

# **Oracle® Trading Community Architecture**

Administration Guide

Release 11*i*

**Part No. B10854-02**

December 2003

**ORACLE®**

Oracle Trading Community Architecture Administration Guide, Release 11i

Part No. B10854-02

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## **Oracle Trading Community Architecture Administration Guide, Release 11i**

### **Part No. B10854-02**

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

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# Preface

Welcome to Release 11*i* of the *Oracle Trading Community Architecture Administration Guide*.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Oracle Trading Community Architecture.

If you have never used Oracle Trading Community Architecture, Oracle suggests you attend one or more of the Oracle Applications training classes available through Oracle University.

- The Oracle Applications graphical user interface.

To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

See **Other Information Sources** for more information about Oracle Applications product information.

## How To Use This Guide

The *Oracle Trading Community Architecture Administration Guide* contains the information you need to understand and administer Oracle Trading Community Architecture.

- Chapter 1 provides an overview of administering Oracle Trading Community Architecture.
- Chapter 2 describes how to implement Oracle Trading Community Architecture.
- Chapter 3 describes setting up for relationships, including creating, copying, and converting relationship types, adding new relationship phrase and role pairs to existing types, and assigning phrase and role pairs to relationship groups.
- Chapter 4 describes administering classifications, including creating and updating class categories and codes.
- Chapter 5 describes how to administer Data Quality Management, including setting up word replacements, defining attributes and transformations, defining match rules, maintaining the staged schema, and maintaining the Merge Dictionary.
- Chapter 6 describes setting up Third Party Data Integration, including setting up the single source of truth record, and defining data sources and rules for Party Profile and Other entities.
- Chapter 7 describes administering Data Sharing and Security, including creating, updating, and viewing data sharing groups as well as assigning access privileges.
- Chapter 8 describes how to administer Source Systems Management, including defining, updating, and viewing source systems.
- Chapter 9 describes how to administer adapters, including defining, updating, and viewing adapter configurations.
- Chapter 10 describes administering phone numbers, including time zone information and phone formats.
- Appendix A lists the profile options that affect the operation of Oracle Trading Community Architecture.
- Appendix B describes standard navigation paths for Oracle Trading Community Architecture administration.

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## Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of Oracle Trading Community Architecture.

If this guide refers you to other Oracle Applications documentation, use only the Release 11*i* versions of those guides.

### Online Documentation

All Oracle Applications documentation is available online (HTML or PDF).

- **Online Help** - Online help patches are available on MetaLink.
- **About Document** - Refer to the About document for patches that you have installed to learn about new documentation or documentation patches that you can download. The new About document is available on MetaLink.

### Related Guides

Oracle Trading Community Architecture shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other guides when you set up and use Oracle Trading Community Architecture.

You can read the guides online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them from the Oracle Store at <http://oraclestore.oracle.com>.

## Guides Related to All Products

### **Oracle Applications User's Guide**

This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of Oracle Trading Community Architecture (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.

## Guides Related to This Product

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**Note:** You should have the *Oracle Trading Community Architecture User Guide* and *Oracle Trading Community Architecture Reference Guide* to accompany the *Oracle Trading Community Architecture Administration Guide*.

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### **Oracle Trading Community Architecture User Guide**

Use this user guide to learn about Oracle Trading Community Architecture and how to use features from the Trading Community Manager responsibility to create, update, enrich, and cleanse the data in the TCA Registry.

### **Oracle Trading Community Architecture Reference Guide**

This reference guide contains seeded relationship types, seeded Data Quality Management data, D&B data elements, Bulk Import interface table fields and validations, and a comprehensive glossary. This guide supplements the documentation for Oracle Trading Community Architecture and individual products in the Oracle Customer Data Management family.

### **Oracle Trading Community Architecture API User Notes**

Use these technical user notes to learn how to access the public TCA application programming interfaces (APIs). For each API, these user notes provide a description of the API, the PL/SQL procedure, and the Java method, as well as a table of the parameter descriptions and validations.

### **Oracle Customers Online User Guide**

This user guide describes how to use Oracle Customers Online (OCO) to view, create, and maintain your customer information. From OCO, you can access the Administration tab.

## **Oracle Customers Online Implementation Guide**

This guide describes how to implement Oracle Customers Online.

## **Oracle Data Librarian User Guide**

This user guide describes how to use Oracle Data Librarian (ODL), which solves the 3 Cs of customer data management: 1) consolidation, 2) cleanliness, and 3) completeness. ODL lets you maintain the data quality in the TCA Registry.

## **Oracle Data Librarian Implementation Guide**

This guide describes how to implement Oracle Data Librarian.

## **Oracle Trading Community Architecture Oracle Customers Online XML Web Services User Guide**

Use this user guide to learn how XML Web Services enables application-to-application integration between the Oracle customer repository and legacy or third-party enterprise systems.

# Installation and System Administration

## **Oracle Applications Concepts**

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

## **Installing Oracle Applications**

This guide provides instructions for managing the installation of Oracle Applications products. In Release 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8*i* Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user guides and implementation guides.

## **Oracle Applications Implementation Wizard User Guide**

If you are implementing more than one Oracle product, you can use the Oracle Applications Implementation Wizard to coordinate your setup activities. This guide describes how to use the wizard.

## **Upgrading Oracle Applications**

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

## **Maintaining Oracle Applications**

Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.

## **Oracle Applications System Administrator's Guide**

This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

## **Oracle Alert User's Guide**

This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

## **Oracle Applications Developer's Guide**

This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6i forms so that they integrate with Oracle Applications.

## **Oracle Applications User Interface Standards for Forms-Based Products**

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

## **Other Implementation Documentation**

### **Oracle Applications Product Update Notes**

Use this guide as a reference for upgrading an installation of Oracle Applications. It provides a history of the changes to individual Oracle Applications products between Release 11.0 and Release 11i. It includes new features, enhancements, and changes made to database objects, profile options, and seed data for this interval.

### **Oracle Workflow Guide**

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes. You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

## **Oracle Applications Flexfields Guide**

This guide provides flexfields planning, setup and reference information for the Oracle Trading Community Architecture implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This guide also provides information on creating custom reports on flexfields data.

## **Oracle eTechnical Reference Manuals**

Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for a specific Oracle Applications product. This information helps you convert data from your existing applications, integrate Oracle Applications data with non-Oracle applications, and write custom reports for Oracle Applications products. Oracle eTRM is available on Metalink

## **Oracle Applications Message Manual**

This manual describes all Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11*i*.

# Training and Support

## Training

Oracle offers a complete set of training courses to help you and your staff master Oracle Trading Community Architecture and reach full productivity quickly. These courses are organized into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many education centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University's online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization structure, terminology, and data as examples in a customized training session delivered at your own facility.

## Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Trading Community Architecture working for you. This team includes your technical representative, account manager, and Oracle's large staff of consultants and support specialists with expertise in your business area, managing an Oracle8i server, and your hardware and software environment.

## Do Not Use Database Tools to Modify Oracle Applications Data

*Oracle STRONGLY RECOMMENDS that you never use SQL\*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.*

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL\*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL\*Plus and other database tools do not keep a record of changes.

## About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management, manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

## Your Feedback

Thank you for using Oracle Trading Community Architecture and this administration guide.

Oracle values your comments and feedback. In this guide is a reader's comment form that you can use to explain what you like or dislike about Oracle Trading Community Architecture or this administration guide. Mail your comments to the following address or call us directly at (650) 506-7000.

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# 1

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## Overview

This chapter provides an overview of Oracle Trading Community Architecture administration.

## Introduction to Administration

Oracle Trading Community Architecture (TCA) administration features let you set up, control, and manage functionality that affect data in the TCA Registry. You can administer these TCA tools and features to best fit your business needs.

**See Also:** Introduction to Oracle Trading Community Architecture, *Oracle Trading Community Architecture User Guide*

Most of the administration features are available in the Administration tab, a one-stop access for TCA administration, in the Trading Community Manager responsibility. This tab is also available in Oracle Customers Online and Oracle Data Librarian.

TCA administration includes:

- **Relationships:** Manage the relationship types that can be used to create relationships among entities in the TCA Registry, on page 3-2.
- **Classifications:** Manage the class categories and codes that can be used to classify entities in the TCA Registry, on page 4-5.
- **Data Quality Management:** Set up Data Quality Management, which provides powerful search and duplicate identification functionality, on page 5-14.
- **Enrichment:** Control Third Party Data Integration by determining the usage and display of third party data along with user-entered information in the TCA Registry, on page 6-2.
- **Security:** Manage data sharing groups and control how specific entities in the TCA Registry can be accessed depending on user and responsibility privileges, on page 7-3.
- **Source Systems:** Define the source systems, such as legacy or third party systems, that provide data for specific TCA entities, on page 8-5.
- **Adapters:** Configure third party or custom-made adapters that are used to process data in the TCA Registry, on page 9-2.
- **Phones:** Specify time zone information for phones, and define phone formats, on page 10-2.

# 2

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## Implementation

This chapter describes how to implement Oracle Trading Community Architecture.

## Implementing Oracle Trading Community Architecture

To implement Oracle Trading Community Architecture, you:

- Assign responsibilities to users on page 2-3.
- Optionally define access to the Administration tab on page 2-5.
- Set general profile options on page A-5.

For feature-specific implementation, you can set up:

- Address validation on page 2-6
- Batch duplicate identification on page 2-8
- Bulk Import on page 2-9
- eLocations Spatial Data Integration on page 2-15
- Party Merge on page 2-17
- Relationship Manager on page 2-18
- Third Party Data Integration on page 2-19

These features are all available from the Trading Community Manager responsibility.

## Assigning Responsibilities to Users

Set up individual users of Oracle Trading Community Architecture. Two responsibilities are available for TCA users:

- **Trading Community Manager:** Access to all TCA features, with view-only privileges for Data Sharing and Security (DSS) administration.
- **TCA Data Security Administrator:** Administration privileges for Data Sharing and Security. Assign this responsibility along with Trading Community Manager to users who need to administer DSS.

This table describes the menus and access available to each responsibility.

Responsibility	Menu	Access	Menu Exclusion
Trading Community Manager	TCA Main Menu	Trading Community, Content Access and Integration, Data Quality Management, Setup, Control	None
TCA Data Security Administrator	HZ Security Main Menu	View, create, update, and delete privileges for Data Sharing and Security administration	None

### Responsibility

System Administrator

### Navigation

Security > User > Define

### Procedure

1. Enter a user name and password. Reenter the password to verify.
2. Use the Person list of values to select the user who will be using the user name and password.
3. Assign one or more responsibilities to the user.
4. Optionally enter an end date only if you want to limit a user's access to the application.
5. Save your work.

**See Also:** Users Window, *Oracle Applications System Administrator's Guide*

**See Also**

Implementing Oracle Trading Community Architecture on page 2-2

## Defining Administration Access

You can access the Administration tab as a whole, with all available subtabs, from the Trading Community Manager responsibility and from other Oracle applications. For example, you get the tab in Oracle Customers Online if you have the Oracle Customers Online Superuser responsibility, and in Oracle Data Librarian with the Oracle Customers Online Data Librarian Superuser responsibility.

To restrict and manage access to the Administration features, you can assign specific Administration subtabs to other responsibilities. For example, you can create a Relationships Administrator responsibility with access to administer only relationships.

### Responsibility

System Administrator

**See Also:** *Implementing Function Security, Oracle Applications System Administrator's Guide*

### See Also

Implementing Oracle Trading Community Architecture on page 2-2

Introduction to Administration on page 1-2

## Setting Up Address Validation

Address validation is the process of comparing raw or user-entered addresses against a known or authorized data source, to determine if the addresses are recognized and correct according to the authority's database.

TCA address validation uses a central XML open-standards based "black box" that allows integration with third party service providers and custom solutions, through adapters that you or the third party provides.

Callers such as the Address Validation program or the TCA Bulk Import process invoke the black box, which sends and receives the address data to and from the address validation adapters. The adapters validate TCA addresses against the standard addresses in the adapter's associated databases.

**See Also:** Address Validation, *Oracle Trading Community Architecture User Guide*

### Procedure

1. Set up or optionally create adapters that can provide address validation services.

**See Also:** *Oracle Trading Community Architecture Adapter Development Guide*

2. Define address validation adapter configurations. See *Configuring Adapters* on page 9-3.
3. Set these profile options:
  - HZ: Allow Update to Standardized Address
  - HZ: Create Log for Adapters
  - HZ: Default Location Service Adapter
  - HZ: Maintain Location History
  - HZ: Timeout Limit for Address Validation

See *Setting Profile Options* on page A-2.

- ECX: Log File Path

**See Also:** Define System Profile Options, *Oracle XML Gateway User's Guide*

**See Also**

Implementing Oracle Trading Community Architecture on page 2-2

## Setting Up Batch Duplicate Identification

Batch duplicate identification involves creating batches of potential duplicate parties in the TCA Registry, using Data Quality Management tools. Based on a specified match rule, the process determines duplicate candidates, which can be designated for merge.

**See Also:** Batch Duplicate Identification Overview, *Oracle Trading Community Architecture User Guide*

### Procedure

1. Set up Data Quality Management, on page 5-14.

Optionally create match rules with the Expanded Duplicate Identification or Bulk Duplicate Identification type, on page 5-36. You can allow Automerge for the match rule and enter an automatic merge threshold. Any party with a score that exceeds the automatic merge threshold is defaulted in the Duplicate Identification: Batch Review window to be merged. The Automerge program itself does not run.

2. Optionally set the DQM Match Rule for Batch Duplicate Identification profile option if you want to default a match rule in the Submit Duplicate Identification Batch window. See Setting Profile Options on page A-2.
3. Optionally use the DUP\_BATCH\_RESTRICTION\_LIST Receivables lookup to define the list of attributes that appear in the Submit Duplicate Identification Batch window. For example, you can add a custom attribute to the list. These attributes are used as restriction criteria for creating duplicate identification batches.

**See Also:** Defining Receivables Lookups, *Oracle Receivables User Guide*

### See Also

Implementing Oracle Trading Community Architecture on page 2-2

Data Quality Management Overview on page 5-2

## Setting Up Bulk Import

TCA Bulk Import allows for importing batches of data from external sources into the TCA Registry.

**See Also:** Bulk Import Overview, *Oracle Trading Community Architecture User Guide*

### Procedure

- Upgrade to Oracle9i or above if you have not already done so.
- Define and map legacy and other source systems to entities in the TCA Registry. Perform this step for all source systems you plan to import from. See *Administering Source System Management* on page 8-5.
- You can provide the option of resolving duplicates for import:
  - **Batch de-duplication:** Resolving duplicates within the interface tables.
  - **Registry de-duplication:** Resolving duplicates between the interface tables and the TCA Registry.

Import de-duplication involves Data Quality Management (DQM) bulk duplicate identification. See *Bulk Import De-Duplication Processes* on page 2-12.

1. Administer Data Quality Management, on page 5-14.

You must define and designate attributes and transformations for bulk duplicate identification acquisition.

2. Optionally create match rules for import de-duplication, which must have the Bulk Duplicate Identification type.

For match rules you create for Registry de-duplication, allow for Automerge if you want to automatically merge parties with the highest probability of being duplicates.

When you create the match rules, take note of the match and automatic merge thresholds. If a record:

- Does not exceed the match threshold, then it is not a duplicate. In Registry de-duplication, the record is inserted as a new party into the TCA Registry.

- Reaches or exceeds the match threshold but not the automatic merge threshold, then it is a potential duplicate.

In batch de-duplication, based on the action that the user specifies for duplicates, the record is dealt with in the interface tables, before import.

In Registry de-duplication, the record is inserted as a new party, but is also included in a System Duplicate Identification Batch in Oracle Data Librarian for further evaluation.

**See Also:** System Duplicate Identification, *Oracle Data Librarian User Guide*

- Reaches or exceeds the automatic merge threshold, then it is inserted as a new party and then automatically merged with its duplicates. This threshold applies only to Registry de-duplication, and only if the match rule is allowed for Automerge.
- For providing the option of validating addresses before importing them into the TCA Registry, use or create adapters that can provide address validation services, and define the adapter configurations. See *Configuring Adapters* on page 9-3.
- For providing the option of applying Data Sharing and Security to the import process:
  1. Administer Data Sharing and Security, on page 7-3.
  2. Set the HZ: Use Data Sharing and Security During Import profile option.
- Set these profile options:
  - HZ: Allow Import of Records with Disabled Lookups
  - HZ: Allow Updates of Address Records During Import
  - HZ: Character Value to Indicate NULL During Import
  - HZ: Date Value to Indicate NULL During Import
  - HZ: Error Limit for Import
  - HZ: Number of Workers for Import
  - HZ: Numeric Value to Indicate NULL During Import
  - HZ: Use HR Security During Import

- HZ: Validate Flexfields During Import
- HZ: Work Unit Size for Import

**See Also**

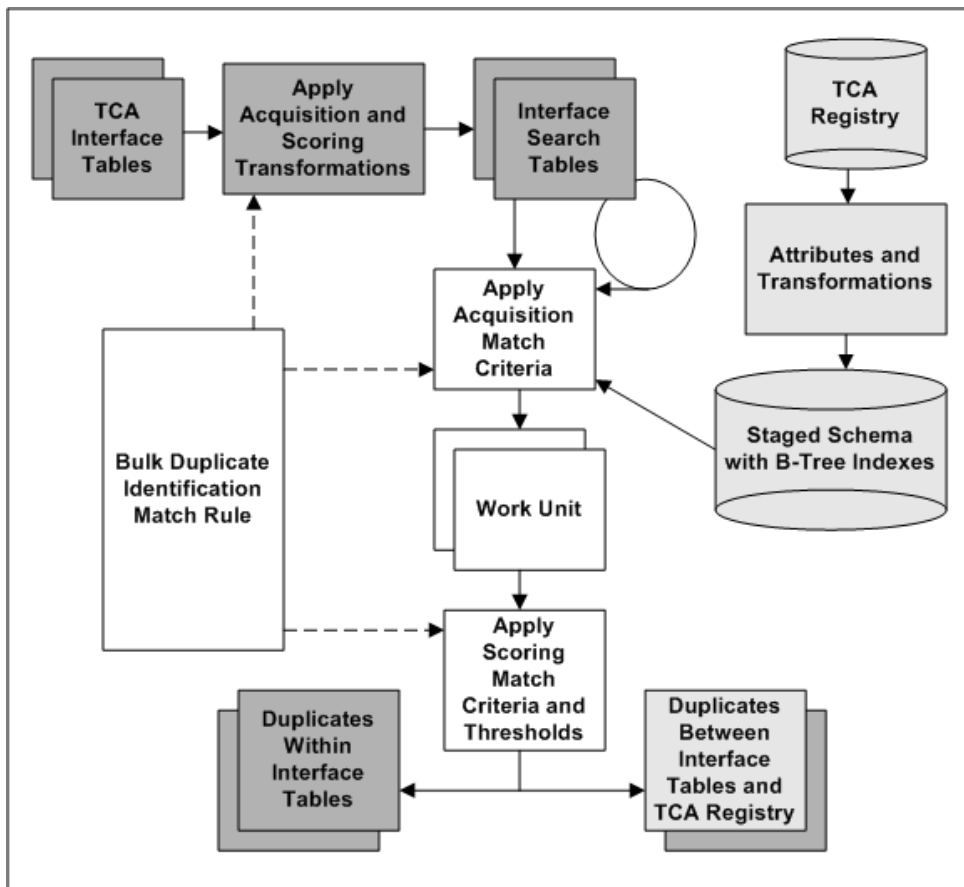
Setting Profile Options on page A-2

Implementing Oracle Trading Community Architecture on page 2-2

Data Quality Management Overview on page 5-2

## Bulk Import De-Duplication Processes

The batch and Registry de-duplication are separate processes that run at different times, either with the same or different match rules. For illustration purposes, this diagram describes both de-duplication processes:



1. TCA Registry attributes are transformed for the staged schema. The attributes to include in the schema, as well as the transformations to use on each attribute, are defined in the Define Attributes and Transformations page.

Also defined are the attribute and transformation combinations to be used for bulk duplicate identification. The staged schema includes B-Tree indexes only for the transformed attributes marked for bulk duplicate identification.

2. The user specifies a match rule with Bulk Duplicate Identification type for the de-duplication.
3. When the de-duplication process starts, the acquisition and scoring transformations are applied to the attributes in the interface tables, based on the selected match rule.
4. The transformed interface table records are mapped and loaded into the interface search tables, a set of temporary staged tables with B-Tree indexes.
  - HZ\_SRCH\_PARTIES
  - HZ\_SRCH\_PSITES
  - HZ\_SRCH\_CONTACTS
  - HZ\_SRCH\_CPTS
5. To find duplicates within the TCA interface tables:
  - The interface search tables are joined with themselves.
  - The acquisition match criteria of the same match rule is applied to compare each record against all other records in the same staged table simultaneously.

For example, an acquisition criterion is the DUNS Number attribute with the Exact transformation. All DUNS Numbers, as transformed by the Exact transformation, would be compared against one another.

To find duplicates between the TCA interface tables and the TCA Registry:

- The interface search tables are joined with the staged schema. The two sets of staged tables have the same columns. This table shows the mapping between the interface search and staged schema tables:

<b>Entity</b>	<b>Interface Search Table</b>	<b>Staged Schema Table</b>
Party	HZ_SRCH_PARTIES	HZ_STAGED_PARTIES
Address	HZ_SRCH_PSITES	HZ_STAGED_PARTY_SITES
Contact	HZ_SRCH_CONTACTS	HZ_STAGED_CONTACTS
Contact Point	HZ_SRCH_CPTS	HZ_STAGED_CONTACT_POINTS

- The acquisition match criteria of the same match rule is applied to compare all records in each interface search table against all records in the staged schema using only B-Tree indexes.
6. Matched acquisition attribute values determine the most relevant subset of records from the interface search tables to form the work unit.
  7. Using the scoring criteria in the match rule, each record in the work unit is compared to all other work unit records in the same staging table.
  8. A score is calculated for each record in the work unit, and scores for all entities are added together for determining duplicate parties.
  9. The score of each work unit record is compared against the match and automatic merge thresholds defined in the match rule.
    - Records with scores above the match threshold are selected as potential duplicates and resolved accordingly.
    - For Registry de-duplication, records with scores that also exceed the automatic merge threshold are automatically merged after import, if the match rule is allowed for Automerge.

**See Also**

Setting Up Bulk Import on page 2-9

Bulk Duplicate Identification on page 5-12

## Setting Up eLocations Spatial Data Integration

eLocations Spatial Data Integration allows for retrieving spatial information from Oracle eLocations and storing the longitude and latitude data for addresses in the TCA Registry.

**See Also:** eLocations Spatial Data Integration, *Oracle Trading Community Architecture User Guide*

### Procedure

- Set three profile options for the HTTP post to eLocations. The profile options determine the URL, proxy host, and proxy port to use.
  - HZ: Spatial Provider URL
  - Applications Server-Side Proxy Host And Domain or HZ: Web Server Proxy Host Name
  - Applications Proxy Port or HZ: Web Server Proxy Port

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**Note:** If you are on Release 11.5.7 or later, use the Applications Server-Side Proxy Host And Domain and Applications Proxy Port profile options. If you are on Release 11.5.6 or earlier, use the HZ: Web Server Proxy Host Name and HZ: Web Server Proxy Port profile options.

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See Setting Profile Options on page A-2.

- Submit the Locations Spatial Index Rebuild program to create and periodically rebuild the spatial index on the HZ\_LOCATIONS table. See Locations Spatial Index Rebuild on page 2-16.

### See Also

Implementing Oracle Trading Community Architecture on page 2-2

## Locations Spatial Index Rebuild

Use the Locations Spatial Index Rebuild program to rebuild the spatial index on the HZ\_LOCATIONS table. You should periodically rebuild the spatial index to optimize performance and accuracy for queries on the spatial data in this table.

You can schedule this program to run on a periodic basis. If possible, rebuild the index when users are not querying spatial data because the Locations Spatial Index Rebuild program interferes with user spatial operations.

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**Note:** You cannot run the Locations Spatial Index Rebuild program if the Spatial Information for Locations Batch Update program is running.

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### See Also

Setting Up eLocations Spatial Data Integration on page 2-15

## Setting Up Party Merge

Party Merge involves merging parties that are confirmed as duplicates, either from a duplicate identification batch or a manually created merge batch.

**See Also:** Party Merge Overview, *Oracle Trading Community Architecture User Guide*

### Procedure

- Define any custom entities and merge procedures.
- Define the Merge Dictionary to determine the entities and procedures that must be processed to merge party entities, on page 5-63. You can set up the Merge Dictionary for all Oracle Applications that you use to interact with parties.
- You can optionally set up any merge procedure registered with the Merge Dictionary to prevent the deletion of records, if your company's business rules require that parties cannot be deleted. To prevent deletion, a merge procedure must call the HZ\_PARTY\_MERGE\_veto\_delete procedure. At the end of the merge process, if none of the merge procedures has vetoed the deletion of the merge-from parties, then those party records are deleted.

### See Also

Implementing Oracle Trading Community Architecture on page 2-2

## Setting Up Relationship Manager

Relationship Manager allows users to manage relationships among existing parties in the TCA Registry. Relationship Manager uses the relationship types that you administer. See *Administering Relationships* on page 3-2.

You can also set up Data Quality Management (DQM) for the party search in Relationship Manager. DQM provides powerful search functionality, based on a match rule that determines which search criteria are available and how to select and rank the results. You can use a seeded search match rule or create new rules. Relationship Manager's party search uses the rule that is assigned to the DQM: Match Rule for Relationship Manager Search profile option.

If you do not set up DQM, Relationship Manager provides a basic set of search criteria and uses standard search functionality.

**See Also:** *Searching for Parties and Viewing Results, Oracle Trading Community Architecture User Guide*

### Procedure

1. Administer Data Quality Management, on page 5-14.

Optionally create one or more match rules with the Search type. When defining match rule thresholds, remember that a record's score must meet or exceed the match threshold to be displayed in the search results.

2. Assign the match rule that you want to use for the party search to the DQM: Match Rule for Relationship Manager Search profile option. See *Setting Profile Options* on page A-2.

### See Also

*Data Quality Management Overview* on page 5-2

*Implementing Oracle Trading Community Architecture* on page 2-2

## Setting Up Third Party Data Integration

Third Party Data Integration allows for acquiring information from D&B for the TCA Registry. To enable purchase of D&B data, you must integrate with D&B. Without third party data, there is no need to use or administer Third Party Data Integration.

**See Also:** Third Party Data Integration Overview, *Oracle Trading Community Architecture User Guide*

After you set up Third Party Data Integration with D&B, you can optionally administer Third Party Data Integration to control how the D&B and user-entered data are used and displayed. See *Administering Third Party Data Integration* on page 6-2.

### Procedure

1. Establish a contract with D&B for its Data Rationalization Service. Contact your D&B relationship manager to contract for the services that meet your data requirements.

If you do not have a relationship manager assigned to your company, contact D&B's Global Service Center at (888) 243-4566, e-mail [dnb4oracle@dnb.com](mailto:dnb4oracle@dnb.com), or visit <http://www.dnb.com>. You can also contact D&B for information to interpret credit ratings and other information that D&B provides.

2. D&B provides information that you need to access the D&B database from Third Party Data Integration:
  - D&B HTTPS URL
  - D&B user name
  - D&B password

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**Tip:** You can request multiple user names and passwords if you want to assign different ones to your users, for example, to track D&B transactions by user.

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3. Contact your information technology department or organization for information about your web server.
  - Servlet agent URL
  - If you use a proxy server:
    - Web server proxy host name
    - Web server proxy port
    - Web server proxy user name (optional)
    - Web server proxy password (optional)
4. Use the information from D&B and your information technology organization to set up the profile options listed in this table.

<b>Profile Option</b>	<b>Value</b>
Apps Servlet Agent	Servlet agent URL
HZ: D&B Password	D&B password
HZ: D&B URL	D&B HTTPS URL
HZ: D&B User Name	D&B user name
HZ: Web Server Proxy Host Name	Web server proxy host name
HZ: Web Server Proxy Password	Web server proxy password
HZ: Web Server Proxy Port	Web server proxy port
HZ: Web Server Proxy User Name	Web server proxy user name

See Setting Profile Options on page A-2.

5. Set up Bulk Import for batch loading D&B data into the Registry. See Setting Up Bulk Import on page 2-9.
 

Optionally create a request set with the D&B Import Adapter request set and the Import Batch to TCA Registry program. Users can run the new request set to batch load into interface tables and import into TCA Registry in one step.

This table shows the recommended settings for automating D&B batch load import after loading into interface tables.

<b>Import Parameter</b>	<b>Default for D&amp;B Batch Load</b>
Run Batch De-Duplication	No
Batch De-Duplication Match Rule	None
Run Address Validation	No
Run Registry De-Duplication	Yes
Registry De-Duplication Match Rule	Custom match rule with heavy weights on Address attributes

### **See Also**

Implementing Oracle Trading Community Architecture on page 2-2



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## Relationships

This chapter describes setting up for creating and using relationships:

- Creating relationship types.
- Converting nonhierarchical relationship types into hierarchical types.
- Copying relationship types and relationships.
- Adding relationship phrase and role pairs to existing types.
- Assigning relationship phrases and roles to relationship groups.

## Administering Relationships

Set up relationship types and relationship phrase and role pairs that can be used to create relationships among entities in the TCA Registry. These relationships are shared throughout the Oracle E-Business Suite.

**See Also:** Relationships Overview, *Oracle Trading Community Architecture User Guide*

Oracle Trading Community Architecture provides seeded relationship types and phrase and role pairs, but you can create new ones as needed.

**See Also:** Seeded Relationship Types, Phrases, and Roles, *Oracle Trading Community Architecture Reference Guide*

Relationships administration lets you:

- Create relationship types, including a relationship phrase and role pair for each new type, on page 3-6.
- Convert nonhierarchical relationship types into hierarchical types, on page 3-7.
- Copy relationship types and, optionally, also the relationships, on page 3-8.
- Add phrase and role pairs to existing seeded or user-created relationship types, on page 3-9.

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**Note:** You cannot update the definition of existing relationship types. You can only add phrase and role pairs to them.

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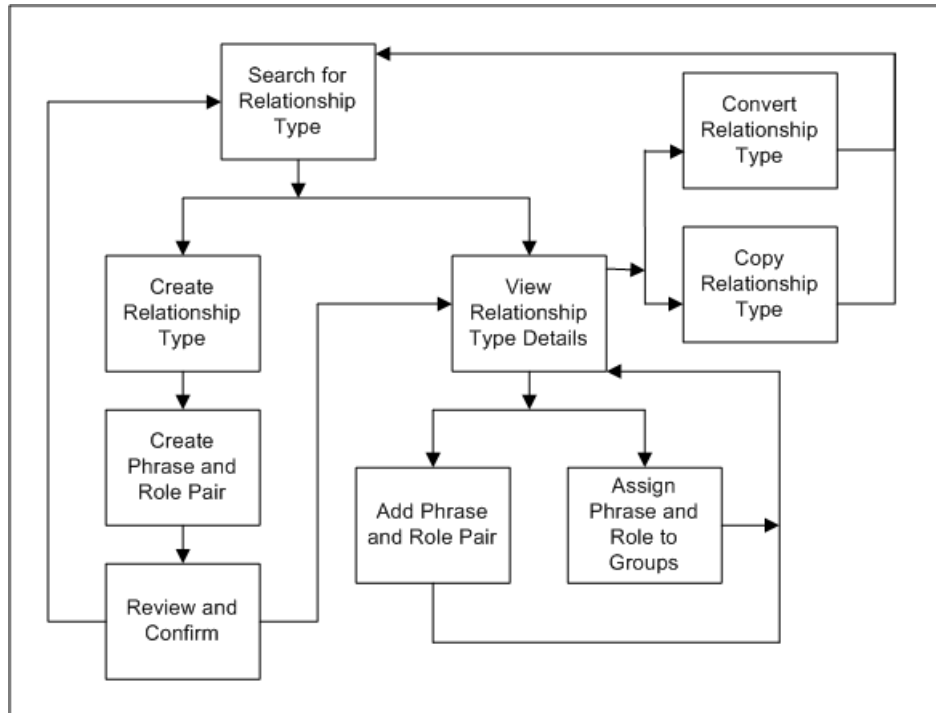
- Assign phrase and role pairs to relationship groups, on page 3-11.

### **See Also**

Introduction to Administration on page 1-2

## Administration Process

This diagram describes the process flow of setting up relationship types as well as phrase and role pairs.



1. Search for a relationship type that you want to view, or to make sure that the relationship type you want to create does not already exist. See Searching for Relationship Types on page 3-5.
2. If you do not see the relationship type that you want in the search results, you can create a new type. Otherwise, select a relationship type from the results and view its details.

3. If you are creating a new relationship type, you:
  - a. Define and create the relationship type.
  - b. Create a relationship phrase and role pair for the relationship type.
  - c. Review and confirm your definitions.
  - d. Return to search for another relationship type or view details of the type that you just created.

See [Creating Relationship Types](#) on page 3-6.

4. If you are viewing details for a selected or newly created relationship type, you can:
  - Convert the relationship type, if it is nonhierarchical, into a hierarchical type, or copy the relationship type to create a new type. See:
    - [Viewing and Converting Relationship Types](#) on page 3-7.
    - [Copying Relationship Types](#) on page 3-8.

After you convert or copy a relationship type, you return to the Relationship Type page.

- Add a relationship phrase and role pair to the type or to assign phrases and roles from this relationship type to relationship groups. See:
  - [Adding Relationship Phrase and Role Pairs to Relationship Types](#) on page 3-9.
  - [Assigning Relationship Phrases and Roles to Relationship Groups](#) on page 3-11.

After you add a phrase and role pair or assign to relationship groups, you return to view the details of your relationship type.

## Searching for Relationship Types

Use the Relationship Type page to search for the relationship type that you want to view, copy, convert, add relationship phrase and role pairs to, or assign to relationship groups. You also search to make sure that the relationship type you want to create does not already exist.

The search results display not only the relationship type name but also whether it is a hierarchical relationship type or not and whether circular relationships are allowed or not. You also see when and by whom the relationship type was created.

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**Note:** If the relationship type is seeded, the Created By column displays *ORACLE* and the Creation Date column shows the date that the relationship type record is created in your database.

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You can view concurrent requests for the processes of copying or converting relationship types.

### See Also

Administering Relationships on page 3-2

## Creating Relationship Types

Use the Create Relationship Type pages to create a new relationship type along with a relationship phrase and role pair for the new type. After you search for the relationship type to make sure that it does not already exist, you follow a three-step process to create a new type.

You also specify whether the new type would create hierarchical relationships or not. If you create a nonhierarchical relationship type, you also determine if circular relationships are allowed with this relationship type or not.

### To create a new relationship type:

1. Search for the relationship type to make sure that it does not already exist. See *Searching for Relationship Types* on page 3-5.
2. Click **Create** after you verify that the relationship type is not in the search results.
3. In the *Create Relationship Type* page, enter the name of your relationship type and determine the relationship type's definition for hierarchical and circular relationships.
4. Create a relationship phrase and role pair for this relationship type. See steps 3 to 5 in *Adding Relationship Phrase and Role Pairs to Relationship Types* on page 3-9.
5. Review your relationship type and phrase and role pair definitions.
6. Go back to make any necessary changes. Otherwise, click **Finish**.
7. From the confirmation page, you can choose to:
  - View details of the relationship type that you just created, on page 3-7 (start at step 3).
  - Search for or create another relationship type, on page 3-5.

### See Also

*Administering Relationships* on page 3-2

## Viewing and Converting Relationship Types

Use the Overview page to view the definition of a relationship type and its included relationship phrase and role pairs. For each relationship phrase and role pair, the Relationship Phrase and Role Pairs table displays:

- The subject role and phrase
- The subject and object type, for example Organization or Person

You can also convert the relationship type, if it is nonhierarchical, into a hierarchical type. You can only convert relationship types that do not have any existing circular relationships. You can access the concurrent request for the conversion process in the Relationship Type page. See Searching for Relationship Types on page 3-5.

### To view the details of a relationship type:

1. Search for the relationship type that you want to view. See Searching for Relationship Types on page 3-5.
2. In the Search Results table, click the relationship type that you want to view details for.

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**Note:** You can also navigate to the Overview page after you create a new relationship type. See Creating Relationship Types on page 3-6.

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3. View the relationship type details. You can choose to:
  - Convert the relationship type from nonhierarchical to hierarchical if you need to create hierarchies with this type.
  - Copy the relationship type, on page 3-8.
  - Add a relationship phrase and role pair to this relationship type, on page 3-9.
  - Assign any of the displayed phrases and roles to relationship groups, on page 3-11.

### See Also

Administering Relationships on page 3-2

## Copying Relationship Types

Copy existing relationship types to create new relationship types, which would have the same relationship type definition except for the name. The relationship phrase and role pairs are also copied over, but you need to append a prefix or suffix to each copied role to keep all roles unique.

You can also copy all relationships along with the relationship type. For example, the relationship that Joe is the employee of Oracle exists for the Oracle Employment relationship type. You copy the relationship type, name it OracleHQ Employment, and prefix the relationship roles with *HQ*. If you also copy the relationships, you would get this relationship with the OracleHQ Employment type: Joe is the HQ employee of Oracle.

Before you define the new type in the Copy Relationship Type page, you first find and view the relationship type that you want to copy from. See Viewing and Converting Relationship Types on page 3-7.

### **See Also**

Administering Relationships on page 3-2

## Adding Relationship Phrase and Role Pairs to Relationship Types

Use the Add Relationship Phrase and Role Pair pages to add a relationship phrase and role pair to an existing relationship type. Similarly, you also define a phrase and role pair when you create a new relationship type.

For the subject and object of the relationship phrase and role pair, you define:

- The type, for example Person or Organization
- The relationship phrase, either an existing one from another relationship type or a new user-defined phrase
- The singular and plural relationship role

What you define for the subject and object also determines the phrases, roles, and types for the reciprocal direction of the pair. For example, if you enter:

- Subject type: Organization
- Subject phrase: Employer Of
- Subject role: Employer and Employers
- Object type: Person
- Object phrase: Employee Of
- Object role: Employee and Employees,

then the relationship phrase and role pair is defined as shown in this table:

Subject Role	Subject Type	Subject Phrase	Object Type
Employer	Organization	Employer Of	Person
Employee	Person	Employee Of	Organization

### To add a relationship phrase and role pair to a relationship type:

1. View the relationship type that you want to add phrase and role pairs to. See Viewing and Converting Relationship Types on page 3-7.
2. Click Add Relationship Phrase and Role Pair.

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**Note:** Adding a phrase and role pair is also part of the relationship type creation process. See *Creating Relationship Types* on page 3-6.

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3. Enter the subject type and subject relationship phrase.

It does not matter which phrase is defined as the subject phrase, for example, Wife Of or Husband Of.

For hierarchical relationship types, however, the defined subject is the parent, which ranks above the object, or child. For example, you would enter Employer Of and not Employee Of as the subject phrase to imply that the employer ranks above the employee. The employee, of course, is still the subject of the relationship when viewed from his or her perspective, for example, Joe as the employee of Oracle.

4. Enter the singular and plural relationship roles that describe the subject.

The roles can be a combination of the relationship type and phrase. For example, if the type is Oracle Employment and the phrase is Employee Of, the role can be Oracle Employee.

This method of defining roles helps you keep roles unique and differentiate between roles of similar relationship types. For example, if you have another relationship type called Elcaro Employment, you would define Elcaro Employee as the role. You cannot have duplicate roles such as Employee for both relationship types.

5. Enter the corresponding information for the object.

6. Click Apply.

7. The confirmation takes you back to view the relationship type with your phrase and role pair added. See *Viewing and Converting Relationship Types* on page 3-7.

### **See Also**

Administering Relationships on page 3-2

## Assigning Relationship Phrases and Roles to Relationship Groups

Use the Assign to Relationship Groups page to assign relationship phrases and roles to relationship groups. You can assign each phrase within a relationship phrase pair and type to a different set of groups. The phrase assignment automatically determines the assignment of the corresponding role.

For example, you can assign the relationship phrase Employer Of to a set of groups that differ from the assignments for Employee Of. The corresponding relationship role Employer would have the assignments of Employer Of, and likewise Employee with assignments of Employee Of.

Relationship groups are mainly used to determine which user interfaces in Oracle applications each phrase and role is available in. Each relationship group corresponds to one or more Oracle Applications user interfaces. Examples of groups include Customer Account Information, Party Families, Party Contacts, Party Corporation Hierarchy, and Party Customers.

For example, you would assign phrases for customer relationships to the Party Customers group. These phrases and their corresponding roles would then be available in Oracle Applications user interfaces with customer related functionality.

### **To assign a relationship phrase and role to relationship groups:**

1. View the relationship type with the phrase and role that you want to assign to relationship groups. See Viewing and Converting Relationship Types on page 3-7.
2. Click Assign to Relationship Groups.
3. In the Assign to Relationship Groups page, select the phrase that you want to assign and click Go. The Assign Relationship Phrase to Groups region displays the current assignments for the selected phrase.
4. Move relationship groups between the two boxes as needed. The relationship phrase and its corresponding relationship role are assigned only to the relationship groups in the Assigned Relationship Groups box.
5. Click Apply. The confirmation takes you back to view the same relationship type. See Viewing and Converting Relationship Types on page 3-7.

### **See Also**

Administering Relationships on page 3-2



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# Classifications

This chapter describes how to administer classifications, including:

- Creating, copying, and updating class categories.
- Assigning entities to class categories.
- Creating and updating class codes.
- Assigning parent class codes.

## Classifications Overview

The TCA Classifications model provides a flexible tool that you can use to categorize entities, which can include parties, projects, tasks, orders, and so on. Classifications can use different paradigms and does not restrict you to a single way to classify an entity. This enables 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 it is referenced within your organization. This is extremely helpful when you map the internal representation of a company's environment to the way that the outside world models it.

The major components of the TCA Classifications model are:

- **Class category:** A broad subject area within which you can classify parties. A class category is a logical grouping of one or more class codes and allows for rules to be defined for how the category code structure is set up, as well as which entities can be assigned to these categories.

You can define class categories to meet the needs of your organization. For example, you can define class categories consistent with special business considerations, pricing arrangements, or terms for a party.

- **Class code:** A specific value of the class category. These class codes can be organized in a hierarchical fashion. Class codes are grouped together into categories.

For example, if you want to specify the industry sector to which a party belongs, you can use a predefined class category, such as SIC 1987, which includes the 1987 version of US Standard Industrial Classification (SIC) codes. For example, within the SIC 1987 class category, you could assign the class code Software to a party in the software industry.

All classifications are made up of two key components: a class category and class code. In the user interface, the classification scheme you create is called a class category or classification. The individual values within the classification scheme are called class codes.

- **Classification rules:** The Classifications model allows class categories to have rules and characteristics which define how classifications can be assigned to entities. When you set up class categories, you can create specific rules such as allowing for multiple parents for the codes in the category. For example, a Hardware class category could include the tangible components of a computer system.

Entities with multiple classifications can have the classifications ranked in order of importance for the particular entity. A party can have multiple class codes associated with it. A ranking of these codes could be useful. For example, Oracle could have databases and applications linked to it as separate codes. If you are part of an organization interested in databases, you might rank the Database class code higher than the Application class code.

- **Class code hierarchy:** A hierarchy of class codes within a class category. For example, you could set up the High Tech class category, and the class codes associated with the High Tech class category are: Software, Hardware, Applications, PCs, Printers, and Consulting. These codes are set up in a hierarchical manner by assigning the parent codes to the appropriate children.

High Tech

- Software
  - Applications
  - ERP applications
  - CRM applications
  - Consulting
- Hardware
  - PCs
  - Printers
  - Consulting

When you create a class code hierarchy, three options are available to administer the hierarchy. You can:

- Assign one or more parents to a code. As shown in the example above, Consulting can be found under both the Hardware and Software parent class codes.

- Allow one or more codes to be assigned to an entity. Using the schema above, both Applications and Printers could be assigned to an Organization party.
- Allow the assignment of higher level codes to an entity, not just the lowest level code. With the schema above, for example, a company could be assigned the Software code, even though that code is not at the lowest level, or leaf, node.

The Create Class Category and Update Class Category pages provide a list of the valid entities that the class codes within a class category can be assigned to.

## Standard and Custom Classification Schema

A classification schema can be built using standards such as the NAICS (North American Industrial Classification System), NACE (European Union's Statistical Classification of Economic Activity), or SIC (Standard Industrial Classification) classification schema, or on user-defined classifications based on your organization's business needs.

If you use the seeded standard classification schema, then you do not have to set up user-defined categories and codes.

The Oracle Trading Community Classifications model includes the following standard class categories and class codes:

- **SIC 1987:** The 1987 version of the US SIC schema. This is the most popular industrial classification in U.S.
- **NACE:** The industrial classification schema used in European countries.
- **NAICS:** Introduced in 1997 to replace the SIC schema.
- **SIC 1972:** The 1972 version of the US SIC schema. Used by Dun & Bradstreet for classifying companies in Canada.
- **SIC 1977:** The 1977 version of the US SIC schema. Used by Dun & Bradstreet for classifying companies in European countries.

## Administering Classifications

Use the classification process for:

- Searching for an existing class category, on page 4-6
- Creating a class category, on page 4-7
- Copying a class category, on page 4-15
- Assigning an entity to a class category, on page 4-9
- Updating a class category, on page 4-12
- Creating a class code, on page 4-10
- Updating a class code, on page 4-13
- Assigning a parent class code, on page 4-11

See Classifications Overview on page 4-2.

### **To administer classifications:**

1. Search for class categories to update or to confirm that the class category you want to create does not already exist.
2. Define class categories, including assigning entities to and creating class codes for the category.
3. Optionally, define the hierarchy of class codes within a category. Assign the parent codes to the appropriate children codes, for example:
  - Software is the a parent of Applications.
  - Applications is the parent of ERP applications.

## Searching for an Existing Class Category

Use the Classifications page search for a class category to view and update or to confirm that a class category does not already exist before you create a new category. In the Search region of the Classifications page, you can enter several criteria to search the existing class codes. Your initial search should be broad enough to find class categories that may be similar to the one you plan to create.

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**Note:** You can search for compiled or uncompiled categories. However, to be able to use a class category and assign it to an entity, the class category must be in the compiled state.

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### To search for a class category:

1. Navigate to the Classifications page.
2. Enter search criteria for the class category or the class code in the appropriate fields of the Search region. You can also select Yes or No in the Compiled poplist to filter the results by whether or not the class category or class code is compiled.
3. Click the Go button to start your search.
4. View the results.
5. If the appropriate class category is not found, click the Create Class Category button to create a class category. See Creating a Class Category on page 4-7.

### See Also

Administering Classifications on page 4-5

## Creating a Class Category

Use the Create Class Category page to define class categories. When you create a class category you must provide required information that identifies and describes the class category.

- Assign a name, meaning, and description to a category, for example, High Tech.
- Define rules for using the class category.
  - Allow single or multiple parent codes. For example, class codes in a High Tech category can have multiple parent codes.
  - Allow single or multiple parent code assignments. For example, you can assign the Hardware, PCs, or both to Vision Corporation.
  - Allow parent class code assignments. For example, you can assign class codes to Vision Corporation at any level of the hierarchy, Hardware or PCs, not just the lowest level of PCs.
  - Define what types of entities use the class codes. A seeded list of tables restricts the use of class codes. For example, the SIC Code categories are restricted to Organization parties.

You also assign at least one entity to the class category and create at least one class code for the new category.

To create a class category that is similar to an existing one, you can copy the existing category. See Copying a Class Category on page 4-15.

### **To create a class category:**

1. In the Classifications page, make sure that the class category you want to create does not already exist and click the Create Class Category button. See Searching for an Existing Class Category on page 4-6.
2. Enter the required information in the appropriate fields.

3. Select any of the optional attributes for this class category:
  - **Allow Multiple Parent Codes:** You can select this check box to allow any node in your hierarchy to have more than one parent. Clearing this check box restricts the class category to only one parent.
  - **Allow Parent Code Assignment:** You can select this check box to allow the assignment of parent nodes in the class code hierarchy. Clearing this check box requires that you must use leaf nodes, nodes that have no children, for the class category.
  - **Allow Multiple Class Code Assignments:** You can select this check box to allow a user to classify a customer, opportunity, or other entity using more than one class code from this class category. Clearing this check box prevents users from assigning more than one class code to an entity.
4. In the Assign Entities region, you can assign entities to this class category. Select the appropriate entities identified by the table and column names.
5. Optionally enter, edit, or delete a condition defined with an SQL Where clause.
6. Click the Add New Entity Assignment button to add a new entity.

For more information, see Assigning Entities to a Class Category on page 4-9.
7. Click the Apply and Create Class Codes button to apply and create new class codes for this category. See Creating a Class Code on page 4-10.

To use a class category, you must first compile it. A class category should be compiled when it is created and whenever it is updated.

#### **To compile class categories:**

1. Navigate to the Classifications page.
2. Select No in the Compiled poplist.
3. Click the Go button to start your search for all uncompiled class categories.
4. Click the Compile Class Categories button.

#### **See Also**

Administering Classifications on page 4-5

## Assigning Entities to a Class Category

Use the Assign Entities page or Entity Assignment region to assign entities to a class categories. You must assign an entity by entering the name of the table and the column for the appropriate entity. You can also optionally create a condition, using an SQL Where clause, to select a subset of the entities in your database.

### To assign an entity to a class category:

1. Navigate to the Assign Entities page or Entity Assignment region.
  - From the Create Class Category page, click the Add New Entity Assignment button and then enter the entity information in the Assign Entities page. See [Creating a Class Category](#) on page 4-7.
  - If you have created a copy of an existing class category, then in the Create Class Category page enter the entity information in the Entity Assignment region. See [Copying a Class Category](#) on page 4-15.
  - From the Update Class Category page that displays an existing class category, click the Add Another Entity Assignment button and enter the entity information in the Entity Assignment region. See [Updating a Class Category](#) on page 4-12.
2. Enter the required entity information:
  - Table name, such as HZ\_PARTIES
  - Column name, such as PARTY\_ID

You can use the list of values to search for the table and column name.
3. Enter an optional condition in the Condition field. The condition is expressed as an SQL Where statement, such as:

```
PARTY_TYPE= 'ORGANIZATION'
```

### See Also

[Administering Classifications](#) on page 4-5

## Creating a Class Code

Use the Create Class Codes page to create the appropriate class codes for class categories. When you create the class codes you specify the name of each class code, a meaning, a description, the date when the code becomes active, and an optional date when the code is not active. You can immediately enable a class code or enable it at a later time.

### To create a class code:

1. Click the Apply and Create Class Codes button in the Create Class Category page, after you have created a class category. See [Creating a Class Category](#) on page 4-7.
2. Enter the characteristics of the class code in the Class Codes region of the Create Class Codes page:
  - Name
  - Meaning
  - Description
  - Start date active
  - End date active
3. Check the Enabled check box to make the class code effective, or leave the check box clear until you are ready to enable it.

You can use the Enabled check box, along with the Start and End active dates, to control the availability of a class code. For example, you can create and enable a class code with a start date in the future. On that start date, the class code automatically becomes available for use. You can immediately make an active class code unavailable by clearing the Enable check box. Or you can inactivate a class code by specifying an end date on some day in the future.

4. Optionally assign a parent class code to at least one of the class codes. See [Assigning Parent Class Codes](#) on page 4-11.

### See Also

[Administering Classifications](#) on page 4-5

## Assigning Parent Class Codes

Use the Assign Class Codes page, after you have created a class category and its class codes, to make one class code the parent of another class code in a class code hierarchy. This option structures class categories and class codes in parent-child hierarchal relationships.

The assignment of parent class codes is restricted by the options available for the class category. When you create or update a class category, you can check or clear the Allow Multiple Parent Codes check box, which allows or prevents a class code from having more than one parent class code.

You can update class code definitions, including parent codes, in the Update Class Code page. See Updating a Class Code on page 4-13.

### **To assign a parent class code to a new class code:**

1. Create new class codes for a new category. See Creating a Class Code on page 4-10.
2. In the Class Codes region, select the child class code of the parent-child relationship that you are creating.
3. Click the Assign Parent Class Codes button to navigate to the Assign Class Codes page.
4. Select a parent class code, or one or more if allowed.
  - If the Allow Multiple Parent Codes option is selected, then you can select one or more class codes.
  - If the Allow Multiple Parent Codes option is not selected, then you can only select one class code.
5. Click the Assign button.

## Updating a Class Category

Use the Update Class Category page to update the information associated with an existing class category, such as the meaning, description, delimiter, and entity assignment for a class category.

### **To update an existing class category:**

1. Search for the class category that you want to update. See [Searching for an Existing Class Category](#) on page 4-6.
2. In the Results region, click the appropriate class category.
3. In the Update Class Category page, you can update the information about the class category in the Class Category Details region and the Entity Assignment region. See [Creating a Class Category](#) on page 4-7 and [Assigning Entities to a Class Category](#) on page 4-9.
4. Click the Compile button to save your work.

For user-defined class codes, you can navigate to the Update Class codes page from this page to revise information about class codes. For more information, see [Updating a Class Code](#) on page 4-13.

### **See Also**

[Administering Classifications](#) on page 4-5

## Updating a Class Code

Use the Update Class Codes page to update the information associated with existing class codes, such as the meaning, description, parent, end date, and whether the class code is enabled or disabled.

### To update an existing class code:

1. Search for the class category with the class codes that you want to update. See Searching for an Existing Class Category on page 4-6.
2. In the Classifications page, click the Update Class Codes icon for the class category with the class codes that you want to update.
3. In the Update Class Codes page, revise the information about the class codes, as necessary. You can revise the information in the following fields:
  - Meaning
  - Description
  - Parent Class Code
  - End Date Active

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**Note:** The Start Date Active date cannot be changed.

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4. Check or clear the Enabled check box to enable or disable the class code.
5. Save your work.

If the class code that you want to update is not found, then you must create the class code. For more information, see Creating a Class Code on page 4-10.

### See Also

Administering Classifications on page 4-5

## Viewing a Class Code Hierarchy

You can access the class code hierarchy for viewing by clicking the View Class Code Hierarchy button on the Update Class Codes page to bring up the View Class Code Hierarchy page. See Updating a Class Code on page 4-13.

On the Update Class Category page you can also view the class code hierarchy. See Updating a Class Category on page 4-12.

For each class code you can view:

- Class code meaning
- Class code
- Description
- Start date active
- End date active

To update the class code hierarchy, see Updating a Class Code on page 4-13.

### **See Also**

Administering Classifications on page 4-5

## Copying a Class Category

Use the Copy Classification feature on the Classifications page to create similar class categories. You can copy an existing class category and then edit the information about that class category to create similar class categories.

Although class codes are associated with a class category, you cannot edit the class codes for a copy of a class category in the Create Class Category page. You must edit the copy of a class category and then, if necessary, edit the class codes in the Update Class Codes page.

### **To copy a class category:**

1. Search for the class category that you want to copy. See Searching for an Existing Class Category on page 4-6.
2. Click the Copy Classification icon for the class category that you want to copy.
3. In the Create Class Category copy page, edit the class category details and entity assignments as necessary. See Creating a Class Category on page 4-7 and Assigning Entities to a Class Category on page 4-9.
4. To update the class codes for the category, see Updating a Class Code on page 4-13.

### **See Also**

Administering Classifications on page 4-5



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# Data Quality Management

This chapter describes how to administer Data Quality Management, including:

- Setting up word replacements.
- Defining attributes and transformations.
- Defining match rules.
- Maintaining the staged schema.
- Maintaining the Merge Dictionary.

## Data Quality Management Overview

Oracle Trading Community Architecture Data Quality Management (DQM) is a set of tools and features that provide powerful searching and matching functionality for search, duplicate identification, duplicate prevention, and other data management features. With a sophisticated matching mechanism, DQM can determine records that match specified search criteria, or records that are potential duplicates of another record.

TCA and other Oracle applications integrate Data Quality Management functionality for various purposes, including:

- Searches for parties, addresses, contacts, and contact points in the TCA Registry.
- Prevention of duplicate entry into the Registry when records are created or updated.
- Identifying possible duplicates that currently exist in the Registry.

For the purposes of matching records, DQM takes into account that records can contain typographical errors, spelling errors, or incomplete data. DQM copies the data into staged tables separate from the TCA Registry, and transforms and standardizes the staged records. With fuzzy searches through the transformed data in the staged tables, a set of possible matches in the TCA Registry is established.

For resolving duplicates, DQM also lets you define a repository of the entities and procedures that are processed when parties are merged. DQM also provides an Automerge feature to automatically merge records that exceed a specified threshold.

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**Note:** If you have third party information in the TCA Registry, DQM uses the single source of truth record for each party as well as the records for the Other entities. See *Administering Third Party Data Integration* on page 6-2.

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### See Also

Major Features on page 5-3

Data Quality Management Examples on page 5-7

Data Quality Management Process on page 5-10

Administering Data Quality Management on page 5-14

## Major Features

Data Quality Management provides various features that work together as a powerful and flexible data transformation and matching tool. These features are integrated with TCA and can be used by any Oracle E-Business Suite application to search and identify duplicates.

### **See Also**

Data Quality Management Overview on page 5-2

## Attribute Search in Entities

DQM uses attributes in these four entities, which are a subset of the TCA Registry, to search and identify matches:

- Party
- Address
- Contact
- Contact Point

Each attribute corresponds to a table column in the TCA Registry tables. For example, party name is an attribute of the party entity, and the value for this attribute is obtained from the HZ\_PARTIES table. The party name can be one attribute that you use to evaluate if two parties are duplicates or matches, for example John Smith and Jon Smith.

You can add custom attributes if the predefined attributes do not meet your needs.

### **See Also**

Attributes for DQM on page 5-21

## Predefined and Customizable Search and Match Functionality

You can use predefined transformations and match rules to search and identify matching records. Transformations transform party, address, contact, and contact point attribute values into standardized representations for high quality matching. In addition to the seeded transformations, DQM provides seeded word replacement lists in American English that transformations can optionally call upon. Match rules determine and evaluate the results of the matching process.

You can define and implement custom transformations to optimize the match rules for your environment and application. You can also set up your match rules to meet your business needs.

### Transformations and Word Replacements

Transformations transform data into representations that are more similar for matching purposes. For example, transformations can replace double letters with only one of the letters, as well as remove nonalphanumeric characters and vowels. A transformation that removes vowels would change, for example, both values for an address attribute, *123 Main Rd* and *123 Mane Road*, into *123 MN RD*. This transformation allows the two attributes to be determined a match, minimizing the effects of potential spelling errors, such as *Mane*, and data entry inconsistencies, such as *Rd* versus *Road*.

Transformations use word replacement lists which create synonyms that are treated as equivalents for searching and matching. You can use word replacements to standardize certain portions of your party data to minimize the effect of data entry inconsistencies on searches. For example, a word replacement transformation can replace *California*, *Calif*, and *ca* with *CA*.

### Match Rules

Match rules determine whether two parties should be identified as a match or potential duplicate. DQM match rules can be applied, for example, when you:

- Search for TCA Registry information using search interfaces.
- Run a duplicate identification process.
- Enter or update party information through user interfaces, import interfaces, or APIs, for duplicate prevention.

Match rules support score-based matching and consist of two parts, acquisition and scoring criteria. Acquisition provides an initial set of possible matches, and scoring assigns scores to attributes to further filter matches and rank the results.

When you define match rules, you can specify which attributes are important for matching and configure how the attributes should be evaluated. For example, you can define a match rule so that only records with the same transformed party name and party number attribute values are considered matches. You can also determine how matching or similar attributes are scored to produce a total score that you can use to evaluate a record. To each attribute that you use in a match rule, you also assign transformation.

**See Also**

Word Replacements on page 5-15

Transformations Overview on page 5-22

Match Rules Overview on page 5-30

**Staged Schema**

The staged schema is a mirror of a portion of the TCA Registry and contains data that transformations have cleansed and standardized. Matches are determined by comparing an input record against the transformed records in the staged schema, which is separate from the TCA Registry. The Registry itself is not transformed or searched at any time. The staged schema is shared across all Oracle E-Business Suite applications.

Searches through the staged schema are actually searches against the *interMedia* or B-Tree indexes that index the schema and speed up the search process. During the acquisition phase of matching, the indexes quickly limit the number of parties to evaluate for scoring.

You can run programs in DQM to generate or update the staged schema and the indexes. For accurate searches, the staged schema is automatically synchronized with the TCA Registry when records in the Registry are created or updated through user interfaces or TCA import.

**See Also**

Staged Schema on page 5-51

**Merge Dictionary**

The Merge Dictionary contains the entities and procedures that are processed during party merges. You define how duplicate parties are to be merged and in what order.

**See Also**

Merge Dictionary Overview on page 5-61

## Automerger

Automerger automatically merges records that exceed a specified threshold. This process is implemented as part of a duplicate identification process. The Automerger program only runs if the match rule specified for the de-duplication process is designated for Automerger.

The Automerger program evaluates records against the match and automatic merge thresholds set in that match rule. The program:

- Automatically merges records that meet or exceed the automatic merge threshold.
- Creates a System Duplicate Identification (SDI) batch containing records that exceed the match threshold but not the automatic merge threshold. The SDI batch is available in Oracle Data Librarian for merge consideration.

If a party is to be automatically merged, but already exists in a merge request in Oracle Data Librarian, then an error is recorded in the Automerger log, and that party is not merged with its duplicates. The program continues and merges other parties that do not incur errors.

**See Also:** De-Duplication Overview, *Oracle Data Librarian User Guide*

### Rules for Merging or Transferring Attributes and Records

- In some cases, multiple duplicate candidates are to be automatically merged into one merge master record. For any attribute, if the master already has a value, then that value survives the merge. If not, then the value is transferred from the duplicate candidate with the latest creation date and an attribute value.
- If the subject party Registry ID for the merge master and duplicate candidates are the same, and the relationship type is the same, then Automerger merges the relationship records.

**See Also:** Relationships Overview, *Oracle Trading Community Architecture User Guide*

- If the party sites for the merge master and duplicate candidates have the same location ID, then the party sites are merged instead of transferred.

## Data Quality Management Examples

These examples illustrate using Data Quality Management to identify existing duplicates, search for parties, or prevent duplicate entries.

### Identifying Duplicate Parties

For a party called International Party Duplicates, the party name could have been entered in different ways, such as International Party Duplicates, Inc. or IPD.

You use a transformation to remove all nonalphanumeric characters and terms such as Corp and Inc, and then normalize party names into three-letter acronyms in the staged schema. Define match rules and search for duplicates.

As a result, the entries in this table are displayed as possible duplicates:

Original Value	Transformed Value in Staged Schema
IPD	IPD
I.P.D.	IPD
IPD Corp.	IPD
Intl Party Duplicates	IPD
International Party Duplicates	IPD
International Party Duplicates, Inc.	IPD

### Searching for Parties

An Oracle application has implemented DQM to create a search interface that you enter search criteria in. Transformations were created, including one that uses the DQM PL/SQL function Soundex, and the results were populated into the staged schema.

You want to search for parties of type Person with the last name Smyth who are located in California. The last name could have been misspelled and entered in different ways, such as Smith or Smythe. You enter Smyth and California in the search interface, and the Oracle application applies a match rule that includes a filter for the state of California and searches through the staged schema for search results.

This table shows the original entries in your TCA Registry.

<b>Name</b>	<b>Location</b>
Smith, James	Redwood Shores, California
Smith, Virginia	Seattle, Washington
Smyth, Edward	Los Angeles, California
Smyth, Helen	New York City, New York
Smythe, Joseph	Los Angeles, California

This table shows the Soundex representation for these names:

<b>Name</b>	<b>Soundex Representation</b>
Smith	S260
Smyth	S260
Smythe	S260

The search finds the entries in this table as possible matches:

<b>Name</b>	<b>Location</b>
Smith, James	Redwood Shores, California
Smyth, Edward	Los Angeles, California
Smythe, Joseph	Los Angeles, California

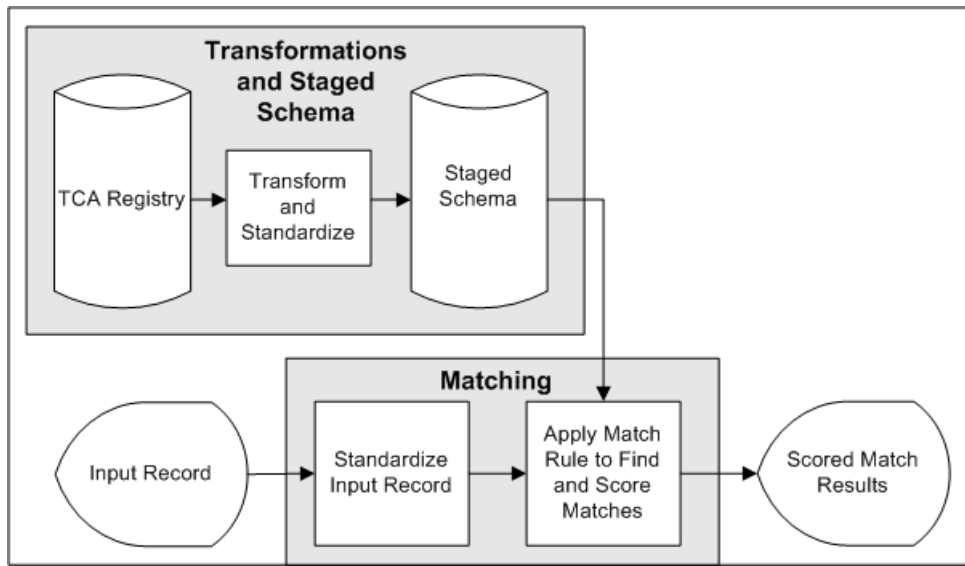
## Preventing Duplicate Entries

DQM was implemented to enforce the policy that no duplicates are allowed for matches on the combination of cleansed party name and address. Transformations were defined that remove all vowels and double letters, and a match rule was also defined that best expresses the policy.

As a result, you avoid populating the duplicate entries in the TCA Registry, shown in this table, because their transformed records are identical:

<b>Original Record</b>	<b>Transformed Record</b>
Allison Byrne, 123 S. Main Str. 11111	ALSN BRN, 123 MAIN, 11111
Alisen Burn, 123 South Main Street, 11111	ALSN BRN, 123 MAIN, 11111

## Data Quality Management Process



This diagram illustrates how the different features of Data Quality Management work together to find matches and duplicates.

1. The TCA Registry contains party information that could have been entered with typographical errors, spelling errors, and aliases.
2. You run the DQM Staging program to transform and standardize the attribute values, such as party name and number, in a copy of the Registry, the staged schema. The attributes to include in the schema, as well as the transformations to use on each attribute, are defined in the Define Attributes and Transformations page.
3. The staged schema stores the transformed attribute values, separate from the original Registry.
4. Input records come in when you enter or search for party information, or run a duplicate identification process.
5. The transformations in a match rule transform the attribute values in the input record.

6. The same match rule is applied to compare the transformed input record attributes against the attributes in the staged schema.
7. Based on how the attributes match up, potential matches from the staged schema are identified for the input record. If the match rule contains scoring criteria, the selected records from the staged schema are also scored.

**See Also**

Data Quality Management Overview on page 5-2

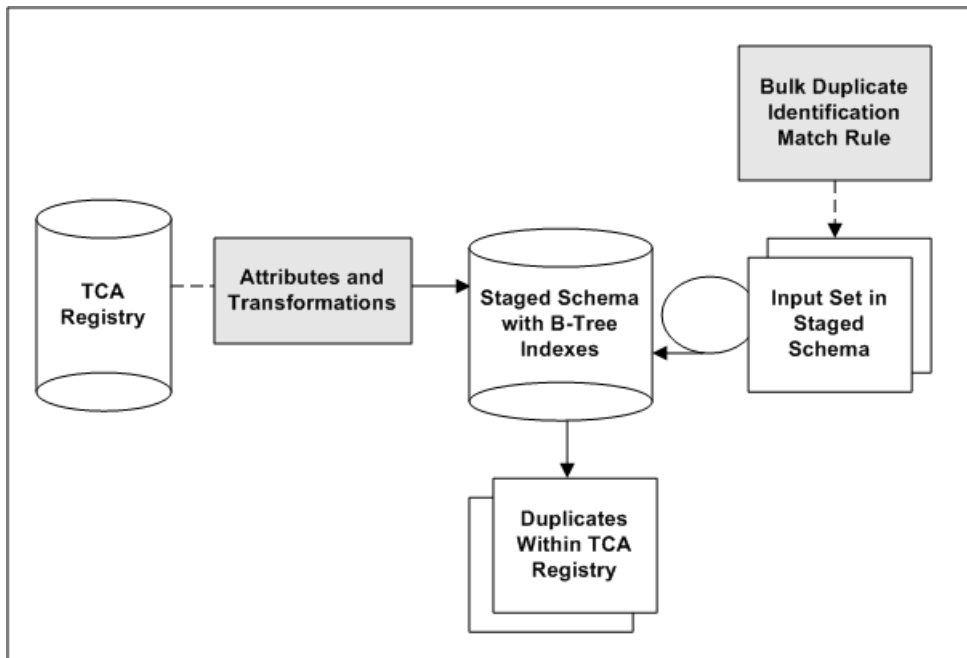
## Bulk Duplicate Identification

Bulk duplicate identification is a particular DQM process to identify duplicates for a large number of records within the TCA Registry. The process involves:

- B-Tree indexes in the staged schema.
- Match rules with the Bulk Duplicate Identification type, which include acquisition attributes and transformations that are defined for bulk duplicate identification.

Instead of comparing against the staged schema one at a time for each input record, as with simple duplicate identification, bulk duplicate identification compares the whole set of input records at once through a join procedure in the staged schema.

This diagram illustrates the bulk duplicate identification process:



1. TCA Registry attributes are transformed for the staged schema. The attributes to include in the schema, as well as the transformations to use on each attribute, are defined in the Define Attributes and Transformations page.

Also defined are the attribute and transformation combinations to be used for bulk duplicate identification. The staged schema includes B-Tree indexes only for the transformed attributes marked for bulk duplicate identification.

2. A duplicate identification process is started, either for a subset of records in the TCA Registry or for the entire Registry. The transformed version of that set of input records is already represented in the staged schema.
3. A match rule with the Bulk Duplicate Identification type is applied, and the input set within the staged schema is joined with the staged schema.

Each record in the input set is simultaneously compared against all other records in the same staged table using only B-Tree indexes.

4. Based on how the attributes match up, potential duplicates from the staged schema are identified. If the match rule contains scoring criteria, the selected records from the staged schema are also scored.

## Administering Data Quality Management

To utilize and implement Data Quality Management (DQM) functionality, you must set up and administer the DQM tools. These tools are integrated with TCA and can be used by any Oracle Applications E-Business Suite application to search the TCA Registry and identify or prevent duplicates.

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**Note:** To utilize all DQM features, upgrade to Oracle9i or above if you have not already done so.

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### To administer DQM:

1. Create word replacements, on page 5-17.
2. Define attributes and transformations, on page 5-24.
3. Generate the staged schema and indexes, on page 5-54.
4. Define and compile match rules, on page 5-36.
5. Synchronize the staged schema with the TCA Registry, on page 5-58.
6. Maintain the Merge Dictionary, on page 5-63.
7. Define DQM profile options, on page A-2.

### See Also

Data Quality Management Overview on page 5-2

Introduction to Administration on page 1-2

## Word Replacements

With word replacement, you can identify words that act like synonyms of other words for the purpose of searching and matching. Transformations can use word replacements.

Word replacement is a particularly useful technique for standardizing certain portions of your party information to minimize the effect of data entry inconsistencies on searches. You can use these word replacements in the development of transformations. In the PL/SQL functions used in transformations, code can be written to call a word replacement list.

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**Note:** For word replacement, a word is defined as a set of alphanumeric characters preceded and followed by white space.

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For example, this table displays possible original words for a replacement word in a word list for a specified language.

Word List Name	Language	Original Word	Replacement Word
Person Name	American English	Bob	Robert
Person Name	American English	Rob	Robert
Person Name	American English	Robbie	Robert
Person Name	American English	Roberto	Robert
Person Name	American English	Bobby	Robert

When you enter *Rob* as the value for a first name attribute of a search, the search returns records in which the first name attribute matches to the replacement word for *Rob*. The result of your search would return records containing Bob, Robbie, Roberto, Bobby, and Robert as well as Rob.

After you add or modify word replacement pairs, run the DQM Staging program to update the staged schema to include the new or revised word replacement pairs. Word replacement pairs become immediately effective for any record that you add to or update in the TCA Registry.

### **See Also**

Creating and Updating Word Replacement Lists on page 5-17

Data Quality Management Overview on page 5-2

### **Seeded and Custom Word Replacement Pairs**

DQM provides word replacement lists containing over 3,000 word replacement pairs in American English. The included word lists are:

- Person Name
- Address
- Organization
- State (US only)
- Domain (used for e-mail and URLs)

**See Also:** *Seeded Word Replacement Lists, Oracle Trading Community Architecture Reference Guide*

You can add to the lists of seeded word replacement pairs in American English or create lists in any other languages supported by Oracle Applications.

## Creating and Updating Word Replacement Lists

Although DQM provides over 3,000 word replacement pairs in American English, you can modify the provided lists or create lists of word replacement pairs that include words that users in your organization often enter with errors or as shortcuts.

When you create new lists, you must enter a unique word list name and specify the language of the list. You can optionally define the source of the list, for example to identify a list that you created or obtained from a third party. When you update an existing list, you can change the name and source, but not the language.

### Word Replacement Pairs

When you create new word replacement lists, you specify word replacement pairs consisting of an original word and a replacement word. When you update existing lists, you can add new word pairs or change existing replacement words, but not existing original words. During the search for matches, the replacement word is used.

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**Note:** You can enter not only whole words, but also abbreviations, word fragments, and numeric characters. For example, you can create a word replacement pair by entering *1* as the original word and *one* as the replacement word. If a user enters *1* to perform a search, then *one* is used to search your party information.

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Original words must be unique in a word list. For example, you cannot enter *St.* twice as an original word to be replaced by the replacement words *Street* and *Saint*. Replacement words do not have to be unique and can be left blank.

You can create several word replacement pairs that have different unique original words with the same replacement word. This table shows an example:

<b>Original Word</b>	<b>Replacement Word</b>
Bob	Robert
Rob	Robert
Robbie	Robert
Roberto	Robert
Bobby	Robert

After you add or modify word replacement pairs, run the DQM Staging program to update the staged schema to include the new or revised word replacement pairs. For any record that you add to or update in the TCA Registry, the word replacement pairs become immediately effective after the DQM Staging program finishes. See [DQM Staging Program](#) on page 5-54.

### **See Also**

[Word Replacements](#) on page 5-15

[Word Replacements Tips](#) on page 5-19

## Word Replacements Tips

When you create and use word replacements, consider these issues:

- Avoid recursive word replacement pairs that can generate inconclusive results. For example, you need to create word replacements for common variations of a name such as Caroline, Carolyn, Carolan, Carole, and Carol.

This table shows an example of effective word replacement pairings of original and replacement words.

### Effective Word Replacement Pairs

Original Word	Replacement Word
Caroline	Carol
Carolyn	Carol
Carolan	Carol
Carole	Carol

This table shows an example of ineffective word pairings using recursive word replacement.

### Ineffective Word Replacement Pairs

Original Word	Replacement Word
Caroline	Carolyn
Carolyn	Carolan
Carolan	Carole
Carole	Carol

- Create word replacement pairs consistent with the type of party information in the word lists for person names, addresses, organization names, or states. For example, if you apply a word replacement pair for a person name to an organization name, *Jonathan Deere* might be used as a replacement for the company name, *John Deere*.

- Create a limited number of word replacement pairs between person names and organization names.

Because some organizations are named after people, a limited number of common word replacements of person names to organization names can be appropriate. For example, your organization has regular contact with a group of professional firms such as accountants and lawyers. You can create word replacement pairs specifically for these organizations that would match person names to organization names. Word replacement pairs between different types of party information should be limited to reduce inappropriate matches.

- Create a limited number of word replacement pairs between address-related words and organization names.

Because some organizations are named after geographical locations, a limited number of word replacements of address elements to organization names can be appropriate. For example, your organization has regular contact with the Main Street Cafe. You can create a word replacement pair specifically for this organization that would match an address element to the organization name. Word replacement pairs between different types of party information should be limited to reduce inappropriate matches.

- Consider replacing the original word, or symbol, *&* with the replacement word *and*.

Several of the seeded transformations remove symbols such as *&*, that are not alphanumeric characters. If some form of conjunction is important to your searches, you should replace *&* with *and*. You can also avoid or customize the seeded transformations that remove *&*.

- Consider mapping generic address-related words such as street, avenue, and so on to a blank Replacement Word field.

People often know the proper name for an address but might not know the generic portion of the address. For example, you can broaden the search criteria so that both *Market Street* and *Market Avenue* are included in the search results as possible matches. By mapping the words *street* and *avenue* to a blank Word Replacement field, you would broaden the possible matches.

**See Also:** Seeded Word Replacement Lists, *Oracle Trading Community Architecture Reference Guide*

## Attributes for DQM

Attributes make up the four entities used in DQM: Party, Address, Contact, and Contact Point. Each attribute in the entities is derived from a specific column in one of the TCA Registry tables. These four entities make up the staged schema.

For example, the Party entity in DQM is named HZ\_STAGED\_PARTIES and contains attributes from the TCA Registry tables:

- HZ\_PARTIES
- HZ\_ORGANIZATION\_PROFILES
- HZ\_PERSON\_PROFILES

Examples of attributes in the Party entity include:

- PARTY\_NUMBER from HZ\_PARTIES
- DUNS\_NUMBER from HZ\_ORGANIZATION\_PROFILES
- MARITAL\_STATUS from HZ\_PERSON\_PROFILES

Attributes in the staged schema contain values from the TCA Registry tables that have been transformed into representations that are more alike for the purposes of matching. Attributes, therefore, are used to search for possible matches between an input record and the TCA Registry data.

You cannot extend the staged schema's list of attributes. You can, however, use up to 30 CUSTOM\_ATTRIBUTE columns in each entity to store your additional attributes.

**See Also:** *Seeded Attributes, Oracle Trading Community Architecture Reference Guide*

### **See Also**

Defining Attributes and Transformations on page 5-24

Creating Custom Attributes on page 5-26

Data Quality Management Overview on page 5-2

## Transformations Overview

Your raw party information can include typographical errors, spelling errors, inconsistent formats, and abbreviations due to input errors. For this reason, searches performed on raw values often are inconclusive or miss potential matches.

Transformations transform attribute values in the staged schema so that the values are more similar and useful for the purpose of matching records. Transformations neutralize the effects of data errors on your searches. For example, a transformation that removes all of the double letters in a party name transforms a name such as *Allied Freight* into *Alied Freight*. This transformation makes it easier to match to a party if a typographical error, such as a missing double letter, exists.

After your raw data has been transformed and populated into the staged schema, match rules can use the transformed data to score each record to determine if the record is considered alike enough to be a match to an input value.

DQM includes several standard, or seeded, transformations. You can also develop your own transformations.

### See Also

Defining Attributes and Transformations on page 5-24

Creating Custom Transformations on page 5-27

Data Quality Management Overview on page 5-2

### Seeded Transformations

DQM provides several predefined transformations, such as Cleanse and Exact.

For example, the Cleanse transformation performs these actions:

1. Capitalizes all letters.

*Zannardi-Montoya* is transformed to *ZANNARDI-MONTOYA*.

2. Removes nonalphanumeric characters.

*ZANNARDI-MONTOYA* is transformed to *ZANNARDIMONTOYA*.

3. Reduces any white space to one space.

4. Removes double letters, retaining only one of the double letters.

*ZANNARDIMONTOYA* is transformed to *ZANARDIMONTOYA*.

5. Removes vowels except initial vowels.

*ZANARDIMONTOYA* is transformed to *ZNRDMNTY*.

The final result from the Cleanse transformation is *ZNRDMNTY*. This result would be populated into the staged schema.

All seeded transformations are available in packages. Not all seeded transformations are automatically populated into the staged schema. During the installation of DQM, you can decide if you want to use all of the available transformations.

To ensure that a seeded transformation is populated into the staged schema, you must define the transformation and then run the DQM Staging program. See *Defining Attributes and Transformations* on page 5-24 and *DQM Staging Program* on page 5-54.

**See Also:** *Seeded Transformations, Oracle Trading Community Architecture Reference Guide*

## Defining Attributes and Transformations

Specify the attributes of entities that are used for matching, and assign transformations to each attribute. Only active attribute and transformation combinations that you define in the Define Attributes and Transformations page can be used in the staged schema and in match rules.

You assign transformations to the attributes of each entity used in DQM: Party, Address, Contact, Contact Point. When you define transformations, you must specify which PL/SQL function should be used. Attributes are transformed by their assigned transformations in the staged schema.

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**Note:** Seeded attributes and transformations cannot be deleted. You also cannot inactivate the seeded transformations if they are used in seeded match rules. You can, however, activate inactive transformations to use in custom match rules.

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**Warning:** Before you can use new or updated attributes and transformations, you must generate or update your staged schema. See [DQM Staging Program on page 5-54](#).

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### See Also

Attributes for DQM on page 5-21

Transformations Overview on page 5-22

Attribute and Transformation Tips on page 5-28

### Attributes

For each attribute, you should enter a user-defined name. Search interfaces that use DQM generally display the user-defined names, not the attribute names, as the search criteria.

If you are defining one of the 30 custom attributes, enter the name of the custom PL/SQL procedure that DQM uses to obtain the custom attribute. See [Creating Custom Attributes on page 5-26](#).

For address, contact, and contact point attributes, you can optionally denormalize the attribute to the party level. The transformed value would be stored in the HZ\_

STAGED\_PARTIES table instead of the staging table for the entity. You should denormalize only attributes that have a limited number of possible values, such as the Country attribute. Denormalization improves performance, but you cannot denormalize all attributes.

To view or update the transformations assigned to an attribute, click Transformation Details for the appropriate attribute to display the transformations below.

## Transformations

To assign a seeded transformation, just enter the transformation name. For custom transformations, you must also enter a description as well as the PL/SQL function that is called to transform the attribute values and to return a formatted result. See Creating Custom Transformations on page 5-27.

- **Expanded Match:** Specify if the attribute and transformation combination can be used in acquisition for match rules with the Search or Expanded Duplicate Identification type. The attribute value, as transformed by the transformation, would be indexed with *interMedia* in the staged schema. Indexing improves performance, but too much indexing can also decrease performance.
- **Bulk Duplicate Identification:** Specify if the attribute and transformation combination can be used in acquisition for match rules with the Bulk Duplicate Identification type. The attribute value, as transformed by the transformation, would be indexed with B-Tree indexes, which are used only for bulk duplicate identification. See Bulk Duplicate Identification on page 5-12.
- **Active:** To use the transformation, you must activate the transformation for the selected attribute. You cannot inactivate the seeded transformations because they are used in seeded match rules.

## Creating Custom Attributes

You can define custom attributes for the entities used in DQM: Party, Address, Contact, and Contact Point. Up to 30 custom attributes are available in each entity.

### Procedure

1. Write a custom procedure that obtains the custom attribute.

When a CUSTOM\_ATTRIBUTE column needs information about a party, address, contact, or contact point, DQM calls a procedure with this signature:

```
FUNCTION <custom_attribute_proc>
    p_record_id    IN    NUMBER,
    p_entity_name  IN    VARCHAR2,
    p_attrib_name  IN    VARCHAR2
    p_context     IN    VARCHAR2)
RETURN VARCHAR2;
```

The p\_record\_id value in the signature is the primary key of the table where the CUSTOM\_ATTRIBUTE\_PROCEDURE is defined.

This table displays the appropriate p\_record\_id value for each entity attribute.

Entity Attribute	p_record_id
Party	PARTY_ID
Address	PARTY_SITE_ID
Contact	ORG_CONTACT_ID
Contact Point	ORG_CONTACT_POINT_ID

2. Define the custom attribute using one of the available CUSTOM\_ATTRIBUTE values. Enter your custom PL/SQL procedure and define transformations for the attribute. See Defining Attributes and Transformations on page 5-24.

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**Note:** If you do not plan to transform the party information for a custom attribute, then use an Exact transformation.

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### See Also

Attributes for DQM on page 5-21

## Creating Custom Transformations

You can create transforms to transform any of the TCA Registry attributes in the entities used in DQM: Party, Address, Contact, and Contact Point.

### Procedure

1. Create a PL/SQL function for transforming a TCA table column.

Create the transformation in the APPS schema as a PL/SQL function that conforms to the following standard signature:

```
FUNCTION <transformation_function_name>
  p_original_value      IN      <ATTRIBUTE_DATATYPE>
  p_attribute_name      IN      VARCHAR2,
  p_entity_name         IN      VARCHAR2)
RETURN VARCHAR2;
```

The data type of the parameter `p_original_value` depends on the data type of the attribute that the parameter is transforming. The return value, however, must be `VARCHAR2`.

This table shows an example of `p_original_value` data types for different attributes.

Attribute Name	Attribute Code	Data Type of <code>p_original_value</code>
Party Name	PARTY_NAME	VARCHAR2
Person Name	PERSON_NAME	VARCHAR2
Last Update Date	LAST_UPDATE_DATE	DATE
Date of Birth	DATE_OF_BIRTH	DATE

You can use any PL/SQL procedure that adheres to the above signature as a transformation.

2. Assign your custom PL/SQL function to a transformation. To use the transformation, you must also assign the transformation to at least one attribute. See *Defining Attributes and Transformations* on page 5-24.

### See Also

Transformations Overview on page 5-22

## Attribute and Transformation Tips

When you create and use transformations, consider these issues:

- Design and create as many attributes and transformations as possible before populating or updating the staged schema.

After defining any new transformations for any attribute, you must run the DQM Staging program to generate or update the staged schema. Processing the staged schema can require significant computing resources and time. If you are uncertain about initially adding a transformation or an attribute with the initial group of transformations and attributes, the best strategy is to add the transformation.

- Do not transform lookups. Lookups have a predetermined or known set of values, so you cannot transform them.
- Remember that word replacements are called from transformation.
- Consider the possibility that your party information might contain compound names that were entered with the modifier following a comma.

For example, *The New Datsonville* could have been entered into your party information as *Datsonville, The New*. You can create a transformation that reverses the text before and after the comma in any city name.

- If the Domain attribute has only domain values, use the Core Domain Extraction transformation. If the attribute has e-mail addresses, use either the Core Domain Extraction or Full Domain extraction transformation.

You can modify or add codes to the:

- E-Mail Domain Suffixes (HZ\_DOMAIN\_SUFFIX\_LIST) lookup type, which the Core Domain Extraction transformation uses to identify core domains.
- ISP E-Mail Domains (HZ\_DOMAIN\_ISP\_LIST) lookup type, which both transformations use to remove ISP e-mail domains from the matching process.

The transformation compares against the code, not lookup meaning or description.

**See Also:** *Defining Receivables Lookups, Oracle Receivables User Guide*

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**Warning:** Before you can use new or updated lookups, you must generate or update your staged schema. See DQM Staging Program on page 5-54.

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## Match Rules Overview

Match rules determine whether two records should be identified as a match. A match rule has one of these types:

- Search
- Expanded Duplicate Identification
- Bulk Duplicate Identification

Only match rules with the Search type, for example, can be used for search user interfaces. Expanded duplicate identification match rules are used to identify or prevent duplicates, while bulk duplicate identification rules are for identifying duplicates for a large number of records.

Match rules support score-based matching and consist of two parts, acquisition and scoring. Acquisition provides an initial set of possible matches, and scoring assigns scores to attributes to further filter matches and rank the results.

For your business needs, you do not need to use all of the functions of match rules.

- For the simplest type of matching, use only acquisition.
- For ranking your results, use scoring.
- For filtering results based on the scores, use thresholds.

When you define match rules, you can specify which attributes are important for matching and configure how the attributes should be evaluated. For each attribute that you use in a match rule, you also assign one or more transformations.

For example, you can define a match rule so that only records with the same transformed party name and party number attribute values are considered matches. You can also determine how matching or similar attributes are scored to produce a total score that you can use to evaluate a record.

Aside from letting you create new custom match rules, DQM provides seeded match rules.

**See Also:** *Seeded Match Rules, Oracle Trading Community Architecture Reference Guide*

You can copy and modify match rules to meet your specific requirements, or to test variations of an existing custom match rule before you improve or modify the original rule. See *Defining Match Rules* on page 5-36.

**See Also**

The Matching Process on page 5-32

Data Quality Management Overview on page 5-2

**Compiling Match Rules**

After you initially install DQM, you must compile all the seeded match rules before you can use them, even if just to use them for copying. You also need to compile match rules that you create, update, or copy.

- **Compiled:** PL/SQL code for the match rule has been generated. The match rule is locked against changes, but available for use. The lock ensures that the match rule and its compiled PL/SQL code are always synchronized.
- **Uncompiled:** Match rule is previously saved, but now unlocked. An uncompiled match rule cannot be used until it is compiled.

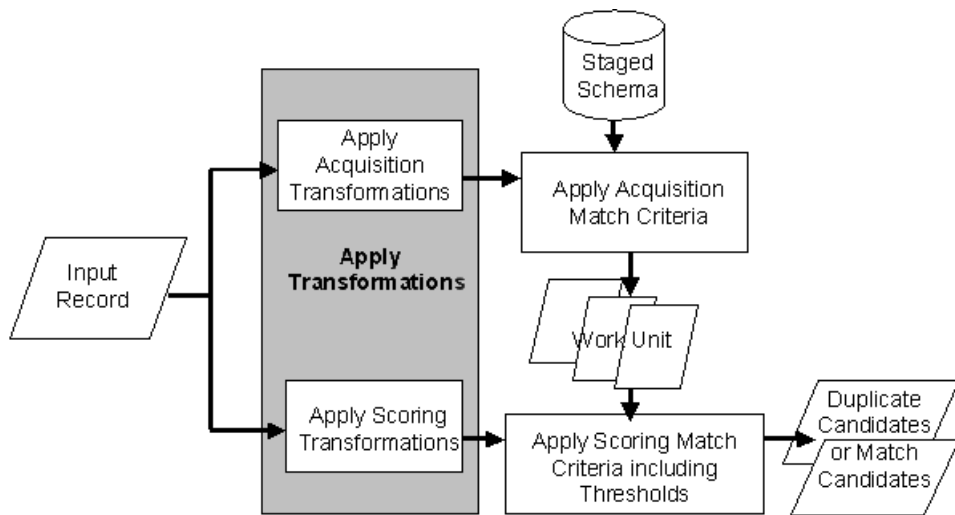
You can use the Match Rules page to compile individual or all match rules, or run the DQM Compile All Rules program to compile all rules. See DQM Compile All Rules Program on page 5-50.

Before you can compile any match rule, you must make sure that the staged schema is generated, or run the DQM Staging program. See DQM Staging Program on page 5-54.

**Deleting Match Rules**

Use the Match Rules page to delete any compiled, custom match rules. Before deleting a match rule, you should make sure that it is not used anywhere. If the rule is in use, replace it with another match rule or consider the consequences of deleting the rule.

## The Matching Process



This diagram describes the DQM matching process.

1. The staged schema stores the transformed TCA Registry attribute values for comparison in the matching process. The included attributes and the transformations applied to each are defined in the Define Attributes and Transformations page.
2. Input records come in when you enter or search for party information, or run a duplicate identification process.
3. Transformations from the acquisition and scoring phases of the match rule transform the input record, one entity at a time, for the attributes defined in the match rule.
4. The attribute values in the input record that are transformed by the acquisition transformations in the match rule are compared against the attribute values in the staged schema.

Matched acquisition attribute values determine the most relevant subset of records from the staged schema to form the work unit.

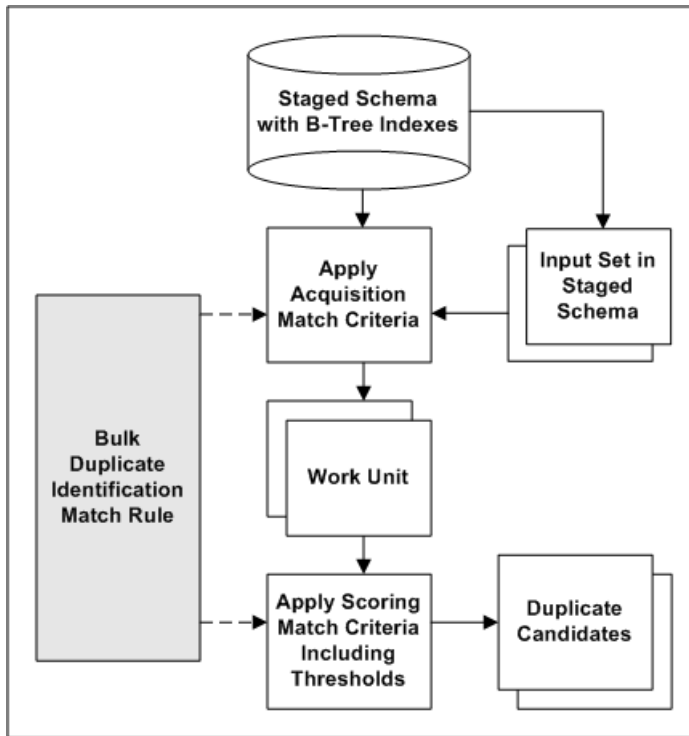
5. The work unit consists of all records from the staged schema with attribute values that match the transformed acquisition attribute values of the input record.  

The work unit saves you time and resources because this relevant subset of records, not the entire staged schema, can be compared against the input record for scoring.
6. The attribute values in the input record that are transformed by the scoring transformations in the match rule are compared against the attribute values in the work unit. Based on the match rule, a score is calculated for each record in the work unit.
7. Steps 3 through 6 are repeated for each entity.
8. Scores from all entities are added together for each record.
9. The score of each work unit record is compared against the match, override, and automatic merge thresholds defined in the match rule.
  - Records with scores above the match threshold are selected as matches for the input record.
  - Records with scores that also exceed the automatic merge threshold are automatically merged if Automerge is implemented and the match rule is designated for use with Automerge.
  - The input record can be prevented from entering the TCA Registry if a duplicate is found with a score that exceeds the override threshold.

**See Also**

Match Rules Overview on page 5-30

## Bulk Duplicate Identification Matching Process



1. The staged schema stores the transformed TCA Registry attribute values for comparison in the matching process. The included attributes and the transformations applied to each are defined in the Define Attributes and Transformations page.

Also defined are the attribute and transformation combinations to be used for bulk duplicate identification. The staged schema includes B-Tree indexes only for the transformed attributes marked for bulk duplicate identification.

2. A duplicate identification process is started, either for a subset of records in the TCA Registry or for the entire Registry. The transformed version of that set of input records is already represented in the staged schema.

3. With the Bulk Duplicate Identification type, the match rule specified for the duplicate identification is applied to the staged schema, which is joined with the input set for bulk comparison.
  - a. Using the acquisition criteria in the match rule, each record in the input set is compared to all other records in the same staged table.

For example, an acquisition criterion is the DUNS Number attribute with the Exact transformation. All DUNS Numbers, as transformed by the Exact transformation, would be compared against one another.
  - b. Matched acquisition attribute values determine the most relevant subset of records from the staged schema to form the work unit.
  - c. Using the scoring criteria in the match rule, each record in the work unit is compared to all other work unit records in the same staged table.
  - d. A score is calculated for each record in the work unit, and scores for all entities are added together for determining duplicate parties.
4. The score of each work unit record is compared against the match and automatic merge thresholds defined in the match rule.
  - Records with scores above the match threshold are selected as potential duplicates.
  - Records with scores that also exceed the automatic merge threshold are automatically merged, if Automerge is implemented and the match rule is designated for use with Automerge.

### **See Also**

Bulk Duplicate Identification on page 5-12

## Defining Match Rules

You define a match rule when you create a new custom rule, update an existing custom rule, or copy a compiled seeded or custom rule. You cannot update a seeded match rule or copy an uncompiled rule.

### Procedure

1. Enter the basic information for the match rule, including its name and type. You also specify:
  - For the search operator if a record must match any or all acquisition attributes to be considered a match.
  - Whether the match rule can be used for Automerge. See Automerge on page 5-6.

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**Warning:** You cannot undo automatic merges. For Automerge, use only match rules that provide exact matches.

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2. Select attributes for the match rule, either acquisition, scoring, or both, on page 5-37.
3. Define the usage of the attributes, on page 5-37.
4. Assign scores, transformations, and thresholds, and submit the match rule, on page 5-40.
5. Compile the match rule, on page 5-31.

### See Also

Match Rules Overview on page 5-30

Match Rule Example on page 5-44

## Selecting Attributes and Defining Usage

When you select attributes, from the Party, Address, Contact, and Contact Point entities, you should select attributes that help you obtain all relevant matches. For example, if you want to find records that have matching names, include the Party Name attribute in the match rule.

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**Note:** Only defined attributes are available for you to select. See Defining Attributes and Transformations on page 5-24.

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After you select attributes from any of the four entities for the match rule, you must define the usage of the attribute in the rule:

- Acquisition:** Used for comparing an input record to the records in the staged schema, to obtain an initial set of matched records. This table describes how an attribute must be marked to be available for acquisition, depending on the match rule type. See Defining Attributes and Transformations on page 5-24.

Match Rule Type	Available for Acquisition
Search	Expanded Match
Expanded Duplicate Identification	Expanded Match
Bulk Duplicate Identification	Bulk Duplicate Identification

If you specify more than one acquisition attribute in the match rule, the search operator that you defined for the match rule determines whether all or any attribute must match to determine if the input record is a match to a record in the staged schema.

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**Note:** If you are defining a match rule with the Search type, the acquisition attributes determine the search criteria that appear in the user interface. The actual prompt that appears for each criterion is the user defined name. See Defining Attributes and Transformations on page 5-24.

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The initial set of matched records obtained by acquisition is called the work unit. A work unit includes all records with acquisition attribute values, transformed using the transformations, that match attribute values of the input record. The work unit can be the final set of matches or used for scoring.

If you only want to consider this initial set of matched records, you do not have to define scoring attributes and specify thresholds or scores. You would have a match rule that requires that a record matches any or all acquisition attributes you have selected.

- **Scoring:** Used to score the records in the work unit. These attributes do not have to be that same as the acquisition attributes, and you can use more attributes for scoring. With the scoring component of a match rule, records that do not exactly match the values of the acquisition attributes values can still be considered a match.

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**Suggestion:** For match rules with the Search type, use the same scoring attributes as the acquisition attributes for best results.

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You must have acquisition attributes from each entity that has scoring attributes in the same match rule. For example, if you have scoring attributes from the Party and Contact Point entities, you must also have acquisition attributes from those two entities, even if not the exact same attributes.

- **Filter:** Used so that the attribute always appears as a match in the returned records. The search engine groups specific attributes of an entity under a match-all condition when those attributes are used as filters.

For example, in the table below, the Address 1, Country, and Identifying Address Flag filter attributes are grouped together because they belong to the Address entity. This grouping overrides the search operator of the match rule.

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**Note:** If the attribute's type is Lookup, then the DQM search engine defaults that attribute as a filter because the values of the attribute are usually not unique across records.

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For example, this table displays a set of filter attributes:

Attribute Name	Entity	Type	Default as Filter
Party Name	Party		No
Address 1	Address		No
Country	Address	Lookup	Yes
Identifying Address Flag	Address	Lookup	Yes

If the match rule's search operator is Match Any, then all of the returned records will match either of the following criteria:

- Party Name
- Address 1, Country, and Identifying Address Flag

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**Note:** Attributes used as filters are only used in acquisition, not scoring, because all records must contain these filter attributes.

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After you select attributes and their usage, assign transformations and optionally scores and thresholds. See *Assigning Scores, Transformations, and Thresholds* on page 5-40.

### See Also

Defining Match Rules on page 5-36

## Assigning Scores, Transformations, and Thresholds

Define the scores and weights used to calculate the match score for each record in the work unit. The match score for the entire record is the sum of the actual weighted attribute scores. This match score is the value that is compared to the match rule thresholds.

### See Also

Defining Match Rules on page 5-36

### Attribute Scores

You rank your scoring attributes in order of importance by assigning scores in the form of integers. Assign the highest score to the attribute that you consider the most important for a match. The score is awarded to a record if the attribute is evaluated as a match. If the attribute does not match, then a score of zero is assigned.

This score is then multiplied by the weight percentage of the attribute, if any, to determine the final weighted attribute score that counts toward the match score of the record.

### Transformations

You must assign at least one transformation for each acquisition, filter, and scoring attribute. DQM applies the selected transformations to that attribute before the input record is compared to the record in the work unit. You can choose more than one transformation for each of the attributes in the match rule.

For acquisition, you can only select transformations that are marked with the corresponding attribute for acquisition. This table describes how the transformation must be marked with the attribute to be available for acquisition, depending on the match rule type. See Defining Attributes and Transformations on page 5-24.

<b>Match Rule Type</b>	<b>Available for Acquisition</b>
Search	Expanded Match
Expanded Duplicate Identification	Expanded Match
Bulk Duplicate Identification	Bulk Duplicate Identification

Use the fewest transformations possible in your match rule. Using more transformations than necessary could affect the time required for staging and the performance of your search.

### Scoring Attributes

For scoring attributes, you can optionally assign weights and similarity matching.

- **Weight:** Assign percentage weights to the transformations depending on how similar the transformed value of the attribute would be to the original values of the attribute. For example, you should assign more weight to the Exact transformation than to the Cleanse transformation because Exact makes fewer changes to the original data.

If a transformed attribute value is a match, the weight is multiplied by the attribute score to determine the weighted score of the attribute. If an attribute is assigned more than one transformation, the highest weighted score is awarded to the record for the attribute.

For example, you assign the Party Type scoring attribute a score of 50, and assign the transformations Exact and Cleanse to that attribute. You give Exact a 80% weight and Cleanse 50%. If the Party Type attribute is a match with both transformations, the attribute's weighted score would be 40.

- **Similarity:** The Similarity matching option does not require an exact match, letting you create fuzzier matches by applying the similarity algorithm to transformed attribute values. The similarity algorithm compensates for unanticipated errors that the transformations do not catch.

The algorithm compares the transformed attribute value of the input record to the corresponding attribute value from the work unit record and assigns a percentage for the extent of similarity. If that percentage is greater than or equal to the similarity percentage that you define in the match rule, the attribute is considered a match. If you select the Similarity option, you must enter this similarity percentage.

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**Note:** The Similarity option requires additional computing resources and time.

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## Thresholds

DQM calculates a weighted score for the entire record, based on attribute scores and weight percentages, and then compares that score against the match rule thresholds to evaluate the record in the work unit.

- **Match threshold**

- For match rules with the Expanded or Bulk Duplicate Identification type, a record with a score equal to or above the match threshold is considered a match to the input record.

To compute what you should enter as the match threshold, determine the minimum set of attributes required for a match. The total of the attribute scores of this minimum set is the maximum value of the match threshold.

- For match rules with the Search type, the record's score is divided by the total possible score to get a percentage. A record with a percentage equal to or above the match threshold percentage is considered a match to the input record.

For example, you enter 75 as the match threshold percentage for a match rule with the Search type. The highest possible score that any record can get based on this match rule is 500. If a record gets a score of 250, it is not considered a match because 50% is less than the 75% match threshold.

- **Override threshold:** A record with a score equal to or above the override threshold can be prevented from entering the TCA Registry, because it is considered to be a match or duplicate of an existing record.

To compute the override threshold, determine the minimum set of attributes required for two parties to match when a new record is being created. The total of the attribute scores of this minimum set is the maximum value for the override threshold.

The override threshold must be more than or equal to the match threshold.

- **Automatic merge threshold:** A record with a score equal to or above the automatic merge threshold is marked by default as a candidate for merge without manual intervention. The record will be automatically merged if Automerge is implemented. You can enter this threshold only if the match rule is allowed for Automerge.

To compute the automatic merge threshold, determine the minimum set of attributes required for considering two parties for merge. The total of the attribute scores of this minimum set is the maximum value for the automatic merge threshold.

The automatic merge threshold must be more than or equal to the match threshold.

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**Note:** If you specify thresholds in your match rules, be sure that:

- You do not set any thresholds too low. Low thresholds might let combinations of attributes pass as matches that are not significant or relevant to your search.
  - Each threshold is less than the sum of the possible scores of all attributes.
- 
-

## Match Rule Example

This section provides an example of how you can develop a match rule. This example focuses on the scoring and threshold components, detailing the thought process you might take to create an effective match rule.

### Preparing for the Match Rule

1. Create a list of all of the attributes that should match between two matching records. This list should include attributes that are really important as well as attributes that are just good to have as matches.

For this example, this table shows the following list of attributes:

Attribute Name	Entity	Type
Party Name	Party	
Phone Number	Contact Point	
Address1	Address	
Country	Address	Lookup
Postal Code	Address	
Contact Last Name	Address	

2. Rank the order of importance of the attributes, as shown in this table:

Rank	Attribute Name	Entity	Type
1	Party Name	Party	
2	Phone Number	Contact Point	
3	Contact Last Name	Contact	
4	Address1	Address	
5	Country	Address	Lookup
6	Postal Code	Address	

This ranking indicates that the attribute score you assign to party name is the highest and the scores are lower or stay the same as you go down the ranking.

3. Identify the minimum sets of attributes you require to match for records to be considered matches, for example:

- Only the party name
- Only the phone number

This requirement indicates that your acquisition attributes should at least include party name and phone number and that you should select the Match Any search operator.

4. Identify the sets of attributes that by themselves are not good enough to indicate that you have matching records, but which, if they were close enough matches, might give additional credence to a match on the minimum set of party name and phone number.

- Only address
- Only country
- Only postal code
- Only address and country
- Only address and postal code
- Only country and postal code
- Only contact last name

This selection determines the attributes that you need to include as scoring attributes.

## Selecting Attributes and Assigning Scores

1. You should select the Match Any search operator because you have two sets in step 3 of Preparing for the Match Rule.
2. Choose attributes from step 1 of Preparing for the Match Rule that would get you all of the possible matches. You must include the attributes from step 3 of Preparing for the Match Rule. For this example, you select:
  - Party Name
  - Phone Number
  - Contact Last Name

3. Select attributes from step 1 of Preparing for the Match Rule that you want to use to score the records. You must include the attributes from step 4 of Preparing for the Match Rule.

This table shows the scoring attributes.

<b>Attribute Name</b>	<b>Entity</b>	<b>Type</b>
Party Name	Party	
Phone Number	Contact Point	
Address1	Address	
Country	Address	Lookup
Postal Code	Address	
Contact Last Name	Contact	

4. Assign scores to the scoring attributes following the ranking in step 2 of Preparing for the Match Rule. The most important attributes receive the highest scores. For this example, the score assignments should reflect the following:
  - Matches on party name provide the best match results, so you assign the highest score to party name.
  - Matches on a phone number might be the second best matching criterion, so you assign the next highest score to phone number.
  - Combinations of the address components and contact last name are the third best, so you assign scores by relative importance.
  - The contact last name attribute is estimated to have about the same value as the address1 attribute.

For this example, the scores in this table are assigned to the scoring attributes.

<b>Scoring Attributes</b>	<b>Scores</b>
Party Name	40
Phone Number	30
Address1	15
Country	10
Postal Code	10
Contact Last Name	15

The total score for the attributes in this table is 120.

## Setting the Match Threshold

1. Obtain minimum sets from step 3 of Preparing for the Match Rule and total attribute scores from step 4 of Selecting Attributes and Assigning Scores.
  - For Party Name the total attribute score is 40.
  - For Phone Number the total attribute score is 30.
2. Set your match threshold based on the lower score of the two minimum sets, in this example, 30.

With the match threshold at 30, you can interpret scoring as follows:

- If only the phone number is a match, the record is a match because the score equals the match threshold of 30.
- If only the party name is a match, then the record is a match because the score exceeds the match threshold of 30.
- If the country, postal code, and contact last name are a match, then the record is a match because the attributes' combined score of 35 exceeds the match threshold of 30.
- If the address1, country, and postal code are a match, then the record is a match because the attributes' combined score is 35, which exceeds the match threshold of 30.

With the match threshold at 30, this table shows results of possible matches:

Possible Matches	Cumulative Score	Match
Party Name	40	Yes
Phone Number	30	Yes
County, Postal Code, and Contact Last Name	35	Yes
Address1, Country, and Postal Code	35	Yes
Party Name and Phone Number	70	Yes
Phone Number and Country	40	Yes
Address1 and Country	25	No
Country and Postal Code	20	No
Party Name, Address1, and Contact Last Name	70	Yes

## Considering the Impact of Transformations on Your Thresholds

If you have transformation weights other than 100%, then you might need to tune your threshold. With weights other than 100%, the total score for the record can be lower than the match threshold that you assigned. The total score is the sum of attribute scores that are multiplied by the weight.

For example, a minimum set of attributes required for match consists of party name. The following table shows the transformations and weights assigned to the Party Name attribute, as well as the weighted attribute scores calculated for each transformation.

### Party Name Attribute with Attribute Score 40

Transformation	Weight %	Weighted Attribute Score Calculation
Exact	100	100% * 40 = 40
Reverse	80	80% * 40 = 32
Cleanse	50	50% * 40 = 20

Depending on the transformations, a matching party name can have a weighted attribute score below 40. With a weighted score of 20, for example, this minimum set might not exceed the match threshold of 30. If you want all possible matches that originate from any of the transformations, you might want to adjust some of your values.

You have three options:

1. Decrease the match threshold to the lowest possible weighted attribute score. Performing this option might affect the scores of other attributes and thresholds.
2. Increase the weight of the transformations so that the lowest possible weighted attribute score exceeds the match threshold. This option might not always be possible because weights must be less than or equal to 100.
3. Increase the attribute score so that the lowest possible weighted attribute score exceeds the match threshold.

For example, you can increase the Party Name attribute score to 60 and the Cleanse transformation weight to 70%. This table shows the adjusted assignments with each possible weighted attribute score exceeding the match threshold of 30.

#### **Party Name Attribute with Attribute Score 60**

<b>Transformation</b>	<b>Weight %</b>	<b>Weighted Attribute Score</b>
Exact	100	60
Reverse	80	48
Cleanse	70	42

## DQM Compile All Rules Program

Use the DQM Compile All Rules program when you initially install DQM to compile the seeded match rules provided by TCA. You can also use this program to compile all of the match rules that you create or update.

You can compile selected match rules in the Match Rules page, while this program always compiles all rules. The program attempts to compile all match rules even if certain match rules fail to compile. Match rules that are already compiled remain compiled, and match rules that can be successfully compiled are compiled. Match rules that fail to compile are left uncompiled.

You can see the compile status of each match rule in the Match Rules page.

### **See Also**

Compiling Match Rules on page 5-31

### **Prerequisites**

Before you can compile your match rules, you must run the DQM Staging program. For more information, see DQM Staging Program on page 5-54.

## Staged Schema

The staged schema is a separate set of database tables with a portion of the data from the TCA Registry that transformations have standardized for improved matching. During matching, the input record is compared against the records in the staged schema instead of the original Registry. To enable efficient searches, the staged schema is indexed using Oracle *interMedia* and B-Tree indexes. DQM searches against the indexes to take advantage of high performance capabilities in searching through large quantities of data.

### See Also

Data Quality Management Overview on page 5-2

## Staged Schema Features

Each table in the staged schema contains attribute values for each entity: Party, Address, Contact, and Contact Point, and can include up to 30 custom attributes. In the Define Attributes and Transformations page, you define the attributes that you want in the staged schema as well as the transformations to apply to each attribute value. See Defining Attributes and Transformations on page 5-24.

For example, for the Party entity, you can include the party name attribute and specify two transformations to transform the party names. Each attribute, in essence, corresponds to a column in a TCA Registry table that stores the attribute value, and the staged schema contains the transformed version of those values.

This table shows the mapping of the TCA Registry to the staged schema:

Entity	TCA Registry Table	Staged Schema Table
Party	HZ_PARTIES	HZ_STAGED_PARTIES
Address	HZ_PARTY_SITES	HZ_STAGED_PARTY_SITES
Contact	HZ_CONTACTS	HZ_STAGED_CONTACTS
Contact point	HZ_CONTACT_POINTS	HZ_STAGED_CONTACT_POINTS

**See Also:** Seeded Attributes, *Oracle Trading Community Architecture Reference Guide*

Data Quality Management provides programs that you run to:

- Create and update the staged schema. See DQM Staging Program on page 5-54.
- Synchronize the staged schema with the TCA Registry. See DQM Synchronization Program on page 5-58.

When information is added to or updated in the TCA Registry through a user interface or TCA Bulk import, an Oracle Workflow listener starts the automatic synchronization of the staged schema with the Registry. This near real-time process ensures accurate DQM searches. For example, after you enter a new address, a subsequent DQM search for addresses can include that record in the search.

The automatic synchronization works only if the Workflow Agent Listener is periodically running. See Implementing Automatic Synchronization of Staged Schema on page 5-59.

### ***interMedia* Index Features**

*interMedia* indexes speed up the acquisition phase of the matching process by quickly limiting the number of parties to evaluate for scoring. *interMedia* indexes are built using inverted indexes, a structure that differs from normal indexes. DQM provides four *interMedia* indexes, one for each entity.

DQM provides programs that you run to:

- Create *interMedia* indexes. See DQM Staging Program on page 5-54.
- Optimize *interMedia* indexes. See DQM Index Optimization Program on page 5-57.
- Update *interMedia* indexes. See DQM Synchronization Program on page 5-58.

The process started by a Workflow listener to automatically synchronize the staged schema with an updated TCA Registry also updates the *interMedia* indexes.

### **B-Tree Index Features**

B-Tree indexes are created in the staged schema only for attributes that were transformed for bulk duplicate identification. These indexes provide increased performance over *interMedia* indexes, and are used only for matching processes that involve match rules with the Bulk Duplicate Identification type. Use the DQM Staging program to create B-Tree indexes, on page 5-54.

The process started by a Workflow listener to automatically synchronize the staged schema with an updated TCA Registry also updates the B-Tree indexes. If automatic synchronization is not set up, you need to run the DQM Synchronization Program, on page 5-58.

**See Also**

Bulk Duplicate Identification on page 5-12

## DQM Staging Program

Use the DQM Staging program to create the staged schema, B-Tree, and *interMedia* indexes. This program applies transformations to a portion of the data contained in the TCA Registry and generates a separate schema with the transformed and standardized data. The time that the program takes to create the staged schema depends on the size of your database and the number of attributes and transformations that you defined.

When you specify in the Staging Command parameter to create indexes, the DQM Index Creation program automatically runs to generate *interMedia* and B-Tree indexes for the staged schema. Invoke the DQM Index Creation program not just to create indexes for the first time, but also to reindex the entire staged schema whenever necessary.

You can use the HZ: DQM Index Creation Memory profile option to override the default amount of memory that is allocated for creating *interMedia* indexes. See Setting Profile Options on page A-2.

To decrease the amount of time it takes to create the staged schema, you can specify how many parallel workers to use when you run the DQM Staging program. Workers are processes that run at the same time to complete a task that would otherwise take longer with a single process. The DQM Staging program invokes the DQM Stage Worker, which spins off parallel workers for staging the data.

Aside from creating the entire staged schema and the *interMedia* indexes, you can also run the DQM Staging program to:

- Stage data using only new transformations
- Generate only mapping procedures, which map attributes to the source columns of the attribute values
- Regenerate only missing or invalid *interMedia* indexes
- Estimate the table disk space needed to stage all data and create indexes

You should estimate the disk space first before actually staging data. The report output displays, in megabytes, the space required to stage each entity and create all indexes, as well as the total for all entities and indexes.

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**Note:** Run the DQM Staging program every time that you add or modify attributes or transformations. See Defining Attributes and Transformations on page 5-24.

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While the DQM Staging program is running to create new indexes for new or modified attributes and transformations, the staged schema can still be queried and used with the existing indexes. If there are new or updated word replacements, however, all indexes are dropped and re-created. In this case, you cannot use the staged schema until the program finishes.

### See Also

Staged Schema on page 5-51

## Prerequisites

Before you submit the DQM Staging program, you must define attributes and transformations. See Defining Attributes and Transformations on page 5-24.

## Program Parameters

### Number of Parallel Staging Workers

Enter the number of parallel staging workers, between one and ten, that you want to use to create the staged schema, or leave the parameter blank. The DQM Stage Worker runs with one worker if you leave the parameter blank.

### Staging Command

Enter what you want the program to accomplish. This table shows the options.

Staging Command	Description
CREATE_INDEXES	Create Indexes: To invoke the DQM Index Creation program to generate <i>interMedia</i> indexes for the staged schema.
CREATE_MISSING_INVALID_INDEXES	Recreate Missing and Invalid DQM Indexes: To invoke the DQM Index Creation program to regenerate missing or invalid <i>interMedia</i> indexes
ESTIMATE_SIZE	Estimate Disk Size for Staging: To estimate the disk space required to stage all data and create indexes.
GENERATE_MAP_PROC	Generate mapping procedures: To generate only mapping procedures.
STAGE_ALL_DATA	Stage all data, create indexes, and generate map procedures: To stage all data, create <i>interMedia</i> indexes, and generate mapping procedures.
STAGE_NEW_TRANSFORMATIONS	Stage new transformations: To stage data using only new or modified transformations.

**Continue previous execution**

Enter *Yes* to continue running a previous DQM Staging program that did not finish.  
Enter *No* to run a new DQM Staging program.

**Index Creation Tablespace**

Enter the table space where the *interMedia* indexes are to be created in.

**Index Creation**

Enter *PARALLEL* to generate multiple indexes at the same time, based on the number of parallel workers that you specified. Enter *SERIAL* to create indexes one after another, even if you specified parallel workers.

## DQM Index Optimization Program

Use the DQM Index Optimization program to optimize *interMedia* indexes. You can schedule this program to run on a periodic basis. In general, you can run the DQM Index Optimization program less frequently than the DQM Synchronization program. The DQM Index Optimization program improves the performance of *interMedia* searches, which gradually degrades over time. You should run this program once in a while, but frequent optimization is not mandatory.

The DQM Synchronization program, however, synchronizes data between the TCA Registry and the staged schema, so you should run this program as often as possible to keep the search results accurate. See DQM Synchronization Program on page 5-58.

### **See Also**

Staged Schema on page 5-51

### **Prerequisites**

Before you submit the DQM Index Optimization program, you must make sure that both the staged schema and *interMedia* indexes exist.

## DQM Synchronization Program

Use the DQM Synchronization program to synchronize an existing staged schema with the TCA Registry. This program ensures that any new or updated data in the TCA Registry is reflected in the staged schema, and *interMedia* and B-Tree indexes. The program updates the indexes after updating the staged schema.

The DQM Synchronization program includes Registry records of any source, updated and created through either user interfaces or batch loading. The automatic synchronization of the staged schema with the TCA Registry happens only when records are created or updated through user interfaces or TCA import, not other batch loading. This automatic process is started by a periodically running Workflow Agent Listener. See *Implementing Automatic Synchronization of Staged Schema* on page 5-59.

You can schedule the DQM Synchronization program to be run on a periodic basis. The frequency that you want to submit this program with depends on:

- How often the information in the TCA Registry usually changes
- How often you search against the TCA Registry
- How much processing power you have

If you run the program frequently, the data in the staged schema and indexes are sooner updated for your searches. The *interMedia* indexes, however become less optimal and slower to use. To optimize the *interMedia* indexes, see *DQM Index Optimization Program* on page 5-57.

### See Also

*Staged Schema* on page 5-51

## Prerequisites

Before you submit the DQM Synchronization program, you must make sure that both the staged schema and indexes exist.

## Parameters

### Number of Workers

Enter the number of parallel workers, between one and ten, that you want to use to synchronize the staged schema, or leave the parameter blank. The synchronization runs with one worker if you leave the parameter blank.

## Implementing Automatic Synchronization of Staged Schema

To implement the automatic synchronization of the staged schema with the TCA Registry when records are created or updated through user interfaces or TCA import, you must use an Oracle Workflow agent listener. Depending on the version of Oracle Workflow that you have, you can either use the agent listener service component or concurrent program.

**See Also:** Scheduling Listeners for Local Inbound Agents, *Oracle Workflow Administrator's Guide*

### See Also

Staged Schema on page 5-51

## Agent Listener Service Component

Run an Oracle Workflow agent listener to enable deferred processing. Use Oracle Applications Manager (OAM) to ensure that an agent listener service component is scheduled to run for the WF\_DEFERRED agent so that the listener picks up updates to the TCA Registry and starts the synchronization process.

Oracle Workflow provides a seeded agent listener service component named Workflow Deferred Agent Listener to process messages on the standard WF\_DEFERRED agent. This agent listener does not have any correlation ID specified, so that it can operate generally to process all messages on the agent. The agent listener is configured to automatically start running continuously after your installation is complete. You can optionally schedule control events or manually choose control commands to start, stop, suspend, resume, or refresh the agent listener.

You can also optionally create and configure your own additional agent listeners for the WF\_DEFERRED agent. Make sure that the correlation ID is null.

## Workflow Agent Listener Concurrent Program

Schedule the Workflow Agent Listener concurrent program to run periodically, without an end date, to make sure that the listener picks up updates to the TCA Registry and starts the synchronization process.

### To set up the listener:

1. Submit the Workflow Agent Listener concurrent program once to make sure that it successfully runs and flushes all events in the queue. Use these parameters:
  - **Agent Name:** WF\_DEFERRED
  - **Correlation ID:** NULL
  - **AQ Wait Period:** 1000

This run might take a while, depending on the number of events that were generated in the queue.

2. After the Workflow Agent Listener has successfully completed, set up the same program to run periodically with the same parameters, and with these scheduling options:
  - In the Run the Job option group, select *Periodically*.
  - Leave the End At field blank.
  - Specify to run the program every .25 minutes, or another interval that best suits your business needs, the number of records you have, and the frequency of additions or updates to your database.
  - In the Apply the Interval option group, select *From the completion of the prior run*. You must select this option to prevent overlap of program runs.

## Merge Dictionary Overview

The Merge Dictionary stores the entities and procedures that must be processed to merge party entities for any Oracle application. During the merge process, each procedure sequentially executes for the entities defined in the Dictionary. Merge programs use the information in the Merge Dictionary to recognize which entities to merge, and they recognize the foreign keys and procedures without the need to recompile or regenerate the application code.

Each Oracle application maintains its own tables to store the information required to complete its business functions. During a merge process, all registered applications must be able to access the data for the appropriate entity that is related to the TCA Registry. If a merge procedure attempts to access a deleted party, the transaction, attributes, and other information for the party cannot be merged.

To maintain how Oracle applications are affected by the merge process, you register the entities, for example Accounts, Organization Contacts, and Party Sites, foreign keys, and procedures for specific Oracle applications in the Merge Dictionary. See *Maintaining the Merge Dictionary* on page 5-63.

For example, if your company enters into a service contract with one of the parties in your Registry, you would use Oracle Receivables to send invoices and statements to that party and Oracle Service to administer that service contract. If that party is acquired by another party, is identified as a duplicate of another party, or has sites that must be consolidated, you must merge those parties or party sites. This party merge affects customer accounts and attributes of the parties in Oracle Receivables, Oracle Service, and other Oracle Applications.

The registration specifies the names of the procedures required to merge the entities that interact with the party entities. These entities can be identified using the foreign key attributes that they contain. If any entity contains an attribute that is a foreign key to any of the TCA entities, these entities should be part of the Merge Dictionary and a procedure should be created to handle the records in this entity during the merge process.

Some Oracle Applications, along with their party entities, are automatically registered at installation. If you have installed any of these applications, when you perform a merge, the entities associated with the parties in these applications are merged as well.

**See Also:** *Oracle Trading Community Architecture Party and Account Merge Impact*

**See Also**

Data Quality Management Overview on page 5-2

## Maintaining the Merge Dictionary

With the Merge Dictionary, you determine the sequence of entities to merge, as well as view, update, and add seeded or custom entities.

You add entities as a child of another entity. The parent entity is merged before the child, and the foreign key of the child points to the parent.

You can customize the Merge Dictionary by:

- Including your own custom entities as part of the merge process that affects the standard TCA entities, so that custom entities can be merged using standard merge rules or custom rules.
- Using a different implementation of the merge process for the standard TCA entities, so that standard entities can be merged using custom rules. You can override the predefined procedures for merging TCA entities with the custom procedures.

You must develop the code to customize the merge procedures used by your custom applications and entities. Your custom merge procedure should:

- Perform any required validations before you run the merge process.
- Meet the processing requirements of your range of business activities.

You can delete custom entities from the Merge Dictionary. The data from deleted entities will not be merged during any merge process, and all child entities under the deleted entity will also be deleted.

### Prerequisites

Before you add any Oracle application to the Merge Dictionary, you must:

- Identify any entities that have foreign keys in the TCA Registry.
- Create merge procedures by identifying the foreign keys for those entities.

## Entity Details

This table describes the details of the entity that you are viewing, updating, or adding. What you can update depends on whether the entity is seeded or custom.

Detail	Description
Entity	The name of the table that has a foreign key to the HZ_PARTIES table or a related table such as HZ_PARTY_SITES or HZ_CONTACT_POINTS.
Application	The Oracle application affected by the merge process.
Sequence	The order in which the entity is to be processed during a merge.
Parent Entity	The name of the table that the foreign key of the entity refers to.
Primary Key	The name of the primary key column for the entity.
Foreign Key	The name of the foreign key column which links the entity to its parent entity.
Description	A description of the entity, for example <i>Party</i> for HZ_PARTIES.
Description Columns	The name of the columns used to generate a description for the record, for example, PARTY_NAME for the HZ_PARTIES table. You can alternatively enter a complex concatenation or decode expression. The description columns are used in reports and logs.
Procedure Name	The name of the merge procedure, which must conform to the standard merge procedure signature.
Merge Records in Bulk	Whether or not the merge procedure is called once for every record or for all records in the table that references the merged party.  If records are merged in bulk, you cannot assign child entities to this entity.
Additional Query Clause	A SQL clause that is used to specify additional filtering conditions for joining the table to the related parent entity.

If the relationship between the parent and child entities involve more than one foreign key or is complex, you can enter an additional join condition in the merge procedure.

For example, the HZ\_CONTACT\_POINTS table can be associated with either a party or party sites based on the value of the owner\_table\_name. To associate HZ\_CONTACT\_POINTS with:

- The HZ\_PARTIES table
  - Enter the join condition as *hz\_contact\_points.owner\_table\_name = HZ\_PARTIES*.
  - Define the foreign key as *owner\_table\_id*.
- The HZ\_PARTY\_SITE table
  - Enter the join condition as *hz\_contact\_points.owner\_table\_name = HZ\_PARTY\_SITE*.
  - Define the foreign key as *owner\_table\_id*.

**See Also**

Merge Dictionary Overview on page 5-61



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## Third Party Data Integration

This chapter describes administering Third Party Data Integration for:

- Party profile entities for the single source of truth record, including selecting and ranking data sources as well as defining user and third party overwrite rules.
- Other entities, including selecting data sources and defining user data creation rules.

## Administering Third Party Data Integration

Administer Third Party Data Integration only if you acquire and use third party data from D&B in the TCA Registry. It is recommended that you do not frequently change the setup.

**See Also:** Third Party Data Integration Overview, *Oracle Trading Community Architecture User Guide*

Data that you acquire from D&B coexist with user-entered data as separate records. For the party profile entities, Organization Profile and Person Profile, you can set up a single source of truth (SST) record. Oracle applications display and use only the SST record for organization and person party profile information.

The SST record represents a single view of the most accurate information about a party's profile. The attributes in the SST record can contain information from different data sources, depending on the setup. For the Other entities, meaning other than party profile entities, Oracle applications can display and use one or more records from different data sources, depending on the setup.

Third Party Data Integration administration also involves rules that regulate overwriting and creating data.

### **See Also**

Introduction to Administration on page 1-2

## Setting Up Data Sources

For the attributes in the Organization Profile and Person Profile entities, you select and rank data sources based on your perception of the accuracy of information from each source. For example, you can set the single source of truth record to use the D&B source for the DUNS Number attribute but the user-entered source for the total number of employees. The SST record takes attribute values from the highest ranked source that contains data.

For Other entities, you select the data sources at the entity level. For example, for the Contact Point entity, you can specify to display only the user-entered contact points in Oracle applications, but both the user-entered and third party addresses for the Address entity.

## Controlling Overwrite and Creation of Data

To maintain accurate information in the TCA Registry, you can define rules that manage the third party and user-entered data.

- **User overwrite rules:** Determine if new user-entered data can overwrite existing third party data in the SST record.
- **Third party overwrite rule:** Determines if new third party data can overwrite existing user-entered data in the SST record. This rule applies only to user-entered data that previously overwrote third party data.
- **User data creation rules:** Determine which Other entities users can create new records for.

## Administration Process

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**Note:** You should perform Third Party Data Integration administration steps when no users are logged into Oracle Applications.

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1. Integrate with D&B for acquiring data from the D&B database (if you are not already integrated with D&B), on page 2-19.
2. Select and rank data sources for party profile entities to set up the SST record, on page 6-7.
3. Define user overwrite rules for party profile entities (if you set up at least one attribute with third party data source in step 3), on page 6-9.
4. Define the third party overwrite rule for party profile entities (if you allow at least one attribute to be overwritten in step 4), on page 6-11.
5. Select data sources for Other entities, on page 6-22.
6. Define user data creation rules for Other entities (if you set up at least one entity with third party data source in step 6), on page 6-24.
7. Assign user overwrite and user data creation rules using profile options (if you defined any of these rules), on page A-2.
8. Run the Third Party Integration Update program to regenerate the SST record, on page 6-27.
9. Ask your system administrator to restart Apache or the Web server after you perform any of the setup steps so that your changes take effect.

## Party Profile Entities Setup

Your setup of the party profile entities controls, through the single source of truth record, how Oracle applications display and use organization profile and person profile information from various data sources. You select and rank data sources for each attribute in the party profile entities to determine where the SST record obtains its attribute values.

Oracle applications display and use the values from the SST record. SST data depends on not only the ranking but also the availability of data for each party. For example, one party might have both third party and user-entered records, while another has only user-entered data.

The Organization Profile entity contains attributes that correspond to the columns in the HZ\_ORGANIZATION\_PROFILES table, which provide the attribute values. For example, the SIC\_CODE column stores the value for the SIC code attribute. Likewise, the Person Profile entity maps to the HZ\_PERSON\_PROFILES table.

If you do not acquire and use any third party data, or do not select any third party data sources for the SST record, Oracle applications always use the user-entered information.

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**Note:** If you do not use any third party data, you do not need to set up data sources nor any rules for party profile entities.

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If you do set up third party data sources, you can define rules to control whether or not new user-entered data can overwrite third party data in the SST record. If you allow user overwrite, you can also define rules to determine if new third party data can overwrite the user-entered data that originally overwrote third party data.

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**Note:** You do not need to set up the Person Profile entity because Third Party Data Integration does not yet integrate with a business-to-consumer third party data provider.

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### See Also

Administering Third Party Data Integration on page 6-2

Attribute Groups on page 6-5

Party Profile Entities Setup Example on page 6-13

## Attribute Groups

Some of the attributes in the party profile entities are grouped, and each group has a primary attribute. Third Party Data Integration pages display only the primary attribute, but your data source and rule setup for the primary attribute applies to the entire group.

Whenever the SST record is regenerated after you run the Third Party Data Integration Update program, all nonprimary attributes in each group are populated from the same data source as their primary attribute. For more information about the program, see Third Party Data Integration Update Program on page 6-27.

If the highest ranked source has no data for the primary attribute, the SST record takes values from the next highest ranked source that does. If none of the data sources has data for the primary attribute, the other attributes in the group are treated like regular individual attributes in the SST record.

This table shows the Organization Profile attribute groups, including the primary attributes and the other attributes in each group.

<b>Primary Attribute</b>	<b>Other Attributes in Group</b>
CEO Name	CEO Title
DUNS Number	Displayed DUNS Party Identifier Enquiry DUNS Number
Headquarters or Branch Indicator	Branch Flag
Local Activity Code	Local Activity Code Type
Local Business Identifier	Local Business Identifier Type
Minority Owned Indicator	Minority Owned Indicator Type
Organization Name	Phonetic Organization Name
Principal Name	Principal Title
SIC Code	SIC Code Type

This table shows the Person Profile attribute groups, including the primary attributes and the other attributes in each group.

<b>Primary Attribute</b>	<b>Other Attributes in Group</b>
Person Identifier Number	Person Identifier Type
Person Name	Initials First Name Phonetic First Name Last Name Phonetic Last Name Middle Name Phonetic Middle Name

Even though user and third party overwrite rules also apply to the entire group, an attribute can be updated without requiring the other attributes in the group to be also updated by the same data source.

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**Note:** The SIC Code and SIC Type group has additional validations. These attributes must always have values from the same data source, and both must have values or none at all.

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### **See Also**

Attribute Groups Setup Example on page 6-17

Party Profile Entities Setup on page 6-4

## Setting Up Data Sources for Party Profile Entities

Use the Set Up Data Sources pages to select and rank the data sources for the party profile entities. The single source of truth record takes attribute values from the highest ranked source that contains data.

For example, you rank D&B as the highest source for the DUNS Number attribute, followed by user entered. For party 1, if both D&B and user-entered records have a DUNS Number attribute value, the SST record takes the value from D&B. If party 2 has only a user-entered record, the SST record takes the user-entered DUNS Number. For each party, Oracle applications display and use the DUNS Number from the SST record.

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**Note:** If no data source has a value for a specific attribute, Oracle applications display nothing and the user can enter a value for that attribute.

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You can view the current data source settings and give all attributes within an entity either the same setup or different settings. After you select the attributes to set up, you can update all the selected attributes together or individually. With the latter method, you sequentially update each selected attribute.

### To view and set up data sources for party profile entities:

1. Navigate to the Set Up Data Sources page.

This page displays the current data source ranking for both the Organization Profile and Party Profile entity at the entity level. If an entity's attributes have different highest ranked data sources, the ranking status at the entity level is Mixed.

2. Click the View Attributes button to view and update data source ranking for each attribute.

3. Select at least one attribute and click either the Update as a Group or Update Individually button, depending on whether you want to update the selected attributes together or individually.

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**Note:** If a displayed attribute is the primary attribute for an attribute group, your setup applies to the entire group. See Attribute Groups on page 6-5.

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4. For either all selected attributes or an individual attribute, move data sources between the two boxes. Only the data sources in the Rank Data Sources box are considered for the SST record.

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**Note:** By default, the User Entered data source is selected for the SST record. You cannot remove it from the Rank Data Sources box.

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5. Rank sources in the Rank Data Sources box, with uppermost as highest ranked.
6. Click the Apply or Finish button.
7. Repeat steps 2 to 6 as needed.

### **See Also**

Party Profile Entities Setup on page 6-4

## Setting Up User Overwrite Rules

Use the Set Up User Overwrite Rules pages to define rules that allow or prevent users from overwriting third party data in the single source of truth record. Each rule includes all attributes from the party profile entities, and you define the rule for each individual attribute.

For example, the user-entered organization name is Party A and the D&B name is Party B. If the highest ranked source for the organization name attribute is D&B, the SST record takes Party B. If you allow user overwrite of the organization name attribute, the user can enter a new name, Party C, in an Oracle application. Party C replaces Party A in the user-entered record and Party B in the SST record. The D&B record with Party B is untouched.

User overwrite rules apply only to attributes with third party data from the highest ranked source. For example, the highest ranked source is user entered, but the SST record takes the D&B organization name Party B because a user-entered name does not exist. No matter what the rule is for organization name, if the user enters Party C, the SST record takes Party C because data now exists from the highest ranked source.

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**Note:** A seeded rule specifies that the user can never overwrite a DUNS Number from the D&B data source. You cannot modify this rule, and the DUNS Number attribute is not available for you to include in other user overwrite rules.

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You can create multiple user overwrite rules and update them at any time. You can also duplicate an existing rule as a basis for a new rule. Use the HZ: User Overwrite Rule profile option to assign the rules at the user, responsibility, application, or site level. See Setting Profile Options on page A-2.

If you are assigning only at the site level, you need to define only one user overwrite rule. If you do not define nor assign any rules, the default functionality allows user overwrite of all attributes.

You can delete user overwrite rules at any time. If you delete a rule that is assigned to users, the rule from the next assigned level would then apply to these users. For example, rules are assigned at the user, application, and site levels. If you delete the user level rule, the application level rule takes effect.

**To create, update, duplicate, or delete a user overwrite rule:**

1. Navigate to the Set Up User Overwrite Rules page.
2. Click the Create New Rule button or the Update, Duplicate, or Delete icon.
3. If you are creating, updating, or duplicating a rule, enter or update the rule name as needed.
4. Check the Allow User to Overwrite Third Party Data check box if you want to allow user-entered data to overwrite highest ranked third party data in the SST record.

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**Tip:** Uncheck only for attributes that are set up with third party data sources. If an attribute has only user-entered data, there is no third party data to prevent overwrite of.

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**Note:** If a displayed attribute is the primary attribute for an attribute group, your setup applies to the entire group. See Attribute Groups on page 6-5.

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5. Click the Apply button.
6. Repeat steps 2 to 5 as needed.

**See Also**

Party Profile Entities Setup on page 6-4

## Setting Up the Third Party Overwrite Rule

Use the Set Up Third Party Overwrite Rule page to determine if newly acquired third party data can overwrite user-entered data in the single source of truth record. You define this rule for each attribute in the party profile entities.

The third party overwrite rule applies only to user-entered data that meet these conditions:

- The user-entered value previously overwrote third party data.

For example, Party B is the organization name in the SST record, as derived from the highest ranked source, D&B. The user then enters Party C in an Oracle application, replacing Party B in the SST record. In the meantime, D&B has updated its database with Party D as the name for this organization.

If third party overwrite is allowed for the organization name attribute, when D&B data is reacquired, Party D replaces Party C in the SST record and Party B in the D&B record. The user-entered record with Party C is untouched.

If third party overwrite is not allowed for this attribute, Party D replaces only Party B in the D&B record. The SST and user-entered record remain with Party C.

- The third party value that was previously overwritten comes from the highest ranked source.

For example, the highest ranked source is user entered, but the SST record takes the D&B organization name Party B because a user-entered name does not exist. The user enters Party C, which replaces Party B in the SST record. No matter how the third party overwrite rule is defined for organization name, newly acquired third party data cannot overwrite a user-entered organization name because user entered is highest ranked.

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**Note:** Even if the third party overwrite rule applies and allows overwrite, the third party value does not overwrite the user-entered value if the third party value has not changed since the last acquisition from its provider.

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You define only one third party overwrite rule and do not need to manually assign it with a profile option. If you do not set up the third party overwrite rule, third party overwrite is not allowed for all attributes by default.

If your user overwrite rules do not allow user overwrite for any attribute, you do not need to define the third party overwrite rule because this rule applies only to user-entered data that overwrote third party data from the highest ranked source. To follow the first example from above, the user overwrite rule allows the user to overwrite Party B with Party C, so the third party overwrite rule applies to the organization name attribute.

### **To set up the third party overwrite rule:**

1. Navigate to the Set Up Third Party Overwrite Rule page.
2. Check the Allow Third Party to Overwrite User Data check box if you want to allow third party data to overwrite user-entered data in the SST record.

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**Tip:** Uncheck only for attributes that are set up with third party data sources. If an attribute has only user-entered data, there is no third party data to prevent from overwriting user-entered data.

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**Note:** If a displayed attribute is the primary attribute for an attribute group, your setup applies to the entire group. See Attribute Groups on page 6-5.

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3. Click the Apply button.

### **See Also**

Party Profile Entities Setup on page 6-4

## Party Profile Entities Setup Example

This example shows how different settings for some party profile attributes affect the functionality in Oracle applications. Some of these attributes are primary attributes that belong to attribute groups, but the example treats the primary attributes as if on their own. For an example of attribute group setup, see Attribute Groups Setup Example on page 6-17.

### Data Sources Setup and Single Source of Truth Record

For the Organization Profile entity, you set up some attributes as shown in this table. This table also shows the available records for a specific party and the values that populate the single source of truth record based on the setup.

Attribute	Data Source Ranking	User-Entered Value	D&B Value	SST Value
Organization Name	1. D&B	Company A	Company A	Company A
	2. User Entered			
Year Established	1. D&B	1992	1990	1990
	2. User Entered			
CEO Name	1. D&B	Joe Lee	<Not Available>	Joe Lee
	2. User Entered			
Total Employees	1. User Entered	<Not Available>	100	100
	2. D&B			
SIC Code	1. User Entered	2520	2521	2520
	2. D&B			

### User Overwrite Rule

This table shows the user overwrite rule for the five attributes.

<b>Attribute</b>	<b>Allow User to Overwrite Third Party Data</b>
Organization Name	No
Year Established	Yes
CEO Name	Yes
Total Employees	No
SIC Code	Yes

### User Enters Data

This table describes what happens when a user tries to enter data. The table shows the SST values from above, the data sources of each value, the highest ranked data sources, as well as the new user-entered values and the new SST values, whether the user updated them or not.

<b>Attribute</b>	<b>Current SST Value</b>	<b>Current SST Data Source</b>	<b>Highest Ranked Data Source</b>	<b>New User Entered Value</b>	<b>New SST Value</b>
Organization Name	Company A	D&B	D&B	Company B	Company A
Year Established	1990	D&B	D&B	1992	1992
CEO Name	Joe Lee	User Entered	D&B	Joey Lee	Joey Lee
Total Employees	100	D&B	User Entered	1000	1000
SIC Code	2520	User Entered	User Entered	2522	2522

The user overwrite rule applies only to attribute values that have D&B as the current SST and highest ranked data source. This table describes which attributes the rule applies to.

Attribute	Rule Definition	Rule Is Applied	Description
Organization Name	Prevent Overwrite	Yes	The user overwrite rule prevents the user-entered value from overwriting the highest ranked D&B value in SST record.
Year Established	Allow Overwrite	Yes	The user overwrite rule allows the user-entered value to overwrite the highest ranked D&B value.
CEO Name	Allow Overwrite	No	The current SST data source is already user entered, and data still does not exist for the highest ranked D&B source, so the user can modify the user-entered record and accordingly update the SST record.
Total Employees	Prevent Overwrite	No	Even though the current SST value is from D&B, the user can overwrite it because user entered is the highest ranked source.
SIC Code	Allow Overwrite	No	The current SST data source is already user entered, and the highest ranked source is user entered, so the user can definitely update the SST value.

### Third Party Overwrite Rule

This table shows the third party overwrite rule for the five attributes.

Attribute	Allow Third Party to Overwrite User Data
Organization Name	No
Year Established	Yes
CEO Name	No
Total Employees	Yes
SIC Code	Yes

### New D&B Data is Acquired

This table shows what happens when D&B data is subsequently acquired. The table shows the SST values from above, the data sources of each value, the previous data sources, the highest ranked data sources, as well as the new D&B values and the new SST values, whether D&B updated them or not.

Attribute	Current SST Value	Current SST Data Source	Previous Data Source	Highest Ranked Data Source	New D&B Value	New SST Value
Organization Name	Company A	D&B	D&B	D&B	Company AA	Company AA
Year Established	1992	User Entered	D&B	D&B	1991	1991
CEO Name	Joey Lee	User Entered	User Entered	D&B	Joseph Lee	Joseph Lee
Total Employees	1000	User Entered	D&B	User Entered	2000	1000
SIC Code	2522	User Entered	User Entered	User Entered	2520	2522

The third party overwrite rule applies only to attributes that have a current user-entered value that previously overwrote a highest ranked D&B value. This table describes which attributes the rule applies to.

Attribute	Rule Definition	Rule Applies	Description
Organization Name	Prevent Overwrite	No	The SST record always had a D&B value, which is highest ranked, so the new D&B value updates the SST record.
Year Established	Allow Overwrite	Yes	The current user-entered value previously overwrote a highest ranked D&B value in the SST record. The rule allows the new D&B value to overwrite the user-entered value.
CEO Name	Prevent Overwrite	No	Even though the current SST value is user entered and the highest ranked source is D&B, the current SST value did not previously overwrite a D&B value. The new D&B value can overwrite the user-entered value because D&B is the highest ranked source.
Total Employees	Allow Overwrite	No	Even though the current SST value is user entered and previously overwrote a D&B value, D&B is not the highest ranked source. The new D&B value cannot overwrite the user-entered value because the highest ranked source is user entered.
SIC Code	Allow Overwrite	No	The SST record always had a user-entered value, which is highest ranked, so the new D&B value cannot update the SST record.

## Attribute Groups Setup Example

This example shows how attribute groups in the SST record are populated and subsequently updated. For more information, see Attribute Groups on page 6-5.

This table shows the primary attribute and the other attribute in the group.

Primary Attribute	Other Attribute in Group
CEO Name	CEO Title
SIC Code	SIC Code Type

### Data Source Setup and Single Source of Truth Record

This table shows the available records for a specific party and the values that populate the single source of truth record based on the setup. The setup for the primary attribute determines the setting for the other attribute in the group.

Attribute	Data Source Ranking	User-Entered Value	D&B Value	SST Value
CEO Name	1. D&B	Jennie Lee	Jennifer Lee	Jennifer Lee
	2. User Entered			
CEO Title	1. D&B	CEO	<Not Available>	<None>
	2. User Entered			
SIC Code	1. User Entered	<Not Available>	2952	2952
	2. D&B			
SIC Code Type	1. User Entered	<Not Available>	1977 SIC	1977 SIC
	2. D&B			

Primary attributes in the SST record are populated like individual attributes, but the other attributes in the group are populated based on the primary attributes' data source. For example, the CEO title attribute takes the D&B value, which is nothing, because the primary attribute, CEO name, takes a D&B value.

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**Note:** The SIC Code and SIC Type group has additional validations. At all times, they both must have values from the same data source or none at all.

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### User Overwrite Rule

This table shows the user overwrite rule for the four attributes. The setup for the primary attribute determines the setting for the other attribute in the group.

Attribute	Allow User to Overwrite Third Party Data
CEO Name	Yes
CEO Title	Yes
SIC Code	No
SIC Code Type	No

### User Enters Data

This table describes what happens when a user tries to enter data. The table shows the SST values from above, the data sources of each value, the highest ranked data sources, as well as the new user-entered values and the new SST values, whether the user updated them or not.

Attribute	Current SST Value	Current SST Data Source	Highest Ranked Data Source	New User Entered Value	New SST Value
CEO Name	Jennifer Lee	D&B	D&B	<No Action>	Jennifer Lee
CEO Title	<None>	D&B	D&B	CEO	CEO
SIC Code	2952	D&B	User Entered	2999	2999
SIC Code Type	1977 SIC	D&B	User Entered	1987 SIC	1987 SIC

The user overwrite rule applies only to attribute values that have D&B as the current SST and highest ranked data source. This table describes which attributes the rule applies to and how attributes within a group can be updated separately except for the SIC code and type group.

<b>Attribute</b>	<b>Rule Definition</b>	<b>Rule Applies</b>	<b>Description</b>	<b>New SST Data Source</b>
CEO Name	Allow Overwrite	Yes	The user does nothing and leaves the D&B value in the SST record.	D&B
CEO Title	Allow Overwrite	Yes	Even though the primary attribute, CEO name, is still a D&B value, the user can overwrite the D&B CEO title in the SST record.	User Entered
SIC Code	Prevent Overwrite	No	Even though the current SST value is from D&B, the user can overwrite it because user entered is the highest ranked source.	User Entered
SIC Code Type	Prevent Overwrite	No	The user must also overwrite the D&B SIC code type in the SST record because SIC code and type must always have the same data source.	User Entered

## Other Entities Setup

Your setup of the Other entities controls which data sources are available for Oracle applications to display and use for each of these entities: Address, Contact Point, Credit Rating, Financial Report, and Relationship.

An entity contains attributes that correspond to the columns in one or more tables which provide the attribute values. This table maps the Other entities to their relevant tables.

Other Entity	Table
Address	HZ_LOCATIONS and HZ_PARTY_SITES
Contact Point	HZ_CONTACT_POINTS
Credit Rating	HZ_CREDIT_RATINGS
Financial Report	HZ_FINANCIAL_REPORTS and HZ_FINANCIAL_NUMBERS
Relationship	HZ_RELATIONSHIPS

You select data sources for each entity at the entity level, not the attribute level. For example, if you select the user-entered and D&B data sources for the Address entity, for each party, Oracle applications display and use both the user-entered and D&B records.

If you do not acquire and use any third party data, or do not set up any third party data sources, Oracle applications always use the user-entered information.

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**Note:** If you do not use any third party data, you do not need to set up data sources nor any rules for Other entities.

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In Oracle applications, the user can update user-entered records for the Other entities but cannot manually update the third party data. The user, however, can update TCA-specific information in party site and relationship records from third party data sources. For example, even though a third party might provide all the addresses for a party's sites, the user can always determine which one is the primary address.

For each Other entity, you can define user data creation rules that determine whether users can create new records or not.

**See Also**

Administering Third Party Data Integration on page 6-2

Other Entities Setup Example on page 6-26

**Address Entity and Tax Location Validation**

For location-based tax validation purposes, an address cannot be updated when transactions are associated with the address, or party site. When you acquire new third party address information, if the new address significantly differs from the existing address, the old address would be deactivated. The new, active third party address replaces the previous address for the party site.

## Setting Up Data Sources for Other Entities

Use the Set Up Data Sources pages to select the data sources for the Other entities. The selected sources provide records to be used and displayed in Oracle applications. Which records are actually displayed also depends on the availability of data.

For example, you select both the user-entered and D&B data sources for the Address entity. For party 1, if both D&B and user-entered address records exist, both records are displayed and used in Oracle applications. For party 2, if only a user-entered record exists for the Address entity, Oracle applications use only the user-entered information.

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**Note:** Users can enter new records for any entity only if the user data creation rule that is assigned to the users allows them to. See Setting Up User Data Creation Rules on page 6-24.

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You can view the current data source settings and give all Other entities either the same setup or different settings. After you select the entities to set up, you can update all the selected entities together or individually. With the latter method, you sequentially update each selected entity.

### To view and set up data sources for Other entities:

1. Navigate to the Set Up Data Sources page.
2. Select at least one entity and click either the Update as a Group or Update Individually button, depending on whether you want to update the selected entities together or individually.
3. For either all selected entities or an individual entity, move data sources between the two boxes. Only data sources in the Selected Data Sources box are considered for providing records to use in Oracle applications.

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**Note:** By default, the User Entered data source is selected. You cannot remove it from the Selected Data Sources box.

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4. Click the Apply or Finish button.
5. Repeat steps 2 to 4 as needed.

**See Also**

Other Entities Setup on page 6-20

## Setting Up User Data Creation Rules

Use the Set Up User Data Creation Rules pages to define rules that allow or prevent new user-created records for each Other entity. The user can always update existing user-entered data, regardless of these rules.

You can create multiple user data creation rules and update them at any time. You can also duplicate an existing rule as a basis for a new rule. Use the HZ: User Data Creation Rule profile option to assign the rules at the user, responsibility, application, or site level. See Setting Profile Options on page A-2.

If you are assigning only at the site level, you need to define only one user data creation rule. If you do not define nor assign any rules, the default functionality allows user data creation of all Other entities.

If you do not set up third party data sources for any Other entity, you do not need to set up any user data creation rules. The main function of these rules is to restrict data to third party information.

You can delete user data creation rules at any time. If you delete a rule that is assigned to users, the rule at the next assigned level would then apply to these users. For example, rules are assigned at the user, application, and site levels. If you delete the user level rule, the application level rule takes effect.

### **To create, update, duplicate, or delete a user data creation rule:**

1. Navigate to the Set Up User Data Creation Rules page.
2. Click the Create New Rule button or the Update, Duplicate, or Delete icon.
3. If you are not deleting a rule, enter or update the rule name as needed.
4. Check the Allow User to Create Data check box if you want to allow new user-created records.

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**Tip:** Uncheck only for entities that are set up with third party data sources. If an entity has only user-entered data, you do not need to prevent new user-entered data.

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5. Click the Apply button.
6. Repeat steps 2 to 5 as needed.

**See Also**

Other Entities Setup on page 6-20

## Other Entities Setup Example

This example shows how different settings for the Other entities affect the functionality in Oracle applications.

### Data Source Setup

You set up the Other entities as shown in this table. The table also shows which records are actually used and displayed in Oracle applications for a specific party.

Other Entity	Data Source Selection	User-Entered Record Exists	D&B Record Exists	Record in Oracle Applications
Contact Point	User Entered, D&B	Yes	Yes	User Entered, D&B
Credit Rating	User Entered, D&B	No	No	<None>
Financial Report	User Entered, D&B	No	Yes	D&B
Location	User Entered	Yes	Yes	User Entered
Relationship	User Entered	No	Yes	<None>

If neither data source exists, as is the case for the Credit Rating and Relationship entity, nothing is displayed in Oracle applications regardless of data source setup.

### User Data Creation Rule

The user data creation rules do not depend on which data sources currently provide records in Oracle applications. The rules apply to all entities at all times.

For example, if the rule prevents user data creation for all entities, users cannot create new records even for the Credit Rating and Relationship entities, which contain no data from either source. If user-entered data already exists, as is the case for the Contact Point and Location entities, the user can update those existing records.

## Third Party Data Integration Update Program

Use the Third Party Data Integration Update program to:

- Regenerate the single source of record.  
The new SST values are based only on the data source setup for the party profile entities and the existing availability of data. It does not matter which data sources the current SST values come from, and none of the user nor third party overwrite rules apply.
- Regenerate some data for the Other entities.

Run this program each time after you update data source setup for party profile or Other entities. Your data source setup updates do not take effect in Oracle applications until you run this program.

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**Note:** You do not need to run this program after updating only the setup for any of the rules. The updated rule setup automatically applies to new records, user actions, or third party downloads.

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To run the Third Party Data Integration Update program, navigate to the Concurrent Request page.

### Prerequisite

Complete the Third Party Data Integration setup for the first time or update data source settings. See *Administering Third Party Data Integration* on page 6-2.

### Program Parameters

#### **Commit Size**

Enter the number of new or updated records to be included in each commit to the database.

#### **Number of Workers**

Enter the number of parallel workers that you want to use to process the Third Party Data Integration Update program. Workers are processes that run at the same time to complete a task that would otherwise take longer with a single process.



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# Data Sharing and Security

This chapter describes how to securely share data, including:

- Creating, updating, and viewing data sharing groups.
- Assigning access privileges.

## Data Sharing and Security Overview

Oracle Trading Community Architecture provides a model for managing information about entities such as customers. The TCA Data Sharing and Security (DSS) feature provides the capability to manage who can create, modify, and delete information about TCA data model entities across the applications in the Oracle E-Business Suite.

You can configure applications in the E-Business Suite to implement the data sharing and security rules required by your organization's internal policies and procedures, as well those required by governmental regulations and laws. For example, you can establish security rules so that only healthcare workers can change personal information about patients.

The DSS feature registers data security rules in a central repository using the security features of Oracle's Application Object Library (AOL). Because E-Business Suite applications use the TCA public application programming interfaces (APIs) to create, update, and manage party information, data security rules are encoded in these APIs to enforce consistent behavior across the E-Business Suite.

With the DSS feature, you can control access to the following TCA data model entities:

- Parties
- Person parties
- Organization parties
- Relationships
- Classification code assignments
- Party sites
- Locations
- Party contact points
- Party site contact points

## Administering Data Sharing and Security

To secure information about entities, a TCA data security administrator must define the data sharing groups that specify the criteria used to determine the data to be secured. Security criteria can be one or more of the following characteristics:

- Classification
- Relationship
- E-Business Suite module used to create the data

After defining a data sharing group, the TCA data security administrator can assign access privileges to users who create, update, or delete information secured by the data sharing group. You can assign access privileges to users at the following levels:

- Global or public (all users)
- Responsibility
- Individual user

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**Note:** You cannot use the DSS feature to restrict users of an application from viewing information created and maintained in that application. The DSS feature limits the ability of users to create, update, or delete information that is secured based on that data sharing group definition.

For more information see the *Oracle Applications System Administrator Guide* and the user guides for the applications in the E-Business Suite.

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Two responsibilities can access the Security Administration pages:

- **Trading Community Manager:** Can only view existing data sharing groups and cannot create new data sharing groups or update existing ones.
- **TCA Data Security Administrator:** Has both view and update access privileges.

### See Also

Data Sharing and Security Overview on page 7-2

Introduction to Administration on page 1-2

## Example

Consider the case of a hospital implementing Oracle applications powered by TCA. In this situation, the hospital could define different data sharing groups to secure patient information as well as hospital employee information. A security conflict might occur if a hospital employee falls ill and becomes a patient at the same hospital. Which privilege assignment scheme controls access to this entity?

The DSS feature addresses this issue by allowing administrators to create a third data sharing group that defines the privileges associated with creating, updating, and deleting records of parties that are both employees and patients. For the appropriate privilege assignment to take place, this third data sharing group must be assigned a rank that is higher than the rank assigned to the Employee Only or the Patient Only groups.

## Seeded Data Sharing Groups

You can use the seeded data sharing groups listed in this table, in addition to the ones that you create.

<b>Group Name</b>	<b>Group Code</b>
Public	PUBLIC
Human Resources Shared Data	HR_SHARED

## Administration Process

A TCA data security administrator creates and updates data sharing groups, enables or disables data sharing groups, and assigns access privileges to responsibilities and users.

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**Note:** To create, update, or delete data sharing groups you must have the TCA Data Security Administrator responsibility.

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The Data Sharing and Security Administration page provides a starting point for a TCA data security administrator to define security rules and to assign access privileges for information modeled by the Oracle Trading Community Architecture or the Oracle Customer Model.

- To create a new data sharing group, click the Create button. See [Creating a Data Sharing Group](#) on page 7-7.
- To assign the privilege to access a data sharing group to a responsibility or an individual user, click the Assign Privileges icon for the appropriate data sharing group. See [Assigning Privileges to Access a Data Sharing Group](#) on page 7-11.
- To view and update a data sharing group, click the data sharing group name. See [Updating a Data Sharing Group](#) on page 7-10.

The Trading Community Manager responsibility can only view information. Only the TCA Data Security Administrator responsibility can also update the data sharing group information.

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**Note:** From the Data Sharing and Security Administration page, you can also click on Third Party Data Rules for Third Party Data Integration administration, which allows you to control the usage of third party and user-entered data. See [Administering Third Party Data Integration](#) on page 6-2.

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When you define a data sharing group, you must explicitly assign access privileges to the information secured by the data sharing groups. If an entity is secured by a data sharing group, then explicit assignments must be made to the appropriate users or responsibilities to define their access privileges. If privilege assignments are not made, then no one will have access to the information.

If an entity is not covered by any defined data sharing group, you can use the HZ: Default Data Sharing Group profile option to designate the default group that would be assigned to that entity.

To control the release of Data Sharing and Security, TCA data security administrators can use the HZ: Data Sharing and Security Enabled profile option to limit TCA security features to a specific user before generally releasing the functionality to ensure a controlled release. Furthermore, data sharing groups can be set up, but not enabled until the desired security is ready to be enforced.

See Setting Profile Options on page A-2.

**See Also**

Administering Data Sharing and Security on page 7-3

## Creating a Data Sharing Group

This process enables a TCA data security administrator to define data sharing groups by specifying information that identifies the data sharing group and the criteria that define the group: classifications, relationships, source modules, and specific TCA data model entities supported by the DSS feature.

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**Note:** A TCA data security administrator can only set table or row level security. Specific attributes such as a person's date of birth cannot be secured. However, the entire person profile can be secured using the Create Data Sharing Group page.

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This page can only be accessed with a TCA Data Security Administrator responsibility.

### To create a data sharing group:

1. Click the Create button in the Data Sharing and Security Administration page. See Administration Process on page 7-5.
2. Enter a name for this group in the Data Sharing Group Name field.  
The name should be descriptive of the secured data and of the users, responsibilities, and public that you assign the privilege of accessing this data sharing group.
3. Enter a code for this group in the Data Sharing Group Code field.  
This code must be a unique identifier. The code cannot be updated, although other attributes can be.
4. Enter a description for this group in the Data Sharing Group Description field.
5. You can specify the rank of this group that will be used to resolve conflicting security rules between groups and to order the display of this group with other groups on the Data Sharing and Security Administration page. Rank controls the order in which data sharing groups are evaluated to determine which sharing group applies to data.

For example, you can set up two data sharing groups, one for patients and one for employees. If the Patient group is ranked higher than the Employee group, then information about an employee who is a patient would be secured as part of the Patient group.

- Select the Last option to place this data sharing group at the end of the list.
  - Select the Before option and a data sharing group to place the new data sharing group before the selected existing data sharing group.
6. Check or clear the Enable Data Sharing Group check box.
  7. In the Classifications region, add class categories to be included in this data sharing group.
  8. Enter the name of a classification, or class code, associated with each class category.

The Class Path column displays the hierarchical position of class codes in the class code hierarchy of a class category.

For more information on classifications, see [Classifications Overview](#) on page 4-2 and [Administering Classifications](#) on page 4-5.

9. Check or clear the Enabled check box to enable or disable the class category and classification.
10. Add relationship roles, such as Employee, Patient, Customers, and so on in the Relationships region.
11. Check or clear the Enabled check box to enable or disable the relationship role.

For more information on relationships, see [Administering Relationships](#) on page 3-2.

12. In the Created By Module region, enter a source application or module that stores and maintains the information secured by this data sharing group. This section displays a list of the applications and modules, secured by a TCA data security administrator, that created the entity within the TCA registry.

For example, to only allow Oracle Healthcare application users to create a particular person entity called Patient, then the TCA data security administrator may secure the Patient relationship in the Relationships region, the Business Function of Patient in the Classifications region, and the Oracle Healthcare Applications (OHC) in the Created By Module region to specify the business rules needed to secure patient information.

13. Check or clear the Enabled check box to enable or disable the created by module.
14. Check or clear the check boxes, in the Entities region, for the entities secured by this data sharing group.

The DSS feature encapsulates the following entities modeled within TCA:

- Parties
- Person parties
- Organization parties
- Relationships
- Classification code assignments
- Party sites
- Locations
- Party contact points
- Party site contact points

15. Click the Apply button to create this data sharing group.

### **See Also**

Administering Data Sharing and Security on page 7-3

## Updating a Data Sharing Group

This process enables a TCA data security administrator to update existing data sharing groups by modifying the classifications, relationship roles, and entities of previously defined data sharing groups.

You can modify or update existing criteria based on changes in the application used to create and manage the information a TCA data security administrator secures. For example, if an enterprise plans to use Oracle Customers Online, in addition to its Oracle TeleService call center, the TCA data security administrator could modify an existing data sharing group used to protect customer information to include Oracle Customers Online, so that only users of the two applications can create, update or delete customer information modeled within TCA.

This page can only be accessed with the TCA Data Security Administrator responsibility.

### **To update the information about a data sharing group:**

1. Click the name of a data sharing group in the Data Sharing and Security Administration page. See Administration Process on page 7-5.
2. Modify the details of the data sharing group, as necessary, in the Update Data Sharing Group page.

In response to changes in their organization's business policies or requirements, TCA data security administrators can:

- Enable or disable an existing classification, relationship, or created-by module from the data sharing group.
- Edit or add classifications, relationships, or created-by modules.

See Creating a Data Sharing Group on page 7-7.

3. Click the Apply button.

### **See Also**

Administering Data Sharing and Security on page 7-3

## Assigning Privileges to Access a Data Sharing Group

This process enables TCA data security system administrators to assign specific users, responsibilities, or all users (public) to specific data sharing groups.

A data sharing group assignment is a special entity that associates any entity with a data sharing group. Due to the configurable nature of the Data Sharing and Security solution, not all TCA entities are directly associated with a data sharing group, but only those that require protection. When you assign data sharing group privileges, those users, responsibilities, or groups can access the information protected by that data sharing group.

### To assign data sharing and security access privileges to a responsibility or user:

1. On the Data Sharing and Security Administration page, click the Assign Privileges icon for a data sharing group. See Administration Process on page 7-5.
2. On the Assign Privileges page, select the type of grantee:
  - **Public:** All users
  - **Group:** Responsibility
  - **User:** Individual user
3. Enter the user or responsibility name of the grantee in the Name field, or use the list of values to find and select a user or responsibility name set up by the system administrator.
4. Check the appropriate check boxes to give create, update, or delete privileges to a grantee.
5. Click the Apply button.

### See Also

Administering Data Sharing and Security on page 7-3



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# Source System Management

This chapter describes how to administer Source System Management, including defining, updating, and viewing source systems.

## Source System Management Overview

Source System Management (SSM) allows you to maintain mappings between the TCA Registry and any external source system, such as a legacy or third party system, that loads data into the Registry. The source ID, or ID of the record in that external system, is mapped to the Registry ID of the TCA record, such as the party or contact point.

For example, you load a record with the ID 12345 from the Gorman system into the TCA Registry. That record is assigned the Registry ID 100 in the TCA Registry. The source ID, 12345, is mapped to Registry ID 100.

Source System Management allows for multiple source system mappings to one Registry ID. Examples of TCA entities that support multiple source system mappings include the Party, Location, and Customer Account entities. The mappings can be between one Registry ID and source IDs from multiple source systems, or, if enabled, between one Registry ID and multiple source IDs from the same source system.

For example, Registry ID 100 is mapped to source ID 12345 from the Gorman system and source ID 99999 from the Elcaro system. If multiple mappings from the same source is allowed for the entity, Registry ID 100 can be mapped to source IDs 12345 and 67890 from the same Gorman system.

By mapping the IDs from the sources of your customer data to the TCA Registry IDs, your source systems can continue to operate, sending updates to and receiving updates from TCA. This operational mapping between the TCA Registry and multiple source systems allows you to:

- Consolidate multiple customer databases, stored in various applications across different platforms, into the TCA Registry.
- Create, maintain, share, and leverage an operational, single view of your customer information, or Customer Hub, across your enterprise.

### See Also

Introduction to Administration on page 1-2

## Example

This example shows how Source System Management can be implemented and used.

1. You define external source systems and determine which target entities in the TCA Registry the source system can provide data for. See Administering Source System Management on page 8-5.

The mapping between the source system and TCA entity ensures that when you load data from that system into that entity, a record will be created to maintain the mapping between the source ID and the Registry ID.

For example, you define a source system called Gorman and specify that the system is actively providing data for the Party entity, HZ\_PARTIES.

2. You load data from an external system into the TCA Registry, specifying both the source system name and source ID.

For example, you load a record for a party named Joe Smith from the Gorman source system. You specify that the source system name is Gorman and that the source ID, or ID of Joe Smith in Gorman, is 12345.

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**Note:** If you specify only the source ID, the mapping is only inserted for customer account level entities with unique references, with the source system name defaulted to UNKNOWN.

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3. Users of an application that has implemented SSM can specify the source system name and source ID when they create or update records in the TCA Registry. They can also query records in the Registry using the source system name and source ID.

For example, the user enters a record for the party named Joe Smith and specify that the source system is Gorman and the source ID is 12345. Then, the user can query for Joe Smith using 12345 as the source ID and Gorman as the source system name.

4. You can encounter additional situations, for example:

- When a source system is no longer used to provide data to one or more entities, you update the source system definition from Step 1 to indicate that the source system is inactive for those entities.

This inactivation prevents additional mapping records from being created for that source system and TCA entity. Existing mappings to the source system remain active.

For example, you do not want to continue maintaining mappings between the Gorman source system and the TCA Registry for any new data loaded into the Party entity. You inactivate the Gorman system for this entity. The mappings between the Joe Smith record in the TCA Registry and the Joe Smith record in Gorman remain untouched.

- When a party record is inactivated in the source system, the mapping between the source ID and the Registry ID is not affected.

For example, the Joe Smith record in the Gorman system is inactivated. The mapping between Gorman 12345 and Joe Smith's Registry ID remains unchanged.

- When a party record is inactivated in the TCA Registry, the mapping between the source ID and the Registry ID is not affected. A BES callout for the party record inactivation is raised and applications that subscribe to the event are notified of the inactivation.

For example, the Joe Smith record in the HZ\_PARTIES table is inactivated. The mapping between Gorman 12345 and Joe Smith's Registry ID remains unchanged. A BES callout from HZ\_PARTIES is raised due to the inactivation, notifying subscribing applications.

## Administering Source System Management

Define source systems and map them to entities in the TCA Registry to administer Source System Management. You define which source systems are actively providing data to which specific entities. You cannot load data from a source system into a TCA entity unless the mapping between the source system and entity is defined and active.

You can search for source systems by TCA entity to find the source systems that are mapped to that entity.

With Source System Management administration, you can:

- Define and update source systems and their mappings to TCA entities, on page 8-6.
- View source system definitions, on page 8-8.

### See Also

Source System Management Overview on page 8-2

## Flexfields

The HZ\_ORIG\_SYS\_MAPPING table stores information about the mapping between source systems and TCA entities. The HZ\_ORIG\_SYSTEM\_REFERENCES table stores information about the mappings between source IDs and TCA Registry IDs.

For both tables, you can set up flexfields to store additional information about the mappings. Flexfields are additional data fields that can be customized for your organization's business needs.

**See Also:** Overview of Flexfields, *Oracle Applications User's Guide*

For more information about flexfields for the HZ\_ORIG\_SYS\_MAPPING table, see Flexfields for Mapping Information on page 8-7.

## Defining and Updating Source Systems

When you define the source system, you can enter the same value for the source system name and code. The code is used in the mapping records, for mappings between source IDs and Registry IDs. Users should enter the source system code when they load data into the TCA Registry. Source system codes are used to query mapping records.

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**Note:** You cannot update the source system code after you first define it.

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Even though you must map the source system to at least one TCA entity, you do not have to activate any of the entities. After you have entered an entity, you cannot remove it when you update the source system, but you can inactivate it.

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**Note:** Activations and inactivations do not affect existing mappings between the source system and Registry IDs in that entity.

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If mapping records exist, you can still change the setting from allowing to disallowing multiple source IDs from one source to map to a record in the specified entity. You cannot, however, change from disallow to allow. If no mapping records exist, you can update the setting either way.

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**Note:** You can never allow multiple source IDs from the D&B source system to map to one TCA record.

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### See Also

Administering Source System Management on page 8-5

## Flexfields for Mapping Information

You can set up flexfields in the HZ\_ORIG\_SYS\_MAPPING table to store additional information about the mappings between source systems and TCA entities. Flexfields are additional data fields that can be customized for your organization's business needs.

**See Also:** *Overview of Flexfields, Oracle Applications User's Guide*

If flexfields are set up, you can enter that additional information for the mappings when you create or update any source system.

For example, you set up a First Import Date flexfield to store the date when the source system is first used to import data for a specific TCA entity. The First Import Date flexfield appears in the Entities table for all source systems that you create or update.

Then, you update the Gorman source system by activating the mapping between Gorman and the HZ\_PARTIES entity because today, you are importing data for the first time from Gorman into HZ\_PARTIES. You can then enter today's date as the First Import Date flexfield value.

## Viewing Source Systems

The overview provides information about the source system and the entities mapped to the system. You can update most of this information. See [Defining and Updating Source Systems](#) on page 8-6.

### **See Also**

[Administering Source System Management](#) on page 8-5

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## Adapters

This chapter describes how to administer adapters, including defining, updating, and viewing adapter configurations.

## Administering Adapters

Adapters allow for data integration services between the TCA Registry and a third party or deploying company data source.

For example, the TCA address validation feature uses a central XML open-standards based "black box" that allows integration with third party service providers and custom solutions, through adapters that you or the third party provide. The black box can accept requests from callers, such as the Address Validation program, and integrate with adapters to process those requests

The Address Validation program sends requests with address data to the address validation black box, which passes an XML message request to the appropriate third party or custom adapter. The adapter validates the address data against its location libraries and returns an XML response to the Address Validation program. Through this process, addresses are validated in the TCA Registry against the standard address information that the adapter is linked to.

To use a third party or custom-made adapter with TCA, you must define and administer adapter configurations. For each adapter, you specify information such as the adapter name and description, the method used to invoke the adapter, and the XML message format that the adapter uses.

First you search for the adapter to administer, by name or the country that the adapters support. You can then:

- View adapter configurations.
- Update adapter configurations.
- Create adapter configurations after you verify from the search results that the adapters do not already exist.

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**Note:** Only enabled adapters can be used to process data from the TCA Registry.

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Also, define profile options for adapters. See Setting Profile Options on page A-2.

### See Also

Introduction to Administration on page 1-2

Configuring Adapters on page 9-3

## Configuring Adapters

When you view, create, or update adapter configurations, the information displayed or to be entered is the same. After you view an adapter, you can optionally update its configuration.

### Adapter Details

- **Message Format:** The XML message format that the adapter uses.
- **Default Batch Size:** The default number of records the adapter can handle in one batch. This number is used if the maximum batch size is not defined.
- **Maximum Batch Size:** The maximum number of records the adapter can handle in one batch. This number must be greater than or equal to 1.
- **Invoke Method:** The method used to communicate with the adapter, for example HTTP V1.1 Post.
- **Host Address:** The host address of the adapter, applicable only if the invoke method is HTTP.
- **Default Replace Status Code:** For adapters used with address validation, the default code that must be reached or exceeded for an address to be updated with data from the adapter service. This default code is used if the caller to address validation adapters does not specify a code.

For example, if the code is 2, the service linked to the adapter must validate a TCA address up to at least the street or thoroughfare level before updating that address with the service's standard address. Addresses with validation status 0, 1, or 2 would be updated.

This table describes the available status codes.

Status	Meaning	Description
0	Valid Address	The highest level of validation. The address has been certified deliverable based on postal authority certifications.
1	Multiple or Ambiguous Address	Address has been validated to the street level, but there is ambiguity to locate the specific address.
2	Street or Thoroughfare Match	Address has been validated to the street level, but no further.

Status	Meaning	Description
3	Municipality Match	Address has been validated to the city or town level, but no further.
4	Administrative Subdivision Match	Address has been validated to be within the country's main administrative subdivision, such as province or state, but no further.
5	Country Match	Address has only been validated to the country level, but no further.
6	No Match	Address could not be validated in any way.

### Adapter Countries

For adapters used with address validation, you specify the countries that the adapter supports. For example, if an adapter can validate only addresses from France and Australia, only those two countries should be listed. The adapter can process addresses only for countries that are enabled.

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**Note:** If an adapter is used to set the HZ: Default Location Service Adapter profile option, you cannot disable that adapter unless you set the profile option with another adapter. See Address Validation Profile Options on page A-8.

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You can indicate that the adapter is the default to use for specific countries. Only one adapter can be the default for each country. For example, if the Gorman adapter is already the default for Italian addresses, and you try to set Elcaro as the default adapter, you can either stay with Gorman or switch to Elcaro.

### See Also

Administering Adapters on page 9-2

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## Phones

This chapter describes administering phone numbers, including time zone information and phone formats.

## Administering Phones

In the TCA Registry, phone numbers can be of type telephone, fax, pager, or voice mail. For phone numbers, you can:

- Define time zone information for phone numbers based on country or area code.
- Define phone formats for parsing and displaying phone numbers.

### **See Also**

Introduction to Administration on page 1-2

## Defining Time Zones for Phones

For phone numbers in a country, you can define time zone information based on the country or its area codes. Countries with multiple time zones should not have a country time zone, but rather multiple area code time zones. You can set either a country time zone or area code time zones, but not both types.

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**Note:** The time zone information is not for mobile phone numbers or pagers.

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When you set a time zone at the country level, you permanently delete all area code time zones, if any exist, for that country. If you want to switch from a country time zone to area code time zones, you must first delete the country time zone.

To define area code time zones, you create or update area codes for the country. The area code description is usually the city or region that the area code encompasses. Multiple area codes can have the same time zone. If you want to switch from area code time zones to a single country time zone, just set the country time zone.

### See Also

Administering Phones on page 10-2

## Defining Phone Formats

Use the Define Phone Formats window to set up phone formats for parsing and displaying phone numbers. This window lets you define country-specific components of phone numbers, display format styles, and area codes. You can also specify country-specific mobile prefixes to determine if a phone number is mobile or not.

To display the phone number based on the phone formats that you define in this window, a user interface must call the parsing routine of the Phone Number Parsing API and the display routine of the Phone Number Formatting API. Parsing occurs only if the territory code is always specified as an input parameter for the Phone Number Parsing API.

**See Also:** Phone Number Parsing API, *Oracle Trading Community Architecture API User Notes*

**See Also:** Phone Number Formatting API, *Oracle Trading Community Architecture API User Notes*

In the Define Phone Formats window, you must set up phone formats for each country that you enter phone numbers for. The Phone Number Parsing API uses the phone formats to correctly parse phone numbers into these segments: phone country code, area code, and subscriber number. Phone formats also determine the correct format style for displaying phone numbers in user interfaces.

For example, for the US phone format, you define the phone country code as 01, the fixed area code as three numbers in length, the subscriber number as seven digits in length, and the format style as 999-999-9999. The Phone Number Parsing and Phone Number Formatting APIs parse and format phone numbers accordingly into three components. 1234567890 would be 01 phone country code, 123 area code, and 456-7890 subscriber number, and display as 123-456-7890.

### To define phone formats:

1. Navigate to the Define Phone Formats window.
2. Query the two-letter country code for the country that you want to define phone formats for.

3. Enter country-specific phone information:
  - **Phone code:** The phone country code, 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
  - **Trunk prefix:** The code to dial before long distance numbers within the country, for example 1 for the US
  - **Phone length and area code length:** The number of digits in the subscriber number and area code for this country, only if either is fixed
4. Define phone format styles in the Formats tabbed region:
  - In the Style field, use 9 to represent digits in the area code and subscriber number, and enter other characters as separators, for example, (999) 999-9999.

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**Note:** You can set up only one phone format style for each area code length. If a country has area code lengths of two three digits, you can set up two styles, for example, (99) 9999-9999 and (999) 999-9999.

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- In the Area Code Size field, enter the number of digits in the area code for each style.
5. Define area codes that you want to use for this country in the Area Codes tabbed region.
  6. Define mobile prefixes that you want to use for this country in the Mobile Prefixes tabbed region.

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.

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**Note:** Mobile prefixes work only in countries where subscriber prefixes are based on area codes.

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## See Also

Administering Phones on page 10-2



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## Profile Options

This appendix lists the profile options that affect the operation of Oracle Trading Community Architecture. This appendix includes a brief description of each profile option that you can set at the site, application, responsibility, or user levels.

## Setting Profile Options

During implementation, you set a value for each profile option to specify how Oracle Trading Community Architecture controls access to and processes data.

**See Also:** Overview of Setting User Profiles, *Oracle Applications System Administrator's Guide*

To set the profile options for Oracle Trading Community Architecture, see:

- Profile Option Descriptions on page A-4
- Profile Option Access and Defaults on page A-20

These profile options are not used or internally used by Oracle Trading Community Architecture. You should not modify their settings in any way.

- HZ: Address Key Index
- HZ: Allow User to Update Third Party Data
- HZ: Bank Branch Contact Point Validation Procedure
- HZ: Bank Branch Contact Validation Procedure
- HZ: Bank Branch Location Validation Procedure
- HZ: Bank Branch Site Validation Procedure
- HZ: Bank Branch Validation Procedure
- HZ: Bank Contact Point Validation Procedure
- HZ: Bank Contact Validation Procedure
- HZ: Bank Location Validation Procedure
- HZ: Bank Site Validation Procedure
- HZ: Bank Validation Procedure
- HZ: Banking Group Member Validation Procedure
- HZ: Banking Group Validation Procedure
- HZ: Clearinghouse Assignment Validation Procedure
- HZ: Created By Module
- HZ: D&B Policy Function Exists

- HZ: DQM Index Creation Workers
- HZ: Special Characters Enabled

## Profile Option Descriptions

To set profile options for general Oracle Trading Community Architecture implementation and administration, see General Profile Options on page A-5.

You can also set profile options for the following features, which are available from the Trading Community Manager responsibility.

- Adapters on page A-7
- Address Validation on page A-8
- Batch Duplicate Identification on page A-9
- Bulk Import on page A-9
- Data Quality Management on page A-11
- Data Sharing and Security on page A-12
- eLocations Spatial Data Integration on page A-12
- Relationship Manager on page A-13
- Third Party Data Integration on page A-13

These profile options are for the Customer Interface or Customer Account Merge features:

- HZ: Audit Customer Account Merge
- HZ: Number of Workers Used by Customer Interface
- HZ: Location Updatable

**See Also:** Overview of Receivables User Profile Options, *Oracle Receivables User Guide*

Oracle Trading Community Architecture profile options can also apply to other Oracle E-Business Suite applications that use TCA functionality.

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**Note:** To determine whether you should set a profile option for the Oracle E-Business Suite applications you have, check the documentation for those applications. Even if an application uses a specific TCA feature, not all profile options listed for that feature necessarily apply to each application.

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Some profile options are used only for other Oracle E-Business Suite applications that include TCA functionality. Those profile options do not affect features included for the Trading Community Manager responsibility. See Profile Options Only for Other Applications on page A-16.

### **See Also**

Setting Profile Options on page A-2

## **General Profile Options**

### **HZ: API Debug File Directory**

Specify the directory name where the file that stores API debug messages resides. The file is for all public TCA APIs and some internal APIs used in TCA.

### **HZ: API Debug File Name**

Specify the file name that stores API debug messages for all public TCA APIs and some internal APIs used in TCA.

### **HZ: Default Address Style**

Specify the default style that the Address Formatting API uses when the caller does not pass a style.

### **HZ: Default Name Style**

Specify the style to be used to construct the PARTY\_NAME column for a person name in the HZ\_PARTIES table. This style is also the default that the Name Formatting API uses when the caller does not pass a style.

### **HZ: Execute API Callouts**

Determine if TCA APIs raise business events when a TCA entity is created or updated. This profile option applies to all public TCA APIs and some internal APIs used in TCA. Leaving this profile option blank is the same as setting it to *No*.

### **HZ: Generate Contact Number**

Specify whether or not TCA automatically generates a contact number when the relevant API is used or called from a user interface to create a contact for an organization.

If the profile option is set to *Yes* or left blank, then users cannot enter the contact number when creating the contact. If set to *No*, users must enter the number.

**HZ: Generate Party Number**

Specify whether or not TCA automatically generates a Registry ID, or party number, when the relevant API is used or called from a user interface to create a party of type Organization or Person.

If the profile option is set to *Yes* or left blank, then users cannot enter the Registry ID when creating the party. If set to *No*, users must enter the number.

**HZ: Generate Party Site Number**

Specify whether or not TCA automatically generates a party site number when the relevant API is used or called from a user interface to create a party of type Organization or Person.

If the profile option is set to *Yes* or left blank, then users cannot enter the party site number when creating the party. If set to *No*, users must enter the number.

**HZ: Language for Country Display**

Specify the default language that the country name should be displayed in. If this profile option is left blank, then the country name is translated using the current session's NLS Language setting.

**HZ: Name/Address Backwards Compatibility**

Determine whether existing TCA name and AR address formatting routines should use the new TCA formatting routines, or continue with the previous behavior. Enter *Yes* for new or *No* for old routines.

**HZ: Profile Version Method for Updates**

Determine the type of person or organization profile versioning to use, if any. This profile option controls whether entering new information for an existing organization or person record updates that record, creates a new record, or only creates a new record if current system date and the last update date are different.

- **No Version:** When new data is entered about an organization or person profile, the existing organization or person profile record is updated with the new data. Entering new data does not create a new profile record.
- **New Version:** When new data is entered about an existing organization or person profile, a new organization or person profile record is created using the existing record and the newly entered data. This option is useful in environments that require the maintenance of detailed historical records, such as in healthcare applications.

- **One Day Version:** When new data is entered about an existing organization or person profile, the current system date and the last update date are compared. If these dates are the same, the existing profile record is updated. If the dates are different, a new organization or person profile record is created using the existing record and the newly entered data. This is the default behavior.

**HZ: Reference Language**

Specify the default language used in determining the appropriate name style formats. If this profile option is left blank, then the current session's NLS Language setting is used.

**HZ: Reference Territory**

Specify the default territory used in determining the appropriate address style formats. If this profile option is left blank, then the current session's NLS Territory setting is used. This profile option also controls whether an address is considered domestic or foreign, for showing or hiding the country name.

**HZ: Report Error on Obsolete Columns**

Determine whether internal APIs used in TCA report an error when users try to enter a value for an obsolete column. This profile option does not apply to public TCA APIs. Leaving this profile option blank is the same as setting it to *No*.

**HZ: Turn on File Debug**

Specify if you want all public TCA APIs and some internal APIs used in TCA to write errors to a file.

If you set this profile option to *Yes*, you can use the HZ: API Debug File Name profile option to specify the file name and the HZ: API Debug File Directory profile option to specify the directory where the file resides. Leaving this profile option blank is the same as setting it to *No*.

## Adapters Profile Option

**HZ: Create Log for Adapters**

Specify whether or not to create log entries in the HZ\_ADAPTER\_LOGS table for adapter processes, for example, address validation through an address validation adapter.

In the HZ\_ADAPTER\_LOGS table, the OUT\_DOC column stores the outbound XML documents and log files, and the IN\_DOC column stores the inbound XML documents and logs.

See *Administering Adapters* on page 9-2.

## Address Validation Profile Options

### **ECX: Log File Path**

**See Also:** Define System Profile Options, *Oracle XML Gateway User's Guide*

### **HZ: Allow Update to Standardized Address**

Specify whether or not users or programs can update addresses that were standardized by address validation adapters. Even if this profile option is set to *Yes*, updates are allowed only if they do not violate other validations, such as tax validation rules. If a standardized address is updated, it becomes eligible for revalidation in future address validation processes.

### **HZ: Default Location Service Adapter**

Specify the system-wide default address validation adapter to use, if you want to use only one adapter for all address validations. If no country-specific default adapter is selected by the user for a specific import or address validation process, this default adapter is also used.

### **HZ: Maintain Location History**

Specify whether or not to track the history of location and location profile records. If location history is maintained, then every update to a location's supported address elements is tracked in the HZ\_LOCATION\_PROFILES table for all content sources in the HZ\_LOCATIONS table. Supported address elements include the four address lines, city, state, county, and country.

### **HZ: Timeout Limit for Address Validation**

Specify the number of seconds that the address validation "black box" should wait for a response from the address validation adapter before timing out. The adapter receives the XML file that the black box sends, and should send a corresponding response to validate the addresses.

### **See Also**

Adapters Profile Option on page A-7

Setting Up Address Validation on page 2-6

## Batch Duplicate Identification Profile Option

### **DQM Match Rule for Batch Duplicate Identification**

Use the DQM Match Rule for Batch Duplicate Identification profile option to store the default match rule to use for batch duplicate identification. This match rule defaults in the Match Rule field of the Submit Duplicate Identification Batch window and can be overridden. See Setting Up Batch Duplicate Identification on page 2-8.

## Bulk Import Profile Options

### **HZ: Allow Import of Records with Disabled Lookups**

Specify whether or not data that reference disabled lookups are allowed to be imported in the TCA Registry. Normally, data can be loaded only if validated against enabled lookups.

### **HZ: Allow Updates of Address Records During Import**

Specify whether or not address records can be updated during the import if the existing address is not the same as the imported address.

### **HZ: Character Value to Indicate NULL During Import**

Specify the character value in the interface tables that, when imported into the TCA tables, would make the corresponding TCA character column null. If an interface table column is null, the corresponding TCA column, empty or not, is not affected by the import.

### **HZ: Date Value to Indicate NULL During Import**

Specify the date value in the interface tables that, when imported into the TCA tables, would make the corresponding TCA date column null. Use the date format *DD/MM/YYYY*. If an interface table column is null, the corresponding TCA column, empty or not, is not affected by the import.

### **HZ: Error Limit for Import**

Enter the number of errors allowed for an import before stopping the process. This functionality lets you limit the processing time for imports that have too many errors.

### **HZ: Number of Workers for Import**

Determine the number of parallel workers to use for the import process. Workers are processes that run at the same time to complete a task that would otherwise take longer with a single process.

**HZ: Numeric Value to Indicate NULL During Import**

Specify the numeric value in the interface tables that, when imported into the TCA tables, would make the corresponding numeric TCA column null. If an interface table column is null, the corresponding TCA column, empty or not, is not affected by the import.

**HZ: Use Data Sharing and Security During Import**

Specify whether or not to apply Data Sharing and Security (DSS) for record updates during import. DSS does not affect record inserts, even if this profile option is set to *Yes*. See Data Sharing and Security Overview on page 7-2.

**HZ: Use HR Security During Import**

Specify whether or not to apply HR security during import. HR security checks the interface tables and prevents updates to parties with HR information. If there are any records with a source system of *DEFAULT* and source ID of *PER%*, the import process would result in error. See Source System Management Overview on page 8-2.

**HZ: Validate Flexfields During Import**

Specify whether or not flexfields are validated during the import process. These tables have flexfields:

- HZ\_PARTIES
- HZ\_CONTACT\_POINTS
- HZ\_LOCATIONS
- HZ\_RELATIONSHIPS

**HZ: Work Unit Size for Import**

Enter the number of records for each work unit in an import process. Data in the interface tables are divided into work units for processing.

**See Also**

Setting Up Bulk Import on page 2-9

## Data Quality Management Profile Options

### **HZ: Do not use contact addresses and contact points for DQM Duplicate identification**

By default, Data Quality Management includes addresses and contact points of contacts for duplicate identification. If this profile option is not set, the default functionality prevails. Set the profile option to *Yes* if you do not want to include these entities for identifying duplicates.

### **HZ: DQM Index Creation Memory**

Use the HZ: DQM Index Creation Memory profile option to override the default amount of memory for the DQM Index Creation program to use to generate *interMedia* and B-Tree indexes. Enter the amount of memory in megabytes.

### **HZ: DQM Maximum Index Optimization Time**

Enter the maximum processing time, in minutes, allowed for the DQM Index Optimization program to optimize *interMedia* indexes, not B-Tree indexes. The specified time limit could prevent the optimization of all *interMedia* indexes.

### **HZ: Maximum Number of Match Results**

Enter the maximum number of matching records from a match rule. If the acquisition component of any match rule provides more than this number of records, the process that is using the match rule would result in error.

### **HZ: Number of Workers for DQM Duplicate Identification Program**

Determine the number of parallel workers to use for the DQM Duplicate Identification program. Workers are processes that run at the same time to complete a task that would otherwise take longer with a single process.

### **HZ: Stop Scoring After Reaching DQM Automerge Threshold**

Specify whether or not to stop scoring a record after its score reaches the automatic merge threshold. The score for such a record is the same as the automatic merge threshold, even if the score would be higher if scoring did not stop at the threshold. Set this profile option to *Yes* if you are concerned with performance and do not need exact record scores. Otherwise, select *No* or leave the profile option blank.

### **See Also**

Administering Data Quality Management on page 5-14

## Data Sharing and Security Profile Options

### **HZ: Data Sharing and Security Enabled**

Enter *Yes* or *No* to enable or disable the Data Sharing and Security feature. You can also limit TCA security features to a specific user by setting the profile option to *Yes* at the User level before generally releasing the functionality to ensure a controlled release. This profile option lets the system administrator control whom Data Sharing and Security applies to.

### **HZ: Default Data Sharing Group**

Enter the default data sharing group that should be assigned to any entity that does not match any of the defined data sharing group criteria.

### **See Also**

Administering Data Sharing and Security on page 7-3

## eLocations Spatial Data Integration Profile Options

### **Applications Proxy Port**

Set the proxy port to use for HTTP posts to eLocations. If you are on Release 11.5.6 or earlier, use the HZ: Web Server Proxy Port profile option instead.

### **Applications Server-Side Proxy Host And Domain**

Set the proxy host to use for HTTP posts to eLocations. If you are on Release 11.5.6 or earlier, use the HZ: Web Server Proxy Host Name profile option instead.

### **HZ: Spatial Provider URL**

This profile option stores the URL to use for HTTP posts to eLocations:  
*http://elocation.oracle.com/elocation/lbs.*

### **HZ: Web Server Proxy Host Name**

Set the proxy name to use for HTTP posts to eLocations. If you are on Release 11.5.7 or later, use the Applications Server-Side Proxy Host And Domain profile option instead.

### **HZ: Web Server Proxy Port**

Set the proxy port to use for HTTP posts to eLocations. If you are on Release 11.5.7 or later, use the Applications Proxy Port profile option instead.

### **See Also**

Setting Up eLocations Spatial Data Integration on page 2-15

## Relationship Manager Profile Option

### **HZ: Match Rule for Relationship Manager Search**

Specify the seeded or user-defined match rule that Relationship Manager uses to determine the search criteria and results for the DQM party search. You can use the RM SEARCH RULE match rule, which was seeded specifically for the Relationship Manager search. See Setting Up Relationship Manager on page 2-18.

## Third Party Data Integration Profile Options

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**Note:** D&B should provide you with the appropriate information for the D&B user name, D&B user password, and the D&B HTTPS URL. Your information technology organization should provide you with the information needed to set up the profile options related to the appropriate web server proxy. See Setting Up Third Party Data Integration on page 2-19.

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### **Apps Servlet Agent**

This profile option identifies the servlet agent URL (Apache listener) for your Oracle Applications instance. This URL is used to construct URLs for SERVLET and JSP type functions and has the format *http://:/. For example, [http://ap999us.oracle.com:8000/servlet\\_zone](http://ap999us.oracle.com:8000/servlet_zone).*

### **HZ: D&B Password**

Enter the password that D&B provides for you to log in to the D&B database.

If you have different user names and passwords for different users, set this profile option along with the HZ: D&B User Name profile option at the User level.

For example, if you want to assign the ORACLE1 user name and WELCOME password to the JSMITH user, you set these two profile options with the given values from D&B at the User level for JSMITH.

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**Tip:** If you want only users such as JSMITH to use the D&B integration, you should not also set this profile option at the site level.

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### **HZ: D&B URL**

Enter the URL that D&B provides for you to log in to the D&B database.

**HZ: D&B User Name**

Enter the user ID that D&B provides for you to log in to the D&B database.

If you have different user names and passwords for different users, set this profile option along with the HZ: D&B Password profile option at the User level.

For example, if you want to assign the ORACLE1 user name and WELCOME password to the JSMITH user, you set these two profile options with the given values from D&B at the User level for JSMITH.

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**Tip:** If you want only users such as JSMITH to use the D&B integration, you should not also set this profile option at the site level.

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**HZ: Third Party Data Integration Set Up for Organization Profile Entity**

Third Party Data Integration automatically sets this internal profile option to *Yes* after you set up at least one attribute in the Organization Profile entity with a third party data source and run the Third Party Data Integration Update program for the first time.

**HZ: Third Party Data Integration Set Up for Person Profile Entity**

Third Party Data Integration automatically sets this internal profile option to *Yes* after you set up at least one attribute in the Person Profile entity with a third party data source and run the Third Party Data Integration Update program for the first time.

**HZ: User Data Creation Rule**

Enter the user data creation rule that you want to assign at any of the profile option levels. For each Other entity, the rule determines whether the user can create new records or not.

**HZ: User Overwrite Rule**

Enter the user overwrite rule that you want to assign at any of the profile option levels. For each attribute in the single source of truth record, the rule determines whether user-entered data can overwrite third party data or not.

**HZ: Web Server Proxy Host Name**

If your organization uses a proxy server, enter the host name that your information technology group provides.

**HZ: Web Server Proxy Password**

Enter the password that your information technology group provides if your organization uses a proxy server. The password for the web server proxy might be optional if your web server proxy does not require it.

**HZ: Web Server Proxy Port**

If your organization uses a proxy server, enter the proxy port number that your information technology group provides.

**HZ: Web Server Proxy User Name**

Enter the user ID that your information technology group provides if your organization uses a proxy server. The user ID for the web server proxy might be optional if your web server proxy does not require it.

## Profile Options Only for Other Applications

Oracle Trading Community Architecture provides functionality that other applications in the Oracle E-Business Suite can use and include. These profile options are for those applications only and do not affect features included for the Trading Community Manager responsibility.

Some profile options that do apply to the features for Trading Community Manager responsibility also apply to other Oracle E-Business Suite applications. See Profile Option Descriptions on page A-4.

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**Note:** To determine whether you should set a profile option for the applications you have, check the documentation for those applications. Even if an application uses a specific TCA feature, not all profile options listed for that feature necessarily apply to each application.

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TCA provides profile options for other applications that use these features:

- Certification on page A-16
- Data Quality Management Search on page A-17
- Duplicate Identification on page A-18
- Duplicate Prevention on page A-18
- Fuzzy Search on page A-19
- Source System Management on page A-19
- Third Party Data Integration on page A-19

### Certification Profile Option

#### **HZ: Display Certification Level**

Specify whether or not the certification level is displayed in the user interface. This profile option setting applies to all Oracle e-Business Suite applications that are using the TCA certification feature.

## Data Quality Management Search Profile Options

### **DQM Match Rule for Search**

Specify the default match rule to use for Data Quality Management (DQM) searches. The match rule determines the available search criteria as well as the search results.

### **HZ: Enable DQM Party Search**

Determine whether Data Quality Management is enabled for organization and person searches. Set this profile option to *Yes* only if you provide a match rule for at least one of the following four profile options. DQM search is enabled only for searches that has an assigned match rule.

### **HZ: Match Rule for Organization Advanced Search**

Specify the seeded or user-defined match rule for determining the search criteria and results for the organization advanced search.

### **HZ: Match Rule for Organization Simple Search**

Specify the seeded or user-defined match rule for determining the search criteria and results for the organization simple search.

### **HZ: Match Rule for Person Advanced Search**

Specify the seeded or user-defined match rule for determining the search criteria and results for the person advanced search. Do not use a match rule that has the Organization Name attribute.

### **HZ: Match Rule for Person Simple Search**

Specify the seeded or user-defined match rule for determining the search criteria and results for the person simple search. Do not use a match rule that has the Organization Name attribute.

## Duplicate Identification Profile Options

### **DQM Match Rule for Online Duplicate Identification**

Specify the default match rule to use for preventing duplicates from entering the TCA Registry. This profile option can also be used to store the match rule for duplicate identification. Before you set this profile option, verify the feature that it applies to.

### **HZ: Allow access to submit merge requests**

Determine if users can mark potential duplicate organizations or persons to submit as a merge request to Oracle Data Librarian. Set this profile option to *Yes* only if your organization uses Oracle Data Librarian.

## Duplicate Prevention Profile Options

### **DQM Match Rule for Online Duplicate Identification**

Specify the default match rule to use for finding duplicates of entered or updated records, or for preventing duplicates from entering the TCA Registry. This profile option can also be used to store the match rule for duplicate prevention. Before you set this profile option, verify the feature that it applies to.

### **HZ: Duplicate Allowed**

Determine whether duplicate entry into the Registry is allowed or not. If you set the profile option to *Yes*, records with duplicates that exceed the override threshold as defined in the match rule can still be saved. The *No* default prevents such records from being saved.

### **HZ: Enable Duplicate Prevention at Party Creation**

Determine if duplicate prevention is enabled for organizations, persons, both, or neither. You can enable for organizations or persons only if you provide match rules for the appropriate match rules below.

### **HZ: Match Rule for Organization Duplicate Prevention**

Specify the seeded or user-defined match rule for identifying potential duplicates of the organization that the user is creating. Use match rules with the Duplicate Identification purpose.

### **HZ: Match Rule for Person Duplicate Prevention**

Specify the seeded or user-defined match rule for identifying potential duplicates of the person that the user is creating. Use match rules with the Duplicate Identification purpose.

## Fuzzy Search Profile Options

### **HZ: Address Key Length**

Specify the number of characters from the address line that are included in the address key.

### **HZ: Cleanse Fuzzy Key**

Determine whether or not internal and trailing vowels, not leading vowels, as well as double letters are removed in a word when creating name and address fuzzy keys.

### **HZ: Key Word Count**

Specify the number of words to include in the organization or group name fuzzy key. TCA uses this profile option during the creation of keys that allow fuzzy search.

### **HZ: Postal Code Key Length**

Specify the number of characters from the postal code to include in the address key. TCA uses this profile option during the creation of keys that allow fuzzy search.

## Source System Management Profile Option

### **HZ: Source System Mapping Access**

Specify the type of access for Source System Management (SSM) mapping. For example, you can set the Oracle Customers Online User responsibility to *View Only*, and Oracle Customers Online Superuser responsibility to *Create and Update*.

## Third Party Data Integration Profile Option

### **HZ: Allow access to D&B Online Purchase**

Specify whether users can access D&B purchase or not. Set this profile option to *Yes* only if you have a contract with D&B and have completed the integration with D&B.

## Profile Option Access and Defaults

This table shows whether the profile option is required or not and displays the default profile option value, or *No Default* if none exists. A required profile option must have an entered or default value for its related feature to function properly.

The User Access column indicates if you can view or update the profile option. The System Admin Access: User Level, Responsibility Level, Application Level, and Site Level columns show the type of access your system administrator has for setting the profile option at each level.

The available types of profile option access for you and your system administrator are:

- **Update:** You can update the profile option.
- **View Only:** You can view the profile option but cannot change it.
- **No Access:** You cannot view or change the profile option value.

Profile Option	Required	Default	User Access	System Admin Access: User Level	System Admin Access: Responsibility Level	System Admin Access: Application Level	System Admin Access: Site Level
Applications Proxy Port	Required (11.5.7 or later)	No Default	Update	Update	No Access	No Access	No Access
Applications Server-Side Proxy Host And Domain	Required (11.5.7 or later)	No Default	Update	Update	No Access	No Access	No Access
Apps Servlet Agent	Required	No Default	Visible	Update	Update	Update	Update
DQM Match Rule for Batch Duplicate Identification	Required	No Default	Update	Update	Update	Update	Update
DQM Match Rule for Online Duplicate Identification	Required	No Default	Update	Update	Update	Update	Update

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
DQM Match Rule for Search	Required	No Default	Update	Update	Update	Update	Update
HZ: Address Key Length	Optional	No Default	No Access	No Access	No Access	No Access	Update
HZ: Allow access to D&B Online Purchase	Required	Yes	Update	Update	Update	Update	Update
HZ: Allow access to submit merge requests	Required	Yes	Update	Update	Update	Update	Update
HZ: Allow Import of Records with Disabled Lookups	Required	Yes	Update	View Only	View Only	View Only	Update
HZ: Allow Update to Standardized Address	Required	Yes	Update	No Access	No Access	No Access	Update
HZ: Allow Updates of Address Records During Import	Required	Yes	Update	View Only	View Only	View Only	Update
HZ: API Debug File Directory	Required	No Default	Update	Update	Update	Update	Update
HZ: API Debug File Name	Required	No Default	Update	Update	Update	Update	Update
HZ: Character Value to Indicate NULL During Import	Optional	!	Update	View Only	View Only	View Only	Update
HZ: Cleanse Fuzzy Key	Optional	Yes	Update	No Access	No Access	No Access	No Access
HZ: Create Log for Adapters	Optional	No	Update	No Access	No Access	No Access	Update

## Profile Option Access and Defaults

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
HZ: D&B Password	Required	No Default	Update	Update	Update	Update	Update
HZ: D&B URL	Required	No Default	Update	Update	Update	Update	Update
HZ: D&B User Name	Required	No Default	Update	Update	Update	Update	Update
HZ: Data Sharing and Security Enabled	Required	No	No Access	Update	Update	Update	Update
HZ: Date Value to Indicate NULL During Import	Optional	01/01/4000	Update	View Only	View Only	View Only	Update
HZ: Default Address Style	Optional	No Default	Update	Update	Update	Update	Update
HZ: Default Data Sharing Group	Optional	No Default	No Access	View Only	View Only	View Only	Update
HZ: Default Location Service Adapter	Optional	No Default	Update	No Access	No Access	No Access	Update
HZ: Default Name Style	Optional	No Default	Update	Update	Update	Update	Update
HZ: Display Certification Level	Required	No	Visible	Visible	Visible	Visible	Update
HZ: Do not use contact addresses and contact points for DQM Duplicate identification	Optional	No Default	Update	Update	Update	Update	Update
HZ: DQM Index Creation Memory	Required	No Default	Update	Update	Update	Update	Update

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
HZ: DQM Maximum Index Optimization Time	Optional	No Default	Update	Update	Update	Update	Update
HZ: Duplicate Allowed	Required	No	Update	Update	Update	Update	Update
HZ: Enable DQM Party Search	Required	No	Update	No Access	Update	Update	Update
HZ: Enable Duplicate Prevention at Party Creation	Required	Disabled	Update	No Access	Update	Update	Update
HZ: Error Limit for Import	Optional	10000	Update	View Only	View Only	View Only	Update
HZ: Execute API Callouts	Required	No Default	Update	Update	Update	Update	Update
HZ: Generate Contact Number	Required	No Default	Update	Update	Update	Update	Update
HZ: Generate Party Number	Required	No Default	Update	Update	Update	Update	Update
HZ: Generate Party Site Number	Required	No Default	Update	Update	Update	Update	Update
HZ: Key Word Count	Optional	No Default	No Access	No Access	No Access	No Access	Update
HZ: Language for Country Display	Optional	No Default	Update	Update	Update	Update	Update
HZ: Maintain Location History	Optional	Yes	Update	No Access	No Access	No Access	Update
HZ: Match Rule for Organization Advanced Search	Required	No Default	Update	No Access	Update	Update	Update

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
HZ: Match Rule for Organization Duplicate Prevention	Required	No Default	Update	No Access	Update	Update	Update
HZ: Match Rule for Organization Simple Search	Required	No Default	Update	No Access	Update	Update	Update
HZ: Match Rule for Person Advanced Search	Required	No Default	Update	No Access	Update	Update	Update
HZ: Match Rule for Person Duplicate Prevention	Required	No Default	Update	No Access	Update	Update	Update
HZ: Match Rule for Person Simple Search	Required	No Default	Update	No Access	Update	Update	Update
HZ: Match Rule for Relationship Manager Search	Required	No Default	Update	Update	Update	Update	Update
HZ: Maximum Number of Match Results	Required	200	Update	Update	Update	Update	Update
HZ: Name/Address Backwards Compatibility	Required	Yes	Update	Update	Update	Update	Update
HZ: Number of Workers for DQM Duplicate Identification Program	Required	3	Update	Update	Update	Update	Update
HZ: Number of Workers for Import	Required	1	Update	Update	Update	Update	Update

Profile Option	Required	Default	User Access	System Admin Access: User Level	System Admin Access: Responsibility Level	System Admin Access: Application Level	System Admin Access: Site Level
HZ: Numeric Value to Indicate NULL During Import	Optional	-9999	Update	View Only	View Only	View Only	Update
HZ: Postal Code Key Length	Optional	No Default	No Access	No Access	No Access	No Access	Update
HZ: Profile Version Method for Updates	Required	No Default	View Only	View Only	View Only	View Only	Update
HZ: Reference Language	Optional	No Default	Update	Update	Update	Update	Update
HZ: Reference Territory	Optional	No Default	Update	Update	Update	Update	Update
HZ: Report Error on Obsolete Columns	Optional	No Default	Visible	No Access	No Access	No Access	Update
HZ: Source System Mapping Access	Required	<i>View Only</i>	Update	Update	Update	Update	Update
HZ: Spatial Provider URL	Required	<i>http://elocation.oracle.com/elocation/lbs</i>	Update	Update	Update	Update	Update
HZ: Stop Scoring After Reaching DQM Match Threshold	Optional	No Default	Update	Update	Update	Update	Update
HZ: Third Party Data Integration Set Up for Organization Profile Entity	Optional	No Default	No Access	View Only	View Only	View Only	View Only

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
HZ: Third Party Data Integration Set Up for Person Profile Entity	Optional	No Default	No Access	View Only	View Only	View Only	View Only
HZ: Timeout Limit for Address Validation	Required	300	Update	No Access	No Access	No Access	Update
HZ: Turn On File Debug	Required	No Default	Update	Update	Update	Update	Update
HZ: Use Data Sharing and Security During Import	Required	No	Update	View Only	View Only	View Only	Update
HZ: Use HR Security During Import	Required	No	Update	View Only	View Only	View Only	Update
HZ: User Data Creation Rule	Optional	No Default	View Only	Update	Update	Update	Update
HZ: User Overwrite Rule	Optional	No Default	View Only	Update	Update	Update	Update
HZ: Validate Flexfields During Import	Required	No	Update	View Only	View Only	View Only	Update
HZ: Web Server Proxy Host Name	Conditionally Required	No Default	Update	Update	Update	Update	Update
HZ: Web Server Proxy Password	Conditionally Required	No Default	Update	Update	Update	Update	Update
HZ: Web Server Proxy Port	Conditionally Required	No Default	Update	Update	Update	Update	Update

<b>Profile Option</b>	<b>Required</b>	<b>Default</b>	<b>User Access</b>	<b>System Admin Access: User Level</b>	<b>System Admin Access: Responsibility Level</b>	<b>System Admin Access: Application Level</b>	<b>System Admin Access: Site Level</b>
HZ: Web Server Proxy User Name	Conditionally Required	No Default	Update	Update	Update	Update	Update
HZ: Work Unit Size for Import	Required	10000	Update	Update	Update	Update	Update

### **See Also**

Setting Profile Options on page A-2



# B

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## Standard Navigation Paths

This appendix describes standard navigation paths for Oracle Trading Community Architecture administration.

## Standard Navigation Paths

Although your system administrator may have customized your navigator, typical navigation paths are shown in this table. Access all of these features through the Trading Community Manager responsibility.

<b>Feature</b>	<b>Functionality</b>	<b>Navigation Path</b>
Adapters	All	Trading Community > Administration > Adapters
Classifications	All	Trading Community > Administration > Classifications
Data Quality Management	Attributes and Transformations	Trading Community > Administration > DQM > Attributes and Transformations
Data Quality Management	Match Rules	Trading Community > Administration > DQM > Match Rules
Data Quality Management	Merge Dictionary	Trading Community > Administration > DQM > Merge Dictionary
Data Quality Management	Word Replacements	Trading Community > Administration > DQM > Word Replacements
Data Sharing and Security	All	Trading Community > Administration > Security > Data Sharing Groups
Phones	All	Trading Community > Administration > Phones
Phone Formats	Define Phone Formats	Setup > Define Phone Formats
Relationships	All	Trading Community > Administration > Relationships
Source System Management	All	Trading Community > Administration > Source Systems
Third Party Data Integration	Set Up Data Sources (Party Profile Entities)	Trading Community > Administration > Enrichment > Third Party Data Rules > Party Profile Entities > Set Up Data Sources  Trading Community > Administration > Security > Third Party Data Rules > Party Profile Entities > Set Up Data Sources

<b>Feature</b>	<b>Functionality</b>	<b>Navigation Path</b>
Third Party Data Integration	Set Up User Overwrite Rules	Trading Community > Administration > Enrichment > Third Party Data Rules > Party Profile Entities > Set Up User Overwrite Rules
		Trading Community > Administration > Security > Third Party Data Rules > Party Profile Entities > Set Up User Overwrite Rules
Third Party Data Integration	Set Up Third Party Overwrite Rule	Trading Community > Administration > Enrichment > Third Party Data Rules > Party Profile Entities > Set Up Third Party Overwrite Rule
		Trading Community > Administration > Security > Third Party Data Rules > Party Profile Entities > Set Up Third Party Overwrite Rule
Third Party Data Integration	Set Up Data Sources (Other Entities)	Trading Community > Administration > Enrichment > Third Party Data Rules > Other Entities > Set Up Data Sources
		Trading Community > Administration > Security > Third Party Data Rules > Other Entities > Set Up Data Sources
Third Party Data Integration	Set Up User Data Creation Rules	Trading Community > Administration > Enrichment > Third Party Data Rules > Other Entities > Set Up User Data Creation Rules
		Trading Community > Administration > Security > Third Party Data Rules > Other Entities > Set Up User Data Creation Rules



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