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Oracle Web Applications Desktop Integrator Implementation and Administration Guide, Release 12.2
Part No. E22007-14

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- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

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Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

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Preface

Intended Audience


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

- The principles and customary practices of your business area.
- Computer desktop application usage and terminology.

If you have never used Oracle E-Business Suite, we suggest you attend one or more of the Oracle E-Business Suite training classes available through Oracle University.

See Related Information Sources on page viii for more Oracle E-Business Suite product information.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

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

Structure

1 Introduction to Oracle Web Applications Desktop Integrator
Related Information Sources

This book is included in the Oracle E-Business Suite Documentation Library. If this guide refers you to other Oracle E-Business Suite documentation, use only the latest Release 12.2 versions of those guides.

Online Documentation

All Oracle E-Business Suite documentation is available online (HTML or PDF).

- **Online Help** - Online help patches (HTML) are available on My Oracle Support.

- **Oracle E-Business Suite Documentation Library** - This library, which is included in the Oracle E-Business Suite software distribution, provides PDF documentation as of the time of each release.


- **Release Notes** - For information about changes in this release, including new features, known issues, and other details, see the release notes for the relevant product, available on My Oracle Support.


Related Guides

You should have the following related books on hand. Depending on the requirements of your particular installation, you may also need additional manuals or guides.

**Oracle Application Framework Developer’s Guide**

This guide contains the coding standards followed by Oracle E-Business Suite Development to create applications with Oracle Application Framework. This guide is available in PDF format on My Oracle Support and as online documentation in JDeveloper 10g with Oracle Application Extension.

**Oracle E-Business Suite Concepts**
This book is intended for all those planning to deploy Oracle E-Business Suite Release 12.2, or contemplating significant changes to a configuration. After describing the Oracle E-Business Suite architecture and technology stack, it focuses on strategic topics, giving a broad outline of the actions needed to achieve a particular goal, plus the installation and configuration choices that may be available.

**Oracle E-Business Suite Desktop Integration Framework Developer’s Guide**

Oracle E-Business Suite Desktop Integration Framework is a development tool that lets you define custom integrators for use with Oracle Web Applications Desktop Integrator. This guide describes how to define and manage integrators and all associated supporting objects, as well as how to download and upload integrator definitions.

**Oracle E-Business Suite Flexfields Guide**

This guide provides flexfields planning, setup, and reference information for the Oracle E-Business Suite implementation team, as well as for users responsible for the ongoing maintenance of Oracle E-Business Suite product data. This guide also provides information on creating custom reports on flexfields data.

**Oracle E-Business Suite Installation Guide: Using Rapid Install**

This book describes how to run Rapid Install to perform a fresh installation of Oracle E-Business Suite Release 12.2 or to replace selected technology stack executables in an existing instance.

**Oracle E-Business Suite Maintenance Guide**

This guide explains how to patch an Oracle E-Business Suite system, describing the adop patching utility and providing guidelines and tips for performing typical patching operations. It also describes maintenance strategies and tools that can help keep a system running smoothly.

**Oracle E-Business Suite Multiple Organizations Implementation Guide**

This guide describes the multiple organizations concept in Oracle E-Business Suite. It describes setting up and working effectively with multiple organizations in Oracle E-Business Suite.

**Oracle E-Business Suite Security Guide**

This guide contains information on a comprehensive range of security-related topics, including access control, user management, function security, data security, secure configuration, and auditing. It also describes how Oracle E-Business Suite can be integrated into a single sign-on environment.

**Oracle E-Business Suite Setup Guide**

This guide contains information on system configuration tasks that are carried out either after installation or whenever there is a significant change to the system. The activities described include defining concurrent programs and managers, enabling Oracle Applications Manager features, and setting up printers and online help.

**Oracle E-Business Suite User’s Guide**
This guide explains how to navigate products, enter and query data, and run concurrent requests by means of the user interfaces (UI) of Oracle E-Business Suite. It includes basic information on setting preferences and customizing the UI. An introduction to Oracle Enterprise Command Centers is also included. Lastly, this guide describes accessibility features and keyboard shortcuts for Oracle E-Business Suite.

**Oracle General Ledger User's Guide**

This guide provides information on how to use Oracle General Ledger. Use this guide to learn how to create and maintain ledgers, ledger currencies, budgets, and journal entries. This guide also includes information about running financial reports.

**Oracle Report Manager User's Guide**

Oracle Report Manager is an online report distribution system that provides a secure and centralized location to produce and manage point-in-time reports. Oracle Report Manager users can be either report producers or report consumers. Use this guide for information on setting up and using Oracle Report Manager.

**Oracle XML Publisher Report Designer's Guide**

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Using Microsoft Word or Adobe Acrobat as the design tool, you can create pixel-perfect reports from the Oracle E-Business Suite. Use this guide to design your report layouts.

This guide is available through the Oracle E-Business Suite online help. For more information, see: *Notes for Using Oracle Business Intelligence Publisher 10g in Oracle E-Business Suite Release 12.2*, My Oracle Support Knowledge Document 1640073.1.

**Oracle XML Publisher Administration and Developer's Guide**

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Outputs include: PDF, HTML, Excel, RTF, and eText (for EDI and EFT transactions). Oracle XML Publisher can be used to generate reports based on existing Oracle E-Business Suite report data, or you can use Oracle XML Publisher’s data extraction engine to build your own queries. Oracle XML Publisher also provides a robust set of APIs to manage delivery of your reports via e-mail, fax, secure FTP, printer, WebDav, and more. This guide describes how to set up and administer Oracle XML Publisher as well as how to use the Application Programming Interface to build custom solutions.

This guide is available through the Oracle E-Business Suite online help. For more information, see: *Notes for Using Oracle Business Intelligence Publisher 10g in Oracle E-Business Suite Release 12.2*, My Oracle Support Knowledge Document 1640073.1.

**Integration Repository**

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a
complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the Oracle E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite 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 E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, 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 E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite 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.
Introduction to Oracle Web Applications Desktop Integrator

This chapter covers the following topics:

- Overview
- Key Features
- Using Oracle Web Applications Desktop Integrator
- Process Flow for Oracle Web Applications Desktop Integrator
- Accessing Oracle Web Applications Desktop Integrator

Overview

Oracle Web Applications Desktop Integrator brings Oracle E-Business Suite functionality to the desktop where the familiar Microsoft Excel, Word, and Project applications can be used to complete your Oracle E-Business Suite tasks. This guide provides instructions on using the Microsoft Excel functionality. For further information on using the Word and Project features, see the Oracle HRMS Configuring, Reporting, and System Administration Guide and the Oracle Projects Implementation Guide.

The Oracle Web Applications Desktop Integrator integration with Microsoft Excel enables you to bring your Oracle E-Business Suite data to a spreadsheet where familiar data entry and modeling techniques can be used to complete Oracle E-Business Suite tasks. You can create formatted spreadsheets on your desktop that allow you to download, view, edit, and create Oracle E-Business Suite data. Use data entry shortcuts (such as copying and pasting or dragging and dropping ranges of cells) or Excel formulas to calculate amounts to save time. You can combine speed and accuracy by invoking lists of values for fields within the spreadsheet.

After editing the spreadsheet, you can use the Oracle Web Applications Desktop Integrator validation functionality to validate the data before uploading it to Oracle E-Business Suite. Validation messages are returned to the spreadsheet, allowing you to identify and correct invalid data.
The fields that appear in the spreadsheet, their positions, and their default values can all be customized through the Oracle Web Applications Desktop Integrator Layout functionality. This allows you to create a more productive work environment by removing unnecessary fields from the spreadsheet, and by organizing the spreadsheet in a way that conforms to your practices.

Key Features

Oracle Web Applications Desktop Integrator includes the following features:

Works Via Internet
Oracle Web Applications Desktop Integrator uses Internet computing architecture to lower the total cost of ownership by having the product centrally installed and maintained. No installation is required on client machines; you need only a Web browser and Microsoft Excel. This architecture also provides superior performance over a WAN or dialup connection, since the exchange between client and server is simplified through the use of HTML.

Presents Oracle E-Business Suite Data in a Spreadsheet Interface
Spreadsheets provide a familiar interface that is common in the business environment. You can use familiar editing capabilities such as copying and pasting data, and moving ranges of cells to create or edit large amounts of data. Recurring data entry is possible by saving a spreadsheet, and then uploading it at needed intervals, such as every month or every quarter. Spreadsheets offer additional flexibility in the way work is done; they can be sent to others for approval or review, and they can be edited when disconnected from a network.

Validates Data
All data in the spreadsheet can be validated against Oracle E-Business Suite business rules before it is uploaded. This includes validation against key and descriptive flexfields. Data is validated against accounts, segment security rules, and cross validation rules. If any errors are found, messages are returned directly to the spreadsheet, enabling you to correct the errors and successfully upload the data.

Enables Customizations
You can use the layout functionality to determine what fields appear in your spreadsheet, where they appear, and if they contain default values. These definitions can be saved, reused, and modified as needed.

Automatically Imports Data
Oracle Web Applications Desktop Integrator automatically imports data into your Oracle Web Applications Desktop Integrator spreadsheets whenever you create them. This information can come from the Oracle E-Business Suite or from a text file. Imported information can be quickly modified in Excel, validated, and uploaded to the Oracle E-Business Suite. This feature can be useful when migrating data from a legacy system to the Oracle E-Business Suite.
Using Oracle Web Applications Desktop Integrator

The Oracle E-Business Suite task you perform on the desktop is determined by the integrator you select in Oracle Web Applications Desktop Integrator. Each seeded integrator is delivered with the Oracle E-Business Suite product that provides the functionality being integrated with the desktop. Additional information specific to each seeded integrator can be found in the product-specific documentation. For additional information about any custom integrators developed at your site using Oracle E-Business Suite Desktop Integration Framework, consult your system administrator.

You can access Oracle Web Applications Desktop Integrator functionality through a Self Service link on your personal home page.

Note: Oracle Web Applications Desktop Integrator occasionally introduces optional new features that are disabled by default in their initial release. You can enable such features through the associated profile options if you want to use them. However, if you encounter issues, it is recommended that you disable the features until they become standard in a release where they are enabled by default.

Prerequisites

The following are the prerequisites for Oracle Web Applications Desktop Integrator:

- A client PC with a supported version of Windows installed.
  
  For more information, see My Oracle Support Knowledge Document 1077728.1, *Microsoft Office Integration with Oracle E-Business Suite 11i and R12*.

- A Web browser supported by Oracle E-Business Suite installed on the client PC.
  


  For more information, see My Oracle Support Knowledge Document 1077728.1, *Microsoft Office Integration with Oracle E-Business Suite 11i and R12*.

- Optional: WinZip or 7Zip installed on the client PC, if you want to use compression to increase the number of records that you can upload to Oracle E-Business Suite at once. See: Compressing Data for Upload, page 3-15.
Using the Office Open XML Format

Beginning in Release 12.2.5, you can choose to create Oracle Web Applications Desktop Integrator spreadsheets according to the Office Open XML (OOXML) standard, an XML format developed by Microsoft to represent spreadsheets and other types of documents. When using the OOXML format, Oracle Web Applications Desktop Integrator creates the spreadsheet entirely on the Oracle E-Business Suite server, and the completed spreadsheet is then downloaded to the desktop. Upload processing is also performed on the server. With this option, no macros are used during document creation and limited macros are used during upload. Consequently, the Trust access to the VBA project object model security option is not required to work with OOXML documents. Also, because the processing is performed on the server, document creation and upload use minimal desktop resources.

Use the BNE: Enable OOXML Standard profile option to specify whether to use the OOXML format for your Oracle Web Applications Desktop Integrator documents. Beginning in Release 12.2.6, this profile option is set to Yes by default.

Note: Spreadsheets exported from Oracle Application Framework tables are always created as OOXML documents, regardless of the format your site uses for other spreadsheets.

Selecting Macro Security Settings in Microsoft Excel

In Microsoft Excel, you must select the macro security settings that you want to enable the macros used by Oracle Web Applications Desktop Integrator.

• If you do not use the OOXML format, then Oracle Web Applications Desktop Integrator creates an initial document named WebADI.xls on the server. After you download this document, it creates the actual integrator document on the desktop using VBA macros. Macros are also used for lists of values and features in the Oracle ribbon tab, including upload.

• If you use the OOXML format, then Oracle Web Applications Desktop Integrator create the document on the server without using macros, but limited macros are used for lists of values and features in the Oracle ribbon tab, including upload.

You can choose to set a medium macro security level, in which case you are prompted to enable the macros each time you open an Oracle Web Applications Desktop Integrator spreadsheet. Alternatively, you can set the BNE Enable Digital Signature profile option in Oracle E-Business Suite to have Oracle Web Applications Desktop Integrator affix a digital signature to the spreadsheets you create. In this case, you can select a high macro security level in Microsoft Excel. After you initially identify the Oracle Web Applications Desktop Integrator macros as coming from a trusted source, Microsoft Excel automatically allows the macros to run.
Note: If you do not enable macros with the appropriate setting, according to whether you use digital signatures or not, then the Oracle Web Applications Desktop Integrator features that use macros will not work.

- If you do not use OOXML and you do not enable macros, then Oracle Web Applications Desktop Integrator cannot create spreadsheets.
- If you do use OOXML but you do not enable macros, then Oracle Web Applications Desktop Integrator can create spreadsheets in the OOXML format on the server, but you cannot use lists of values or the Oracle ribbon tab features, including upload, when you are working with those spreadsheets.

Settings for Unsigned Spreadsheets

If you do not use digital signatures in Oracle Web Applications Desktop Integrator, then you must set your Microsoft Excel macro security to let you enable macros on a case by case basis. The steps to do so may vary depending on your version of Microsoft Excel. For example:

**For Microsoft Excel 2010, 2013, and 2016:**
1. Choose the File tab, and then choose Options. In the Options dialog box, choose Trust Center and then Trust Center Settings. In the Trust Center, choose Macro Settings.
2. Select the Disable all macros with notification option.
3. If you are not using OOXML, then select the Trust access to the VBA project object model option.

   **Note:** If you are using OOXML, then this option is not required.

Settings for Digitally Signed Spreadsheets

If you want to use digital signatures in Oracle Web Applications Desktop Integrator, set the BNE Enable Digital Signature profile option to Yes. When this option is set, Oracle Web Applications Desktop Integrator affixes a digital signature to the spreadsheets you create. You can then select a macro security level in Microsoft Excel that requires digital signatures. The steps to do so may vary depending on your version of Microsoft Excel. The following sections list example steps for some versions.

**For Microsoft Excel 2010, 2013, and 2016:**
1. Choose the File tab, and then choose Options. In the Options dialog box, choose
Trust Center and then Trust Center Settings. In the Trust Center, choose Macro Settings.

2. Select the Disable all macros except digitally signed macros option.

3. If you are not using OOXML, then select the Trust access to the VBA project object model option.

   Note: If you are using OOXML, then this option is not required.

Selecting Microsoft Internet Explorer Settings

If you use Microsoft Internet Explorer as your Web browser, select the following downloads setting so that you can download the spreadsheets created by Oracle Web Applications Desktop Integrator to your desktop.

1. From the Tools menu, select Internet Options and then select the Security tab.

2. Select the zone in which you are working, such as Trusted Sites, and select the Custom level button.

3. In the Downloads settings, select Enable for the File download option.

Additionally, select the following scripting setting so that Oracle Web Applications Desktop Integrator can complete the spreadsheet creation process.

1. From the Tools menu, select Internet Options and then select the Security tab.

2. Select the zone in which you are working, such as Trusted Sites, and select the Custom level button.

3. In the Scripting settings, select Enable for the Allow status bar updates via script option.

Setting the Reading Order for Right-to-Left Languages

If you use the OOXML format to create documents on the server, then Oracle Web Applications Desktop Integrator uses the current session language to determine the reading order. If the current session language is a right-to-left language such as Arabic or Hebrew, then the reading order is set to right-to-left in the spreadsheet.

However, if you do not use the OOXML format, then Oracle Web Applications Desktop Integrator creates the integrator document on the desktop. In this case, the reading order is determined by the language options set in Microsoft Excel. Ensure that you set the language options you want in Microsoft Excel before you create your document. For more information, see your Microsoft Excel documentation.
Selecting the Number Format Setting in Microsoft Excel
For consistency, ensure that the number format setting you select in Microsoft Excel matches the number format preference you specified in Oracle E-Business Suite.

Process Flow for Oracle Web Applications Desktop Integrator
Oracle Web Applications Desktop Integrator uses the following process to upload data to Oracle E-Business Suite:

1. Define a layout that determines what fields appear in your spreadsheet (conditional).
   
   **Note:** Layouts may already be defined for your spreadsheet. See the product-specific documentation to determine if you are required to define the layout.

2. Define a mapping to allow data to be imported into the spreadsheet (conditional).
   
   **Note:** A mapping may already be defined for your spreadsheet. See the product-specific documentation to determine if you are required to define a mapping.

3. Create the spreadsheet.

4. If the spreadsheet integration allows upload, you can upload the data to the Oracle E-Business Suite.

5. Monitor the progress of your upload.

Accessing Oracle Web Applications Desktop Integrator

**System Administrators:**
System administrators can access Oracle Web Applications Desktop Integrator functionality from the seeded Desktop Integration responsibility. Use this responsibility to access the following functionality:

- Create Document
- Define Layout
- Define Mapping
• Setup Options

• Define Stylesheet

• Manage Document Links

You can also add these functions to a custom responsibility.

**Note:** The Desktop Integration responsibility provides access to the user interfaces for the Oracle Web Applications Desktop Integrator functionality. However, an administrator must log in as a user who has been granted access to a particular integrator in order to work with that integrator, including defining layouts, defining mappings, and creating documents for the integrator. Specific security functions grant access to specific integrators. See the product documentation for the functions that must be added to your menu for you to have access to an integrator.

---

**End Users:**

Because Oracle Web Applications Desktop Integrator can be integrated with Oracle E-Business Suite applications according to product-specific business flows, end user access depends on individual product implementations.

Generally, the product implementation follows one of two methods:

• The product integrates the generate spreadsheet functionality within its own functional page flow. Oracle Web Applications Desktop Integrator is used in the background to generate the spreadsheet. This is the most common method.

• The product provides a self-service menu item that invokes the Oracle Web Applications Desktop Integrator Create Document user interface. Oracle Web Applications Desktop Integrator provides two versions of this interface. The default is the Create Document page, which lets users enter all document parameters in a single page. To display the Create Document page flow, which guides users through multiple pages to enter the document parameters, set the BNE: Enable Simplified Create Document profile option to No.

See the product-specific documentation for details on accessing the Desktop Integration functionality.

Additionally, if you enable exporting for tables in Oracle Application Framework pages, then an end user can select the Export Table Data to Excel icon for a table to create the corresponding spreadsheet. To enable exporting for Oracle Application Framework tables, set the FND: Enable BNE Table Integration profile option to True. For more information about this profile option, see Oracle Application Framework Profile Options in the *Oracle Application Framework Developer’s Guide*, available from My Oracle
Support Knowledge Document 1315485.1.
Defining Layouts

Layouts enable you to customize the user interface presented in your spreadsheet. Use the layout functionality to determine the fields in a spreadsheet, set their positions, and specify default values for the fields.

A layout must be available before you create a spreadsheet in the Create Document interface. Some integrators offer predefined layouts, or you can use the procedure described in this chapter to create a layout.

Note: For some products, the layouts are predefined and preselected. Therefore you cannot select an alternate layout during document creation.

Note: You must be granted access to an integrator to modify its layout. Specific security functions grant access to specific integrators. See the product-specific documentation for information regarding access to individual integrator layouts.

Use the Define Layout interface to perform the following:
• Define a new layout

• Modify an existing layout

• Duplicate a layout from the list and save it under a different name. You can then modify this duplicated layout.

• Delete a layout from the list

When you define a layout, you must first select the integrator to which the layout applies. Then choose to create a new layout or select an existing layout to update. You can then define the layout properties, including the following:

• A name for the layout.

• The fields that should appear in the context. The context appears at the beginning of the spreadsheet as read-only, contextual information. For example, use the context to display static information that does not vary from one instance to another.

• The fields that should appear in a header. A header includes fields whose values are the same for every record in the spreadsheet. This region appears after the context and before the line region in the spreadsheet.

If your document has one header, all fields that you identify as header fields will be displayed in a single vertical list. If you define multiple headers, they are displayed in multiple lists placed horizontally across your document. If your layout includes numerous header fields, consider defining multiple headers to make it easier for users to see all the header fields.

• The fields that should appear in the lines. The line region includes fields whose values can vary for different records in the spreadsheet. The rows of data in this region represent the records that will be uploaded to Oracle E-Business Suite. The line region appears after the header.

Oracle Web Applications Desktop Integrator provides two versions of the Define Layout interface. The default is the Define Layout page flow, which guides you through multiple pages to enter the layout properties. Alternatively, your administrator can enable the Define Layout page, which lets you enter all the layout properties in a single page after you have selected the integrator to which the layout applies.

To define a layout in the Define Layout page flow:

1. From the Oracle E-Business Suite navigator, select Define Layout. This menu item may be under the Desktop Integration responsibility, or it may be located under a different responsibility assigned to you by your system administrator.

2. Select the integrator. Oracle Web Applications Desktop Integrator displays any existing layouts for the integrator.
3. Choose **Create** to create a new layout, or select an existing layout and choose **Update** to modify it.

   To create a new layout based on an existing layout, select the existing layout and choose **Duplicate**. Enter a name for the new layout and choose **Apply**.

   To delete a layout that you no longer need, select the layout and choose **Delete**. Then choose **OK** in the confirmation page.

4. Enter a **Layout Name** and specify the **Number of Headers** to place across the top of the document.

   If your document has one header, all fields that you identify as header fields will display in a single list. If your layout includes numerous header fields, consider defining multiple headers to place them horizontally across the top of your document.

5. Determine the fields to be included in the layout, their placement, and their default values. The page displays a list of the required fields for this integrator and a list of optional fields.

   Some integrators offer the ability to display a graph of data from the rows in the lines region. In this case the **Include Graph of Lines Data** option appears in this page. Optionally select this option to specify that Oracle Web Applications Desktop Integrator should generate a graph automatically when the document is first downloaded. For example, you might want to select this option if the integrator has a content defined to populate the document with data during the initial download. If you do not select this option, then users must use one of the graph buttons from the Oracle ribbon tab in Microsoft Excel to generate a graph in their documents after the initial download. See: Viewing Graphs, page 3-8.

   All required fields must be included in your layout. Include optional fields by selecting the **Select** box. The following table describes the options available for the fields in your layout:

   | **Layout Field Options** |

<table>
<thead>
<tr>
<th><strong>Fields</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement</td>
<td>Defines the location of the field on the spreadsheet. You can select Context, Header, or Line.</td>
</tr>
<tr>
<td></td>
<td>If you specified that the document has multiple headers, select the one in which you want the field to appear, such as Header 1, Header 2, or Header 3.</td>
</tr>
</tbody>
</table>
Fields | Description
---|---
Default Value | Some fields may have predefined default values, or you can enter the default value here, using the appropriate format for the default type. For context fields, you should always define a default value.

**Note:** For a field that contains a date value, the format of the default value should match the date format defined for the integrator in the integrator LDT file.

Default Type | Indicates how Oracle Web Applications Desktop Integrator should obtain the default value.

The following table describes the available default types.

### Default Types

<table>
<thead>
<tr>
<th>Default Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>If you do not want to specify any default value, select this type and leave the Default Value field blank. None is the default setting for the Default Type option itself, for all fields in the layout. For context fields, you should always change this setting to specify a default type and a default value.</td>
</tr>
<tr>
<td>Constant</td>
<td>Select this type to use the text entered in the Default Value field as the default value in the spreadsheet.</td>
</tr>
<tr>
<td>Environment</td>
<td>Select this type to reference an environment variable when setting a default for a field. If you select this type, enter one of the following values in the Default Value field:</td>
</tr>
<tr>
<td></td>
<td>• <code>sysdate</code> - System date</td>
</tr>
<tr>
<td></td>
<td>• <code>database</code> - Name of the current database</td>
</tr>
<tr>
<td></td>
<td>• <code>oauser.id</code> - ID of your current Oracle E-Business Suite user</td>
</tr>
</tbody>
</table>
### Default Type Description

<table>
<thead>
<tr>
<th>Default Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Select this type to reference a runtime parameter from the document parameter list defined for the integrator. The parameters that can be referenced are specific to each integrator. See the product-specific documentation for the valid values to enter in the Default Value field for this default type. For more information, see: To define integrator information, <em>Oracle E-Business Suite Desktop Integration Framework Developer’s Guide</em> and To define a document parameter list, <em>Oracle E-Business Suite Desktop Integration Framework Developer’s Guide</em>.</td>
</tr>
</tbody>
</table>
| SQL          | Select this type to run a SQL statement to determine the default for the field. Oracle Web Applications Desktop Integrator runs the SQL statement entered in the Default Value field and automatically populates the spreadsheet with the results. If more than one value is returned from the query, Oracle Web Applications Desktop Integrator uses the first value. You can use the following tokens in the SQL statement that you enter in the Default Value field:  
  * `$profiles$.profilename` - Returns the value for the current user’s profile when you enter the name of the profile option.  
  * `$env$.userid` - Returns the current user ID.  
  * `$env$.appid` - Returns the current application ID.  
  * `$env$.respid` - Returns the current responsibility ID.  
  * `$env$.language` - Returns the current session language. |
<table>
<thead>
<tr>
<th>Default Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>Select this type to enter an Excel-compatible formula to determine the default value for a field. When you enter the formula in the Default Value field, follow the Excel formula syntax and enclose field names in brackets. For example: <code>[credit]+[debit]</code> Note that referencing the field names rather than the cell names prevents your formulas from being corrupted if the order of the fields is changed in the layout.</td>
</tr>
</tbody>
</table>

6. In the Create Layout page, define display properties for the page components. Use this page to mark fields as Read Only, to hide fields, and to move the fields up or down in the display order.

**Document Properties**

- **Protect Sheet** - Select Yes or No to set the state of the document when downloaded. A protected sheet will allow you to update the data fields but will not allow you to insert rows. Users can change this setting in Microsoft Excel.

- **Style Sheet** - Select a style sheet to apply to the document. See Defining a Style Sheet, page 2-28.

- **Apply Filters** - Select Yes to enable Microsoft Excel filters for the lines region when the document is downloaded. Users can change this setting in Microsoft Excel by selecting the Filters button in the Oracle ribbon tab.

- **Image** - If you want to display a branding image in the documents created with this layout, enter the file name of the image. For example, `MyCompanyImage.gif`. Ensure that you have placed the image in the OA_MEDIA virtual directory. The image you define here for the layout overrides any image specified at the style sheet level or in the Corporate Branding Image for Oracle Applications profile option. See: Implementing Branding Images, page 2-32.

**Graph Properties**

- Some integrators offer the ability to display a graph of data from the rows in the lines region. In this case you can specify the following properties to define how the graph should appear by default. These properties apply both to automatically generated graphs and to graphs that users add manually.

  - Enter a graph **Title**.

  - Select the **Graph Type**: Area, Bar, Column, Line, or Pie.
• Select the **Subtype**: 3D (three-dimensional) or 2D (two-dimensional).

• For 2D graphs, enter the titles for the **Category (X) Axis** and the **Series (Y) Axis**. For 3D graphs, enter the titles for the **Category (X) Axis**, the **Series (Y) Axis**, and the **Value (Z) Axis**.

• Enter the **Category Columns**. The data from these columns will be represented on the X axis. Separate each column name from the next with a comma. Each name entered must be a valid column name occurring in the layout definition.

• Enter the **Series Columns**. The data from these columns will be represented on the Y axis. Separate each column name from the next with a comma. Each name entered must be a valid column name occurring in the layout definition.

  **Tip**: Users can modify the graph within the downloaded document by selecting **Modify Graph Type** or **Modify Graph Options** from the Oracle ribbon tab in Microsoft Excel. See: Viewing Graphs, page 3-8.

**Context Field Properties**

• **Prompt Span** - enter the number of columns that the field prompt will span.

  **Important**: For context and header fields, you set the number of columns for the Prompt, Hint, and Data to span. You set the column widths for the fields at the Line level. Therefore, when setting the column spans for a header or context field, be aware that the width of a column is determined by the width of the line fields in the spreadsheet. See Design Considerations, page 2-18.

• **Hint Span** - enter the number of columns for the field hint to span. The hint for a field can include the following:
  • * - indicates the field is required.
  • List - indicates that the field provides a list of values. Double-click the field to invoke the list.
  • Data type - the data type for each field is always displayed. For example, Text or Number.

• **Data Span** - enter the number of columns for the data to span.

• **Move Up and Move Down** - optionally use these arrows to change the order of
the fields.

- Hide - select this option if you want the field hidden on the spreadsheet.

**Header Field Properties**

- Prompt Span - enter the number of columns that the field prompt will span.

  **Important:** For context and header fields, you set the number of columns for the Prompt, Hint, and Data to span. You set the column widths for the fields at the Line level. Therefore, when setting the column spans for a header or context field, be aware that the width of a column is determined by the width of the line fields in the spreadsheet. See Design Considerations, page 2-18.

- Title - optionally enter a title for the header.

- Hint Span - enter the number of columns for the field hint to span. The hint for a field can include the following:
  - * - indicates the field is required.
  - List - indicates that the field provides a list of values. Double-click the field to invoke the list.
  - Data type - the data type for each field is always displayed. For example, Text or Number.

- Data Span - enter the number of columns for the data to span.

- Move Up and Move Down - optionally use these arrows to change the order of the fields.

- Hide - select this option if you want the field hidden on the spreadsheet.

- Read Only - select this option if you want the field to display as a non-updateable, read-only field.

**Line Region Properties**

- Data Entry Rows - enter the number of blank rows to display when the document is generated. Users can add more rows once the document is downloaded to Excel.

  **Note:** The maximum number of data entry rows is limited by the number of rows that Microsoft Excel allows in a worksheet.
When you use Microsoft Excel 2010 and higher with Oracle Web Applications Desktop Integrator Release 12.2.6 and higher, the maximum value for the Data Entry Rows field is 1,048,000 rows.

If your site is not using the OOXML format, use caution when specifying the Data Entry Rows setting. Specifying a large number of data entry rows significantly increases the time required to create and upload Oracle Web Applications Desktop Integrator documents.

If your site is using the OOXML format, then the document creation and upload processing is performed on the server. In this case the processing is significantly faster than if you do not use OOXML, but requires a larger server heap memory. You should review the server heap memory setting to ensure it is appropriate for this configuration.

- Move Up and Move Down - optionally use these arrows to change the order of the fields.
- Read Only - select this option if you want the field to display as a non-updateable, read-only field.
- Width - enter the width of the field in characters.
- Frozen Pane - use this option to set the fields that you want to remain visible while users scroll horizontally across the spreadsheet. All fields before the field for which you select the Frozen Pane option will be fixed in the spreadsheet and remain visible. Select the first field in the list if you do not want a frozen pane.

**To define a layout in the simplified Define Layout page:**

1. From the Oracle E-Business Suite navigator, select Define Layout. This menu item may be under the Desktop Integration responsibility, or it may be located under a different responsibility assigned to you by your system administrator.

2. Select the integrator. You can optionally enter a complete or partial layout name to search for layouts whose names match that value. Leave the layout name blank to search for all existing layouts for the integrator. Then choose Go. Oracle Web Applications Desktop Integrator displays the layouts that match your search criteria.

   **Note:** The number of integrators displayed in the list of values for the Integrator Name field is limited by the FND: View Object Max
Fetch Size profile option. By default, this profile option is set to 200 records. If the list of values does not display all your integrators, set the FND: View Object Max Fetch Size profile option to a value equal to or higher than the number of integrators defined in your instance. For more information about this profile option, see the Oracle Application Framework Developer’s Guide, available from My Oracle Support Knowledge Document 1315485.1.

3. Choose the action you want to perform.
   - To define a new layout, choose Create Layout.
   - To modify an existing layout, choose the Update icon for that layout.
   - To create a new layout based on an existing layout, choose the Duplicate icon for the existing layout.
   - To delete a layout that you no longer need, choose the Delete icon for that layout and confirm the deletion in the warning dialog.

   If you chose to create, update, or duplicate a layout, continue with the following steps to define the layout properties in the Create Layout, Update Layout, or Duplicate Layout page, respectively.

4. Enter a name for the layout.
5. Select a style sheet to apply to the documents created with this layout. See Defining a Style Sheet, page 2-28.
6. If you want to display a branding image in the documents created with this layout, enter the file name of the image. For example, MyCompanyImage.gif. Ensure that you have placed the image in the OA_MEDIA virtual directory. The image you define here for the layout overrides any image specified at the style sheet level or in the Corporate Branding Image for Oracle Applications profile option. See: Implementing Branding Images, page 2-32.

7. Optionally select the Protect Sheet option to set the state of the document to protected when it is first downloaded. A protected sheet lets users update the data fields but does not let them insert rows. Users can change this setting in Microsoft Excel.

8. Optionally select the Apply Filters option to enable Microsoft Excel filters for the lines region when the document is first downloaded. Users can change this setting in Microsoft Excel by selecting the Filters button in the Oracle ribbon tab.

9. Some integrators offer the ability to display a graph of data from the rows in the
lines region. In this case the Graph region appears in this page.

Optionally select the **Automatically Generate Graph** option to specify that Oracle Web Applications Desktop Integrator should generate a graph automatically when the document is first downloaded. For example, you might want to select this option if the integrator has a content defined to populate the document with data during the initial download. If you do not select this option, then users must use one of the graph buttons from the Oracle ribbon tab in Microsoft Excel to generate a graph in their documents after the initial download. See: Viewing Graphs, page 3-8.

Specify the following properties to define how the graph should appear by default. These properties apply both to automatically generated graphs and to graphs that users add manually.

- Enter a graph title.
- Select the graph type: **Area**, **Bar**, **Column**, **Line**, or **Pie**.
- Select the subtype: **3D** (three-dimensional) or **2D** (two-dimensional).
- For 2D graphs, enter the titles for the Category (X) axis and the Series (Y) axis.
  For 3D graphs, enter the titles for the Category (X) axis, the Series (Y) axis, and the Value (Z) axis.

Additionally, when you set the properties for the line fields in the Line region of this page, you should specify the fields that will be represented on the X axis and the fields that will be represented on the Y axis. See step 19.

**Tip:** Users can modify the graph within the downloaded document by selecting **Modify Graph Type** or **Modify Graph Options** from the Oracle ribbon tab in Microsoft Excel. See: Viewing Graphs, page 3-8.

10. In the Context region, enter the following overall properties for the context fields.

- Prompt Span - Enter the number of columns that the field prompt will span.

  **Important:** For context and header fields, you set the number of columns for the prompt, hint, and data to span. You set the column widths for the fields at the line level. Therefore, when setting the column spans for a header or context field, be aware that the width of a column is determined by the width of the line fields in the spreadsheet. See Design Considerations, page 2-18.
• Hint Span - Enter the number of columns that the field hint will span. When determining the width required for the hint, note that the hint for a field can include the following:
  • * - Indicates that the field is required.
  • List - Indicates that the field provides a list of values. The user can double-click the field to invoke the list.
  • Data type - The data type for each field is always displayed. For example, Text or Number.

• Data Span - Enter the number of columns that the data will span.

11. Specify the fields to include as context fields in the layout. Choose Add Optional Fields to add available fields to the context. You can also move fields from a header or from the Line region to the context.

If you do not want a field to appear in the context, you can move it to a header or to the Line region, or, if the field is optional, you can remove it from the layout.

12. Set the properties for each context field.
  • Optionally select the Hide option to hide the field in the spreadsheet.
  • Enter a default value for the field, using the appropriate format for the default type. Some fields may have a predefined default value specified in the integrator definition. You should always define a default value for context fields.
    
    Note: For a field that contains a date value, the format of the default value should match the date format defined for the integrator in the integrator LDT file.

  • Select the default type that indicates how Oracle Web Applications Desktop Integrator should obtain the default value. The following table describes the available default types.
**Default Types**

<table>
<thead>
<tr>
<th>Default Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>If you do not want to specify any default value, select this type and leave the Default Value field blank. If you do not want to specify any default value, select this type and leave the Default Value field blank. None is the default setting for the Default Type option itself, for all fields in the layout. For context fields, you should always change this setting to specify a default type and a default value.</td>
</tr>
<tr>
<td>Constant</td>
<td>Select this type to use the text entered in the Default Value field as the default value in the spreadsheet.</td>
</tr>
</tbody>
</table>
| Environment | Select this type to reference an environment variable when setting a default for a field. If you select this type, enter one of the following values in the Default Value field:  
  * `sysdate` - System date  
  * `database` - Name of the current database  
  * `oauser.id` - ID of your current Oracle E-Business Suite user |
<p>| Parameter | Select this type to reference a runtime parameter from the document parameter list defined for the integrator. The parameters that can be referenced are specific to each integrator. See the product-specific documentation for the valid values to enter in the Default Value field for this default type. For more information, see: To define integrator information, <em>Oracle E-Business Suite Desktop Integration Framework Developer’s Guide</em> and To define a document parameter list, <em>Oracle E-Business Suite Desktop Integration Framework Developer’s Guide</em>. |</p>
<table>
<thead>
<tr>
<th>Default Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| SQL          | Select this type to run a SQL statement to determine the default for the field. Oracle Web Applications Desktop Integrator runs the SQL statement entered in the Default Value field and automatically populates the spreadsheet with the results. If more than one value is returned from the query, Oracle Web Applications Desktop Integrator uses the first value. You can use the following tokens in the SQL statement that you enter in the Default Value field:  
  - `$profiles$.profilename` - Returns the value for the current user’s profile when you enter the name of the profile option.  
  - `$env$.userid` - Returns the current user ID.  
  - `$env$.appid` - Returns the current application ID.  
  - `$env$.respid` - Returns the current responsibility ID.  
  - `$env$.language` - Returns the current session language. |
| Formula      | Select this type to enter an Excel-compatible formula to determine the default value for a field. When you enter the formula in the Default Value field, follow the Excel formula syntax and enclose field names in brackets. For example: `[credit]+[debit]`  
Note that referencing the field names rather than the cell names prevents your formulas from being corrupted if the order of the fields is changed in the layout. |

- The context fields will appear in the same order in the spreadsheet as they do in the list in this page. Use the Move Up and Move Down icons to place the fields in the order you want.

- If you do not want a listed field to appear in the context, select the Move To icon and select the part of the layout where you want to move the field, either a header or the Line region. Alternatively, if the field is optional, select the Remove icon to remove it from the layout.
13. In the Headers region, select the number of headers to include in the layout and choose Apply. The page then displays a region to define each header, identified as Header 1, Header 2, Header 3, and so on. You can include up to 10 headers. If you do not want to include a header, select 0.

If your document has one header, all fields that you identify as header fields will be displayed in a single vertical list. If you define multiple headers, they are displayed in multiple lists placed horizontally across your document. If your layout includes numerous header fields, consider defining multiple headers to make it easier for users to see all the header fields.

14. In each header region, enter the following overall properties for the header.
   - Title - Optionally enter a title for the header.
   - Prompt Span - Enter the number of columns that the field prompt will span.

     Important: For context and header fields, you set the number of columns for the prompt, hint, and data to span. You set the column widths for the fields at the line level. Therefore, when setting the column spans for a header or context field, be aware that the width of a column is determined by the width of the line fields in the spreadsheet. See Design Considerations, page 2-18.

   - Hint Span - Enter the number of columns that the field hint will span. When determining the width required for the hint, note that the hint for a field can include the following:
     - * - Indicates that the field is required.
     - List - Indicates that the field provides a list of values. The user can double-click the field to invoke the list.
     - Data type - The data type for each field is always displayed. For example, Text or Number.

   - Data Span - Enter the number of columns that the data will span.

15. Specify the fields to include in this header. Choose Add Optional Fields to add available fields to the header. You can also move fields from the context, from another header, or from the Line region to this header.

    If you do not want a field to appear in this header, you can move it to the context, to another header, or to the Line region. Alternatively, if the field is optional, you can remove it from the layout.
16. Set the properties for each header field.

   - Optionally select the Read Only option if you want the field to appear as a nonupdatable, read-only field.

   - Optionally select the Hide option to hide the field in the spreadsheet.

   - Optionally enter a default value for the field, using the appropriate format for the default type. Some fields may have a predefined default value specified in the integrator definition.

     **Note:** For a field that contains a date value, the format of the default value should match the date format defined for the integrator in the integrator LDT file.

   - Select the default type that indicates how Oracle Web Applications Desktop Integrator should obtain the default value. The available default types are the same as those for the context fields.

   - The header fields will appear in the same order in the spreadsheet as they do in the list in this page. Use the Move Up and Move Down icons to place the fields in the order you want.

   - If you do not want a listed field to appear in this header, select the Move To icon and select the part of the layout where you want to move the field, either the context, another header, or the Line region. Alternatively, if the field is optional, select the Remove icon to remove it from the layout.

17. In the Line region, in the Data Entry Rows field, enter the number of blank rows to display when the document is generated. Users can add more rows once the document is downloaded to Microsoft Excel.

     **Note:** The maximum number of data entry rows is limited by the number of rows that Microsoft Excel allows in a worksheet. When you use Microsoft Excel 2010 and higher with Oracle Web Applications Desktop Integrator Release 12.2.6 and higher, the maximum value for the Data Entry Rows field is 1,048,000 rows.

     If your site is not using the OOXML format, use caution when specifying the Data Entry Rows setting. Specifying a large number of data entry rows significantly increases the time required to create and upload Oracle Web Applications Desktop Integrator documents.

     If your site is using the OOXML format, then the document creation and upload processing is performed on the server. In this
In this case the processing is significantly faster than if you do not use OOXML, but requires a larger server heap memory. You should review the server heap memory setting to ensure it is appropriate for this configuration.

18. Specify the fields to include in the lines in the layout. Choose **Add Optional Fields** to add available fields to the lines. You can also move fields from the context or from a header to the lines.

If you do not want a field to appear in the lines, you can move it to the context or to a header, or, if the field is optional, you can remove it from the layout.

19. Set the properties for each line field.

- Optionally select the Read Only option if you want the field to appear as a nonupdatable, read-only field.
- Enter the width of the field in characters.
- Use the Frozen Pane option to determine which fields remain visible while users scroll horizontally across the spreadsheet. All fields before the field for which you select the Frozen Pane option will be fixed in the spreadsheet and remain visible. If you do not want a frozen pane, then select the first field in the list.
- Optionally enter a default value for the field, using the appropriate format for the default type. Some fields may have a predefined default value specified in the integrator definition.

  **Note:** For a field that contains a date value, the format of the default value should match the date format defined for the integrator in the integrator LDT file.

- Select the default type that indicates how Oracle Web Applications Desktop Integrator should obtain the default value. The available default types are the same as those for the context fields.
- If this integrator offers the ability to display a graph, then the Graph Location option appears to let you specify where the data from the field will be represented in the graph by default.
  - **Category** - The data from this field will be represented on the Category (X) axis.
  - **Data** - The data from this field will be represented on the Series (Y) axis.
You can include multiple fields on each axis. If you do not want a field to be included in the graph, leave the Graph Location field blank. Ensure that you have also specified the related graph properties described in step 9.

- The line fields will appear in the same order in the spreadsheet as they do in the list in this page. Use the Move Up and Move Down icons to place the fields in the order you want.

- If you do not want a listed field to appear in the lines, select the Move To icon and select the part of the layout where you want to move the field, either the context or a header. Alternatively, if the field is optional, select the Remove icon to remove it from the layout.

20. Choose **Apply** to save the layout definition.

**Design Considerations:**

The width of columns in a spreadsheet is set at the line item level. Consequently, when setting the column spans for context and header fields, you must consider the widths of the corresponding line item columns. The following example shows the layout specifications for the Context fields and how these specifications are rendered in the actual document. The Context Prompt Span is defined as 5 columns and the Context Data Span is defined as 4 columns. Note that in the resulting spreadsheet, the context prompts span the five columns B through F.

- Column B is the automatically generated Upload line item column.

- Column C is the Period line item column.

- Columns D, E, and F are key flexfield segment columns.

The context data following the context prompts span the 4 columns G through J.

**Note:** The examples in this section show the layout specifications defined in the simplified Define Layout page. The layout properties appear slightly differently in the Define Layout page flow, but you can define the same properties in both interfaces.
**Example 1 - Layout Specifications**

**Update Layout**

- Indicates required field
- Layout Name: Budgets - Single
- Style Sheet: Default

**Context**

- Prompt Span: 5
- Hint Span: 2
- Data Span: 4

**Add Optional Fields**

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Hide Default Value</th>
<th>Default Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Type</td>
<td>B</td>
<td>Constant</td>
<td>Move Up</td>
</tr>
<tr>
<td>Database</td>
<td>None</td>
<td></td>
<td>Move Down</td>
</tr>
<tr>
<td>Data Access Set</td>
<td>None</td>
<td></td>
<td>Move To Remove</td>
</tr>
<tr>
<td>Chart Of Accounts</td>
<td>None</td>
<td></td>
<td>Remove</td>
</tr>
</tbody>
</table>

**Headers**
The next example shows the Hint Span for the Header set to 1. In this case because the column that the hint falls into is narrow, the full hints are not displayed. To display the full hint text in this example, expand the Hint Span to 3.
### Example 2 - Layout Specifications

#### Headers

<table>
<thead>
<tr>
<th>Number Of Headers</th>
<th>1</th>
</tr>
</thead>
</table>

**Header 1**

<table>
<thead>
<tr>
<th>Field</th>
<th>Read Only</th>
<th>Hide Default Value</th>
<th>Default Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ledger</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
<tr>
<td>Currency</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
<tr>
<td>Budget</td>
<td></td>
<td></td>
<td>None</td>
<td><img src="Icon" alt="Move Up" />, <img src="Icon" alt="Move Down" />, <img src="Icon" alt="Move To Remove" /></td>
</tr>
</tbody>
</table>

#### Line
Example 2 - Resulting Spreadsheet

The following example shows the same document after increasing the Header Hint Span to 3, to accommodate the full hint text.
Example 3 - Layout Specifications

Headers

Number Of Headers 1

Header 1

Title
Prompt Span 2
Hint Span 3
Data Span 2

Add Optional Fields

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Read Only</th>
<th>Hide Default Value</th>
<th>Default Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ledger</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Line
Note that achieving the desired layout might require several iterations, because changing the column spans for the fields in the first header will affect the placement of the fields in subsequent headers. For example, if changing the Hint Span for Header 1 moves the hint text for Header 2 to a narrower column, then you should also change the Hint Span for Header 2 to accommodate that hint text.

**Defining Mappings**

You can choose to automatically import data into the spreadsheet in the Create Document interface, as described in Creating a Document, page 3-1. When you choose to import data on the Content page, Oracle Web Applications Desktop Integrator prompts you to select a mapping. Oracle Web Applications Desktop Integrator requires a mapping in order to determine where imported data should be placed in the spreadsheet.

Mapping associates columns in the imported source data with columns in the spreadsheet. You do not need to create new mappings for fields that do not have data, or if a mapped field is not included in the spreadsheet. You need to create multiple mappings for a content only if the associations between the downloaded columns and the fields in the spreadsheet change. If you import text files with varied data structures, you may need to define more than one mapping for each text file variation.

**Note:** Do not modify contents that download data from Oracle E-Business Suite.
**Note:** To modify an integrator’s mappings, you must be granted access to the integrator. Specific security functions grant access to specific integrators. See the product documentation for the functions that must be added to your menu for you to have access to an integrator’s list of mappings.

Oracle Web Applications Desktop Integrator provides two versions of the Define Mapping interface. The default is the Define Mapping page flow, which guides you through multiple pages to enter the mapping properties. Alternatively, your administrator can enable the Define Mapping page, which lets you enter all the mapping properties in a single page after you have selected the integrator to which the mapping applies.

**To define a mapping in the Define Mapping page flow:**

1. From the Oracle E-Business Suite navigator, select the Define Mapping link. This may be under the Desktop Integration responsibility, or it may be located under a different responsibility assigned to you by your system administrator.

2. In the Mapping page, select an integrator.

3. If the integrator has more than one content defined, then in the Select Content page, select a content to import.

   Content indicates the information you will import into your spreadsheet. One or more mappings can be defined for a particular content.

4. Choose Define Mapping to define a new mapping, or choose Update for an existing mapping to modify it.

   To define a new mapping based on an existing mapping, choose Duplicate for the existing mapping. Enter the name and unique key for the new mapping, and choose Apply.

   To delete a mapping that you no longer need, choose Delete for that mapping. Then choose OK in the confirmation page.

5. Enter a name and a unique key for the mapping and the number of columns to be mapped.

   If you are updating an existing mapping, you can update the name and the number of columns for the mapping, but you cannot change the unique mapping key.

6. Associate columns being imported from the content with fields in the spreadsheet.

   - For each mapping row, enter a source column within the content. You can choose LOV for the Source Column field in the mapping row to view a list of available columns to import.
• Then, enter the target column within the spreadsheet that you want to associate with that source column. You can choose LOV for the Target Column field in the mapping row to view a list of available columns for the spreadsheet.

• To add another mapping row, choose Add Row.

• Some target columns support the translation of ID values from source columns. To find out if a specific column supports the translation of IDs, select that column and choose Lookup. If the column supports ID translation, a check box appears under Lookup in the mapping row for that column name. To perform the ID translation, select the Lookup check box for the desired columns.

7. Choose Apply.

**To define a mapping in the simplified Define Mapping page:**

1. From the Oracle E-Business Suite navigator, select Define Mapping. This menu item may be under the Desktop Integration responsibility, or it may be located under a different responsibility assigned to you by your system administrator.

2. Select the integrator. You can optionally enter a complete or partial mapping name to search for mappings whose names match that value. Leave the mapping name blank to search for all existing mappings for the integrator. Then choose Go. Oracle Web Applications Desktop Integrator displays the mappings that match your search criteria.

   **Note:** Because mappings are created for a specific content, the list of values for the Integrator Name field includes only those integrators for which at least one SQL query, Java, or text file content is defined.

   **Tip:** The number of integrators displayed in the list of values for the Integrator Name field is limited by the FND: View Object Max Fetch Size profile option. By default, this profile option is set to 200 records. If the list of values does not display all your integrators, set the FND: View Object Max Fetch Size profile option to a value equal to or higher than the number of integrators defined in your instance. For more information about this profile option, see the Oracle Application Framework Developer’s Guide, available from My Oracle Support Knowledge Document 1315485.1.

   **Note:** The list of existing mappings does not include the default mappings that are generated automatically for reporting-only
3. Choose the action you want to perform.
   • To create a new mapping, choose **Define Mapping**.
   • To modify an existing mapping, choose the **Update** icon for that mapping.
   • To create a new mapping based on an existing mapping, choose the **Duplicate** icon for the existing mapping.
   • To delete a mapping that you no longer need, choose the **Delete** icon for that mapping.

   If you chose to create, update, or duplicate a mapping, continue with the following steps to define the mapping properties in the Define Mapping page.

4. Enter a name for the mapping.

5. If the integrator has more than one content defined, then select the content to which this mapping applies.

   The content indicates the information you will import into your spreadsheet. You can define one or more mappings for a particular content.

   **Note:** If you are updating or duplicating an existing mapping, you cannot change the previously specified content.

6. Use the Source Column list and the Target Column list to associate source columns being imported from the content with target columns in the spreadsheet. The columns in the lists are mapped to each other in the order in which they appear in this page. That is, the first source column shown is mapped to the first target column shown, the second source column shown is mapped to the second target column shown, and so on. Each source column that you include must be mapped to a target column.

   **Tip:** You can map multiple source columns to the same target column. To do so, add the same target column to the Target Column list as many times as needed, so that it appears in a mapped pair with each relevant source column.

   • Choose **Select Source Columns** to search for the source columns you want to include in the mapping. In the Select Source Columns list of values, choose one
or more columns to add.

**Tip:** To add more columns after the initial selection, choose **Select Source Columns** again. The new columns are added at the end of the Source Columns list.

- Choose **Select Target Columns** to search for the target columns you want to include in the mapping. In the Select Target Columns list of values, choose one or more columns to add.

  **Tip:** To add more columns after the initial selection, choose **Select Target Columns** again. The new columns are added at the end of the Target Columns list.

- Use the **Move Up** and **Move Down** arrows in the Target Column list to change the order of the target columns to match the order of the corresponding columns in the Source Column list.

- Some target columns support the conversion of internal ID values from the corresponding source column into user-readable values in the target column. For these target columns, a check box appears under the Lookup heading in the Target Columns list. To enable the conversion of ID values for a pair of mapped columns, select the Lookup check box for the target column.

- To delete a pair of mapped columns, choose the Delete icon for the source column in the Source Column list. Oracle Web Applications Desktop Integrator deletes both that source column and the target column in the corresponding position in the Target Column list.

  7. Choose **Save**.

    **Tip:** Oracle Web Applications Desktop Integrator saves only mapped pairs of source and target columns in the mapping definition. If the Target Columns list contains more entries than the Source Columns list, then Oracle Web Applications Desktop Integrator ignores the unmapped target columns.

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**Defining a Style Sheet**

A style sheet enables you to define the colors and fonts to apply to the sheet, the prompts, the hints, and the data fields of your document.
1. From the Oracle E-Business Suite navigator, select the **Define Style Sheet** link. This may be under the Desktop Integration responsibility, or it may be located under a different responsibility assigned to you by your system administrator.

2. Choose **Create** to create a new style sheet, or select an existing style sheet and choose **Update** to modify it. To create a new style sheet based on an existing style sheet, select the existing style sheet and choose **Duplicate**.

   To delete a style sheet that you no longer need, select the style sheet and choose **Delete**. Then choose **Yes** in the confirmation page.

3. Enter a name and description for the style sheet. The maximum length for the style sheet name is ten characters.

4. If you want to display a branding image in the documents created with this style sheet, enter the file name of the image. For example, `MyCompanyImage.gif`. Ensure that you have placed the image in the OA_MEDIA virtual directory. The image you define here for the style sheet overrides any image specified in the Corporate Branding Image for Oracle Applications profile option. However, an image defined at the layout level will override the image defined for the style sheet. See: Implementing Branding Images, page 2-32.

5. Select a read only color to apply to the background of read-only fields. Read-only
fields take the font properties of data fields.

Use the color picker to select a color, or for additional color options, you can enter the hexadecimal value for the color in the field. For example, enter \#A52A2A for brown.

6. Define the following properties for the sheet as a whole, for the prompts, for the hints, and for the data fields:
   - Background color - Use the color picker to select a color, or for additional color options, you can enter the hexadecimal value for the color in the field.
   - Font color - Use the color picker to select a color, or for additional color options, you can enter the hexadecimal value for the color in the field.
   - Font family - Enter the name of a font family supported by the viewer in which users will view the document.
   - Font style - Select Regular, Italic, Bold Italic, or Bold.
   - Font size - Enter the numerical font size.

7. Choose Apply.

The following figure shows the style sheet items as they appear on a generated document:
Defining Setup Options for Key Flexfields

Oracle Web Applications Desktop Integrator provides the option to set right-justification and zero padding for every segment of a key flexfield, regardless of this setting at the value set level.

Lists of values for flexfields apply character format masks after a segment value has been selected. These format masks such as right-justify and zero padding and maximum character width are derived from the flexfield value set definition. Use the Oracle Web Applications Desktop Integrator Setup Options feature to override the values specified in the value set definition.

If you set the right-justify and zero-fill format mask for a key flexfield segment, then Oracle Web Applications Desktop Integrator performs right-justification and zero padding on the value entered in the spreadsheet based on the segment length and validates the value according to this option before updating the segment value in the interface table.

**Note:** If you are migrating from the client-server Oracle Applications Desktop Integrator, this provides the equivalent functionality to the Zero Pad Account Values feature.

To set the right-justify and zero-fill format mask for a key flexfield, or for a specific key flexfield structure:
1. From the Oracle E-Business Suite navigator, select Desktop Integration, then Setup Options, or follow a navigation path provided by your system administrator.

2. Choose Select Key Flexfields.

3. To apply the right-justify and zero-fill format mask to every structure of a key flexfield, select the flexfield in the list and choose Apply.

4. To apply the format mask only to specific structures of a key flexfield, choose Select Structure for the flexfield. Then select the appropriate structures and choose Apply.

The Overridden column displays the number of structures selected.

   Note: If you choose this option, you must not modify the format of the cells for the flexfield segments in the spreadsheet. Oracle Web Applications Desktop Integrator sets a custom number format for the flexfield segments in the spreadsheet to enable zero padding. If you change this format, such as by using the Format Cells menu option within Microsoft Excel, by copying and pasting a cell with a different format, or by adding a character such as an apostrophe (') to the cell value, then Oracle Web Applications Desktop Integrator does not perform zero padding for the value, and the value may fail validation and not be updated in the interface table.

Implementing Branding Images

You can include a branding image in your Oracle Web Applications Desktop Integrator spreadsheets to mark the spreadsheets with your corporate logo or otherwise identify the source or owner of the data. Use the BNE Viewer Displays Image profile option to enable or disable branding images. Branding images are enabled by default.

You can specify the image to use at the layout level, at the style sheet level, or through the Corporate Branding Image for Oracle Applications profile option (FND_CORPORATE_BRANDING_IMAGE). You can also use the default Oracle corporate image (/OA_MEDIA/FNDSSCORP.gif).

- When you create a spreadsheet using the Create Document interface, Oracle Web Applications Desktop Integrator first checks whether an image is defined for the specified layout. Defining an image at the layout level gives you the most fine-grained control if you want to display different images in different spreadsheets.

- If no image is defined for the layout, then Oracle Web Applications Desktop Integrator checks whether an image is defined for the specified style sheet. Defining an image at the style sheet level lets you more easily display the same image in different spreadsheets. You cannot edit the default Oracle Web Applications Desktop Integrator style sheet, but you can either create a duplicate of the default
style sheet or create a new style sheet, and add the image you want. Then you can
assign that style sheet to all the layouts that should include that image.

• If neither the layout nor the style sheet has an image defined, then Oracle Web
Applications Desktop Integrator checks whether an image is defined for the
Corporate Branding Image for Oracle Applications profile option at user,
responsibility, application, or site level, in that order. This profile option lets you
more easily specify the same image for broader use, depending on the level at
which you set the profile option. However, the Corporate Branding Image for
Oracle Applications profile option also controls the branding image displayed in
Oracle Application Framework pages in Oracle E-Business Suite. If you specify a
image using this profile option, then that image will appear in your Oracle
Application Framework pages as well as your Oracle Web Applications Desktop
Integrator spreadsheets. See: Branding, *Oracle Application Framework Personalization
Guide*.

• If you have not defined a custom branding image at any level, then Oracle Web
Applications Desktop Integrator uses the default Oracle corporate image
(/OA_MEDIA/FNDSSCORP.gif).

If you have implemented branding images, then when you open a spreadsheet in
Microsoft Excel, the image appears in the upper left corner of the sheet.

**To implement branding images:**

1. Place the images you want to use in the OA_MEDIA virtual directory on your Web
server.

2. Set the BNE Viewer Displays Image profile option to null or *Yes*.

3. Optionally specify custom images at the levels you want.
   • Specify an image when defining a layout. See: Defining Layouts, page 2-1.
   
   • Specify an image when defining a style sheet, and assign that style sheet to the
   
   • Specify an image in the Corporate Branding Image for Oracle Applications
     profile option at user, responsibility, application, or site level. See: Overview of

Alternatively, if you do not want to specify custom images, you can use the default
Oracle corporate image (/OA_MEDIA/FNDSSCORP.gif).
Creating a Document

This chapter covers the following topics:

- Overview
- Creating a Spreadsheet
- Working with Spreadsheets
- Uploading and Downloading Data from Spreadsheets
- Monitoring Concurrent Requests

Overview

The Create Document interface guides you through steps that allow you to create your spreadsheet. This section only applies to those products that instruct users to create documents through a function that calls the Oracle Web Applications Desktop Integrator Create Document interface. See your product documentation for information specific to accessing its spreadsheet functionality.

**Note:** Before you create your spreadsheet, make sure at least one layout has been defined. Layouts determine the fields that appear in the spreadsheet you will create. If you intend to automatically import information into the spreadsheet, make sure that a mapping has been defined. For details on defining layouts and mapping, see Administering Oracle Web Applications Desktop Integrator, page 2-1.

After you have defined the parameters for your spreadsheet, you can review them before creating the spreadsheet.

Note that the Create Document process varies depending on how it is implemented. Also, some of the parameters in the Create Document interface might be pre-configured by your system administrator.
Creating a Spreadsheet

Use this procedure to create a spreadsheet on your desktop to which you can import data from Oracle E-Business Suite.

There are three possible procedure flows for creating a spreadsheet:

- The product uses the Create Document interface, described in the following procedure.
- The product calls the Create Document interface from within its application. In this case, you will follow one or more of the following steps depending on the product implementation. See your product documentation for details.
- The product calls the Create Document interface, but does not require user input for these steps. The spreadsheet will be automatically created as described in Step 8.

Oracle Web Applications Desktop Integrator provides two versions of the Create Document interface. The default is the Create Document page, which lets you enter all document parameters in a single page. After you enter the initial parameters, the page displays additional parameter fields based on the values you specified. Alternatively, your administrator can enable the Create Document page flow, which guides you through multiple pages to enter the document parameters. After you enter the parameters in each page, choose Next to display the next page based on the values you specified.

To create a spreadsheet:

1. From the Oracle E-Business Suite navigator, select the link appropriate for your product to create a document. For example, you might select the Create Document link under the Desktop Integration responsibility.

2. In the Primary Parameters region of the simplified Create Document page, or in the Integrator page of the page flow, select an integrator. The integrator defines the task you will perform. For example, to use spreadsheets to upload data to General Ledger, select the General Ledger - Journals integrator.

   **Note:** You must be granted access to an integrator by your system administrator. Specific security functions grant access to specific integrators. See the product documentation for information on your product's functions.

3. Select the viewer that you want to use to open your spreadsheet. For example, Excel 2010.

   Select the Reporting Flag option if you want to create a spreadsheet for reporting
purposes only, that does not allow you to upload data to Oracle E-Business Suite.

**Note:** In the Create Document page flow, select the Reporting option.

4. Select a layout. Layouts determine which fields are included in your spreadsheet, their placement, and any default values. See Defining Layouts, page 2-1 for details on defining custom layouts.

5. Select the content to import. You can choose None to define a blank spreadsheet, or, depending on the integrator, choose a content that will automatically populate the spreadsheet with data from a text file or with data downloaded from Oracle E-Business Suite.
   - If you select None, skip to Step 7.
   - If you select Text File, continue to Step 6.
   - If you select a product-specific option, depending on the integrator you are using, Oracle Web Applications Desktop Integrator prompts you for mapping information and parameters required by the content. See your product documentation.

6. If you selected the Text File option, specify how to handle the text file data.
   - Select the mapping to use in order to map the text file data to the spreadsheet columns. For details on defining custom mappings, see: Defining Mappings, page 2-24.
   - Select Browse to locate the text file in your local system.
   - Indicate the delimiter used in the text file: Tab, Semicolon, Comma, or Other. If you select Other, enter the delimiter into the Delimiter Character field.
   - Select Ignore Consecutive Delimiters if you do not want to insert a null value into the spreadsheet when two delimiters exist side by side in the text file.
   - Enter the line in the text file where you want to start importing. The first few lines in a text file may be header information that you do not want to import into the spreadsheet.

   **Note:** If you work in a multi-byte environment, save the text file with UTF-8 encoding before importing the text file.
Note: To ensure that the data from the text file can be imported correctly, use the following canonical formatting for numbers and dates:

- Specify numbers using a period (.) as the decimal separator when needed, and do not use any group separator.

- Specify dates that do not include a time component according to the server time zone using the following format: \texttt{yyyy-MM-dd}

- Specify dates that include a time component according to the server time zone using the following format: \texttt{yyyy-MM-dd HH:mm:ss}

7. Review the parameters you specified for the document in the previously completed regions of the Create Document page or in the Review page of the page flow.

   Optionally choose Save. The Shortcut popup window or Select Shortcut page allows you to save a shortcut that will appear in the shortcut list at the beginning of the Create Document UI. Specify the shortcut name and choose the settings you want to save. Any settings that you save will be pre-specified whenever you use this shortcut. In the Create Document page, those settings will appear as read-only fields. In the page flow, the pages displaying those settings will be skipped.

   Note: System administrators can also choose to save the shortcut to a function, and attach the function to a user’s menu.

   In the Shortcut popup window, choose Save to save the shortcut and return to the Create Document page, or choose Save & Create to save the shortcut and immediately begin creating your spreadsheet with the specified parameters.

8. Create your spreadsheet by selecting Create in the Create Document page, Save & Create in the Shortcut popup window, Create Document in the page flow, or a link specified by your product documentation.

   - If your site is using the Office Open XML (OOXML) format for Oracle Web Applications Desktop Integrator spreadsheets, then the spreadsheet is created on the server and your browser prompts you to download the spreadsheet as a file with the .xlsx extension. Select Open, and if necessary, enable the Oracle Web Applications Desktop Integrator macros when prompted by Microsoft Excel.

   If you selected a content in Step 5, the data will be downloaded to populate the spreadsheet during the spreadsheet creation.
• If your site is not using OOXML, then your browser prompts you to download the file "WebADL.xls". Select Open, and if necessary, enable the Oracle Web Applications Desktop Integrator macros when prompted by Microsoft Excel. The Excel file for the integrator spreadsheet will open and a small window will open that will format the Excel file.

If you selected a content in Step 5, the data will be downloaded to populate the spreadsheet.

Do not close the window or use Excel until this window indicates that formatting is complete.

If exporting is enabled for tables in Oracle Application Framework pages, then you can select the Export Table Data to Excel icon for a table to create the corresponding spreadsheet. Spreadsheets exported from Oracle Application Framework tables are always created as OOXML documents, regardless of the format your site uses for other spreadsheets.

Note: If the table contains unsaved data, then you must save the pending changes before you can export the table.

Some types of tables do not support exporting. In this case, the export icon does not appear.

9. You can now work in the spreadsheet. If your integrator allows upload, you can also upload the data to Oracle E-Business Suite after you finishing modifying the data.

**Working with Spreadsheets**

Once you have created and downloaded your document, you can begin working with your data. Use the Oracle tab on the Microsoft Excel ribbon to access additional Oracle Web Applications Desktop Integrator features that extend the functionality of the spreadsheet.

Note: Except where noted, the same steps apply for working with spreadsheets created in the OOXML format as for those not created with OOXML.
Working with Unsigned Spreadsheets

If you do not use digital signatures in Oracle Web Applications Desktop Integrator, then you must enable the Oracle Web Applications Desktop Integrator macros on a case by case basis within Microsoft Excel. In this case Microsoft Excel prompts you to enable the macros whenever you create or open an Oracle Web Applications Desktop Integrator spreadsheet. See: Selecting Macro Security Settings in Microsoft Excel, page 1-4.

Working with Digitally Signed Spreadsheets

If you set the BNE Enable Digital Signature profile option to have Oracle Web Applications Desktop Integrator affix a digital signature to the spreadsheets you create, then you can select a high macro security level in Microsoft Excel. The first time you create a signed Oracle Web Applications Desktop Integrator spreadsheet, you must identify the Oracle Web Applications Desktop Integrator macros as coming from a
trusted source. Subsequently, whenever you create a signed spreadsheet, Microsoft Excel automatically allows the macros to run. See: Selecting Macro Security Settings in Microsoft Excel, page 1-4.

**Note:** If you create a digitally signed spreadsheet, it is recommended to work without saving in order to preserve the signature. If you save an Oracle Web Applications Desktop Integrator spreadsheet, then the Oracle signature is discarded, because the content of the spreadsheet is no longer controlled by Oracle. To continue working on the spreadsheet, you can use one of these options:

- Change your macro security settings to a medium security level temporarily while performing tasks that use Oracle Web Applications Desktop Integrator macros, such as using lists of values or performing an upload to Oracle E-Business Suite.

- Create a new digitally signed Oracle Web Applications Desktop Integrator spreadsheet, and copy and paste the modified data from the saved, unsigned spreadsheet to the new signed spreadsheet. You can then continue working in the new spreadsheet at the same security level.

- Attach your own digital signature from a trusted source to the spreadsheet and save the spreadsheet again.

**Viewing Data**

Use the expand and collapse buttons at the left of the spreadsheet to show or hide each of the sections: Context, Header, and Lines.

**Note:** When you initially create your spreadsheet, the sheet is protected by default. You must unprotect the sheet before you can use the expand and collapse buttons.

You can optionally turn on Microsoft Excel filtering on the line items. This is useful when your spreadsheet contains many rows of data. To enable filters, from the Oracle ribbon tab, select the **Filters** toggle button. To turn filters off, select the **Filters** toggle button again. To return to the default filter settings, from the Oracle ribbon tab, select **Reset Filters**.

The hint text for a field displays an asterisk (*) if the field is required and indicates the data type of the field, such as number or text. If the field shows the **List** hint, then you can double-click the field to access the list of values.

Fields that contain dates with a time component may be displayed either according to the server time zone or according to your client time zone, depending on the integrator definition. Fields that display a date and time in the server time zone show the hint
**DateTime.** Fields that display a date and time in your client time zone show the hint *Local DateTime*.

**Additional Information:** See: User-Preferred Time Zones, *Oracle E-Business Suite Setup Guide*.

Date values are formatted according to your Date Format setting in the Preferences page in Oracle E-Business Suite.

**Multiple Worksheets**

Your spreadsheet may contain multiple worksheets if your product integrator is defined to generate multiple worksheets. Also, if your site does not use the OOXML format, then multiple worksheets will be automatically created when your downloaded data exceeds 100,000 rows.

If your spreadsheet contains multiple worksheets, then when you are uploading data, you can choose either the *Upload* button or the *Upload All* button in the Oracle ribbon tab. *Upload* will upload only the current worksheet. *Upload All* will upload all worksheets.

**Viewing Graphs**

If your integrator supports graphs, your spreadsheet will include additional graphing options.

If the layout for your integrator was designed with the *Include Graph of Lines Data* option or the *Automatically Generate Graph* option selected, then a graph of the data will be generated automatically when you download the spreadsheet. Otherwise, view the graph of your line data by selecting one of the following buttons from the Oracle ribbon tab.

- **Graph All** - Creates a graph of the data on the active worksheet.
- **Graph Selection** - Creates a graph of the selected data on the spreadsheet.
- **Graph Variation** - This option is available for multi-sheet downloads, where each sheet contains data from a different source. The data in each sheet shares the same Category and Series. The graph will display the same series column from each worksheet.

**Note:** Excel limits the number of data points that can be used in a graph.

**Note:** Oracle Web Applications Desktop Integrator graphs the data according to the graph definition specified in the layout. For more
Adding Rows to a Spreadsheet

To add rows to an open spreadsheet:
Steps:
1. Unprotect the spreadsheet: In the Review tab, select Unprotect Sheet. Note that some spreadsheets are defined with protection turned off.

   **Note:** Certain regions of the spreadsheet will remain uneditable even when protection is turned off.

2. Select a row in the Lines section of the spreadsheet.

3. In the Home tab, select the Insert button, then Insert Sheet Rows. Repeat to add as many rows as you need. Oracle Web Applications Desktop Integrator displays a flag in the Upl column beside every row you add.

   **Note:** To preserve the structure of your Oracle Web Applications Desktop Integrator spreadsheet, do not insert individual cells in the Lines section. Inserting an individual cell causes the spreadsheet’s structure to become inconsistent as the remaining cells shift in position.

   Additionally, do not insert any cells or rows into the Context and Header sections.

4. Make changes in the sheet to add the data you want to upload.

5. If desired, protect the spreadsheet by selecting Protect Sheet in the Review tab.

6. If you need to remove a row of data from the Lines section of the spreadsheet, select the entire row and delete it.

   **Note:** To preserve the structure of your Oracle Web Applications Desktop Integrator spreadsheet, do not delete or cut individual cells from the Lines section. Deleting or cutting an individual cell causes the spreadsheet’s structure to become inconsistent as the remaining cells shift in position.

   Additionally, do not delete or cut any cells or rows from the Context and Header sections.

Entering Data

**To enter data:**

1. To enter data, either type the data directly in the spreadsheet field, or if the field
shows the List hint, then you can double-click the field to access the list of values. Alternatively, you can select the field and then choose List of Values from the Oracle ribbon tab. The hint text for the field displays an asterisk (*) if the field is required, and indicates the data type of the field, such as number or text.

If the list of values depends on another field, then you must enter a value for the referenced field before you can select a value for the dependent field.

Fields that contain dates with a time component may be displayed either according to the server time zone or according to your client time zone, depending on the integrator definition. Fields that display a date and time in the server time zone show the hint DateTime. Fields that display a date and time in your client time zone show the hint Local DateTime. If a field is defined to use your client time zone in the spreadsheet, then the value you enter is converted to the server time zone when you upload the data to Oracle E-Business Suite.

Note: For a field that contains a date value, the date format should match the date format defined for the integrator in the integrator LDT file.

2. If desired, protect the spreadsheet by selecting Protect Sheet in the Review tab.

To upload a password-protected spreadsheet without entering the password during the upload process, you must protect the spreadsheet according to the following steps.

To prepare a password-protected spreadsheet for uploading:
1. In the Review ribbon tab, choose the Unprotect Sheet button.
2. Select the Messages column and the column prior to it.
3. Right-click in the spreadsheet, and from the resulting menu, select Format Cells.
4. Navigate to the Protection tab.
5. Deselect the Locked check box.
6. Make changes in the sheet to add the data you want to upload.
7. Navigate to the Review ribbon tab and choose the Protect Sheet button.
8. Enter the password you want to use.
9. Select the following check boxes:
   - Select locked cells
   - Select unlocked cells
• Format cells
• Format columns
• Edit objects

Then choose the OK button.

10. In the confirmation dialog box, reenter the password and choose the OK button.

You can then upload the data as usual.

Copying Data

You cannot copy an entire worksheet to a different worksheet. However, you can copy row and column values from one worksheet to another Oracle Web Applications Desktop Integrator worksheet, and then upload the data. Copying the entire worksheet is not supported because, while rows and columns are copied, the macro code behind the Oracle Web Applications Desktop Integrator worksheet is not copied over to the new sheet.

Working with Spreadsheets Exported from Oracle Application Framework Tables

If exporting is enabled for tables in Oracle Application Framework pages, then you can download the information from these tables as Oracle Web Applications Desktop Integrator spreadsheets for offline review and analysis. The exported spreadsheet includes all the records in the table, not only those displayed in the page.

Spreadsheets exported from Oracle Application Framework tables are read-only. You cannot upload data from this type of spreadsheet to Oracle E-Business Suite. You also cannot re-download to refresh the data within this type of spreadsheet. However, you can perform a new export from the original table to download a new spreadsheet with the latest data.

Note: Because the relevant functions are not available for spreadsheets exported from Oracle Application Framework tables, the Oracle ribbon menu does not appear in these spreadsheets. These spreadsheets also do not display data entry hints.

Spreadsheets exported from Oracle Application Framework tables are always created as OOXML documents, regardless of the format your site uses for other spreadsheets. Number values in these spreadsheets are formatted according to your Microsoft Excel settings, while date values in these spreadsheets are formatted according to your Date Format setting in the Preferences page in Oracle E-Business Suite. Additionally, date values that include a time component are displayed according to your client time zone.
Uploading and Downloading Data from Spreadsheets

Uploading Data

After creating and modifying your spreadsheet, you can upload the data to Oracle E-Business Suite.

Note: Not all spreadsheets support upload.

Note: Oracle Web Applications Desktop Integrator is designed for transactional worksheet uploads and is not meant to be used for mass data uploads. If you need to perform a mass batch upload, you should review the documentation for the relevant product to evaluate the open interface tables exposed by that product for such uploads. The Oracle Web Applications Desktop Integrator framework has been tested with up to 100,000 rows, though results may vary depending on the number of columns in the spreadsheet, which determines the total number of data cells to upload, as well as the processor speed and amount of memory (RAM) on the desktop. If your site uses OOXML, then the document is automatically uploaded as a ZIP compressed OOXML file. Otherwise, compressing the data using WinZip or 7Zip can help increase the number of records you can upload; see: Compressing Data for Upload, page 3-15. For data sets larger than approximately 100,000 rows, you should evaluate other upload and download alternatives.

To upload data:

1. To ensure that you perform the upload with the correct privileges for your Oracle E-Business Suite application, you can optionally specify the responsibility to use for the upload. For instance, if you perform multiple uploads during the same Microsoft Excel session, you can use this option to switch responsibilities as needed between uploads. While viewing your spreadsheet, choose Switch Responsibility from the Oracle ribbon tab. Then select the responsibility you want, and choose the Select button.

2. To initiate the upload, choose Upload from the Oracle ribbon tab. If you are working in a spreadsheet with multiple worksheets, the Upload option uploads only the current worksheet; in this case you can also choose Upload All to upload all the worksheets at once. The Upload Parameters window appears.

3. Select the desired parameters.

Upload parameters depend on the integrator you select. Moreover, your system administrator might disallow you from changing upload parameters using the BNE
Allow Set Parameters profile option. See your product documentation for information on the available parameters.

The following table shows some common parameters that you may see:

### Upload Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rows to Upload</strong></td>
<td></td>
</tr>
<tr>
<td>All Rows</td>
<td>Select this option to upload all rows in your spreadsheet, regardless of whether changes have been made.</td>
</tr>
<tr>
<td>Flagged Rows</td>
<td>Select this option to upload only those rows that are marked with a flag character in the Upl column of your spreadsheet. Oracle Web Applications Desktop Integrator displays a flag character against a row that has changed.</td>
</tr>
<tr>
<td><strong>Validate Before Upload</strong></td>
<td>Recommended. Validating prevents invalid data from being uploaded to Oracle E-Business Suite. It is useful when you expect the import process to be quite lengthy or when you plan to run it unattended, such as overnight.</td>
</tr>
<tr>
<td><strong>Automatically Submit Import</strong></td>
<td>Select this option to automatically submit a processing request for the data after upload. This parameter is available when a post-processing procedure has been set up for the integrator. A post-processing procedure may be a call to a server-side procedure or a concurrent program to continue processing the data in Oracle E-Business Suite.</td>
</tr>
<tr>
<td><strong>Commit Rows</strong></td>
<td></td>
</tr>
<tr>
<td>All Rows</td>
<td>Select this option to commit the uploaded rows only if all the rows are valid. If any row is invalid, then no rows are committed.</td>
</tr>
<tr>
<td>Each Row</td>
<td>Select this option to commit each uploaded row that is valid, even if other rows are invalid.</td>
</tr>
</tbody>
</table>

4. Start the upload process. After the upload process completes, the upload window indicates whether or not the upload was successful. Oracle Web Applications Desktop Integrator returns messages to the spreadsheet identifying all rows
containing invalid values. By default, if the data in any rows are invalid, Oracle Web Applications Desktop Integrator does not upload any of the data in the spreadsheet. You must correct all errors to successfully upload the spreadsheet. However, if your integrator provides the Commit Rows upload parameter and you chose the Each Row option, then Oracle Web Applications Desktop Integrator does upload the valid rows. You can correct the errors in any invalid rows and retry the upload for those rows.

Any errors that occur during the upload of a multi-sheet workbook are also displayed in a Summary Worksheet. The Summary Worksheet enables you to see all errors and link to them.

**Compressing Data for Upload**

The size of the data that you can upload from a spreadsheet is determined by the available memory (RAM) on your PC. If your site does not use OOXML and you need to upload a large amount of data, you can choose to compress the data using WinZip or 7Zip. Compression increases the number of records that you can upload at once.

To use this feature, you must have either the WinZip or 7Zip compression application installed on your PC.

**Note:** The compression feature is designed to optimize the upload capacity. However, the total size of the upload is still limited by the available memory. If the size of the data in a very large file exceeds this limit even after compression, you may still encounter an error. In this case, divide the data into smaller batches to perform the uploads.

If your site uses OOXML, then the document is automatically uploaded as a ZIP compressed OOXML file.

**To compress data for upload:**

1. Set the BNE: Enable Upload Compression profile option to **Yes**.
2. Create your spreadsheet.
3. In the spreadsheet, select **Settings** from the Oracle ribbon tab and specify the compression application to use, either WinZip or 7Zip, and the location of the corresponding executable. The standard locations for these executables are as follows:
   - **WinZip:** `C:\Program Files\WinZip\WZZIP.EXE`
   - **7Zip:** `C:\Program Files\7-Zip\7z.exe`
4. Submit the upload.
**Downloading Data**

Download enables you to refresh data that you have imported into your spreadsheet. This option is available only if the spreadsheet contains imported data. To download or refresh data, from the Oracle ribbon tab, select **Download**.

**Note:** Any new rows of data or other modifications that you have made on the spreadsheet will be overwritten when you use **Download** to refresh the data. Some product integrators may not allow refresh.

Additionally, for OOXML documents, manually inserted worksheets are not retained when you use **Download**. To refresh an OOXML document, Oracle Web Applications Desktop Integrator creates a new document on the server that then replaces the current version on the desktop. Consequently, any manually inserted worksheets are no longer included after the refresh.

If you imported data from a text file, **Download** will not be available.

**Monitoring Concurrent Requests**

The upload process of some of the integrators starts a concurrent program to import the data you have uploaded to an interface table in Oracle E-Business Suite. You can monitor concurrent requests from the spreadsheet.

To monitor concurrent requests from the spreadsheet, from the Oracle ribbon tab, select **Monitor**. The Monitor Requests window displays the last 10 concurrent requests submitted by the current user.
This appendix covers the following topics:

- Overview
- Setting Profile Options
- Setting Up Functions, Menus, and Responsibilities
- Granting Users the Ability to Create Documents
- Running Diagnostic Tests

### Overview

This appendix describes how to implement Oracle Web Applications Desktop Integrator. It applies to all integrators that use the Create Document interface. It describes how to set profile options to control specific Oracle Web Applications Desktop Integrator functions, as well as how to set up functions to call the Oracle Web Applications Desktop Integrator Create Document interface and grant them to users. Once set up, a user can create a spreadsheet to download and upload data to a specific product. Use this appendix in conjunction with the product-specific documentation.

This appendix also lists diagnostic tests you can use to check the setup of Oracle Web Applications Desktop Integrator and review troubleshooting information.

**Optional Action:** You can use themes to customize the look and feel of Oracle Web Applications Desktop Integrator pages. Themes are reflected in all Oracle Web Applications Desktop Integrator pages regardless of their underlying technology. See: Themes, *Oracle Application Framework Personalization Guide*. 
Setting Profile Options

The following profile options can be set to control specific Oracle Web Applications Desktop Integrator functions in your system. For more information on profile options, see: Overview of Setting User Profiles, Oracle E-Business Suite Setup Guide.


BNE Allow No Security Rule

A production instance of Oracle E-Business Suite should have this profile option set to No.

The default value is No.

BNE Allow Set Parameters

Valid values are Yes and No. If this profile option is set to No, users will not be able to access the upload parameters window.

BNE Disable

Valid values are Yes and No. If set to Yes, all Oracle Web Applications Desktop Integrator functionality is disabled. This can be set at the Site, Application, Responsibility and User level. You can use this option to restrict access to Oracle Web Applications Desktop Integrator functionality at levels where you do not plan to allow use of integrators.

BNE Document Lifetime

Spreadsheets created by Oracle Web Applications Desktop Integrator can be saved, opened, and used again at a later date to interact with Oracle E-Business Suite. Use this option to disable a spreadsheet from connecting to the database after a specific length of time from the creation date. Select from a range of hours, days, months, or years.

BNE Enable Digital Signature

Use this profile option to enable Oracle Web Applications Desktop Integrator to affix a digital signature to the spreadsheets you create, identifying them as coming from a trusted source. You can then select a macro security level in Microsoft Excel that requires digital signatures when working with these spreadsheets. See: Selecting Macro Security Settings in Microsoft Excel, page 1-4.

The default value is No.
Note: Oracle Report Manager uses the Oracle Web Applications Desktop Integrator integration with Microsoft Excel to generate spreadsheets for the Financial Report Template Editor and for the Microsoft Excel output for Financial Statement Generator reports. Consequently, if you use these Oracle Report Manager features, then this profile option also controls the use of digital signatures for those spreadsheets. For more information, see: Setup Overview, Oracle Report Manager User's Guide.

**BNE: Enable OOXML Standard**

Set this profile option to Yes to enable Oracle Web Applications Desktop Integrator to create spreadsheets according to the Office Open XML (OOXML) standard. When using the OOXML format, Oracle Web Applications Desktop Integrator performs the processing for document creation and upload on the Oracle E-Business Suite server rather than on the desktop. With this option, no macros are used during document creation and limited macros are used during upload. Consequently, the Trust access to the VBA project object model security option is not required to work with OOXML documents. Also, because the processing is performed on the server, document creation and upload use minimal desktop resources. See: Using the Office Open XML Format, page 1-4.

The default value is Yes.

Note: This profile option does not apply to spreadsheets exported from tables in Oracle Application Framework pages. Such spreadsheets are always created as OOXML documents, regardless of the setting specified in this profile option.

**BNE: Enable Simplified Create Document**

By default, Oracle Web Applications Desktop Integrator displays the Create Document interface as a single page in which users can enter all the document parameters. To display the Create Document page flow, which guides users through multiple pages to enter the document parameters, set this profile option to No.

The default value is Yes.

**BNE: Enable Simplified Define Layout**

By default, Oracle Web Applications Desktop Integrator displays the Define Layout interface as the Define Layout page flow, which guides users through multiple pages to enter the layout properties. To display the Define Layout page, which lets users enter all the layout properties in a single page after selecting the integrator to which the layout applies, set this profile option to Yes.
The default value is No.

**BNE: Enable Simplified Define Mapping**

By default, Oracle Web Applications Desktop Integrator displays the Define Mapping interface as the Define Mapping page flow, which guides users through multiple pages to enter the mapping properties. To display the Define Mapping page, which lets users enter all the mapping properties in a single page after selecting the integrator to which the mapping applies, set this profile option to Yes.

The default value is No.

**BNE: Enable Upload Compression**

If your site does not use OOXML, set this profile option to Yes to enable Oracle Web Applications Desktop Integrator to compress the data that you upload from a spreadsheet to Oracle E-Business Suite. Compression increases the number of records that you can upload at once. You can use either WinZip or 7Zip as the compression application. See: Compressing Data for Upload, page 3-15.

The default value is No.

**Note:** If your site uses OOXML, then the spreadsheet is automatically uploaded as a ZIP compressed OOXML file.

**BNE Enforce Parameter Values**

If a required parameter is invalid or is not sent by the function calling the Oracle Web Applications Desktop Integrator service, the user will be shown a page to enter the required parameter so the create document process can be completed. If this profile option is set to Yes, users will not be able to enter parameter values and will be shown an error stating that they should have their system administrator edit the function to correct the problem.

**BNE Excel Worksheet Maximum**

If your site does not use OOXML, use this profile option to set the maximum number of worksheets that Oracle Web Applications Desktop Integrator can create within a workbook. This is unlimited by default.

**Note:** The number of worksheets that can be added to a spreadsheet is limited only by the available memory resources. Setting this option allows you to manage your memory resources and avoid potential crashes for users working on older, less resource-rich clients.

If your site uses OOXML, then this profile option is not applicable.
because the document is processed on the server rather than on the client.

**BNE Offline List of Values Limit**

This profile option specifies the maximum number of values to download and display in the list of values for fields based on a value set and for a dependent segment. If there are more possible values than the maximum you set here, the spreadsheet displays only the first values in the list, up to the specified limit.

**BNE Server Log Filename (also known as BNE Debug Log Filename)**

Use this profile option to change the name of the Oracle Web Applications Desktop Integrator log file on the middle tier. If this profile option is not set, bne.log is used. The default value is bne.log. You should set this profile option only at site level.

**BNE Server Log Level (also known as BNE Debug Log Level)**

This profile option determines the level of detail that is recorded in the Oracle Web Applications Desktop Integrator log file. The valid values are listed below. The level of granularity and amount of information recorded to the log file increases as you move down the list.

- **CRITICAL_ERROR** - Messages that are the result of a system failure. The integrity and reliability of the system is in doubt as a result of this error.

- **ERROR** - Messages that are the result of an unexpected error in the system. It is possible to recover from these errors; the system may still be in a usable state. Setting the profile option to this value will include CRITICAL_ERROR messages in the log file. This is the default setting and the recommended value for a production environment.

- **WARNING** - Messages trapped by the application. These errors were handled by the application but the system administrator should be aware of them occurring. Setting the profile option to this value will include ERROR as well.

- **INFORMATION** - Additional messaging is added to the log file that includes processing information. Setting the profile option to this value includes CRITICAL_ERROR, WARNING, and ERROR log messages.

- **DETAIL** - Messages that summarize what is written to the log file. Setting the profile option to this value includes CRITICAL_ERROR, WARNING, ERROR, and INFORMATION log messages.

- **TRACE** - Messages that provide detailed debugging information. Setting the profile
option to this value includes CRITICAL_ERROR, WARNING, ERROR, INFORMATION, and DETAIL log messages.

Additionally, if you select the value TRACE, then Oracle Web Applications Desktop Integrator displays the name of the Java module that renders the current page in the lower left corner of the page. Furthermore, if you select TRACE, then Oracle Web Applications Desktop Integrator displays the WebADI.xls file while it is being generated and does not delete it.

**Note:** Similarly, if you use Oracle Report Manager and you select TRACE for this profile option, then Oracle Report Manager displays the ReportManager.xls file while it is being generated for the Financial Report Template Editor and for the Microsoft Excel output for Financial Statement Generator reports, and does not delete it.

The default value is ERROR. You should set this profile option only at site level.

### BNE Server Log Path (also known as BNE Debug Log Directory)

This profile option can be used to set the directory for the Oracle Web Applications Desktop Integrator log file on the application server. This directory must be in the non-editioned file system. If this profile option is not set, then the FND_TOP/log directory is used.

The default value is FND_TOP/log. You should set this profile option only at site level.

For more information about the non-editioned file system, see: File System Structure, *Oracle E-Business Suite Concepts*.

### BNE Upload Batch Size

All of the rows in the spreadsheet are uploaded from the client machine to the middle tier at once; the Upload Batch Size determines the number of records sent to the database at one time from the middle tier. The default is 100. System administrators can adjust this setting to find the batch size that optimizes upload time for their environment. This setting should not be less than 5 or greater than 200. Network packet sizes, latency and average number of rows uploaded from the client affect the optimal setting of this value. If there is a large distance between the middle tier and the database, you may want to increase the batch size to reduce the number of trips over the network. You also want to make sure that the amount of data sent in a batch takes full advantage of the size of packets on your network using the average number of rows users will be uploading. You should set this profile option only at site level.

### BNE Upload Retry Count

This profile option specifies how many times Oracle Web Applications Desktop Integrator Implementation and Administration Guide
Integrator should check the concurrent request status for an upload. This profile option applies only for synchronous imports. If the concurrent request has not completed after the maximum number of checks has been reached, then the upload fails.

The default value is 50. You should set this profile option only at site level.

**BNE Upload Sleep Seconds**

This profile option specifies the number of seconds to sleep after checking the concurrent request status for an upload before checking again.

The default value is 3. You should set this profile option only at site level.

**BNE Upload Staging Directory**

This profile option specifies the file system directory where uploaded data is initially stored as an XML stream file. This directory must be a shared directory within the non-editioned file system.

The default value is `BNE_TOP/upload`. You should set this profile option only at site level.

For more information about the non-editioned file system, see: File System Structure, *Oracle E-Business Suite Concepts*.

**BNE Upload Text Directory**

This profile option specifies the file system directory to use when a document is created that is initially populated with data from a text file. The content file is temporarily stored in this directory as an XML file. This directory must be in the non-editioned file system.

The default value is `BNE_TOP/upload`. You should set this profile option only at site level.

For more information about the non-editioned file system, see: File System Structure, *Oracle E-Business Suite Concepts*.

**BNE Viewer Displays Image**

Set this profile option to null or *Yes* to include a branding image in your Oracle Web Applications Desktop Integrator spreadsheets. You can specify an image at the layout level, at the style sheet level, or through the Corporate Branding Image for Oracle Applications profile option. If you do not want to display an image in your spreadsheets, set the BNE Viewer Displays Image profile option to *No*. See: Implementing Branding Images, page 2-32.
BNE XML Response Compression

If set to null or Yes, XML compression is used when downloading data to the spreadsheet. Some browsers do not support this XML compression, so you may need to set this option to No for some users to avoid errors.

Additional Profile Options

The following profile options are for internal use within Oracle Web Applications Desktop Integrator only. Do not change the settings for these profile options from the default values.

- BNE Redirect Home Enabled
- BNE Redirect Portal URL
- BNE Servlet Path
- BNE UIX Headless Mode Enabled

The following profile options are no longer used. Do not change the settings for these profile options from the default values, except where noted.

- BNE FND Jar Path
- BNE JAR Path
- BNE Servlet Link
- BNE UIX Base Path
- BNE UIX Physical Directory

Note: You should delete any value stored in this profile option.

- BNE Upload Import Directory

Setting Up Functions, Menus, and Responsibilities

Oracle Web Applications Desktop Integrator provides seeded functions and a seeded menu and responsibility for its functionality. You can assign the seeded responsibility to users who should have access to all the functionality it includes. You can also add the seeded functions to your own menus and responsibilities to provide your users access to specific functionality as needed. Additionally, you can create your own functions that enable users to create specific Oracle Web Applications Desktop Integrator documents. You can then add your custom functions to the menus and responsibilities you choose.
Oracle E-Business Suite products that use integrators may also include access to Oracle Web Applications Desktop Integrator functionality in their own menus or functional page flows. Consult your product documentation for information on accessing these functions.

**Note:** Integrators are not installed with Oracle Web Applications Desktop Integrator, but with their associated products.

The seeded functions are used to secure the associated functionality. Even if you provide alternate navigation through a separate menu item or page flow, you must also add the relevant seeded function to a responsibility assigned to a user in order for the user to work with that functionality. For example, a user must have a responsibility that includes the BNE_ADI_CREATE_DOCUMENT function in order to create Oracle Web Applications Desktop Integrator documents, even if you give that user access to the Create Document interface through a custom function. In this case the seeded BNE_ADI_CREATE_DOCUMENT function does not need to be displayed to the user in the menu.

Additionally, access to specific integrators is secured by the functions defined as security rules for each integrator. You must add at least one of the functions for an integrator to a responsibility assigned to a user in order for the user to work with that integrator.

### Seeded Functions

The following table describes the functions that are automatically created.

<table>
<thead>
<tr>
<th>Seeded Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td>BNE_ADI_CREATE DOCUMENT</td>
</tr>
<tr>
<td>BNE_ADI_DEFINE LAYOUT</td>
</tr>
<tr>
<td>BNE_ADI_DEFINE MAPPING</td>
</tr>
</tbody>
</table>
### Function Description

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNE_ADI_DEFINE_STYLESTEET</td>
<td>Allows users access to the define style sheet user interface. The style sheet sets the colors and font styles used in the spreadsheet.</td>
</tr>
<tr>
<td>BNE_ADI_LOB_MANAGEMENT</td>
<td>Specific to the Human Resources application. You do not need to give users access to this function unless they use mail merge functionality in Oracle HRMS. See My Oracle Support Knowledge Document 394265.1 for more information on HRMS functionality.</td>
</tr>
<tr>
<td>BNE_ADI_SETUP_OPTIONS</td>
<td>Allows system administrators to define right-justification and zero-fill format masking for key flexfields. This setting will override the flexfield value set definition.</td>
</tr>
</tbody>
</table>

### Seeded Menu

The Desktop Integration Menu is created with the following prompts:

- Create Document (BNE_ADI_CREATE_DOCUMENT)
- Define Layout (BNE_ADI_DEFINE_LAYOUT)
- Define Mapping (BNE_ADI_DEFINE_MAPPING)
- Manage Document Links (BNE_ADI_LOB_MANAGEMENT)
- Setup Options (BNE_ADI_SETUP_OPTIONS)
- Define Style Sheet (BNE_ADI_DEFINE_STYLESTEET)

### Seeded Responsibility

The Desktop Integration responsibility is created with the Desktop Integration Menu.

### Granting Users the Ability to Create Documents

The sections that follow apply to integrators that are accessed through the Create Document interface.

### Creating Functions Using the Create Document Interface

You can go through the Create Document interface and select all parameters, then save the parameters to a function.

Follow these steps to create a function with specified parameter values. If your site uses the single Create Document page, then parameters with values specified in the function
appear as read-only fields. If your site uses the Create Document page flow with multiple pages and a page in the flow is to be skipped, every parameter on that page must be specified in the function.

**Specifying Skipped Parameters**
1. Log in to Oracle E-Business Suite as a user with access to the relevant integrator and select the Create Document function.
2. Enter the parameter values you want to save in the Create Document interface.
3. Click Save in the Create Document page or in the Review page of the page flow. The Shortcut popup window or Select Shortcut window opens, respectively.
4. Enter a name for your function in the Shortcut Name field. This name will have the prefix BNE_ when you search for it in Oracle E-Business Suite.
5. Select Save to Form Function.
6. Select the parameters you want to save to the function and determine if the Create Document page or the Review page will be displayed.
   
   If all the parameters are saved and you choose not to display a page to let the users review those parameters, then the document will immediately be created when the user selects the function. If you do not save some of the parameters, then users must manually specify those parameters in the Create Document interface before they can create the document.

   **Note:** The Viewer and Reporting parameters must be saved if you do not want them to be displayed for users to enter a value. If you have users with different versions of Excel creating documents for upload in English, you may want to create separate functions; one for each viewer.

7. Log in to Oracle Forms with the System Administrator responsibility and attach the function to a menu. Under Application, select Menu, and search for BNE_{name entered in Step 4}. You must attach the function to the same menu that contains the security function that grants access to the integrator. You must also include the BNE_ADI_CREATE_DOCUMENT function, although this function does not need to be displayed to the user.

**Creating and Editing Functions in Oracle Forms**

System administrators can create functions using these steps for integrators that are used through the Create Document interface. See your product documentation for the security function that must be placed in the same menu structure for access to the integrator.
To create your own functions:

- Set the Type to SSWA SERVLET FUNCTION for all Oracle Web Applications Desktop Integrator functions

- Set the HTML Call for all Oracle Web Applications Desktop Integrator functions to BneApplicationService

- To create a function allowing users to create documents, set the parameter field to bne:page=BneCreateDoc

- To create a function allowing users to define layouts, set the parameter field to bne:page=BneDefineLayout

- To create a function allowing users to define mappings, set the parameter field to bne:page=BneMappingTemplate

  **Note:** You must also include the corresponding seeded function in the menu structure for access to the Oracle Web Applications Desktop Integrator functionality, although this function does not need to be displayed to the user.

- Create Document: BNE_ADI_CREATE_DOCUMENT

- Define Layout: BNE_ADI_DEFINE_LAYOUT

- Define Mapping: BNE_ADI_DEFINE_MAPPING

**Including Parameter Values in the Create Document Function**

When users create documents they are prompted for a number of parameters that determine how their spreadsheet will be created. These parameters can be specified within the function to secure parameter values and force users to use certain values. When users access the single Create Document page, parameters with values specified in the function appear as read-only fields. When users access the Create Document page flow, pages prompting users for values specified in the function will not be displayed; this reduces the number of steps they must take to create documents.

The table that follows provides a description of each parameter that determines page flows.
Parameters for Create Document Interface

<table>
<thead>
<tr>
<th>Page in the Create Document Page Flow</th>
<th>Parameter</th>
<th>Required/Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewer</td>
<td>bne:viewer</td>
<td>Required</td>
<td>The desktop program that will be used to view the spreadsheet.</td>
</tr>
<tr>
<td>Viewer</td>
<td>bne:reporting</td>
<td>Required</td>
<td>If selected, the spreadsheet created will not allow upload of data.</td>
</tr>
<tr>
<td>Integrator</td>
<td>bne:integrator</td>
<td>Required</td>
<td>Indicates that the Oracle E-Business Suite task users will be using the desktop.</td>
</tr>
<tr>
<td>Layout</td>
<td>bne:layout</td>
<td>Required</td>
<td>The Layout determines the fields in the spreadsheet, their placement, and their default values. Valid values depend on the integrator you select.</td>
</tr>
<tr>
<td>Content</td>
<td>bne:content</td>
<td>Optional</td>
<td>Points to information that will be imported into the spreadsheet. Valid values depend on the integrator you select.</td>
</tr>
<tr>
<td>Map</td>
<td>bne:map</td>
<td>Required, if Content is chosen</td>
<td>Provides the relationship between data in the content and fields in the spreadsheet. Valid values depend on the integrator you select.</td>
</tr>
</tbody>
</table>

Providing Users a Secured List of Values

You might want to grant access to several parameter values. Hard coding these parameter values in the function would require you to create a Self-Service link for every parameter you wish to grant to a user. You can work around this by allowing users to choose from a restricted list of parameter values.

For example, twenty layouts may be defined for an integrator; however, you can create a function that will allow users to see only ten. You can do this by defining more than one value for the bne:layout parameter in the function definition.

1. Log in to Oracle E-Business Suite with the System Administrator responsibility.

2. Navigate to the Form Functions window and look up a function that calls the Create Document interface.

3. Go to the Parameter field and locate the parameter you want to secure and add a comma-separated list of valid values, or a partial value that includes a wild card...
that will return more than one parameter value.

Parameter values can be referenced by their internal key names or by their user visible values.

The sections that follow discuss how to enter internal keys, enter user values, and use wild cards.

**Entering Internal Keys**

1. Parameter values are saved in the format of the Application Short Name:Key; For example, bne:integrator=

   BNE:JOURNALS_120&bne:layout = BNE:FUNCT_ACT_SINGLE_120.

   To give the user two options for a layout, you would enter bne:layout=

   BNE:FUNCT_ACT_SINGLE_120,BNE:FUNCT_ACT_MULTIPLE_120.

2. If you are only using the Journals integrator, all of your parameter values will be using the BNE application short name.

   To ensure that you have entered a valid value for a parameter, go through the Create Document interface, select the layout you want to grant to users, and choose Save to create a function after completing the Create Document page or in the Review page. Then log in as System Administrator, look up the function and note the key that was saved for the layout.

**Entering User Values**

If you do not know the key value for a layout, your function can reference the name of the layout that appears in the Create Document interface.

1. Navigate to the layout parameter in the Create Document interface and choose the layouts you want the user to access. For example, you might choose the layouts "Functional Actuals - Single" and "Functional Actuals - Multiple".

2. Log in as System Administrator and look up the function.

3. Go to the parameter field and enter a comma separated list of the layout names using the following format:

   parameter name=USER_NAME:USER_NAME,USER_NAME:USER_NAME

   In this example, you would enter: 'bne:layout=USER_NAME:Functional Actuals - Single, USER_NAME:Functional Actuals - Multiple'.

   **Note:** The user name you enter in the function must match the names you see in the Create Document interface.
Using Wild Cards

You can create restricted lists by entering a value for the bne:layout parameter that includes a wild card (%). The wild card character (%) must be escaped with "\25". In this example, you would enter bne:layout=USER_NAME:Fu\25 to restrict the list to "Functional Actuals - Single" and "Functional Actuals - Multiple". These will be the layouts shown to the user because they are the only layouts whose names begin with "Fu".

Running Diagnostic Tests

Oracle Diagnostics Framework provides a mechanism which makes Oracle E-Business Suite more supportable and robust by providing predefined tests to check for key setup requirements. Oracle Web Applications Desktop Integrator provides tests through Oracle Diagnostics Framework that you can use to check the setup of Oracle Web Applications Desktop Integrator and review troubleshooting information. These tests are available in Oracle Diagnostics Framework under the Web Applications Desktop Integrator application. For information on running tests in Oracle Diagnostics Framework, see: Oracle Diagnostics Framework User’s Guide.

WebADI Diagnostics

The following tests are available in the WebADI Diagnostics group.

WebADI Module Versions and Profile Values

This test reports details about the versions of Oracle Web Applications Desktop Integrator and its components installed in your Oracle E-Business Suite instance, and about the values set for Oracle Web Applications Desktop Integrator profile options. You can use this information to verify your implementation or to help diagnose any errors.

Select the responsibility ID to use when running this test.

The report displays release or patch version and selected configuration details for the following:

- The Oracle Database used by your Oracle E-Business Suite instance
- The Web Applications Desktop Integrator application
- Oracle E-Business Suite Diagnostics
- The Application Object Library application
- The XML Publisher application
• The Oracle E-Business Suite Applications Technology product family (ATG_PF)
• Oracle E-Business Suite
• JDK
• JDBC

For each Oracle Web Applications Desktop Integrator profile option, the report shows
the current value and default value, and indicates whether the source of the current
value is an Oracle seeded setting or a custom setting entered in your instance. For
profile options that can be set at the responsibility and user level, the report shows the
value for the responsibility you selected or for your user ID, as appropriate.

Next, the report displays version details for Oracle Web Applications Desktop
Integrator Java classes under the oracle.apps.bne hierarchy, PL/SQL packages, and
servlets. The report also provides information about any invalid database objects for
Oracle Web Applications Desktop Integrator.

Finally, the report provides links to related My Oracle Support Knowledge Documents,
and XML file details for the WebADI Module Versions and Profile Values test itself.

WebADI Integrator Metadata

This test reports details about the metadata defined for a particular integrator. You can
use this information to verify the integrator definition or to help diagnose any errors.

Select the responsibility ID and the integrator for which you want to run this test.

The report displays release or patch version and selected configuration details for the
following:
• The Oracle Database used by your Oracle E-Business Suite instance
• The Web Applications Desktop Integrator application
• Oracle E-Business Suite Diagnostics
• The Application Object Library application
• The XML Publisher application
• The Oracle E-Business Suite Applications Technology product family (ATG_PF)
• Oracle E-Business Suite
• JDK
• JDBC

Next, the report displays the various types of metadata that make up the integrator
definition. Choose the See SQL links to view the SQL queries used to retrieve the metadata. The report includes the following:

- The overall integrator definition, including basic integrator properties, parameter lists used by the integrator, and security rules defined for the integrator

  Note: For each security rule, the report shows whether the responsibility for which you ran this test is allowed or denied access to the securing function.

  The report displays a warning if the integrator is either not enabled or not displayed in the Create Document interface. For information about enabling an integrator or changing the display setting, see: Defining Integrators, Oracle E-Business Suite Desktop Integration Framework Developer’s Guide.

- Any interfaces defined for the integrator, including interface attributes, user interface display details for those attributes, any list of values components assigned to interface attributes, any attribute groups, and any list of values components assigned to attribute groups

- Any contents defined for the integrator, including content columns and any parameter list defined for the content

- The uploader defined for the integrator, if any, and the uploader parameters

- The importer defined for the integrator, if any, including the importer rules that define the steps performed by the importer, and the parameters for the importer rules

- The layouts defined for the integrator, including the layout blocks and layout columns

- Any mappings defined for the integrator, including the interface and the content being mapped and the mapping lines that link the interface attributes with content columns

Finally, the report provides a key to some abbreviations used in the metadata details, links to related My Oracle Support Knowledge Documents, and XML file details for the WebADI Integrator Metadata test itself.

For more information about defining integrators and how each type of metadata is used, see Defining Integrators, Oracle E-Business Suite Desktop Integration Framework Developer’s Guide, Defining Layouts, page 2-1, and Defining Mappings, page 2-24.
Frequently Asked Questions

This appendix covers the following topics:

- General Issues
- Technical Issues

General Issues

General issues are as follows:

**Is the Oracle Applications Desktop Integrator client-server version still supported?**

Version 7.2 was supported for Release 11 and 11i only; not for Release 12 and higher.

**Do any Oracle Web Applications Desktop Integrator components need to be installed on the desktop?**

No. You need only a Web browser supported by Oracle E-Business Suite and Microsoft Excel.

**How will new integrators be added?**

New seeded integrators will be added as separate patches. These patches will be shipped with the products related to the integrators. You can also use Oracle E-Business Suite Desktop Integration Framework to define custom integrators. See: Oracle E-Business Suite Desktop Integration Framework Developer’s Guide.

**Why can't I get past the login page after selecting a Oracle Web Applications Desktop Integrator function on the PHP?**

The GUEST user name defined in the .dbc file cannot be the same as your Oracle E-Business Suite user name. When you select an Oracle Web Applications Desktop Integrator function, a guest login to the database is performed based on the .dbc setting. The Oracle Web Applications Desktop Integrator application requires login to the database before it can attempt to take any action, such as validating your login name and password or getting the profile option to see that Single Sign-On (SSO) server support is enabled. For more information about the Guest user account, see: Guest User Account, Oracle E-Business Suite Security Guide.
Are reference fields supported when entering key and descriptive flexfield information into the spreadsheet?

No. Reference fields are not currently supported; however, there are plans to support this Oracle E-Business Suite flexfields feature. See enhancement 2809958 for the current status of this feature.

My spreadsheet has only 10 rows for entering data. Can I increase the number of lines so that I can enter more than 10 records?

Yes, you can increase the number of rows to enter more records. See Adding Rows to a Spreadsheet, page 3-9.

How many rows of data can I upload using Oracle Web Applications Desktop Integrator?

Oracle Web Applications Desktop Integrator is designed for transactional worksheet uploads and is not meant to be used for mass data uploads. If you need to perform a mass batch upload, you should review the documentation for the relevant product to evaluate the open interface tables exposed by that product for such uploads. The Oracle Web Applications Desktop Integrator framework has been tested with up to 100,000 rows, though results may vary depending on the number of columns in the spreadsheet, which determines the total number of data cells to upload, as well as the processor speed and amount of memory (RAM) on the desktop. If your site uses OOXML, then the document is automatically uploaded as a ZIP compressed OOXML file. Otherwise, compressing the data using WinZip or 7Zip can help increase the number of records you can upload; see: Compressing Data for Upload, page 3-15. For data sets larger than approximately 100,000 rows, you should evaluate other upload and download alternatives.

Can I copy my entire Oracle Web Applications Desktop Integrator worksheet to a different workbook?

You cannot copy an entire worksheet to a different workbook; however, you can copy row and column values from one worksheet to another Oracle Web Applications Desktop Integrator worksheet and then upload the data. Oracle Web Applications Desktop Integrator does not support copying the entire worksheet because Excel copies only the rows and columns. If you copy entire worksheets, the macro code behind the Oracle Web Applications Desktop Integrator worksheet is not copied over to the new sheet.

Can I copy a spreadsheet to a PC running a different language?

Yes. Spreadsheets can be copied between PCs on Windows Vista or higher running different languages.

Where can I find client-server Oracle Applications Desktop Integrator functionality in Release 12?

The Web versions of Analysis Wizard, Budget Wizard, Journal Wizard, Report Wizard, and Account Hierarchy Manager are available within the Oracle General Ledger product. The Web versions of Physical Inventory and Asset Wizard functionality can be found within the Oracle Assets product. Submitting and publishing standard, variable, and FSG reports can be found in Oracle Report Manager.
**Can I download a document from one Oracle E-Business Suite instance and upload it to a separate instance?**

No. Oracle Web Applications Desktop Integrator uses a secure document ID and instance URL while uploading a document. The document ID is stored in the database during document creation and is later used during upload. Additionally, the upload process uses the instance URL from the macro code that is downloaded during document creation. Consequently, it is not possible to upload a document to a separate instance.

**Can I download a document from one Oracle E-Business Suite instance and upload it to an instance cloned from the first instance?**

Yes, if the cloned instance has the same URL as the original URL for the source instance, then you can upload a document to the cloned instance. To ensure that the cloned instance has the same URL as the source instance, you must perform host aliasing on the target instance after cloning.

**Technical Issues**

Technical issues are as follows:

**What versions of Microsoft Excel can be used with Oracle Web Applications Desktop Integrator?**

For the most current list of supported Microsoft Excel versions, see My Oracle Support Knowledge Document 1077728.1, *Microsoft Office Integration with Oracle E-Business Suite 11i and R12*.

**What internet browsers are supported by Oracle Web Applications Desktop Integrator?**


**Is the Apple Macintosh supported?**

Although not currently supported, work is currently underway to support Apple Macintosh.

**How does Oracle Web Applications Desktop Integrator utilize the Internet Computing Architecture (ICA)?**

ICA is a three-tiered framework with desktop, middle, and database tiers. For Oracle Web Applications Desktop Integrator, the desktop tier will make a direct connection to the HTTP server. The business logic is controlled through Java components, which are executed by an appropriate module. The modules connect to the data server as necessary to complete their assigned instructions. Oracle Web Applications Desktop Integrator business logic and properties will be installed on the middle tier. The Apache listener is required on the middle tier.
How does the desktop tier communicate with the middle tier?

The desktop tier makes a direct connection to the HTTP server on the middle tier. It uses standard Web protocols such as HTTP, HTTPS, TLS, or SSL.

What is the role of the middle tier?

Oracle E-Business Suite software and tools are deployed and managed on this tier. This tier eliminates the need to install and maintain application software on each desktop client. The software also has the potential to scale with load by moving components to separate hosts. Network traffic is kept low by passing only data, instead of passing graphical information like some screen scraping technologies. Oracle Web Applications Desktop Integrator business logic is installed on the middle tier.

How does the middle tier communicate with the database tier?

The middle and database tiers communicate via SQL*Net, Net8, or JDBC.

What is the role of the database tier?

The database tier holds all data and data-intensive programs, and processes all SQL requests for data. Machines in this tier do not communicate directly with applications users, but rather with machines on the middle tier that mediate these communications, or with other servers on the database tier.

How can I import text files in a multi-byte environment?

If you use a multi-byte environment, you must save the text file with UTF-8 encoding before importing the text file.

Does Oracle Web Applications Desktop Integrator support Single Sign-On (SSO)?

Yes. Oracle Web Applications Desktop Integrator is SSO capable when used in an Oracle E-Business Suite environment. No extra configuration of Oracle Web Applications Desktop Integrator with SSO is required.
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