November 2019
Describes how to prepare for a software update, install updates on the deployment server, use change assistant, run software updates, use the software update impact analysis tool, use JD Edwards compare and merge tools, custom modifications and packages, update environments, and set up localizations.
## Contents

### Preface

- Audience ................................................................. ix
- Documentation Accessibility ........................................... ix
- Related Information ..................................................... ix
- Conventions ............................................................... ix

### 1 Introduction to Software Updates

1.1 Software Update Overview ........................................... 1-1

#### 1.1.1 Using My Oracle Support ........................................ 1-1

#### 1.1.2 Using Update Documentation .................................. 1-1

1.2 Implementing Software Updates .................................... 1-2

### 2 Preparing for a Software Update

2.1 Understanding the Update Process ................................. 2-1

#### 2.2 Performing an Impact Analysis ................................. 2-1

2.3 Knowing what an Update Preserves and Replaces ............. 2-2

#### 2.3.1 Interactive Application Rules .................................. 2-2

#### 2.3.2 Report Rules ..................................................... 2-3

#### 2.3.3 Application Text Changes ..................................... 2-3

#### 2.3.4 Table Specification Rules ...................................... 2-3

#### 2.3.5 Control Table Rules ............................................ 2-4

#### 2.3.6 Business View Rules ........................................... 2-4

#### 2.3.7 Rules for Event Rules ........................................... 2-4

#### 2.3.8 Data Structure Rules ............................................ 2-4

2.4 Preparing Environments for Update ............................... 2-5

#### 2.4.1 Preparing the Prototype Environment ...................... 2-5

#### 2.4.2 Preparing the Development Environment .................. 2-5

#### 2.4.3 Checking Modification and Merge Flags ................... 2-6

#### 2.4.3.1 Check modification and merge flags: .................... 2-6

#### 2.4.4 Verifying Custom Changes in Master Control Tables .... 2-7

#### 2.4.5 Backing Up Servers and Databases .......................... 2-8

#### 2.4.6 Preparing the Localization update ........................... 2-9

### 3 Installing Updates on the Deployment Server

3.1 Understanding the Deployment Server Installation ............. 3-1
3.2 Using Update Center to Acquire Updates .............................................................. 3-1
3.3 Using the Oracle Software Delivery Cloud to Acquire Updates .................. 3-1
3.4 Installing the Software Update on the Deployment Server ....................... 3-2
3.4.1 Install the software update on the deployment server: ......................... 3-2

4 Using Change Assistant

4.1 Understanding Change Assistant................................................................. 4-1
4.2 Installing the Java Runtime Engine............................................................ 4-1
4.3 Installing Change Assistant........................................................................ 4-2
4.4 Viewing BUG Details.................................................................................. 4-4
4.5 Searching for Software Packages.............................................................. 4-4
4.5.1 Understanding Package Searches.......................................................... 4-4
4.5.2 Performing a Search............................................................................... 4-5
4.5.3 Analyzing Packages................................................................................ 4-6
4.5.4 Running All Queries............................................................................. 4-6
4.5.5 Saving Search Criteria for Future Use.................................................. 4-7
4.6 Working with Packages............................................................................... 4-7
4.6.1 Understanding Package Downloads....................................................... 4-7
4.6.2 Changing the Downloads Directory...................................................... 4-8
4.6.3 Downloading Packages.......................................................................... 4-8
4.6.4 Extracting Packages............................................................................... 4-9
4.6.5 Transferring Packages with FTP.......................................................... 4-9
4.6.6 Copying Packages.................................................................................. 4-9
4.6.7 Performing an Impact Analysis.............................................................. 4-10
4.6.8 Using Visual Compare for UDC Descriptions and Glossaries........ ... 4-10
4.6.9 Deleting Packages................................................................................ 4-10
4.6.10 Deploying Packages.............................................................................. 4-11
4.7 Working with Batches ................................................................................. 4-12
4.7.1 Understanding Batches......................................................................... 4-12
4.7.2 Working with Batch Details................................................................. 4-13
4.8 Deploying UDOs using the Change Assistant (Tools Release 9.2 Update 2)...... 4-13

5 Running Software Updates

5.1 Understanding Software Updates............................................................... 5-1
5.2 Working with the Software Updates ............................................................ 5-2
5.3 Starting and Running the Software Updates........................................... 5-2
5.3.1 Selecting Environments and Starting the Software Update............... 5-2
5.3.2 Replacing Language Data when Running a Language Update............ 5-5
5.3.3 Restoring a Backup.............................................................................. 5-5
5.4 Completing the Update.............................................................................. 5-6
5.4.1 Adding a Security Override for Running Table Conversions............... 5-6
5.4.2 Running Table Conversions................................................................. 5-7
5.4.3 Configuring your Control Tables......................................................... 5-8
5.4.4 Merging your Specification Tables....................................................... 5-8
5.4.5 Restarting the Specification Merge.................................................... 5-8
5.4.6 Configuring your Packages............................................................... 5-9
5.4.7 Validating the Update......................................................................... 5-10
8.6.12 Troubleshooting Information and Tips ................................................................. 8-36
8.7 Decustomizer Analysis Report (Release 9.2.3.3) ..................................................... 8-36
8.7.1 Overview ............................................................................................................. 8-36
8.7.2 Decustomizer Dataload Report ......................................................................... 8-37
8.7.2.1 Running the Decustomizer Dataload ............................................................... 8-37
8.7.3 Decustomizer Analysis Report .......................................................................... 8-38
8.7.3.1 Running the Decustomizer Analysis Report .................................................. 8-38
8.7.3.2 Decustomizations Summary ......................................................................... 8-39
8.7.3.3 Customizations Detail Report ........................................................................ 8-40

9 Custom Modifications and Packages
9.1 Understanding Custom Modifications and Packages ............................................. 9-1
9.2 Identifying Custom Modifications Using the Customization Workbench ............... 9-1
9.3 Retrofitting Custom Modifications .................................................................... 9-6
9.3.1 Understanding Retrofitting Custom Modifications .......................................... 9-6
9.3.2 Prerequisites ..................................................................................................... 9-6
9.3.3 Retrofitting Custom Modifications for an Interactive Application ................... 9-7
9.3.4 Retrofitting Custom Modifications for a Report ................................................. 9-7
9.3.5 Retrofitting Custom Modifications for a Table Conversion .............................. 9-8
9.3.6 Retrofitting Custom Modifications for a Table ................................................ 9-8
9.3.7 Retrofitting Custom Modifications for a Named Event Rule ............................. 9-9
9.3.8 Retrofitting Custom Modifications for a C Business Function ......................... 9-9
9.4 Using JD Edwards EnterpriseOne Package Management ..................................... 9-9

10 Updating Environments
10.1 Understanding How to Update the Production Environment .............................. 10-1
10.2 Updating the Production Environment ................................................................ 10-1
10.2.1 Updating the Production Environment Using OMW .................................... 10-1
10.2.2 Preparing to Use the Updated Production Environment .................................. 10-2

A Setting Up Localizations
A.1 Understanding How to Set Up Localizations ...................................................... A-1
A.2 Adding the Localization ..................................................................................... A-1
A.3 Changing the Revision Level ............................................................................. A-2
A.4 Setting Processing Options for R96450 .............................................................. A-2

Glossary
Welcome to the *JD Edwards EnterpriseOne Tools Software Updates Guide*.

**Audience**

This guide is intended for system administrators and technical consultants who are responsible for working with software updates and Change Assistant. This guide has been updated for JD Edwards EnterpriseOne Tools releases 9.2.2, 9.2.3.3 and 9.2.4.

**Documentation Accessibility**


**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](http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info) or visit [http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs](http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs) if you are hearing impaired.

**Related Information**

For additional information about JD Edwards EnterpriseOne applications, features, content, and training, visit the JD Edwards EnterpriseOne pages on the JD Edwards Resource Library located at: [http://learnjde.com](http://learnjde.com)

This guide contains references to server configuration settings that JD Edwards EnterpriseOne stores in configuration files (such as jde.ini, jas.ini, jdbj.ini, jdelog.properties, and so on). Beginning with the JD Edwards EnterpriseOne Tools Release 8.97, it is highly recommended that you only access and manage these settings for the supported server types using the Server Manager program. See the Server Manager Guide.

**Conventions**

The following text conventions are used in this document:
<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
1 Introduction to Software Updates

This chapter contains the following topics:

- Section 1.1, "Software Update Overview"
- Section 1.2, "Implementing Software Updates"

1.1 Software Update Overview

JD Edwards EnterpriseOne Software Update distributes the following types of updates.

- Electronic Software Update (ESU) is a fix to a problem reported on a specific JD Edwards EnterpriseOne application or report.
- Application Software Update (ASU) is a set of enhancements for a specific functional area of EnterpriseOne applications.
- Language Update contains the translated language updates associated with a Software Update. This is only applicable to customers that have a base language installed.
- Maintenance Pack (MP) is a group of all currently available fixes and in some cases, enhancements.
- Tools Release is a group of all fixes to JD Edwards EnterpriseOne foundation (System) code.

All are installed on the deployment server, deployed to a path code, merged with custom code as necessary, and validated before rollout to production users.

1.1.1 Using My Oracle Support

My Oracle Support is your link to customer support functions, the latest release information, and the Update Center. Select the Patches and Downloads tab and JD Edwards Products link to access the Update Center. Link to the Update Center to research and download updates for the entire line of Oracle's JD Edwards EnterpriseOne products.

1.1.2 Using Update Documentation

Each software update includes documentation that describes the contents of the update and includes instructions specifically related to that update.

For an ESU, the documentation is in the form of an HTML document (JL12345.htm) packaged within the download or accessible online before downloading. This document includes a list of SARs fixed by the update, the list of objects modified in the
update and a section detailing special installation instructions to implement the fix. Each ASU and Service Pack distribution CD includes a cover letter in PDF format. Read the cover letter before installing the update.

The cover letter includes this information:

- An overview of the installation process.
- Information related to running the update application.
- Manual steps specific to the update (for example, processing option and application setup).
- Other Software Updates that must be applied before or after the Software Update from the CD.
- Any changes to JD Edwards EnterpriseOne Certifications (MTRs) required by this update.

Each Tools Release includes an HTML document detailing SARs fixed by this release, installation instructions, and special considerations for this release.

### 1.2 Implementing Software Updates

All JD Edwards updates follow this basic process flow:

1. Prepare for the update.
2. Acquire the update from the appropriate source.
3. Install the update on the deployment server.
4. Deploy the update to the Pristine and Development environments.
5. Retrofit custom modifications and complete specific tasks relevant to the update.
6. Validate the applied update in a safe environment.
7. Rollout the update to production users.
Preparing for a Software Update

This chapter contains the following topics:

- Section 2.1, "Understanding the Update Process"
- Section 2.2, "Performing an Impact Analysis"
- Section 2.3, "Knowing what an Update Preserves and Replaces"
- Section 2.4, "Preparing Environments for Update"

2.1 Understanding the Update Process

To update JD Edwards EnterpriseOne successfully, complete the following checklist before starting the update process:

- Apply the latest JD Edwards EnterpriseOne Planner ESU prior to applying any JD Edwards EnterpriseOne Applications ESUs in order to ensure that updates are merged as expected.
- Complete a thorough Impact Analysis to consider the benefits and costs of applying each update.
- Prepare the prototype environment.
- Prepare the development environment.
- Check modification and merge flags.
- Backup critical data.
- Verify custom changes in master control tables.

See Also:

- Using the Software Update Impact Analysis Tool

2.2 Performing an Impact Analysis

Before you deploy any update, complete a thorough analysis of the benefits and costs associated with each update. Not all updates are relevant to your business or to the way you conduct your business. Careful planning at this stage is critical to the success of applying an update. It is recommended that you perform the impact analysis in two phases:

1. Perform a rough cut by reviewing SARs associated with the update. This review will help you determine if the update is relevant to your needs.
2. If you determine that an update is relevant, download and install it to your deployment server. Use the Impact Analysis tool to conduct a thorough review, or apply and run the update in the Pristine environment (PS900).

The Impact Analysis tool provided with JD Edwards EnterpriseOne helps perform an impact analysis. A key feature of this tool is a list of the objects in the update that you have modified. You must reapply the modifications using the JD Edwards ER Compare tool.

See Also: ■Using the Software Update Impact Analysis Tool

2.3 Knowing what an Update Preserves and Replaces

This section discusses the considerations that are important if your business requires custom modifications. An update does not change or delete any new JD Edwards EnterpriseOne object you create. However, if you modify a standard JD Edwards EnterpriseOne object or interface to an object, there may be an impact to your modifications when applying an update.

These rules describe which of your modifications the update process preserves and which modifications the update replaces.

1. "Preserve" means that during an update you do not lose your custom modifications when the software you currently have installed automatically merges them with the new JD Edwards EnterpriseOne applications shipped with the update. If there is a direct conflict between your specifications and JD Edwards EnterpriseOne specifications, the update process uses your specifications. When there is no direct conflict between the two, the update process merges the two specifications.

2. "Replace" means the update replaces your modifications and does not merge them into the update. You will need to redo your custom modifications after the update completes.

Note: If possible, transfer all modifications to one path code. Do this only if you have tested and approved all modifications or if you have modifications only in development. Having only one environment to update significantly shortens the process.

To ensure an accurate and predictable update, follow these rules as you modify your JD Edwards EnterpriseOne objects.

2.3.1 Interactive Application Rules

Do not delete controls, grid columns, or hyperitems on existing JD Edwards EnterpriseOne applications; instead, hide or disable them. The updates might use these items for calculations or as variables, and deleting them might disable major functionality.

The update process replaces the current application that resides in your Central Object database. Use Oracle’s JD Edwards ER Compare to restore custom changes. This set of tools helps you restore custom changes to:

■ New hyperitems.
■ New controls and their event rules.
■ New grid columns.
Preparing for a Software Update

2.3.2 Report Rules

These rules apply to report specifications that were created using Report Design.

An update preserves these changes:

- New reports.
- New objects to existing reports, including:
  - Constants.
  - Alpha variables.
  - Numeric variables.
  - Data variables.
  - Runtime variables.
  - Database variables.
  - Dictionary variables.
- Any style changes, such as fonts and colors.
- Location and size changes for objects.
- Data dictionary overrides.

An update replaces custom sections on existing reports.

2.3.3 Application Text Changes

An update preserves overrides done in Oracle's JD Edwards EnterpriseOne Form Design Aid (FDA), Report Design, or Interactive or Batch Vocabulary Overrides.

2.3.4 Table Specification Rules

An update merges your table specifications from one release level to the next.

An update preserves these changes:

- New tables
- New indexes

An update replaces columns added or removed from existing JD Edwards EnterpriseOne tables. This includes changing field length, field type, and decimal position.

Instead of adding a new column to an existing JD Edwards EnterpriseOne table, use Oracle's JD Edwards EnterpriseOne Table Design Aid to create a second table that has the same key as the first table and add your modifications to the new table. Use system codes 55 -59. For custom tag files, be aware of data item changes in the JD Edwards
EnterpriseOne data dictionary. From one release to the next, JD Edwards EnterpriseOne might change certain data item attributes, such as data item size, which can affect data integrity and how data is stored in the database.

For this reason, you might need to use Oracle’s JD Edwards EnterpriseOne Table Conversion tool to convert the tag file data to the new release level. For base tables, the update process takes care of the data dictionary changes by upgrading the JD Edwards EnterpriseOne database to the new release level.

An update preserves custom indices over the custom tag files.

See *JD Edwards EnterpriseOne Tools Table Conversion Guide*.

### 2.3.5 Control Table Rules

An update merges your control tables during an update using the Change Table process, a delta between the base product and the update, as the basis to do the data merge.

An update preserves these changes:

- Data dictionary custom changes, such as changes to row, column, and glossary text. The update process uses your data dictionary as the base. If there is a conflict with JD Edwards EnterpriseOne data items, your changes override them.

- User-defined codes. The update process merges any new hard-coded JD Edwards EnterpriseOne values. (Values owned by JD Edwards EnterpriseOne are system 90 and higher, and H90 and higher.) The process also reports any JD Edwards EnterpriseOne hard-coded values that conflict with your custom values.

- Oracle’s JD Edwards EnterpriseOne Workflow. The update process merges any JD Edwards EnterpriseOne additions, updates, or deleted workflow processes in your data. If there is a conflict with your workflow processes, JD Edwards EnterpriseOne overrides them.

### 2.3.6 Business View Rules

Do not remove columns from existing business views. Changing business views that applications use can cause unpredictable results when you run the application. If you need to hide columns, do so at the application design level using either FDA or Report Design. Performance is not greatly improved by deleting a few columns from a business view.

An update preserves these changes:

- New custom business views.

- New columns, joins, or indices to the existing business views.

An update replaces columns that you have removed from JD Edwards EnterpriseOne business views.

### 2.3.7 Rules for Event Rules

An update replaces all modifications that you have made to applications, including custom event rules. Use FDA and ER Compare to restore your customizations after an update.

An update replaces modifications that you have made to JD Edwards event logic in reports, tables, and Named Event Rules (NER).
An update preserves new, custom logic that you have added to reports, tables, and NER on events with no previous or current JD Edwards logic.

### 2.3.8 Data Structure Rules

An update preserves all of these custom data structures:

- Forms
- Processing options
- Reports
- Business functions
- Generic text

An update replaces these custom modifications to JD Edwards EnterpriseOne data structures:

- Forms
- Processing options
- Reports
- Business functions
- Generic text

### 2.4 Preparing Environments for Update

This section discusses how to:

- Prepare the prototype environment.
- Prepare the development environment.
- Check the modification and merge flags.
- Verify custom changes in master control tables.
- Back up servers and databases.
- Prepare the localization update.

### 2.4.1 Preparing the Prototype Environment

This table lists the requirements for preparing the prototype environment.

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer or system administrator</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the deployment server, in the deployment environment, logged on as user JDE with the database password for user JDE.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

To make sure you retain all modifications from the base prototype environment, complete these tasks:

- Transfer all tested and approved modifications to the base prototype path code.
After the transfer finishes, build a prototype package.

- Deploy the prototype package to workstations you want to run at the base release.
- Verify the Central Object Database is large enough to accommodate the update.

### 2.4.2 Preparing the Development Environment

This table lists the requirements to prepare the development environment.

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer or system administrator</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the deployment server, in the development environment, logged on as user JDE with the database password for user JDE.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

To make sure you retain all modifications from the base development environment, complete these tasks:

- Make sure that all work in progress is checked into the development path code. From a development workstation, use the Promotion Manager or your own query or report to verify that objects are not checked out.
- Build the development package in preparation for deployment to one or more workstations.

Deploy the development package to one or more workstations. You will use these workstations later to help verify that all modifications were carried forward to the new release.

While you update, you cannot make any modifications (except changes to custom business functions written in C language) to carry forward to the next release.

Verify the Central Object Database is large enough to accommodate the update.

**See Also:**

- "Understanding Objects" in the *JD Edwards EnterpriseOne Tools Package Management Guide*.
- "Building Packages" in the *JD Edwards EnterpriseOne Tools Package Management Guide*.

### 2.4.3 Checking Modification and Merge Flags

This task ensures that your modifications are carried forward to the new release. Before you update, perform these steps to review or set the modification flags on the Object Librarian records for all modified objects.

Do not run the Specification merges until you check the flags for all path codes containing modified objects.

#### 2.4.3.1 Check modification and merge flags:

This table lists the requirements for checking modification and merge flags.
Log onto a workstation or to the deployment environment on the deployment server.

From the Advanced Operations (GH9611) menu, select Specification Merge Selection (P98401).

1. On Specification Merge Selection, complete these fields:
   - **Location**
     Type the name of the deployment server that contains the central objects specifications.
   - **Path Code**
     Type the name of the associated path code (prototype or development).

2. On the QBE line, type C in the Mod Flag field to list the changed objects, then click Find.

3. For each object that appears in the grid, verify that the Mod Flag field is set to C, and the Mrg Opt field is set to 1 (merge), which ensures that the modifications are merged when the specification merges run during the update workbenches.

   Do not set the Mrg Opt field to 1 unless you want objects merged or saved.

4. When you finish reviewing or modifying the records, click Close.

To verify the accuracy of modifications, some additional queries are strongly recommended to avoid missing any modified objects. For example, SY = 55 - 59.

---

**Note:** You can also print Oracle's JD Edwards EnterpriseOne Object Librarian Modifications Report (R9840D), which lists all added and modified objects. After the update finishes, review this report to verify whether the object modifications were carried forward to the new release. For more information about the JD Edwards EnterpriseOne Object Librarian Modifications report, see Reports in the Installation Reference Guide.

---

### 2.4.4 Verifying Custom Changes in Master Control Tables

This table lists the requirements to verify custom changes in master control tables:

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer or database administrator</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the workstation, for each applicable environment, logged on as user JDE with the database password for user JDE.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None</td>
</tr>
</tbody>
</table>

---
1. Verify that these master control tables for the data dictionary reside in a relational database accessed by the Data Dictionary data source:
   - F9200
   - F9202
   - F9203
   - F9207
   - F9210
   - F9211
   - F9212
   - F00165 (GT92002)

2. Verify that these master control tables for Solution Explorer tasks reside in a relational database accessed by the Control Tables - Production data source (for production) or Control Tables - CRP (for prototype environments) or Control Tables - Test (for the development environment):
   - F9000
   - F9001
   - F9002
   - F9005
   - F9005D
   - F9006
   - F9006D
   - F9020
   - F9022
   - F9050

3. Verify that these master control tables for user-defined codes reside in a relational database accessed by the Control Tables - Production data source (for production) or Control Tables - CRP (for prototype environments) or Control Tables - Test (for the development environment).
   - F0004
   - F0005

4. Verify that these master control tables for workflow reside in a relational database accessed by the Control Tables - Production data source (for production) or Control Tables - CRP (for prototype environments) or Control Tables - Test (for the development environment).
   - F98800
   - F98800D
   - F98800T
5. Verify that the media objects queue paths are configured correctly.

Use P98MOQUE from the deployment server in both the JDEPLAN and DEPSRV environments.

2.4.5 Backing Up Servers and Databases

Before beginning the software update, back up the entire deployment server, the enterprise server (the complete directory structure for the base installation), and the Oracle or SQL Server databases.

2.4.6 Preparing the Localization update

If you are a Localization customer, you must complete all the tasks in Appendix A: Setting Up Localizations. These tasks describe how to set up the software to automatically handle all future updates to the localization that are installed by ESUs.
3.1 Understanding the Deployment Server Installation

The Deployment Server is the central hub for distribution of Oracle’s JD Edwards EnterpriseOne objects to servers and users. The update process delivers changes to the deployment server to integrate with that distribution process. Each update type has a slightly different method of completing this task but the outcome is the same.

The installation process for the deployment server includes these tasks:

- Acquiring the update from the Update Center, Oracle Software Delivery Cloud portal.
- Installing the objects from the CDs or the Web.

3.2 Using Update Center to Acquire Updates

Link to the Update Center through My Oracle Support or use Oracle’s JD Edwards EnterpriseOne and World Change Assistant from your desktop to acquire all ESUs and updates for other Oracle JD Edwards EnterpriseOne and World products. JD Edwards EnterpriseOne and World Change Assistant streamlines the update process. This versatile tool simplifies the installation and deployment of ESUs and other updates.

See Also: Using Change Assistant

3.3 Using the Oracle Software Delivery Cloud to Acquire Updates

If you already have JD Edwards EnterpriseOne 9.0 software and want to acquire an update, go to the Oracle Software Delivery Cloud portal at https://edelivery.oracle.com, or contact your local Customer Care Center. The Oracle Software Delivery Cloud portal enables you to obtain your software.
Installing the Software Update on the Deployment Server

3.4 Installing the Software Update on the Deployment Server

The following process installs the software update on the deployment server. This installation may be from a CD or a download from the Update Center via My Oracle Support or JD Edwards EnterpriseOne and World Change Assistant.

Before you run the installation program, shut down all programs running on the deployment server that could cause Dynamic Link Library (DLL) conflicts (such as Internet Explorer or Adobe Reader).

**Important:** In order to ensure that updates are merged as expected, it is strongly recommended that you apply the latest JD Edwards EnterpriseOne Planner ESU prior to applying any JD Edwards EnterpriseOne Applications ESUs.

3.4.1 Install the software update on the deployment server:

This table lists the requirements for installing the software update on the deployment server:

<table>
<thead>
<tr>
<th>Action</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer</td>
</tr>
<tr>
<td>Logon status</td>
<td>Logged on to the deployment server with administrator rights. You must log off JD Edwards EnterpriseOne before completing this task.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>You must create the JDE user.</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

To install an ESU that was downloaded from the Update Center:

1. Locate the downloaded JLnnnnn.exe file.
2. Right-click on the self-extracting executable and click on **Run As Administrator**. The Client Workstation Setup Screen appears.
3. Click Next, the package size is calculated. The Installation Setup Type appears.
4. Click Finish.

To install ASUs from a CD:

1. Insert the setup CD into the CD drive.
2. Double-click the InstallManager.exe file. The Installation Setup Screen appears.
3. Click Next, and the package size is calculated. The Installation Setup Type appears.
4. Click Finish.

**See Also:** [Using Change Assistant](#)
Note: After completing this step, the update is ready to deploy to an environment. JD Edwards EnterpriseOne updates (ASU and ESU) are located in a folder under the Planner path code (..\Planner\Package\package name).

Note: Complete your Impact Analysis at this time and then continue with deployment using JD Edwards EnterpriseOne and World Change Assistant, the JD Edwards EnterpriseOne Software Updates application, or special instructions included with your update.
This chapter contains the following topics:

- Section 4.1, "Understanding Change Assistant"
- Section 4.2, "Installing the Java Runtime Engine"
- Section 4.3, "Installing Change Assistant"
- Section 4.4, "Viewing BUG Details"
- Section 4.5, "Searching for Software Packages"
- Section 4.6, "Working with Packages"
- Section 4.7, "Working with Batches"
- Section 4.8, "Deploying UDOs using the Change Assistant (Tools Release 9.2 Update 2)"

4.1 Understanding Change Assistant

The JD Edwards EnterpriseOne and World Change Assistant is a standalone Java application that helps you manage, download, and deploy JD Edwards EnterpriseOne packages. Change Assistant provides a single point of entry to facilitate administration of software updates and fixes. You can download Change Assistant from the Oracle JD Edwards EnterpriseOne Update Center by clicking the Download the Change Assistant Application link.

You can access the Update Center by using the following navigation from My Oracle Support:

My Oracle Support  |  Patches & Updates tab  |  JD Edwards

4.2 Installing the Java Runtime Engine

Change Assistant requires a certified JRE. If you do not have an appropriate version of JRE installed, you will not be able to use Change Assistant. You can download and install the Java Runtime Engine by navigating to the Java website. The Change Assistant Launch page provides the link to launch the application via Java WebStart.

Note: See the Oracle Technology Network (OTN) for certified versions of JRE:
http://www.oracle.com/technetwork/java/javase/overview/index.html
If you have problems after installing the JRE, Oracle recommends that you manually remove all existing JREs and start over.

4.3 Installing Change Assistant

You download Change Assistant from the Update Center. When the installation is finished, a Preference wizard opens, prompting you for preferences for setting up Change Assistant. If you already have Change Assistant installed, or if the Preference wizard does not appear when installing Change Assistant, you can launch Change Assistant from your desktop. You can change or set up your preferences by selecting Preferences from the Edit menu.

The Preference wizard provides an option for you to choose whether the Preference wizard always appears upon startup of the tool. If you choose to have the Preference wizard always appear, you are prompted for your Update Center password each time you launch Change Assistant.

To install Change Assistant:

1. Within Update Center, select Electronic Software Updates from the News and Links pane on the left.

2. Click the Download the Change Assistant Application link on the Update Center, Electronic Software Updates web page.
   The JD Edwards EnterpriseOne and World Change Assistant page opens providing information about Change Assistant features.

3. Click the "here" link in Step 2, under Installing Change Assistant.

   After Change Assistant installs, the Preference wizard opens prompting you for preference information.

4. For Update Center Authentication, enter your Update Center access information in these fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User ID</td>
<td>Enter your Update Center user ID.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter your password.</td>
</tr>
<tr>
<td>User Name</td>
<td>Enter a user name.</td>
</tr>
<tr>
<td>Email</td>
<td>Enter your email address.</td>
</tr>
<tr>
<td>Phone</td>
<td>Enter your phone number.</td>
</tr>
</tbody>
</table>

5. If you want to disable the Update Center connection, select the Disable Update Center connection check box.

   Caution: If you select this check box, you will not be able to search for and download ESUs.

6. If you want to be prompted for your password each time Change Assistant starts, select the Always Prompt at Startup? option.

   This option is on all pages of the Preference wizard. If you change your selection on a future page, the change is reflected on all pages.
7. Click Next to open the next page of the Preference wizard, which prompts you for connection information.

8. The system provides default values for these Update Center Connection fields:
   - Timeout
   - Number of Retries

   Oracle recommends that you use the default values.

9. If you access the Update Center through a proxy server that requires authentication, enter this information:
   - User ID
   - Password
   - Domain

10. Click Next to open the next page of the Preference wizard, which prompts you for a directory location for downloads.

11. Enter the path to the directory where you want to store downloaded updates.
    For example, C:\Change Assistant\Downloads.

    This is the root folder for packages that are downloaded from the Update Center. Typically, this is a folder that is shared by all your Update Center users to avoid downloading the same packages multiple times. Packages can be organized into additional folders under this parent folder.

12. Select the Include Dependencies option to automatically include dependent packages in download and deployment requests.

13. Select Show News and Links at Startup to automatically display this information each time you launch Change Assistant.

    If you select this option, the Show News and Links page appears each time you launch Change Assistant. If you do not select this option, Change Assistant opens with the tree structure. The News and Links page enables you to view content that is downloaded from the Update Center, such as breaking news, planner information, or JD Edwards EnterpriseOne Certifications (MTRs) information.

14. Click Next to open the next page of the Preference wizard, which prompts you for Logging information.

15. Enter the directory for the activity Log files.
    For example, C:\Change Assistant\Logs.

    Deployment activity for downloads is kept in the log file directory. This includes information about download times and deployment times. This location is also used to hold information that is captured during the deployment of downloaded packages. You create the download log by searching your local downloads or by retrieving download audit information from the Update Center.

16. Select the Create Download Log from current downloads option if you want the system to automatically generate logs based on downloads in the download folder.

17. Select the Create Download Log from download audit history option if you want to create logs based on the Update Center audit history.
18. Click Next to open the next page of the Preference wizard, which provides licensing information.

19. Select the Always Accept option to hide the license agreement during the download process.

20. Click Finish. Change Assistant is installed on your system with a shortcut available on your desktop.

4.4 Viewing BUG Details

The View BUG Details option appears within the Change Assistant tree structure. When you select View BUG Details, the BUG Details tab displays in the right pane. Enter the BUG you want to review and click on the Show Details button to retrieve the BUG information.

4.5 Searching for Software Packages

This section provides an overview of package searches and discusses how to:

- Perform a search.
- Analyze packages.
- Run all queries.
- Save search criteria for future use.

4.5.1 Understanding Package Searches

Package searches can be performed in various ways. You can use preexisting queries to find packages, or you can create your own query and save it for future use. The preexisting queries are organized by type, release, and business purpose within the Search for Packages tree structure under the JD Edwards folder.

Queries in the JD Edwards folder are updated each time that you launch Change Assistant.

When you choose one of the predefined queries, the system populates the fields in the Search pane. You can update these fields as needed or create your own query by populating these fields manually.

If you customize a query, you can save it for future use within the My Queries folder. Queries within the My Queries folder are persistent and do not get overwritten. You can configure the predefined queries with date ranges or other filters and save these searches in the My Queries folder or any subfolder therein.

You have the ability to run all queries inside a query folder. The queries will be run in the order that they appear in the tree, the results will be displayed on a single tab, and any duplications will be excluded.

You can customize any query folder that you have created under the My Queries folder using the Folder Options dialog. This enables you to designate a folder as an aggregate folder. An aggregate folder enables you to arrange the child queries in a particular order by simply dragging them to the desired location, while a regular query folder sorts the queries alphabetically. You can also use the Folder Options dialog to disable searching at the folder level.
**Note:** When you use the Run All Queries option under an aggregate subfolder of JD Edwards, the results tab only allows you to download or download and deploy all of the packages in the order they appear in the grid.

When you perform a search, the results are displayed on the right side of the form. Only the first twenty matches are displayed, and the results count is displayed above the grid. You can use the Page at a time button or the All Results button to continue fetching the results. Each search that you perform creates a new results tab.

### 4.5.2 Performing a Search

Access Change Assistant.

1. Expand the Search for Packages node on the tree.

2. If you want to create a new query, use any of these fields on the Search pane to define your query:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Specify the type of update you want to search for.</td>
</tr>
<tr>
<td>Release</td>
<td>Specify the release for the selected updated type.</td>
</tr>
<tr>
<td>Platform</td>
<td>Specify the target platform of the package.</td>
</tr>
<tr>
<td>Defect Category</td>
<td>Specify the defect category of a BUG in the package. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>■ All</td>
</tr>
<tr>
<td></td>
<td>■ Memory</td>
</tr>
<tr>
<td></td>
<td>■ Performance</td>
</tr>
<tr>
<td>Name</td>
<td>Enter the name of the package. Valid values include a single name with a wildcard (*) and a comma-separated list of exact names.</td>
</tr>
<tr>
<td>BUG Number</td>
<td>Enter the name of a BUG contained in the package or a comma-separated list of BUGs.</td>
</tr>
<tr>
<td>Object</td>
<td>Enter the name of an object contained in the package. Valid values include a single name with a wildcard (*) and a comma-separated list of exact names.</td>
</tr>
<tr>
<td>System Code</td>
<td>Enter a system code for a BUG or an object contained within the package. You can also enter a comma-separated list of exact names.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description for the package or for a BUG or an object contained within the package. You can enter a string including wildcards (*).</td>
</tr>
<tr>
<td>Search by Dates</td>
<td>Specify whether you want to search over a range of dates or for a duration of time.</td>
</tr>
<tr>
<td></td>
<td>■ Duration: Specify how many days, weeks, or months you would like to include in the search.</td>
</tr>
<tr>
<td></td>
<td>■ Range: Specify a From Date and Through Date</td>
</tr>
</tbody>
</table>

3. If you want to use an Oracle JD Edwards predefined query, expand the JD Edwards folder to view a predefined set of queries and select a search.

4. Update the search criteria as needed to search by type, names, or dates.
5. Click the search button above the search criteria to run the search against the Update Center.

6. View the search results on the appropriate search tab on the right side of the screen.

7. To view details for a specific package, select the package.

   The Package Details pane displays detailed information for that package, such as included BUGs, objects, and dependency information.

8. View the package details below the search results by clicking the tab that corresponds to the information that you want to view.

   Select any of these tabs to view more information:

<table>
<thead>
<tr>
<th>Tab Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUGs</td>
<td>Displays a list of all of the BUGs included in the package. You can double-click on any of the BUGs to see the BUG details.</td>
</tr>
<tr>
<td>Objects</td>
<td>Displays a list of all of the objects included in the package.</td>
</tr>
<tr>
<td>Objects by BUG</td>
<td>Lists the objects included in the package as well as the BUG with which they are associated.</td>
</tr>
<tr>
<td>Net Change</td>
<td>Lists the packages that are superseded by the selected package. Select the Compare button to see a comparison of the selected package and any of the superseded packages.</td>
</tr>
<tr>
<td>Dependencies</td>
<td>Lists any other packages upon which the selected package is dependent. These packages should be installed before the selected package.</td>
</tr>
</tbody>
</table>
   | Check Sum       | When you select this tab, the system computes the checksum. This can be used after downloading a package in order to verify its integrity. The following two checksum algorithms are used:  
                     ■ MD5  
                     ■ SHA-1 |

9. To close a specific results tab, right-click it and select Close from the pop-up menu.

10. Select Close All Results to close all results tabs.

4.5.3 Analyzing Packages

After finding a package, you can perform a net change analysis before you download the package.

To analyze packages:

1. On the search results tab, select the packages that you want to analyze and click the Analyze button.

2. If you have selected more than one package and you choose the Analyze with Downloads option from the Analyze drop-down list box, the selected packages are compared to the superseded list. Next, the most current download found is used to perform the net change analysis by comparing the most current download to previously downloaded packages.
3. If you select the Summarize All option from the Analyze drop-down list box, Change Assistant will summarize the selected packages and will not perform a net change comparison.

4. When the analysis finishes processes, a report appears. Review the report. Any manual special instructions are included in the report.

**Note:** The Analyze option is only available when you are connected to the Update Center.

### 4.5.4 Running All Queries

To run all queries:

1. Select the folder for which you want to run the queries.

**Note:** If the Disable Folder Search check box has been selected within the Query Folder Options, you will not be able to search at the folder level.

2. Right-click and select Run All Queries to run all the queries in the selected folder and subfolders.

Change Assistant will display the combined results of all the included queries.

### 4.5.5 Saving Search Criteria for Future Use

To save search criteria for future use:

1. Select one of the existing queries under the JD Edwards folder.
2. Configure the query as desired.
3. Click the Save Query button.
4. Specify the folder to save the query in within the My Queries folder.
5. Enter a name for the query.
6. Click the Save the Query button.

### 4.6 Working with Packages

This section provides an overview of package downloads and discusses how to:

- Change the downloads directory.
- Download packages.
- Extract packages.
- Transfer packages with FTP.
- Copy packages.
- Perform an impact analysis.
- Use Visual Compare for UDC descriptions and glossaries.
- Delete packages.
Deploy packages.

4.6.1 Understanding Package Downloads

Once you have searched for your packages, the next step is to download the packages. Downloading the packages makes them available to work with on your machine. For example, you can extract, transfer, copy, or deploy packages once they have been downloaded.

Your download folder structure appears in Change Assistant under the Work with Packages node. You can organize packages into subfolders based on release, package type, and platform. This allows for easy browsing, tracking, and management of packages. You could also further categorize the packages based on when they were downloaded.

To view your downloaded packages, select a downloads folder in the tree structure on the left side. The display on the right changes to display the packages contained in that folder in the Work with Packages grid. By default, only the packages that are immediate children of the folder selected in the tree are displayed in the grid. The Descendants option on the View menu allows you to display the contents of the selected folder and all the subfolders.

Clicking on the column in the grid header allows you to sort rows in ascending and descending order based on that column. You can also sort multiple columns by holding the Control key down while clicking on one or more column headers. Selected packages can be extracted, deployed, transferred to a different machine using FTP, or deleted, using the tool bar options.

4.6.2 Changing the Downloads Directory

To change the downloads directory:

2. Enter the new downloads directory and click OK.

Note: The downloads directory must have read/write access. To access a PAR file on a CD or from the Oracle Software Delivery Cloud portal, copy the PAR file to a folder within the current downloads directory, or to a folder with read/write access. Then, change the downloads directory to the folder where you copied the PAR file.

3. To quickly switch back to previously used directories, select File, Recent Home Directories.

4.6.3 Downloading Packages

Packages in the Search Results grid are downloaded from the Update Center. The checked boxes in the first column of the grid specify those updates that have not been downloaded. This status is determined by local information that is taken from the download log. You can select which packages to download by manually checking or unchecking the check boxes in the first column. You can download multiple packages simultaneously by selecting more than one package in the Search Results grid.

To download packages:

1. Within the Search Results grid, select the packages you would like to download by placing a check mark in the first column.
2. Open the Download drop-down list box by selecting the down arrow next to the Download button.

3. To download the selected packages, select either the Download To option or the Download and Deploy To option from the drop-down list box.

   The Download and Deploy To option provides a way to download and deploy all selected packages in one step.

4. Select your download folder from the list of previously chosen folders or select a new folder to which to download your packages.

   **Note:** During the download process, you have the ability to pause, resume, and cancel the download using the appropriate buttons in the bottom-right corner of the form. You can also view the progress of the download in the status bar at the bottom of the form.

5. If you selected to download and deploy in one step, you are prompted to sign into JD Edwards EnterpriseOne and then must enter your specific deployment information before starting the download.

   For example, deploying Electronic Software Update (ESU) packages from the JD Edwards EnterpriseOne deployment server requires the name of the target environment and other deployment options. An additional input dialog is displayed to prompt for these options.

   **Note:** You must be on the deployment server in order to deploy the packages.

   See Deploying Packages.

6. View your downloaded packages by selecting Work with Packages and then Downloads from the tree structure.

7. If you think there may have been problems during the download process, you can perform a checksum validation to ensure the integrity of the downloaded package by selecting the Check Sum tab within the Package Details pane.

   When you select this tab, the system uses 2 algorithms, MD5 and SHA-1, to calculate checksum values for the downloaded package and compares these values to the original package. A green check mark appears next to each value if the checksum value for the downloaded package and the original package are the same. If there is a problem with the integrity of the package, you will see a red universal no symbol over a check mark next to the value.

### 4.6.4 Extracting Packages

If the downloaded package is a PAR file, you need to extract the contents of the package.

1. Select the Work with Packages node from the tree structure.

2. Select the Downloads node, and your downloaded packages appear on the Work with Packages tab.

3. Select the package to download and click the Extract button.
When you click the Extract button, the contents of the package appear in a new Extract window in a tree structure or in a tabular form.

4. In the Extract window, select one or more files or folders to be extracted by selecting the corresponding check box.

Selecting a folder automatically selects all of its contents.

5. To examine a file before extracting it, right-click the tree or grid and select Open/Launch.

### 4.6.5 Transferring Packages with FTP

To transfer packages with FTP:

1. On the Work with Packages tab, click the FTP button to display a dialog box.
2. Enter the information for the machine to which the selected packages are to be transferred.
3. Transfer the packages.

### 4.6.6 Copying Packages

To copy packages:

1. On the Work with Packages tab, select the package that you want to copy and click the Copy button.
2. Enter the target directory on the Select the Target Location form and click OK.

**Note:** The target directory must allow write permission, and cannot be the same as the source directory.

### 4.6.7 Performing an Impact Analysis

To perform an Impact Analysis:

1. On the Work with Packages tab, select the packages for which you would like to perform an impact analysis.
2. Click the Impact Analysis button and the system will verify the selected packages as ESUs, extract the impact analysis document from the package deliverable, and import the impact analysis document into JD Edwards EnterpriseOne.
3. If you want to import impact analysis documents from the deployment server, select Impact Analysis from Deployment Server directory from the Impact Analysis drop-down list box.
4. Use the Impact Analysis Tool to review the changes for your selected software updates.

**Note:** The Impact Analysis option is only available when JD Edwards EnterpriseOne is installed.

### 4.6.8 Using Visual Compare for UDC Descriptions and Glossaries

To use Visual Compare for UDC Descriptions and Glossaries:
1. On the Work with Packages tab, select the packages for which you would like to run Visual Compare.


3. If you want to import impact analysis documents from the deployment server, select Visual Compare for UDC Descriptions and Glossary from Deployment Server directory from the Impact Analysis drop-down list box.

Change Assistant verifies that the selected packages are ESUs, extracts the automated special instructions document from the package deliverable, and imports only documents containing User Defined Codes or Glossaries into JD Edwards EnterpriseOne.

4. Use the Visual Compare for UDC Descriptions and Glossary Tool to review the changes and accept the changes for your target environment.

---

**Note:** The Visual Compare for UDC Descriptions and Glossary option is only available when JD Edwards EnterpriseOne is installed.

---

### 4.6.9 Deleting Packages

To delete packages:

1. Click the Delete button.

2. Select Continue in the Delete Confirmation dialog box to delete the selected packages and the corresponding temporary folders from the local machine.

---

**Note:** This process only deletes the file from your machine and does not affect deployment status. If the package was deployed, it will not be uninstalled.

---

### 4.6.10 Deploying Packages

Before deploying a package, you should check whether the prerequisites or dependencies for the package have been deployed. This information is displayed on the Dependencies tab.

When you click the Deploy button, the activity log is checked to determine whether any of the selected packages have been superseded. If so, a list of these packages is displayed. Also, the log is checked to determine whether all prerequisites for the selected packages have been deployed. If not, a list of these dependencies is displayed and you can continue or cancel deployment.

To deploy packages:

1. Select Deploy.

2. From the Deploy drop-down list menu, select one of these two options:
   - **Deploy**
     
     Select Deploy to search for a previous batch for the current object at an "in process" status. The system will restart that deployment where it left off or if it cannot find any batches with an "in process" status, it will start a new batch. This is typically used in an Oracle Business Accelerator (OBA) where there is a question and answer session that may require input from multiple sessions, but the "logical" session remains intact.
- **New Batch Deploy**

  Select New Batch Deploy to start deployment of a new batch.

3. Select Run All to deploy all of the packages.

4. If multiple packages are selected, a new window is launched and the packages are deployed as an aggregate.

5. If a single package is selected and if the package is suitable for deployment, one of the following processes will occur, depending on the type of package that is selected:

- If the package is a documentation package, the documentation link is displayed in a new documentation window, and clicking the link launches the associated application.
  
  If the link points to an HTML page that resides inside the package itself, it is directly displayed in the window.

- If the package only contains some files that need to be extracted to the disk, the extract window is displayed.

- If the package is a PAR file that contains some deployment tasks or is an EXE file, a new window is displayed that enables you to view the documentation for these tasks and run them.

Configurations and packages with JD Edwards EnterpriseOne tables or objects are validated for their release level. If the source and target release do not match, a warning is displayed. If you choose to ignore this warning, you must give careful consideration to changed table formats, object dependencies, and so forth.

During the deployment of configurations that contain versions, the Versions tab appears. Use this tab to change the version prefix. Enter the From Prefix and the To Prefix values in the grid.

---

**Note:** The new prefix string must be the same length as the old prefix.

---

- If the package is an ESU, a new window is displayed that prompts you to select the target deployment environments and the following deployment options:

<table>
<thead>
<tr>
<th>Batch Deployment Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Backup</strong></td>
<td>Select the backup check box to create a backup of object specifications included in the updates. Backups are used with the compare/merge tools to aid the retrofitting process and to examine changes made by the update. Backup is selected by default.</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Select the environments to which you want to deploy the update. It is recommended to apply updates to the Pristine and Development environments using Change Assistant. After retrofitting custom objects, you can transfer the objects to the Prototype and Production environments using OMW.</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td>Use this tab to add any runtime notes that you would like displayed on activity reports and during restart of a deployment.</td>
</tr>
</tbody>
</table>
4.7 Working with Batches

This section provides an overview of batches and discusses how to work with batch details.

4.7.1 Understanding Batches

A batch is created for each download, deployment, and delete action taken. All packages selected for the initial action are preserved in a single link to simplify future tasks with these same packages. You can research all packages that were downloaded in a batch by right-clicking the batch record. You can also use the Deploy button to deploy all packages that were previously downloaded in a batch.

You can use the following options when you are working with a batch:

- **Deploy**
  To deploy all the packages in the selected batch, click Deploy. If the batch contains one or more ESUs, you will be prompted to sign into JD Edwards EnterpriseOne.

- **Export**
  This feature is useful when you want to download packages to one machine and deploy them from another machine. For example, if your deployment server does not have access to the Update Center, you can download packages to a client and then export the packages to a Jar file. This file can then be copied to the deployment server and imported using the Import option.

- **Import**
  This option enables you to import packages to a machine from a jar file that was created using the Export option. The application prompts you to select the jar file from which you want to import the packages and to choose the directory to which you want to import the packages.

- **New**
  You can create a custom batch by clicking the New button on the Work with Batches grid. This enables you to group the previously downloaded packages together for the purpose of deployment or exporting.

- **Delete**

---

<table>
<thead>
<tr>
<th>Batch Deployment Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skip Spec Merge</td>
<td>Select this option if you would like to skip the spec merge for objects for a particular environment.</td>
</tr>
<tr>
<td>Skip OMW and Package Build Data</td>
<td>Select this option to skip the creation of OMW projects and package build definitions.</td>
</tr>
<tr>
<td>Summary</td>
<td>Select this option to deploy the group automatically with minimal status information. If you do not select this option, you step through each task of the deployment with full status. The manual mode requires clicking the Run or Run All button before starting the deployment.</td>
</tr>
<tr>
<td>Unattended</td>
<td>Select this option to deploy a group of updates in a single process. If you do not select this option, you step through each task of the deployment manually (attended mode). The unattended mode requires no further input after clicking the OK button. The status of each update displays as the application runs.</td>
</tr>
</tbody>
</table>

---
Use this option to remove any batches that you do not need. This option removes only the batch information, not the packages themselves.

- **Batch Summary**
  This option generates a summary report of all the actions that were performed on the highlighted batch. The report is displayed in the default browser.

### 4.7.2 Working with Batch Details

To work with batch details:

1. Select Work with Batches in the tree structure.
   A list of batches will appear in the Batches pane.
2. Select the batch that you want to work with.
   A list of packages included in that batch will appear in the Batch Details pane.
3. To add a package to the batch, select Add Package.
4. To remove a package from the batch, select Remove Package.
5. To view more information about one of the packages, select the package to highlight it, and select Package Summary.
6. To view a history of actions that were performed on the batch, select the Batch Actions tab.
   You can also restart deployment from the Batch Actions tab by clicking the Restart Deployment button.

### 4.8 Deploying UDOs using the Change Assistant (Tools Release 9.2 Update 2)

Beginning with 4.0.0.4 version, the Change Assistant supports the deployment of User Defined Object Packages and provides a Deployment Summary report after a successful deployment.

To download and deploy the User Defined Object Packages from the Change Assistant:

1. In the Change Assistant, open Search for Packages in the tree structure.
2. In the Advanced Search tab, select the Type as EnterpriseOne User Defined Objects, the Release Number as 9.2, and the Platform as CLIENT. Click the Search icon. 

3. Select the required User Defined Object Packages you want to download and deploy. You can select single or multiple packages. 

4. Click the Download icon and then select Download To and Deploy Option, and then select the required folder as shown in the following example.

**Note:** You can select the Download To option to download the packages to the selected directory. You can navigate to the Download directory under Work with Packages in the Change Assistant tree structure, and then deploy the downloaded packages.
5. Enter the required credentials in the JDEPLAN environment window.

6. Select the Environment in the Environment Selection window, and then click OK.
The Change Assistant Deployment Summary window displays the summary of the UDOs deployment as shown in the following examples.

7. The User Defined Object Summary Report is displayed after the deployment is successful. Click the required User Defined Object Package name to see the detailed report.

In the User Defined Objects Summary report, the Customized UDOs tab displays the UDOs modified by the customer, and the Deployed UDOs tab displays the UDOs that are a part of the deployed packages.
## Figure 4–2

### UDO_9.2_10222 Summary

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>UDO_9.2_10222</td>
</tr>
<tr>
<td>Description</td>
<td>Customized UDOs</td>
</tr>
<tr>
<td>Type</td>
<td>Deployed UDOs</td>
</tr>
<tr>
<td>Project</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>UDO_9.2_10222</td>
</tr>
<tr>
<td>Description</td>
<td>Customized UDOs</td>
</tr>
<tr>
<td>Type</td>
<td>Deployed UDOs</td>
</tr>
<tr>
<td>Project</td>
<td></td>
</tr>
</tbody>
</table>

### Customized UDOs

<table>
<thead>
<tr>
<th>Object ID</th>
<th>Object Type</th>
<th>Description</th>
<th>Date Modified</th>
<th>Modified by User</th>
<th>Modified in Path Code</th>
<th>Logged to User</th>
<th>Merge Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDO_9.2_10222</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Deployed UDOs

<table>
<thead>
<tr>
<th>Object ID</th>
<th>Description</th>
<th>UDO Type</th>
<th>ID Modified</th>
<th>Deployed Path Code</th>
<th>Post-Deployment Status</th>
<th>Merge Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDO_9.2_10222</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This chapter contains the following topics:

- Section 5.1, "Understanding Software Updates"
- Section 5.2, "Working with the Software Updates"
- Section 5.3, "Starting and Running the Software Updates"
- Section 5.4, "Completing the Update"

### 5.1 Understanding Software Updates

After downloading the software update or updates, selecting the update to install, and selecting the environment to be updated, you choose to run the software update workbenches in either attended or unattended mode.

It is recommended that you use the JD Edwards EnterpriseOne and World Change Assistant to run software updates. However, if you choose not to use the JD Edwards EnterpriseOne and World Change Assistant (for example, if your company has fire walls that block your access), then use the methods discussed in this chapter to run updates.

You will use Oracle's JD Edwards EnterpriseOne Table Conversion Workbench if you are applying any Application Software Update (ASU).

Depending on the contents of the update, these workbenches may run:

- JD Edwards EnterpriseOne Control Table Workbench runs the batch applications for the planned merges that update the data dictionary (DD), user-defined codes (UDCs), menus, and workflow tables. It then updates the F98405 table to reflect completion, and writes a conversion log record to the F984052 Table Conversion History Log.

- JD Edwards EnterpriseOne Table Conversion Workbench runs the batch application that creates tables and indexes. It then updates the F98405 table to reflect completion, and writes a conversion log record to the F984052 Table Conversion History Log.

- JD Edwards EnterpriseOne Specification Table Merge Workbench runs the batch applications that update the specification tables. It then updates the F98405 table to reflect completion, and writes a conversion log record. The Object Librarian and Versions List merges are now a part of the specification merge.

- JD Edwards EnterpriseOne Package Workbench transfers the F9603 and F9631 Package Information tables from the Planner data source to the System - 900 data source. It then updates the Package Plan Detail table (F98404) to reflect completion.
5.2 Working with the Software Updates

The software update application combines a series of individual update workbenches into a single process. You will see only the workbenches that apply to your update.

You can run the workbenches manually (attended mode), or automatically (unattended mode). If you run the workbenches unattended, you will start the update as described. The status of each individual workbench will display as the workbench begins. Unattended mode is the default.

5.3 Starting and Running the Software Updates

This section provides an overview of starting and running the software updates and discusses how to:

- Select environments and start the software.
- Replace language data when running a language update.
- Restore a backup.

5.3.1 Selecting Environments and Starting the Software Update

The following procedure lets you select environments and starts the software update workbenches in unattended mode or attended mode. Unattended mode is the default.

In unattended mode, if an error is encountered in any of the individual workbenches, the process stops. Fix the error and continue. The software update resumes.

This procedure also creates a JD Edwards EnterpriseOne Object Management Workbench (OMW) project, an installation plan, and an update package for this update. In addition, the procedure optionally creates a backup of specs, so that the original specs can be restored if necessary.

Do not lock the deployment server during the software update (for example, with a screen saver password) because doing so pauses some processes. In addition, do not minimize any of the workbench forms, or the software update will not continue to the next workbench form until it is again maximized.

If you use a SQL Server database, be sure that these database options are selected before you start the software update:

- Select Into/Bulk Copy.
- Truncate Log on Checkpoint.

This table lists the requirements for starting the update workbenches:

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the deployment server, logged on as user JDE with the database password for user JDE, in the JDEPLAN environment.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>Software update installed on the deployment server.</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

To select the environment and start the update workbenches:

On the deployment server, log on to the JDEPLAN (planner) environment as user JDE with the database password for user JDE.
From the System Installation Tools menu (GH9612), select Application Software Update, Electronic Software Update, or Language Update, depending on the type of update you are installing.

1. On Work with Software Updates, select the software update that you want to install. Click Next.

**Important!** If you want to install more than one update at the same time, you must use the JD Edwards EnterpriseOne and World Change Assistant. See Using Change Assistant for more information.

The Work with Software Updates panel presents these row exits:

- **Select**
  Selects the software update, and puts a check mark in the media object column for the selected row.

- **Deselect**
  Deselects the software update, and puts an X in the media object column for the selected row.

- **Update Detail**
  Provides more information on the software update

- **Update Status**
  Shows the statuses of the processes that run during the software update.

- **Update Sched Comp**
  Displays all merges (DD Merge, Spec Merge, and so forth) that are scheduled for the software update. This row exit is not applicable for language updates.

- **Update Objects**
  Displays all objects, SARs and dependencies that are part of the software update. Use this exit to check for dependent and baseline updates.

  **Note:** If you don't install the correct dependent or baseline updates, the system will display an error message.

- **Update Cntrl Table**
  Displays all DD, UDCs, Menus, Favorites, Tips of the Day, and Report Director Templates that are delivered with the software update. This row exit is not applicable for language updates.

- **Update Table Changes**
  Displays table changes delivered with the software update.

- **Update Index Changes**
  Displays index changes delivered with the software update.

- **Update History**
  Shows the environment and plan history of the software update.

- **Advanced Setup**
The program performs a series of common processes when each software update is run on the first environment. If you want to run these processes on a second environment, however, you must use this option to select processes that you want to run again. Note that you must clear the check boxes for the processes you want to run again.

The Work with Software Updates panel presents these form exits:

- **Remove Updates**
  
  Opens the Software Update Remove form where you can choose packages to remove. You can also select to remove files only or history and files.

- **Update Hist. Rpt**
  
  Runs a report of all of the software updates that have been applied.

2. Double-click the environments where you want the software update installed.

3. If you want the software update to run in unattended mode, verify that the Unattended Workbench check box is selected. Unattended Workbench is checked by default.

4. If you want to make a backup of specs, so that the original specs can be restored, select the Backup check box. Backup is selected by default. This option is not available for language updates.

   **Note:** If you have custom modifications and will be retrofitting these to the new update, it is strongly recommended that you make a backup of your original specs. For more information about retrofitting, see Retrofitting Custom Modifications.

   The Backup option creates a backup directory with the path `planner\package\software update name\PATHCODE.BAK` (for example, `\planner\package\JL123456\DV900.BAK`). All artifacts for the delivered objects (specs, source, include files) are stored in a single file with the extension .PAR. Control tables (data dictionary, UDC, and others) are not backed up. The contents of the backup file may be viewed with the JD Edwards EnterpriseOne Universal Table Browser tool or WinZip.

5. Select the Create OMW Project and Package Assembly check box if you want to create the OMW project and package assembly record for the software update. This option is not available for language updates.

The Software Update Environment Selection panel also presents these row exits:

- **Select**
  
  Selects the environment to be updated, and puts a check mark in the media object column for the selected row.

- **Deselect**
  
  Deselects the environment to be updated, and puts an X in the media object column for the selected row.

- **Affected Objects**
  
  Use this exit to view:

  - Objects that will be installed.
  - SARs that will be installed to a specific path code.
– Checked out objects.
– Modified objects.
– Objects with tokens.

This row exit is not applicable for language updates.

– Restore Backup

If backups were performed for a software update for a specific environment, this option restores all specs and business functions. Control tables are not backed up and hence will not be restored. For information about restoring a backup, see Restoring a Backup. This row exit is not applicable for language updates.

– Delete Backup

Deletes the backup directory created, and frees up disk space. A warning message is displayed if no backup was performed. This row exit is not applicable for language updates.

– Advanced Setup

When applying software updates to alternate environments, we recommend that you do not perform the spec merge. Instead, transfer objects using OMW. However, this exit enables you to override this option and run the spec merge.

5.3.2 Replacing Language Data when Running a Language Update

In order to preserve your customized language records, the update process only appends new language records in the target environment and does not update any existing records. This is the default setting for updates, but you can change this setting by changing a processing option.

If you do not have any customized language records, you may want to change the processing option value so that changes delivered in the language update will replace the current records. Follow these steps to change the processing option value:

1. After installing language updates on the deployment server, sign onto JD Edwards EnterpriseOne JDEPLAN on the deployment server.
2. Enter BV in the Fast Path to open the Batch Version application.
3. Find R98403XB and select version XJDE0030.
4. Select Processing Options from the Row Menu.
5. On the Advanced Tab, enter 'Y' for the following processing option:
   Enter a 'Y' to replace duplicate records in the target table, or enter 'N' (or leave blank) to preserve duplicate records in the target table.
6. Click OK to save your changes.
7. Repeat this process and change the same processing option value to a 'Y' for versions XJDE0031, XJDE0032, and XJDE0033.
8. Enter GH9612 in the Fast Path.
9. Run Language Updates to apply the update to the target environment.
5.3.3 Restoring a Backup

Use this procedure to restore a backup you made while starting the software update. If you are not restoring a backup, skip this section and proceed to Completing the Update.

You can restore a backup if you selected the Backup check box on the Software Update Environment Selection panel, as described previously.

To restore a backup:

From the System Installation Tools menu (GH9612), select Application Software Update, or Electronic Software Update. The Work with Software Updates panel appears.

1. Select the software update for which you want to restore the backup.
2. Click Next. The Software Update Environment Selection panel appears.
3. Select the environment for which you want to restore the backup.
4. On the Row Exit menu, click Restore Backup. The backup is restored.
   This may take several minutes.
5. Click Cancel to close the Software Update Environment Selection panel.

---

Note: The restore process doesn’t remove objects that were added through the software update. If you wish to remove the added objects, use the JD Edwards EnterpriseOne Object Management Workbench (OMW) project created by the software update. A list of added objects can be found in the software update spec merge report.

If you are restoring objects for a software update that you have already transferred to other path codes, make sure you re-transfer the restored specs to the other path codes using OMW. If you wish to remove the added objects in all path codes, use the OMW project created by the software update.

5.4 Completing the Update

This section provides an overview of the completion process for the attended mode and discusses how to complete these update workbenches:

- Add a Security Override for Running Table Conversions.
- Run Table Conversions.
- Configure your control tables.
- Merge your specification tables.
- Restart the Specification Merge.
- Configure your packages.
- Validate the update.

If you selected the unattended mode, the process begins and all workbenches are completed automatically. In this case, skip the following tasks and continue with "Custom Modifications and Packages.”

When the workbenches are complete, an update package must be built.
When the software update begins, status messages appear in the status bar at the bottom of the screen reporting progress. If an error occurs, the process stops. In this case, click Previous to return to the Work with Software Updates screen, and then, on the Row menu, click Update Status. Status messages are displayed.

### 5.4.1 Adding a Security Override for Running Table Conversions

If your database is Oracle, SQL, or DB2 for Linux, UNIX, and Windows, you must add a security override so that the table conversion process can drop and recreate a table. Adding a security override must be done by a security administrator. To add a security override, you must first add a system user for the data source owner, and then add an override for the EnterpriseOne user who will run the table conversion.

To add a system user for the data source owner:

1. In P98OWSEC, select the form exit Add System User.
2. On Work with System Users, enter the appropriate data source owner (for example PRODDTA, TESTDTA, or CRPDTA) in the System User field and select Find.
3. If no values are returned, add the data source owner as a system user by selecting Add and completing the fields on the System User Revisions form:
   - System User
   - Data Source
   - Password
   - Password Verify
4. Click OK and then Cancel and Close to return to the Work with User Security form.

To add an override for an EnterpriseOne user who is going to run the table conversion:

1. On Work with User Security, enter the user who is going to run the table conversion, and select Find.
2. Select the Form exit, Add Data Source.
3. On Add Data Source, complete the User ID, Data Source, and System User fields.

**Note:** This override can be deleted once the table conversion has run.

**Note:** For IBM i, either sign on as a user who has *ALLOBJ rights to the table to be converted or complete the steps above, setting up a security override for the EnterpriseOne user so that when they connect to the data source, they connect as a system user (IBM i user profile) who has *ALLOBJ rights to the table.

### 5.4.2 Running Table Conversions

Table conversions are performed after applying the software update to the path code. Review the special instructions for the software update that you are applying to see if there are any table conversions.
To run table conversions:

1. Build and deploy an update package containing the software update changes.
2. Install the update package on an administrative client.
3. Sign onto the administrative client in the environment that had the changes applied.
4. For each table conversion that is going to be run, check which data source contains the base table that the table conversion is changing. The name of the table should be in the special instructions.
5. Add security overrides for the JD Edwards EnterpriseOne user who will run the table conversions.
   See Adding a Security Override for Running Table Conversions.
6. Go to Batch Versions and verify, on the Properties tab for the table conversions, that the input and output environments point to the login environment.
7. Run the table conversions.
8. Review the table conversion logs in the print queue, and verify that the table conversions completed successfully.

5.4.3 Configuring your Control Tables

If you are running the software update in unattended mode, this process is run automatically.

Complete this task to configure your control tables.

1. On Control Table Workbench, the system displays all control table merges in the detail area. From the Form menu, select Merge All.
2. After each merge finishes, verify the output of the report produced.
3. From Control Table Workbench, click Next.

5.4.4 Merging your Specification Tables

If you are running the software update in unattended mode, this process is run automatically.

To merge your specification tables:

1. On Specification Table Merge Workbench, from the Form menu, select Merge All.
2. After the merge finishes, verify the output of the report that is produced.
3. After all merges complete, click Next.
   The Package Workbench form appears.

5.4.5 Restarting the Specification Merge

If you are running the software update in unattended mode, this process is run automatically.
If the Specification Merge stops before it completes successfully because the merge of an object fails, you can restart it from the point where it stopped. If all merges complete successfully, you can skip this task.

To restart the Specification Merge:

This table lists the requirements for restarting the specification merge.

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the deployment server, logged on as user JDE with the database password for user JDE, in the JDEPLAN environment.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>Specification merge must be stopped.</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

Before you restart the Specification Merge you must set the status of the failed merge back to Not Processed (zero). The restarted Specification Merge will skip completed merges and process the failed merge and all subsequent merges.

Use this procedure to set the status of the failed merge back to Not Processed (zero):

From Advanced Operations menu (GH9611) select Specification Merge Status (P98700).

1. On the SpecMerge Status panel, complete these fields:
   - **Package Name**
     Enter the name of the software update.
   - **Source Environment**
     Enter JDEPLAN (the Planner environment).
   - **Target Environment**
     Enter the name of the environment you are updating.

2. Click Find. All objects that are part of the specification merge are displayed.
3. Select the object for which the specification merge failed. The object will have a status of 4 (Error) in the Merge Status column.
5. In the New Merge Status field, specify 0 (zero, or Not Processed).
6. Click OK.
   The object’s merge status is changed.
7. Click Close.
   You can now restart the specification merge.

### 5.4.6 Configuring your Packages

If you are running the software update in unattended mode, this process is run automatically.
Completing the Update

Package Workbench transfers the F9603 and F9631 Package Information tables from the Planner data source to the System - 900 data source. It then updates the Package Plan Detail table (F98404) to reflect completion.

If you are running the software update in unattended mode, this process is run automatically.

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the deployment server, logged on as user JDE with the database password for user JDE, in the deployment environment (DEP900).</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

1. On Package Workbench, review your packages.
2. From the Form menu, select Configure. The Congratulations form appears.
3. Click Finish. The Software Updates History report will appear.

---

**Note:** After this screen appears, processing continues to occur in the background. Once completed the program displays a message that the update was completed successfully.

---

After this report appears processing continues in the background. Once this is completed, an Update Completion message appears.

4. Click OK.

**See Also:**
- Restarting the Specification Merge.
- Reports in the *JD Edwards EnterpriseOne Application Release 9.0 Installation Guide*.

### 5.4.7 Validating the Update

After the spec merge process, JD Edwards EnterpriseOne generates the Software Update Report (R96701) that lists the updated objects and the SARs addressed by the update.

For Tools Release 9.2.1.x and after, if the path code value in the F00942T.emdbsrcflg field is set to 1, this report also updates the Object Librarian Archive Repository (F98780R) and Object Librarian Archive History (F98780H) tables in central objects.

This report is summarized in a PDF file that opens automatically once the update process is complete. If the spec merge process fails, this report is not created.

To validate the update process, view the R96701 report and note the value of the Object Install Flag for each of the objects listed in the report:
<table>
<thead>
<tr>
<th>Object Install Flag Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The object was not updated because the existing object in the environment is more recent than the object in the software update.</td>
</tr>
<tr>
<td>1</td>
<td>The object is selected to be applied to the environment. (This is the status of all objects in the list before the upgrade starts, but should not be observed when the update process is complete.)</td>
</tr>
<tr>
<td>2</td>
<td>Updated object was applied to the environment.</td>
</tr>
</tbody>
</table>

For Tools Release 9.2.1.x and after, also, note the value of the Update Repository Table column for each of the objects listed in the report:

<table>
<thead>
<tr>
<th>Update Repository Table Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>The object was not updated by the spec merge so there was no need to save it to the F98780R and F98780H tables.</td>
</tr>
<tr>
<td>Updated</td>
<td>The object was updated in the F98780R and F98780H tables in central objects.</td>
</tr>
<tr>
<td>Not Updated</td>
<td>There was an error saving the information to the F98780R and F98780H tables.</td>
</tr>
</tbody>
</table>
This chapter contains the following topics:

- Understanding Object Usage Tracking
- Working with Object Usage Tracking Configuration (P980042T)
- Working with Object Usage Tracking Detail (P98911)
- Working with Object Usage Tracking Summary (P98902)
- Working with Summarize Object Usage UBEs (R98902)
- Purging Object Usage Tracking Detail for Applications and Batch Applications (R98911P)
- Purging Business Function Tracking Detail (R98912)
- Working with Object Usage Tracking Composed EnterpriseOne Page

6.1 Understanding Object Usage Tracking

You perform an object usage tracking analysis to determine the frequency that objects are being used within a path code. This information will enable you to determine the objects that need to be validated prior to upgrading or applying an update to your system.

See the *JD Edwards EnterpriseOne Tools Security Administration Guide* to secure applications to system administrators only.

You can track the usage of the following objects:

- Applications (APPL)
- Batch Applications (UBE)
- Business Functions (BSFN)

**Note:** Object Usage Tracking is available for JD Edwards EnterpriseOne Application Release 9.0 and later releases.

6.2 Working with Object Usage Tracking Configuration (P980042T)

Object Usage Tracking is disabled by default. You enable Object Usage Tracking with the Working with Object Usage Tracking Configuration (P980042T) application. You must first enable Object Usage Tracking for the system prior to enabling at the path code level.
To activate Object Usage Tracking:


2. Click Object Usage Tracking Configuration.

   The Revise Object Usage Tracking Enablement form displays the following fields and columns:

   - System Level Tracking Enabled
     - Checked: object tracking is enabled at the system level.
     - Un-checked: Object tracking is disabled at the system level.
   - Tracking
     - Green circle: Object tracking is enable for the path code.
     - Red Square: Object tracking is disabled for the path code.
   - Path Code
     - The available path codes.
   - Description
     - The path code descriptions.

3. Click the System Level Tracking Enabled check box.

4. Click the path code row in the Tracking column to enable object usage tracking for that path code.

5. Close the application.

**Note:** You can use Server Manager to restart the HTML Server and Enterprise Server for the changes in Object Usage Tracking Configuration to take effect immediately. Otherwise, the configuration changes will not take effect until the Object Usage Tracking Configuration is automatically updated on the server every 60 minutes.

### 6.2.1 Disable / Enable Object Usage Tracking by Object Type (Release 9.2.2)

You can enable and disable object types through Revise Usage Tracking by Object Type (W980042TC). The Usage Tracking Configuration Lists (F98900) table maintains the object types that are disabled and enabled. By default the F98900 table is empty to prevent disruption of current Object Usage Tracking configuration. Applications and batch application are enabled for tracking and business functions are disabled until a record is added and set to disable or enable.

To enable or disable an object type for Object Usage Tracking:


2. Click Object Usage Tracking Configuration.

3. Select the path code you want to exclude an object type in.

4. On the Row menu, click Object Type Tracking.
5. On the Revise Object Type Enablement form click the Tracking column for the object type to want to enable / disable.
   - Green Circle = Enabled
   - Red Square = Disabled
6. Click Close.

6.2.2 Object Exclusion list (Release 9.2.2)

You can add and remove object names in the Object Exclusion List (W980042T). When you add object names to the grid, Object Usage Tracking does not track them. If a business function is in the list and calls another business function, the called business function is tracked unless also added to the Object Exclusion List. The Usage Tracking Configuration Lists (F98900) table maintains the names of objects in the Object Exclusion List.

To exclude an object from Object Usage Tracking:
1. Navigate to: EnterpriseOne Menus/ EnterpriseOne Life Cycle Tools/Application Development (GH902)/Object Usage Tracking.
2. Click Object Usage Tracking Configuration.
3. Select the path code you want to exclude an object in.
4. On the Row menu, click Exclusion List.
5. Enter the object to be excluded in the grid.
6. Click OK.

6.2.3 Copy Path Code

You can copy the object type and exclusion list for a path code to another path code.

To copy the tracking configuration of a path code:
1. Navigate to: EnterpriseOne Menus/ EnterpriseOne Life Cycle Tools/Application Development (GH902)/Object Usage Tracking.
2. Click Object Usage Tracking Configuration.
3. Select the path code you want to copy.
4. Click the Copy button on the tool bar.
5. In Object Path Search & Select, select the path code you want to copy to.
6. Click the Select button on the tool bar.

6.3 Working with Object Usage Tracking Detail (P98911)

The Object Usage Tracking Detail (P98911) application displays all object usage recorded by the system that has not been purged from the Object Usage Tracking Detail (P98911) table. Object usage is any time a tracked object is accessed by a user or the system. Sub-system calls to an object will create only one record. The grid displays the object name, the user, path code, environment, date, time, and future use columns. You can delete individual or multiple records from the grid, or use Purge Object Usage Tracking Detail (R98911P) to delete records.

To launch Working with Object Usage Tracking Detail:
1. Navigate to: EnterpriseOne Menus/ EnterpriseOne Life Cycle Tools/Application Development (GH902)/Object Usage Tracking.

2. Click Object Usage Tracking Detail.

**Note:** It is recommended you increase the table size for Object Usage Tracking Detail (F98911). The table size necessary will depend on how often you run R98911P.

### 6.4 Working with Object Usage Tracking Summary (P98902)

The Object Usage Tracking Summary (P98902) application displays data from the Object Usage Tracking Summary (F98902) table, which is populated by running the Summarize Object Usage UBE (R98902). Object usage data in this table can be summarized by Object Name, Object Name/Form/Version, and/or Product Code. In addition, object usage counts for each type can be totaled by day, month, or year.

To launch Object Usage Tracking Summary:

1. Navigate to: EnterpriseOne Menus/ EnterpriseOne Life Cycle Tools/Application Development (GH902)/Object Usage Tracking.

2. Click Object Usage Tracking Summary.

### 6.5 Working with Summarize Object Usage UBEs (R98902)

The Summarize Object Usage UBEs (R98902) populates the F98902 table with data up to the last complete day. The following four batch versions summarize data in F98902:

- XJDE0001 - Summarize Object Usage by Object Name UBE
- XJDE0002 - Summarize Object Usage by Object Form Version UBE
- XJDE0003 - Summarize Object Usage by Product Code UBE
- XJDE0004 - Summarize Object Usage by Business Function UBE

Each time you run a summarization version, it will summarize the records in the F98911 or F98912 tables based on the Object Tracking Type:

- 01 - Object Name (F98911 and F98912)
- 02 - Object Name/Form/Version (F98911)
- 03 - Product code (F98911 and F98912)
- 04 - object Name/Business Object (F98912)

Each summary will summarize by Tracking Unit:

- 01 - Hours per Day (24)
- 02 - Days per Month (28-31)
- 03 - Months per Year (12)

Each time you run a summarization version, it will add to the existing records for Days per Month and Months per Year, so that it is cumulative from the first time it was executed and it will create new records for:

- Hours per Day for new days
- Days per Month for new months
■ Months per year for new years

The first time you run a summarization version, it will summarize to the current date minus 1 for the Object Tracking Type version selected.

At the end of the summarization, the UBE adds a LASTSUMMARY record to the F98902 table with Object Tracking Type of 01, 02, 03, 04 with the current date minus 1. This record will contain a value in the OSOTUT field of how many F98911 records were read.

The next time you run the UBE, it will use the LASTSUMMARY date and will only use records from that date to the current date minus 1. Each Object type will have a LASTSUMMARY record.

To launch Summarize Object Usage UBEs:
1. Navigate to: EnterpriseOne Menus/EnterpriseOne Life Cycle Tools/Application Development (GH902)/Object Usage Tracking.
2. Click Summarize Object Usage by (select a version).

6.6 Purging Object Usage Tracking Detail for Applications and Batch Applications (R98911P)

You purge records from the Object Usage Tracking Detail (F98911) table by running the Purge Object Usage Tracking Detail UBE (R98911P). Complete the following processing options prior to running

Select Tab
Path Code
The path code you want to purge from.
Object Tracking Purge From Date
The date you want the purge to start.
Object Tracking Purge To Date
The date you want the purge to end.

Process Tab
Proof or Final Mode
Blank = Proof Mode
1 = Final Mode

Report View
Blank = View the summary.
1 = View the detail purge records.

**Note:** It is recommended you run the Purge Object Usage Tracking Detail UBE in proof mode first to verify the summarization UBEs have been run. Use the Proof mode to generate a report that displays the Path Code, From and To Dates, Purge Total, and Last Summary Dates for each Tracking Type.
6.7 Purging Business Function Tracking Detail (R98912)

You purge records from the Business Object Usage Tracking Detail (F98912) table by running the Purge Business Function Tracking Detail UBE (R98912P).

Complete the following processing options prior to running:

Select Tab

Path Code
The path code you want to purge from.

From Date
The date you want the purge to start.

To Date
The date you want the purge to end.

Process Tab
Proof or Final Mode
Blank = Proof Mode
1 = Final Mode

6.8 Working with Object Usage Tracking Composed EnterpriseOne Page

The Object Usage Tracking Composed EnterpriseOne Page (CMP_1701270001JDE) presents four charts for you to use to analyze Object Usage Tracking data.

Note: The Object Usage Tracking Composed Page is available for JD Edwards EnterpriseOne Applications Release 9.2 and later releases.

See the JD Edwards EnterpriseOne Tools Security Administration Guide to secure UDOs to system administrators only.
Usage Count by (Tracking Type) Chart
Use this chart to view object usage for the specified path code. The chart is based on the Object Usage Tracking Summary table (F98902).

Additionally, you can use the drop-down menu on the top of the chart to change the data that the system displays. You can select one of the these options:

- Object
- Object/Form/Version
- Product Code

You can use the menu to further filter the data in the chart that the system displays.

The queries associated with the object Usage Tracking Summary table are all filtering on Tracking Unit 01. Any query you create for use with this composite page must be filtering on one of the three tracking units. Tracking Unit 01 provides the most detail.

Daily Peak Time Usage for (Date) Chart
Use this chart to view daily object usage by path code. The chart is based over the Object Usage Tracking Summary table (F98902). You can use the input date field in the chart's title to change the date of the data displayed in the chart.

You can also use the menu to further change the data displayed in the chart.

- The Path Code field determines which path code totals display on the chart. If you select multiple path codes, separate line for each path code displays on the chart. If you do not select a path code, totals from all path codes in the F98902 are displayed in separate lines on the chart by default.
- The Tracking Type field determines the type of summary totals displayed on the chart. For example, object usage totals may only be summarized in the F98902 by product code, so you will need to select the Product Code option from this field to view the data in the chart.

Note: If the Universal Time setting in User Preferences is populated, the usage totals displayed on the chart will be adjusted to the account for your time zone offset. This will correctly display the hourly totals according to your day. Otherwise, all hourly totals on the chart are displayed according to Coordinated Universal Time (UTC) regardless of your time zone.

Object Usage by Product Code
Use this chart to view object usage totals by Product Code for a specified number of days. The chart is based over the Object Usage Tracking Detail table (F98911) and can show object usage totals for the past seven days.

You can use the menu to further change what data displays in the chart.

- The Path Code field determines which path code totals display on the chart. If you select multiple path codes, product code totals for all selected path codes are combined into a single bar for each date. If you do not select a path code, usage totals for all path codes in the F98911 display on the chart by default.
- The Number of Days field determines the number of dates appearing on the chart. You can select between one to seven days in the past.
- The Display Count field determines the number of individual product code totals displaying on the chart. If the chart data contains totals for more product codes
than the number specified, the totals beyond this number are accumulated and displayed under an "Other" category.

**Object Usage by Path Code**

Use this chart to view object usage totals by path code for a specified number of days. The chart is based on the Object Usage Tracking Detail table (F98911) and can show object usage totals for the past seven days.

You can use the menu to further change the data displaying in the chart.

- The Path Code field determines which path code totals display on the chart. If you select multiple path codes, a separate totals bar for each selected path code displays on each date. If do not select a path code, usage totals for all path codes in the F98911 display on the chart by default.

- The Number of Days field determines the number of dates appearing on the chart. You can select between one to seven days in the past.

These charts are based on the Object Usage Tracking Detail and Summary tables. By default, the charts are set up to render using predefined queries found in the chart's menu drawer. You can modify the queries to better meet your requirements. Additionally, you can add filters in the menu of each chart to further restrict the chart's data. The filters provide selection capabilities based on the columns included in the primary table used by each chart. For example, with the Daily Peak Time Usage chart, you can display hourly totals for a single object by creating a filter to only retrieve data where the F98902 Summary ID (OTSUM) column equals the name of the object.

The shared queries are:

- **All Supported Types (QRY98902_1702010003JDE)**
  Tracking Unit = 1

- **Applications (QRY98902_1701300005JDE)**
  Tracking Unit = 01
  OMWOT = APPL

- **Applications and Reports (QRY98902_1701300008JDE)**
  Tracking Unit = 01
  OMWOT = APPL or UBE

- **Reports (QRY98902_1701300006JDE)**
  Tracking Unit = 01
  OMWOT = UBE

---

**Note:** To limit irrelevant objects from appearing in the charts, you can add an exclude into the query, for example; SY not in (' ','H92','H95','H96U','H96B') and SYR not in (' ','00','UX'). This will limit some tools system codes that you may not want in your reporting.
This chapter contains the following topics:

- Section 7.1, "Understanding the Software Update Impact Analysis Tool"
- Section 7.2, "Working with the Software Update Impact Analysis Tool"
- Section 7.3, "Working with Object Usage for Software Update Impact Analysis"

### 7.1 Understanding the Software Update Impact Analysis Tool

Oracle’s JD Edwards EnterpriseOne Software Update Impact Analysis Tool has been added to help manage your software update. This tool is used to gauge the level of impact a software update will have on your existing system. Users may access this tool from a client workstation or the deployment server.

You perform an impact analysis when you download ESUs. If you are performing a new installation, or if you are performing an upgrade, you do not need to do an impact analysis. If you do need to perform an impact analysis, you do so after you have installed the update on the deployment server, but before you deploy the update to another environment.

This is a list of features that this tool provides:

- Identification of what Software Action Requests (SARs), objects, and control files will be applied to the system.
- Special instructions for SARs.
- List of objects associations with a SAR.
- List of any dependent software updates.
- Identification of any table conversions within a software update.

It can also be used to manage the application of the software update to your system. A system administrator may assign specific objects, control files, and SARs to individual users. Users who have been assigned objects can update the status of approved objects, SARs, and control files that have been assigned to them. They can also keep track of the status of their approvals.

The web client version, Object Usage for Software Update Impact Analysis (P96710) is available for JD Edwards EnterpriseOne Application Release 9.0 and later releases. (Release 9.2.1.2)
7.2 Working with the Software Update Impact Analysis Tool

Access the JD Edwards EnterpriseOne Software Update Impact Analysis Tool:

1. Logon to a JD Edwards EnterpriseOne client with administrative privileges.
2. In the fast path enter GH9612.
3. From the Software Updates menu, right-click Software Update Impact Analysis → Prompt For →Values.
4. Enter the path to the location of the update.xml file (for example, \deployment server name\E900\ImpactAnalysis). Since this utility can be run from a client or the deployment server, it is important that the XML files are located in a central location. By default, the XML files will be downloaded to the unc path provided in the previous example by the installation of a software update.
5. Click OK.
6. From the Software Updates menu (GH9612), select Software Update Impact Analysis (P96710).

**Note:** Within this form, a list of earlier analyses are listed in the main work area. This is the core navigation screen that will enable you to access many of the features available within this tool.

7.2.1 Configuring a New Analysis

To configure a new analysis:

1. Click Add.
2. When creating a new report complete these fields:
   - **Software Update Name**
     Click the browse button to search for the software update you wish to analyze.
     Select the desired software update.
     Click the Select button on the tool bar. This will populate the Software Update Name field in the setup screen.
   - **Description**
     Enter additional details on this update in this field’s text box.
   - **Environment Name**
     Enter the environment to do the analysis on (for example, DV900).
   - **Expected Completion Date**
     Enter the date you anticipate to complete the analysis.
   - **Percent Complete**
     Enter the percent complete for this update.
   - **Impact Analysis Status**
     Use the visual assist to select the status of the impact analysis (for example, 03 - In Process, 02 - Configure).
3. Click OK to return to the SU Impact Analysis Master screen.
7.2.2 Analyzing your Software Update

Access the JD Edwards EnterpriseOne Software Update Impact Analysis Tool: On the SU Impact Analysis Master screen, highlight the record that was created in the previous steps. Once this is completed click the Analyze row exit.

---

**Note:** Once this step has been completed, analysis processing occurs in the background. This processing may take several moments. Once it is completed, a success message will appear in the status bar area.

---

7.2.3 Reviewing the Results in the Impact Analysis - Master View

From the SU Impact Analysis Master screen, select the Master View row exit.

The overall view of the analysis displays and includes:

- SARs.
- Objects and control files in SARs.
- What objects are affected or merged.

---

**Note:** The master view should be accessible to the CNC administrative user only by enforcing security.

---

7.2.4 Assigning Objects to Users

Objects may be assigned to different users within this tool for further analysis.

1. To assign objects to users, select the Assign exit row.
2. Highlight the object you wish to assign and click the Select exit row.
   
   A check mark will appear to the left of the item you selected. Multiple records can be selected at once within this screen as well.
3. In the Assigned To text box, enter the address book number of the user who will receive the assignment.
4. To complete this process, select the Assign option from the row exit.

---

7.2.5 Notifying Users of Assignments by Email

Complete this task to notify users of their assignments by email.

1. Select the Form exit.
2. Select one of these row options:
   
   - Approval Report
     Shows the latest states of what users have done with objects.
   - Notify all
     Sends a global email notification to all users that have been assigned objects (past and present).
   - Notify today’s assigners
     Sends an email notification to users who have been assigned today.
3. To exit this screen click the Close button. This will take you to the Impact Analysis - Master View.

4. Click the Close button again to enter the SU Impact Analysis Master screen.

7.2.6 Viewing any Prerequisites prior to Installing a Software Update

Complete this task to view the prerequisites before you update the software.

1. Within the SU Impact Analysis Master screen select the Pre-reqs View exit row.
   The Pre-reqs View displays any prerequisites that may be required to apply a software update. These requirements may include:
   - Base line software updates that are required prior to installing the current software update.
   - Indicates any quarterly updates that already have the dependent / baseline software update.
   - Through the Install Status column, it will indicate if an update has been installed.

2. To exit this item, click the Close button to re-enter the SU Impact Analysis Master screen.

7.2.7 Viewing Objects Affected by the Software Update

Select the Object View row to display this screen.
Select one of these radio buttons to filter objects:

Objects that will be affected by applying this software update (Default)
Lists all affected objects delivered by the software update.

All objects delivered with this software update
Lists all objects in the software update.

7.2.8 Accepting Assigned Objects

Complete this task to accept the assigned objects.

1. In the object window, accept a job by selecting it in the object window.

2. Click the Approved exit row.
   The administrator might modify these text fields:
   - Impact Analysis Status
     Through a visual assist, various values may be assigned to indicate the status (for example Accept / Completion).
   - Percent Complete
     A percent completed may be assigned to indicate the progress of analyzing the object.

3. Click the OK button to return to the Impact Analysis - Object View Screen.

4. Click the Close button to return to the main screen (SU Impact Analysis Master).
7.2.9 Viewing SARs
Complete this task to view relevant SARs.

1. Click the SAR View row.
   Select one of these options:
   - **New SARs delivered**
     List new SARs available in the software update.
   - **All SARs delivered**
     List all SARs in the software update.
   - **View Objects associated with each SAR**
     Select this check box if you wish to view objects associated with a specific SAR.
   - **Special Instructions exit row**
     List any additional details and special instructions that may be associated with a specific SAR.

2. Click the Close button to return to the Impact Analysis SAR View screen.
   - **Approved exit row**
     Same as noted earlier.

3. Click the Close button again to return to the SU Impact Analysis screen.

7.2.10 Viewing Control Files in the Software Update
Complete this task to view the Control Files.

1. To access this option, click the Control File View row.
   The Control File View lists all control files in a software update and will indicate the merge options for individual items.
   Select one of these exit row options:
   - **Approved**
     Same as indicated earlier.
   - **Detail**
     What specifically has changed within a control file.

2. Click the close button to return to the SU Impact Analysis Master screen.

7.2.11 Working with the Scheduler View
Complete this task to view the scheduled merges and table conversions.

1. Click Scheduler View from the exit row.
   The Scheduler viewer lists merges and table conversions that will be performed when the software update is executed.

2. Click the Close button to return to the SU Impact Analysis Master screen.
7.2.12 Working with the Analyze Report

Click the Analyze Report exit row.

This report is a complete summary, in pdf format, of the impact analysis results.

7.3 Working with Object Usage for Software Update Impact Analysis

The Object Usage for Software Update Impact Analysis application has additional information not available on the Software Update Impact Analysis on the development client. The following additional columns exist:

- Customized Objects
  The number of objects in the ESU that have been customized (checked-out/checked-in).

- Used Objects
  The number of objects in the ESU that have a record in the Object Usage Tracking Detail table (F98911) or Object Usage Tracking Summary table (F98902).

- Total Objects
  The total number of objects contained in the ESU.

**Note:** You need to execute an Impact Analysis for an ESU to populate the columns. The Used Objects column is populated after Object Usage Tracking is activated in the Object Usage Tracking Configuration (P980042T) application.

The Object Usage View option is only available on the web client version of the Software Update Impact Analysis Master (P96710) application.

To access Object Usage for Software Update Impact Analysis:

1. From the Application Development menu (GH902), select Object Usage Tracking and click Object Usage for Software Update Impact Analysis.

2. Select the Object Usage View from the Analysis Views Row exit to display the Impact Analysis - Object Usage View form.

The form has the following fields and table columns:

ESU Name
The name of the ESU Being analyzed.

Path Code
The path code being analyzed.

Total Objects
The total number of objects contained in the ESU.

Customized Objects
The number of objects in the ESU that have been customized (checked-out /checked-in).

Used Objects
The number of objects in the ESU that have a record in the Object Usage Tracking Detail table (F98911) or Object Usage Tracking Summary table (F98902).
OMW Object Name
The unique identifier for the object in the ESU.

Last Patched
The last date this object was updated by an ESU in this path code.

Last Patched ESU Name
The name of the last patched ESU.

Object Customized
Checkmark - Object has been customized (checked-out/checked-in).

Last Customized
The date the object was last customized.

User ID
The User ID of who last checked-in the object.

Object Used
Checkmark - Object has been used.
X - Object has not been used.
Grey Ball Icon - Tracking not supported.

Usage Count
The number of times the object has been accessed.

Last Accessed
The date the object was last accessed.

---

**Note:** The Used Objects, Object Used, Usage Count, and Last Accessed field are populated after Object Usage Tracking is activated in the Object Usage Tracking Configuration application.
This chapter contains the following topics:

- **Section 8.1, "Understanding JD Edwards EnterpriseOne Compare and Merge Tools"**
- **Section 8.2, "Application Configuration Analyzer"**
- **Section 8.3, "JD Edwards Visual Compare for UDC Descriptions and Glossary Tool"**
- **Section 8.4, "JD Edwards EnterpriseOne FDA Compare"**
- **Section 8.5, "JD Edwards EnterpriseOne ER Compare"**
- **Section 8.6, "JD Edwards EnterpriseOne RDA Compare (Release 9.2.4)"**
- **Section 8.7, "JD Edwards EnterpriseOne Business View Compare (Release 9.2.4)"**
- **Section 8.8, "JD Edwards EnterpriseOne Table Compare (Release 9.2.4)"**
- **Section 8.9, "Customization Object Analyzer"**
- **Section 8.10, "Decustomizer Analysis Report (Release 9.2.3.3)"**

### 8.1 Understanding JD Edwards EnterpriseOne Compare and Merge Tools

JD Edwards compare and merge tools enable you to compare two versions of JD Edwards EnterpriseOne objects and non-code objects, such as versions, UDCs, data dictionary items. Tools Release 9.2.4 and later include a compare tool for RDA and merge tools for business views and tables. If you have made custom modifications to business data, forms, or event rules, the compare and merge tools can help you retrofit your changes or verify that they were carried forward to a new release. Furthermore, you can use these tools anytime you want to compare items between two environments.

---

**Note:** The compare and merge tools for RDA, business views, and tables require that the JAS.ini, JDBJ.ini, and MergeTools_JAR.jar files reside in the ..System/Classes directory of the development client. If you are using the Oracle Database Client, the tnsnames.ora file must also be present in the ..System/Classes local folder on the development client. These files are copied automatically from the Developer Web Client configuration, if it has been installed.
8.2 Application Configuration Analyzer

The Application Configuration Analyzer is a set of reports which identify differences for processing options, data dictionary (DD) items, and user defined codes (UDCs) between releases or environments. These reports are:

- Version Compare Report
- User Defined Codes Compare Report
- Data Dictionary Compare Report

**Note:** JD Edwards provides the report templates and report definitions to produce the Application Configuration Analyzer reports using the JD Edwards EnterpriseOne embedded BI Publisher.

For information about the embedded BI Publisher, see “Introduction to BI Publisher for JD Edwards EnterpriseOne” in the *JD Edwards EnterpriseOne Tools BI Publisher for JD Edwards EnterpriseOne Guide*.

8.2.1 Version Compare Report

The Version Compare report (R983051N) compares the processing options for interactive versions and batch versions between two environments or data sources. Environment (1) and Data Source (1) are determined from the current sign on environment. You specify Environment (2) or Data Source (2) in a processing option to indicate the environment or data source to use for comparison.

Before an upgrade, you can compare the versions in the Production and Pristine environments to determine which versions were added, deleted, or changed. After the upgrade, you can use the report to verify that your modifications were carried forward to the new release.

Another way to use the report is as an audit or validation tool. For example, if a version performs as expected in a development environment but not in a production environment, you can use the Versions Compare report to see if there are processing option differences in the two environments.

The comparison report includes both a summary and a detailed section. The detailed section is sorted by system code and object type.

8.2.1.1 Processing Options

The following processing options enable you to specify the processing for the report.

7.2.1.1.1 Environment

1. **Enter the Environment (2) that you want to compare.**
   Specify an environment to compare with the sign on environment. Leave this option blank if you want to compare data sources.

2. **Or Enter the Data Source (2) for Versions table F983051.**
   Specify a data source to compare with the sign on data source. Leave this option blank if you want to compare environments.
7.2.1.1.2 Options

3. Enter '1' to display all selected versions.

Enter '2' to display only 'Processing Option (PO) Data' that are different.

Default is to display all versions that are different.
Use this processing option to display all versions, all versions that are different, or only those where the processing option data is different.

Entering '1' displays all versions, even if there are no differences.
Entering '2' displays batch versions that have different processing option values.
The default (blank) displays:
- Versions that exist in one environment or data source, but not in another.
- Versions with processing option values that are different.

8.2.1.2 Running the Report
To run the Version Compare report:
1. From the Software Compare Tools (GH96111) menu, select Compare Versions.
2. Enter values for the processing options.
3. Click Submit.

---

**Note:** Do not run multiple instances of the Version Compare report simultaneously. The report uses work table F98881 to build the report data. If two Version Compare reports are running at the same time, the information in the reports will not be accurate.

---

4. Select options for the report definition, and then click Next.
5. From Recent Reports on the top menu bar, select Version Compare report.

---

**Note:** If the report is not shown in the drop-down list, select View Job Status to monitor the processing of the report.

---

6. When the report processing is complete, you can view or print the output by selecting either View Job Status or Version Compare report from the Recent Reports menu.

8.2.1.3 Reading the Report
The Version Compare report identifies differences in the interactive and batch versions between two environments or data sources. Based on the processing options that you select, the report will identify the following:
- Versions that exist in one environment or data source, but not in the other.
- Processing option values that are different in the compared versions.

8.2.1.4 Report Components
The cover page of the report shows the report title, the date and time of the report, the data sources that were compared, and the report level of detail that was selected.
The report contains the following components:

- Processing Option Data Changed - Summary by System Code (table)
- Version Differences Detail (horizontal bar graph and table)
- Report summary (text)

**Summary by System Code**

The summary section displays a table that summarizes the number of versions without processing option data changes, the number of versions with processing option data changes, and the total number of versions for each system code.

**Versions Differences Detail**

The detail portion of the report is grouped by system code. At the beginning of each system code section, a horizontal bar chart shows the total number of versions with processing option data differences and without processing option data differences in that system code.

Each version with differences has a table with the following columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Describes the result of the comparison. Values are:</td>
</tr>
<tr>
<td></td>
<td>Only In: The version is only in the location shown in the Data Src column.</td>
</tr>
<tr>
<td></td>
<td>Different: The versions in the two locations are not identical.</td>
</tr>
<tr>
<td></td>
<td>PO Data Differ: The version processing option values are different.</td>
</tr>
<tr>
<td>Data Src</td>
<td>Data Location (1) or (2)</td>
</tr>
<tr>
<td>Version</td>
<td>Version Name</td>
</tr>
<tr>
<td></td>
<td>An example of a version name is XJDE0001 or VER0003.</td>
</tr>
<tr>
<td>Version Title</td>
<td>Version Title</td>
</tr>
<tr>
<td></td>
<td>An example of a version title is &quot;Mailing Labels for the Eastern Region.&quot;</td>
</tr>
<tr>
<td>Security Flag</td>
<td>Values are:</td>
</tr>
<tr>
<td></td>
<td>0 - No Security</td>
</tr>
<tr>
<td></td>
<td>1 - Medium Security</td>
</tr>
<tr>
<td></td>
<td>2 - Medium to Full Security</td>
</tr>
<tr>
<td></td>
<td>3 - Full Security</td>
</tr>
<tr>
<td>Option Code</td>
<td>Values are:</td>
</tr>
<tr>
<td></td>
<td>Blank - Disables the processing options for the version.</td>
</tr>
<tr>
<td></td>
<td>1 - Blind Execution. The application will use existing processing options</td>
</tr>
<tr>
<td></td>
<td>without prompting the user.</td>
</tr>
<tr>
<td></td>
<td>2 - Prompt for Values. The application will prompt the user for processing</td>
</tr>
<tr>
<td></td>
<td>options at run time</td>
</tr>
<tr>
<td>Check Out Status</td>
<td>Indicates whether the version is checked out in Object Management Workbench.</td>
</tr>
<tr>
<td></td>
<td>Values are Y or N.</td>
</tr>
</tbody>
</table>
8.2.1.5 Report Summary

The summary at the end of the report displays the names of the environments or data sources that were compared and the F983051 table mappings. Also included is a record count with the following information:

- Total number of versions selected in each data source.
- Total number of versions that are only in one data source or the other.
- Total number of versions that are different.
- Total number of versions with processing option data that is different.

Compare Terms

The terms used in the report are defined as follows:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only in (1)</td>
<td>Version is only in Data Source (1)</td>
</tr>
<tr>
<td>Only in (2)</td>
<td>Version is only in Data Source (2)</td>
</tr>
<tr>
<td>Different</td>
<td>Version in Data Source (1) and (2) are not identical.</td>
</tr>
<tr>
<td>PO Data Differ - Y</td>
<td>Version processing option values are different.</td>
</tr>
</tbody>
</table>

**Note:** To change processing option values shown on the Version Compare report:

- For batch versions, use the Batch Versions (P98305W) application.
- For interactive versions, use the Interactive Versions (P983051) application.

### 8.2.2 User Defined Code Compare Report

The User Defined Code Compare report (R960004N) displays differences in the user defined codes (UDCs) in two environments or data sources. Environment (1) and Data Source (1) are determined from the current sign on environment. You specify Environment (2) or Data Source (2) in a processing option to indicate the environment or data source to use for comparison. If data sources are compared, the F0004 User Defined Code Types and F0005 User Defined Codes tables must exist in both data sources for the comparison to succeed.
Before an upgrade you can compare the UDCs in the Production and Pristine environments to determine which UDCs were added, deleted, or changed. After the upgrade, you can use the report to verify that your UDC modifications were carried forward to the new release.

Another way to use the report is as an audit or validation tool. For example, if a UDC performs as expected in a development environment but not in a production environment, you can use the User Defined Code Compare report to see if there are UDC differences in the two environments.

The comparison report includes both summary and detailed sections. The detailed section is sorted by system code, and then by UDC type, such as 01/ST.

### 8.2.2.1 Processing Options

The following processing options enable you to specify the processing for the report.

#### 7.2.2.1.1 Environment

1. **Enter the Environment (2) that you want to compare.**
   Specify an environment to compare with the sign on environment. Leave this option blank if you want to compare data sources.

2. **Or Enter the Data Source (2) for User Defined Code (UDC) tables.**
   Specify a data source to compare with the sign on data source. Leave this option blank if you want to compare environments. If you are comparing the UDCs in data sources, Data Source (2) must contain the F0004 and F0005 UDC tables.

#### 7.2.2.1.2 Options

3. **Enter ‘1’ to display all selected UDCs.**
   Default is to display all UDCs that are different.
   Entering ‘1’ displays all UDCs, even if there are no differences.
   The default (blank) displays:
   - UDCs with different values.
   - UDCs that exist in one environment, but not in the other.

### 8.2.2.2 Running the Report

To run the User Defined Code Compare report:

1. From the Software Compare Tools (GH96111) menu, select Compare User Defined Codes.
2. Enter values for the processing options.
3. Click Submit.

---

**Note:** Do not run multiple instances of the User Defined Code Compare report simultaneously. The report uses work table F98881 to build the report data. If two User Defined Code Compare reports run at the same time, the information in the reports will not be accurate.

4. Select options for the report definition, and then click Next.
5. From Recent Reports on the top menu bar, select User Defined Codes Compare report.

**Note:** If the report is not shown in the drop-down list, select View Job Status to monitor the processing of the report.

6. When the report processing is complete, you can view or print the output by selecting either View Job Status or User Defined Code Compare report from the Recent Reports menu.

### 8.2.2.3 Reading the Report

The User Defined Code Compare report identifies differences in the UDCs between two environments or data sources. Based on the processing options that you select, the report will identify the following:

- UDCs that exist in one environment or data source, but not in the other.
- UDCs with different field values.

### 8.2.2.4 Report Components

The cover page of the report shows the report title, the date and time of the report, the data sources that were compared, and the report level of detail that was selected.

The report contains the following components:

- Summary by User Defined Code Types (horizontal bar graph).
- Differences by Product Code (table).
- Report summary (text and table)

#### Summary by Product Code

A horizontal bar graph at the beginning of the report displays the percentage of UDC differences in each product code.

#### Differences by Product Code

The Differences by Product Code portion of the report is grouped by product code. Only the product codes with UDC differences display on the report. Under each product code section are UDCs with differences (grouped by UDC, such as 01/PH). A table for each UDC or UDC value with differences shows the differences that were found.

For example, an entire UDC, such as 01/PH, could exist in one environment or data source, but not in the other. Or, if the UDC exists in both locations, some of the code values could be different. For instance, the BUSN code within the 01/PH UDC shown in the following example could be missing in one location or have a different value for one of its fields, such as Description 01.

This is an example of a UDC:
Each UDC with differences displays a table showing the values for the UDC and for any codes within the UDC with differences.

The following columns are shown for the UDC:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>The Result column indicates that the UDC has differences.</td>
</tr>
<tr>
<td>Product Code</td>
<td>The UDC's product code.</td>
</tr>
<tr>
<td>Code Types</td>
<td>The UDC type, which is a code that identifies the table that contains user defined codes. For example, for UDC 01/PH the type is PH.</td>
</tr>
<tr>
<td>Description</td>
<td>The UDC description.</td>
</tr>
<tr>
<td>Code Length</td>
<td>The maximum length of UDC code values.</td>
</tr>
</tbody>
</table>
| Second Line (Y/N)  | Determines if the Select User Defined Code form will display a second line of description. Valid values are:  
|                    | ■ Y - Enables the second line of description.  
|                    | ■ N - Enables the Select User Defined Code form to display only one line of description. |
| Numeric (Y/N)      | Determines whether a user defined code is numeric or alphanumeric. Valid values are:  
|                    | ■ Y - Indicates that the code is numeric and should be right-justified.  
|                    | ■ N - Indicates that the code is alphanumeric and should be left-justified. |

The following columns are shown for the UDC codes:
<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
</table>
| Result         | The Result column displays one of these values:  
|                | - UDC Codes Different (<1 or 2>)  
|                | - UDC Codes Only in (<1 or 2>)  
|                | The 1 or 2 value indicates in which environment or data source the difference was found.  
| Product Code   | The UDC’s product code.  
| Code Types     | The UDC type, which is a code that identifies the table that contains user defined codes. For example, for UDC 01/PH the type is PH.  
| UDC Codes      | The code values within the UDC with differences.  
| Description 01 | Values that are different for the Description 01 field are shown in this column.  
| Description 02 | Values that are different for the Description 02 field are shown in this column.  
| Special Handling | Values that are different for the Special Handling field are shown in this column.  
| Hard Coded Y/N | Values that are different for the Hard Coded field are shown in this column.  

**Note:** Use the User Defined Codes (P0004A) application to change UDCs and UDC values.

### 8.2.2.5 Report Summary

The summary at the end of the report shows the environment or data sources that were compared and the F0004 and F0005 UDC table mappings. Additionally, the report displays a table with the following information for each location:

- Total UDCs (F0004) selected in Data Source (1) and Data Source (2).
- Total UDCs (F0004) only in Data Source (1) and Data Source (2).
- Total UDCs (F0004) that are different.
- Total UDCs (F0005) selected in Data Source (1) and Data Source (2).
- Total UDCs (F0005) only in Data Source (1) and Data Source (2).
- Total UDCs (F0005) that are different.

**Compare Terms**

The terms used in the report are defined as follows:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only in (1)</td>
<td>The UDC is only in Data Source (1)</td>
</tr>
<tr>
<td>Different</td>
<td>The UDC in Data Source (1) and (2) are not identical.</td>
</tr>
<tr>
<td>Only in (2)</td>
<td>The UDC is only in Data Source (2)</td>
</tr>
</tbody>
</table>
8.2.3 Data Dictionary Compare Report

The Data Dictionary Compare report (R969200N) compares data dictionary items between two environments or data sources. Environment (1) and Data Source (1) are determined from the current sign on environment. You specify Environment (2) or Data Source (2) in a processing option to indicate the environment or data source to use for comparison.

Before an upgrade, you can compare the data dictionary items in the Production and Pristine environments to determine which items were added, deleted, or changed. After the upgrade, you can use the report to verify that your modifications were carried forward to the new release.

Another way to use the report is as an audit or validation tool. For example, if a data dictionary item performs as expected in a development environment but not in a production environment, you can use the Data Dictionary Compare report to see if the items in the two environments are different.

The report includes both a summary and a detailed section. The detailed section is sorted by system code, and then by the item alias name within each system code.

8.2.3.1 Processing Options

The following processing options enable you to specify the processing for the report.

7.2.3.1.1 Environment

1. Enter the Environment (2) that you want to compare.
   Specify an environment to compare with the sign on environment. Leave this option blank if you want to compare data sources.

2. Or Enter the Data Source (2) for Data Dictionary tables.
   Specify a data source to compare with the sign on data source. Leave this option blank if you want to compare environments.

   The data dictionary tables that will be used for comparison are F9200, F9203, F9207, F9210, and GT92002.

7.2.3.1.2 Options

3. Enter ‘1’ to display all selected DD items.

   Default is to display all DD items that are different.

   Entering ‘1’ displays all selected DD items, even if there are no differences.

   The default (blank) displays:
   ■ Data dictionary items with different values.
   ■ Data dictionary items that exist in one environment, but not in the other.

8.2.3.2 Running the Report

To run the Data Dictionary Compare report:

1. From the Software Compare Tools (GH96111) menu, select Compare Data Dictionary.

2. Enter values for the processing options.

3. Click Submit.
4. Select options for the report definition, and then click Next.
5. From Recent Reports on the top menu bar, select Data Dictionary Compare report.

**Note:** If the report is not shown in the drop-down list, select View Job Status to monitor the processing of the report.

6. When the report processing is complete, you can view or print the output by selecting either View Job Status or Data Dictionary Compare report from the Recent Reports menu.

### 8.2.3.3 Reading the Report

The Data Dictionary Compare report identifies differences in the data dictionary tables between two environments or data sources. The following data dictionary tables are compared:

<table>
<thead>
<tr>
<th>Table Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F9200</td>
<td>Data Item Master</td>
</tr>
<tr>
<td>F9203</td>
<td>Data Item Alpha Description</td>
</tr>
<tr>
<td>F9207</td>
<td>Error Message Information</td>
</tr>
<tr>
<td>F9210</td>
<td>Data Item Specifications</td>
</tr>
<tr>
<td>GT92002</td>
<td>Data Dictionary Glossary</td>
</tr>
</tbody>
</table>

Based on the processing options that you select, the report will identify the following:

- Data dictionary items that exist in one environment or data source, but not in the other.
- Values which are different in the compared data dictionary items.

### 8.2.3.4 Report Components

The cover page of the report shows the report title, the date and time of the report, the data sources that were compared, and the report level of detail that was selected.

The report contains the following components:

- Summary by Product Code (horizontal bar graph)
- Data item differences (detail tables)
- Report summary (text and table)

**Summary by Product Code**

The summary displays a horizontal bar graph showing the number of data items with differences in each product code in two environments or data sources. The summary is followed by a detail section, which displays detailed information about the items in both locations.
Data Item Differences

The detail section for each product code is sorted by data item aliases. The section consists of a table for each item, which displays the item differences. The information shown in the table differs, depending on whether the data dictionary item is a regular data item or a glossary data item.

**Note:** If the data item exists only in Environment (2) or Data Source (2), the report lists the item but does not display a detail section for the item.

For more information, see “Understanding the Data Dictionary” in the *JD Edwards EnterpriseOne Tools Data Dictionary Guide*.

Glossary Data Items

Each glossary item with differences has a table with the following columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Describes the result of the comparison.</td>
</tr>
<tr>
<td></td>
<td>DD: The glossary data dictionary items in the two locations are different.</td>
</tr>
<tr>
<td>Glossary Group</td>
<td>The glossary group assigned to the glossary data item in the Data Item Master (F9200) table.</td>
</tr>
<tr>
<td></td>
<td>The most common glossary groups for glossary data items are E, H, X, or Y, although other types are available.</td>
</tr>
<tr>
<td>Product Code</td>
<td>The product code assigned to the glossary data item in the Data Item Master (F9200) table.</td>
</tr>
<tr>
<td>Product Code Reporting</td>
<td>The product reporting code assigned to the glossary data item in the Data Item Master (F9200) table.</td>
</tr>
<tr>
<td>Error Message</td>
<td>Error message tab for F9207.</td>
</tr>
<tr>
<td>Program Name</td>
<td>Program name (FRPGM) in F9207.</td>
</tr>
<tr>
<td>Error Level</td>
<td>The error level assigned to the glossary data item in the Error Message Information (F9207) table</td>
</tr>
<tr>
<td></td>
<td>Values are:</td>
</tr>
<tr>
<td></td>
<td>■ 1 - Error Message</td>
</tr>
<tr>
<td></td>
<td>■ 2 - Warning Message</td>
</tr>
<tr>
<td></td>
<td>■ 3 - Information Message</td>
</tr>
<tr>
<td>Item Glossary</td>
<td>Item Glossary tab for F9203</td>
</tr>
<tr>
<td>Data Item Language System Code</td>
<td>Data Item (FRDTAI) for DD Alpha Descriptions F9203</td>
</tr>
<tr>
<td>Language System Code Screen/Rpt Alpha Description</td>
<td>System Code (FRSYR) in F9203</td>
</tr>
<tr>
<td>Screen Name</td>
<td>Screen Name (FRSCRN) in F9203</td>
</tr>
<tr>
<td>Alpha Description</td>
<td>The description assigned to the glossary data item in the Data Item Alpha Description (F9203) table.</td>
</tr>
<tr>
<td>Generic Text Key</td>
<td>The glossary data dictionary item’s Generic Text Key.</td>
</tr>
</tbody>
</table>
### Regular Data Items

Each regular data item with differences has a table with the following columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Describes the result of the comparison. Values are:</td>
</tr>
<tr>
<td></td>
<td>■ Only in (&lt;location&gt;): The data dictionary item is only in the location shown. Values are (1) or (2).</td>
</tr>
<tr>
<td></td>
<td>■ Different: The data dictionary items in the two locations are different.</td>
</tr>
<tr>
<td>Glossary Group</td>
<td>The glossary group assigned to the glossary data item in the Data Item Master (F9200) table. Values are: C, D, K, S, E.</td>
</tr>
<tr>
<td>Product Code</td>
<td>The product code assigned to the data item in the Data Item Master (F9200) table.</td>
</tr>
<tr>
<td>Product Code Reporting</td>
<td>The product reporting code assigned to the data item in the Data Item Master (F9200) table.</td>
</tr>
</tbody>
</table>

The second portion of the table displays the values for the data item in the two environments or data sources being compared. The table shows the data item values for the following categories:

- Item Specifications
- Default Value
- Visual Assist
- Edit Rule
- Display Rule

---

**Note:** To access the values for glossary data items, select any of the following Data Dictionary Design (GH951) menu selections:

- Work with Data Dictionary Items (P92001).
  
  Select Glossary Data Item from the Form menu.
- Error Messages (P92002).
- Workflow Messages (P92002).
- Processing Option Glossaries. (P92002)
The table, with a side-by-side comparison of the field values in the two locations, enables you to verify all field value differences.

**Note:** To access the values for regular data dictionary items, select Work with Data Dictionary Items (P92001) from the Data Dictionary (GH951) menu.

### 8.2.3.5 Report Summary

The report summary displays the names of the environments or data sources that were compared and the data dictionary table mappings in both locations. Also included is a record count for the following tables:

- **Data Item Master (F9200)**
  - Total number of data items selected in each data source.
  - Total number of data items that are only in Data Source (1) or Data Source (2).
  - Total number of data items that are different.

- **Data Item Alpha Description (F9203)**
  - Total number of data items selected in each data source.
  - Total number of data items that are only in Data Source (1) or Data Source (2).
  - Total number of data items that are different.

- **Data Dictionary Glossary (GT92002)**
  - Total number of data items that are only in Data Source (1) or Data Source (2).
  - Total number of data items that are different.

- **Error Message Information (F9207)**
  - Total number of data items selected in each data source.
  - Total number of data items that are only in Data Source (1) or Data Source (2).
  - Total number of data items that are different.

- **Data Item Specifications (F9210)**
  - Total number of data items selected in each data source.
  - Total number of data items that are only in Data Source (1) or Data Source (2).
  - Total number of data items that are different.

**Compare Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only in (1)</td>
<td>DD is only in Data Source (1).</td>
</tr>
<tr>
<td>Different</td>
<td>DD in Data Source (1) and (2) are not identical.</td>
</tr>
<tr>
<td>Only in (2)</td>
<td>DD is only in Data Source (2).</td>
</tr>
<tr>
<td>A</td>
<td>DD Glossary Text is only in Data Source (1).</td>
</tr>
</tbody>
</table>
8.3 JD Edwards Visual Compare for UDC Descriptions and Glossary Tool

JD Edwards EnterpriseOne Visual Compare for UDC Descriptions and Glossary tool (P96472) enables you to review and apply text updates for Data Dictionary glossaries and UDCs. You can see a side-by-side comparison of the new and old text values, which enables you to choose whether to accept the changes. When you install an ESU containing UDC Description and Glossary changes, an XML file is extracted to the Special Instructions folder on the deployment server and is located in the following directory: ..\E900\SpecialInstructions. The Visual Compare for UDC Descriptions and Glossary Tool, application P96472, is run from an administrative client workstation within JD Edwards EnterpriseOne and applies the changes to the current environment. You must have installed the Planner Update, which contains Software Action Request (SAR) 7481054, completed the special instructions, and built and deployed your package.

To apply DD glossary and UDC description changes:

1. In the Fast Path, enter P96472.

2. On Work With Special Instructions, click Add.

   On Search and Select Special Instructions, in the Server Share Path field, the path to the Deployment Server special instructions folder appears as the default.

3. If you have moved the folder or if the appropriate folder does not appear, click the browse button, navigate to the directory that contains the XML file, and select the directory. Click Find.

4. In the grid, click the appropriate ESU, and then click Select.

   The data from the new ESU is imported and the application returns to the Work With Special Instructions form. The new ESUs appear in the grid. The Work With Special Instructions form appears. The ESUs appear in the grid.

5. Select the appropriate ESU.

6. Select one of the following options from the Row menu:

   - Accept: Select this option if you want to accept all updates in the ESU without reviewing them.
   - Reset Status: Select this option to change the status from Applied to Not Applied or from Reviewed to Not Applied.

Three types of statuses are available:

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied</td>
<td>Applied status appears if you have applied everything contained in the ESU. If you have applied parts of the ESU, but not all, then this status will not appear.</td>
</tr>
<tr>
<td>Not Applied</td>
<td>This status appears if you have not applied any of the ESU contents.</td>
</tr>
</tbody>
</table>
7. Select the UDC Description Option to access the Work with UDC Description Changes form. This option is enabled only if the ESU contains changes to UDC descriptions.

The UDCs are grouped by product code and appear in a list underneath the Available UDC Items folder. Only those UDCs that have different descriptions from the ones that already reside in your current environment appear.

8. You can select individual UDCs, multiple UDCs, or all UDCs. To select all UDCs, click the top-level node located under the Available UDC Items folder. Clicking any node selects all of the UDCs beneath it. To accept the UDC descriptions, click Accept.

9. You can opt to view all UDCs in the ESU by clicking the All items option. Or, you can opt to view only those items that have not already been reviewed by clicking the Non Reviewed Items option.

10. Click the double-arrow button to accept the UDC description of the currently selected UDC.

11. Select the DD Glossary option to access the Work with DD Glossary Changes form. This option is enabled only if the ESU contains changes to DD glossaries.

The DD items are grouped by product code and appear in a list underneath the Special Instructions folder. Only those DD items that have different glossaries from the ones that already reside in your current environment appear.

12. You can select individual DD items, multiple DD items, or all DD items. To select all DD items, click the top-level node located under the Special Instructions folder. Clicking any node selects all of the DD items beneath it. To accept the DD glossaries, click Accept.

13. You can opt to view all glossaries in the ESU by clicking the All items option. Or, you can opt to view only those items that have not already been reviewed by clicking the Non Reviewed Items option.

14. Click the double-arrow button to accept the DD glossary of the currently selected DD.

15. Select the Preceding ESU option to view a summary of changes previously applied but also contained in the selected ESU.

16. Select the SARs Related option to view all SARs in the selected ESU containing text changes for UDCs and glossaries.

### 8.4 JD Edwards EnterpriseOne FDA Compare

This section contains the following topics:

- Section 8.4.1, "Understanding FDA Compare"
- Section 8.4.2, "Understanding the FDA Compare Color Scheme"
- Section 8.4.3, "Using FDA Compare"
8.4.1 Understanding FDA Compare

The FDA Compare tool in Oracle's JD Edwards EnterpriseOne Form Design Aid (FDA) enables you to compare one version of an application to another. You can compare them on the application level to determine whether forms have been added, deleted, or rearranged and whether the properties have changed. You also can compare the forms in the applications to each other to see whether controls have been added, deleted, or rearranged and whether the properties have changed.

Additionally, you can compare two different applications as well. This feature is useful when you have made a new application by copying an existing one and then modifying it. Then, when you upgrade, you can not only compare the base application to its new counterpart, but also you can compare a custom application.

While working with the target object, you can use all FDA functions except creating new forms. While comparing, you can change the target object to match the source object. If an object exists in the source but not in the target, you can copy it to the target. If an object exists in both but is different in some way, you can merge the specifications from the source to the target to make them identical.

As a software developer, you might use FDA Compare as the final step before checking in the changes to ensure that you made all of the changes you intended to make. In this way, you can also make sure that you did not move a control or make a property change unintentionally.

As an administrator, you might use FDA Compare to see the changes between a software update and the pristine or current implementation. If you have performed a number of customized modifications, you can more carefully implement the software changes without fear of ruining the customization.

8.4.2 Understanding the FDA Compare Color Scheme

FDA Compare uses colors and letters to highlight the differences between the source and target objects. This table lists the default colors and their meanings:

<table>
<thead>
<tr>
<th>Color</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>The object exists in both the source and target and is the same in both versions.</td>
</tr>
<tr>
<td>Red</td>
<td>The object exists in both the source and target but is not the same in both versions.</td>
</tr>
<tr>
<td>Green</td>
<td>The object exists only in the target.</td>
</tr>
<tr>
<td>Blue</td>
<td>The object exists only in the source.</td>
</tr>
</tbody>
</table>

In the form workspace, the controls that differ between the versions are marked with a symbol in a color indicating the type of change. When you click a control, the browsers highlight the changes in specific property values with the same color coding. To change the color scheme, select View, User Options.

**Note:** Nodes in the Application Tree View browser appear in a color if one or more of their children are different. Therefore, while the node itself may not be different, you will find that an object is different when you navigate deeper into the tree.
8.4.3 Using FDA Compare

This section discusses how to merge specifications using FDA Compare.

### 8.4.3.1 Forms Used To Use FDA Compare

<table>
<thead>
<tr>
<th>Form Name</th>
<th>FormID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Source Object</td>
<td>NA</td>
<td>Form Design Aid, File, Compare Mode</td>
<td>Enable or disable compare mode (toggle). When you enable compare mode, the system prompts you to identify the application that you want to use as the basis for the comparison.</td>
</tr>
</tbody>
</table>

### 8.4.3.2 Merging Specifications Using FDA Compare

To merge specifications using FDA Compare:

1. In FDA, open the target application.
   - This is the application that you have been working on or that your company uses. It is the version of the application that you might want to change when you compare it to the source, which is a base version of the application.

2. Select a source application (the one to use as the basis for the comparison).

3. To change the view properties in the source or target property browser, select one of these options from the drop-down menu at the bottom of the pane:
   - **All**
     - Displays all the properties and values in alphabetic order for the object including the translation properties.
   - **Standard**
     - Displays only the standard properties in alphabetic order.
   - **Translation**
     - Displays only the translation properties in alphabetic order.

4. Compare the source application properties (on the left) to the local target properties (on the right).

5. To merge properties from the source object to the target object, right-click in the property source property browser and select Merge to Target from the menu.

8.5 JD Edwards EnterpriseOne ER Compare

This section contains the following topics:

- Section 8.5.1, "Using JD Edwards ER Compare for Applications and Event Rules"
- Section 8.5.2, "Working with JD Edwards ER Compare"

JD Edwards ER Compare provides a detailed, on-screen comparison of event rules. You can change the target object (your local version) within the utility by moving lines
directly from the source. You can also remove or disable lines. In addition to providing an on-screen comparison, you can select to print a report detailing the changes as well.

8.5.1 Using JD Edwards ER Compare for Applications and Event Rules

This section provides an overview of the JD Edwards ER Compare user interface and discusses how to start JD Edwards ER Compare.

8.5.1.1 Understanding the JD Edwards ER Compare User Interface

JD Edwards ER Compare is a utility that enables you to compare an application on the local workstation (target application) to the source applications defined in:

- The central objects data source of any defined path code.
- A TAM specifications directory.
- An ESU backup.

You can compare applications, reports, table conversions (TC), business functions (BSFN), table event rules (TER), and business services (BSSVs) using the ER Compare User Interface.

Figure 8–2 Select Target Object

When you start JD Edwards ER Compare, a tree-structured outline of the application appears on the left. You can change source locations with the Select Source command under the File menu.

Expand an event node in the tree to display a split window that shows the source ER on the left and corresponding target ER on the right. The ER on the right belongs to your local specifications.

The program indicates differences in color, while identical lines are normally displayed in black. Disabled lines are marked with an exclamation point. You can customize the color coding by selecting the Set Colors command from the View menu.
JD Edwards ER Compare normally displays ID numbers and technical details about the currently selected item in two small windows on the status bar. The window on the left annotates the source specification while the window on the right annotates the target specification. This information is superfluous in most cases, and can be deactivated with the Show Object IDs switch under the View menu.

The tool lets you compare a modified application to the original version of that application on the server. JD Edwards ER Compare provides a side-by-side, visual comparison of the event rules for the two applications. Moreover, JD Edwards ER Compare enables you to modify the target ER (your local version) by copying lines directly from the source application. You can also move, remove, and disable ER lines in the target application. To copy all eligible lines in the current event from source to target, use the Copy All command. To copy all eligible lines in every event from source to target, use the Auto Merge Application command in the Edit menu.

To refresh the comparison, click the Refresh button. A warning message saying ‘the source and target specifications are about to refresh, any unsaved changes will be lost’ is displayed when you click the refresh button. You can click OK or Cancel as required.

To validate your changes before saving, select the Validate Event Rules command from the File menu. A validation will automatically occur before you exit the tool if you have saved changes.

### 8.5.1.2 Starting JD Edwards ER Compare

JD Edwards ER Compare can be started from FDA or directly from OMW.

When JD Edwards ER Compare starts, a window appears. On this window, entitled Select the Location of Source Specifications, select one of these locations:

- **Central Objects Path Code**
  
  Enter the server location of the source object (the object to which you want to compare the local ER).

- **Remote Specifications Location**
  
  Enter the TAM location of the source object (the object to which you want to compare the local ER). ESUs are delivered in a TAM package, so use this method to compare the local ER to an object packaged in an ESU.

- **Software Update Backup**
  
  After applying a software update, use this tool to retrofit custom ER from the customized copy on the ESU backup.

**Note:** Starting JD Edwards ER Compare under FDA freezes all other programs running on your system, including FDA itself. Finish your work in JD Edwards ER Compare and then exit ER Compare to restore normal operation. The purpose of this action is to prevent two programs from potentially modifying the same set of specifications at the same time.

### 8.5.2 Working with JD Edwards ER Compare

Use the application tree view to identify and display specific application and ER components that have changed. If a parent node is identified as having changed, expand it to see which of its children are different. Expand an event in the tree structure to display its associated code. You can display more than one event at a time.
You can change the target ER with JD Edwards ER Compare. You can also print the ER.

### 8.5.2.1 Changing the Target ER

Perform any of these actions to change the target ER:

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>To copy selected lines from source to target</td>
<td>Select the lines to copy and then select Copy Right.</td>
</tr>
<tr>
<td>To copy all lines in the current event</td>
<td>See Merging ER in a Single Event.</td>
</tr>
<tr>
<td>To copy all lines in the application</td>
<td>See Merging ER in the Entire Application.</td>
</tr>
<tr>
<td>To delete selected lines from the target</td>
<td>Select the lines to delete, and then click Delete.</td>
</tr>
<tr>
<td>To enable or disable selected lines in the target</td>
<td>Select the lines to enable or disable, and then select Enable/Disable ER.</td>
</tr>
<tr>
<td>To undo the previous command</td>
<td>Select Undo.</td>
</tr>
<tr>
<td>To redo the previous command</td>
<td>Select Redo.</td>
</tr>
<tr>
<td>To reload the last saved version of the specifications</td>
<td>Select Refresh.</td>
</tr>
</tbody>
</table>

Each command is available from the Edit menu and tool bar.

---

**Note:** Use the Shift key to select multiple, contiguous lines and the Ctrl key to select multiple, noncontiguous lines.

When you are copying ER, JD Edwards ER Compare checks ER variable references before copying and automatically fixes nonmatching variable IDs. Not only does JD Edwards ER Compare perform validity checking on ER variables, which are present in almost every ER statement, but it also does many other types of validity checking.

---

**Caution:** Although JD Edwards ER Compare provides validity checking, which eliminates the largest source of invalid ER, you must still be vigilant when using JD Edwards ER Compare. When JD Edwards ER Compare copies ER statements, it does not check all of the object references in those statements. If the ER statements reference objects that do not exist in the target specifications or objects that have different IDs in the source and target specifications, JD Edwards ER Compare may allow the copy operation, which results in invalid ER. Different control IDs are very common for controls or objects that were not in the base version of the application. Controls that were added at separate times to separate versions of the application usually have different control IDs.

---

When you save changes, your local application specifications are updated. JD Edwards ER Compare prompts you to save before either of these operations:

- Exit
- Select new source location
8.5.2.2 Printing
You can use the Print command to place a copy of the target ER in a text file. JD Edwards ER Compare will generate the text file and open it in your default text editor. You can then print the ER from the text editor.

8.5.2.3 Merging ER in a Single Event
The Copy All command copies ER lines from the source to the target, but only within the currently displayed event. The command will not delete lines from target ER if they do not exist in the source location. The command also does not necessarily copy all lines. It does not copy lines that would produce any of these types of invalid ER:
- Duplicate variables.
- Unbalanced IF and ENDIF statements.
- Unbalanced WHILE and ENDWHILE statements.
- Statements referencing an ER variable that is not defined in the target application.
- Statements referencing an ER variable that is defined differently in the target application.

8.5.2.4 Merging ER in the Entire Application
The Auto Merge Application command resides under the Edit menu. It lets you copy ER lines from all events in the source application to the corresponding events in the target application. It works like the Copy All command, but it works on all events at once. The command will not delete lines from target ER that do not exist in the source location. The command also attempts to avoid copying lines that would result in invalid ER.

As with any JD Edwards ER Compare command, you might create invalid ER by using the Auto Merge Application command. As of version 8.98, JD Edwards ER Compare attempts to protect you from this by disabling unsafe operations. For example, JD Edwards ER Compare prevents the accidental creation of references to undefined ER variables. However, it does not recognize references to other kinds of undefined objects. Follow the steps recommended earlier to ensure that your ER remains valid.

Regardless of how you modify the ER, you should validate event rules prior to saving. This command is found under the File menu. If any ER violations occur, delete the offending lines and use Edit Event Rules to reenter them after you have exited JD Edwards ER Compare.

8.6 JD Edwards EnterpriseOne RDA Compare (Release 9.2.4)
This section contains the following topics:
- Section 8.6.1, "Understanding RDA Compare,"
- Section 8.6.2, "Using RDA Compare,"

8.6.1 Understanding RDA Compare
The Report Design Aid (RDA) Compare tool in Oracle's JD Edwards EnterpriseOne Batch Application Design enables you to compare one report to another of the same name. You can compare the details of reports to determine if objects have been added, deleted, or rearranged and whether the properties have changed.
This is useful when you have made modifications to an EnterpriseOne report and you upgrade, you can compare the base report to its new counterpart.

Use RDA Compare to see the changes between a software update and the pristine or current implementation. If you have performed a number of customized modifications, you can use the RDA Compare tool to validate and implement your customization.

RDA Compare will compare the following attributes:

**Report**
Compares the report template interconnects.

**Section**
Only sections with the same section Id are compared. If a section does not have the same type (columnar or group) or business view, it and all child fields will be marked as protected.
- Section Size
- Section Properties
- Color
- Data Sequencing

**Field**
Fields with the same Id in a section are compared to each other. Fields with different DDICT and/or different data types with the same Id will show differences, but are marked protected.
- Field Properties
- Total Types
- Field Style
- Display Length
- Display Decimals
- Edit Code
- Justification
- Display Styles
- Field Position
- Font Format
- Field Color
- Text Override

**Note:** Table Conversions, tabular reports, reports with database mappings are not compared.

### 8.6.2 Using RDA Compare

This section discusses how to compare specifications using RDA Compare.

To compare specifications using RDA Compare:
1. Navigate to Object Management Workbench (OMW) from a JD Edwards Development Client.

2. Check out the object to be the target. The target object should always be a copy of the object received in an ESU or Applications Update.

3. Click the OMW Design button, click the Design Tools tab and then click the RDA Compare button.

4. In the Spec Compare Manager, click the Select Source button. The source objects should be the object version that has been customized.

5. Select the location of the source object under Object Location.

Source objects may be selected from:

<table>
<thead>
<tr>
<th>Location</th>
<th>Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Objects</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td>Local</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>OMW Project (Optional)</td>
</tr>
<tr>
<td></td>
<td>Select the OMW Project</td>
</tr>
<tr>
<td></td>
<td>Filters projects for which you are a member.</td>
</tr>
<tr>
<td></td>
<td>Specifications come from E1Local</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td>Object History</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td></td>
<td>Changed Date</td>
</tr>
<tr>
<td></td>
<td>Displays the date the object was last</td>
</tr>
<tr>
<td></td>
<td>modified.</td>
</tr>
<tr>
<td></td>
<td>Object Release</td>
</tr>
<tr>
<td></td>
<td>Displays the JD Edwards EnterpriseOne</td>
</tr>
<tr>
<td></td>
<td>application. release.</td>
</tr>
<tr>
<td>Package</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Package Name</td>
</tr>
<tr>
<td></td>
<td>Select the name of the full package build.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td>Development Save</td>
<td>SAVE Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Save Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
</tbody>
</table>
Click the OK button to accept the selection and return to the Spec Compare Manager.

The selected object version will be extracted from the location and validated. This may take some time depending on the size and location of the object.

7. Click the Compare button to display object differences.

The Compare Specifications form displays with the Source on the left pane and Target on the right pane.

The Compare Specifications form enables you to compare the specification differences between the specifications.

The report name row is highlighted in blue. The columns that are different, but are protected are in red text. The rows with red text illustrate where the reports are different.

8. Click the OK button.

8.7 JD Edwards EnterpriseOne Business View Compare (Release 9.2.4)

This section contains the following topics:

- Section 8.7.1, "Understanding Business View Compare,"
- Section 8.7.2, "Using Business View Compare,"

8.7.1 Understanding Business View Compare

The Business View Compare tool in Oracle's JD Edwards EnterpriseOne Business View Design enables you to compare one business view to another to identify. The Compare Specifications form displays the differences in columns and joins. You can compare the details of business views to determine if columns have been added, deleted, and whether the properties have changed.

This is useful when you have made modifications a business view and you upgrade, you can compare the business view to its new counterpart and merge the specification differences.

Use Business View Compare to see the changes between a software update and the pristine or current implementation. If you have performed a number of customized modifications, you can use the Business View Compare tool to validate and implement your customization.

8.7.2 Using Business View Compare

This section discusses how to compare and merge specifications using Business View Compare.

To compare and merge specifications using Business View Compare:

<table>
<thead>
<tr>
<th>Location</th>
<th>Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>file System .par File</td>
<td>PAR File Name</td>
</tr>
<tr>
<td></td>
<td>Select the file system .par file.</td>
</tr>
<tr>
<td></td>
<td>Value must include the full path and can be a .par or .zip file.</td>
</tr>
</tbody>
</table>
1. Navigate to Object Management Workbench (OMW) from a JD Edwards Development Client.

2. Check out the object to be the target. The target object should always be a copy of the object received in an ESU or Applications Update.

3. Click the Business View Design button, click the Design Tools tab and then click the BSSV Compare button.

4. In the Spec Compare Manager, click the Select Source button. The source objects should be the object version that has been customized.

5. Select the location of the source object under Object Location. Source objects can come from the following locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Objects</td>
<td>Path Code&lt;br&gt;Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the path code.&lt;br&gt;Select the object name.</td>
</tr>
<tr>
<td>Local</td>
<td>Path Code&lt;br&gt;OMW Project (Optional)&lt;br&gt;Object Name&lt;br&gt;OMW Project (Optional)&lt;br&gt;Filters projects for which you are a member. Specifications come from E1Local</td>
</tr>
<tr>
<td></td>
<td>Select the path code.&lt;br&gt;Select the OMW Project&lt;br&gt;Object Name&lt;br&gt;Select the object name.</td>
</tr>
<tr>
<td>Object History</td>
<td>Path Code&lt;br&gt;Object Name&lt;br&gt;Changed Date&lt;br&gt;Object Release&lt;br&gt;Object History</td>
</tr>
<tr>
<td></td>
<td>Select the path code.&lt;br&gt;Select the object name.&lt;br&gt;Displays the date the object was last modified.&lt;br&gt;Displays the JD Edwards EnterpriseOne application. release.</td>
</tr>
<tr>
<td>Package</td>
<td>Path Code&lt;br&gt;Package Name&lt;br&gt;Object Name&lt;br&gt;Package Name</td>
</tr>
<tr>
<td></td>
<td>Select the path code.&lt;br&gt;Select the name of the full package build.&lt;br&gt;Select the object name.</td>
</tr>
<tr>
<td>Development Save</td>
<td>SAVE Path Code&lt;br&gt;Save Object Name&lt;br&gt;Save Object Name&lt;br&gt;Save Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the path code.&lt;br&gt;Select the object name.</td>
</tr>
</tbody>
</table>
6. Click the OK button to accept the selection and return to the Spec Compare Manager.
   The selected object version will be extracted from the location and validated. This may take some time depending on the size and location of the object.

7. Click the Compare button to compare the specifications.
   The Compare Specifications form displays with the Source on the left pane and Target on the right pane.
   The Compare Specifications form enables you to compare and merge the specification differences between the two selected objects. You can select Source lines and copy them to the Target.
   The table definition row is highlighted in blue. The columns that are different, but are protected are in red text. The source rows with red text, representing tables, columns, or joins and red background, you can copy to the target.

8. Click the Ok button to save the merged specifications and exit.

   **Note:** Business View Compare also merges dependent rows when merging certain elements. For example, merging a source join will also merge the source column and source table if they are not already part of the target specifications. Another example is merging a source table causes the source join and source join-column to be merged if they are not already part of the target specifications.

---

### 8.8 JD Edwards EnterpriseOne Table Compare (Release 9.2.4)

This section contains the following topics:

- Section 8.8.1, "Understanding Table Indices Compare,"
- Section 8.8.2, "Using Table Indices Compare,"

#### 8.8.1 Understanding Table Indices Compare

The Table Compare tool in Oracle's JD Edwards EnterpriseOne Table Design enables you to compare the indexes from one table to another. You can compare and merge missing indexes or index columns. Table Compare does not merge missing data columns of the table.

Use Table Compare to see the index changes in a table between a software update and the pristine or current implementation. If you have performed a number of customized modifications, you can use the Table Compare tool to validate and implement your customization.

#### 8.8.2 Using Table Indices Compare

This section discusses how to compare and merge indexes using Table Compare.
To compare and merge specifications using Table Compare:

1. Navigate to Object Management Workbench (OMW) from a JD Edwards Development Client.

2. Check out the object to be the target. The target object should always be a copy of the object received in an ESU or Applications Update.

3. Click the OMW Design button, click the Design Tools tab and then click the Table Compare button.

4. In the Spec Compare Manager, click the Select Source button. The source objects should be the object version that has been customized.

5. Select the location of the source object under Object Location.
   Source objects can come from the following locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Objects</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td>Local</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>OMW Project (Optional)</td>
</tr>
<tr>
<td></td>
<td>Select the OMW Project</td>
</tr>
<tr>
<td></td>
<td>Filters projects for which you are a member.</td>
</tr>
<tr>
<td></td>
<td>Specifications come from EI1Local</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td>Object History</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
<tr>
<td></td>
<td>Changed Date</td>
</tr>
<tr>
<td></td>
<td>Displays the date the object was last</td>
</tr>
<tr>
<td></td>
<td>modified.</td>
</tr>
<tr>
<td></td>
<td>Object Release</td>
</tr>
<tr>
<td></td>
<td>Displays the JD Edwards EnterpriseOne</td>
</tr>
<tr>
<td></td>
<td>application. release.</td>
</tr>
<tr>
<td>Package</td>
<td>Path Code</td>
</tr>
<tr>
<td></td>
<td>Select the path code.</td>
</tr>
<tr>
<td></td>
<td>Package Name</td>
</tr>
<tr>
<td></td>
<td>Select the name of the full package build.</td>
</tr>
<tr>
<td></td>
<td>Object Name</td>
</tr>
<tr>
<td></td>
<td>Select the object name.</td>
</tr>
</tbody>
</table>
6. Click the OK button to accept the selection and return to the Spec Compare Manager.

The selected object version will be extracted from the location and validated. This may take some time depending on the size and location of the object.

7. Click the Compare button to compare the specifications.

The Compare Specifications form displays with the source on the left pane and Target on the right pane.

The Compare Specifications form enables you to compare and merge the specification differences between the two selected objects. You can select source lines and copy them to the target.

The table definition row is highlighted in blue. The source rows that are different, but are protected are in red text. The Source rows with red text, representing indexes and red background, you can copy to the target.

8. Click the Ok button to save the merged specifications and exit.

Note: Table Compare does not automatically generate the indexes; it only changes the specifications for the table indices. The table indices and associated header files must be generated through the design tools after the Table Compare merge is complete. The index ids may get changed during the merge process and while the tool attempts to maintain the index ids, the same maintenance steps associated with introducing new indices must be implemented to ensure EnterpriseOne functions properly (for example, New header files must be generated, new indices must be generated and any code relying on the changed indices must be modified or re-built to incorporate the index changes). To minimize the number of index id changes, perform all table index merges in a single compare and merge session.

8.9 Customization Object Analyzer

This section contains the following topics:

- Section 8.9.1, "Object Dataload,"
- Section 8.9.2, "Release Level Dataload"
- Section 8.9.3, "Object Customization Summary Report"
- Section 8.9.4, "Object Customization Detail Report"
If you are on an older release of JD Edwards EnterpriseOne, you need to identify customizations in order to determine the impact and level of effort to retrofit the customizations into the newer release of JD Edwards EnterpriseOne. This utility helps to identify the customizations in order to determine the impact and level of effort to retrofit the customizations into the newer release of JD Edwards EnterpriseOne.

A review of this information, prior to performing modifications within the software, allows for a smoother and more predictable upgrade of the EnterpriseOne software. This section details the impact of an upgrade of the EnterpriseOne software on custom objects and custom modifications to standard EnterpriseOne objects.

The Customization Object Analyzer is comprised of a UBE that loads a table and UBEs that read from that table to create either a summary or detailed report. The UBEs are:

- **R9840DL (Object Dataload)** loads the F98881CU table in a parent-child hierarchy of object changes with a list of all JD Edwards EnterpriseOne customized objects.
- **R9840RLS (Release Level Object Dataload)** - This Data Load UBE takes the Cross Release Pathcodes as input from User from the Processing Options. The Input from the Processing Option can be selected from the Visual Assist. Once the Cross Release Pathcodes are selected and the UBE is submitted to execute, this UBE will load the data into F98881CU table in a parent-child hierarchy of object changes with a list of all JD Edwards EnterpriseOne customized objects.
- **RD9840RS (Object Customization Summary Report - BI Publisher)** creates a summary report from the data in the F98881CU table.
- **RD9840RD (Object Customization Detail Report - BI Publisher)** creates a detail report from data in the F98881CU table that shows the details of the customizations grouped by various criteria.
- **R9840R (Object Customization Summary and Detail Report - Standard Version)** creates a summary and detail report from the data in the F98881CU table.
- **R9840R|ZJDE0005 (Object Customization Summary Version)** creates a summary report on all of the objects from the data in the F98881CU table. This Summary report can be used to compare the Customized objects across pathcodes.
- **R9840R|ZJDE0006 (Object Customization Detail Version)** creates a Detail report on all of the objects from the data in the F98881CU table when executed without Dataselection. This version can also be run with Data Selection to get the Detail report on selected objects.
- **R9840R|ZJDE0007 (Object Customization Summary Version By Pathcode)** - This version takes two pathcodes as input from processing Options and will generate a Summary report only for the selected Pathcodes from Processing Options. This Summary report can be used to compare the Customized objects across pathcodes.
**Note:** For the pathcodes which will be entered in the Processing Options in the R9840R | ZJDE0007 summary report, data should be loaded for those pathcodes using the DataLoad UBE.

**Note:** JD Edwards provides the RD9840RS and RD9840RD report definitions and report templates to produce the summary and detail reports using the JD Edwards EnterpriseOne embedded BI Publisher. BI Publisher reports are only available for E812 and later releases.

For information about the embedded BI Publisher, see "Introduction to BI Publisher for JD Edwards EnterpriseOne" in the *JD Edwards EnterpriseOne Tools BI Publisher for JD Edwards EnterpriseOne Guide*.

### Objects Captured and Not Captured for Customizations

Currently the APPL, UBE, BSFN, DSTR, BSVW, TBLE object types are captured and all other types of objects are not captured. This table lists what specifically is and is not captured within these object types:

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Captured</th>
<th>Not Captured</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPL</td>
<td>For applications, the details about the Form Events, Control Events, Grid Column events, Controls and Grid Columns that are added or changed. New objects list all the details, even the hidden items like columns, controls and events.</td>
<td>Event Rule changes. Changes in BSFN call from an application, like BSFN parameter changes.</td>
</tr>
<tr>
<td>UBE</td>
<td>In UBE templates, changes related to Section Events and Control Events that are newly added or changed. New objects list all the details, even the hidden items like columns, controls and sections.</td>
<td>Event Rule changes.</td>
</tr>
<tr>
<td>UBE Versions</td>
<td>Changes related to section events, newly added controls, Control Event changes and Version Overrides.</td>
<td>Event Rule changes.</td>
</tr>
<tr>
<td>BSFN</td>
<td>Newly added business functions and the BSFN name and function name that are added.</td>
<td>Changes to the C code. BSFN Parameter changes.</td>
</tr>
<tr>
<td>DSTR</td>
<td>Only the data structure name and description.</td>
<td>Internal details of the DSTR variable that are added or changed, but the report displays that the data structure has changed.</td>
</tr>
<tr>
<td>BSVW</td>
<td>Only the business view name and description.</td>
<td>Internal details of business view changes, but the report displays that the business view has changed.</td>
</tr>
<tr>
<td>TBLE</td>
<td>Existing table new column additions, Indexes and Table Events.</td>
<td>Event Rule changes.</td>
</tr>
</tbody>
</table>

### 8.9.1 Object Dataload

EnterpriseOne records when an object is created or modified (an object is considered modified when it is checked in, regardless of whether or not changes were made). This customization information is loaded into the F98881CU table by using the R9840DL UBE. A processing option value needs to be set prior to running this UBE.
8.9.1.1 Processing Options
The following processing options enable you to specify the processing for the data load:

- Enter 0 or Blank to load the data according to data selection without deleting the other existing records where load will occur after deletion based on data selection.
- Enter 1 to delete all of the existing records from the F98881CU table and load the data still based on data selection.

**Note:** Setting the processing option value to 1 means that you want to clean up all of the loaded data and reload it with the default data selection or data selection based on the user’s needs.

8.9.1.2 Data Selection Options
Users running this UBE need to identify the objects that were added or existing objects that have been changed. The default ZJDE0001 version that is shipped with the template R9840DL is set with the default data selection. This data selection loads the F98881CU table with all of the object types for all path codes into the F98881CU table.

8.9.1.2.1 Running the Object Dataload
To run the R9840DL Object Dataload UBE:
1. From the Software Compare Tools (GH96111) menu, select Object Dataload.
2. Enter values for the processing options.
3. Enter values for the Data Selection.
4. Click Submit.

8.9.1.2.2 Running the Object Dataload Using Batch Versions
To run the R9840DL Object Dataload UBE using Batch Versions:
1. Fast Path to BV.
2. Enter R9840DL. Select the ZJDE0001 version.
3. Enter values for the processing options.
4. Enter the values for the Data Selection.
5. Click Submit.

8.9.2 Release Level Dataload
EnterpriseOne records when an object is created or modified (an object is considered modified when it is checked in, regardless of whether or not changes were made).

8.9.2.1 Prerequisite for Release Level Dataload
The following configuration must be done on the development client where the Release Level Dataload UBE will execute:
1. The F00941 table should contain the entries for the Source and Target pathcodes providing all the information regarding the Environment, Pathcode, Release, etc. for which the USER wants to run the Release level Data load UBE.
For example, if the USER wants to run the Release Level Dataload for pathcodes DV900 and DV910, the F00941 table should contain entries for the DV900 and DV910 pathcodes with their corresponding Environments and Releases.

If the entry for the Source and Target pathcode with their corresponding Environment and Release is not available, then it can be created using the P0094 application.

The following screen captures show examples from the F00941 table displaying the entries for the DV910 and DV900 Pathcodes.

2. The Environments of the Source and Target Pathcodes from the F00941 table should have the entries for the following tables with their corresponding Datasources in OCM, in system and Server Map Datasource:
   - F9860
   - F9861
   - F9862
   - F00941
   - F9202
   - F983051

The following screenshots display the DV900WIN and DV910WN environments with the tables and their corresponding datasource mappings and Object Status.
8.9.2.1 Processing Options  This Data Load UBE takes the Cross Release Pathcodes as input from User from the Processing Options. The input from the Processing Option can be selected from the Visual Assist. Once the Cross Release Pathcodes are selected and a UBE is submitted to execute, this UBE will then load the customized data into F98881CU table.

A Processing Option value needs to be set prior to running this UBE.

Note: R9840RLS will typically be run by the administrator.

Release Level Data Load Database Specific Prerequisites:
For Oracle Database:
TNSNAMES.ORA should be manually updated with SID of source and target pathcodes.

For example, if a customer is running the release level data load for DV900 and DV910 pathcodes, make sure the TNSNAMES.ORA file is updated with the SID of both the databases of E9.0 and E9.1.

For Other Databases:
Please make sure that the Data Sources of the Source and Target Pathcodes are created in odbcad32 for the following tables:
- F9860
- F9861
- F9862
- F00941
- F9202
- F983051

8.9.2.2 Processing Options
The following processing options enable you to specify the processing for the data load.

Enter the Source and Target Pathcodes of Different Releases to load the customized data of these Pathcodes into the F98881CU table. Pathcodes can be selected from Visual Assist.
Enter 0 or Blank to load the data according to data selection without deleting the other existing records where load will occur after deletion based on data selection.

Enter 1 to delete all of the existing records from the F98881CU table and load the data still based on data selection.

---

**Note:** Setting the processing option value to 1 means that you want to clean up all of the loaded data and reload it with the default data selection or data selection based on the user's needs.

---

### 8.9.2.2.1 Running the Release Level Dataload

To run the R9840RLS Release Level Dataload UBE:

1. From the Software Compare Tools (GH96111) menu, select Release Level Dataload.
2. Enter values for the processing options.
3. Click Submit.

### 8.9.2.2.2 Running the Release Level Dataload Using Batch Versions

To run the R9840RLS Release Level Dataload UBE using Batch Versions:

1. Fast Path to BV.
2. Enter R9840RLS. Select the ZJDE0001 version.
3. Enter values for the processing options.
4. Click Submit.

### 8.9.3 Object Customization Summary Report

RD9840RS (BI Publisher version) and R8940R (Standard Version) are read-only reports that print the information available in the F98881CU table in a usable format.

This report should be run only after running UBE R9840DL, which loads the F98881CU table. Since the RD9840RS and R9840R reports are based on what is loaded in F98881CU via R9840DL, you need to ensure that table F98881CU has been loaded with what you expect to see in the RD9840RS or R9840R report.

**Running the R9840R|ZJDE0005 Object Customization Summary Report**

To run the R9840R Object Customization Report:

1. Fast Path to P95620.
2. Provide R9840R in Source UBE and click on Find.
3. Select ZJDE0005.
4. Click Submit.

**Running the R9840R|ZJDE0006 Object Customization Detail Report**

To run the R9840R Object Customization Report:

1. Fast Path to P95620.
2. Provide R9840R in Source UBE and click on Find.
3. Select ZJDE0006.
4. Click Submit.
5. Provide Data Selection if Detail report is required for selected objects, else run this version without any Data selection which will give the Output for all the objects in F98881CU table.

Running the R9840R|ZJDE0007 Object Customization Summary Report by Pathcode
To run the R9840R Object Customization Report:
1. Fast Path to P95620.
2. Provide R9840R in Source UBE and click on Find.
3. Select ZJDE0007.
4. Click Submit.
5. Provide the Source and Target pathcode in Processing Options. Summary report will be generated only for the provided Source and Target pathcode.

8.9.3.1 Customizations Summary
The Customizations Summary gives an overview of the impact of customizations to the system, and provides information to estimate the level of effort needed to retrofit the customizations. This summary sees the system as a whole (all of the data in F98881CU) and is not affected by any data selections the user provides before the run.

---

Note: The quickest way to extract a Summary ONLY report in RD9840RS and the R9840R standard UBE is to give an invalid data selection so that no data is selected. This is shipped with a default invalid data selection.

---

The Customizations Summary section contains the following:

7.6.2.1.1 Customizations Summary Statement
The Customizations Summary statement contains embedded values (xx) within a sentence. The sentence reads:

\[ \text{System has xx customized objects impacting xx Product Codes.} \]

The Customizations Summary statement section contains the following:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System has xx</td>
<td>Refers to the unique count of objects that have been customized.</td>
</tr>
<tr>
<td>customized objects impacting</td>
<td>These objects could exist in multiple pathcodes and may have many versions.</td>
</tr>
<tr>
<td>xx product codes.</td>
<td>This shows the unique count of all Product Codes affected across all pathcodes.</td>
</tr>
</tbody>
</table>

7.6.2.1.2 Summary by Pathcode
This section shows all pathcodes affected by customizations and shows the number of objects affected in each pathcode. Remember that the same object might have been customized in multiple pathcodes. Thus, the sum of objects impacted by pathcode...
might not be equal to the total number of objects customized. The information is presented in horizontal bar chart and table format (RD9840RS) and table format (R9840R).

The Summary by Pathcode section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathcodes</td>
<td>Shows all pathcodes affected by customizations.</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows number of objects affected in each pathcode.</td>
</tr>
</tbody>
</table>

7.6.2.1.3 Summary by Object Type

This section shows all object types affected by customizations and shows the number of objects affected for each object type. The summary lists only object types that were affected and not necessarily all EnterpriseOne object types. The information is presented in pie chart format and table format (RD9840RS) and table format (R9840R).

The Summary by Object Type section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Shows all Object Types affected by customizations.</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows number of objects affected for each Object Type.</td>
</tr>
</tbody>
</table>

7.6.2.1.4 Summary by Product Code

This section shows all Product Codes affected by customizations and shows the number of objects affected for each Product Code. The information is presented in horizontal bar chart format and table format (RD9840RS) and table format (R9840R).

The Summary by Product Code section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>Shows all Product Codes affected by customizations.</td>
</tr>
<tr>
<td>Product Code Name</td>
<td>Shows description of each product code.</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows number of objects affected for each Product Code.</td>
</tr>
</tbody>
</table>

7.6.2.1.5 Object List

This section shows information for the different types of objects affected by customizations. If the same object was customized in multiple pathcodes, the object is listed twice; one time for each path code it was customized in. This section does not list versions for objects.

The object list has these columns for each object type:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>Shows all Product Codes affected by customizations.</td>
</tr>
<tr>
<td>Pathcode</td>
<td>Shows pathcodes affected by customizations.</td>
</tr>
<tr>
<td>Object Name</td>
<td>Shows application affected by customizations.</td>
</tr>
<tr>
<td>Object Description</td>
<td>Provides a description of the object.</td>
</tr>
</tbody>
</table>
8.9.3.2 Customizations Summary R9840R ZJDE0005, ZJDE0007

This Summary report can be used to compare the Customized objects across pathcodes. The sample screen capture below shows the Summary report from ZJDE0005, ZJDE0007.

We can see that P0006 is modified in both the pathcodes. It has 1 as a flag under DV910 and PD910, which says object is modified in both the pathcodes.

- 1 signifies Object changed.
- 0 signifies Object not changed.

P01012 is changed in DV910 and not changed in PD910.

![Figure 8–7 Summary Report Pathcodes](image)

8.9.4 Object Customization Detail Report

The Customization Detail Report is impacted by data selection. You may choose to see the objects along with customizations details by data selecting on the following criteria: Path Code, Object Name, Object Type and Product Code. Any other data selection might return unexpected results. A new page is created for each object and its version (if applicable for UBEs). The change details are printed until all are listed.

8.9.4.1 RD9840RD - BI Publisher Report Version

The Customization Detail Report section in RD9840RD has up to five levels of line items. Each level will be indented relative to the previous line level.

<table>
<thead>
<tr>
<th>Line Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Type of object.</td>
</tr>
<tr>
<td>Pathcode + Product Code</td>
<td>Shows the pathcode for the Object Type.</td>
</tr>
<tr>
<td></td>
<td>Shows the Product Code for the Object Type.</td>
</tr>
<tr>
<td>Object Name</td>
<td>Shows the Object Name and version.</td>
</tr>
</tbody>
</table>

**Running the RD9840RD Detail Report**

To run the RD9840RD Object Customization Detail Report:
1. From the Software Compare Tools (GH96111) menu, select Object Customization Detail.

2. Enter the values for the data selection.

3. Click Submit.

**8.9.4.2 R9840R - Standard Report Version**

The Customization Detail section in R9840R has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Type of object.</td>
</tr>
<tr>
<td>Product Code</td>
<td>Shows all Product Codes affected by customizations.</td>
</tr>
<tr>
<td>Pathcode</td>
<td>Shows pathcodes affected by customizations.</td>
</tr>
<tr>
<td>Object Name</td>
<td>Shows application affected by customizations.</td>
</tr>
<tr>
<td>Object Description</td>
<td>Provides a description of the object.</td>
</tr>
</tbody>
</table>

The objects are listed by Object Type. The details are shown in a parent child hierarchy where the top-most parent is the object, followed by 3 children for each change. The 3 children are listed in Child Component 1, Child Component 2, and Child Component 3 order. Each line in the detail identifies one unique change at the lowest level child for that line.

**Running the R9840R Detail Report**

To run the R9840R Object Customization Detail Report:

1. Navigate to Batch Versions.

2. Select R9840R.

3. Enter the values for the data selection.

4. Click Submit.

**8.9.5 Import and Configure Reports and Data Models**

In order to use interactive reports, Oracle BI Publisher and the JD Edwards EnterpriseOne Data Access Driver need to be installed, and then Interactive reports and data models need to be imported from the Oracle Update Center and then configured.

**8.9.5.1 Installing Oracle BI Publisher and the Data Access Driver**

To install Oracle Business Intelligence Enterprise edition (OBIEE) 11g, see: *Oracle® Fusion Middleware Installation Guide for Oracle Business Intelligence 11g Release 1 (11.1.1.5)*.

To install the JD Edwards EnterpriseOne Data Access Driver, see: *JD Edwards EnterpriseOne Tools BI Publisher for JD Edwards EnterpriseOne Guide*.

**8.9.5.2 Importing Interactive Reports and Data Models**

Interactive reports and data models need to be imported from the Oracle Update Center and then configured.

To download reports and data models from the Oracle Update Center:
1. Go to the Oracle Update Center.
   https://updatecenter.oracle.com/apps/WebSearch/updatecenter.jsp?action=news
   &pkgType=06&

2. Select the data model files (.xdmz) and report files (.xdoz) that you want to import.

3. Once you have imported the files, upload the data model files (.xdmz) and report files (.xdoz) to Target Instance.

To upload the data model file (.xdmz file):
   a. Click on Catalog on the toolbar.
   b. Select any folder where you want to upload this file.
   c. Click on Upload in the Tasks window.
   d. Click the Browse button to find the .xdmz file which you copied from target machine.
   e. After uploading, it will show the data model in that folder. Click on the Edit hyperlink and select a correct data source and save the data model.

To upload the report file (.xdoz file):
   a. Click on Catalog on the toolbar.
   b. Select the same folder where you saved the data model.
   c. Click on Upload in the Tasks window.
   d. Browse the .xdoz file which you copied from target machine.
   e. After uploading, click on the Edit hyperlink for the report name to open the report in edit mode.
   f. If there is an associated Data Model, it will display next to Data Model in the top left corner under the tab title. If the correct one is not displayed, or if the one displayed is in red letters, then re-associate the interactive report with appropriate data model by clicking on the Magnifying Glass on the toolbar, then selecting the correct data model, then click Open, and then click Save.

The associations are:

<table>
<thead>
<tr>
<th>Report</th>
<th>Data Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Customization Summary</td>
<td>F98881CU_SUMMARY_DM</td>
</tr>
<tr>
<td>Object Customization Detail</td>
<td>F98881CU_DETAIL_DM</td>
</tr>
<tr>
<td>Pathcode Comparison Summary</td>
<td>F98881CU_PATHCOMP_SU_DM</td>
</tr>
<tr>
<td>Pathcode Comparison Detail</td>
<td>F98881CU_DE_DM</td>
</tr>
</tbody>
</table>

Once the data model is associated, it will display on the toolbar in blue letters.

   g. Click on View Report on the toolbar to run the report.

### 8.9.6 Object Customization Summary Interactive Report

The Object Customization Summary Interactive Report consists of three tabs:

- Summary by Object Type
- Summary by Product Code
8.9.6.1 Summary by Object Type tab

The Summary by Object Type tab will display a pie chart that shows the distribution of the object types affected. The first line of the report has a clickable list of pathcodes affected. Clicking on a pathcode will interactively filter the Object Types to show the summary for that pathcode only.

The Object Types available for selection are:
- Application
- Batch Application
- Business Functions
- Business View
- Data Structure
- Table

The Number of Objects table displays the number of object types affected for the selected pathcode or for all pathcodes.

The Object Type Vs Pathcode comparison table is available which tells the impact of each object type in each pathcode.

The interactive report can be viewed in different formats. In View Report mode, select the View Report icon on the tab toolbar and select a viewing option:
- Interactive
- HTML
- PDF (recommended output type)
- RTF
- Excel
- PowerPoint

8.9.6.2 Summary by Product Code tab

The Summary by Product Code tab displays a horizontal bar graph that lists the product codes affected. The first line of the report has a clickable list of pathcodes affected. Clicking on a pathcode will interactively filter the Product Codes to show the summary for that pathcode only.

The Number of Objects table lists the number of objects affected for each product code.

The Product Code Vs Pathcode comparison table is also available at the bottom of the page for cross analysis of object types and pathcodes. The table will display the number of objects per pathcode for each product code.

The interactive report can be viewed in different formats. In View Report mode, select the View Report icon on the tab toolbar and select a viewing option:
- Interactive
- HTML
- PDF (recommended output type)
- RTF
8.9.6.3 **Object List tab**

The object list tab has a summary statement that contains embedded values (xx) within a sentence. The sentence reads:

\[
\text{System has } xx \text{ customized objects impacting } xx \text{ Product Codes.}
\]

The object list statement section contains the following:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System has xx</td>
<td>Refers to the unique count of objects that have been customized.</td>
</tr>
<tr>
<td>customized objects impacting</td>
<td>These objects could exist in multiple pathcodes and may have many versions.</td>
</tr>
<tr>
<td>xx product codes.</td>
<td>This shows the unique count of all Product Codes affected across all pathcodes.</td>
</tr>
</tbody>
</table>

The Pathcodes Affected section has a list of pathcodes which can be clicked on to filter the report data to that pathcode only.

The Object Types Affected section has a list of object types which can be clicked on to filter the data shown on the report. It can also be clicked in combination with any other filters available on the page.

A table presents all of the objects affected by customizations (the list will be affected by any filters in effect). The table displays:

- Object Type
- Pathcode
- Product Code
- Object Name
- Object Description

8.9.7 **Object Customization Detail Interactive Report**

The Object Customization Detail Interactive Report has a Pathcode and Product Code filter on the header which determines which detail information is shown on the page.

After selecting the Pathcode and Product Code, click on Apply to display the details for that combination in the report. Desired objects can be chosen from the Object Name field using the drop down menu. Change details for that object will be listed in a parent child relationship for up to three children.

The interactive report can be viewed in different formats. In View Report mode, select the View Report icon on the tab toolbar and select a viewing option:

- Interactive
- HTML
- PDF (recommended output type)
- RTF
8.9.8 Pathcode Comparison Summary Interactive Report

The Pathcode Comparison Summary Interactive Report compares two pathcodes for the selected product code. The pathcodes and Product Code are selected at the top of the page. Once the selections are applied, an object list comparing the existence of the object in the chosen pathcodes is displayed along with the total number of instances of the objects.

The interactive report can be viewed in different formats. In View Report mode, select the View Report icon on the tab toolbar and select a viewing option:

- Interactive
- HTML
- PDF (recommended output type)
- RTF
- Excel
- PowerPoint

8.9.9 Pathcode Comparison Detail Interactive Report

The Pathcode Comparison Detail Interactive Report compares two pathcodes for the selected product code. The pathcodes and Product Code are selected at the top of the page. Once the selections are applied, the user can choose the object he is interested in using the Object Name field drop-down object list. Once the object is selected, the detail is shown in table format in a parent child hierarchy with changes displayed for up to three children. The changes in the two pathcodes are grouped at the left showing the changes in each pathcode.

The interactive report can be viewed in different formats. In View Report mode, select the View Report icon on the tab toolbar and select a viewing option:

- Interactive
- HTML
- PDF (recommended output type)
- RTF
- Excel
- PowerPoint

8.9.10 Pathcode Comparison Summary Report

The Pathcode Comparison Summary Report can be accessed by executing the XJDE0005 version of R9840R using Batch Versions (BV). It can also be accessed from the GH96111 menu. No data selection is allowed for this report. An invalid data selection is included by default for this version.

The report output is presented in table format. The pathcodes will be listed as column headings horizontally across the table. The object type will be listed vertically in the
left column. The table cell where the object type and pathcode intersect displays the number of instances of the object in each pathcode. A sum of all instances of the object in pathcodes is also available.

**Note:** The Pathcode Comparison Summary Report is available with Bug# 14767497.

### 8.9.11 Pathcode Comparison Detail Report

The Pathcode Comparison Detail Report can be accessed by executing the XJDE0006 version of R9840R using Batch Versions (BV). It can also be accessed from the GH96111 menu. This report needs a mandatory data selection for up to 3 pathcodes. The user may add further data selection based on his preference of object type, product code and object name.

This report shows a linear comparison of customizations between pathcodes in a format similar to the regular Object Customization detail report. Each section will report on an object within a pathcode. The first line in the section will display the object type and the associated pathcode. The second line will display a description of the object type. The third line will display the product code. The lines following will display details that are relevant to the object type.

**Note:** The Pathcode Comparison Detail Report is available with Bug# 14767497.

### 8.9.12 Troubleshooting Information and Tips

Object customizations are captured based on the SIMRGMOD flag in the F9861 table for each pathcode. A check-out and check-in of an object in OMW flags this column as changed even if the object does not have any changes.

When a new object is created or copied, the flag is set to A. When the R9840DL is run with data selection for this object, it is normal for the R9840DL to display the **Object Customizations data load failed** and **No Data selected** messages.

The R9840DL/ZJDE0001 version is shipped with a default data selection which captures all objects that are added or changed. Any other data selection additions should be added to this default data selection.

If the object has been changed but does not appear in the reports, the issue could be that the object is not checked in. The object must be checked in for the changes to be captured. The SISTCE column set to 1 in F9861 indicates that the object is checked in.

The original UBE template must be checked in for the UBE Version changes or override changes to be reflected in the report.

Changes for object types BSFN, DSTR and BSVW are shown in the Summary report and not in the Detail report.

If for some reason the R9840DL UBE fails to run on the server, you can run this UBE locally from a development client, which should capture the same data.

The R9840R/ZDE0006 version which prints the detail report will fail when the F9881CU data load has a huge amount of data. This issue is fixed in Bug 17195573 in the 9.1.4 Tools Release.
8.10 Decustomizer Analysis Report (Release 9.2.3.3)

This section contains the following topics:

- Section 8.10.1, "Overview"
- Section 8.10.2, "Decustomizer Dataload Report"
- Section 8.10.3, "Decustomizer Analysis Report"

8.10.1 Overview

The JD Edwards EnterpriseOne Decustomizer Analysis Report enables you to identify the UI customizations that can be replaced using the personalization and extensibility framework.

A periodic review of the information generated by the report allows you to track the customizations that can be reduced and to stay in sync with the latest updates in JD Edwards EnterpriseOne. Also, you can run this report prior to performing an upgrade to know the number of customizations that can be replaced by using the personalization framework.

The Decustomizer analysis report identifies the customization done to the Application (APPL) EnterpriseOne objects by comparing the application between two path codes, which are the source and target path codes. Ensure that the ESU level of the source and target path codes that are being compared are at the same level. For more information see, "ESU History (R9672)" in the JD Edwards EnterpriseOne Tools System Administration Guide.

For example, the report scans the EnterpriseOne applications in the Production path code, compares the same with the Pristine path code, and stores the information pertaining to the specific UI customizations in the JD Edwards EnterpriseOne table. Also, the source path code should not have any customizations retrofitted in it for the report to identify the customization done to the APPL objects. Note that the target path code is where the customizations are expected to be present.

The Decustomizer analysis report contains information of the customizations pertaining only to the APPL object type. The report identifies the Application objects that have been customized and provides detailed information about them.

The Decustomizer analysis report supports Tools and Applications releases 9.1 and 9.2.

Generating the Decustomizer analysis report is a two-step process. The first step involves running a UBE to load the table. Second step comprises of running a UBE that reads from the table to produce a report in the PDF format.

The UBEs are:

- R9540DC (Decustomizer Dataload Report): It loads the Decustomizer data load table (F98881DC) with a list of all the customized APPL EnterpriseOne objects. The Decustomizer Dataload UBE takes the path codes as input from Processing Options - Pathcode Details. Once the path codes are selected and the UBE is submitted to execute, the UBE scans the central objects specs for the source and target path codes, and loads the data into the F98881DC table in a parent-child hierarchy of object changes with a list of all the customized APPL type of objects.

- R9540DCR (Decustomizer Analysis Report): It creates a summary and detail report from the data in the F98881DC table. The report takes the two path codes as input from Processing Options and generates a report only for the selected path codes.

The following customizations are specifically captured within the APPL EnterpriseOne object type:
8.10.2 Decustomizer Dataload Report

When an APPL object is customized, EnterpriseOne records the changes in the respective spec repositories. This customization information is loaded into the F98881DC table by using the R9540DC UBE. The processing option values need to be set prior to running this UBE.

8.10.2.1 Running the Decustomizer Dataload

To run the R9540DC Decustomizer Dataload UBE:

1. Fast Path to BV.
2. Enter R9540DC for Batch Application.
3. Select the Version.
4. In Prompt For, select Data Selection.

   **Note:** If the Data Selection is not specified, the R9540DC UBE will scan all of the APPL objects that are marked as customized.

5. Click Submit.
6. Enter values for Data Selection.
7. Click OK.
8. In Path Code Details, enter the values for the Source and Target path codes.
   You can use the visual-assist button to select the values for path codes. It is mandatory to specify the values for the Source and Target path codes.
9. Enter values for the processing options.
   The following processing options enable you to specify the processing for the data load:
   - Enter 0 or Blank to load the data according to data selection without deleting the other existing records.
   - Enter 1 to delete all of the existing records from the F98881DC table and load the data still based on data selection.

   **Note:** Setting the processing option value to 1 means that you want to clean up all of the loaded data and reload it with the default data selection or data selection based on the user's needs.

10. Click OK.
11. In Report Destination, click OK.

After the path codes are selected and the UBE is submitted to execute, this UBE will then load the customized data into F98881DC table.

If there are no UI customizations identified in Target path code when compared against the Source path code (pristine), the F98881DC table will be empty and the data load UBE will display the message: The Decustomizer report found no potential customizations.

**8.10.3 Decustomizer Analysis Report**

The Decustomizer Analysis Report (R9540DCR) gives an overview as well as a detailed summary of customizations to the Application EnterpriseOne objects. These customizations can be replaced using the personalization framework. R9540DCR is a read-only report that prints the information available in the F98881DC table in a usable format.

This report should be run only after running UBE R9540DC, which loads the F98881DC table. Since the R9540DCR report is based on what is loaded in F98881DC through R9540DC, you need to ensure that the F98881DC table has been loaded with the data you want to see in the R9540DCR report.

**8.10.3.1 Running the Decustomizer Analysis Report**

To run the R9540DCR Decustomizer Analysis Report:

1. Fast Path to BV.
2. Enter R9540DCR for Batch Application. Select the Version.

---

**Note:** You can skip the data selection step as the UBE only populates the information available in the F98881DC table.

3. Click Submit.
4. In Report Destination, click OK.

**8.10.3.2 Decustomizations Summary**

The Decustomizations Summary gives an overview of the impact of customizations to the APPL objects. The Decustomizations Summary section contains the following:

**Decustomizations Summary Statement**

The Decustomizations Summary statement contains embedded values (xx) within a sentence. The sentence reads:

*System has xx customized objects impacting xx Product Codes.*

The Decustomizations Summary statement section contains the following:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System has xx</td>
<td>This refers to the unique count of APPL objects that have been customized</td>
</tr>
<tr>
<td>customized objects</td>
<td>These objects could have many versions</td>
</tr>
<tr>
<td>impacting xx product</td>
<td>This shows the unique count of all Product Codes affected across the selected path codes</td>
</tr>
</tbody>
</table>
Summary by Path Code
This section shows the number of APPL objects affected in the target path code.
The Summary by Path code section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Path code</td>
<td>Shows the source path code</td>
</tr>
<tr>
<td>Target Path code</td>
<td>Shows the target path code</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows number of objects affected in the target path code</td>
</tr>
</tbody>
</table>

Summary by Object Type
This section shows the object type affected by customizations and shows the number of objects affected for this object type. The summary lists only the APPL object type that is affected.
The Summary by Object Type section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Type</td>
<td>Shows the APPL object type affected by customizations</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows the number of objects affected for the APPL object type</td>
</tr>
</tbody>
</table>

Summary by Product Code
This section shows all Product Codes affected by customizations and shows the number of objects affected for each Product Code.
The Summary by Product Code section has these columns:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>Shows all the product codes affected by customizations</td>
</tr>
<tr>
<td>Product Code Description</td>
<td>Shows the description of each product code</td>
</tr>
<tr>
<td>Number of Objects</td>
<td>Shows the number of objects affected for each product code</td>
</tr>
</tbody>
</table>

Customized Application Objects
This section lists all the Application objects that have been customized. This section does not list versions for the objects.
The Customized Application Objects list has these columns for each object:

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Name</td>
<td>Shows the application affected by customizations</td>
</tr>
<tr>
<td>Product Code</td>
<td>Shows all Product Codes affected by customizations</td>
</tr>
<tr>
<td>Source Path code</td>
<td>Shows the source path code</td>
</tr>
<tr>
<td>Target Path code</td>
<td>Shows the target path code</td>
</tr>
</tbody>
</table>
Decustomizer Analysis Report

8.10.3.3 Customizations Detail Report

The details are shown in a parent-child hierarchy where the top-most parent is the object, followed by each type of change to the APPL objects.

The parent section of the Customization Detail Report has these items.

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Name</td>
<td>Shows the object name and version</td>
</tr>
<tr>
<td>Description</td>
<td>Shows the description of the object</td>
</tr>
<tr>
<td>Product code</td>
<td>Shows the product code for the object</td>
</tr>
<tr>
<td>Source Path code</td>
<td>Shows the source path code</td>
</tr>
<tr>
<td>Target Path code</td>
<td>Shows the target path code</td>
</tr>
<tr>
<td>ESU Match Status</td>
<td>Show whether the source and target path codes are at the same ESU level for the specific Application object</td>
</tr>
<tr>
<td>Object Description</td>
<td>Shows the description of the object</td>
</tr>
</tbody>
</table>

The child section of the Customization Detail report has these columns.

<table>
<thead>
<tr>
<th>Column Heading</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Category</td>
<td>Shows the category type</td>
</tr>
<tr>
<td>Form Name</td>
<td>Shows the form name</td>
</tr>
<tr>
<td>Control Type</td>
<td>Show the type of control</td>
</tr>
<tr>
<td>Control Name</td>
<td>Shows the ID of control</td>
</tr>
<tr>
<td>Customization Type</td>
<td>Shows the description of each customization</td>
</tr>
</tbody>
</table>

**Important:**

- Any form control that has simple UI customization along with event rule changes is skipped and a message is logged in jde.log file.
- If the customization involves moving a control that is designated as a tab stop to another tab, changes the tab sequence of both the source tab and target tab pages.
- If the ESU level of the source and target path codes are not at the same level for a specific object, the report might indicate that a given customization is present when it is not (i.e. false positive result).
This chapter contains the following topics:

- Section 9.1, "Understanding Custom Modifications and Packages"
- Section 9.2, "Identifying Custom Modifications Using the Customization Workbench"
- Section 9.3, "Retrofitting Custom Modifications"
- Section 9.4, "Using JD Edwards EnterpriseOne Package Management"

### 9.1 Understanding Custom Modifications and Packages

At this point, you are ready to retrofit your custom modifications into the objects delivered in the update. You may also choose to apply Oracle's suggested UDC description Data Dictionary glossary changes. This portion of the update process may involve several iterations of retrofitting and testing, so you will also be building update packages to deliver the modifications to the testing environments. This chapter also explains how to build and test the packages that you will deploy to the workstations.

**Note:** As of Tools Release 9.2, customers could perform custom modifications only after the upgrade process. Beginning with Tools Release 9.2 Update 2, customers can retrofit the custom modifications for the objects that are part of the deployed ESU bundle.

If you made a backup of original specifications and business functions, you can restore this backup.

See [Restoring a Backup](#).

### 9.2 Identifying Custom Modifications Using the Customization Workbench

The Customization Workbench (P98UCUST) is an application that provides a customer a way of easily identifying and managing the merge of EnterpriseOne customized objects that have been changed in the most recent delivery.

To identify custom modifications using the Customization Workbench:

1. Fastpath to OMW.
2. Create an OMW project. Make sure that you are a developer on this project and that this project is at a development status of 21.

3. Use Fastpath to launch P96UCUST.

   Available Form Exits:
   - **Refresh All** - calls BSFN to refresh the F96UCUST data based on the merge modification flag in the F9861 table.
   - **Launch XRef** - will launch the entry point form of the cross reference application in order that the end user may gather more information about the currently checked in object.
   - **Launch OMW** - will Launch OMW (P98220) where more actions can be taken on the object and project as needed.

4. If the F96UCUST table has been loaded with customization objects information, then click "Find". Otherwise, click the form exit "Load COA Data". This will take a while for the table to load.
5. The grid will appear with the data. The counters in the form header will indicate how many objects are complete and how many are still in need of review. Select an object from this list.

### Custom Modifications and Packages

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Description</th>
<th>Project Status</th>
<th>Project Type</th>
<th>Project Team</th>
<th>Project Start Date</th>
<th>Project End Date</th>
<th>Actual Start Date</th>
<th>Actual End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12748B4M4</td>
<td>CDEF 69600</td>
<td>240D</td>
<td>123456</td>
<td>012345</td>
<td>01/01/2023</td>
<td>01/31/2023</td>
<td>01/01/2023</td>
<td>01/31/2023</td>
</tr>
</tbody>
</table>

6. An OMW Project Search and Select form will appear. Select the project that you will add the objects to. A popup window will appear.
7. Confirm that you want to check out the object to the project. If you choose "No", you will have the option to check out the object later.

8. Once on the form, there are several options that will change based upon the specific object.
   - Is the object on the project or not?
   - Is the object checked out or not?
   - What is the object type?
9. Perform the tasks necessary to add the appropriate customized objects.

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rmv frm Project</td>
<td>Removes the object from the current project.</td>
</tr>
<tr>
<td>Add To Project</td>
<td>Will launch the OMW Project Search and Select form to allow for the end user to choose the project to which to add the object.</td>
</tr>
<tr>
<td>Check In</td>
<td>Will check the object in on the current project.</td>
</tr>
<tr>
<td>Check Out</td>
<td>Will check the object out to the current project.</td>
</tr>
<tr>
<td>Design</td>
<td>Will launch the appropriate design application for the object type (i.e. FDA for APPL type objects, RDA for UBE type objects, etc.).</td>
</tr>
<tr>
<td>ER Compare</td>
<td>Will launch the ER Compare tool for APPL, UBE and BSFN (NER) type objects. The default comparison will be between the local specs and the specs of the login pathcode (both can be modified in the tool once it is launched).</td>
</tr>
<tr>
<td>Build</td>
<td>Available for BSFN type objects.</td>
</tr>
<tr>
<td>Launch OMW</td>
<td>Will launch OMW (P98220) where more actions can be taken on the object and project as needed.</td>
</tr>
<tr>
<td>OK</td>
<td>When complete and a value of &quot;D&quot; is entered and the OK button clicked, the object will be checked (confirmation pending).</td>
</tr>
<tr>
<td>Next/Previous</td>
<td>Will scroll through the records on the previous screen for quick completion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Name</td>
<td>The object name.</td>
</tr>
<tr>
<td>Path Code</td>
<td>The path code.</td>
</tr>
<tr>
<td>Modification Flag</td>
<td>The modification flag with a value of &quot;C&quot; indicates that the object has been customized.</td>
</tr>
</tbody>
</table>
If the object is finished, it can be marked as D - Done. When the object is checked in the number of completed objects will change.

Available Form Exit:

Cross Reference - for reference purposes, will launch the appropriate cross reference form based on the object selected.

9.3 Retrofitting Custom Modifications

This section provides an overview of retrofitting custom modifications, discusses prerequisites, and discusses how to retrofit custom modifications for:

- Interactive applications
- Reports
- Table conversions
- Tables
- Named event rules
- C business functions

9.3.1 Understanding Retrofitting Custom Modifications

Most users modify their software to make the functionality more applicable to their business situations. When you update to a new release, you need to transfer your modifications to the new release.

Because re-creating custom modifications each time you update the software would be a laborious process, this chapter explains how to integrate the custom modifications that you made in your current software into the updated software. This integration, called retrofitting, enables you to refit the customizations that can be merged into each new version of the software.

9.3.2 Prerequisites

To retrofit modifications, you need a workstation with the upgraded software and the development tools. These tools enable you to compare the customizations that your current software merged into the new software with any path code in the system. This enables you to easily compare the upgraded modifications with a version of your modifications before the upgrade or with the pristine environment of the new release.

This table lists the requirements to retrofit custom modifications.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMW Project Name</td>
<td>Name of the OMW project.</td>
</tr>
<tr>
<td>Status</td>
<td></td>
</tr>
</tbody>
</table>

Personnel          A programmer, preferably the same one who did the custom modifications, should perform this task.

Logon status       You must be able to log on to the workstation on which you will retrofit object modifications, typically in the development or prototype environment.
9.3.3 Retrofitting Custom Modifications for an Interactive Application

To retrofit custom modifications for an interactive application:

1. From Object Management Workbench (OMW), use Form Design Aid (FDA) to copy custom objects into the target application.
   
   You can use Compare Mode, under the File menu, to help with this process. Everything custom must be copied in FDA, except for Event Rule (ER) variables and ER statements that do not reference any custom objects.

2. Save your changes.

3. Within FDA, select Edit and Event Rules.
   
   This option enables you to use EditER to reenter all ER statements that reference any custom objects other than custom ER variables.

4. Save your work.

5. Use the JD Edwards ER Compare tool (ER Compare button in OMW or ER Compare command in FDA) to compare the updated local specifications (target) with the original, customized (source) specifications.

6. Copy ER variables and then ER statements from source to target.

   Do not copy any statements that reference objects that existed only in the source (customized) environment. Those should have been created in step 3.

7. Validate the resulting ER. Save and exit JD Edwards ER Compare.

8. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.

9. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

### Requirement Details

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package</td>
<td>The environment must be updated and a package must be built and deployed to the workstation being used.</td>
</tr>
<tr>
<td>Modified Objects</td>
<td>The modified objects must be checked out.</td>
</tr>
</tbody>
</table>


---

9.3.4 Retrofitting Custom Modifications for a Report

To retrofit custom modifications for a report:

1. From OMW, use Report Design Aid (RDA) to re-create all custom report objects in the target UBE (universal batch engine).

2. Within RDA, select Edit and Event Rules.
   
   This option enables you to use EditER to reenter all ER statements that reference custom objects other than custom ER variables.

3. Save your work.

4. Use the JD Edwards ER Compare tool (ER Compare button in OMW) to compare the updated local specifications (target) with the original, customized (source) specifications.

5. Copy ER variables and then ER statements from source to target.
Do not copy any statements that reference objects that existed only in the source (customized) environment. Those should have been created in step 2.

6. Validate the resulting ER. Save and exit JD Edwards ER Compare.

7. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.

8. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

9.3.5 Retrofitting Custom Modifications for a Table Conversion

To retrofit custom modifications for a table conversion (TC):

1. Within OMW, use Table Conversion Design Aid to re-create all custom parts of the target UBE.

2. Within Table Conversion Design Aid, click the Advanced ER button within the Mapping dialog.
   This option enables you to use EditER to reenter all ER statements that reference custom objects other than custom ER variables.

3. Use the JD Edwards ER Compare tool (ER Compare button in OMW) to compare the updated local specifications (target) with the original, customized (source) specifications.

4. Copy ER variables and then ER statements from source to target.
   Do not copy any statements that reference objects that existed only in the source (customized) environment. Those should have been created in step 2.

5. Validate the resulting ER. Save and exit JD Edwards ER Compare.

6. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.

7. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

9.3.6 Retrofitting Custom Modifications for a Table

To retrofit custom modifications for a table:

1. Within OMW, on the Design Tools tab, click the Table Trigger Design Aid button and use EditER to reenter all ER statements that reference custom objects other than custom ER variables.

2. Use the JD Edwards ER Compare tool (ER Compare button in OMW) to compare the updated local specifications (target) with the original, customized (source) specifications.

3. Copy the ER variables and then the ER statements from the source to the target.
   Do not copy any statements that reference objects that existed only in the source (customized) environment. Those should have been created in step 1.

4. Validate the resulting ER. Save and exit JD Edwards ER Compare.

5. Use the Table Design Aid tool within OMW to update each table that needs further work.

6. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.
7. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

9.3.7 Retrofitting Custom Modifications for a Named Event Rule

To retrofit custom modifications for a named event rule (NER):

1. Within OMW, use the JD Edwards ER Compare tool to compare the updated local specifications (target) with the original, customized (source) specifications.
2. Copy the ER variables and then the ER statements from the source to the target. Do not copy any statements that reference objects that exist only in the source (customized) environment.
3. Save and exit JD Edwards ER Compare.
4. Use the Business Function Design Aid tool from OMW to select and update each business function that needs further work.
5. Within the Business Function Design Aid tool, select Form and Edit. The edit option enables you to use EditER to reenter ER statements that reference custom objects. Save your work.
6. Validate the resulting ER.
7. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.
8. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

9.3.8 Retrofitting Custom Modifications for a C Business Function

To retrofit custom modifications for a C business function:

1. Within OMW, use the JD Edwards ER Compare tool to compare the updated local business function source code (target) with the original, customized (source) code.
2. Select Edit, Auto Merge Application to merge the code. Save and exit JD Edwards ER Compare.
3. Start the Business Function Design Aid tool from OMW.
4. Select Form and Edit to use Microsoft Visual Studio to finish editing the code.
5. Select the Build Business Function button in OMW to build the business function.
6. When you finish retrofitting and testing the modifications, check them back in and rebuild the package.
7. Test and fix the modifications, and then rebuild and redeploy the corrected package. Repeat this step until all the modifications are functioning properly.

9.4 Using JD Edwards EnterpriseOne Package Management

The package management process provides a means to create a package, to define and build a package, and to deploy packages to both servers and workstations using a step-by-step director process.
Note: The software update process creates the package definition; you simply build and test the package.

Several instances occur in which you will need to update or set up a workstation or server with the JD Edwards EnterpriseOne software. You might need to set up a new workstation, deploy custom solutions to all or to selected users, create a new path code for development, or deploy a fix.

To include any modifications (changed or added business functions or applications) into a package for deployment to workstations (for example, DV900FB or DV900PB), you must define and build one of your own.

See Also:

- "Building Packages" in the JD Edwards EnterpriseOne Tools Package Management Guide.
10

Updating Environments

This chapter contains the following topics:

- Section 10.1, "Understanding How to Update the Production Environment"
- Section 10.2, "Updating the Production Environment"

10.1 Understanding How to Update the Production Environment

Before proceeding with these instructions, you should test the new modifications with a copy of production data in the prototype environment.

Update the production environment after you update and test development and prototype environments.

Do not include additional environments when updating the live production environment. The purpose of isolating the update of production is to minimize production downtime.

Oracle’s JD Edwards EnterpriseOne Global Support Center maintains several documents that describe how to manage and promote Software Updates. These documents address many details of the update process and complement the current documentation.

To access these documents, log on to My Oracle Support, and click the Knowledge tab. Perform a search for the following documents:

- Best Practice for Managing Software Updates
- Applying and Promoting Software Updates
- Understanding and Managing Planner ESUs

10.2 Updating the Production Environment

This section discusses how to:

- Update the production environment.
- Prepare to use the updated production environment.

10.2.1 Updating the Production Environment Using OMW

You update the production environment (and other environments) using Oracle’s JD Edwards EnterpriseOne Object Management Workbench (OMW).

The software update process creates an OMW project for this update. To update the production environment, promote the project in OMW to the appropriate status as
defined by the activity rules. (For example, if you are using Oracle's default JD Edwards EnterpriseOne conventions, you can promote a project from Development to Prototype by changing the status from 21 to 26. For more information about your organization's activity rules, see your JD Edwards EnterpriseOne administrator.)

**Note:** If the software update process runs the table and index creation batch application (R98407 in F9843) and you are using OMW to promote the project to the production environment, you must manually create and regenerate the table and index in OMW.

See "Understanding JD Edwards EnterpriseOne OMW Administration" in the *JD Edwards EnterpriseOne Tools System Administration Guide*.

### 10.2.2 Preparing to Use the Updated Production Environment

After you update the production environment, you create a new package, deploy the new package to a workstation, and test the modifications there.

This table lists the requirements to use the updated production environment:

<table>
<thead>
<tr>
<th>Action</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Installer or system administrator</td>
</tr>
<tr>
<td>Logon status</td>
<td>On the enterprise server, logged on as user JDE with the database password for user JDE.</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>Run the installation plan for the production environment.</td>
</tr>
<tr>
<td>Concurrent Tasks</td>
<td>None</td>
</tr>
</tbody>
</table>

To prepare to use the updated production environment:

1. Create a new package.
   
   See "Building Packages" in the *JD Edwards EnterpriseOne Tools Package Management Guide*.

2. Deploy the new production package to the workstation.

3. Surface test the updated production environment.
   
   After you finish testing the environment, you can deploy the package to other workstations.
A

Setting Up Localizations

This appendix contains the following topics:

- Section A.1, "Understanding How to Set Up Localizations"
- Section A.2, "Adding the Localization"
- Section A.3, "Changing the Revision Level"
- Section A.4, "Setting Processing Options for R96450"

A.1 Understanding How to Set Up Localizations

To install localizations using Electronic Software Updates (ESUs), the customer should run the Work with Enhancements application and register the localization with the JD Edwards EnterpriseOne Installation system.

When you run the Work with Enhancements application, it registers the localization with the JD Edwards EnterpriseOne Installation system and enables the software to correctly handle all future updates to the localization. When you register an enhancement from an ESU, the software update system will correctly apply the ESU to your system.

R96450 is a UBE that enables and disables localization code. When ESUs are shipped out, all localization objects are disabled in the ESU. The R96450 enables the correct objects based on the enhancement and revision level that you entered in the Work With Enhancements application.

A.2 Adding the Localization

Complete this task to add the localization to the JD Edwards EnterpriseOne environment.

On the deployment server, sign on to the DEP900 environment.

In the fast path, type P96450.

---

**Note:** In order to run the application, you must install the most recent Planner ESU.

---

1. On Work with Enhancements, click Add.
2. On the Edit Enhancement Info screen, complete these fields:
   - Enhancement Type
Changing the Revision Level

Type or select ARGENTINA.

- **Revision**
  Type the revision number of the Quarterly Update that you obtained in the previous task.

- **Description**
  Type a valid description.

3. Click OK.
4. Click OK.
5. On the Work with Enhancements form, click Enable to run the R96450 enabler.

---

**Note:** Click Disable to disable the enhancement type.

6. When the UBE completes, open the generated UBE report, and ensure that the report has not recorded any errors. If the report contains errors, forward the report to your GSC representative.

This information is also contained in the jde.log.

7. If the UBE runs successfully without errors, the Localization should be successfully registered. The software will now correctly manage the localization for all subsequent software updates.

Once you have registered the localization, you may take ESUs as normal.

---

### A.3 Changing the Revision Level

Complete this task to update the revision number of the localization.

1. On the Work With Enhancements browse form, select the row for ARGENTINA.
2. Click Select.
3. Type the new revision number in the Revision box and press OK.
   
   The program displays a warning message.
4. Click OK to synchronize the NER to the new enhancement revision level.
   
   The Enabler automatically runs with the specification merge, R98700. For it to run, you must have an enhancement type set up and the software update must have NERs.

---

### A.4 Setting Processing Options for R96450

These values are the default processing options and data selection for the XJDE001 version. You can tell that you are running the XJDE001 version because the P96450 prompts you with the warning that it will run R96450 version XJDE0001.

The default processing options are:

**Environment Name**

DV900

Enter the name of the environment for which you want to update the NERs.
**Enhancement Operation**
E

E indicates that the NER for localization will be enabled.

**Generate NER**
<blank>

A blank value indicates that the NER source will not be regenerated (for example, you will need to build a full package and deploy to get the changes to a client workstation).

**Level of Detail**
0

A value of 0 indicates that only errors and lines changed will be printed on the report.

**Proof or Final**
1

A value of 1 indicates that the UBE will update the NER.

A data selection of 70 means that only NER objects belonging to system code 70 (localization) will be affected.
**central objects merge**
A process that blends a customer’s modifications to the objects in a current release with objects in a new release.

**checksum**
A fixed-size datum computed from an arbitrary block of digital data for the purpose of detecting accidental errors that may have been introduced during its transmission or storage. JD Edwards EnterpriseOne uses the checksum to verify the integrity of packages that have been downloaded by recomputing the checksum of the downloaded package and comparing it with the checksum of the original package. The procedure that yields the checksum from the data is called a checksum function or checksum algorithm. JD Edwards EnterpriseOne uses the MD5 and STA-1 checksum algorithms.

**Control Table Workbench**
An application that, during the Installation Workbench processing, runs the batch applications for the planned merges that update the data dictionary, user-defined codes, menus, and user override tables.

**control tables merge**
A process that blends a customer’s modifications to the control tables with the data that accompanies a new release.

**edit rule**
A method used for formatting and validating user entries against a predefined rule or set of rules.

**Object Librarian Merge**
A process that blends any modifications to the Object Librarian in a previous release into the Object Librarian in a new release.

**Specification merge**
A merge that comprises three merges: Object Librarian merge, Versions List merge, and Central Objects merge. The merges blend customer modifications with data that accompanies a new release.

**Specification Table Merge Workbench**
An application that, during the Installation Workbench process, runs the batch applications that update the specification tables.
**Table Conversion Workbench**
An interoperability model that enables the exchange of information between JD Edwards EnterpriseOne and third-party systems using non-JD Edwards EnterpriseOne tables.

**User Overrides merge**
Adds new user override records into a customer’s user override table.

**Versions List merge**
The Versions List merge preserves any non-XJDE and non-ZJDE version specifications for objects that are valid in the new release, as well as their processing options data.