

JD Edwards EnterpriseOne

Implementing 64-bit Processing with a 32-bit Deployment Server in JD Edwards EnterpriseOne Learning Path

1.0



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Preface

Welcome to the JD Edwards EnterpriseOne documentation.

Documentation Accessibility

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

Access to Oracle Support

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

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>

Conventions

The following text conventions are used in this document:

Convention	Meaning
Bold	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
<i>Italics</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
Monospace	Monospace type indicates commands within a paragraph, URLs, code examples, text that appears on a screen, or text that you enter.
> Oracle by Example	Indicates a link to an Oracle by Example (OBE). OBEs provide hands-on, step- by-step instructions, including screen captures that guide you through a process using your own environment. Access to OBEs requires a valid Oracle account.

1 Introduction

Overview

This learning path guides you through the steps required to update your existing JD Edwards EnterpriseOne 32-bit install to Tools Release 9.2.3 or later and implement 64-bit processing with a 32-bit Deployment Server.

Note: This scenario only applies through EnterpriseOne Tools Release 9.2.5.x. Beginning with Tools Release 9.2.6, a 32-bit Deployment Server is no longer supported. See the Implementing 64-bit Processing with JD Edwards EnterpriseOne learning path for a full 64-bit upgrade.

Before you begin the tasks included in this learning path, ensure that your EnterpriseOne install is at:

- Applications Release 9.2.
- Tools Release 9.2 or higher.

We recommend that you migrate one path code to 64-bit ensuring that your business functions migrate properly. This process is described in more detail in the multi-foundation content included in this learning path.

Starting with Tools Release 9.2.3, JD Edwards EnterpriseOne supports 64-bit processing. To support a flexible adoption, both a 32-bit foundation and a 64-bit foundation are available for the Development Client and the Enterprise Server. Therefore, you should think of Tools Release 9.2.3 and later as having two foundations; one being 32-bit (x86) and the other being 64-bit (x64).

Tools Release 9.2.3 provides support for upgrading Enterprise Servers and Development Clients to 64-bit. Support for upgrading the Deployment Server to 64-bit is provided in a future release. Until support for a 64-bit Deployment Server is provided, 32-bit is the source of truth for the tools release and all development should be done from a 32-bit Development Client. A conversion tool from 32-bit to 64-bit is provided, but the ability to reverse engineer from 64-bit back to 32-bit is not supported.

If you are using a 32-bit development client or a 64-bit development client, business function development is always performed in 32-bit. When you check-in or build through Busbuild the 32-bit version is run through the 64-bit conversion and both the 32-bit and the 64-bit versions are written to the repository. Any subsequent par that is generated via Configuration Assistant will contain both the 32-bit and 64-bit versions and can be deployed to either a 32-bit or 64-bit path code.

While it is possible to upgrade to Tools Release 9.2.3/64-bit directly, our recommendation is a phased approach. To reduce the number of variables, we recommend upgrading to Tools Release 9.2.3 or later/32-bit first. Once validated, the upgrade to Tools Release 9.2.3 or later/64-bit can then proceed.

Important: See Doc ID 2415818.1 on My Oracle Support for Visual Studio 2017 requirements for JD Edwards EnterpriseOne.

A 64-bit Processing FAQ is available on My Oracle Support for your reference.

Please review the JD Edwards EnterpriseOne Licensing Information User Manual.

Please review the Known Issues document on My Oracle Support for any issues still outstanding on the Tools 9.2.3.x releases.

JD Edwards EnterpriseOne Tools Release 9.2.3 or later (64-bit) supports the following platforms:

Oracle Linux

Microsoft Windows

IBM iSeries

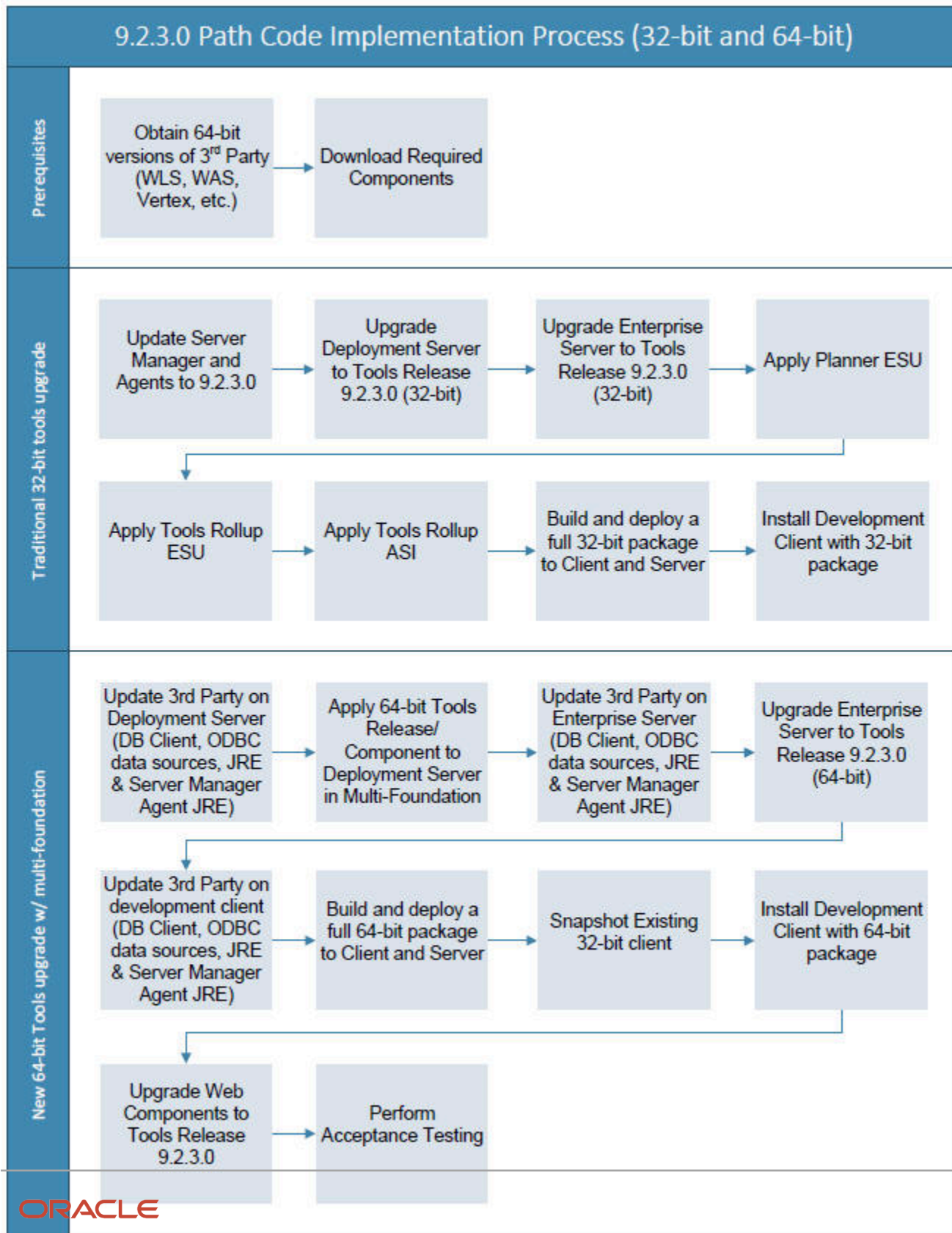
Enroll: Enroll to track your progress. An overall percent complete replaces the Enroll option and each task is marked as complete as you progress through the learning path.

Navigation: Click a topic to view the associated content. When you reach the end of the content, use the arrows at the bottom of the page to move between topics.

Before You Begin

It is important to review and understand the following sections before implementing 64-bit processing.

Implementation Process



Accessing Certifications

When updating JD Edwards EnterpriseOne Tools Releases, it is critical to review and meet the minimal technical requirements for essential 3rd party components. You can locate the JD Edwards EnterpriseOne Tools Release 9.2.3 Certifications (Minimum Technical Requirements) from My Oracle Support.

To access JD Edwards EnterpriseOne Tools Release 9.2.3 Certifications:

1. Navigate to My Oracle Support: <https://support.oracle.com/>
2. Click the Certifications tab.
3. Search for JD Edwards EnterpriseOne Tools Release 9.2x.

In particular for the 64-bit implementation of JD Edwards EnterpriseOne, ensure that the requisite JDK on the Enterprise Server and the Deployment Server meets the version requirements as specified in Oracle Certifications. If you need to upgrade the JDK, you should do so before you use Server Manager to deploy the new JD Edwards EnterpriseOne Tools Release. Verify version requirements on the following:

- JDK
- Database Client
- Visual Studio Runtime

Required Components

Accessing Software

Both 32-bit and 64-bit components for Tools Release 9.2.3 or later (Enterprise Server and Deployment Server) are required for completion of this learning path and can be downloaded from the Update Center. Below you can see the both components for the Enterprise Server in the download basket.

Download Basket

	Name	Description	Platform	Filename
Download	9.2.3.0-Enterprise-Server-INTELNTx64	9.2.3.0 Enterprise Server x64	INTEL NT x64	9.2.3.0-Enterp
Download	9.2.3.0-Enterprise-Server-INTELNT	9.2.3.0 Enterprise Server	INTEL NT	9.2.3.0-Enterp

Downloading Software Components

The following components are necessary for installation and configuration of the JD Edwards EnterpriseOne Tools Release 9.2.3 or later (64-bit) with the JD Edwards EnterpriseOne Applications Release 9.2. Download the 32-bit and 64-bit components and continue with this learning path for installation.

1. Access the Oracle JD Edwards EnterpriseOne Update Center at:

<https://updatecenter.oracle.com/apps/WebSearch/updatecenter.jsp?>

2. Download the latest JD Edwards EnterpriseOne component .par file:

Component	My Oracle Support	Oracle Software Delivery Cloud
Installing Business Function ESUs	Run the “Preparing for 64-bit (BSFNs)” query in Change Assistant under JD Edwards -> ESUs -> 9.2 or run in Module 5: Preparing for Your 64-bit Implementation in this learning path.	Not available on Oracle Software Delivery Cloud
JD Edwards EnterpriseOne Tools Release 9.2.3.0 or later (32-bit and 64-bit for your platform)	Search, download, and install the applicable 9.2.3.0 Tools Release components. Type: EnterpriseOne Tools Releases Release: All EOne 9.2x Releases Search for Name: 9.2.3.0* for the Enterprise Server and Deployment Server components.	V980098-01 JD Edwards EnterpriseOne 9.2.3.0 HTML Server V980099-01 JD Edwards EnterpriseOne 9.2.3.0 Application Interface Services Server V980100-01 JD Edwards EnterpriseOne 9.2.3.0 Transaction Server V980101-01 JD Edwards EnterpriseOne 9.2.3.0 Data Access Server V980102-01 JD Edwards EnterpriseOne 9.2.3.0 Data Access Driver V980103-01 JD Edwards EnterpriseOne 9.2.3.0 Enterprise Server AIX V980105-01 JD Edwards EnterpriseOne 9.2.3.0 Enterprise Server Windows x64 V980107-01 JD Edwards EnterpriseOne 9.2.3.0 Enterprise Server IBM i on POWER x64 V980109-01 JD Edwards EnterpriseOne 9.2.3.0 Enterprise Server Linux x64 V980113-01 JD Edwards EnterpriseOne 9.2.3.0 Deployment Server Tools Update x64 V980114-01 JD Edwards EnterpriseOne 9.2.3.0 Server Manager Installer Windows V980115-01 JD Edwards EnterpriseOne 9.2.3.0 Server Manager Installer Linux V980116-01 JD Edwards EnterpriseOne 9.2.3.0 Server Manager Installer Solaris V980117-01 JD Edwards EnterpriseOne 9.2.3.0 Server Manager Update

Component	My Oracle Support	Oracle Software Delivery Cloud
JDE E1 9.2 Planner ESU	<p>Search, download, and deploy the latest planner ESU for your release.</p> <p>Type: Electronic Software Updates</p> <p>Release: 9.2</p> <p>Bug: 26501747</p> <p>Description: 9.2 Planner ESU</p>	<p>JD Edwards EnterpriseOne 9.2 Planner ESU for Tools 9.2.3.0</p> <p>Part # V98408-01</p>
JDE E1 9.2 Tools Application Enhancement ESU for Tools 9.2.3.0 or later	<p>Search, download, and deploy the ESU associated with 9.2 Bug 24710277.</p> <p>Type: Electronic Software Updates</p> <p>Release: 9.2</p> <p>Bug: 24710277</p>	<p>JD Edwards EnterpriseOne 9.2 Tools Application Enhancement ESU for Tools 9.2.3.0</p> <p>Part # V98409-01</p>
<p>ASI for the Tools Release 9.2.3 or later ESU</p> <p>special instructions for the ESU applied in the previous step.</p> <p>Reference the Deploying Automated Special Instructions on JD Edwards EnterpriseOne documentation on My Oracle Support (Doc ID 1486063.1)</p>	<p>Search, download, and deploy the ASI for Tools 9.2 (this package is valid for E1 9.0, E1 9.2, and E1 9.2).</p> <p>Type: JD Edwards EnterpriseOne</p> <p>Release: All Releases</p> <p>Name: TL9230001</p> <p>Description: ASI for TR 9.2.X</p>	<p>JD Edwards EnterpriseOne 9.1 and 9.2 Accelerator for Tools 9.2.3.0</p> <p>Part # V980118-01</p>
UDO for Notifications	<p>Search, download, and deploy the UDO for Notifications.</p> <p>Type: EnterpriseOne User Defined Objects</p> <p>Release: 9.2</p> <p>Bug: 26910270</p>	<p>JD Edwards EnterpriseOne Core Tools and Infrastructure - Orchestrator Monitor</p> <p>Part # V980416-01</p>
Tools ESU for Notifications	<p>Search, download, and deploy the ESU for Notifications.</p> <p>*Note requires 9.2.1.x</p>	Not available on Oracle Software Delivery Cloud

Component	My Oracle Support	Oracle Software Delivery Cloud
	<p>Type: Electronic Software Updates</p> <p>Release: 9.2</p> <p>Bug: 27541859</p>	

Third-Party Components

Upgrading Third-party Components

Implementing 64-bit with JD Edwards EnterpriseOne requires upgrading third-party components to the latest supported version. This must be performed on Deployment Servers, Enterprise Servers, and Development Clients. EnterpriseOne web servers are not affected. The following chart indicates the component that must be updated to the latest supported version on each platform.

Product	Deployment Servers (Windows only)	Enterprise Servers (Windows, Linux, or Unix)	Development Clients (Windows only)
Java Runtime Environments (JREs)	Yes	Yes	Yes
Java Development Kit (JDK)	Yes	No	Yes
Database clients and drivers	Yes	Yes	Yes
Java Database Connectivity (JDBC) drivers	Yes	Yes	Yes
Microsoft Visual Studio Runtime libraries	Yes	Yes (Windows servers only)	Yes
Microsoft Visual Studio	Yes	Yes (Windows servers only)	Yes
Unix Compilers	No	Yes	No
Database	Yes	No	Yes
WebLogic Application Server (WLS)	No	No	Yes
WebSphere Application Server (WAS)	No	No	Yes

Java Runtime Environment (JRE) and Java Development Kit (JDK)

A JDK provides tools to compile Java source files and to generate jar files containing Java class files. Java-based programs run within a JRE. A JRE provides files that are necessary at runtime such as Dynamic Linked Libraries (DLL) on Windows, shared libraries on UNIX platforms, and jar files that contain compiled Java class files. If a JDK is installed, a JRE does not need to be installed separately because a JDK already contains a JRE. A WLS application server requires a JDK to be installed prior to installation of WLS. A JDK is provided with a WAS installation.

The EnterpriseOne foundation included in a client package should contain a JRE that is used on the Development Client. The bitness of the JRE should match the bitness of the foundation. To include a new JRE in a package, replace

the JRE in the Deployment Server's system\jre folder before building the package; be sure that the package includes the proper foundation.

Downloading

Click the following link to download: <https://www.oracle.com/java/technologies/downloads/>

Under Java Platform, Standard Edition, you can download the JDK or JRE, depending on the particular EnterpriseOne component (Server Manager Console or Agent, EnterpriseOne Development Client, EnterpriseOne Enterprise Server) for which the JDK or JRE is to be used. Each JDK includes a JRE. Some EnterpriseOne components require a JDK, but others require a JRE only. Do not use any non-supported version or edition of the Java JRE or JDK.

Follow the navigation aids to download the JDK/JRE that is appropriate for your operating system.

Follow the installation instructions that are provided with the JDK/JRE.

Verifying on UNIX

After installing the JDK/JRE, run the following test to verify the version of Java is recognized by the system:

Access the command line of the operating system and enter:

```
cd <JDK_or_JRE_install_dir>/bin
```

```
java -version
```

Verify the output shows the version that you downloaded.

Deployment Server & Enterprise Server Multi-Foundation Architecture

Multi-foundation Architecture

A JD Edwards EnterpriseOne architecture that allows for contrasting tools release foundations to reside on different path codes.

Before you upgrade to a new tools release foundation, it is good practice to test and validate the functionality prior to upgrading the production path code. You can keep the production path code running on the existing tools release foundation and apply the new tools release foundation to all other path codes. This architecture enables you to perform tests on the new tools release foundation without impacting the production (PD) path code. When you complete the validation, you upgrade the PD path code to the new tools release foundation.

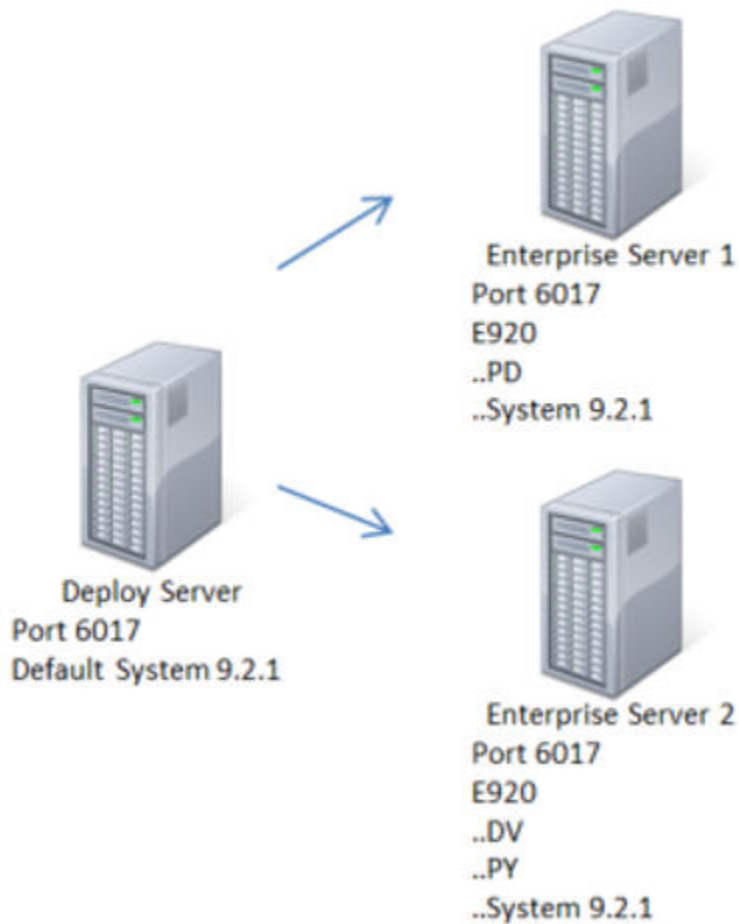
The following are common server configurations:

Deployment Server with multiple physical Enterprise Servers

Deployment Server with one physical server with multiple ports

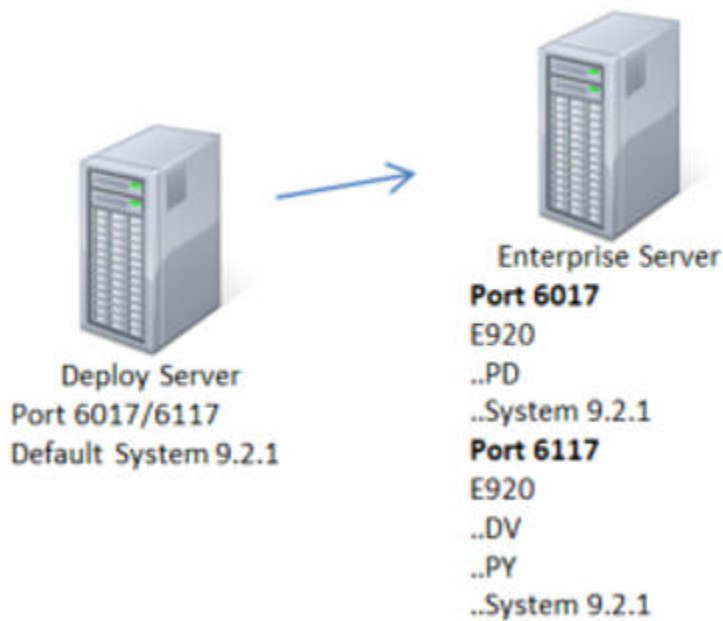
Deployment Server with one physical server with one port

Deployment Server with Multiple Physical Enterprise Servers



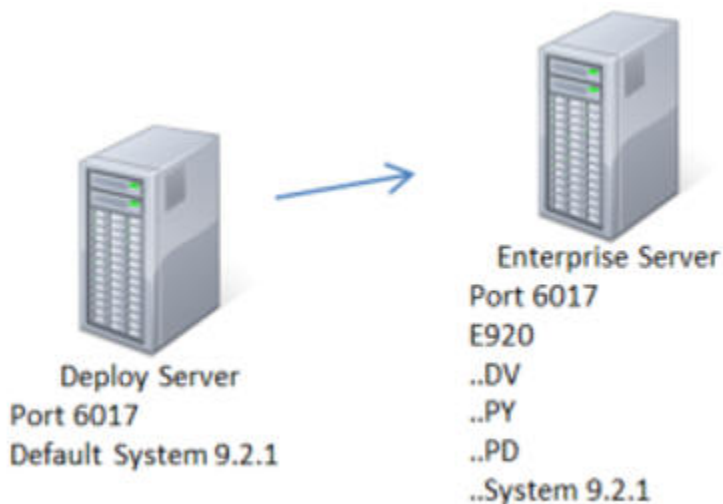
In the above graphic, the PD path code resides on Enterprise Server 1 with a Tools Release 9.2.1 foundation. The prototype (PY) and development (DV) path codes share Enterprise Server 2 with a Tools Release 9.2.1 foundation. This architecture illustrates multi-foundation with different path codes on different Enterprise Servers while having multiple tools release foundations.

Deployment Server with One Physical Enterprise Server with Multiple Ports



In the above graphic, the PD path code uses port 6017 with Tools Release 9.2.1 foundation. The PY and DV path codes use port 6117 with the Tools Release 9.2.1 foundation. This architecture illustrates multi-foundation. The path codes are on the same Enterprise Server, but they are on different ports. Each port can have a different tools release foundation.

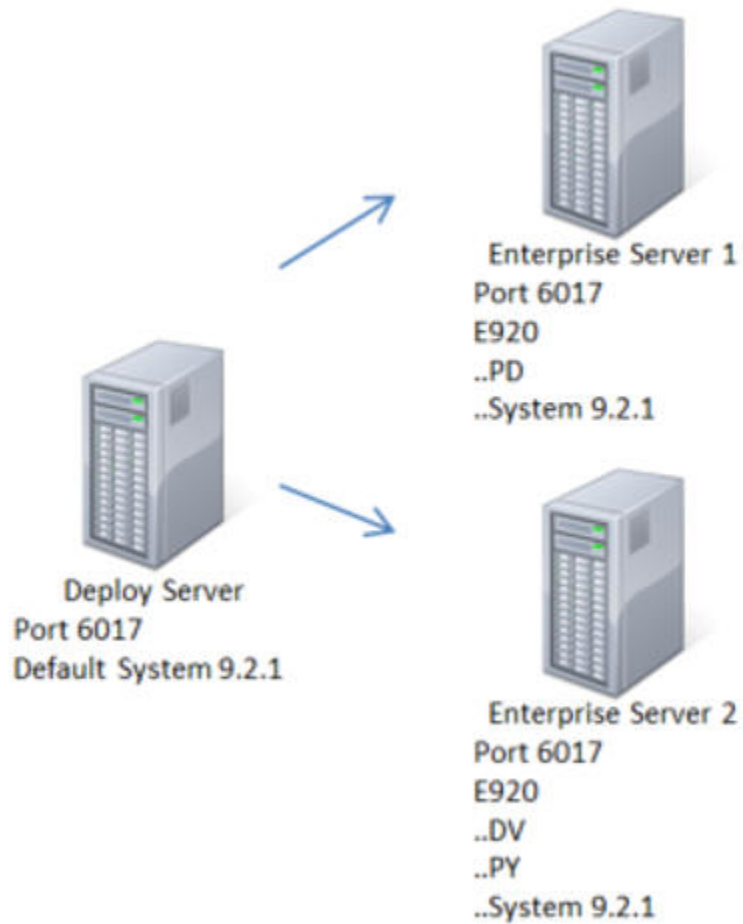
Deployment Server with One Physical Enterprise Server with One Port



In the above graphic, the PD, PY and DV path codes use port 6017 and Tools Release 9.2.1 foundation. This architecture is not multi-foundation because the path codes use the same tools release foundation on the same server and port.

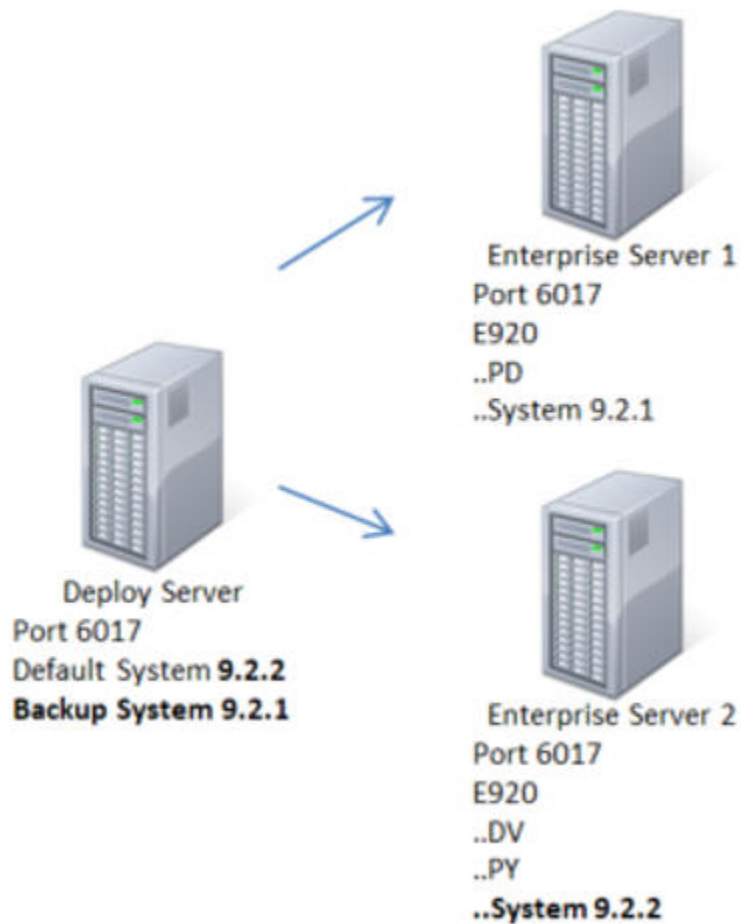
Tools Release Upgrade Example

Initial State



The Deployment Server and both Enterprise Servers are using the Tools Release 9.2.1 foundation.

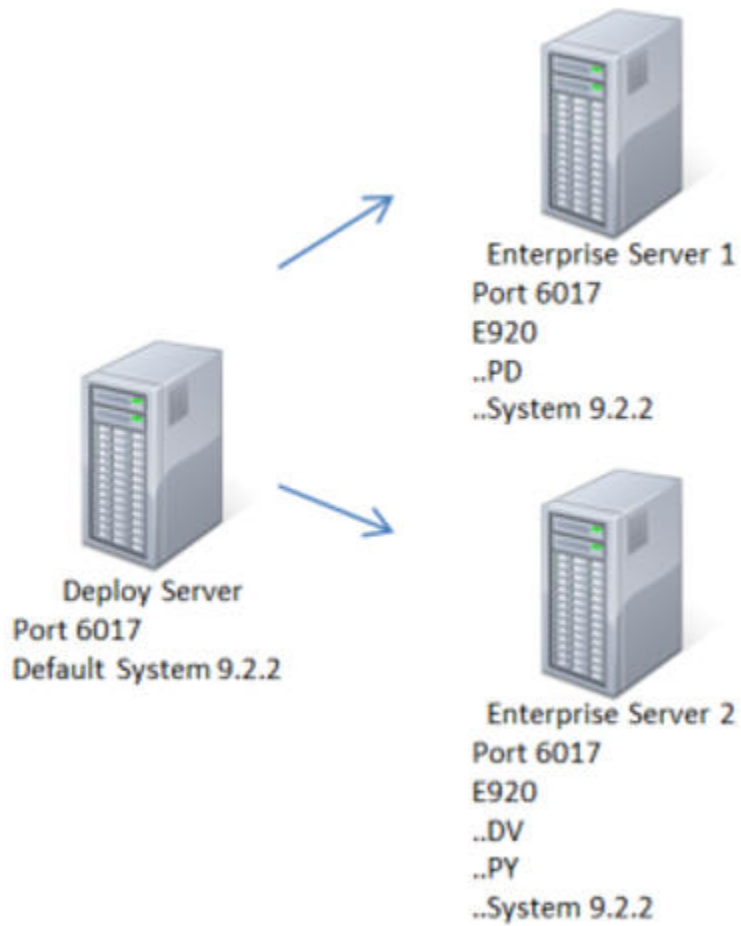
Upgrade State



To upgrade a tools release foundation:

1. Manually back-up the current tools release foundation on the Deployment Server.
2. Apply the new tools release foundation to the Deployment Server as the default system.
3. Apply the new tools release foundation to Enterprise Server 2.
4. Run validations on Enterprise Server 2.
5. After system validations are performed apply the new foundation to Enterprise Server 1.

Final State



The Deployment Server and both Enterprise Servers are now running on Tools Release 9.2.2 foundation.

2 Upgrading from Prior Releases of EnterpriseOne

Upgrade Considerations

- If you are planning an Applications Upgrade to a One-Click installation of JD Edwards EnterpriseOne, you should be aware of important technical considerations.

These considerations are described in the Applications Upgrade Guide which describes an upgrade to the base Applications Release 9.2.

Refer to the section titled Technical Considerations for Applications Upgrade to a 64-bit Version of 9.2 for your platform:

Linux with Oracle Database

Microsoft Windows with Oracle Database

Microsoft Windows with SQL Server Database

IBM i with DB2 for IBM i

3 Preparing for Your Tools Release Update

Backing Up Directories and Tables

When the tools release is changed on the Deployment Server, Server Manager replaces the System directory and its subdirectories. Therefore, before you begin you should make a backup of the existing directory structure.

On the Deployment Server, make a copy of these directories:

- /System
- /Systemcomp
- /OneWorld Client Install

It is also recommend to back up the JD Edwards EnterpriseOne tables. Follow the JD Edwards EnterpriseOne backup procedures. See "[Backing Up JD Edwards EnterpriseOne Tables](#)" in the JD Edwards EnterpriseOne Administration Guide.

Running 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.

To install Change Assistant:

1. Obtain Change Assistant from the [Oracle JD Edwards EnterpriseOne Update Center](#).
2. You can access the Update Center by using the following navigation from Update Center:
3. Select Electronic Software Updates from the News and Links pane on the left.
4. Click the Download the Change Assistant Application link on the Update Center, Electronic Software Updates web page.
5. The JD Edwards EnterpriseOne and World Change Assistant page opens providing information about Change Assistant features.
6. Execute the steps in the Installing Change Assistant section.

See: [Using Change Assistant](#) in the JD Edwards EnterpriseOne Tools Software Updates Guide.

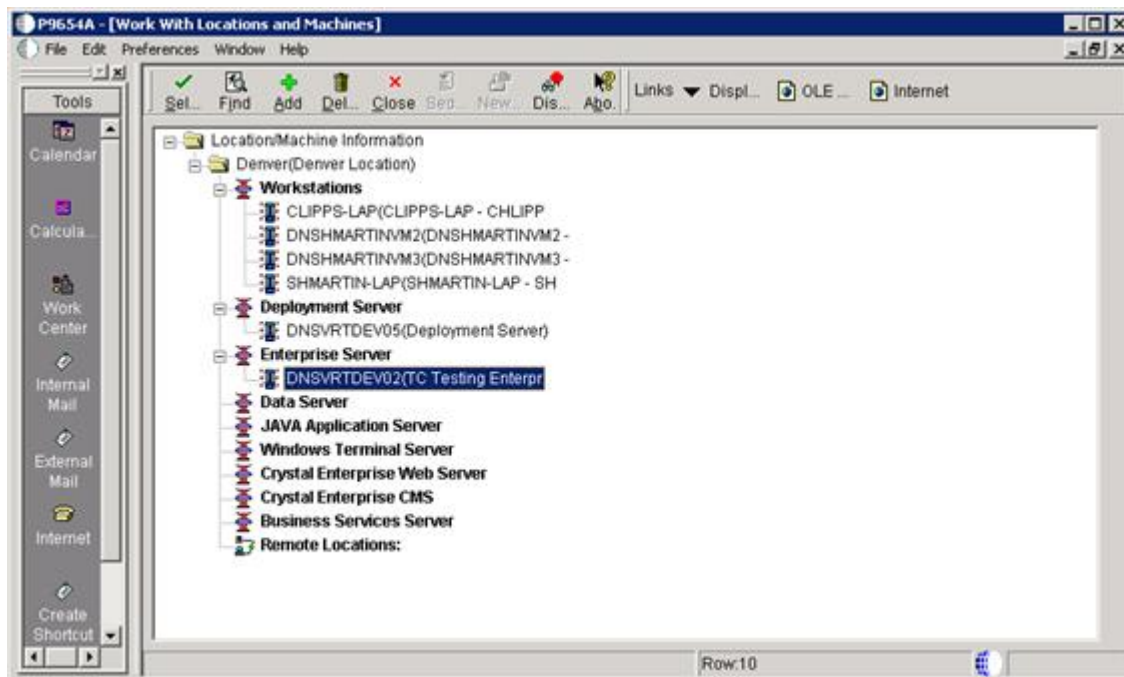
Note: JD Edwards EnterpriseOne Tools Release 9.2.3.x requires Change Assistant version 4.0.0.7 or above.

Associating Environments with the Enterprise Server

You associate environments with the Enterprise Server to automate the server map Object Configuration Manager (OCM) generation during the upgrade process.

1. Log in to the JDEPLAN environment on the Deployment Server.

2. Run the Work with Locations and Machines (P9654A) application.



3. Expand the Enterprise Server node and select your Enterprise Server.
4. Click Environments on the Form menu.
5. Add all environments associated with the path code you are upgrading on the Enterprise Server.
6. Click OK and restart JD Edwards EnterpriseOne.

4 Updating Your Tools Release

Updating Server Manager Console and Agents

Before You Begin

When you update the Management Console to a new tools release, you must update the Management Agents to the same version. Otherwise your Server Manager cannot communicate and operate with the target machines as expected.

Note: You must have Microsoft Visual Studio runtime libraries (32-bit and 64-bit) installed on all Microsoft Windows platforms where a Server Manager Agent resides, before the Server Manager Agent is updated.

Updating Server Manager Console

1. On Managed Homes and Managed Instances page, on left of page, under INSTALL, click on Manage Software.
2. Select Browse to browse to the downloaded jar file, “E1_ServerManagerConsole_<release>_<date>.jar” and select upload.
3. Under Managed EnterpriseOne Software Components, check the downloaded jar file, “EnterpriseOne Server Manager Management Console Version <version/date>” and click on Distribute.
4. On Managed Software Component page, check one of the boxes and click Distribute Software. This will distribute the component to the Server Manager Console.
5. Select Management Dashboard in upper left to return to the Managed Homes and Managed Instances page.
6. On Managed Homes and Managed Instances page, under the Managed Instances column, locate “home” “Management Console” and click the “home” link.
7. In the General section of the page, under Management Console: home, click the Change button.
8. On the Change Tools Release dialog box, select the Software Component radio button with the version which was downloaded and distributed. Click the Change Component button to change to that version.

The update process starts immediately. Upon completion, the Management Console application will automatically restart and will ask for sign on.

Updating Server Manager Agent

1. Clear the browser cache. On Managed Homes and Managed Instances page, under the Managed Home Location column, the page should display “Agent Update Required” for the different Managed Homes.
2. On the left of each, check the box and select Update at the top of the column.
3. Click OK on the dialog box to immediately begin updating the selected Management Agent. Once the update is complete, Server Manager will automatically restart the Management Agent.

Configuring Server Manager for Security Security Server

1. Log into Server Manager as the jde_admin user.
2. On Managed Homes and Managed Instances page, click Server Manager Users on the left.
3. Under the Server Manager User Authentication, verify the following fields have valid values:

Primary Security Server - (NONE is valid).

Outgoing JDENET Port.

4. Click Save

Configuring Server Manager for JDBJ Data Source

1. On Managed Homes and Managed Instances page, under Managed Instances column, click “home” for the Management Console.
2. On the left of the page, under the Configuration Panel, click on JDBJ Database Configuration.
3. Verify the values in the following fields are valid:
 - System Datasource Name
 - Database Type
 - Database Name
 - Database Server Name
 - Database TCP/IP Port
 - Physical Database
 - Object Owner
 - Support Large Objects (LOBS)
 - Unicode Database
4. Click the Apply button.

Setting up Server Manager TNSNAMES

1. On Managed Homes and Managed Instances page, under Managed Instances column, click “home” for the Management Console.
2. On the left of the page, under the Configuration Panel, click on JDBJ Database Configuration.
3. Scroll down to Oracle Database Settings.
4. If the EnterpriseOne database is Oracle then fill out the File Contents with the tnsnames.ora information for sign on to the database. This can be found in under the Oracle Client location product\12.1.0\client_1\network\admin.
5. Click the Apply button.

Upgrading Deployment Server (32-bit)

Uploading Software Component

1. Log on to Server Manager.
2. On Managed Homes and Managed Instances page, on left of page, under INSTALL, click on Manage Software.
3. Select Browse to browse to a downloaded jar file, “<release>Release.DS.Win32_<date>.jar” and select upload. This will take a few minutes to complete. When complete, the downloaded file will display under the Managed EnterpriseOne Software Components Section as “EnterpriseOne Deployment Server <version> <bitness> <date>”, for example: “EnterpriseOne Deployment Server 9.2.3.0 X86 07-18-2018_06_57”.
4. Under Managed EnterpriseOne Software Components, check the downloaded jar file, “EnterpriseOne Deployment Server <version> <bitness> <date>” and click on Distribute.

5. On Managed Software Component page, check the box associated with the EnterpriseOne Deployment Server and click Distribute Software. This will distribute the component to the Server Manager Agent.
6. Select Management Dashboard in upper left to return to the Managed Homes and Managed Instances page.

Change Tools Release Software Component

1. On Managed Homes and Managed Instances page, under the Managed Instances column, locate the EnterpriseOne Deployment server and select on the deployment server.
2. In the General section of the page, under EnterpriseOne Deployment server: <deployment server>, click the Change button.
3. On the Change Tools Release dialog box, select the Software Component radio button for the version that was downloaded.
4. Select the second radio button “Component Change and Backup Current System for Multi-foundation”. This will save the current system and OneWorld Client Install files to a “foundation_<version>” directory and copy in the new downloaded system and OneWorld Client Install to the directories.
5. A dialog box will prompt for the user name and password for the SYSTEM datasource. Enter the user name and password and click, Ok.
6. Various dialog boxes will occur indicating the step it is on. Be patient thru this process.
7. When complete, it will have backed up the previous system and OneWorld Client install into a “foundation_<version>” directory and copied down the new system and OneWorld Client install into the current install location. Also, it creates a new foundation item/record of the new system for package build.

View New Foundation Directory

1. Navigate to the <deployment server>\E920 directory.
2. Validate there is a “foundation_<version>” directory created by Server Manager. The contents of this directory is the previous artifacts of the deployment server. The directory will contain all of the proper artifacts required for the deployment server:
 - o System
 - o SystemComp
 - o OneWorld Client Install
 - o CD Templates\ESU&ASU
3. Validate that the existing directories under <deployment server>\E920 were updated with the new version:
 - o System - validate system\bin32\ptf.log is the correct downloaded version.
 - o SystemComp - validate system\bin32\ptf.log is the correct downloaded version.
 - o OneWorld Client Install – validate the date and time stamps has changed.
 - o CD Templates\ESU&ASU -> validate the date and time has changed.
4. Navigate to the <deployment server>\E920\package_inf file and open an existing package definition file, for example: DV920FA.inf. Notice the path for the SSYS value now contains the path to the version path that was created, keeping the match between the package and foundation it was built against, consistent.

Upgrading Enterprise Server (32-bit)

Uploading Software Component

Use the Upload Software Components page to upload JD Edwards EnterpriseOne software components to the Management Console.

Upload the Enterprise server 32-bit Tools release from Server Manager.

1. Log on to Server Manager.
2. On the Managed Homes and Managed Instances page, under INSTALL, click on Manage Software.
3. Select Browse to browse to a downloaded jar file, "<release>Release.ES.Win32_<date>.jar" and select upload. This will take a few minutes to complete. When complete, the downloaded file will display under the Managed EnterpriseOne Software Components Section as "EnterpriseOne Enterprise Server <version> <bitness> <date>", for example: "EnterpriseOne Enterprise Server 9.2.3.0 X86 07-18-2018_06_57".
4. Under Managed EnterpriseOne Software Components, check the downloaded jar file, "EnterpriseOne Enterprise Server <version> <bitness> <date>" and click on Distribute.
5. On the Managed Software Component page, check the box associated with the EnterpriseOne Enterprise Server and click Distribute Software. This will distribute the component to the Server Manager Agent.
6. Click Management Dashboard in the upper-left to return to the Managed Homes and Managed Instances page.

Changing Tools Release Software Component

1. On the Managed Homes and Managed Instances page, under the Managed Instances column, locate the EnterpriseOne Enterprise Server and select on the Enterprise Server.
2. In the General section of the page, under EnterpriseOne Enterprise Server: <enterprise server>, click the Change button.
3. On the Change Tools Release dialog box, select the Software Component radio button with the version that was downloaded.
4. A dialog box will prompt for the user name and password for the SYSTEM datasource. Enter the user name and password and click OK.
5. When complete, verify the Software Component Version is the version downloaded.

Validating New Tools Release

1. Sign-on to the Enterprise server.
2. Go to the E920 directory.

Installing and Applying the Planner ESU and Special Instructions

Before You Begin

The Planner ESU contains special features that update the specifications and Dynamic Link Libraries (DLL) in the Planner path code. The Planner ESU distributes enhancements and fixes to the software programs. Planner ESUs

provide an HTML (JNxxxx.htm) file that contains the Special Instructions for the software update. You will find the HTML file in the extracted directory for the Planner ESU.

Downloading Planner ESU

1. Obtain the latest Planner ESU from the Oracle JD Edwards EnterpriseOne Update Center.
2. Click on Electronic Software Updates link in the News and Links section on the left-hand side of the screen.
3. On the Electronic Software Updates main page, you will see a Planner ESUs section. Links to the Planner ESUs are listed by EnterpriseOne application release.
4. Click the Get It Now link for the appropriate JD Edwards EnterpriseOne Application Release (9.2) to access the download for the currently available Planner ESU.
5. Download to the Deployment Server.

Running Planner ESU

1. On the Deployment Server with no other JD Edwards EnterpriseOne processes running, execute the downloaded self-extracting executable.
2. Follow the on-screen instructions to install the Planner ESU.
3. Once the executable has completed, follow the steps in the Special Instructions. Planner ESU Special Instructions are contained within an HTML file in the extracted Planner ESU directory.
4. Sign in to EnterpriseOne on the Deployment Server into the JDEPLAN environment.
5. Launch Software Updates from the menu GH9612
6. Locate the new planner ESU in the list of the ESUs and select it.
7. Select the target path code the Planner ESU should be applied to.

Note: It is recommended to apply the Planner ESU to every path code.

Applying the Tools Application Enhancement Rollup ESU

Before You Begin

The Tools Application Enhancement Rollup ESU distributes enhancements and updates to the software programs. Planner ESUs provide an HTML (JNxxxx.htm) file that contains the Special Instructions for the software update. You will find the HTML file in the extracted directory for the Planner ESU.

Downloading the Tools Rollup ESU

1. Log in to the Oracle JD Edwards EnterpriseOne Update Center using your Oracle SSO Id.
2. Click on the Electronic Software Updates link in the News and Links section on the left-hand side of the screen.
3. Enter 24710277 in the BUG field under Search.
4. Check License Agreement.
5. Click Search.
6. Click the + next to the ESU (JN*****) on the right to add it to the Download Basket. You can ignore the other updates.
7. Under Download Basket click Items(1) to access the download basket.

8. Click Download next to the ESU.

Note: If the results also show 'Dependency' ESUs and those have not been applied to the target Path code, they should also be downloaded and applied before applying the Tools Application Enhancement Rollup ESU.

9. Save the ESU executable to a directory on the Deployment Server.

Note: If you downloaded from a machine other than the Deployment Server, transfer the downloaded files to a location on the Deployment Server prior to running the executable.

Running the Tools Rollup ESU

1. On the Deployment Server, navigate to the folder where the downloaded ESU executable files are located.
2. Run the executable file for the Tools Application Enhancement Rollup ESU (for example. JN*****.exe).

Tip: Oracle recommends running the installer executable, As Administrator and verify that Solution Explorer is not running.

Note: If there were additional Dependency ESUs that have not been applied yet, they can be run at any time, but must be done prior to applying the ESUs below.

3. Accept the defaults on installer and execute to completion.

Applying the Tools Rollup ESU

1. From the Deployment Server, launch the Solution Explorer, and sign in to the JDEPLAN environment using the JDE user and password.
2. Run the Electronic Software Updates application from the GH9612 menu.
3. Locate the Tools Application Enhancement Rollup ESU to install, it will be listed in the grid. Select the record and click the Next button.

Note: If you are unable to locate the ESU, enter the name (JN*****) into QBE line above the grid and click the Find button.

4. Select the path code(s) to apply the Tools Application Enhancement Rollup ESU to. Optionally, select if the ESU will:
 - Run in attended or unattended mode
 - Create a backup of existing objects prior to updating the objects in each ESU package
 - Create an OMW and Package definition for each ESU package.
5. Click the Next button when you are ready to begin the batch to install the ESU package.
6. Review for success on each of the PDFs as they are produced by the various workbenches as they run.

Note: If running in 'attended mode', click on the "Next" button for each workbench until complete.

7. When the ESU has completed, close the Software Updates application and JD Edwards EnterpriseOne Solution Explorer.

Deploying the Automated Special Instructions (ASI)

Before You Begin

ASIs are special instructions for software updates that are executed automatically. They are downloaded separately from the software update you are installing, either using Update Center or Change Assistant. The JD Edwards EnterpriseOne Tools Release 9.2 ASI is a .par file and can be found using TL92* as the search criteria for the Update Name within the Update Center or Change Assistant.

Note: Before you execute the ASI on an AIX system with EnterpriseOne Tools Release 9.1.5 and earlier, you must perform the following steps:

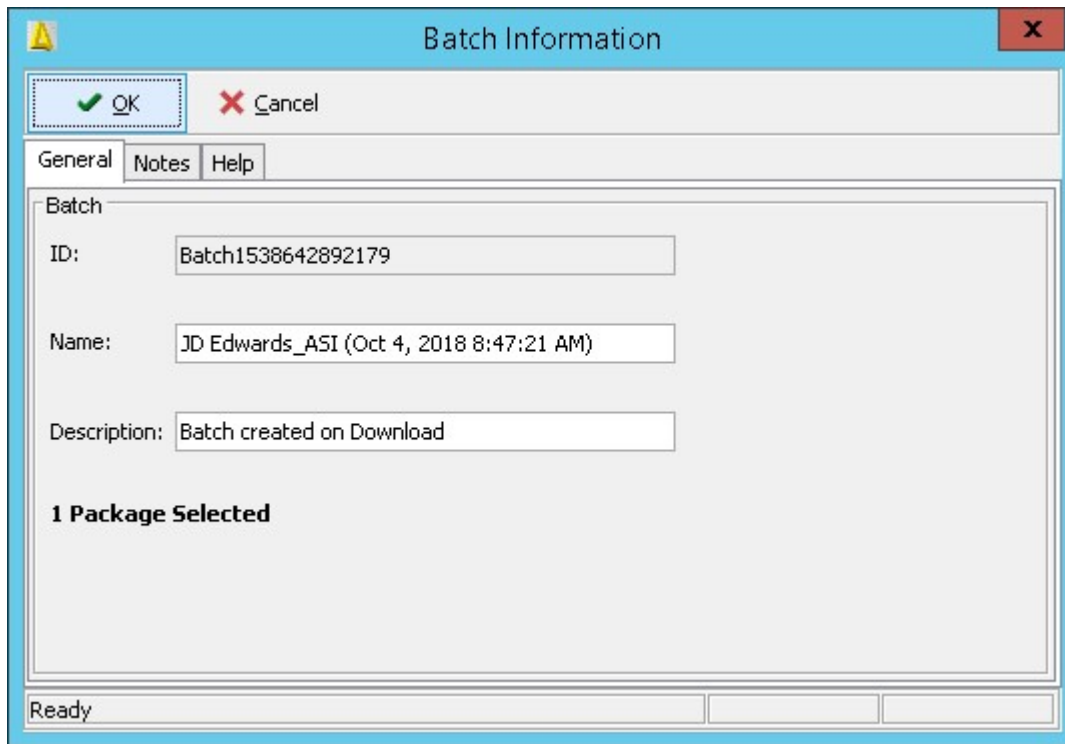
1. Log in to JDEPLAN environment.
2. Execute Object Configuration Manager (OCM).
3. Select Planner-9xx OCM data source.
4. Search on the following criteria to locate the default business function mapping:
 - Environment = JXX9X0
 - Type = BSFN
 - Object = DEFAULT
5. Select to deactivate the mapping.
6. Log off all EnterpriseOne processes.

Note: For Tools Release 9.2.8x and later, P96ATRC has replaced the ASI. See E1: ESU: Running Automated Tools ReleaseConfiguration (ATRC) - Tools Release 9.2.7 and later (Doc ID 2991360.1) for details.

Deploying ASI

1. Obtain the latest TL92* ASI from the Oracle JD Edwards EnterpriseOne Update Center.
2. Download and access with Change Assistant.
3. Using Change Assistant, expand the Work with Packages node.
4. Navigate to the ASI package that you downloaded.
5. Select the ASI package by checking the box next to the package.

6. Click Deploy on the Work with Packages toolbar to start the ASI.

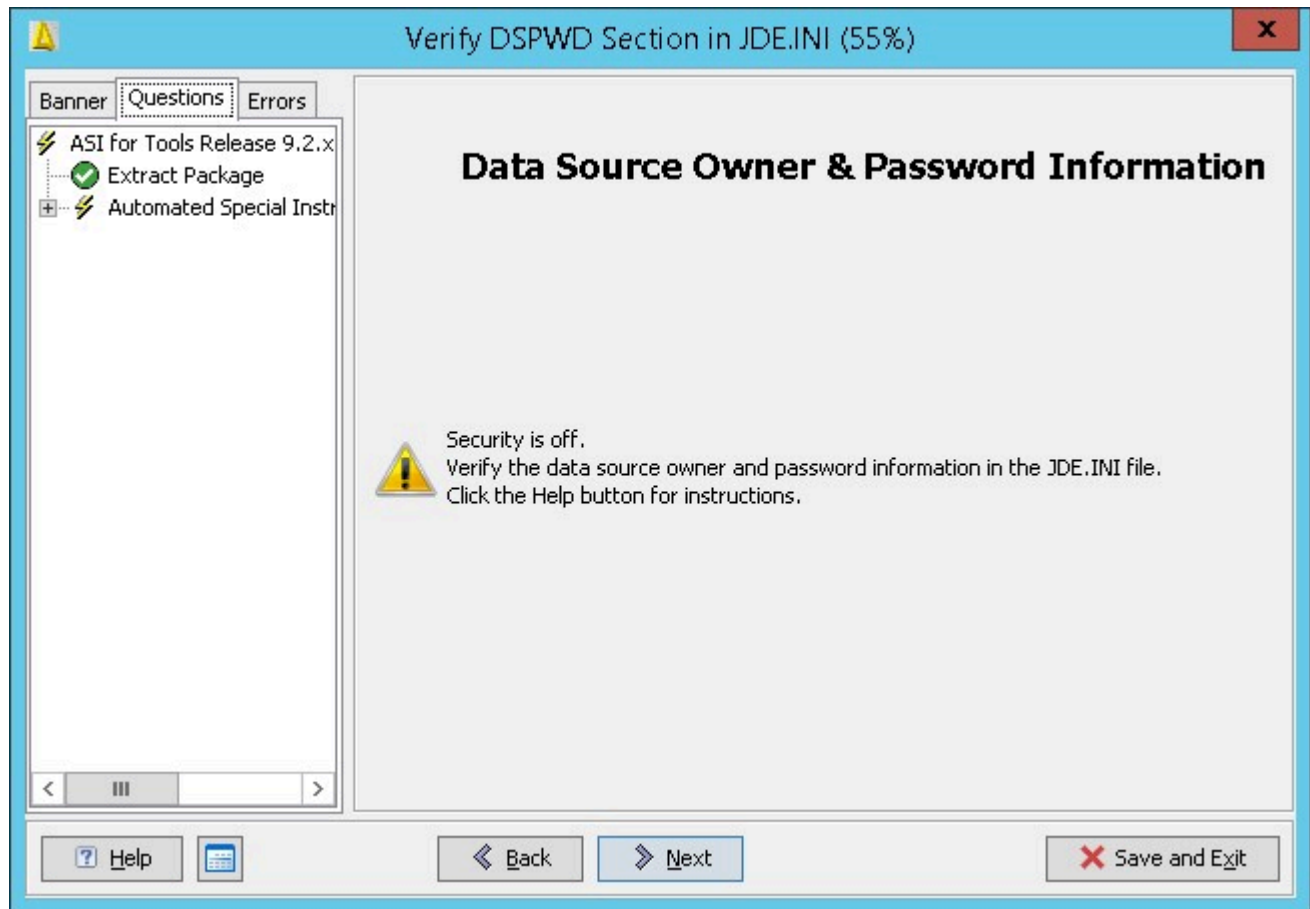


The image shows a 'Batch Information' dialog box with a yellow warning icon in the top-left corner and a red 'X' close button in the top-right corner. The dialog has three tabs: 'General' (selected), 'Notes', and 'Help'. At the top, there are 'OK' and 'Cancel' buttons. The 'General' tab contains the following fields:

- Batch ID:** Batch1538642892179
- Name:** JD Edwards_ASI (Oct 4, 2018 8:47:21 AM)
- Description:** Batch created on Download

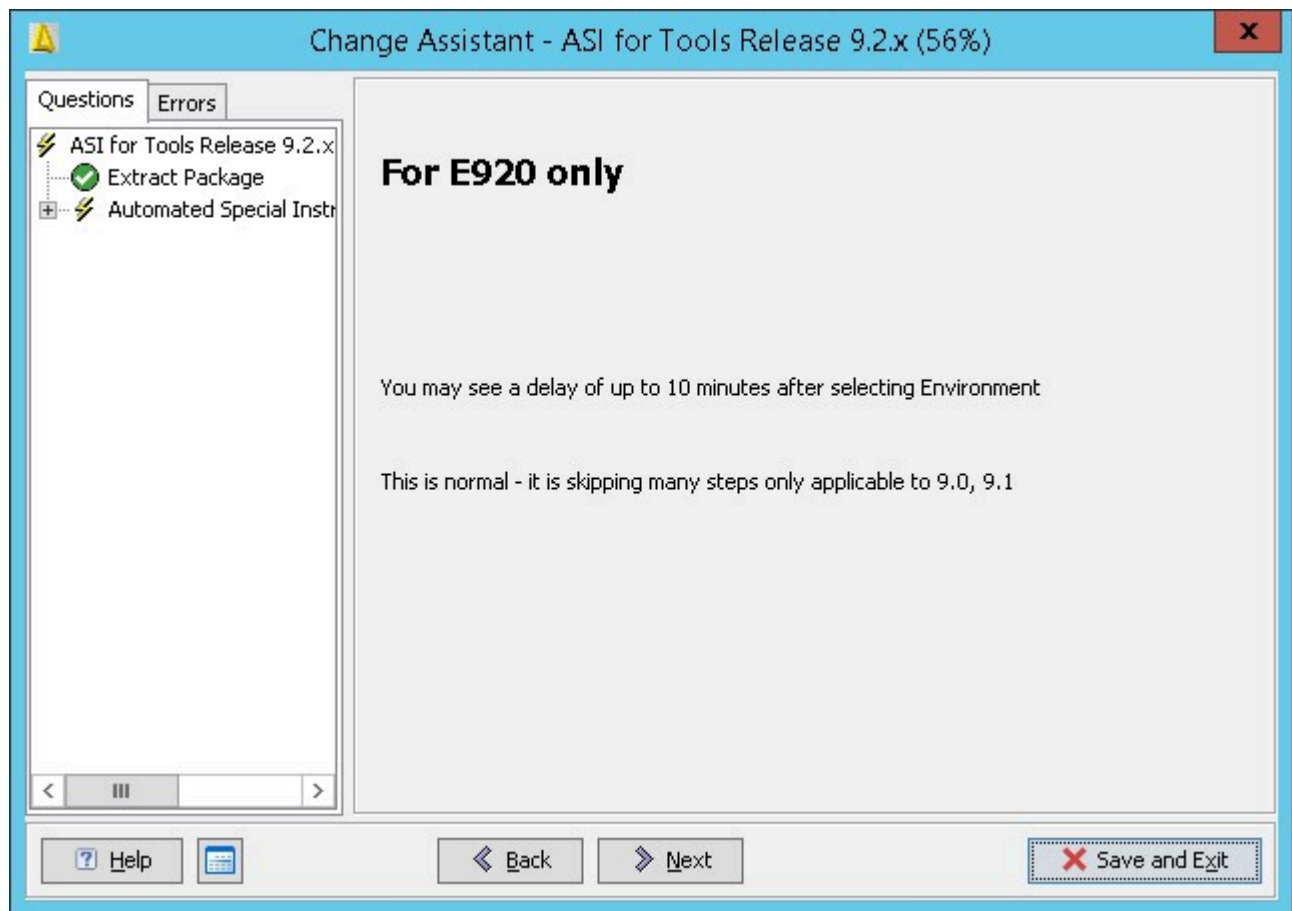
Below these fields, it states **1 Package Selected**. At the bottom of the dialog, there is a status bar that reads 'Ready'.

7. Click OK to continue.



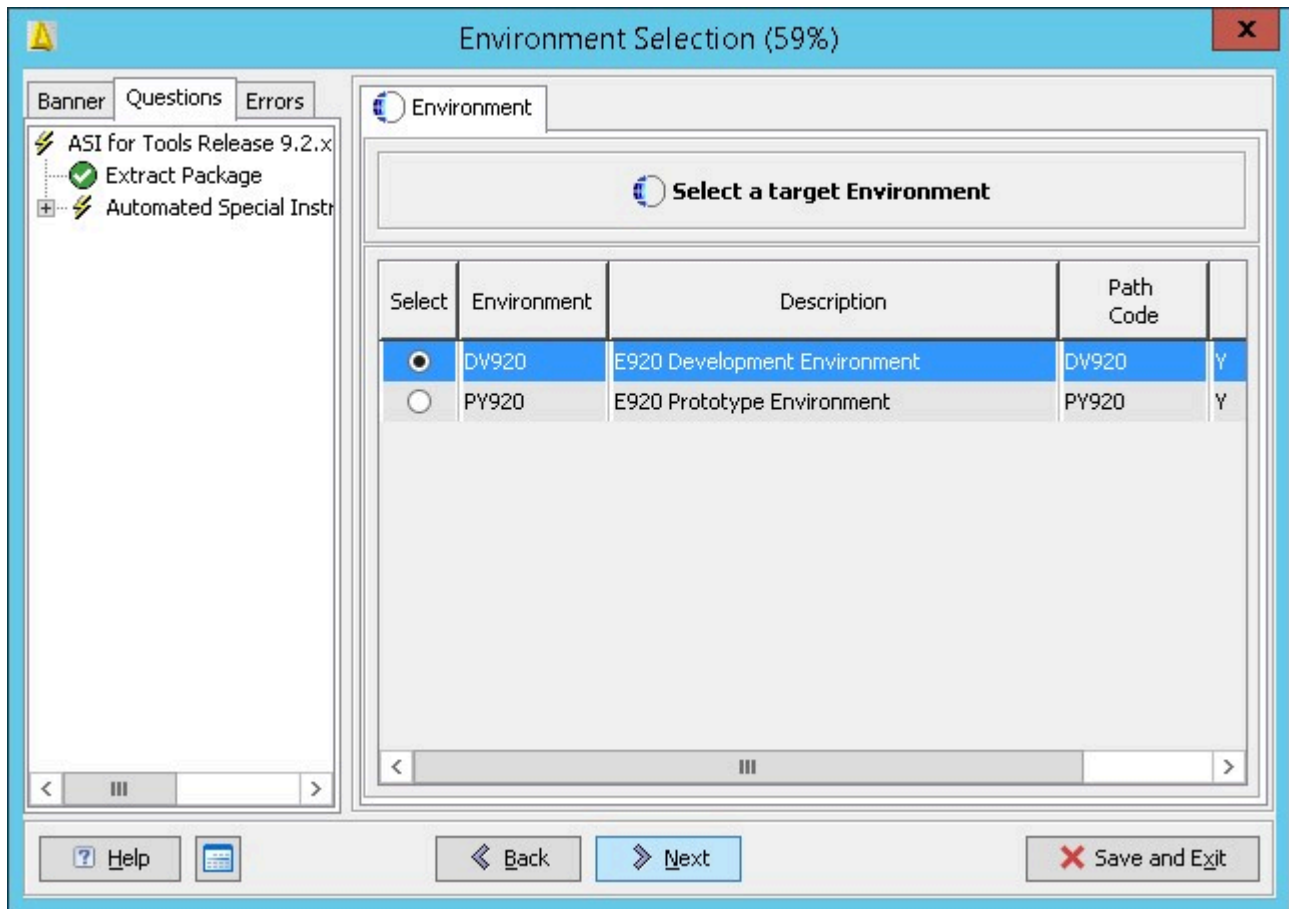
Note: If you have changed the password for any table owners created during the Platform Pack installation, they must be defined in the jde.ini file. The ASI assumes that the table owner's password is the same as the table owner, unless it finds overrides in the jde.ini file on the Deployment Server.

8. Click Next to continue deploying new tasks.



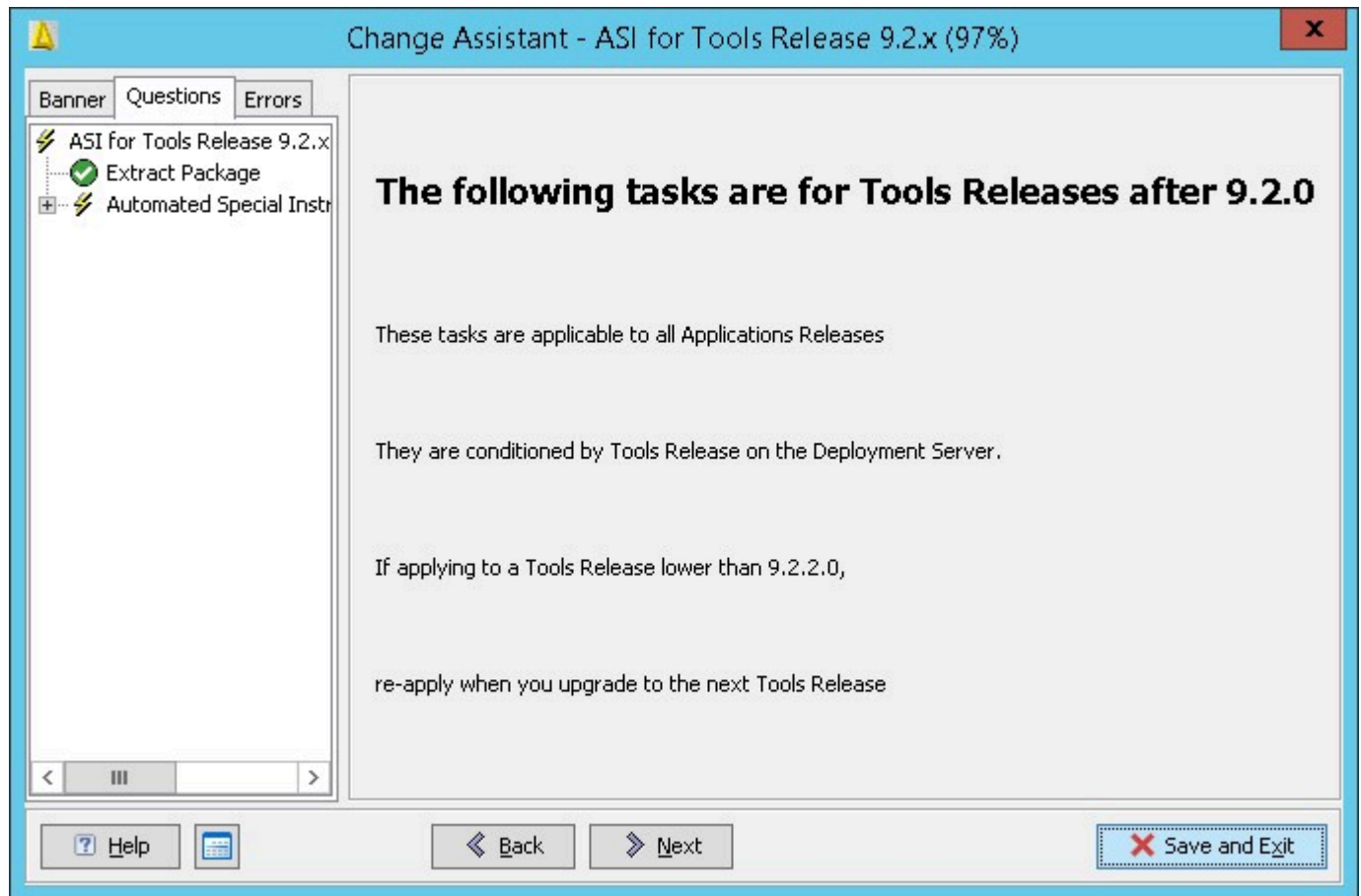
9. On Select Deployment Option, select Install the ASI to the selected environment and click Next.

10. Select the target environment and click Next.



11. Click Yes on Warning - Unknown Release.
12. Click Yes on Warning - Transaction Data.

13. Click Next to continue.



14. Enter a User Defined Object Suffix and click Next.

UDO Unique Name Suffix (98%)

User Defined Object Naming Information

This process will add additional UDO types to your F9800022 table. The value entered here will be appended to the names of new UDO types.

Custom User Defined Object Naming Suffix:*

Note: All pre-delivered User Defined Objects will have the suffix JDE.

Click the Help button for more information.

Help Back Next Save and Exit

15. On the Work with Web Object Names select a new UDO type.

Work with Web Object Names

File Edit Preferences Row Help

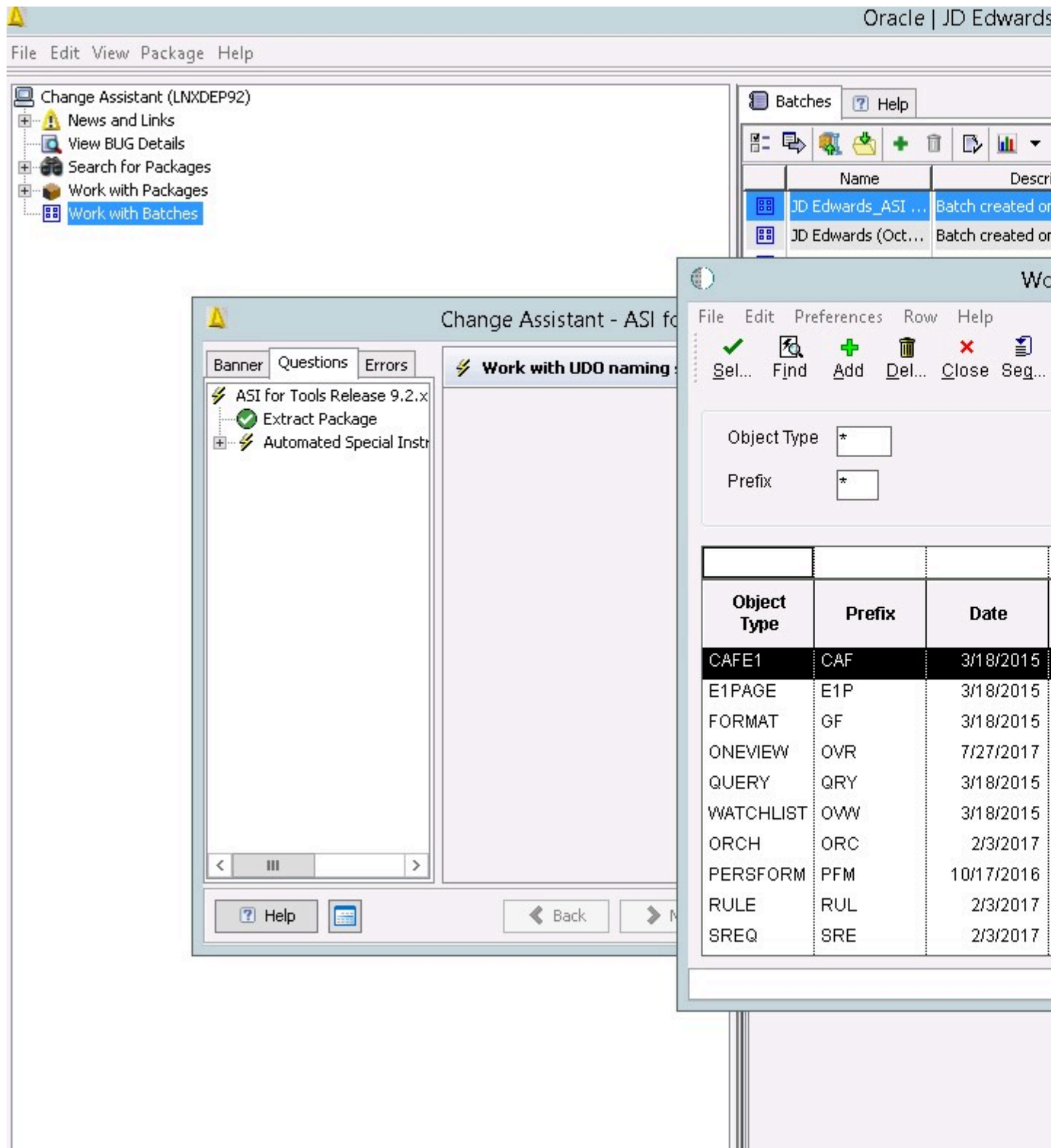
✓ Sel... 🔍 Find + Add 🗑 Del... ✖ Close 📄 Seg... 📁 Ne... 🚫 Dis... 🗑 Abo. Links ▼ Exam... 🌐 Internet

Object Type *

Prefix *

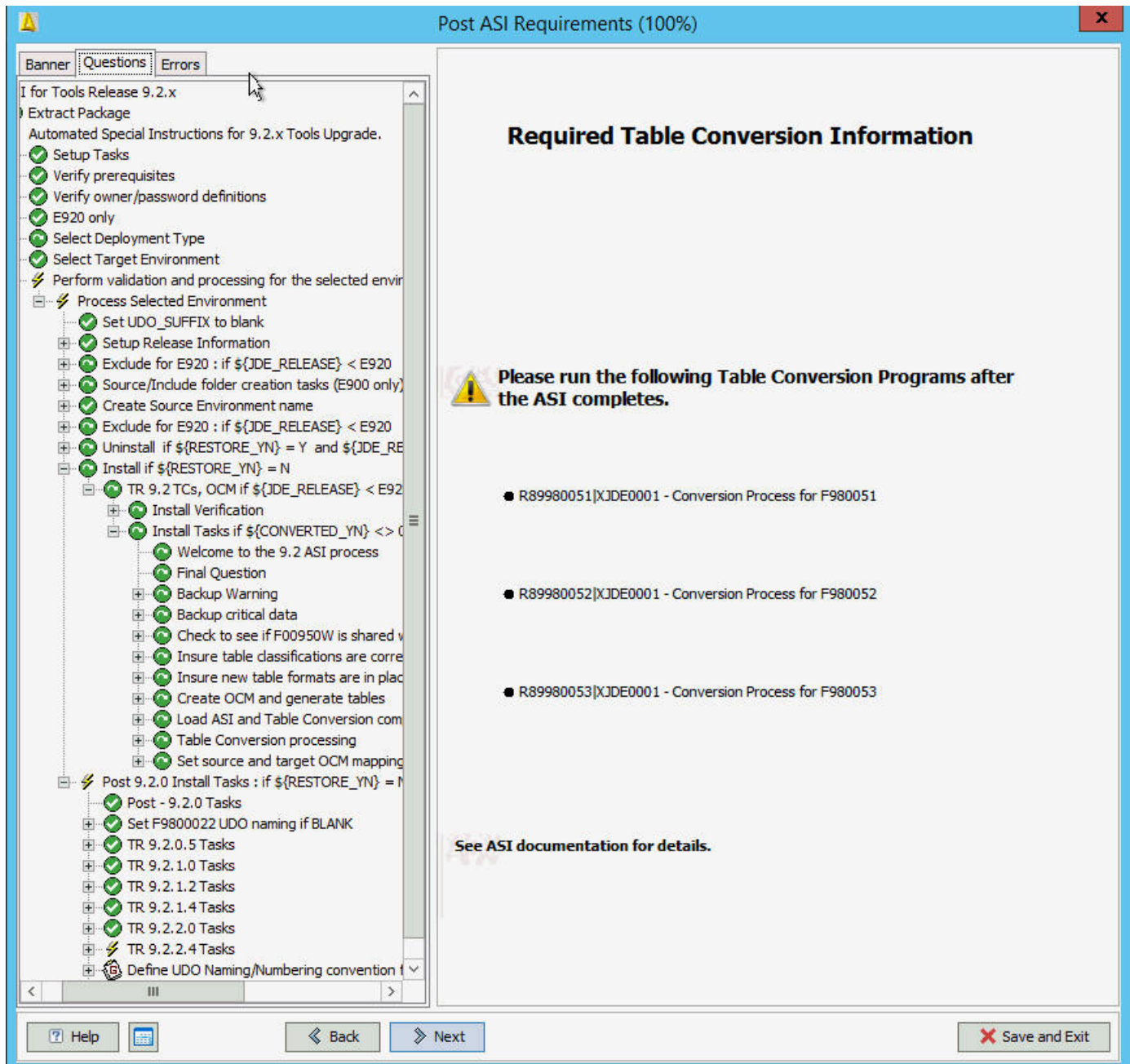
Object Type	Prefix	Date	Unique Key ID	Origin Suffix
CAFE1	CAF	3/18/2015	1	CUSTOM
E1PAGE	E1P	3/18/2015	1	CUSTOM
FORMAT	GF	3/18/2015	1	CUSTOM
ONEVIEW	OVR	7/27/2017	2	CUSTOM
QUERY	QRY	3/18/2015	1	CUSTOM
WATCHLIST	OVW	3/18/2015	1	CUSTOM
ORCH	ORC	2/3/2017	13	CUSTOM
PERSFORM	PFM	10/17/2016	1	CUSTOM
RULE	RUL	2/3/2017	9	CUSTOM
SREQ	SRE	2/3/2017	9	CUSTOM

16. Update the Suffix and click OK.



17. Execute table conversions manually.

The ASI will only prompt you to run the table conversions if it has detected data in F980052 in the System - xxx data source and no data in F980052 in the associated Control Tables data source.



The dialog above appears only if F980051, F980052, and F980053 tables are in the incorrect format and have records in the F980052 table.

Note: The following information assumes the ASI has been applied to target environment DV9X,X which has an associated WAN environment of JDV9XX. The associated WAN environment is to be used as the source environment for the table conversions.

Verify whether there are any records in your version of these three tables in System - xxx. You won't be able to use Universal Table Browser, you will need to use sqlplus / strsql or other database tool. If there are no records,

no action is required. The ASI will have generated the tables for you into the Control Tables – xxx data source for your target environment.

The ASI applied the correct .par file to your Deployment Server.

The ASI reset the OCM for these 3 tables to point to Control Tables – xxx for the environment you applied the ASI to, plus any other environments that share the same path code.

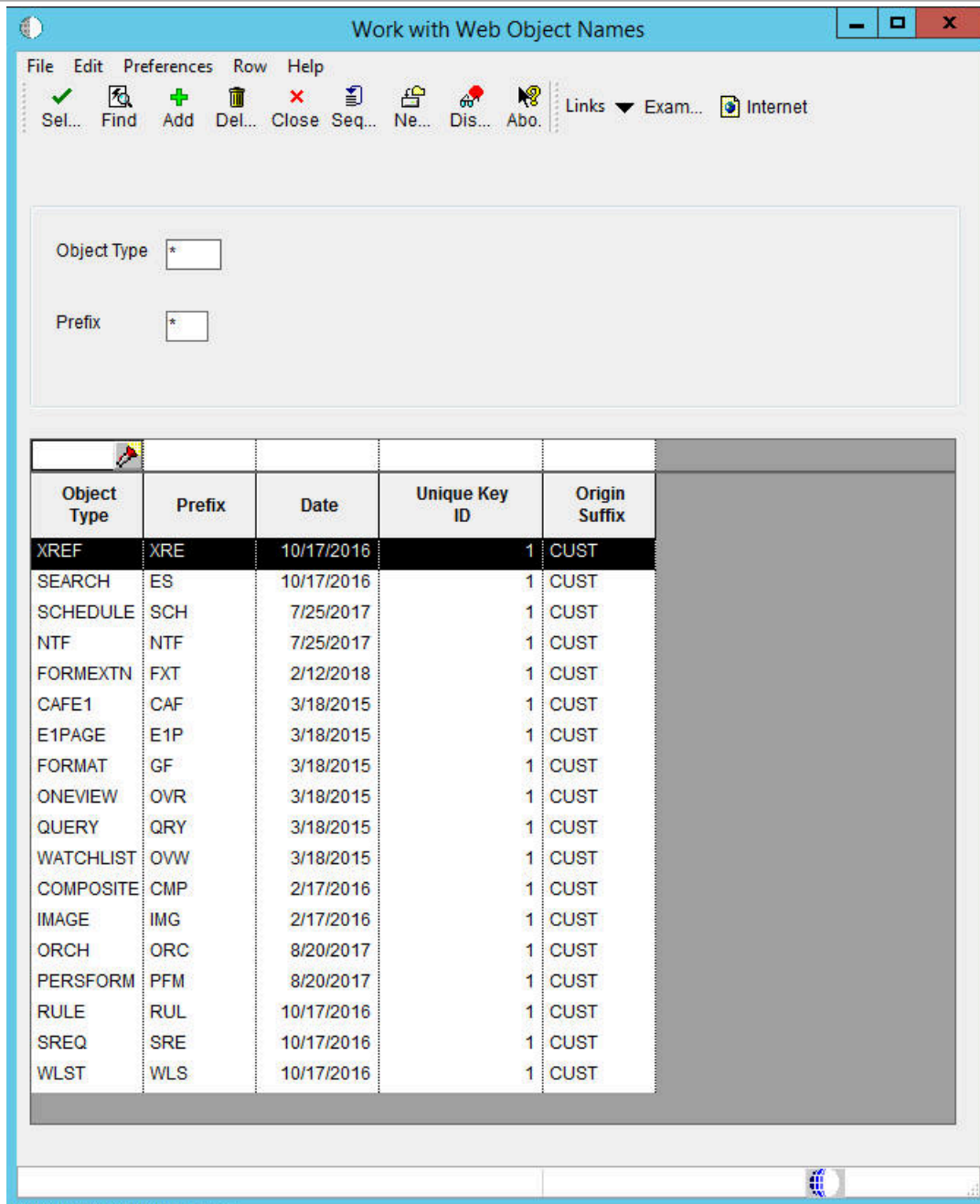
Your source and target environment for the table conversion must be different. The ASI sets the OCM for these three tables to System - xxx for the WAN environment (JDV9XX) associated with the environment you ran the ASI against.

Sign in to JDEPLAN and run the table conversions one at a time and submit from Batch Versions. Click on Properties and change the source environment to JDV9XX and the target environment to DV9XX.

Once the table conversions have run, reset the OCM in JDEPLAN for the source environment to point to the Control Tables - xxx again.

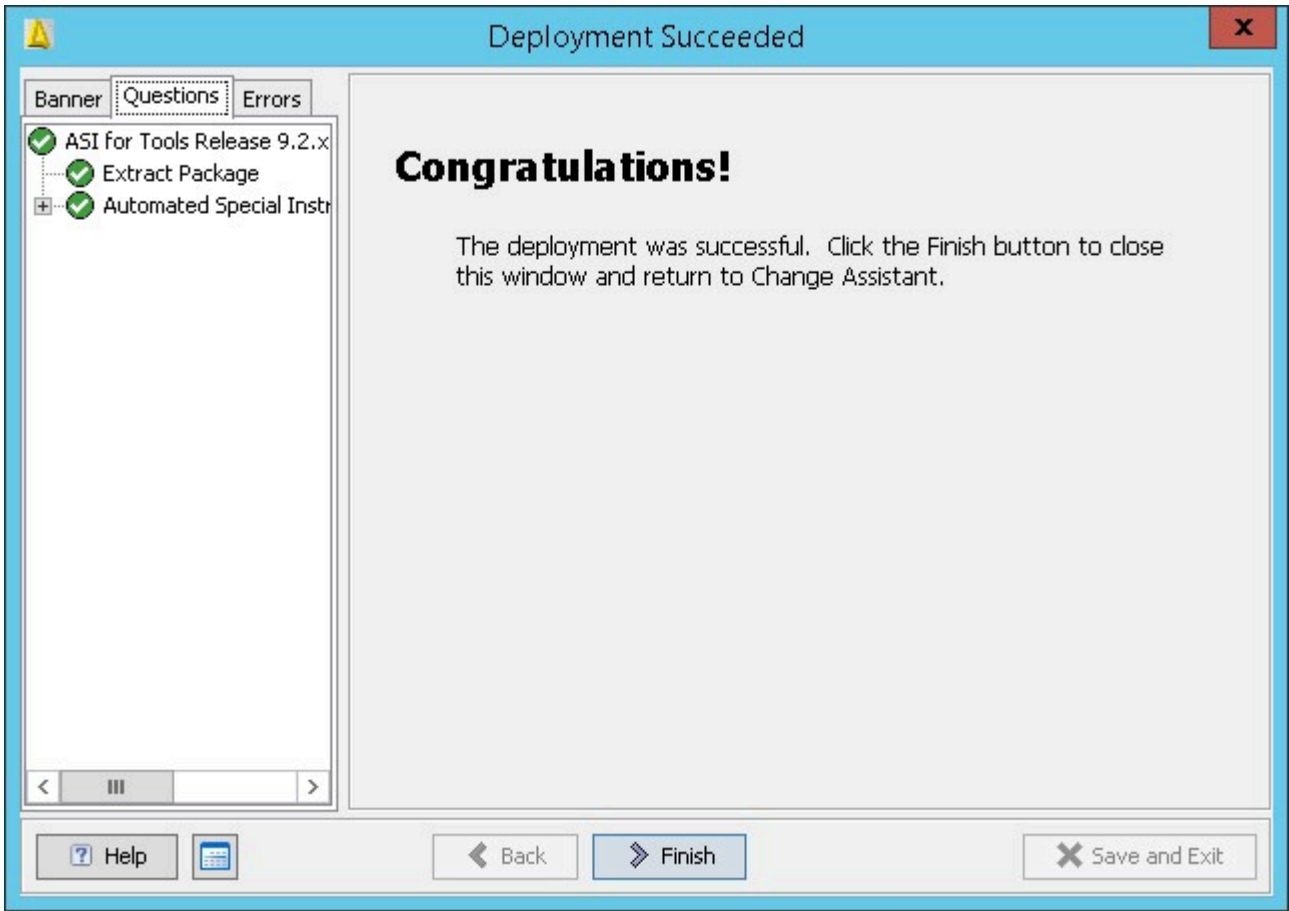
If you have multiple environments with different Control Tables associated with this path code, copy the output table from the table conversion to each of the environments' Control Tables. For example:

- You have DV920 JDV920 DV920XX DV920YY and DV920XX where YY have their own unique Control Tables.
- Run the table conversion against JDV920 DV920, and then copy the F980051, 52, 53 from Control Tables - Test to the Control Tables for DV920XX and DV920YY.



18. Verify all UDO types have the same Origin Suffix and click Close.

19. Click Finish.



Verifying ASI Table Conversions

Verify the success of the ASI table conversion by verifying tables, security, and runtime.

Tables

UDO	Table	Verification
One View Reports and EnterpriseOne Page	F952400	Has the WOBNM column
EnterpriseOne Watchlist	F952420	Has the WOBNM column
Queries	F952430	Has the same record count as F98950
Grid Formats	F952440	Has the same record count as F98950
CAFE1	F952450	Has the same record count as F98950

Security

Use (P00950) to verify that the UDOs have the same level of security as before the EnterpriseOne Tools Release upgrade.

Runtime

After the ASI runs, you should verify access to UDO is the same as before the EnterpriseOne Tools Release upgrade.

If the ASI halts or table conversions do not successfully run, it is recommended to fix the error and run the ASI uninstall program. The ASI uninstall program performs several clean-up operations, table clean-up, and restoring. This action resets your system and enables you to run the ASI as if it were the first time.

Building a Full 32-bit Package

Assembling a Full Package

1. Access JD Edwards EnterpriseOne on the Deployment Server.
2. Sign in to the DEP920 path code.
3. Enter GH9083 in the Fast Path and press Enter.
4. From System Administration Tools, select the Package and Deployment Tools menu, Package Assembly.
5. On the Work with Packages form, click Add, and then on the Package Assembly Director form, click Next.
6. On the Package Information form, complete the Package Name, Description, and Path Code fields.
Note: The name of the package cannot be longer than eight characters.
7. Select the Director option, and click Next.
8. On Package Type Selection, select Full, and click Next:
9. On the Foundation Component form, accept the default location by clicking Next, or click Browse to specify another foundation location.
10. On the Database Component form, accept the default location, or click Browse to specify another database location.
11. The system builds your package from the deployment data source that is associated with the default object path. Verify that the correct location appears on the form, and proceed to the next step.
12. On the Object Component form, click Next.
13. On the Default Object Component form, click Next.
14. To add a feature, click Browse.
15. On the Feature Component Selection form, click Find to display a list of features, select one or more features, and then click Select to add the features that you want to include in your package.
16. Click Close to return to the Features Component form.
17. On the Feature Component form, click Next.
18. On the Language Component form, click Next.
19. Click End.
20. Click Activate on the Row menu.
21. Click Define Build from the Row menu.

Building a Full Package

1. Access JD Edwards EnterpriseOne on the Deployment Server.
2. Sign in to the DEP920 path code.

3. Enter GH9083 in the Fast Path and press Enter.
4. Click Package Build on the right-side.
5. Find and select the defined package that you want to build.
6. If the package definition has a status of In Definition, you must change the status to Assembly-Definition Complete before you build the package. To change the status, select the package and select Activate from the Row menu.
7. On the Package Selection form, in the Express Option pane, select one of these options:
 - Director - Select this option if you want to configure the package build. Director enables you to navigate the package build definition forms.
 - Express - Select this option if you want to accept the default build parameters. Express enables you to accept the default options for the package build and skip the package build definition forms.
8. If you selected the Express option, skip to the Reviewing Package Selections task. If you selected the Director option, continue with the next task.
9. On the Package Build Location form, select one or both of these options:
 - Client - Select to indicate that the package is being built for installation on client workstations.
 - Server(s) - Select to indicate that the package is being built for installation on one or more servers.
10. If you are building a package for client workstations only, click Next.
11. If you are building a server package, you can specify the Shared Location for the shared spec database and click Next.

Note: The default shared spec database is always the central objects data source for the package path code.
12. To select a server on the Server Selection form, double-click the row header for the server. A check mark indicates your selection. You can select multiple servers.

Note: Servers are automatically selected for an update package. They are selected based on the server selection of the parent package.
13. Click Next.
14. On the Build Specification Options form, select Build Options to take the package definition and copy and convert objects from the central data source to the replicated format used by workstations.
15. Complete the following fields and click Next:

Field	Description
All Specification Tables	Select this option if you want to build all specification tables into the package.
Individual Specification Tables	Select this option if you would like to select individual tables to include in the package. All of the tables listed on the Individual Specifications Selection form will be included in the package.
Stop Build Option	Indicate the point at which the system should stop the build. You can continue building on all errors, stop building on specification errors, stop building on business function errors, or avoid compressing when errors exist.
Replace jde.ini	For update packages, indicate if you want a new jde.ini file delivered with the package. Leave this unchecked unless the jde.ini file has changed. For example, the jde.ini may change when you perform upgrades or when you re-configure in release master.

If you chose to build individual specification tables, the Individual Specification Selection form appears.

16. To indicate that you do not want to build a specification table, clear the option.
17. Click Next.
18. Complete the following fields and click Next:

Field	Description
Build Mode	Specify the build mode, such as debug or optimize.
Stop-Build Option	Specify what action to take if errors occur while building business functions.
Build BSFN Documentation	Specify whether you want to build the documentation for the functions.
Clear Output Destination First	Indicate if you want the destination directory for the functions to be cleared before the build.

19. On the Compression Options form, select Compress Client Options if you would like to compress the client package.

Select this option to compress the applications included in the package, and to specify options for the compression process.

20. On the Compression tab, for Compression Options, select Compress Data in order to compress the data.CAB. If you did not get the Tools Release through Server Manager, select "Compress Foundation".

This only needs to be checked for the first package for each path code.

21. If you are compressing the client package, select from these options:

Option	Description
All Client Directories	Select to compress all of the directories listed on the Individual Directory Selection form.
Individual Client Directories	Select to compress only certain directories which you specify.
Compress Data	Indicate whether to compress the data in a package after the package is created. Compress Data compresses the Supported Local Database that is associated with this package.
Compress Foundation	Indicate whether to compress the foundation files in the package after the package is created. Compress Foundation compresses the foundation that is associated with the package.

22. Select Compress Server Options if you would like to compress the server package.

Select this option to compress the applications included in the package, and to specify options for the compression process.

You should select Compress Server Options if you plan to build the package on one enterprise server and deploy it to another enterprise server.

23. If you are compressing the server package, select from these options:

Option	Description
All Server Directories	Select to compress all of the directories listed on the Individual Directory Selection form.
Individual Server Directories	Select to compress only certain directories which you specify.

24. Click Next. If you chose to compress individual directories, the Individual Directory Selection form appears.
25. On the Individual Directory Selection form, indicate that you want to compress a directory for the client or server by clicking its option to select it and click Next.
26. If the package does not include features, skip to the next task. On the Build Features form, if you want to build a feature.inf file with the package, select the Build Feature INFs option. When you select this option, the Compress and Build options become available.

Deploying a Full 64-bit Package

After you define and build a package, use the JD Edwards EnterpriseOne Deployment Director program (P9631) to schedule the package for deployment to individual workstations or enterprise servers.

1. Fast path to GH9083 menu.
2. On the right-pane click Package Deployment.
3. Click Add and Next to setup the deployment of the package.
4. On the Package Selection form, select the package that you want to deploy, and click Next.
5. On the Package Deployment Targets form, select a target to indicate the type of machines to which you want to deploy the package, and click Next.
6. On Package Deployment Attributes, complete these fields and click Next. These are both Optional fields to fill out:
 - o Mandatory Installation
 - o Date/Time
7. On the Deployment Client Workstations Selection form, select the client workstations to which you want to install the package, and then click Next.
8. Select a workstation by double-clicking in its row header. A check mark appears in the row header for each workstation that you select.
9. On the Enterprise Server Selection form, select the name of the server to deploy the package to. Click Next and End.
10. Under the Package, expand and then expand again under Enterprise Server.
11. Highlight the date and time.
12. Select Row/ Deploy and this will deploy the package to this Enterprise server.
13. When a user signs on to a client machine and then logs in they will be prompted to install the package.

5 Preparing for a 64-bit Implementation

Installing Business Function ESUs

A number of JD Edwards EnterpriseOne business functions require modification to be successfully processed on both a 32-bit system and a 64-bit system. To obtain the required updates to these functions, perform these actions:

- Get code current by taking all the currently available ESUs.
- Apply ESUs identified with a new Change Assistant query.

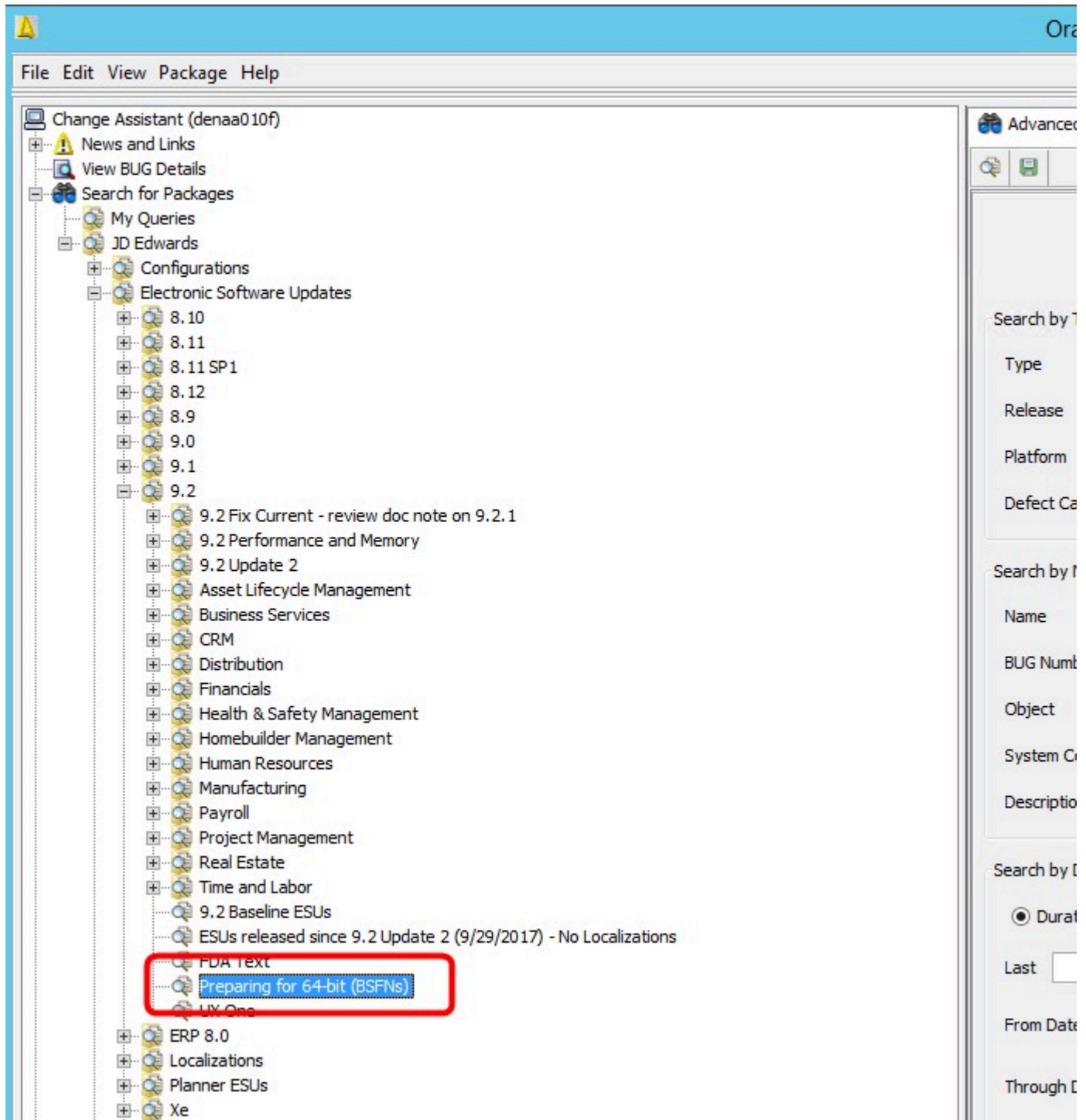
Note: Applications Update UN3 includes all the original updates that were required for JD Edwards EnterpriseOne to run 64-bit.

Running New 64-bit Business Function Change Assistant Profile

Change Assistant can be run from any Microsoft Windows workstation or server, but it is best utilized when run from the JD Edwards EnterpriseOne Deployment Server.

1. Launch Change Assistant.
2. Expand the Search for Packages node.

3. Navigate to JD Edwards Electronic Software Updates 9.2 and select the profile, Preparing for 64-bit (BSFNs).



4. Click the **Search** button.
Note: Change Assistant only displays the first 20 records retrieved.
5. Click the >> button in the upper-right side of the page to display all records.
6. Verify that all the ESUs were selected. If not, click the check mark above the grid to automatically select all the displayed ESUs.

7. To apply the ESUs to a target path code, click the **Download** button and select **Download To and Deploy**, <Folder to Download To>.
8. If Solution Explorer is not already running, you will be prompted to sign in to JD Edwards EnterpriseOne. Enter valid Planner credentials and click OK.
9. Select the environments to which you want to apply the ESUs. Optionally, select if the ESUs will:
 - o Run in attended or unattended mode.
 - o Create a backup of existing objects prior to updating the objects in each ESU package.
 - o Create an OMW and package definition for each ESU package.

Software Update Environment Selection

OK Cancel

General Notes Help

Batch

ID: Batch1538151191587

Name: Preparing for 64-bit (BSFNs) (Sep 28, 2018 10:13:00)

Description: Batch created on Download and Deploy

☒ Unattended ☒ Backup ☒ Create OMW Project and Package Assembly

✓ ✕ **12 Packages Selected**

Select	Environment	Description	Path Code	Skip Spec Merge
<input checked="" type="checkbox"/>	DV920	E920 Development Environment	DV920	<input type="checkbox"/>
<input checked="" type="checkbox"/>	PD920	E920 Production Environment	PD920	<input type="checkbox"/>
<input type="checkbox"/>	PS920	E920 Pristine Environment	PS920	<input type="checkbox"/>
<input checked="" type="checkbox"/>	PY920	E920 Prototype Environment	PY920	<input type="checkbox"/>

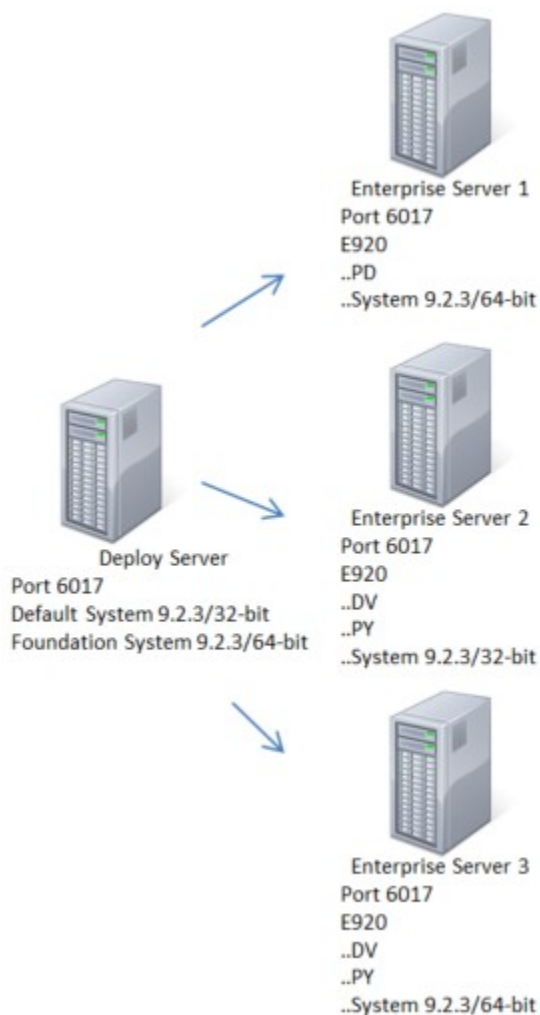
10. Click the **OK** button to begin the batch process to install the ESU packages.
11. Review the generated PDFs for success.
12. When all the ESU packages are installed, close Change Assistant.

6 Configuring the Deployment Server for Multi-foundation

Describing Multi-foundation with Tools Release 9.2.3 64-bit

This configuration is recommended for a business partner who provides a custom solution and for customers who maintain their own customization's. You will need a development environment at 32-bit and testing environments in both 32-bit and 64-bit.

The first server will remain for production, and should be at 64-bit. The second server should be for DV and PY path codes, the foundation will be Tools Release 9.2.3/32-bit. The third server will also be for DV and PY, but the foundation will be Tools Release 9.2.3/64-bit.



Having both Tools Release 9.2.3/32-bit and Tools Release 9.2.3/64-bit foundations on the Deployment Server enables you to build development client packages in either bitness. In this configuration, you have production in 64-bit mode, so Enterprise Server 1 is using Tools Release 9.2.3/64-bit foundation. Enterprise Server 2 is at Tools Release 9.2.3/32-bit foundation and enables you to build 32-bit server packages. It also supports the development and testing of your solutions or customization's in 32-bit mode. Enterprise Server 3 is at Tools Release 9.2.3/32-bit foundation and enables 64-bit server package builds. It also supports the testing of your 32-bit solutions in 64-bit format because your 32-bit solution will be converted to 64-bit during OMW check-in. The 64-bit version of your solution will be used to build the 64-bit server package.

Applying 64-bit Component to Deployment Server

This tutorial shows you how to apply 64-bit component to the Deployment Server.

Applying 64-bit Component to the Deployment Server

Applying 64-bit Component to the Deployment Server

Configure Server Password

1. On the Server Manager Management Console, select the Server Manager Users in the CONFIGURE section of the tab on the left.
2. In the Server Manager User Authentication section, verify that the Primary Security Server is the Enterprise Server that is being used as the Security Server. Also, verify that the Outgoing JDENET Port value is the same as the value in the jde.ini file.
3. Click the Save button.
4. Click the Management Dashboard link.
5. From the Select Instance drop-down menu, select the Home Management Console option.
6. In the Configuration section of the tab on the left, click JDBJ Database Configuration.
7. Enter the required values in the JDBJ Bootstrap Datasource field in this window.

Note: Click the information icon next to the text box for more information about the jde.ini section that contains this information. Do not use the jde.ini file of the Deployment Server. Navigate to the OneWorld Client Instal\misc path, and then use the jde.ini file located in this path for the information. Do not enter any values in the JDBJ Connection Pools section. The values in the JDBC Drivers section are auto-populated.

8. In the Oracle Database Settings section, make sure that the path in the Location field points to the location of the console. For example:

```
/slot/ems6282/oracle/Middleware/jde_home_  
1/SCFMC/targets/home/config/tnsnames.ora
```

9. In the File Content field for the Oracle Database, add the content in the TNSNAMES.ora file of your Database. You can leave the field blank when connecting to a Microsoft SQL server or an AS400 Database.

Example 1: Navigate to the path: C:\Oracle\E1Local\NETWORK\ADMIN. Copy the section for the database that you are using for EnterpriseOne. Paste the content in the File Content field.

Example 2: Copy and paste the following section for the database that you are using for EnterpriseOne:

```
ems6282 = (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP)(HOST = den60212jems)(PORT = 1603))) (CONNECT_DATA = (SID = ems6282) (SERVER = DEDICATED) ) )  
ORACLR_CONNECTION_DATA = (DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521)) (CONNECT_DATA = (SID = CLRExtProc) (PRESENTATION = RO) ) )
```

10. Click the **Save** button.
11. Log-off and back in to Server Manager.

Changing the Component for the Deployment Server

1. Click Manage Dashboard.
2. Click the Deployment Server managed instance
3. Click the Change button under Software Component Version.
4. Select the ... 9.2.3.0 x64 ... component.
5. Select Component Download for Multi-foundation Only.
6. Click the Change Component button.
7. The system will prompt for a database username and password. Enter the appropriate credentials.

Server Manager will inform you that it has detected a 64-bit component and that it will automatically be installed as a multi-foundation directory.

8. Click the **OK** button.

Note: Server Manager might, depending on the session state, prompt again for the database user and password.

9. Enter the 64-bit JRE location and click **OK**.

Note: Nothing is visibly different in Server Manager with the component change. The tools release reported is still 9.2.3 x86.

Viewing the New Foundation Directory

1. On the Deployment Server navigate to: ..\JDE\DEP\JDEdwards\E920 directory
A new foundation directory has been created called foundation_9.2.3.0_X64 and will be used for all 64-bit builds. The directory contains all artifacts required for a foundation.
2. Close the Windows Explorer window.
3. Sign-in to the Server Manager console, and access the Deployment Server.

Viewing the New Foundation Details

1. Launch JD Edwards EnterpriseOne on the Deployment Server.
2. Enter GH9083 in the Fast Path and press Enter.
3. Under Package and Deployment Tools, click Package Assembly.
4. Click Foundation Items from the Form menu.
5. Click Find on Work With Foundation Items.
6. Select the foundation record for ...x64.

You see the details of the new foundation that was created for the 64-bit foundation on the Deployment Server.

7 Implementing 64-bit Processing on the Enterprise Server

Applying 64-bit Component to Enterprise Server

Changing the Enterprise Server Component

1. Click Manage Dashboard.
2. Click Enterprise Server managed instance.
3. Click the Change button under Software Component Version.

Note: Do not select Change for E1 Application Component Version.

4. Select the ... 9.2.3.0 x64 ... component.
5. Click the Change Component button.

Note: A 64-bit component change in Server Manager requires database connection in order to validate the applications release is 9.2.

6. The system will prompt for a database username and password. Enter the appropriate credentials.
7. Click Login.

Server manager detects the new component is 64-bit and displays a message indicating the necessary 3rd-party minimum technical requirements.

8. Click OK.
9. Enter the 64-bit Database Client Home Directory and click OK.
10. Enter the path to the 64-bit JRE directory and click Submit.

8 Configuring the Deployment Server for Development Client Install

Setting Up a Development Client Installer on the Deployment Server

This section in the *Deployment Server Reference Guide* describes how to configure the Deployment Server for Development Client installation.

9 Building and Deploying a Full 64-bit Package

Understanding the JD Edwards EnterpriseOne 64-bit Code Converter

This video describes the 64-bit code conversions for business functions.

Understanding the JD Edwards EnterpriseOne 64-bit Code Converter

Building a Full 64-bit Package

Assembling a Full Package

1. Access JD Edwards EnterpriseOne on the Deployment Server.
2. Sign in to the DEP920 path code.
3. Enter GH9083 in the Fast Path and press Enter.
4. From System Administration Tools, select the Package and Deployment Tools menu, Package Assembly.
5. On the Work with Packages form, click Add, and then on the Package Assembly Director form, click Next.
6. On the Package Information form, complete the Package Name, Description, and Path Code fields.
Note: The name of the package cannot be longer than eight characters.
7. Select the Director option, and click Next.
8. On Package Type Selection, select Full, and click Next.
9. On the Foundation Component form, verify you are selecting the 64-bit foundation.
10. On the Database Component form, accept the default location, or click Browse to specify another database location.
11. The system builds your package from the deployment data source that is associated with the default object path. Verify that the correct location appears on the form.
12. On the Object Component form, click Next.
13. On the Default Object Component form, click Next.
14. To add a feature, click Browse.
15. On the Feature Component Selection form, click Find to display a list of features, select one or more features, and then click Select to add the features that you want to include in your package.
16. Click Close to return to the Features Component form.
17. On the Feature Component form, click Next.
18. On the Language Component form, click Next.
19. Click End.
20. Click Activate on the Row menu.
21. Click Define Build from the Row menu.

Building a Full Package

1. Access JD Edwards EnterpriseOne on the Deployment Server.
2. Sign in to the DEP920 pathcode.
3. Enter GH9083 in the Fast Path and press Enter.
4. Click Package Build on the right-side.
5. Find and select the defined package that you want to build.
6. If the package definition has a status of In Definition, you must change the status to Assembly-Definition Complete before you build the package. To change the status, select the package and select Activate from the Row menu.
7. On the Package Selection form, in the Express Option pane, select one of these options:
 - Director - Select this option if you want to configure the package build. Director enables you to navigate the package build definition forms.
 - Express - Select this option if you want to accept the default build parameters. Express enables you to accept the default options for the package build and skip the package build definition forms.
8. If you selected the Express option, skip to the Reviewing Package Selections task. If you selected the Director option, continue with the next task.
9. For Foundation, click the icon to the left.
10. On the Foundation Component Selection page, select the 64-bit foundation.
11. On the Package Build Location form, select one or both of these options:
 - Client - Select to indicate that the package is being built for installation on client workstations.
 - Server(s) - Select to indicate that the package is being built for installation on one or more servers.
12. If you are building a package for client workstations only, click Next.
13. If you are building a server package, you can specify the Shared Location for the shared spec database and click Next.
Note: The default shared spec database is always the central objects data source for the package path code.
14. To select a server on the Server Selection form, double-click the row header for the server. A check mark indicates your selection. You can select multiple servers.
Note: Servers are automatically selected for an update package. They are selected based on the server selection of the parent package.
15. Click Next.
16. On the Build Specification Options form, select Build Options to take the package definition and copy and convert objects from the central data source to the replicated format used by workstations.
17. Complete the following fields and click Next:

Field	Description
All Specification Tables	Select this option if you want to build all specification tables into the package.
Individual Specification Tables	Select this option if you would like to select individual tables to include in the package. All of the tables listed on the Individual Specifications Selection form will be included in the package.
Stop Build Option	Indicate the point at which the system should stop the build. You can continue building on all errors, stop building on specification errors, stop building on business function errors, or avoid compressing when errors exist.

Field	Description
Replace jde.ini	For update packages, indicate if you want a new jde.ini file delivered with the package. Leave this unchecked unless the jde.ini file has changed. For example, the jde.ini may change when you perform upgrades or when you re-configure in release master.

18. If you chose to build individual specification tables, the Individual Specification Selection form appears.
19. To indicate that you do not want to build a specification table, clear the option.
20. Click Next.
21. Complete the following fields and click Next:

Field	Description
Build Mode	Specify the build mode, such as debug or optimize.
Stop-Build Option	Specify what action to take if errors occur while building business functions.
Build BSFN Documentation	Specify whether you want to build the documentation for the functions.
Clear Output Destination First	Indicate if you want the destination directory for the functions to be cleared before the build.

22. On the Compression Options form, select Compress Client Options if you would like to compress the client package.

Select this option to compress the applications included in the package, and to specify options for the compression process.
23. On the Compression tab, for Compression Options, select Compress Data in order to compress the data.CAB.

If you did not get the Tools Release through Server Manager, select "Compress Foundation". This only needs to be checked for the first package for each path code.
24. If you are compressing the client package, select from these options:

Option	Description
All Client Directories	Select to compress all of the directories listed on the Individual Directory Selection form.
Individual Client Directories	Select to compress only certain directories which you specify.
Compress Data	Indicate whether to compress the data in a package after the package is created. compresses the Supported Local Database that is associated with this package.
Compress Foundation	Indicate whether to compress the foundation files in the package after the package is created. Compress Foundation compresses the foundation that is associated with the package.

25. Select Compress Server Options if you would like to compress the server package.
 - Select this option to compress the applications included in the package, and to specify options for the compression process.
 - You should select Compress Server Options if you plan to build the package on one enterprise server and deploy it to another enterprise server.
26. If you are compressing the server package, select from these options:

Option	Description
All Server Directories	Select to compress all of the directories listed on the Individual Directory Selection form.
Individual Server Directories	Select to compress only certain directories which you specify.

27. Click Next. If you chose to compress individual directories, the Individual Directory Selection form appears.
28. On the Individual Directory Selection form, indicate that you want to compress a directory for the client or server by clicking its option to select it and click Next.
29. If the package does not include features, skip to the next task. On the Build Features form, if you want to build a feature.inf file with the package, select the Build Feature INFs option. When you select this option, the Compress and Build options become available.
30. Click Next.

Deploying a Full 64-bit Package

After you define and build a package, use the JD Edwards EnterpriseOne Deployment Director program (P9631) to schedule the package for deployment to individual workstations or enterprise servers.

1. Fast path to GH9083 menu.
2. On the right-pane click Package Deployment.
3. Click Add and Next to setup the deployment of the package.
4. On the Package Selection form, select the package that you want to deploy, and click Next.
5. On the Package Deployment Targets form, select a target to indicate the type of machines to which you want to deploy the package, and click Next.
6. On Package Deployment Attributes, complete these fields and click Next. These are both Optional fields to fill out:
 - Mandatory Installation
 - Date/Time
7. On the Deployment Client Workstations Selection form, select the client workstations to which you want to install the package, and then click Next.
8. Select a workstation by double-clicking in its row header. A check mark appears in the row header for each workstation that you select.
9. On the Enterprise Server Selection form, select the name of the server to deploy the package to. Click Next and End.
10. Under the Package, expand and then expand again under Enterprise Server.
11. Highlight the date and time.

12. Select Row/ Deploy and this will deploy the package to this Enterprise server.
13. When a user signs on to a client machine and then logs in they will be prompted to install the package.

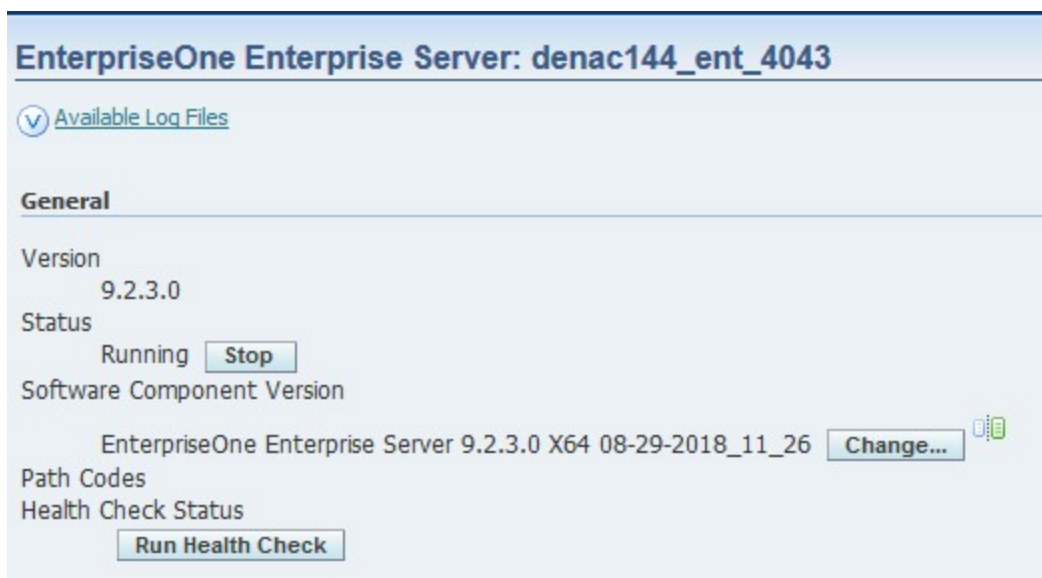
10 Validating Your 64-bit Implementation

Validating EnterpriseOne 64-bit Implementation

Before You Begin

To verify that you have successfully implemented Tools Release 9.2.3 64-bit navigate to the Server Manager Console and select the Enterprise Server instance. Under Software Component Version you will see:

EnterpriseOne Enterprise Server 9.2.3.0 X64 <date stamp>



Verifying Bitness on IBMi

The tools processes print the bitness in their jde.logs and joblogs when they start. In addition, the copyright information has the bitness embedded in most of the EnterpriseOne IBMi programs and service programs at compile time. The bitness in the copyright details are visible when executing DSPPGM or DSPSRVPGM with the option "DETAIL(*COPYRIGHT)".

The copyright detail for the Tools *SRVPGM, E920SYS64/JDEKRNL, on JDEOW1 includes:

- << 64Bit Time & other data types >>

The copyright detail for the Apps *SRVPGM, PD92064/CAEC, on JDEOW1 includes:

- << 32Bit Time & other data types >>

The bitness between the tools code and the business function code should match to function correctly. The tools/apps combination on JDEOW1 (E920SYS64/PD92064) needs to be updated.

