identify trading community members. Examples of identifier types could be bank account numbers, passport numbers, and so on.

instance qualifier set
A set of values that uniquely identifies multiple instances of the same profile item.

interface table
A database table used for transferring data between applications or from an external application or data file.

inventory organization
An organization that tracks inventory transactions and balances, and can manufacture or distribute products.

item master
A collection of data that describes items and their attributes recorded in a database file.

item organization
Item definition where inventory balances are not stored and movement of inventory is not tracked in the applications. Item attributes that carry financial and accounting information are hidden.

Items
Entries within the Product master database. For example, items for a manufacturing company can include nuts, bolts, and screws.

job
A generic role that is independent of any single department or location. For example, the jobs Manager and Consultant can occur in many departments.
job role
A role for a specific job consisting of duties, such as an accounts payable manager or application implementation consultant. A type of enterprise role.

key flexfield
Configurable key consisting of multiple parts or segments, each of which may be meaningful individually or in combination with the others. Key flexfields are commonly implemented to represent part numbers and account numbers.

key flexfield segment instance
A single occurrence of a key flexfield segment in a key flexfield structure instance.

key flexfield structure
The arrangement of segments in a key flexfield. In some cases, multiple structures can be defined for a single key flexfield.

lead rank
A configurable set of values such as hot, warm, or cool used to prioritize leads for lead qualification and sales engagement.

legal employer
A legal entity that employs people.

legal entity
An entity is identified and given rights and responsibilities under commercial law, through the registration with the country’s appropriate authority.

legal reporting unit
The lowest level component of a legal structure that requires registrations. Used to group workers for the purpose of tax and social insurance reporting or represent a part of your enterprise with a specific statutory or tax reporting obligation.

legislative data group
A means of partitioning payroll and related data. At least one legislative data group is required for each country where the enterprise operates. Each legislative data group is associated with one or more payroll statutory units.

line of business
Set of one or more highly related products which service a particular customer transaction or business need. Refers to an internal corporate business unit.

lookup code
A value available for lookup within a lookup type such as the code BLUE within the lookup type COLORS.
lookup type
A set of lookup codes to be used together as a list of values on a field in the user interface.

mainline
A branch of data that serves as a single source of truth.

marketing activity
An instance of the execution of a campaign stage, such as delivering a specific treatment to a specific audience.

marketing list
A static selection of contacts for the purpose of communicating a marketing message by e-mail, direct mail or phone.

mini campaign
A simplified single stage communication platform that allows a marketer to interact with customers by e-mail or SMS.

model profile
A collection of the work requirements and required skills and qualifications of a workforce structure, such as a job or position.

MTA
Acronym for mail transfer agent. A software program that transfers electronic mail messages from one computer to another.

multistage campaign
An integrated multichannel communication platform, that allows a marketer to achieve a specific marketing goal or objective through customer interaction, strategic advertisements and lead generation.

name style format
Specifies the layout of a name, such as first name, last name, and phonetic last name.

name type
A name type is a specific category of additional names that can identify trading community members. Examples of name types could be maiden names, aliases, doing-business-as names, and so on.

named account
A sales account that can be assigned directly to a sales territory.
natural account
Categorizes account segment values by account type, asset, liability, expense, revenue, or equity, and sets posting, budgeting, and other options.

offering
A comprehensive grouping of business functions, such as Sales or Product Management, that is delivered as a unit to support one or more business processes.

one click unsubscribe
A marketing response form that can be inserted into an e-mail. E-mail recipients can click the link to remove themselves from the subscription list associated with a marketing treatment.

organization hierarchy
A tree structure that determines the relationships between organizations, such as which organizations are subordinate to other organizations.

overlay territory
A territory, usually owned by an internal employee, whose team supports the sales activities within the territory boundaries. Overlay territories often overlap with one or more prime or other overlay territories.

payroll statutory unit
A legal entity registered to report payroll tax and social insurance. A legal employer can also be a payroll statutory unit, but a payroll statutory unit can represent multiple legal employers.

PL/SQL
Abbreviation for procedural structured queried language.

position
A specific occurrence of one job, fixed within one department, also often one location. For example, the position Finance Manager is an instance of the job Manager in the Finance Department.

primary ledger
Main record-keeping ledger.

prime territory
A territory that is usually owned by an internal employee who is directly responsible for sales within the territory boundaries. Prime territories aim to assign sales representatives to each region where potential customers are located.
privilege
A grant or entitlement of access to functions and data. A privilege is a single, real world action on a single business object.

profile option
User preferences and system configuration options consisting of a name and a value, that can be set at hierarchical levels of an enterprise. Also called a profile or user option.

profile option level
A level at which profile option values are defined. Site, product, and user are predefined levels.

profile option level hierarchy
The ordering of profile option levels. The order of the levels in the hierarchy determines which levels take precedence.

profile option value
The value portion of a profile option's name and value. A profile option may have multiple values set at different levels, such as site or user.

profile type
A template that defines the content sections of a profile, role access for each section, and whether the profile is for a person, or for a workforce structure such as a job or position.

project expenditure organization
An organization that can incur expenditures and hold financial plans for projects.

PSTN
Abbreviation for public switched telephone network which is the network of the world’s public circuit-switched telephone networks.

rating model
A scale used to measure the performance and proficiency of workers.

reference data
Data in application tables that is not transactional and not high-volume such as sales methods, transaction types, or payment terms, and can be shared and used across organizational boundaries.

reference data set
Contains reference data that can be shared across a number of business units or other determinant types. A set supports common administration of that reference data.
request call back

A marketing response form that can be inserted into an e-mail. E-mail recipients can click the link to request a call back.

resource

People designated as able to be assigned to work objects, for example, service agents, sales managers, or partner contacts. A sales manager and partner contact can be assigned to work on a lead or opportunity. A service agent can be assigned to a service request.

resource organization

An organization whose members are resources. Resource organizations are used to implement sales organizations, partner organizations, and so on.

resource role

Resource roles indicate the role a resource plays as an individual, or within a resource team.

resource team

A resource team is a temporary group of resources formed to work on work objects. A resource team may contain a resource organization or resources or both. A resource team cannot be hierarchically structured and is not intended to implement an organization.

response

A recorded reaction of a prospect or customer to a marketing activity.

role

Controls access to application functions and data.

role hierarchy

Structure of roles to reflect an organization’s lines of authority and responsibility. In a role hierarchy, a parent role inherits all the entitlement of one or more child roles.

role mapping

A relationship between one or more job roles, abstract roles, and data roles and one or more conditions. Depending on role-mapping options, the role can be provisioned to or by users with at least one assignment that matches the conditions in the role mapping.

role provisioning

The automatic or manual allocation of an abstract role, a job role, or a data role to a user.
sales account

Parties with the usage Sales Account and a sales account profile containing sales information specific to the party. When a party has one sell to address, it ceases to be a sales prospect and becomes a new sales account. When the party purchases something, it changes from a new to an existing sales account.

sandbox

A runtime session that commits changes out of reach of mainline users.

security profile

A set of criteria that identifies one or more human capital management (HCM) objects of a single type for the purposes of securing access to those objects. Security profiles can be defined for persons, organizations, positions, countries, LDGs, document types, payrolls, payroll flows, and workforce business processes.

security reference implementation

Predefined function and data security in Oracle Fusion Applications, including role based access control, and policies that protect functions, data, and segregation of duties. The reference implementation supports identity management, access provisioning, and security enforcement across the tools, data transformations, access methods, and the information life cycle of an enterprise.

segregation of duties

An internal control to prevent a single individual from performing two or more phases of a business transaction or operation that could result in fraud.

set

Reference data that is organized into groups appropriate to organizational entities, to enable reference data sharing.

set enabled

An entity, such as a lookup, customer, location, organization, or document attachment, that is allowed to participate in reference data sharing by drawing on the data of a reference data set.

SMTP

Acronym for simple mail transfer protocol. A standard protocol used for sending e-mails across the Internet.

SOA

Abbreviation for service-oriented architecture.
SOAP
Acronym for simple object access protocol. A protocol specification, that relies on extensible markup language, for exchanging structured information in the implementation of web services within computer networks.

spot rate type
Rate you enter to perform conversion based on this rate as of a specific date. This rate applies to the immediate delivery of a currency.

SQL predicate
A type of condition using SQL to constrain the data secured by a data security policy.

stage
A unit of the marketing campaign design that contains a single purpose that contributes to the overall objective of the campaign. The stage purpose can be for interacting, events, advertising, and generating leads.

subscribe to list
A marketing response form that can be inserted into an e-mail. E-mail recipients can click the link to add themselves to the subscription list associated with a marketing treatment.

territory
A legally distinct region that is used in the country field of an address.

territory coverage
A territory coverage is a set of boundaries that define what is included or excluded in the territory and what can be sold. For example, sell all products in North America. In addition to this regular coverage, selected sales accounts or partners can be included or excluded from the territory being defined.

territory owner
Resource assigned to manage a territory and is typically accountable for the work objects, such as opportunities, that are within the boundaries of the territory.

territory proposal
A sandbox container used to model territory changes. All valid territories within a proposal become active on the proposal activation date.

treatment
A marketing term that represents a combination of a marketing message for targeted audience members and delivery options for third party suppliers.
tree
Information or data organized into a hierarchy with one or more root nodes connected to branches of nodes. A tree must have a structure where each node corresponds to data from one or more data sources.

tree structure
Characteristics applied to trees, such as what data to include or how the tree is versioned and accessed.

tree version
An instance of a tree. If a tree is associated with a reference data set, all versions belong to one set. Includes life cycle elements such as start and end date and a status indicator whether the tree is active or not.

unsubscribe from list
A marketing response form that can be inserted into an e-mail. E-mail recipients can click the link to remove themselves from the subscription list associated with a marketing treatment.

user rate type
Rate you enter at journal entry time to convert foreign currency transactions to your functional currency.

value set
A set of valid values against which values entered by an end user are validated. The set may be tree structured (hierarchical).

work relationship
An association between a person and a legal employer, where the worker type determines whether the relationship is a nonworker, contingent worker, or employee work relationship.

workflow
An automated process in which tasks are passed from a user, a group of users, or the application to another for consideration or action. The tasks are routed in a logical sequence to achieve an end result.

XML filter
A type of condition using XML to constrain the data secured by a data security policy.