

JD Edwards EnterpriseOne

Development Client Installation Guide

Applications Release 9.2.x and Tools Release 9.2.x for Oracle
WebLogic Server (WLS) and WebSphere Application Server
(WAS) Express

E55648-13

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Describes the installation of the Development Client.

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Preface

Welcome to the *JD Edwards EnterpriseOne Development Client Installation Guide for WebLogic Server (WLS) and WebSphere Application Server (WAS) Express*.

Audience

This guide is intended for end users that install the JD Edwards EnterpriseOne Development Client.

Note: JD Edwards EnterpriseOne is sometimes abbreviated as E1 in the code and artifacts.

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
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<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
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.

Convention	Meaning
<i>italic</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 in examples, text that appears on the screen, or text that you enter.

Introduction

This chapter contains the following topics:

- [Section 1.1, "Overview"](#)
- [Section 1.2, "Certifications"](#)
- [Section 1.3, "Microsoft Windows Security"](#)
- [Section 1.4, "Minimizing Locked Files"](#)

1.1 Overview

The JD Edwards EnterpriseOne Development Client (also known as a Web Development Client, "Fat" Client, Administrative Client, Windows client, or Workstation) contains components that run as standard Microsoft Windows applications (for example, Active Console, Forms Design Aid (FDA), and Report Design Aid (RDA)) and components that run in a web browser.

Note: This document uses the following terminology when discussing JD Edwards EnterpriseOne clients:

- Web Client
 - Components that run in a web browser.
 - Development Client
 - Composed of standard Windows components and Web Client.
-

The following are the supported Application Servers:

- Oracle WebLogic Server (WLS)
- IBM WebSphere Application Server (WAS) Express or WebSphere Application Server for Developers.

For Oracle WebLogic Servers, you should install the supported version as indicated by the Certifications for the Development Client. The version of the Web Client that is installed on WLS is WLSH4A.

Note: **Tools Release 9.2 Update 2.** The existing installer H4A85 is renamed to WASH4A and is enhanced to support IBM WebSphere 9.0 along with existing support of IBM WAS 8.5.5.

For WebSphere Application Servers, you can choose to use WAS Express or WAS for Developers as the Application Server for the EnterpriseOne Web Client. Both products are similar; either one may be manually installed before installing the Web Client for WAS. Whereas WAS Express requires a licensing fee to IBM, WAS for Developers is free. The version of the Web Client that is installed on either WAS product is referred to by either of these names:

- HTML for Applications, or
- WASH4A

Caution: The Web Client part of the Development Client runs inside an Application Server. Because the Development Client installer both configures and depends on them for some components, these Application Servers must be installed prior to installing the JD Edwards EnterpriseOne Development Client.

The first time setup of the JD Edwards EnterpriseOne Development Client installer and installation package on an EnterpriseOne Deployment Server is described in a separate guide entitled: *JD Edwards EnterpriseOne Deployment Server Reference Guide*. This setup on the Deployment Server must be done before a user can install a JD Edwards EnterpriseOne Development Client on a workstation. The installation package specifies the components to install and may or may not include the Web Client. To access the *JD Edwards EnterpriseOne Deployment Server Reference Guide*, refer to the Installation and Upgrade Documentation library at this link:

http://docs.oracle.com/cd/E24902_01/nav/reference.htm

Note: This document uses the terms "deinstall" and "uninstall" interchangeably. The terms are synonymous and describe the removal of a product from your workstation.

1.2 Certifications

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne Certifications. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the following link for cross-reference material in the Program Documentation for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

<http://www.oracle.com/corporate/contracts/index.html>

Refer to the Certifications tab on My Oracle Support and search for this product:

- **JD Edwards EnterpriseOne Development Client**

For additional information on using Certifications, refer to this document on My Oracle Support (<https://support.oracle.com>):

- **Certifications FAQ for JD Edwards EnterpriseOne [Article ID 1525328.1]**

<https://support.oracle.com/epmos/faces/DocumentDisplay?id=745831.1>

1.3 Microsoft Windows Security

When installing, uninstalling/deinstalling, or running any JD Edwards EnterpriseOne product on Microsoft Windows operating systems, be sure to follow the below guidelines. This includes saving or restoring or deleting snapshots of EnterpriseOne using the SnapShot program. Not following these guidelines may cause unexpected errors to occur.

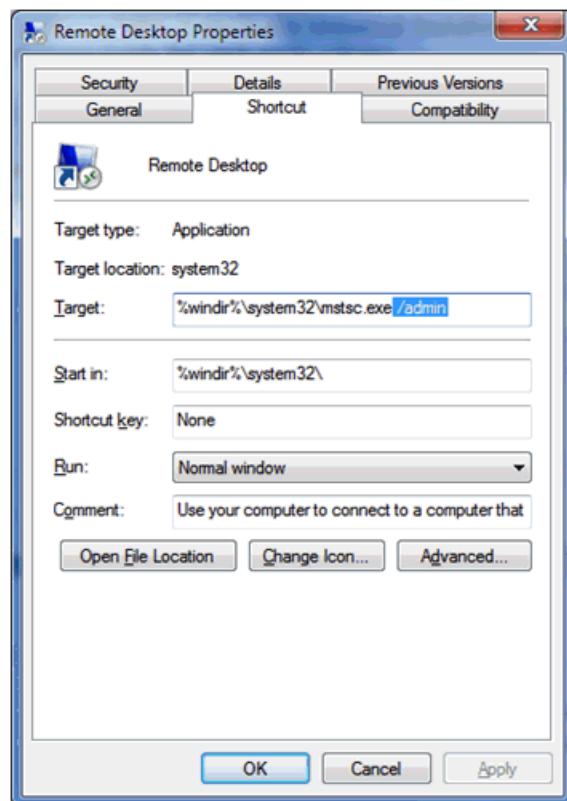
1. Registry and directory permissions

Be sure that the user account into which you are signing into Microsoft Windows is in the Administrators group or a similar group that provides permissions to write to and read from registry hives (for example, HKEY_LOCAL_MACHINE\SOFTWARE) and disk subdirectories (c:\Windows) that are restricted from standard Windows users.

2. Remote Desktop connections

When connecting to a remote Microsoft Windows computer using Microsoft's Remote Desktop, run Remote Desktop with the "/admin" flag. Not running with this setting may cause subtle, hard-to-explain errors in the program. You can do this using these steps:

- a. Right-click on the Remote Desktop shortcut.
- b. Select properties.
- c. Click on the Shortcut tab.
- d. At the end of the Target field, add a space, a forward slash, and the string **admin** to the end of the Target. The screen shot sample below illustrates this setting:



1.4 Minimizing Locked Files

To minimize the possibility that the Development Client's installer or uninstaller or SnapShot might fail due to locked files, follow these guidelines:

1. Exit from all running programs. You can use Microsoft Windows Task Manager to verify that the programs are stopped. In particular, be sure that EnterpriseOne, JDeveloper, and SQL Developer are stopped, but other programs may also need to be stopped. Exceptions to this rule include the database service(s) which should be running.
2. Verify that no files in the Development Client installation directory or subdirectories are open in any file editors.
3. Verify that neither the installation directory nor any of its subdirectories are open in Microsoft Windows Explorer.
4. Verify that no Command Prompt window has as its current working directory either the Development Client installation directory or any of its subdirectories.

Understanding the Development Client Installation

This chapter contains the following topics:

- [Section 2.1, "Understanding Installation Steps"](#)
- [Section 2.2, "Understanding the Destination Paths of Oracle Products"](#)
- [Section 2.3, "Important Notes"](#)
- [Section 2.4, "Installing Compiler, Linker, and Software Development Kit \(SDK\)"](#)

2.1 Understanding Installation Steps

Installation of the Development Client involves the following sequential steps, each of which are described in the following sections and chapters:

1. Understanding the Destination Paths of Oracle Products, also called Oracle Homes
2. Understanding Important Notes
3. Installing Prerequisites for the Development Client
 - a. Compiler, linker, and Software Development Kit (SDK)
 - b. Application server
 - c. Database
 - d. Database client
 - e. Browser
 - f. Oracle JDeveloper -- This is optional and only required for developing BSSVs (Business Services) which are also known as SBFs (Service Business Functions) or Java Business Functions.

With the exception of the browser and Oracle JDeveloper, the other components listed above are covered in this document. The specific versions of these products are specified in the Oracle JD Edwards EnterpriseOne Certifications (refer to the section of this guide entitled: [Section 1.2, "Certifications"](#)).

2.2 Understanding the Destination Paths of Oracle Products

Each Oracle product that is installed on a machine is installed into an **Oracle Home** directory or path. This is a directory that contains most of the files associated with the product. This path has a user-supplied name as well. You can specify a name that is

intuitive so you do not have to remember the path. The parent directory of the Oracle Home directory is called the Oracle Base directory or path.

The following table shows some examples of these terms for the installations of an Oracle WebLogic Server, an Oracle database, Oracle JDeveloper, and JD Edwards EnterpriseOne Development Client.

Note: It is strongly recommended that you always install each Oracle product into its own **Oracle Base Path**. Attempting to share an **Oracle Base Path** among multiple Oracle products may cause unforeseen errors either during installation or at runtime.

Oracle Product	Installation Directory	Oracle Base Path	Oracle Home Path	Oracle Home Name
WebLogic Server	C:\WebLogic\WLS12c	C:\WebLogic	C:\WebLogic\WLS12c	WebLogic_Home
Oracle database	C:\E1Local	C:\E1Local	C:\E1Local	E1Local
JDeveloper	C:\Oracle2\Middleware	C:\Oracle2	C:\Oracle2\Middleware	JDev_Home
JD Edwards EnterpriseOne	C:\Oracle3\E920	C:\Oracle3	C:\Oracle3\E920_1	JDE_E920_Client

During the installation of an Oracle product, OUI copies the files from the package to subdirectories under the Oracle Home path and then performs the necessary configurations. In addition, it places a copy of OUI into the Oracle Home Path.

OUI also creates a submenu of items in the Start / All Programs menu. This submenu is named "Oracle - <Oracle_Home_Name>" where <Oracle_Home_Name> is the name that the user specified during the installation. This submenu will include links to some of the product's programs and the submenu called Oracle Installation Products. Oracle Installation Products includes a link to the copy of OUI that is in the Oracle Home Path. Although you can run other copies of OUI to uninstall (remove) the EnterpriseOne Development Client, it is safest to uninstall using the link in this submenu.

2.3 Important Notes

Refer to the following important notes regarding the overall installation of a Development Client.

Caution: Please verify all Certifications for supported versions of third party software. See the section [Section 1.2, "Certifications"](#).

1. For Releases 9.2.1.0 and 9.2.2.1, refer to MOS Doc ID 2207529.1 for directions on installing the requisite JRE version prior to running the Development Client Installer.

For Release 9.2.1.2 and above, OUI installs its own Java Runtime Environment (JRE) so one is not required to be present before OUI is run. However, OUI will attempt to use any Java-related Microsoft Windows environment variables that are set before it is run. Examples of some Java environment variables are **JAVA_HOME**, **JAVA_TOOL_OPTIONS**, and **_JAVA_OPTIONS**. If any of these are set to

invalid values, OUI may fail to run, or it may fail during the installation. Be sure to either validate these environment variables or delete them before running OUI.

2. Microsoft Visual Studio is not required unless you are building business functions on the Development Client. If you plan to build business functions, you will need the compiler and additional libraries that Visual Studio and Windows Software Development Kit (SDK) provides.
3. Verify that all previous releases of JD Edwards EnterpriseOne (Development and Standalone) Clients have been completely uninstalled or saved via SnapShot before installing a new Development or Standalone Client. For instructions on how to uninstall the Development Client, refer to the section of this guide entitled: [Chapter 9, "Uninstalling the Development Client."](#)
4. The Development Client does not require Software Protection Codes (SPCs) to run so you will not need to perform the steps for applying SPCs that previous EnterpriseOne releases required.
5. Applications Release 9.2 supports **only** Oracle Enterprise Edition (OEE) as the local database.
6. If you previously had installed a local Oracle 12c database for the Development Client and you are reinstalling the Development Client, you do not have to uninstall the database first. However, if you need to reinstall the OEE database for some reason, follow the instructions in the appropriate section of this guide entitled: [Chapter 5, "Installing the Oracle Local Database."](#)
7. If you need to install the OEE database and the Microsoft Windows environment variable **ORACLE_HOME** exists, the OEE installer will delete it during the installation.

2.4 Installing Compiler, Linker, and Software Development Kit (SDK)

This section describes these topics:

- [Section 2.4.1, "Understanding the Requirements for JD Edwards EnterpriseOne"](#)
- [Section 2.4.2, "Obtaining and Installing Visual Studio and the Microsoft Windows SDK"](#)
- [Section 2.4.3, "Updating the jde.ini File"](#)

2.4.1 Understanding the Requirements for JD Edwards EnterpriseOne

As with previous releases of JD Edwards EnterpriseOne, you must install specific versions of the Microsoft Visual Studio runtime libraries or the Visual Studio product itself before you can run the installer for the Development Client. Visual Studio runtime libraries provide the support files for C and C++ based programs to run. The Visual Studio product includes these runtime libraries as well as a compiler and linker which can be used to build JD Edwards EnterpriseOne installable packages.

JD Edwards EnterpriseOne Tools (foundation) and Applications (business functions) are built with different releases of Visual Studio; hence, they each require specific installations of the Visual Studio runtime libraries or product.

- As of the GA release of JD Edwards EnterpriseOne **Tools** Release 9.2.0, the required version of Visual Studio runtime libraries is 2010. (The Microsoft Visual Studio product is not needed for the JD Edwards EnterpriseOne Tools Release because customers do not rebuild this JD Edwards EnterpriseOne component.)

- As of the GA release of JD Edwards EnterpriseOne **Applications** Release 9.2, the required version of Visual Studio runtime libraries and product is 2013.

Tip: The net of this discussion is that for a typical Development Client installation, both versions of Visual Studio runtime are required at a minimum (VS/2010 and VS/2013). Further, if package builds will occur on the Development Client then the full product version of Visual Studio 2013 and the freely-available Windows SDK are also required.

For the Tools Release 9.2.3, Visual Studio 2017 runtime libraries are required.

You should check Oracle Certifications for the most current specifications for supported releases of Visual Studio for your Tools Release and Applications Release. Refer to [Section 1.2, "Certifications"](#) in this guide.

The Visual Studio runtime libraries (which are partial products with no development tools) for each supported release of Visual Studio are freely available from the Microsoft Download Center. The complete Visual Studio product (which includes the runtime and the compiler and associated tools) must be purchased and licensed from Microsoft.

Note: Only 32-bit versions of Visual Studio runtime libraries are supported for use with JD Edwards EnterpriseOne. Note these Microsoft product attributes:

- The Microsoft Download Center designates 32-bit versions of software with the term **x86**.
 - The Visual Studio product comes with both 32- and 64-bit versions of the runtime libraries.
 - When searching the Microsoft Download Center for a particular product, you may need to use these search terms: **Visual Studio** or **Visual C++**.
-

2.4.2 Obtaining and Installing Visual Studio and the Microsoft Windows SDK

You should only install Microsoft Visual Studio on operating systems supported both by Microsoft Visual Studio and Oracle JD Edwards. Refer to the Oracle Certification system on support.oracle.com for the latest service packs, releases, and operating systems supported with Visual Studio (the information will be under the JD Edwards EnterpriseOne Deployment Server and JD Edwards EnterpriseOne Development Client products).

As of the GA of Tools and Applications Release 9.2.3 these links and navigation to the microsoft.com web site are valid:

Visual Studio 2010 Redistributable

Microsoft.com > Downloads > Search > Microsoft Visual C++ 2010 Redistributable Package (x86)

<http://www.microsoft.com/en-us/download/details.aspx?id=5555>

Tip: Some Microsoft Windows systems may already have the Visual Studio 32-bit 2010 redistributable installed, either manually or by some other Microsoft product installation. Users can determine if this version already exists in Control Panel > Programs and Features > Microsoft Visual C++ 2010 x86 Redistribution.

Visual Studio 2013 Redistributable

Microsoft.com > Downloads > Search > Microsoft Visual C++ 2013 Redistributable Package (x86)

<http://www.microsoft.com/en-us/download/details.aspx?id=40784>

Visual Studio 2013 Download and Windows SDK

Note: You need the Visual Studio 2013 download, which is a licensed product from Microsoft, if you plan on building packages on the Development Client. An additional package build requirement is the Windows SDK, which is a freely available program from Microsoft.

Visual Studio Download

Microsoft.com > Downloads > Search > Microsoft Visual C++ 2013 Download

<https://www.visualstudio.com/en-us/downloads/download-visual-studio-vs.aspx>

Windows Software Development Kit for Windows 8.1

Note: Although the SDK download is labeled as Microsoft Windows 8.1, the same download is applicable to both Windows Client 8.1 and Windows Server 2012. This SDK is specifically required for any Windows-based machine that is building JD Edwards EnterpriseOne packages.

Microsoft.com > Downloads > Search > Windows Software Development Kit for Windows 8.1

<https://msdn.microsoft.com/en-us/windows/desktop/bg162891.aspx>

Visual Studio 2017 Redistributable

All downloads > Other Tools and Frameworks > Microsoft Visual C++ Redistributable for Visual Studio 2017.

<https://visualstudio.microsoft.com/downloads/>

Visual Studio 2017 Download and Windows SDK

Note: You need the Visual Studio 2017 and Windows SDK 10 download, which are licensed products from Microsoft, if you plan on building packages on the Development Client.

Visual Studio Download

<https://visualstudio.microsoft.com/downloads/>

Windows Software Development Kit for Windows 10 Version 10.0.15063

<https://developer.microsoft.com/en-us/windows/downloads/sdk-archive>

2.4.3 Updating the jde.ini File

If you have installed Visual Studio 2013 or Visual Studio 2017 in order to build packages on the Development Client, ensure this section and setting exists and is correct in the `jde.ini` file on the Development Client.

```
[JDE(CG)]  
VisualStudioVersion=2013
```

Or

```
VisualStudioVersion=2017
```

No other settings for Visual Studio need to be applied in the `jde.ini` file.

3

Installing the Application Server: Oracle WebLogic Server 12.1.3 and 12.2.1

The Web Client part of the EnterpriseOne Development Client requires that an application server is installed. An application server processes requests from a browser and returns results to the browser to be displayed to the user.

The Development Client supports these application servers from Oracle and IBM:

- Oracle WebLogic Server (abbreviated WLS)
- IBM WebSphere Express Server (abbreviated WAS)
- IBM WebSphere Server for Developers (also abbreviated WAS)
- IBM WebSphere Application Server (also abbreviated WAS)

This chapter describes how to install WebLogic Server. These procedures must be followed only if you are using WebLogic Server for the WLSH4A web client.

Note: You can skip this chapter if you are using the WebSphere Express, WebSphere for Developers, or WebSphere 9.0 for the WASH4A web client. The installation of all these products is described in the next chapter of this guide.

This document covers installations for WebLogic Server version 12c (also known as 12.1.3 and 12.2.1). Follow the Oracle Certifications to determine which version is supported for your particular environment.

Caution: These instructions apply **ONLY** to a JD Edwards EnterpriseOne Development Client. They do **NOT** apply to other JD Edwards EnterpriseOne machines that use WebLogic Server, such as the Deployment Server, Server Manager, HTML Server, or browsers connected to the HTML server.

This chapter contains the following tasks:

- [Section 3.1, "Installing a JDK for WebLogic Server"](#)
- [Section 3.2, "Obtaining WebLogic Server"](#)
- [Section 3.3, "Installing WebLogic Server"](#)

3.1 Installing a JDK for WebLogic Server

Before you can install WebLogic Server itself, you must have a Java Development Kit (JDK) installed on your Development Client. You should always refer to the Oracle Certifications for the current specifications for the specific use case of WebLogic Server and its required JDK on the JD Edwards EnterpriseOne Development Client.

Tip: **WebLogic Server 12.1.3.** When downloading the JDK installer for WebLogic Server 12.1.3, choose the installer for **Windows x86** as this is the installer that contains the requisite 32-bit JDK.

Tip: **WebLogic Server 12.2.1.** When downloading the JDK installer for WebLogic Server 12.2.1, choose the installer for **Windows x64** as this is the installer that contains the requisite 64-bit JDK.

For example, if the supported version of the JDK is 1.8.x, follow these steps to determine if you have a 32-bit 1.8.x JDK:

1. Go to Control Panel > Programs and Features.
2. Scan the list of installed programs for this listing:

Java SE Development Kit x Update x

where 'x' can be any number.

The terminology for the version of Java JDKs is not consistent between versions of Java. The important things that must be present in the installed program description are defined by these rules:

- If **64-bit** is not stated, the JDK is a 32-bit version.
- An installed JDK is designated with this text:

Java SE Development Kit

- The first number of the JDK version (for example, the number **1** in 1.8.0.x) is dropped in the Programs and Features list.
- In the JDK version 1.8.0.x, the **x** is specified as the Update number in the Programs and Features list.

As an example of the above rules, a 32-bit 1.8.0.60 JDK will be designated as:

Java SE Development Kit 8.0 Update 60

3. If the correct JDK is not installed, you must download and install one.

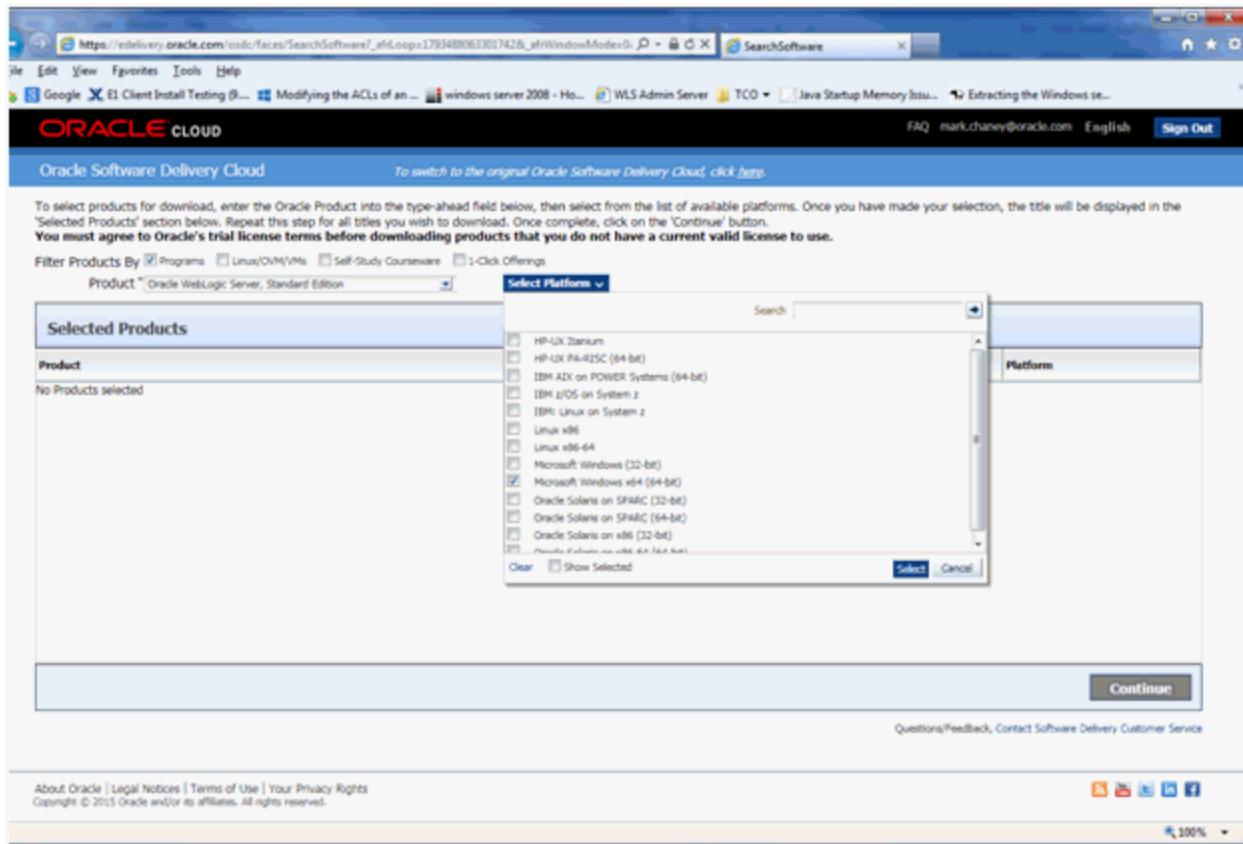
3.2 Obtaining WebLogic Server

Use this procedure to download the WebLogic Server installer from the Oracle Software Delivery Cloud.

1. Go to this web site:
<https://edelivery.oracle.com>
2. Review the site usage license agreement and click the **Accept** button to continue.

The screenshot shows a web browser window for the Oracle Software Delivery Cloud. The URL in the address bar is https://edelivery.oracle.com/oudc/faces/SearchSoftware?_afLoop=3793488063305742&_afrWindowMode=0. The page title is "SearchSoftware". The main content area is titled "Selected Products" and contains a table with one row, which is empty. Below the table, there is a "Continue" button. At the bottom of the page, there are links for "About Oracle", "Legal Notices", "Terms of Use", and "Your Privacy Rights", along with copyright information: "Copyright © 2015 Oracle and/or its affiliates. All rights reserved." There are also social media sharing icons and a zoom control.

3. On Oracle Software Delivery Cloud, in the **Filter Products By** list of checkboxes, be sure **Programs** is checked.
4. In the **Product** field, enter this string:
Oracle WebLogic Server, Standard Edition



5. On Oracle Software Delivery Cloud, in the **Select Products** pulldown, select this checkbox:
Microsoft Windows x64 (64-bit)
6. Click the **Continue** button.

The screenshot shows a web browser window for the Oracle Software Delivery Cloud. The URL is https://edelivery.oracle.com/osdc/faces/SearchSoftware?_afrLoop=1793488063305242&_afrWindowMode=0. The page displays a table of software releases. A checkbox labeled 'Available Release' is checked next to the entry for 'Oracle WebLogic Server Standard Edition 12.1.0.0 for Microsoft Windows x64 (64-bit), 18 files'. The table has columns for Selected Product, Applicable Terms & Restrictions, Size, and Published Date. The product listed is 'Oracle WebLogic Server, Standard Edition', the terms are 'Oracle Standard Terms and Restrictions', the size is '11.6 GB', and the date is 'Jun 08, 2015'. At the bottom of the page, there are navigation links like '< Back' and 'Continue', and a footer with links to About Oracle, Legal Notices, Terms of Use, Your Privacy Rights, and copyright information. There are also social media sharing icons and a zoom control.

<input checked="" type="checkbox"/> Available Release	Selected Product	Applicable Terms & Restrictions	Size	Published Date
> <input checked="" type="checkbox"/> Oracle WebLogic Server Standard Edition 12.1.0.0 for Microsoft Windows x64 (64-bit), 18 files Select Alternate Release...	Oracle WebLogic Server, Standard Edition	Oracle Standard Terms and Restrictions	11.6 GB	Jun 08, 2015

7. Expand the entry **Oracle WebLogic Server Standard Edition** by clicking the arrow to the left of the release name.
8. Click the **Continue** button.

The screenshot shows a web browser window for the Oracle Software Delivery Cloud. The URL is https://edelivery.oracle.com/oddc/Faces/SearchSoftware?_afrLoop=1793488063301742&_afrWindowMode=0. The page title is "SearchSoftware". The main content area displays a table of software releases. A checkbox labeled "Available Release" is checked, and a sub-section titled "Select Alternate Release..." lists several Oracle products. The first item in this list, "Oracle WebLogic Server Standard Edition 12.1.3.0.0 for Microsoft Windows x64 (64-bit), 18 files", has its checkbox checked. The table columns are "Selected Product", "Applicable Terms & Restrictions", "Size", and "Published Date". The selected product row shows "Oracle WebLogic Server, Standard Edition", "Oracle Standard Terms and Restrictions", "11.6 GB", and "Jun 08, 2015". Below the table is a "Continue" button. At the bottom of the page, there are links for "About Oracle | Legal Notices | Terms of Use | Your Privacy Rights" and copyright information. The page also includes social media sharing icons and a zoom control.

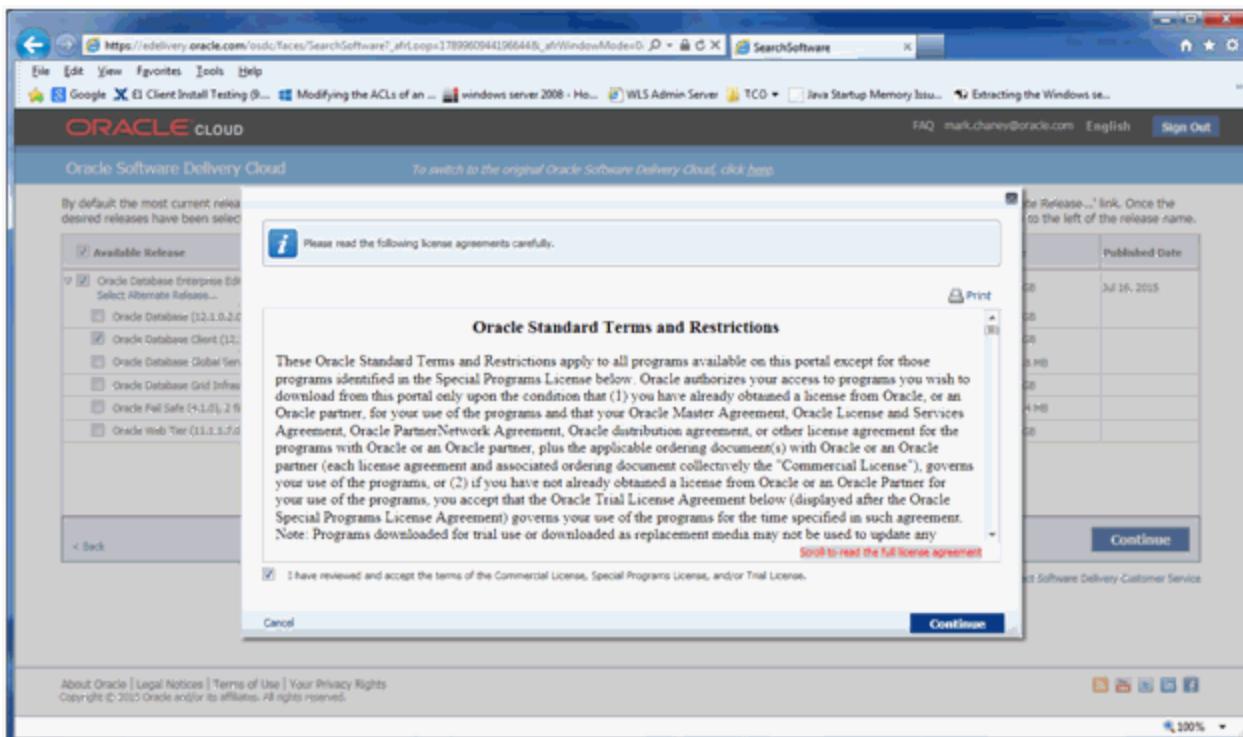
<input checked="" type="checkbox"/> Available Release	Selected Product	Applicable Terms & Restrictions	Size	Published Date
<input checked="" type="checkbox"/> Oracle WebLogic Server Standard Edition 12.1.3.0.0 for Microsoft Windows x64 (64-bit), 18 files Select Alternate Release...	Oracle WebLogic Server, Standard Edition	Oracle Standard Terms and Restrictions	11.6 GB	Jun 08, 2015
<input type="checkbox"/> Oracle Coherence (12.1.3.0.0), 2 files			966.5 MB	
<input type="checkbox"/> Oracle Fusion Middleware 12c Infrastructure (12.1.3.0.0), 1 file			1.5 GB	
<input type="checkbox"/> Oracle GoldenGate Verdanta (12.1.3.0.0), 1 file			415.0 MB	
<input type="checkbox"/> Oracle HTTP Server (12.1.3.0.0), 6 files			3.8 GB	
<input type="checkbox"/> Oracle JDBK (1.7.0_45), 4 files			275.5 MB	
<input type="checkbox"/> Oracle JDeveloper (12.1.3.0.0), 1 file			2.7 GB	
<input type="checkbox"/> Oracle WebLogic Server (12.1.2.0.0), 1 file			880.0 MB	
<input checked="" type="checkbox"/> Oracle WebLogic Server (12.1.3.0.0), 1 file			880.3 MB	
<input type="checkbox"/> Oracle WebLogic Server Plug-in (12.1.3.0.0), 1 file			288.9 MB	

[Continue](#)

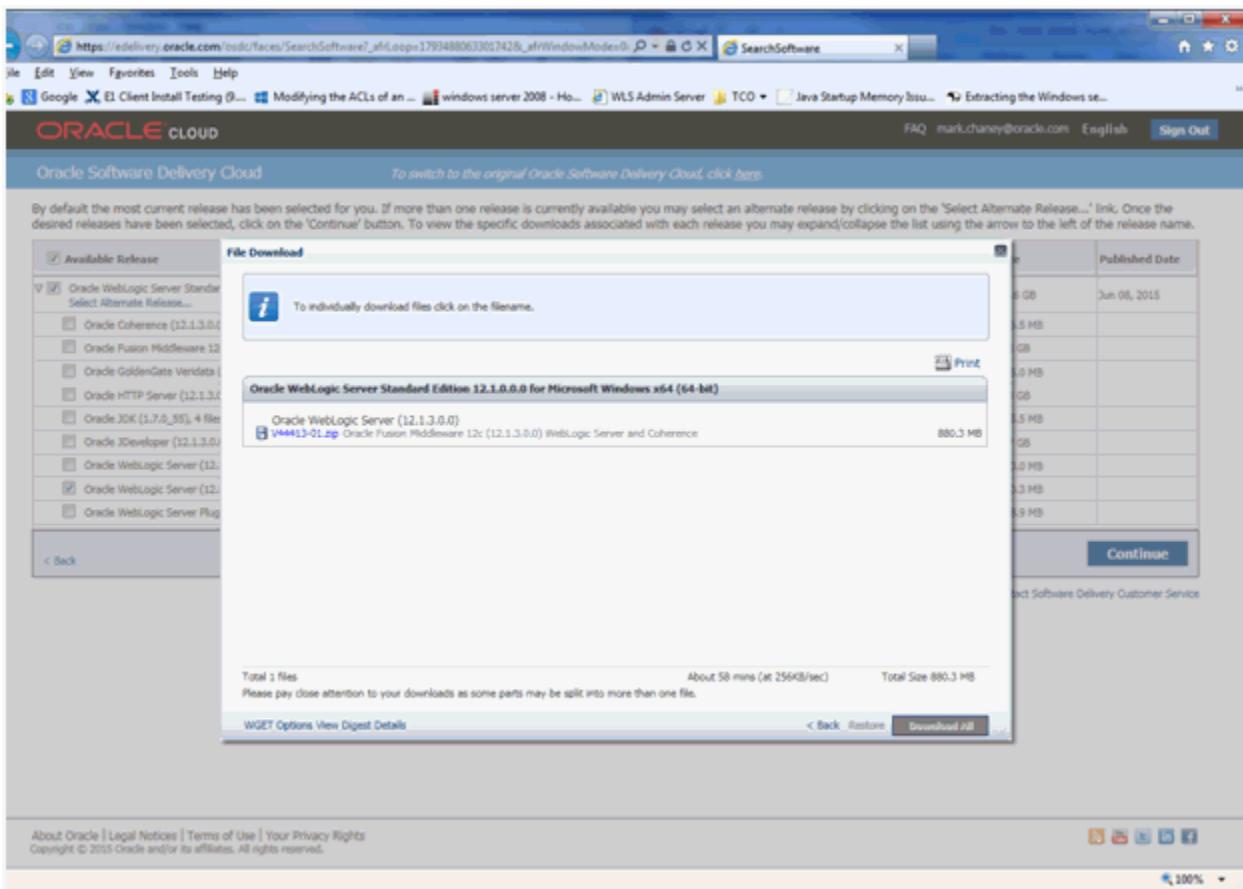
Questions/Feedback, Contact Software Delivery Customer Service

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9. For Available Release, turn off all the checkboxes except for the version of the Oracle WebLogic Server that is listed in the Oracle Certifications for use with the JD Edwards EnterpriseOne Development Client.
10. Click the **Continue** button.



11. On Oracle Standard Terms and Restrictions, read the license agreement, click the checkbox if you accept, and click the **Continue** button.



12. On the File Download screen, click the link for the Oracle WebLogic Server.
13. Save the downloaded file to your computer.
14. Extract the contents of the downloaded file.

For WebLogic Server 12.1.3

The download should consist of this file or a similar version number:

fmw_12.1.3.0.0.jar

For WebLogic Server 12.2.1

The download should consist of this file or a similar version number:

fmw_12.2.1.0.0_wls.jar

3.3 Installing WebLogic Server

Caution: Prior to installing WebLogic Server, ensure an appropriate JDK is installed. For details, refer to the preceding section entitled: [Section 3.1, "Installing a JDK for WebLogic Server"](#).

This procedure assumes you followed the instructions in the previous section of this chapter for obtaining the WebLogic installer and that you extracted the download.

Note: The following installation screen shots are captured during installation of WebLogic Server 12.1.3. In case of WebLogic Server 12.2.1 installation, the screens will be similar with different WebLogic Server version.

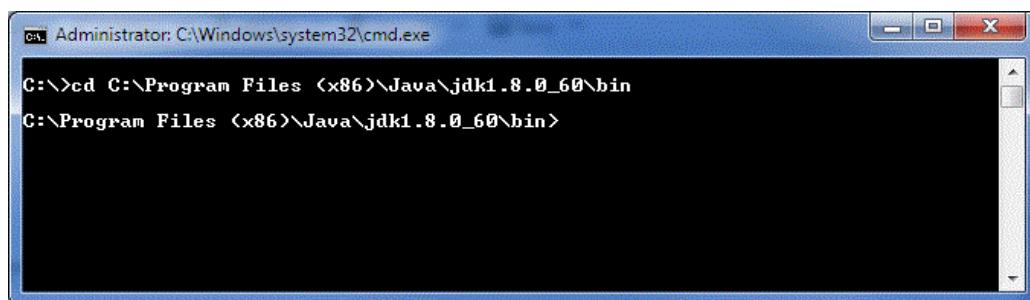
To install WebLogic Server on the Development Client:

1. Open a command prompt window with **Run as Administrator**.
2. Run this command in the command prompt window to change directory:

cd <Java_installation_dir>\bin

where <Java_installation_dir> is the directory where you installed the JDK.

For example:



For more details on supported versions of the JDK, refer to the section of this chapter entitled: [Section 3.1, "Installing a JDK for WebLogic Server"](#).

3. Run this command in the command prompt window to launch the WebLogic Server installer:

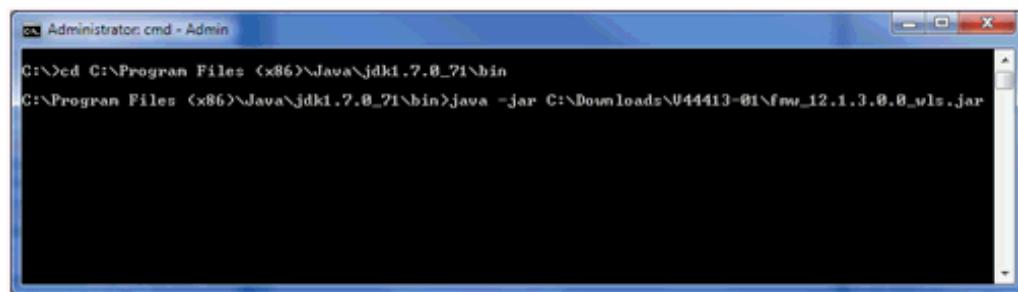
For WebLogic Server 12.1.3:

```
java -jar <path_to_wls_file>\fmw_12.1.3.0.0_wls.jar
```

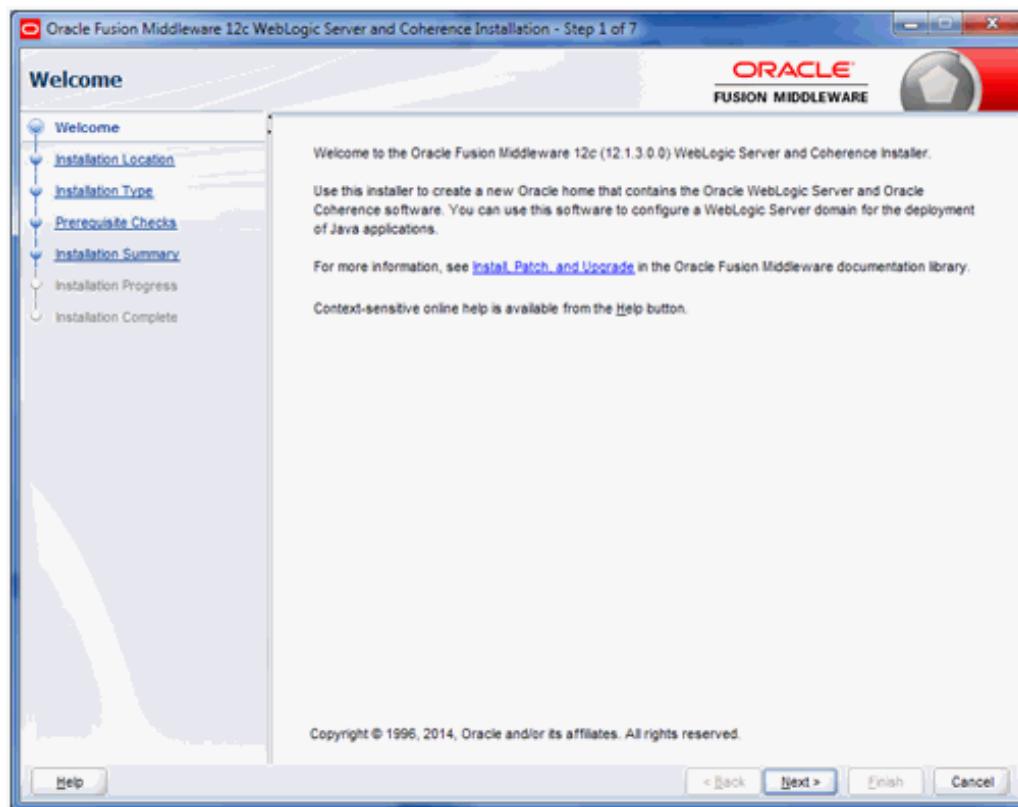
For WebLogic Server 12.2.1:

```
java -jar <path_to_wls_file>\ffmw_12.2.1.0.0_wls.jar
```

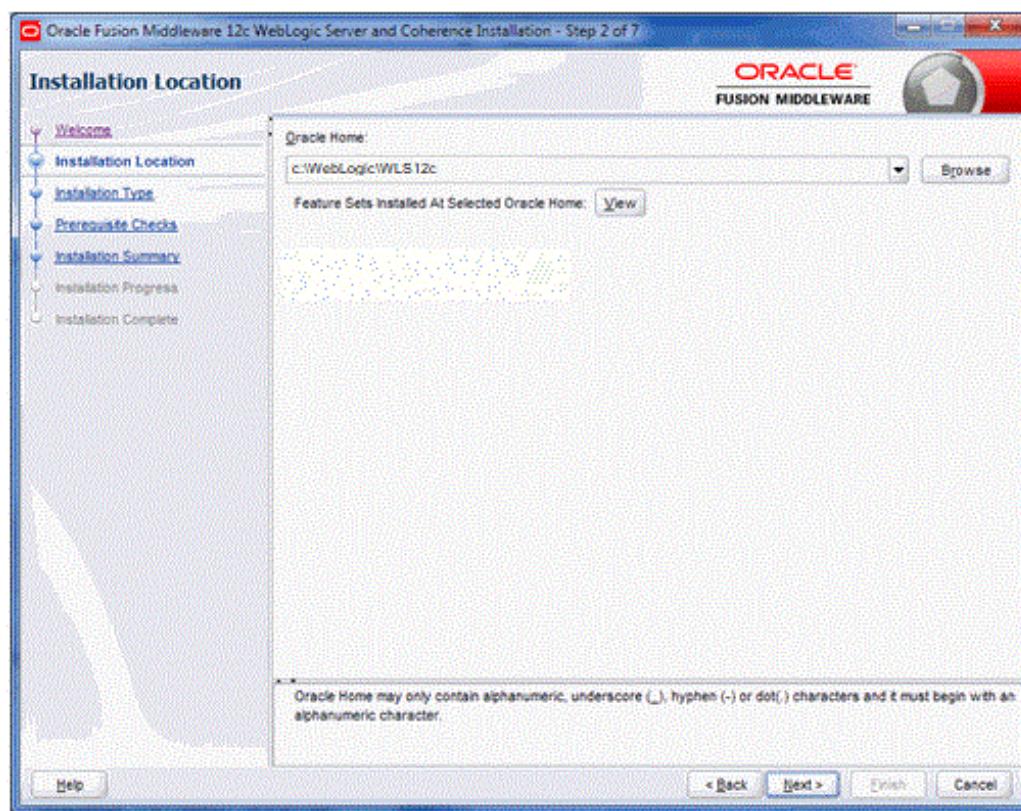
For example:



The Java command executes and displays the Welcome screen for the Oracle Fusion Middleware.



4. On Welcome, click the **Next** button.



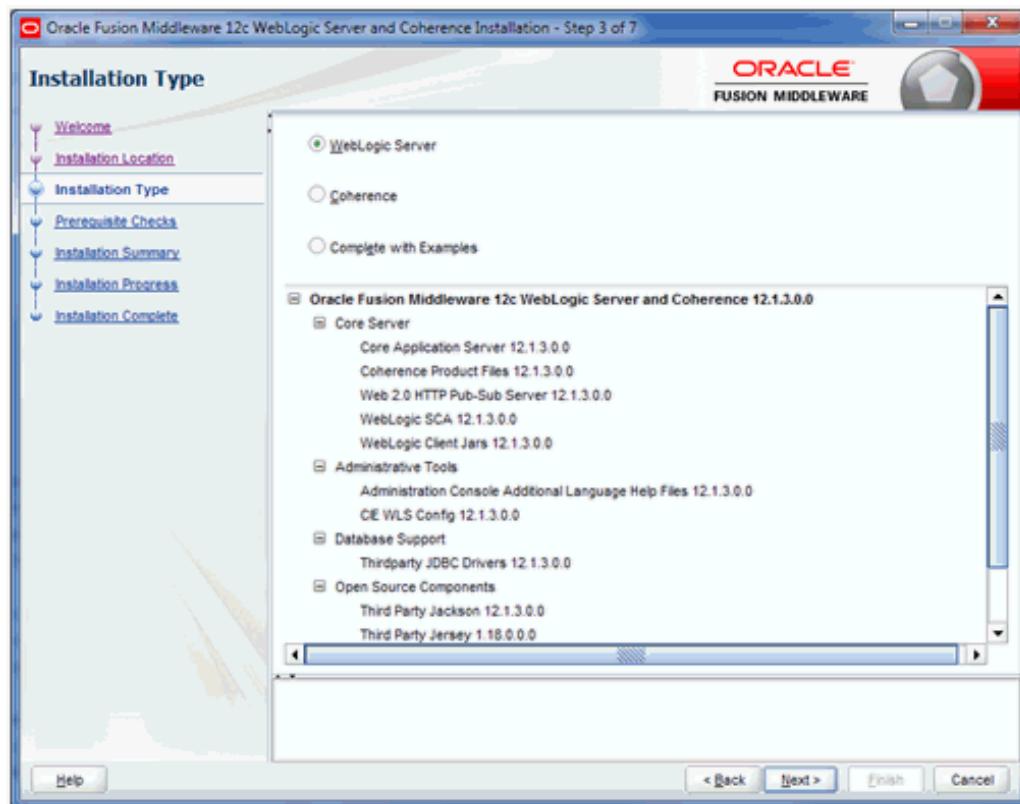
5. On Installation Location, in the *Oracle Home* field, enter or browse to a path into which you want to install WebLogic Server.

Important:

Oracle recommends that you install WebLogic into its own root directory and not into any other Oracle base directory used by another Oracle product, such as c:\ORACLE. For example, you should specify a directory such as c:\WebLogic\WLS12c.

Note: You can choose any install location; however, using a location that contains "space" characters in the path may cause problems.

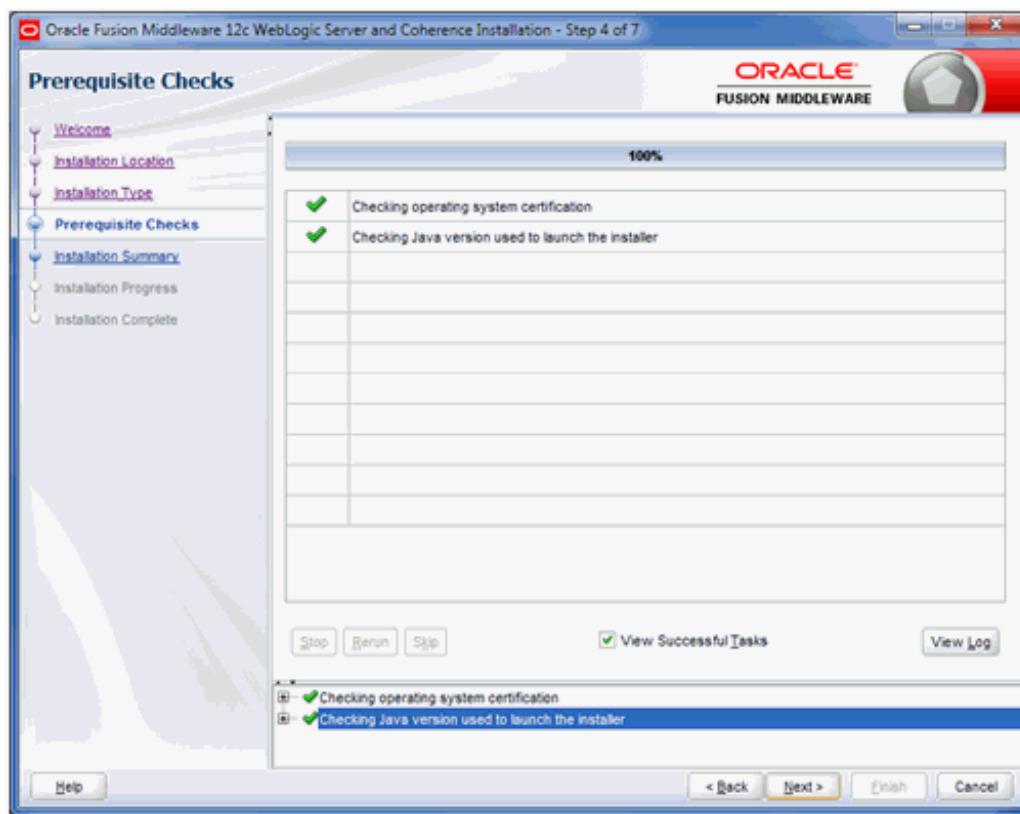
6. Click the **Next** button.



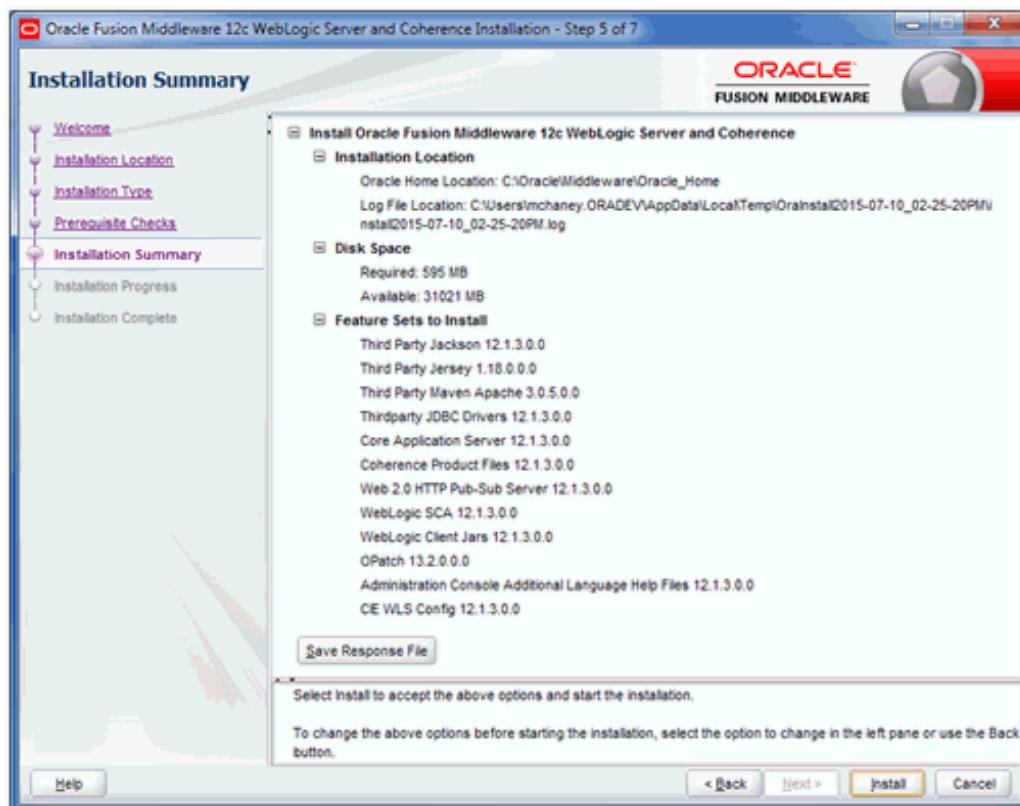
7. On Installation Type, select this radio button:

WebLogic Server

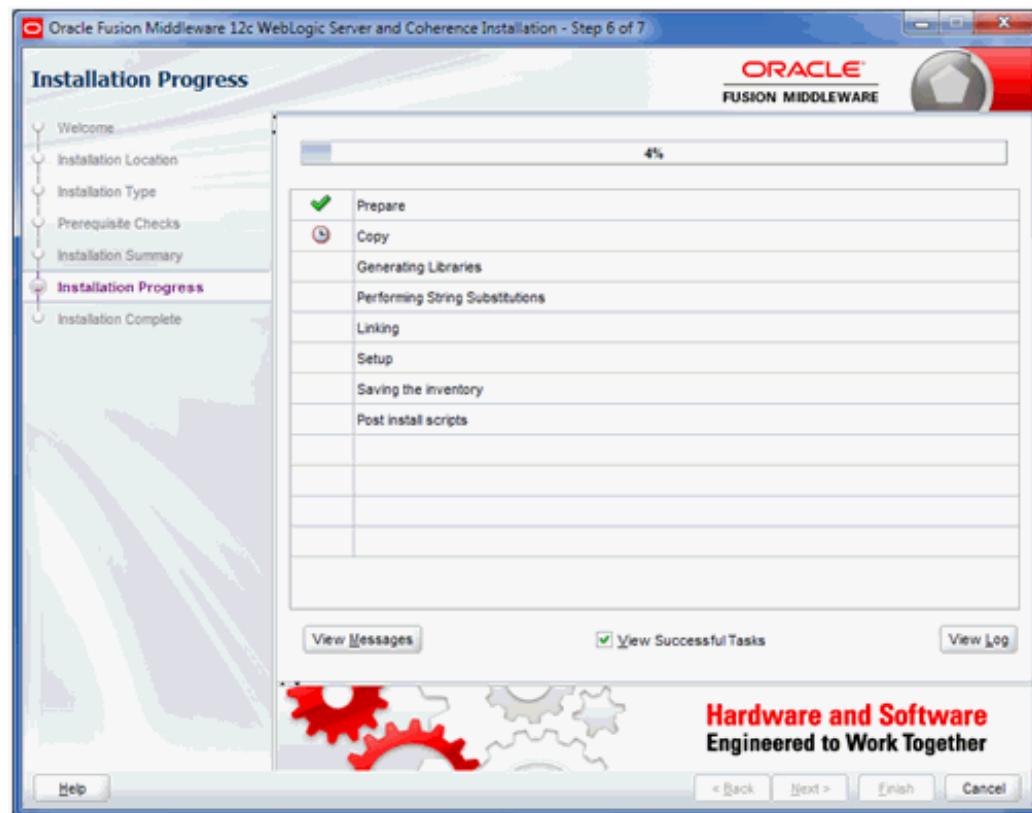
8. Click the **Next** button.



9. On Prerequisite Checks, verify the installer checks complete successfully.
10. Click the **Next** button.



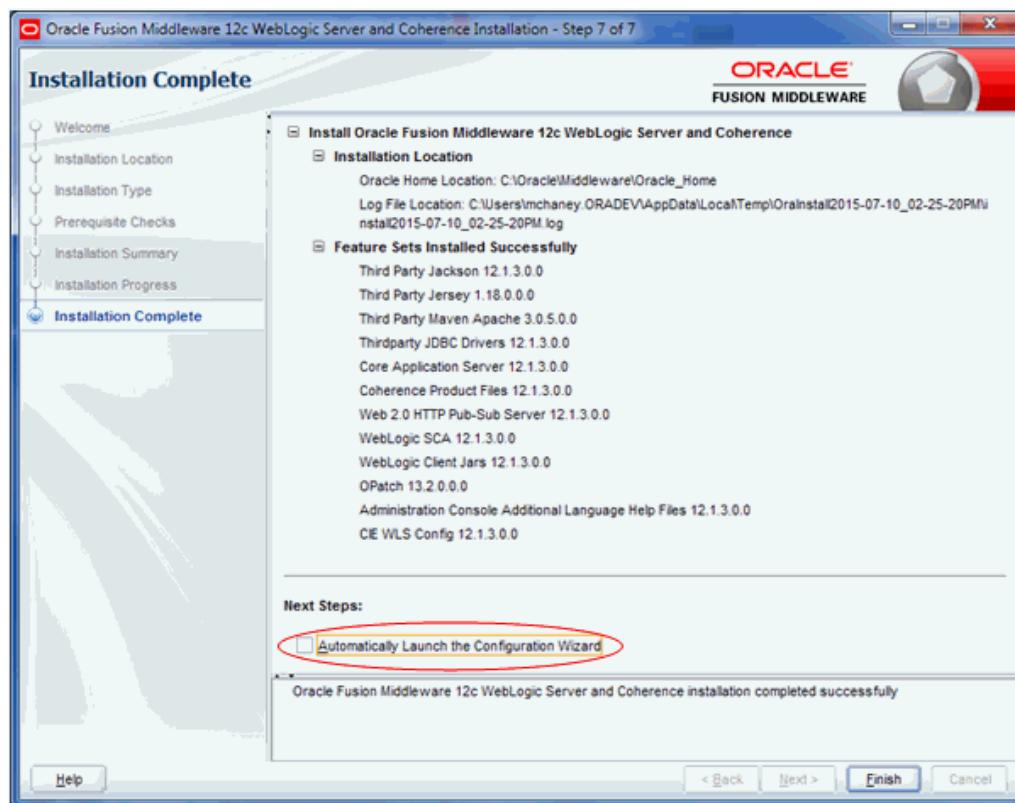
11. On Installation Summary, review the summary information.
12. Click the Next button.



The installer displays the Installation Progress as a percentage in the progress bar.



13. On Installation Progress, the installation is complete when the progress bar indicates 100%.
14. Click the **Next** button.



15. On Installation Complete, turn off this checkbox:

Automatically Launch the Configuration Wizard

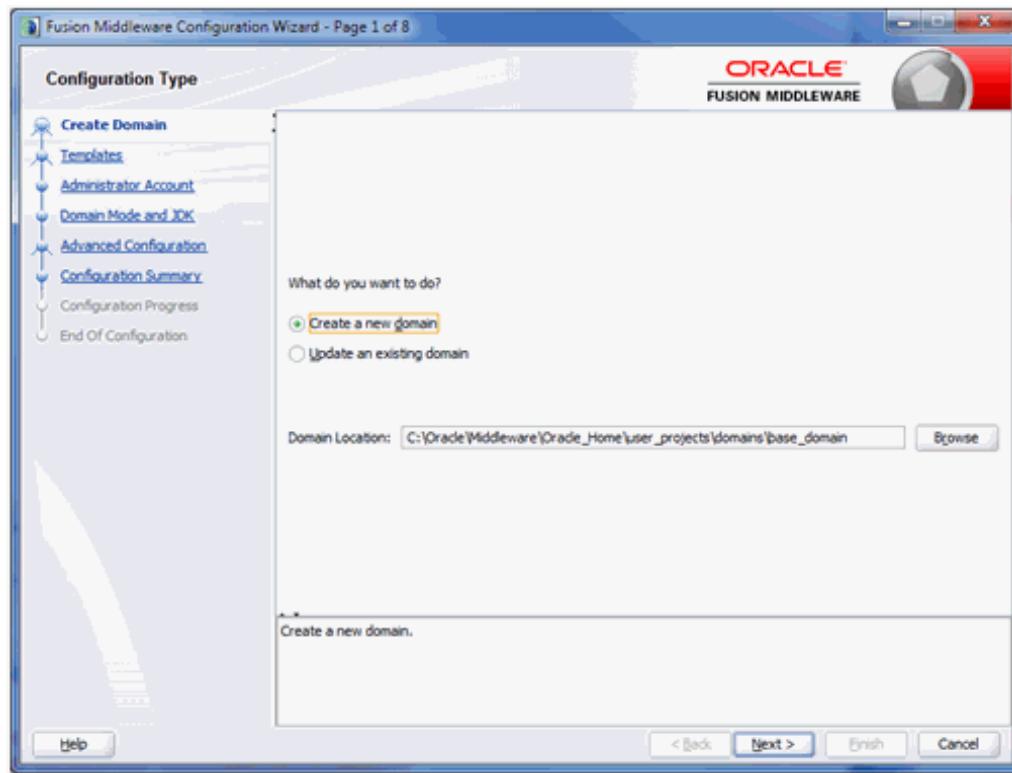
16. Click the **Finish** button.

There is no additional manual configuration of the WebLogic Server. The remainder of the requisite configuration is handled programmatically by the WLSH4A installer.

Note: Troubleshooting. If after you click the **Finish** button you receive the following screen, you did not turn off the checkbox in the previous screen. To proceed you can simply click **Cancel** button to exit.

Note: WebLogic 12.2.1. You must apply a mandatory Opatch after WebLogic Server 12.2.1.1.0 has been successful installed. This is described in the Oracle support document entitled:

**E1: WLS: For JD Edwards EnterpriseOne HTML Server to run
Oracle WebLogic Server 12.2.1.1.0 a Mandatory Patch is Required
(Doc ID 2192375.1)**



4

Installing WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0

The Web Client part of the EnterpriseOne Development Client requires that an application server is installed. An application server processes requests from a browser and returns results to the browser to be displayed to the user.

The Development Client supports these application servers from Oracle and IBM:

- Oracle WebLogic Server (abbreviated WLS)
- IBM WebSphere Express Server (abbreviated WAS)
- IBM WebSphere Server for Developers (also abbreviated WAS)
- IBM WebSphere Application Server (also abbreviated WAS)

This chapter describes how to install WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0. These procedures must be followed only if you are using one of the above WebSphere products for the WASH4A web client.

Note: You can skip this chapter if you are using the Oracle WebLogic Server for the WLSH4A web client. The installation of this product is described in the preceding chapter of this document.

This document covers installations for version 8.5.5 of WebSphere Express and WebSphere for Developers, and version 9.0 of WebSphere Base. Follow the Oracle Certifications to determine which version is supported for your particular environment.

This chapter contains the following tasks:

- [Section 4.1, "Obtaining and Installing the IBM Installation Manager"](#)
- [Section 4.2, "Obtaining and Installing WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0"](#)
- [Section 4.3, "Creating a Profile"](#)
- [Section 4.4, "Switching to a Supported JDK for WebSphere Express or Developer 8.5.5"](#)

4.1 Obtaining and Installing the IBM Installation Manager

WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, and WebSphere 9.0 must be installed using the IBM Installation Manager

1. From the IBM web site, locate and save the download the IBM Installation Manager.
2. Extract the contents of the downloaded file.
3. In the extracted directory, run `install.exe` and follow the prompts to install the IBM Installation Manager.

4.2 Obtaining and Installing WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0

Caution: The installers for WebSphere Express, WebSphere for Developers, and WebSphere Base place data into the registry specifically for the Windows user that is signed into Windows at the time of installation. You *must* sign into Windows using this same user when you install and then run the JD Edwards EnterpriseOne Development and Web Clients.

Note: As described in the preceding section ([Section 4.1, "Obtaining and Installing the IBM Installation Manager"](#)) you must use the IBM Installation Manager to install WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0.

This section discusses these topics:

- [Section 4.2.1, "Obtaining WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0"](#)
- [Section 4.2.2, "Installing WebSphere Express 8.5.5 or WebSphere 9.0"](#)

4.2.1 Obtaining WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0

You can download the installers for WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0 from the IBM web site.

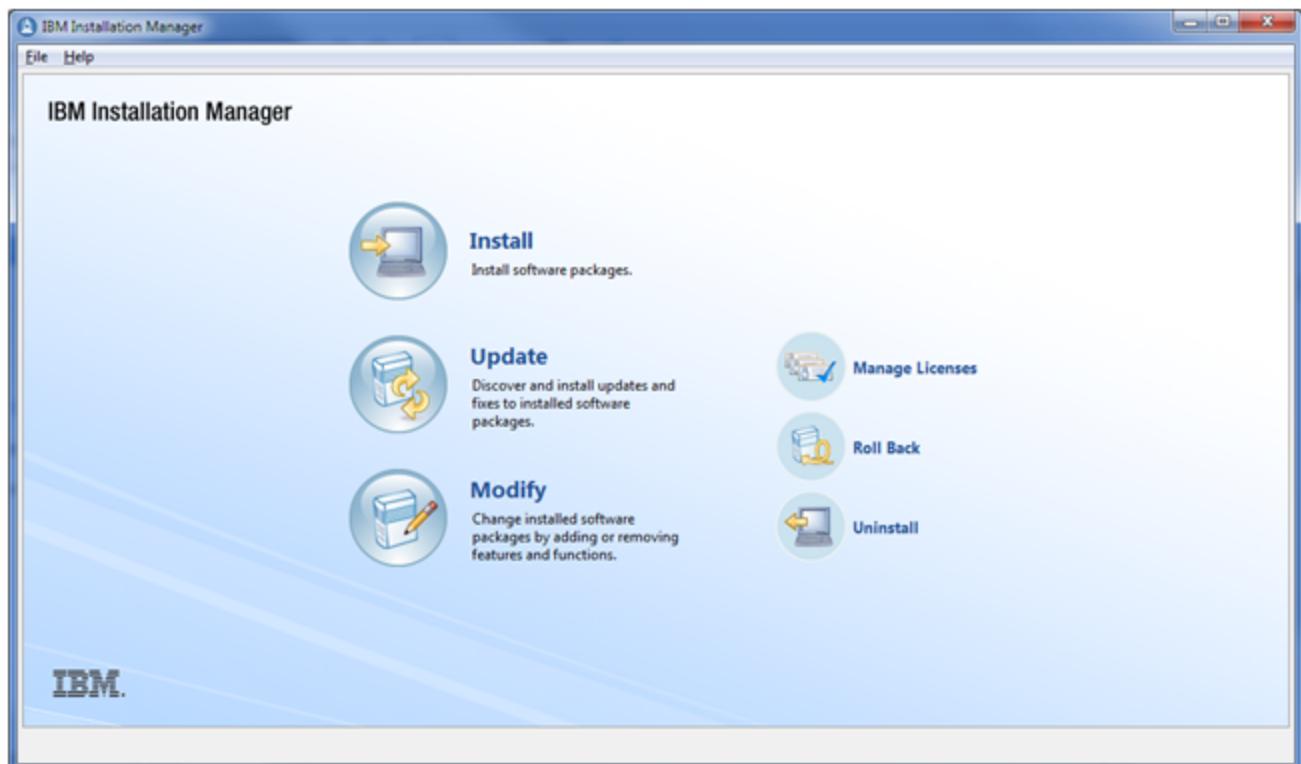
1. From the IBM web site, download the installer for either the Express, Developers, or Base products for WebSphere.
2. Save the downloads.
3. Extract the contents of the downloaded files. If there are multiple files, be sure to select the same target directory when you extract the contents of each file.

4.2.2 Installing WebSphere Express 8.5.5 or WebSphere 9.0

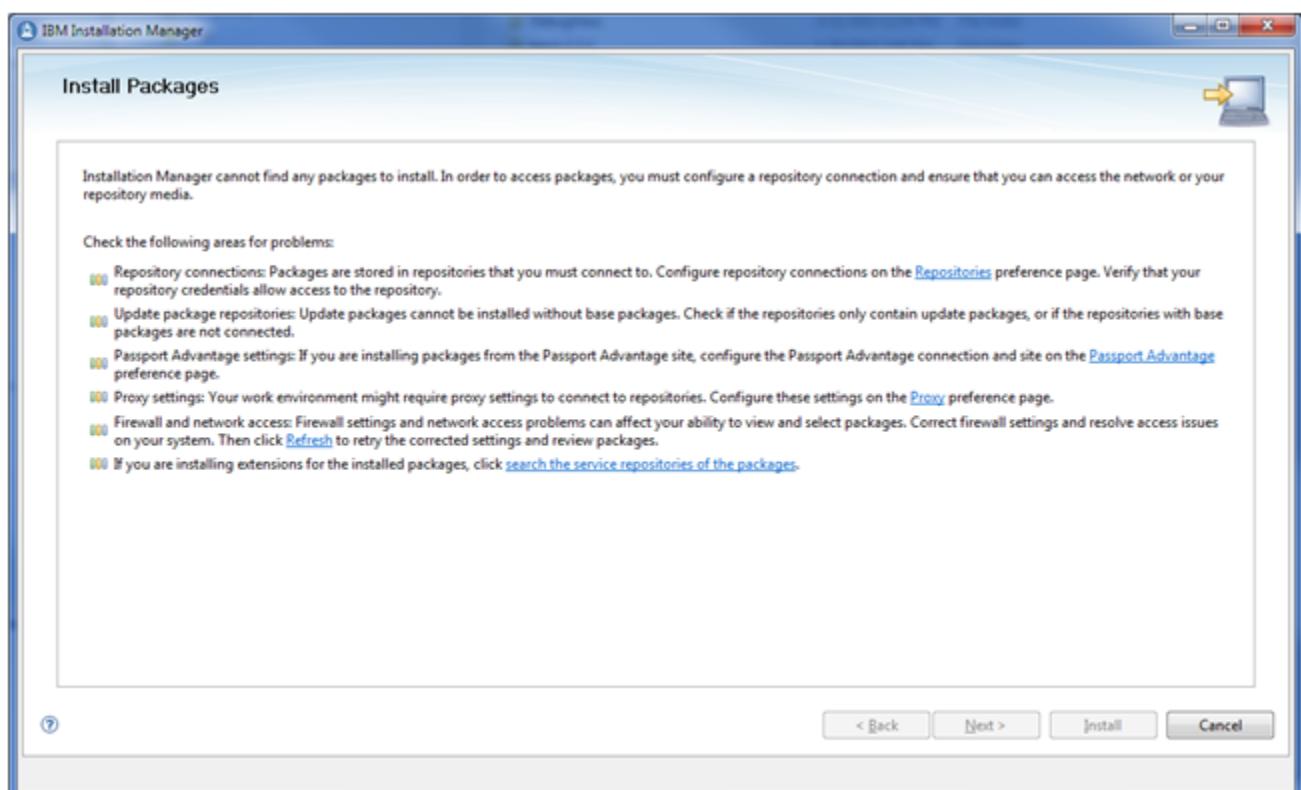
Use this procedure to install WebSphere Express 8.5.5 or WebSphere 9.0.

1. Run the IBM Installation Manager from the directory in which you extracted the components for WebSphere 8.5.5 or WebSphere 9.0 (as described in the preceding

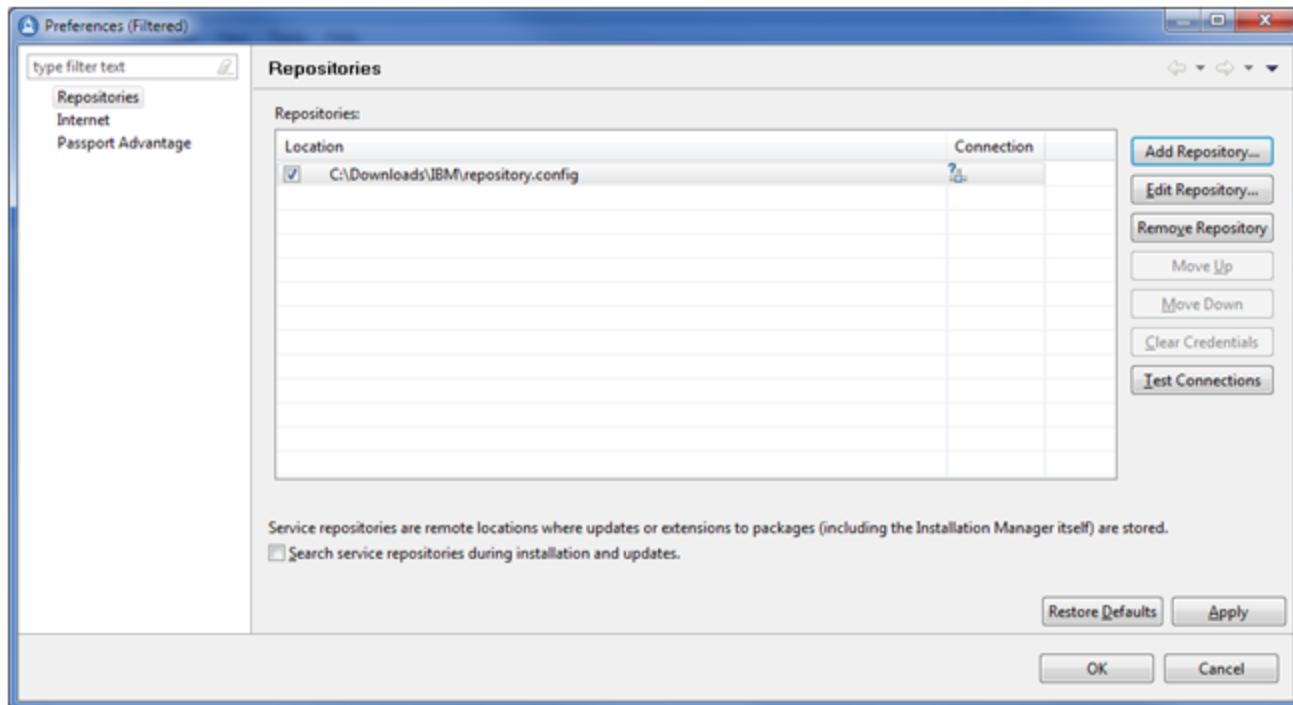
section entitled: [Section 4.2.1, "Obtaining WebSphere Express 8.5.5, WebSphere for Developers 8.5.5, or WebSphere 9.0"](#)).



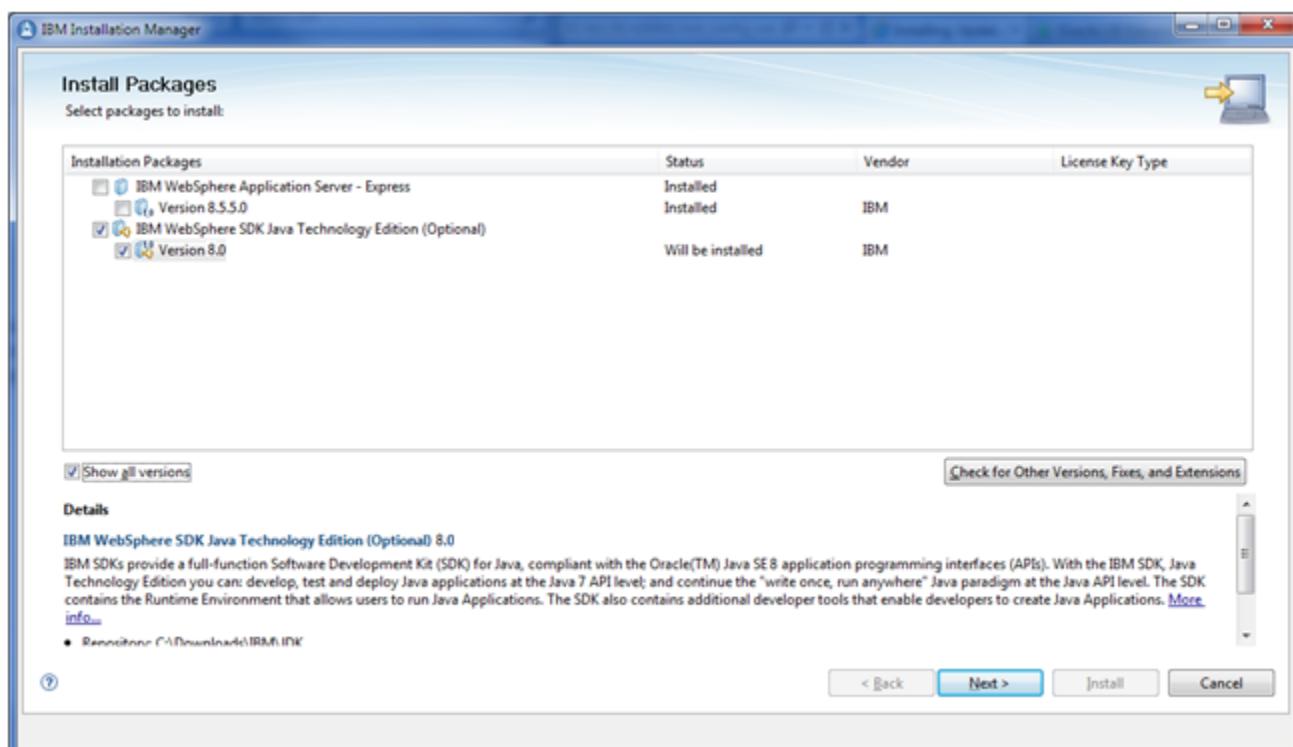
2. On IBM Installation Manager, click **Install**.



3. If you get the above screen, click the **Repositories** link to go to the Repositories preference page.



4. On the Repositories Preferences screen, click the **Add Repository** button and select the checkbox for the location of the repository.config in the directory where you extracted the WebSphere installation files.
5. Click the **OK** button.

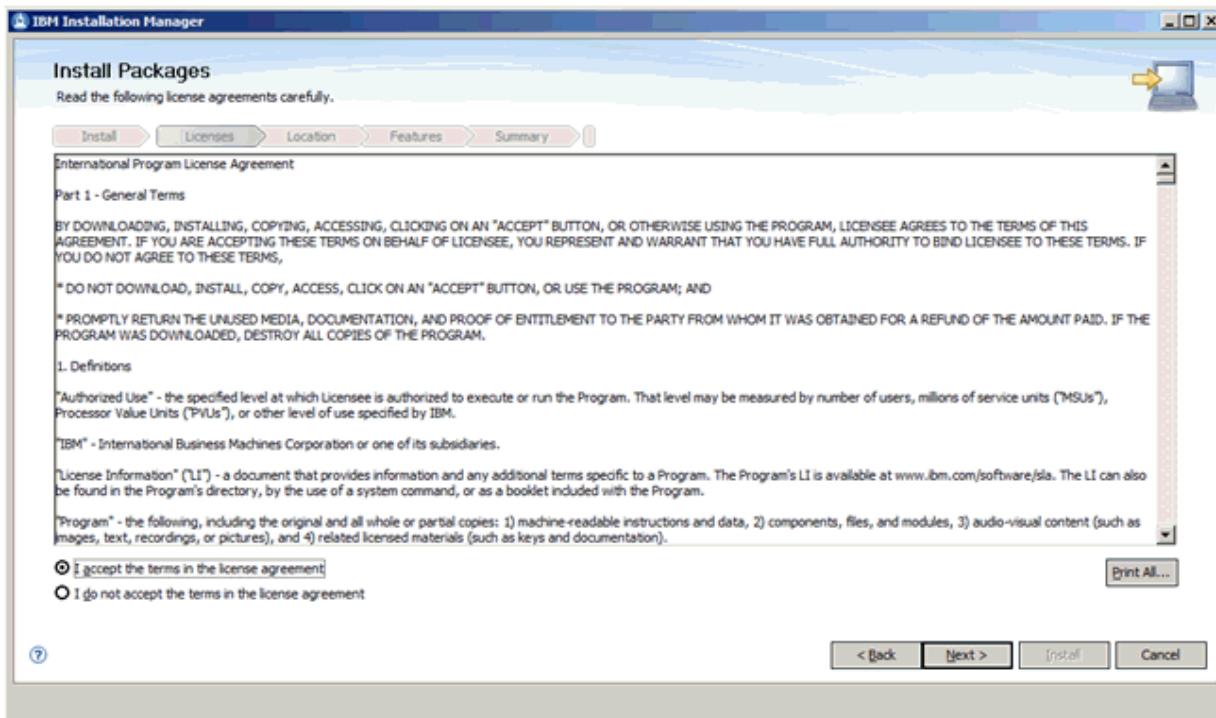


6. On Install Packages, Select Packages to install, turn on the checkbox next to IBM WebSphere Application Server - Express, IBM WebSphere Application Server for Developers, or IBM WebSphere Application Server, whichever is applicable to your implementation.

Note: The WebSphere Express and WebSphere for Developers screens are branded identically.

Note: For WebSphere 9.0, the installer screens shown on this screen will display Version 9.0 instead of Version 8.5.5.0.

7. Click the Next button.

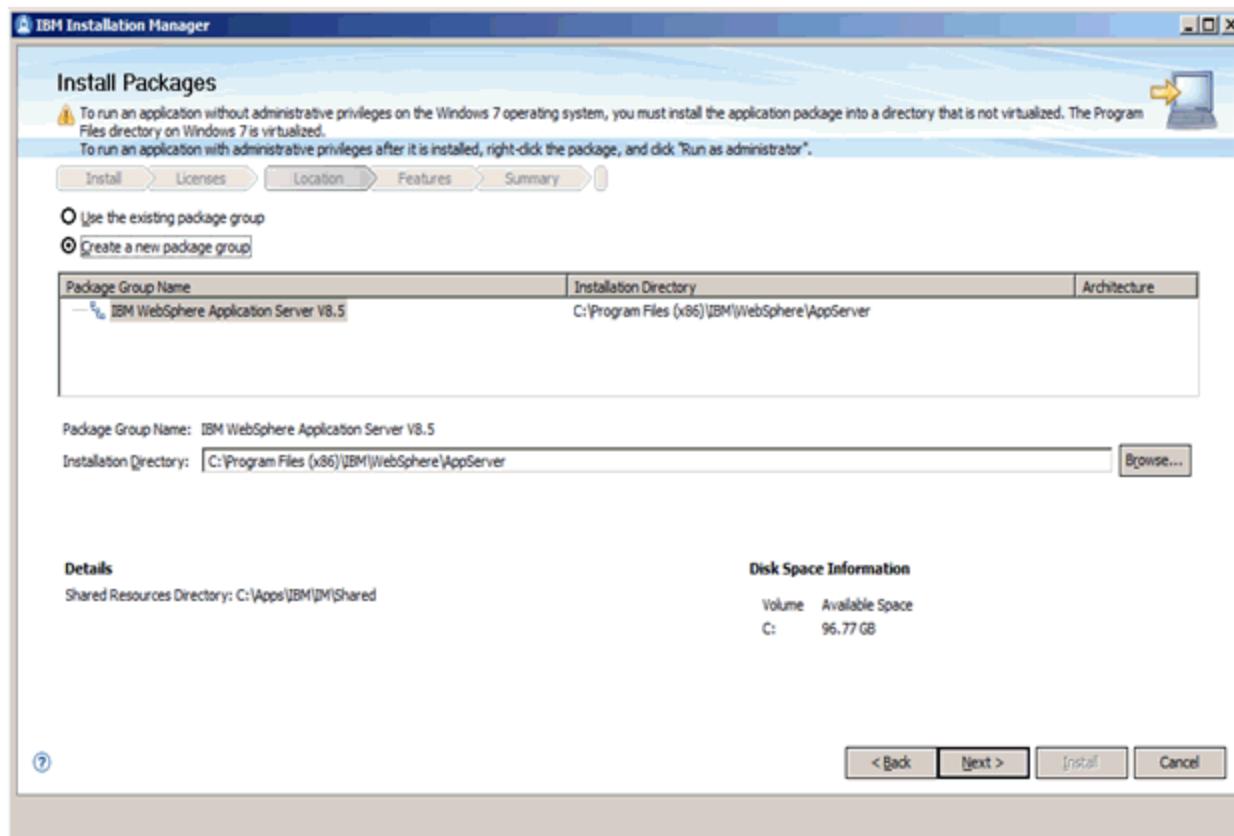


8. On Install Packages, International Program License Agreement, click the radio button to accept the license agreement.

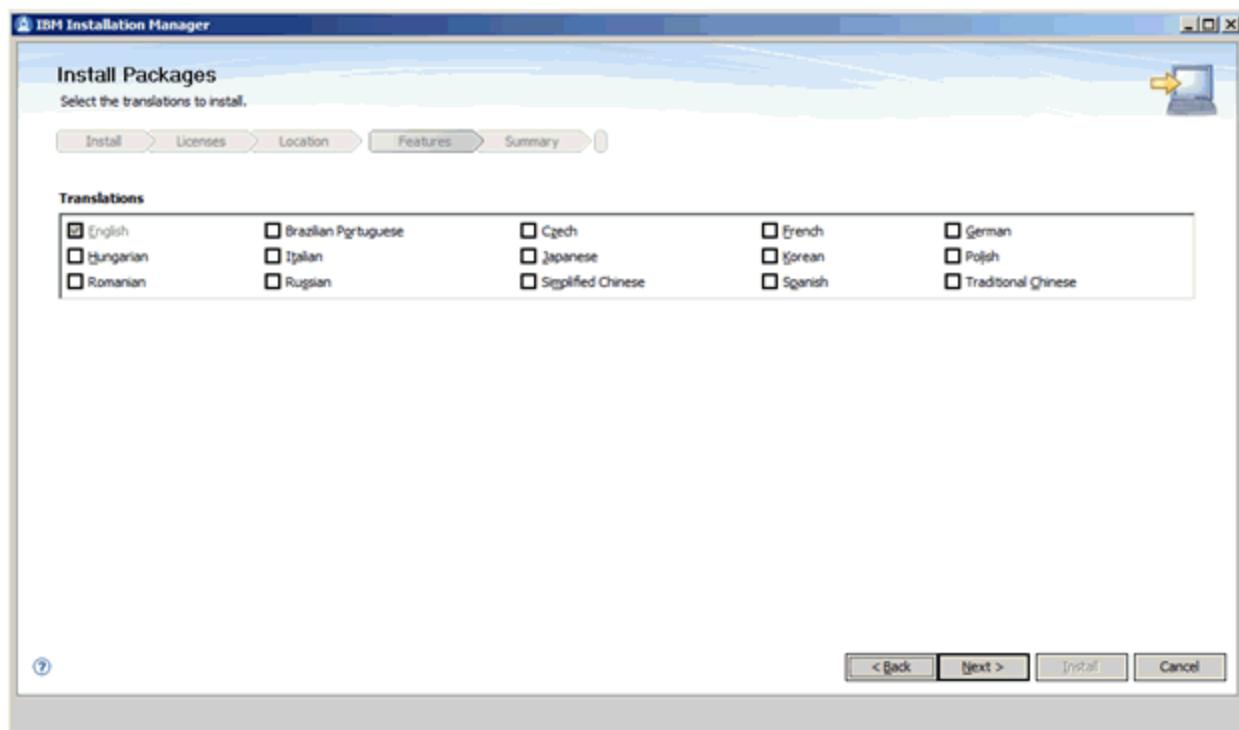
Optionally, you can click the Print All... button to print the license agreement.

If you do not accept the license agreement, the installation process is terminated.

9. Click the Next button.

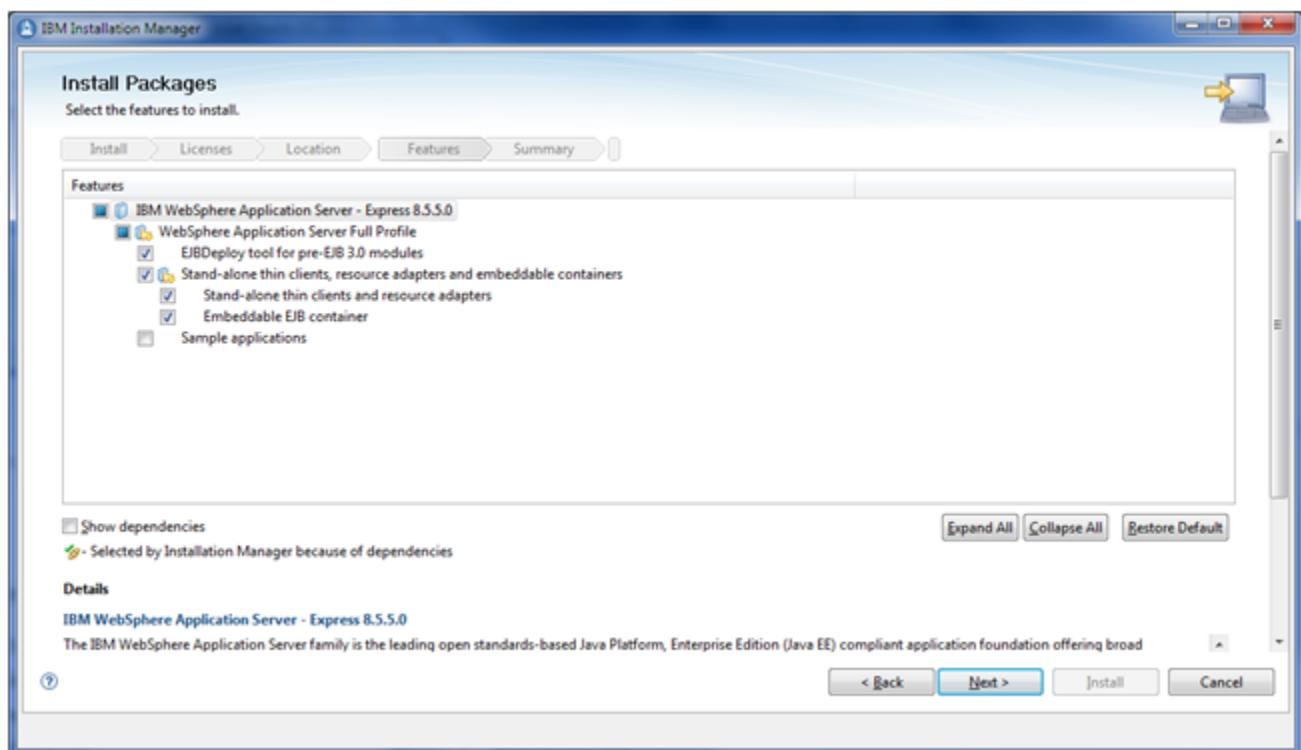


10. On Install Packages, Package Selection, turn on this radio button:
Create a new package group
You can enter an alternate installation directory in the **Installation Directory** field.
11. Click the **Next** button.



12. On Install Packages, Select Translations, select the checkbox(es) next to the language(s) that you want to install.

13. Click the Next button.

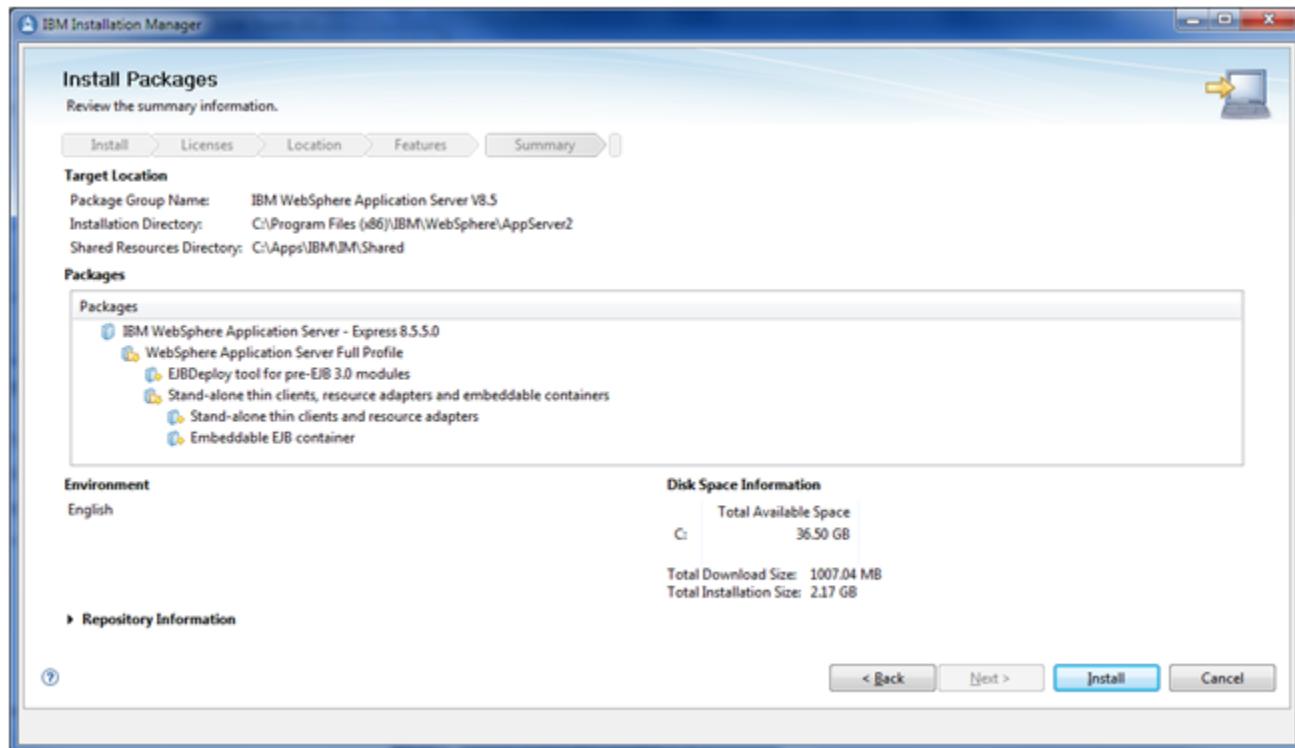


14. On Install Packages, Select Features, you can accept the default values which should include the selection of these features:

- WebSphere Application Server Full Profile
- EJBDeploy tool for pre EJB 3.0 modules
- Stand-alone thin clients, resource adapters and embeddable containers
- Stand-alone thin clients and resource adapters
- Embeddable EJB container

Note: For WebSphere 9.0, the installer screens shown on this screen will display Version 9.0 instead of Version 8.5.5.0.

15. Click the **Next** button.



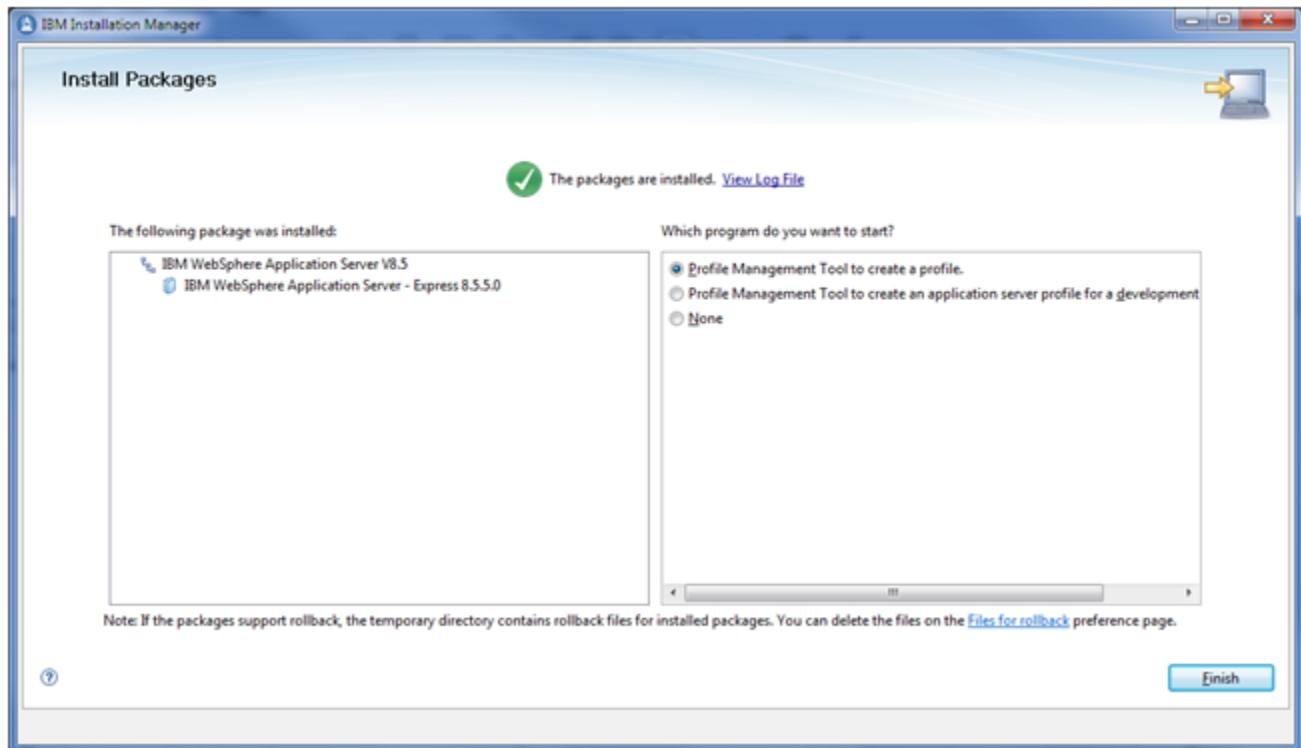
16. On Install Packages, Summary Information, review all the information on this screen, using the scroll bar if necessary.
17. Click the **Install** button.

Note: For WebSphere 9.0, the installer screens shown on this screen will display Version 9.0 instead of Version 8.5.5.0.

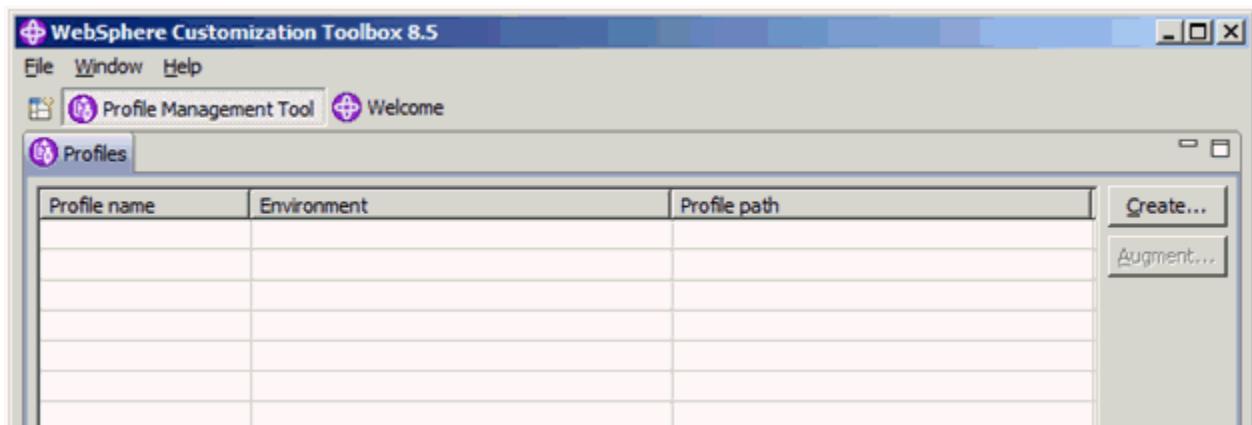
4.3 Creating a Profile

You must now create a WebSphere Express, WebSphere for Developers, or WebSphere 9.0 profile.

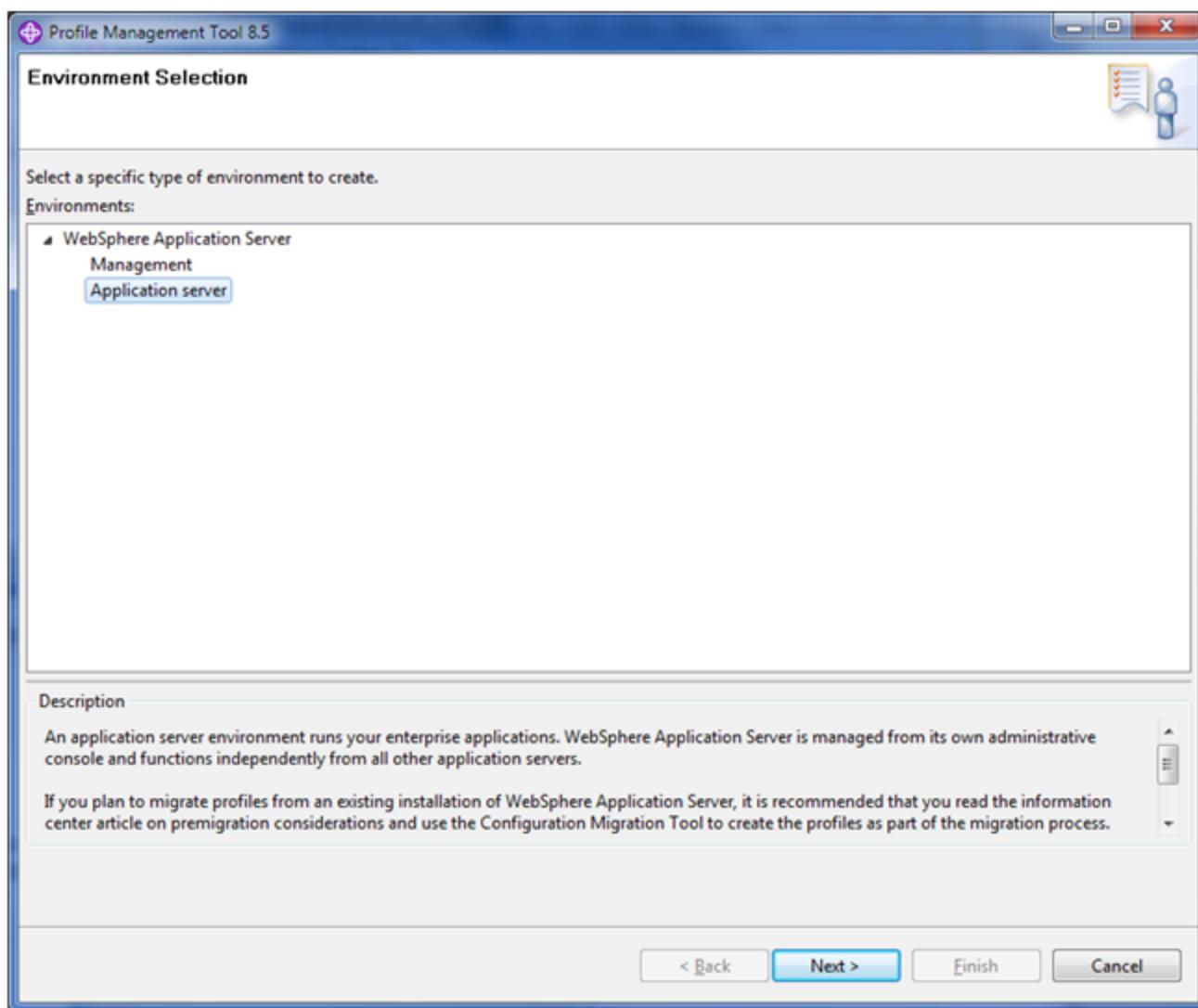
Note: For WebSphere 9.0, the installer screens shown on this screen will display Version 9.0 instead of Version 8.5.5.0.



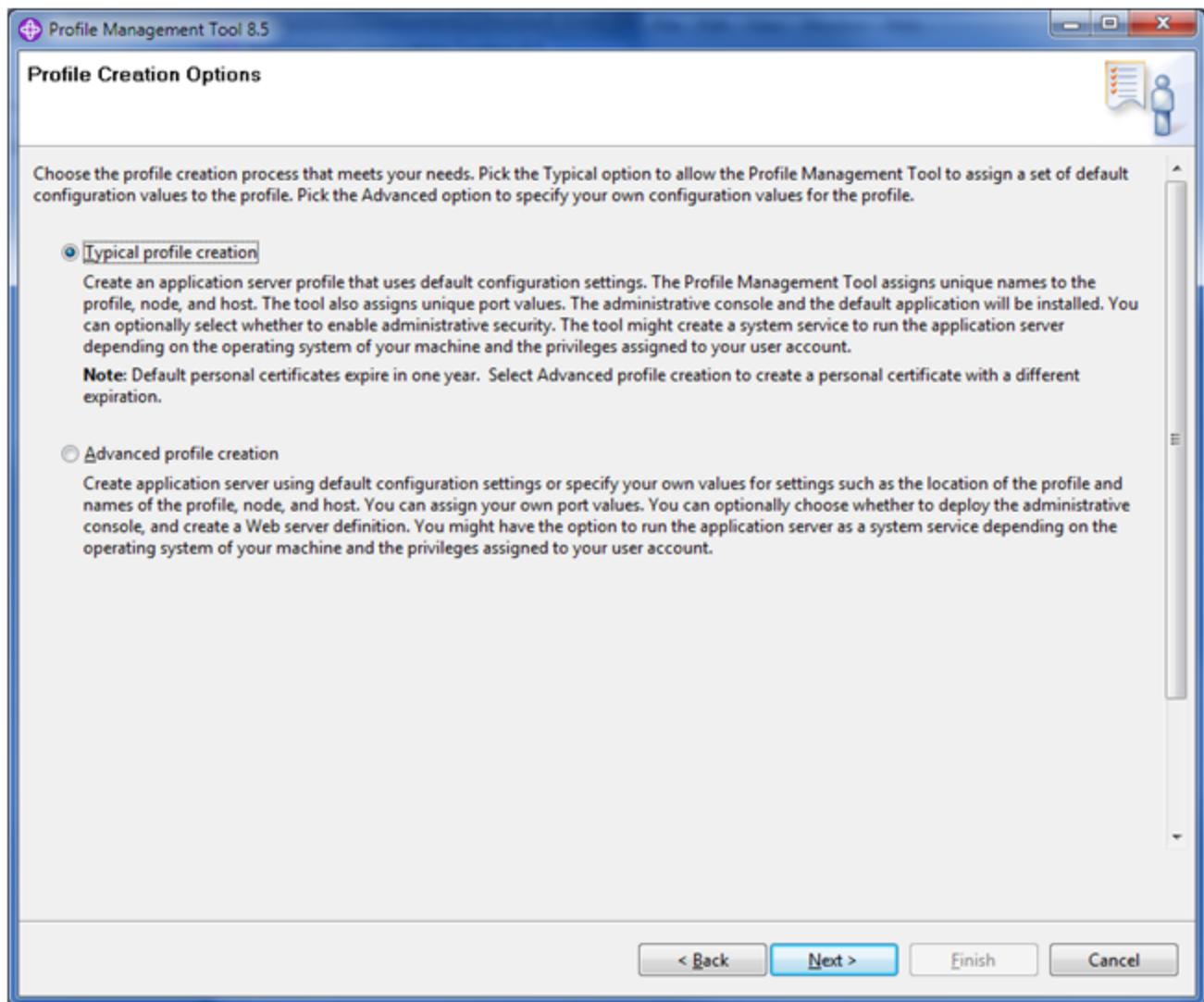
1. On Install Packages, Packages are Installed, in the right hand pane entitled: **Which program do you want to start?**, turn on this radio button:
Profile Management Tool to create a profile
2. Click the **Finish** button.



3. On WebSphere Customization Toolbox 8.5.5 or 9.0 Profile Management Toolbox, click the **Create...** button.



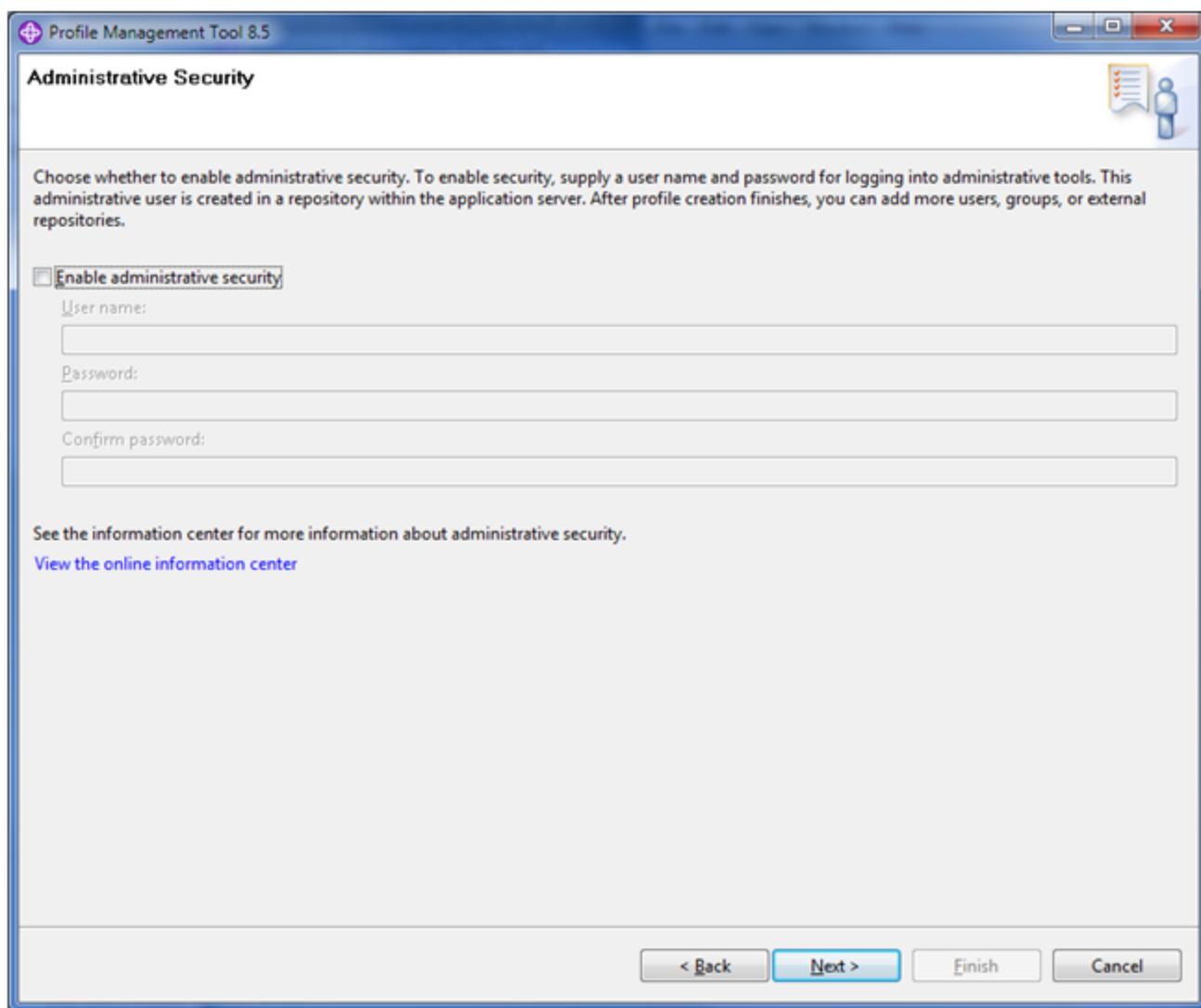
4. On Environment Selection, select the **Application Server** node.
5. Click the **Next** button.



6. On Profile Creation Options, click this radio button:

Typical profile creation

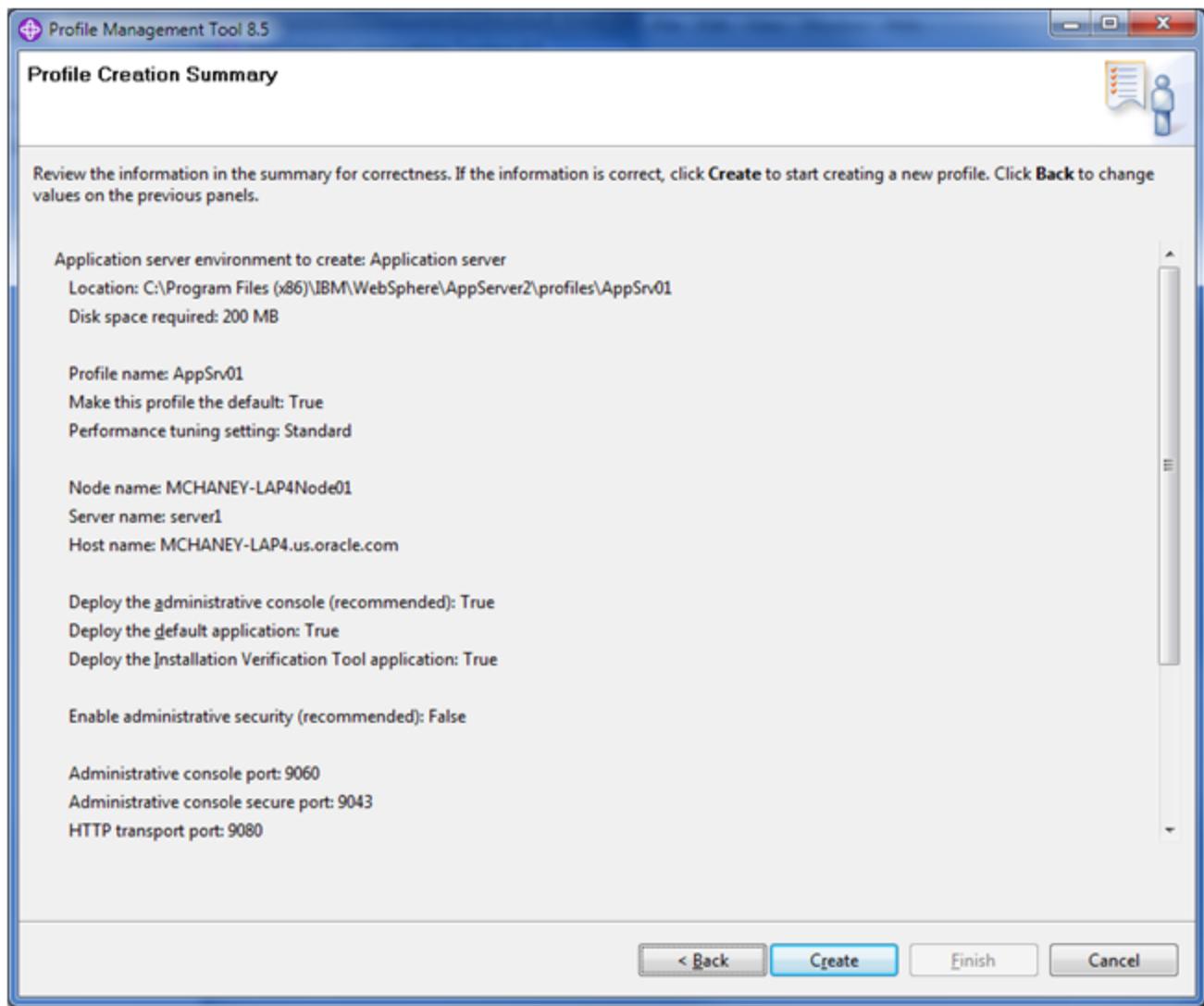
7. Click the Next button.



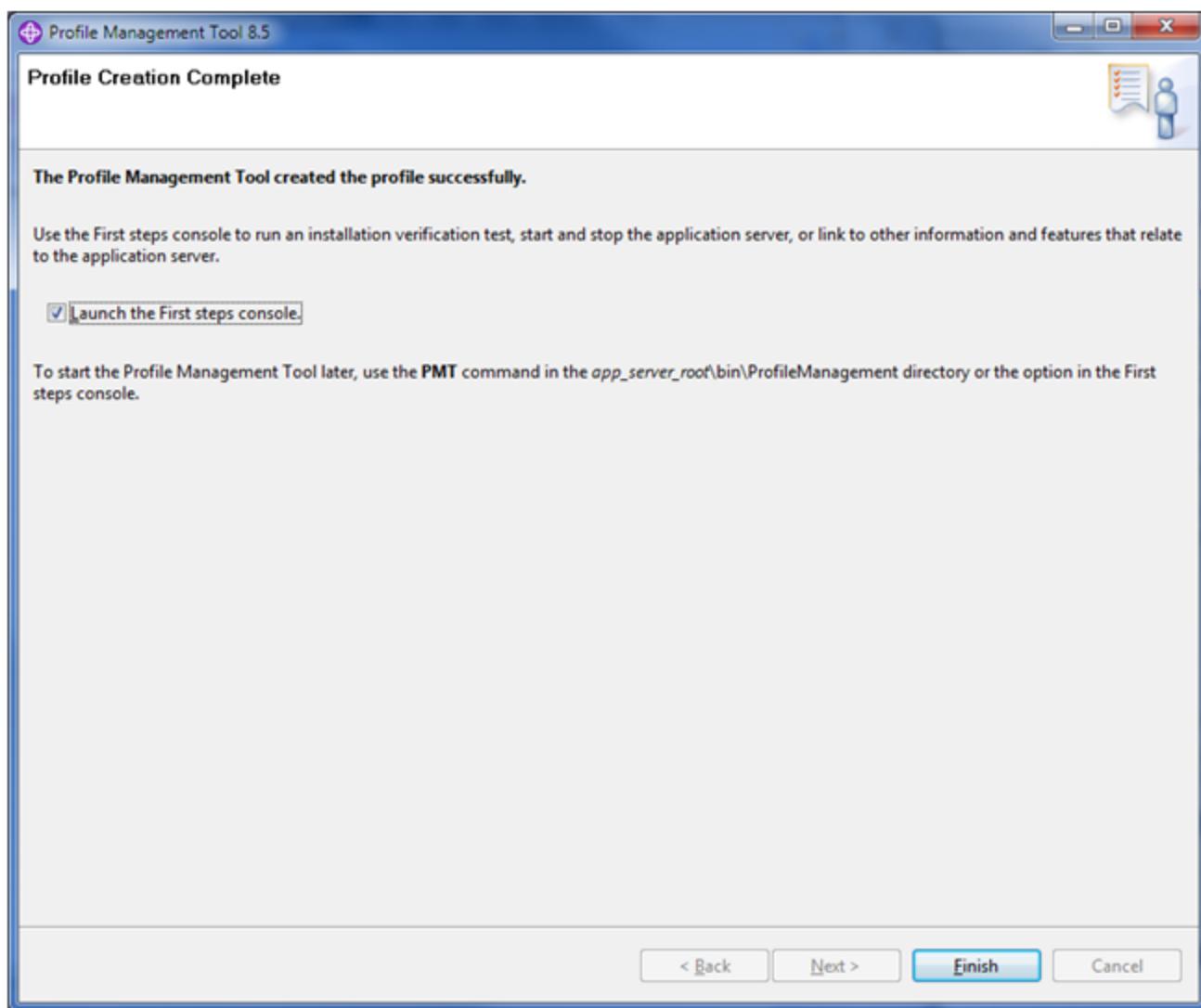
8. On Administrative Security, click the checkbox to turn off (disable) **Enable administrative security**.

Caution: The JD Edwards EnterpriseOne Development Client does not support secured profiles.

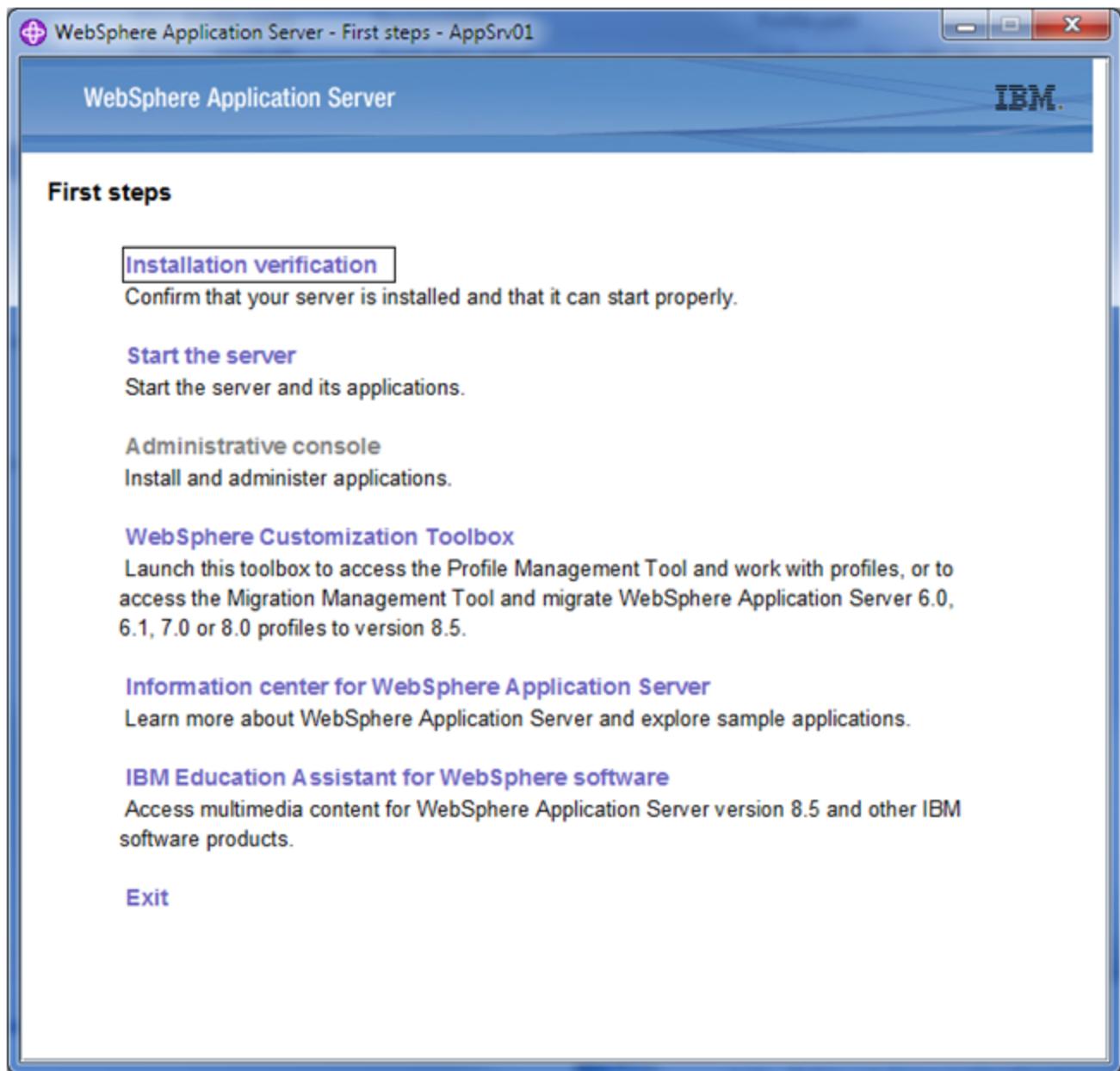
9. Click the **Next** button.



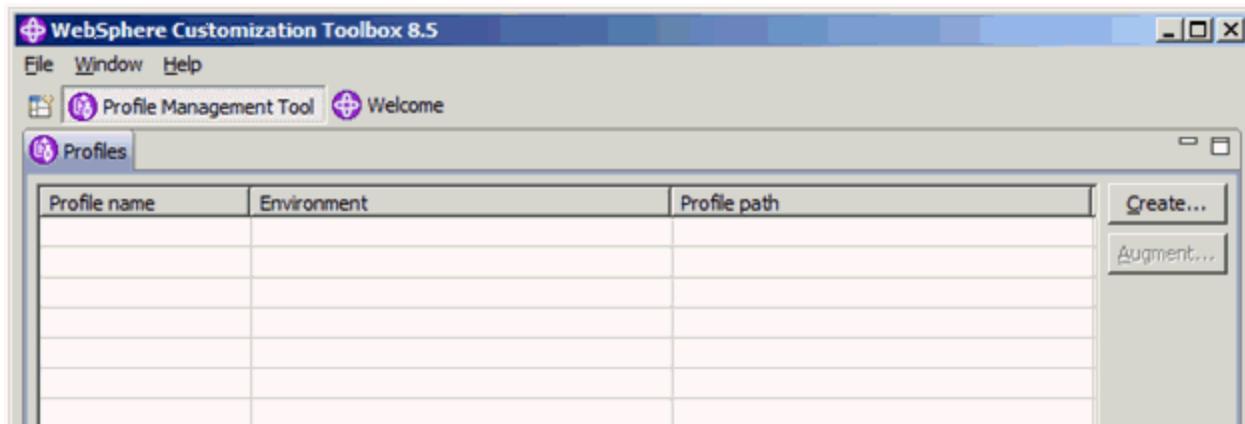
10. On Profile Creation Summary, review the information for correctness. If the information is correct, click the **Create** button to start creating a new profile. Click the **Back** button to change values on the previous panels.



11. On Profile Creation Complete, you can optionally click the checkbox for **Launch the First Steps console** to launch the First steps console to verify the installation. The First Steps console is shown below, where the first step is **Installation Verification**.



12. If you launched the First steps wizard, click **Exit** to return to the WebSphere Customization Toolbox.



13. On WebSphere Customization Toolbox, with the newly created profile displayed, choose File > Close to close the Toolbox application.

4.4 Switching to a Supported JDK for WebSphere Express or Developer 8.5.5

Note: **WebSphere 9.0.** This section is not applicable if you are using WebSphere 9.0.

As of the GA of JD Edwards EnterpriseOne Tools Release 9.2, the supported JDK is 1.8.0.x () .

IBM WebSphere Express 8.5.5 or IBM WebSphere Developer 8.5.5 is shipped with JDK 1.6. Refer to Oracle Certify for details and updated support levels for JDKs with JD Edwards EnterpriseOne. Refer to [Section 3.1, "Installing a JDK for WebLogic Server"](#).

Caution: JD Edwards EnterpriseOne supports WebSphere Express 8.5.5 or IBM WebSphere Developer 8.5.5 running with the IBM 32-bit JDK 1.7 only. You must switch the Java level after the installation of WebSphere Express or Developer is completed.

Note: IBM uses the acronym SDK (Software Development Kit) synonymously with JDK (Java Development Kit).

This section discusses these tasks:

- [Section 4.4.1, "Installing the IBM 32-bit JDK"](#)
- [Section 4.4.2, "Set the WebSphere Express or Developer Default JDK for the New Profile"](#)

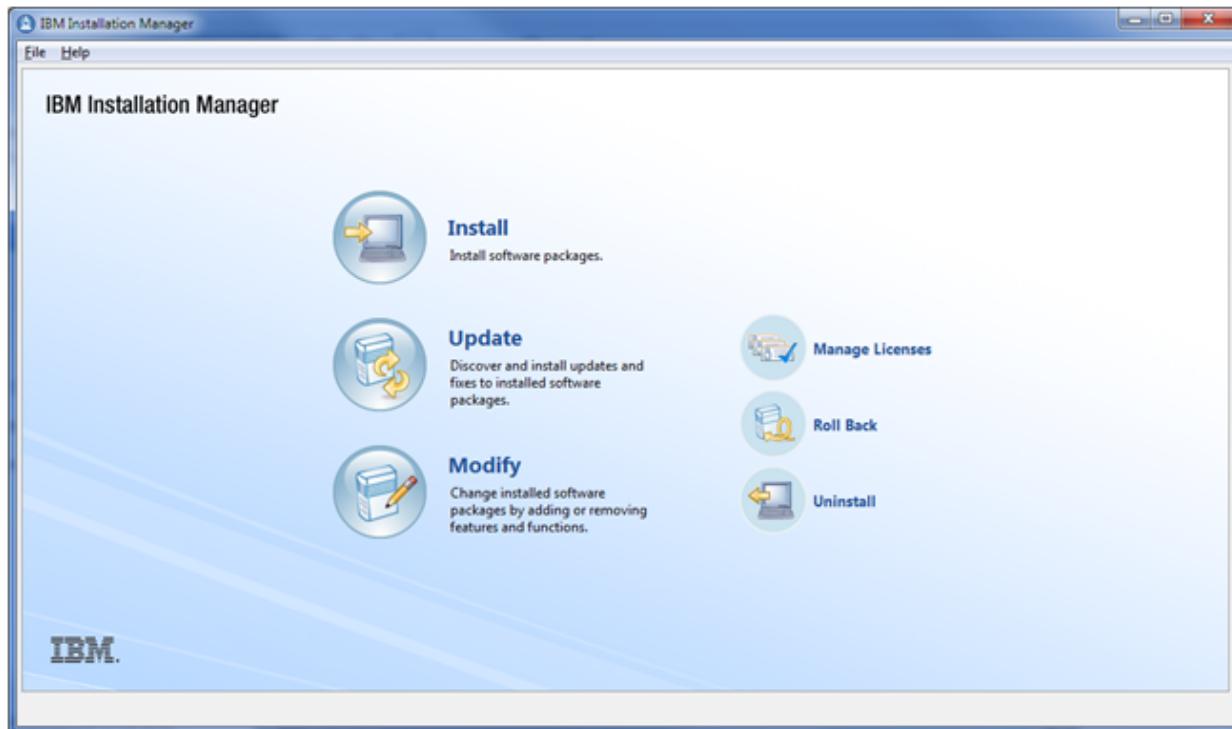
4.4.1 Installing the IBM 32-bit JDK

You must have the IBM Installation Manager installed before you can install the IBM JDK. The IBM Installation Manager is delivered with IBM products such as WebSphere Express or Developer.

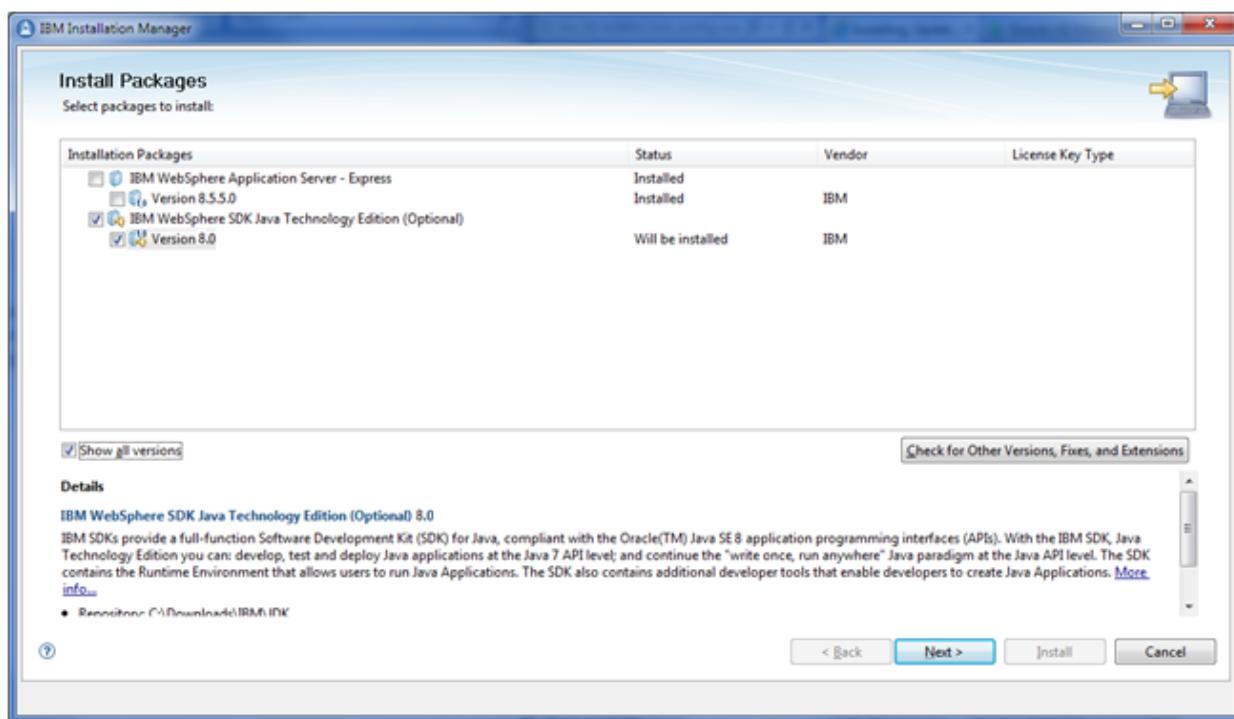
Caution: You must use the IBM 32-bit JDK with WebSphere Express or WebSphere Developer and JD Edwards EnterpriseOne.

Use this procedure to install the IBM 32-bit JDK.

1. Run the IBM Installation Manager from the directory in which you extracted the IBM 32-bit JDK.



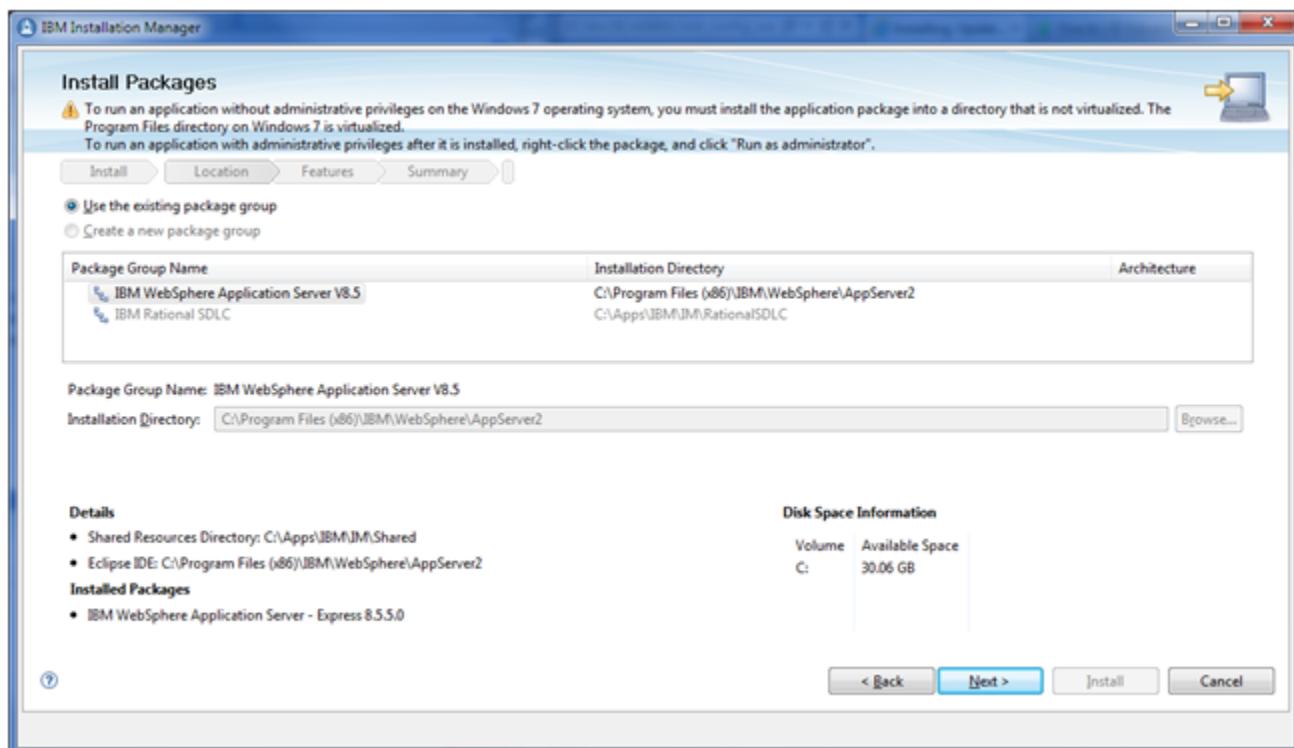
2. On IBM Installation Manager, click **Install**.



- On Install Packages, Select Packages to install, turn on this checkbox:

IBM WebSphere SDK Java Technology Edition

- Click the Next button.

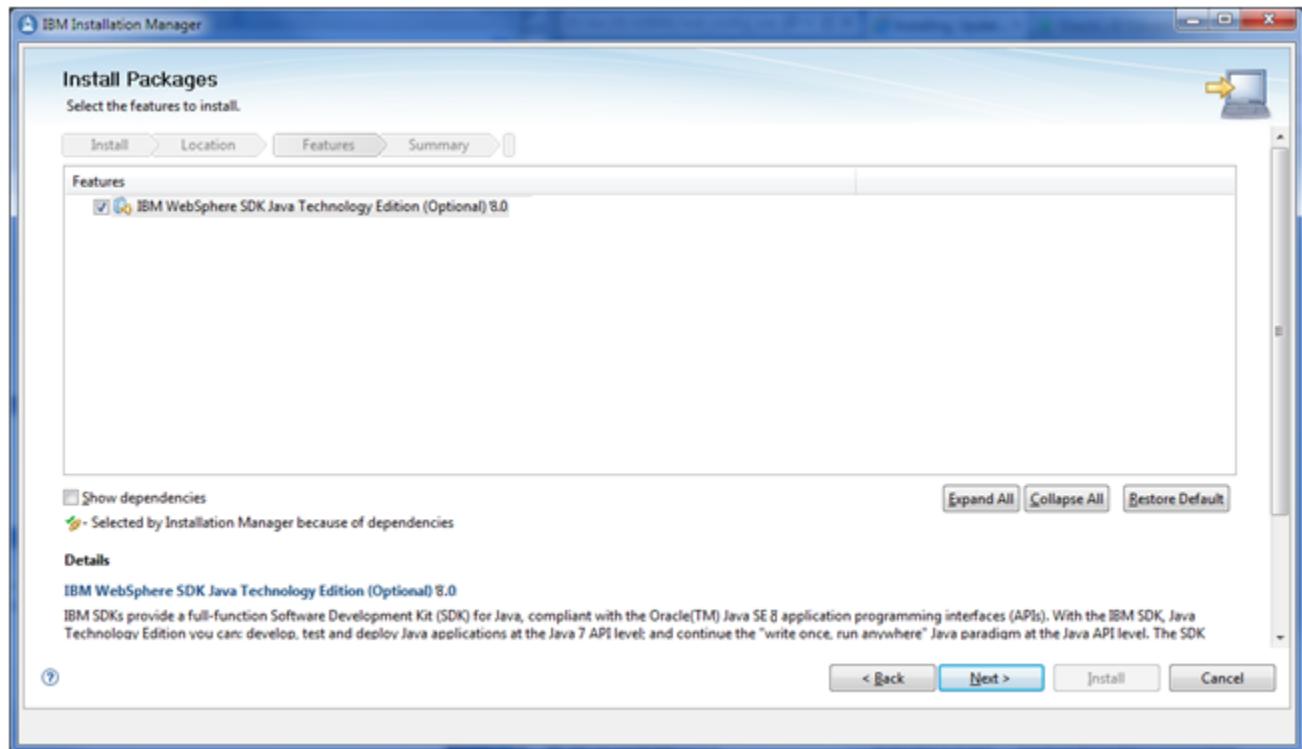


- On Install Packages, Package Selection, turn on this radio button:

Use the existing package group

You can enter an alternate installation directory in the **Installation Directory** field.

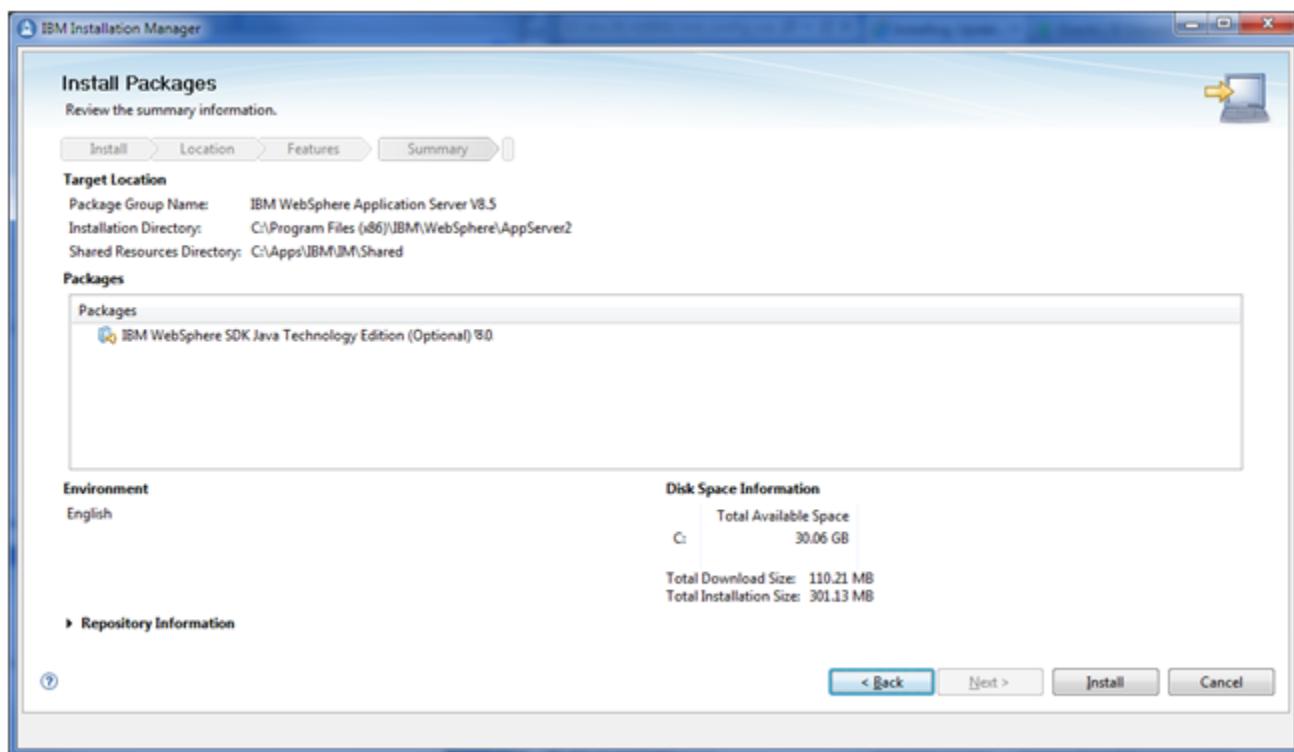
6. Click the **Next** button.



7. On Install Packages, Select Features, you can accept the default value which should mean this checkbox is selected:

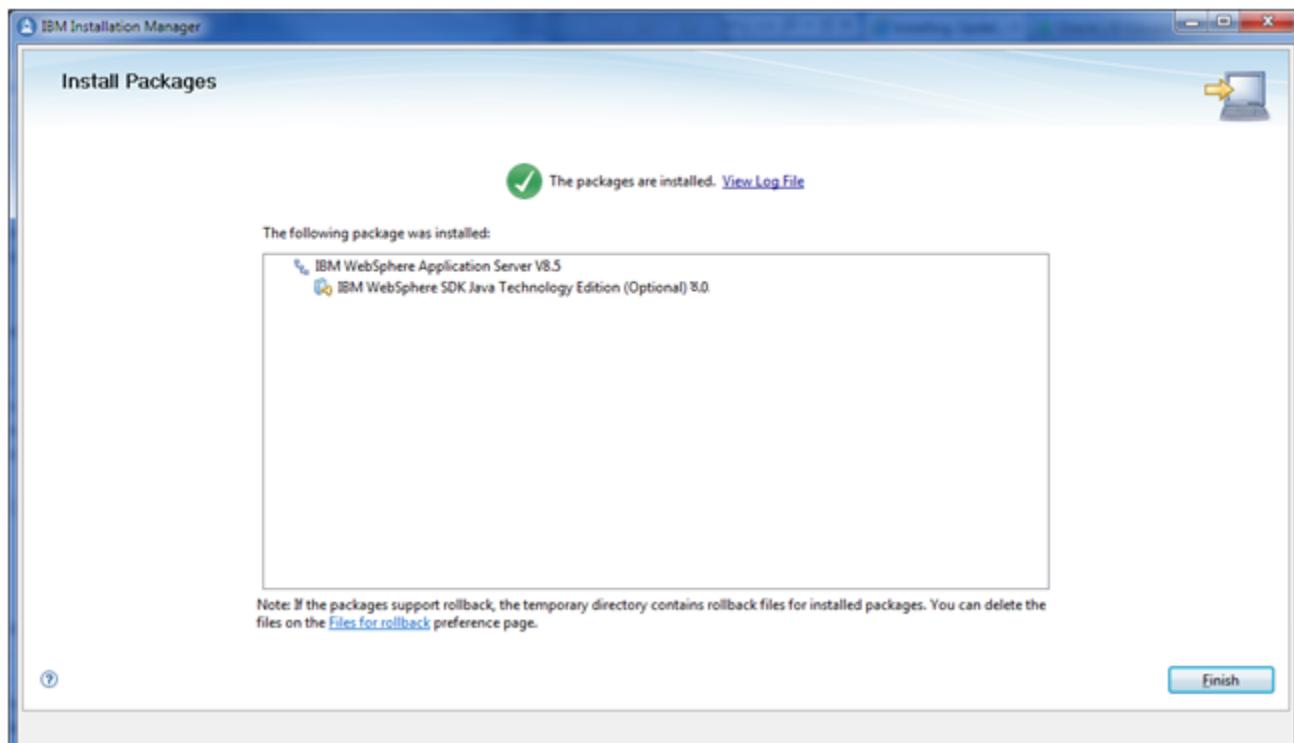
IBM WebSphere SDK Java Technology Edition

8. Click the **Next** button.



9. On Install Packages, Summary Information, review all the information on this screen, using the scroll bar if necessary.
10. Click the **Install** button.

The following screen indicates the installation completed successfully.

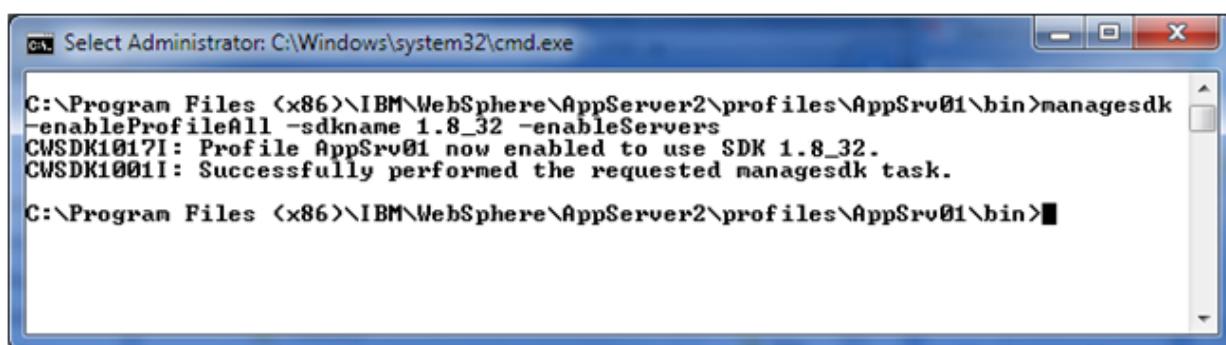


4.4.2 Set the WebSphere Express or Developer Default JDK for the New Profile

Use this procedure to set the WebSphere Express or Developer default JDK for the profile that you created in the section of this chapter entitled: [Section 4.3, "Creating a Profile"](#).

1. Open a command prompt window with Run as administrator.
2. Change directory to the \bin directory of the \profile directory for your WebSphere Express or Developer. For example:
C:\Program Files (x86)\IBM\WebSphere\AppServer2\profiles\AppSrv01\bin
3. Run this command:

```
managesdk.bat -enableProfileAll -sdkname 1.8_32 -enableServers
```



```
C:\Program Files (x86)\IBM\WebSphere\AppServer2\profiles\AppSrv01\bin>managesdk -enableProfileAll -sdkname 1.8_32 -enableServers
CWSDK1017I: Profile AppSrv01 now enabled to use SDK 1.8_32.
CWSDK1001I: Successfully performed the requested managesdk task.

C:\Program Files (x86)\IBM\WebSphere\AppServer2\profiles\AppSrv01\bin>
```

Caution: If you create a new WebSphere Express or Developer profile in the future, you will need to rerun the above command.

5

Installing the Oracle Local Database

Complete this chapter to install the local Oracle Enterprise Edition (OEE) database that the Development Client will use.

If you encounter errors during the installation process, refer to these troubleshooting chapters:

- [Section 5.1, "Oracle Database 12c Considerations"](#)
- [Section 5.2, "Using InstallManager to Install a Local Database"](#)

Caution: It is very important that no files exist in the **E1Local** subdirectory when you attempt to install the OEE database. If any files do exist, the OEE installation will probably fail.

Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

- [Section 1.3, "Microsoft Windows Security"](#)
 - [Section 1.4, "Minimizing Locked Files"](#)
-

If you have not already installed the database engine and a database called **E1Local** does not exist on your Development Client, use the procedures in this section to install these requisite components before installing the JD Edwards EnterpriseOne Development Client. If the local database engine is already installed and an **E1Local** database exists, you can skip this chapter.

Caution: You can run the JD Edwards EnterpriseOne program InstallManager to install the local database into any location. However it is strongly recommended that you **not** choose a directory that contains space characters in the directory name. Avoiding such directory names will avoid the possibility of issues arising later due to known issues with such directory names.

Note: For instructions on launching InstallManager to install the local Oracle database with default parameters, refer to the section entitled: [Section 5.2, "Using InstallManager to Install a Local Database"](#).

For instructions on manually launching the OEE12Setup.exe program to install the local Oracle database with optional parameters, refer to the appendix of this guide entitled: [Appendix A, "Running OEE12Setup.exe from the Command Line"](#).

This section discusses these topics:

- [Section 5.1, "Oracle Database 12c Considerations"](#)
- [Section 5.2, "Using InstallManager to Install a Local Database"](#)

5.1 Oracle Database 12c Considerations

Starting with Oracle Database 12c, Oracle supports the use of an Oracle Home User who will own the install of the database. This user must **not** have Microsoft Windows Administrator (admin) rights. Note that in this context, the user is the local Microsoft Windows user, not a database user.

Caution: Do **not** install the Oracle Database 12c into an existing Oracle Base directory. For example, do **not** install into this directory if it already exists:

C:\Oracle

If you attempt to install to an existing Oracle directory, the OEE12Setup.exe installer will likely fail. Later releases of this installer may be able to programmatically resolve this issue.

This section discusses these topics:

- [Section 5.1.1, "Prerequisites to Running the OEE12Setup.exe Program"](#)
- [Section 5.1.2, "Specifying the Oracle Home User and Oracle Base Directory"](#)
- [Section 5.1.3, "Manually Creating Oracle Home User"](#)

5.1.1 Prerequisites to Running the OEE12Setup.exe Program

Tools Release 9.2.2 Considerations. The OUI installer delivered by Tools Release 9.2.2 is upgraded to a newer version of OUI itself. You may encounter issues if you use a newer version installer to install a package on an existing Development Client installation that used the older version installer. Although not required, Oracle highly recommends that the older Development Client installation either be uninstalled or saved using Snapshot before running a new installer. Furthermore the new installer for 9.2.2 requires an uplift to the latest JRE/JDK as listed in the Oracle Certifications for the Development Client.

The OEE12Setup.exe program is used to install the local Oracle 12c database. This program is called from the InstallManager program when you click on this link:

[EnterpriseOne Database Engine](#)

Optionally you can also manually launch the OEE12Setup.exe program to perform optional functions. In either case (InstallManager or manually), prior to running the OEE12Setup.exe program, ensure that this Microsoft Windows system variable either does not exist, or if it does that it points to a valid JDK:

JAVA_HOME

Otherwise, the OEE12Setup.exe program will fail to execute and return an error stating the JDK is invalid.

Note: For instructions on launching InstallManager to install the local Oracle database with default parameters, refer to the section entitled: [Section 5.2, "Using InstallManager to Install a Local Database"](#).

For instructions on manually launching the OEE12Setup.exe program to install the local Oracle database with optional parameters, refer to the appendix of this guide entitled: [Appendix A, "Running OEE12Setup.exe from the Command Line"](#).

5.1.2 Specifying the Oracle Home User and Oracle Base Directory

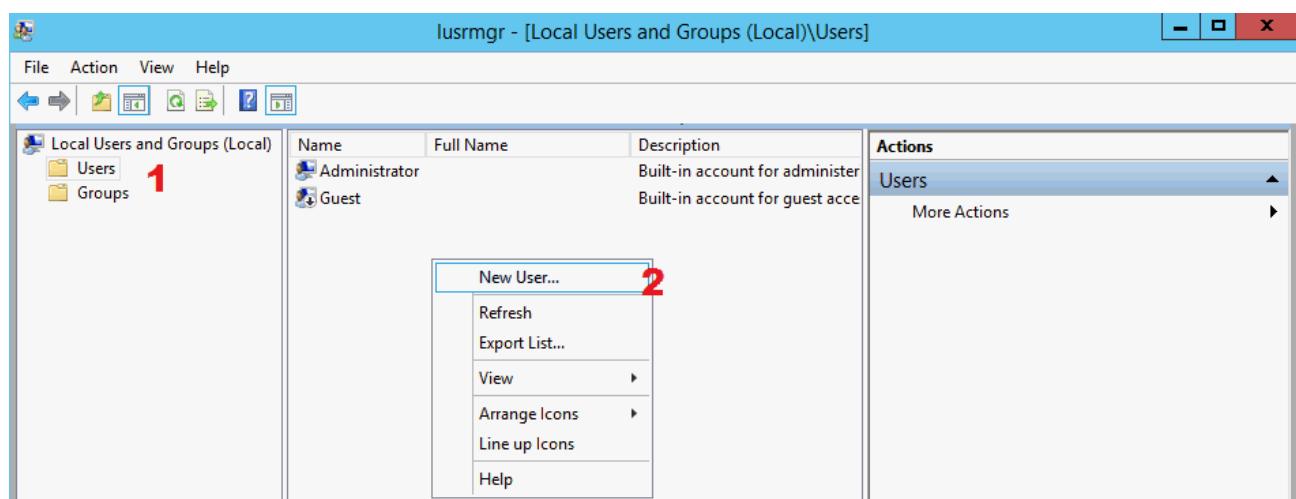
When you launch the OEE12Setup.exe program with no switches (this is the default operation when launched from the link on InstallManager) an OEE12Setup GUI is displayed prompting for Oracle Home User login and Oracle Base Directory information. This data entry GUI is also displayed when OEE12Setup.exe is run with certain combinations of command line switches as described in the appendix of this guide entitled: [Appendix A, "Running OEE12Setup.exe from the Command Line"](#).

5.1.3 Manually Creating Oracle Home User

If you cannot use the OEE12Setup.exe program to create the Oracle Home User, you can create the user manually using the steps described in this section.

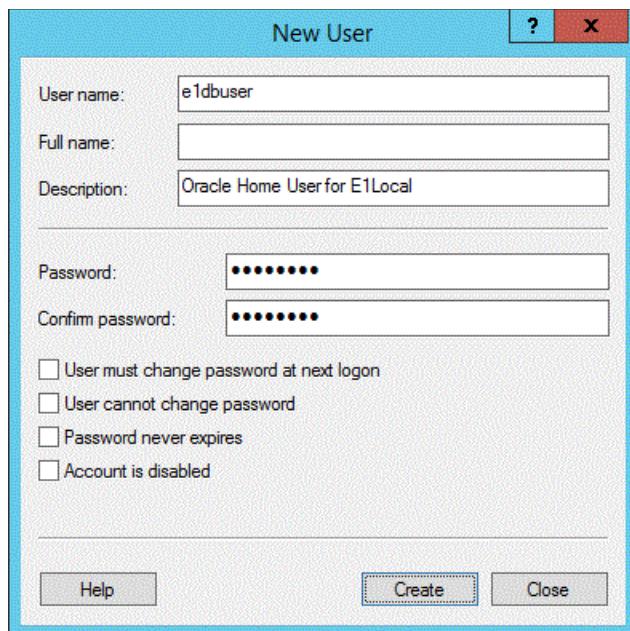
To create a Microsoft Windows user, launch **Local Users and Groups** management console using this navigation:

Control Panel > Administrative Tools > Computer Management > System Tools > Local Users and Groups



1. On Local Users and Groups (Local)\Users, in the left pane, select **Users**.

2. Right click and select **New User**.



3. On New User, complete these fields:

- *User name*:
Enter a name for the user. For example, **e1dbuser**.
- *Password* and *Confirm Password*
Enter and confirm the password for the user.
- Ensure this checkbox is **not** checked:
User must change password at next logon

4. Click the **Create** button.

5.2 Using InstallManager to Install a Local Database

In most cases, your JD Edwards EnterpriseOne administrator will have already downloaded and prepared the local database installer for you to install on your Development Client. If so, the administrator should be able to provide you with the location of `InstallManager.exe`. In that case, in the following procedure you can skip to Step 4. If not, start with Step 1.

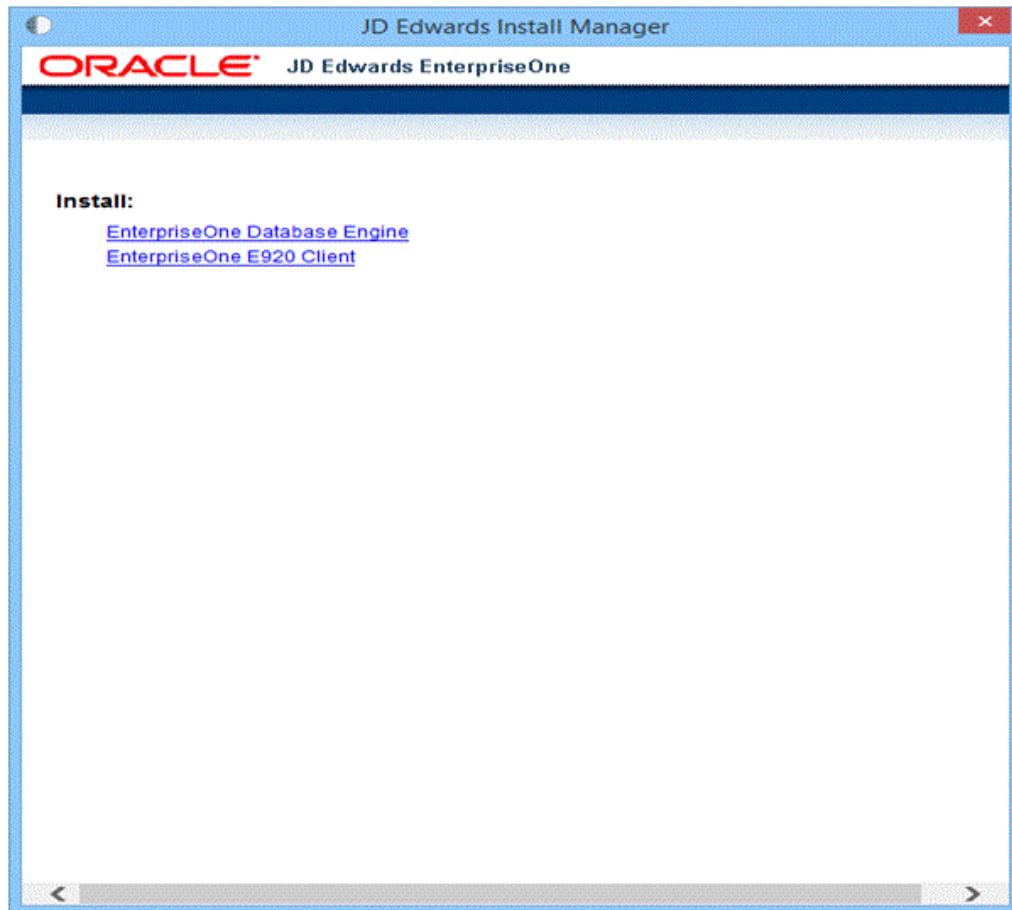
1. Obtain the appropriate disk images from Oracle Software Delivery Cloud for the local database you wish to install on your Development Client.
2. Log on to the Development Client as a user with Administrator rights.

Caution: Ensure that the Administrator account name that you use does not contain any special characters.

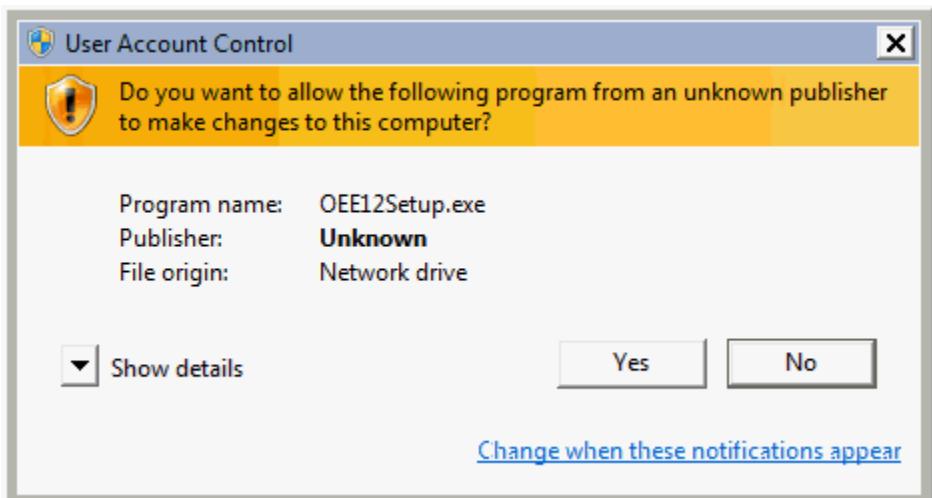
3. If you have not already done so, expand all disk images to be under a common directory called `Disk1` on your Development Client.

4. Right-click on the `InstallManager.exe` program (either in Disk1 or on your Deployment Server) and select **Run as Administrator**.

Caution: For Microsoft Windows, you must right-click on the executable and select **Run as Administrator** from the drop-down. Likewise, if you have a shortcut assigned to `InstallManager.exe`, you must either configure the shortcut to always run as administrator or right click the shortcut and choose **Run as Administrator**.



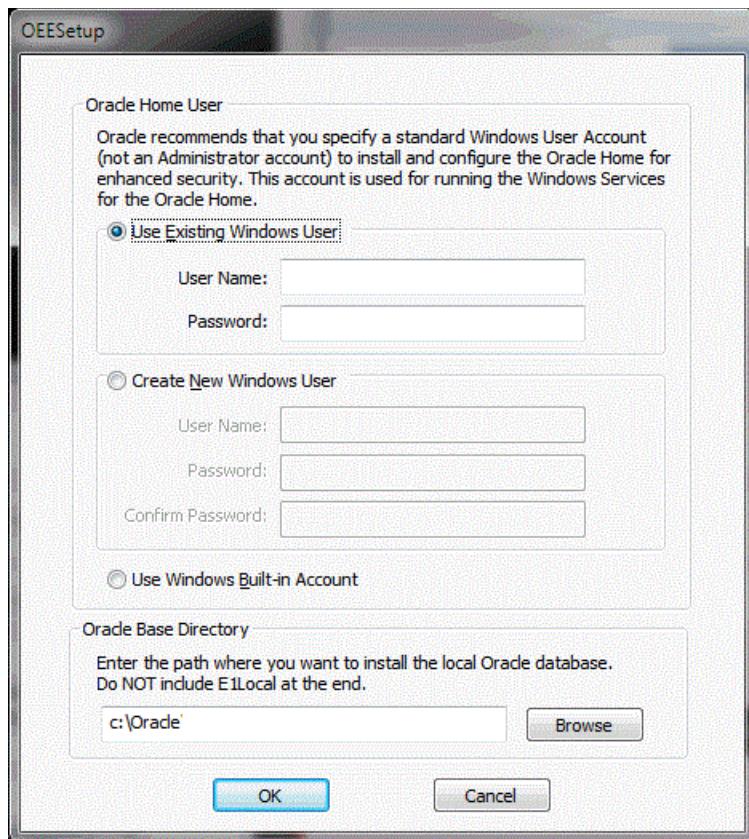
5. On JD Edwards Install Manager, select this link to install the local OEE database:
[EnterpriseOne Database Engine](#)



6. On User Account Control, click the **Yes** button to launch the OEE12Setup.exe installer.



7. If you receive an Install Manager - Security warning dialog with the message "The publisher could not be verified", click the **Run** button to continue the execution of the OEE12Setup.exe program to install the local Oracle database.



8. On OEE12Setup, in the Oracle Home User section, you must select an Oracle Home User. For security purposes, Oracle recommends that you specify a standard Windows user account (that is, an account that is not in the Administrator group of the computer). The OEE12Setup.exe program will not allow you to specify an account that has Administrator privileges. Valid choices are:
 - **Use existing Windows User**
Choose this option if you want to use an existing account for a Windows user. This user must not have Administrator privileges. You must specify a valid **User Name** and associated **Password** for the user.
For instructions on how to manually create an Oracle Home User, refer to the section entitled: [Section 5.1.3, "Manually Creating Oracle Home User"](#).
 - **Create New Windows User**
Choose this option if you want OEE12Setup.exe to create an account for a Windows user without Administrator privileges. You must specify a valid **User Name** and associated **Password** and **Confirm Password** for the user. Be sure to record and remember this password.

Note: OEE12Setup Fails to Create the User. If the OEE12Setup.exe program fails to create the user it might be because the password does not meet the password complexity policy requirements of your computer. You can try again with a more complex password, or exit. If you are unable to create the user using the OEE12Setup.exe interface, you should try to create it manually and rerun OEE12Setup.exe. Refer to the next section entitled: [Section 5.1.3, "Manually Creating Oracle Home User".](#)

Tip: Password Complexity Policy. The Administrator user of the Microsoft Windows machine determines the password complexity policy for each machine. Additionally, such policies vary according to the server or client version of Microsoft Windows. The OEE12Setup.exe program cannot programmatically determine and return these policy requirements. Therefore it is beyond the scope of this documentation to guide the end user to determine the exact policy requirements for user names and their associated passwords.

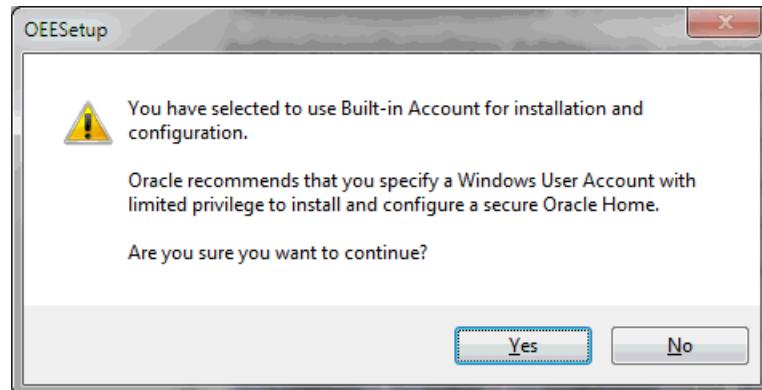
- **Use Windows Built-in Account**

This selection is equivalent to legacy JD Edwards EnterpriseOne functionality for releases prior to Tools Release 9.2.

Caution: For strongest security, Oracle recommends that you do not use the Windows built-in user account. To provide optimal security, you should install and configure with a Windows User Account with limited privileges. For additional details on the Oracle policy regarding **Supporting Oracle Home User on Windows**, refer to this link:

http://docs.oracle.com/database/121/NTQRF/oh_usr.htm

If you choose this selection, you are presented with the following dialog where you must confirm that you understand the security impact of this selection.



Click the **Yes** button to confirm and continue, or the **No** button to exit the OEE12Setup.exe program.

9. On OEESetup, in the Oracle Base Directory section, enter the path where you want to install the local Oracle database. It is recommended that you install the Oracle database into its own root directory and not into any other Oracle base directory

used by another Oracle product, such as c:\ORACLE. If you accept the default location (which is c:\Oracle), some auxiliary files are installed in that location while the local Oracle database itself will be installed in the location you specified, such as:

C:\E1Local

Caution: Do **not** install the Oracle Database 12c into an existing Oracle Base directory. For example, do **not** install into this directory if it already exists:

C:\Oracle

If you attempt to install to an existing Oracle directory, the OEE12Setup.exe installer will likely fail. Later releases of this installer may be able to programmatically resolve this issue.

Caution: Do not include the string E1Local in the path. For example, if you specified C:\Oracle\E1Local as the base install path, the local Oracle database will be installed in this location:

C:\Oracle\E1Local\E1Local

10. On OEE12Setup, click the **OK** button to accept the selected values. If the values are valid the OEE12Setup.exe program proceeds to install the local Oracle database.

Caution: You must reboot your machine before continuing with the installation of the JD Edwards EnterpriseOne Development Client as described in the section in this guide entitled: [Chapter 7, "Installing the Development Client and Web Client Features \(WLSH4A and WASH4A\)"](#).

6

Working with the Oracle Database Client

If you installed OEE on a 64-bit version of Microsoft Windows, you must also install a 32-bit version of the Oracle database client and then copy your `tnsnames.ora` file to a subdirectory under the database client installation directory.

Note: 64- vs. 32-bit Oracle database drivers. Because JD Edwards EnterpriseOne is a 32-bit program, it needs to load 32-bit Oracle database driver DLLs; however, you must install a 64-bit Oracle database in the section of this guide entitled: [Chapter 5, "Installing the Oracle Local Database"](#). Therefore, you also need to install 32-bit Oracle database driver DLLs. These 32-bit DLLs are provided by a 32-bit Oracle database client.

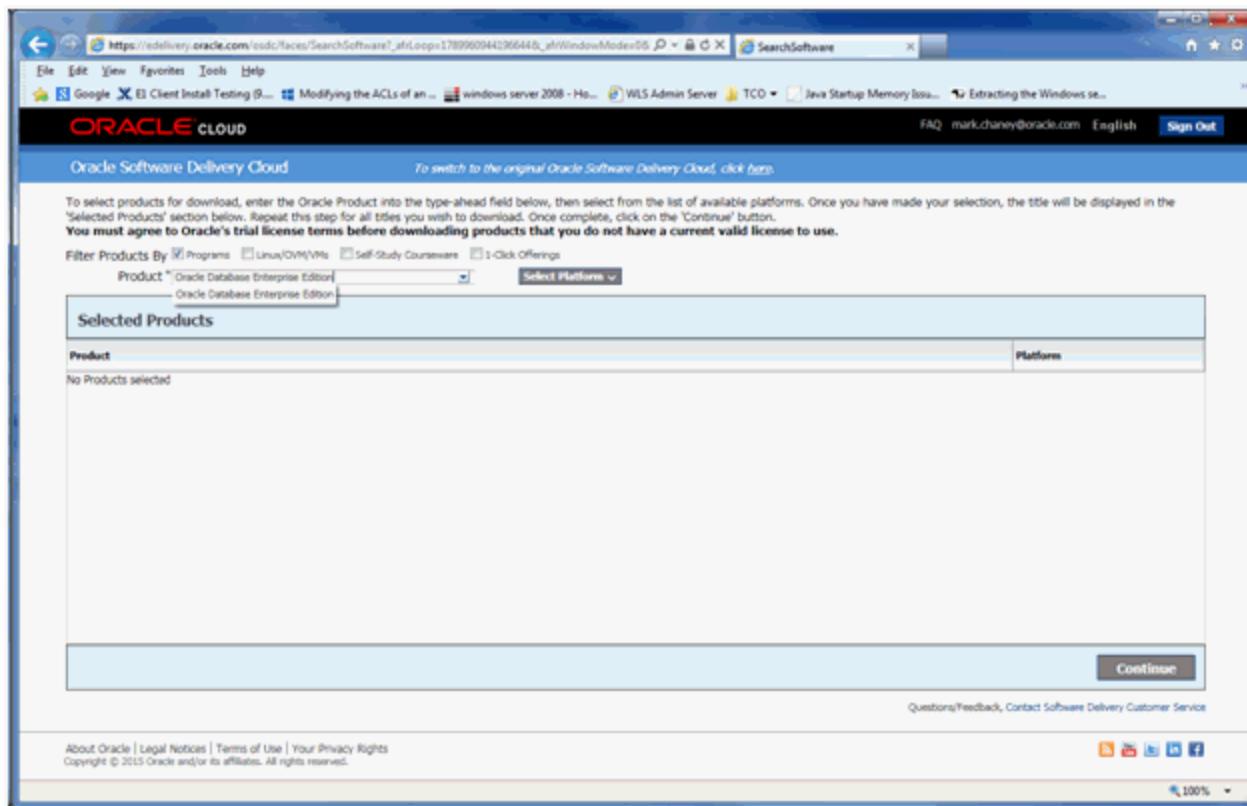
This chapter discusses these topics:

- [Section 6.1, "Obtaining the Oracle Database Client"](#)
- [Section 6.2, "Installing the Oracle Database Client"](#)
- [Section 6.3, "Working with the Microsoft Windows PATH Environment Variable"](#)
- [Section 6.4, "Working with the impdp.exe and expdp.exe Programs"](#)
- [Section 6.5, "Copy the tnsnames.ora File"](#)

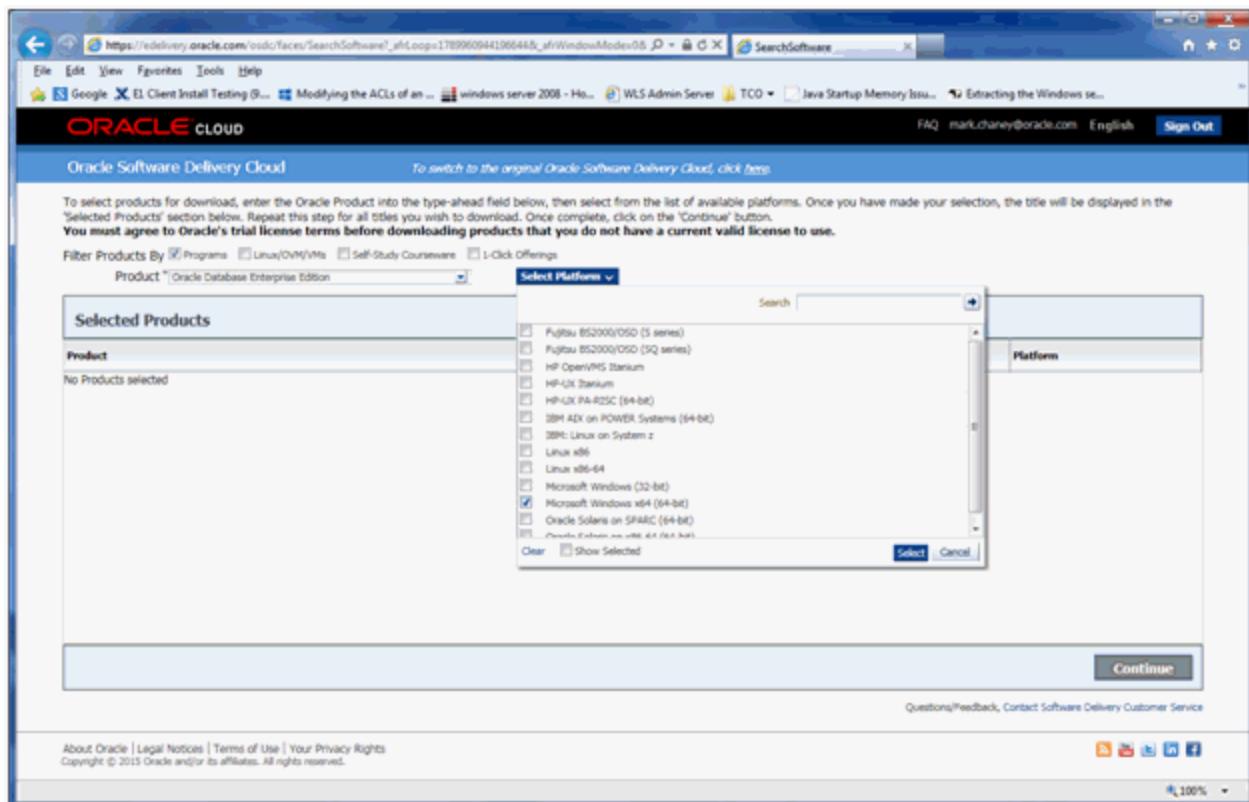
6.1 Obtaining the Oracle Database Client

To obtain a 32-bit Oracle database client:

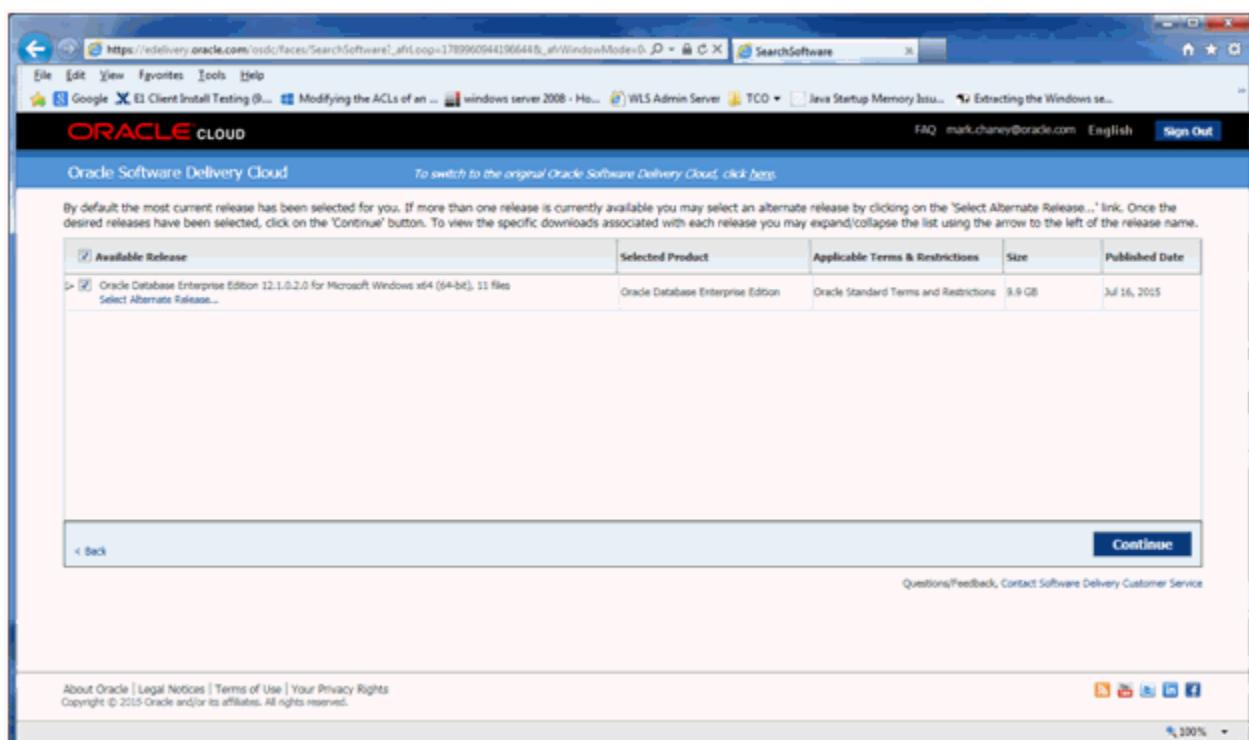
1. Download the 32-bit Oracle 12c database client from the Oracle Software Delivery Cloud located at this link:
<http://edelivery.oracle.com>
2. Click through the license agreement if you accept the terms of the Oracle site usage.



3. On Oracle Software Delivery Cloud, in the **Filter Products By** list of checkboxes, be sure **Programs** is checked.
4. In the **Product** field, enter this string:
Oracle Database Enterprise Edition



5. On Oracle Software Delivery Cloud, in the **Select Products** pulldown, select this checkbox:
Microsoft Windows x64 (64-bit)
6. Click the **Continue** button.



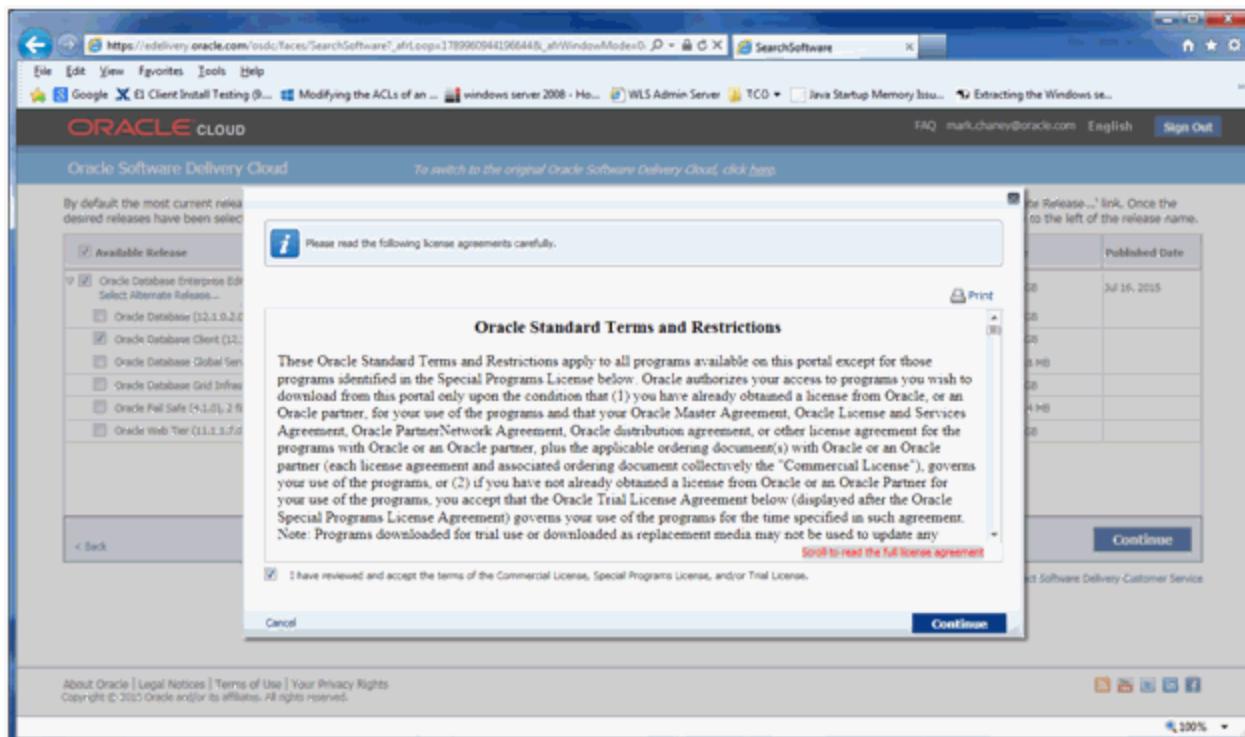
7. On the results screen, expand the entry **Oracle Database Enterprise Edition** by clicking the arrow to the left of the release name.

The screenshot shows a web browser window for the Oracle Software Delivery Cloud at https://edelivery.oracle.com/osdc/faces/SearchSoftware_af!loop=1799609441966485_af!windowMode=0. The user is on a page titled "Available Release" for Oracle Database Enterprise Edition 12.1.0.2.0. The table lists several components under this release:

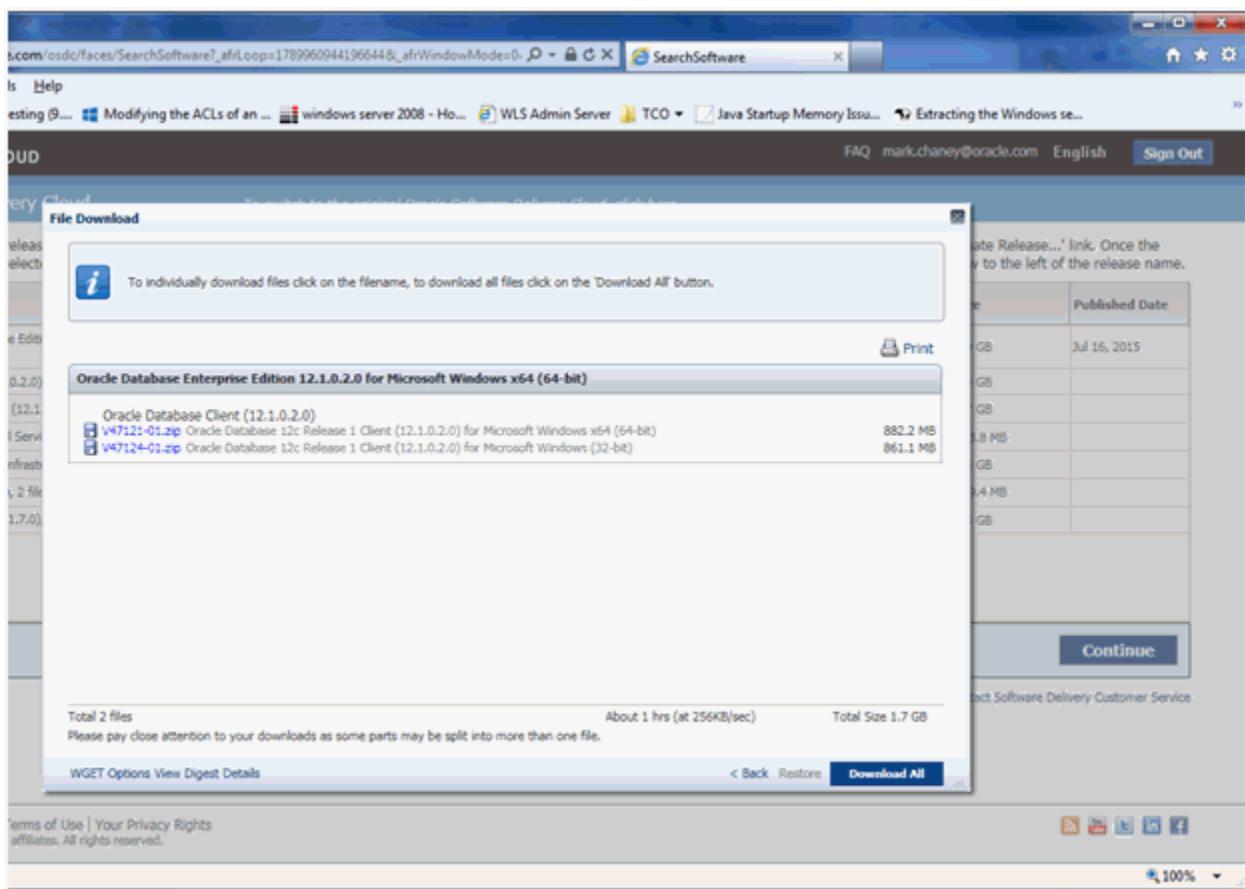
Available Release	Selected Product	Applicable Terms & Restrictions	Size	Published Date
<input checked="" type="checkbox"/> Oracle Database Enterprise Edition 12.1.0.2.0 for Microsoft Windows x64 (64-bit), 11 files Select Alternate Release...	Oracle Database Enterprise Edition	Oracle Standard Terms and Restrictions	9.9 GB	Jul 16, 2015
<input type="checkbox"/> Oracle Database (12.1.0.2.0), 2 files			2.6 GB	
<input checked="" type="checkbox"/> Oracle Database Client (12.1.0.2.0), 2 files			1.7 GB	
<input type="checkbox"/> Oracle Database Global Service Manager (12.1.0.2.0), 1 file			548.8 MB	
<input type="checkbox"/> Oracle Database Grid Infrastructure (12.1.0.2.0), 2 files			1.6 GB	
<input type="checkbox"/> Oracle Fail Safe (4.1.0), 2 files			169.4 MB	
<input type="checkbox"/> Oracle Web Tier (11.1.1.7.0), 2 files			3.3 GB	

At the bottom of the page, there are navigation links like "< Back" and "Continue". A note says "To switch to the original Oracle Software Delivery Cloud, click here."

8. Under the expanded entry for **Oracle Database Enterprise Edition**, uncheck all checkboxes except this:
Oracle Database Client
9. Click the **Continue** button.



- On Oracle Standard Terms and Restrictions, read the license agreement, click the checkbox if you accept, and click the **Continue** button.



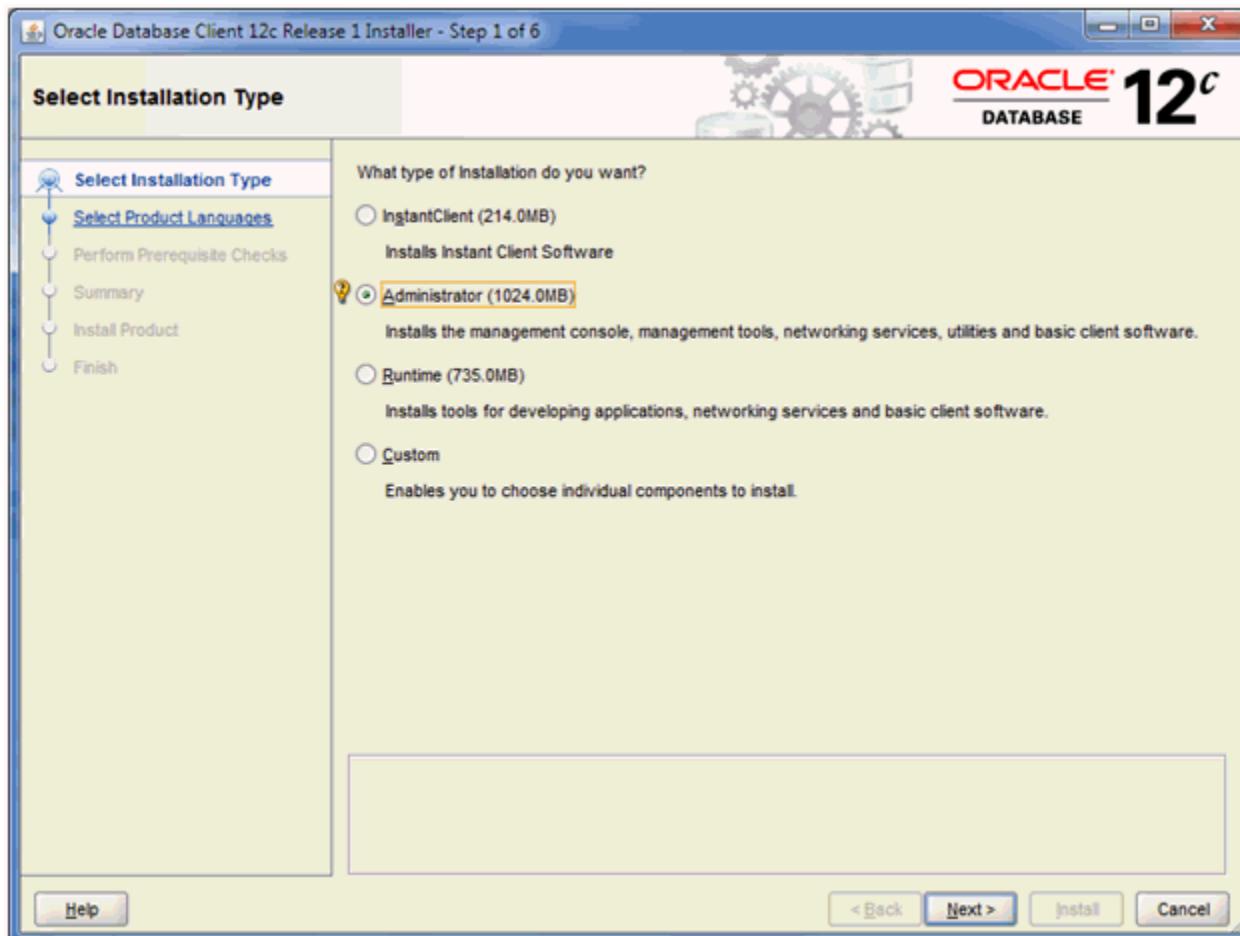
11. On File Download, click the link for the Oracle Database Client for Microsoft Windows (32-bit).
12. Save the downloaded file to your computer.
13. Extract the contents of the downloaded file.

6.2 Installing the Oracle Database Client

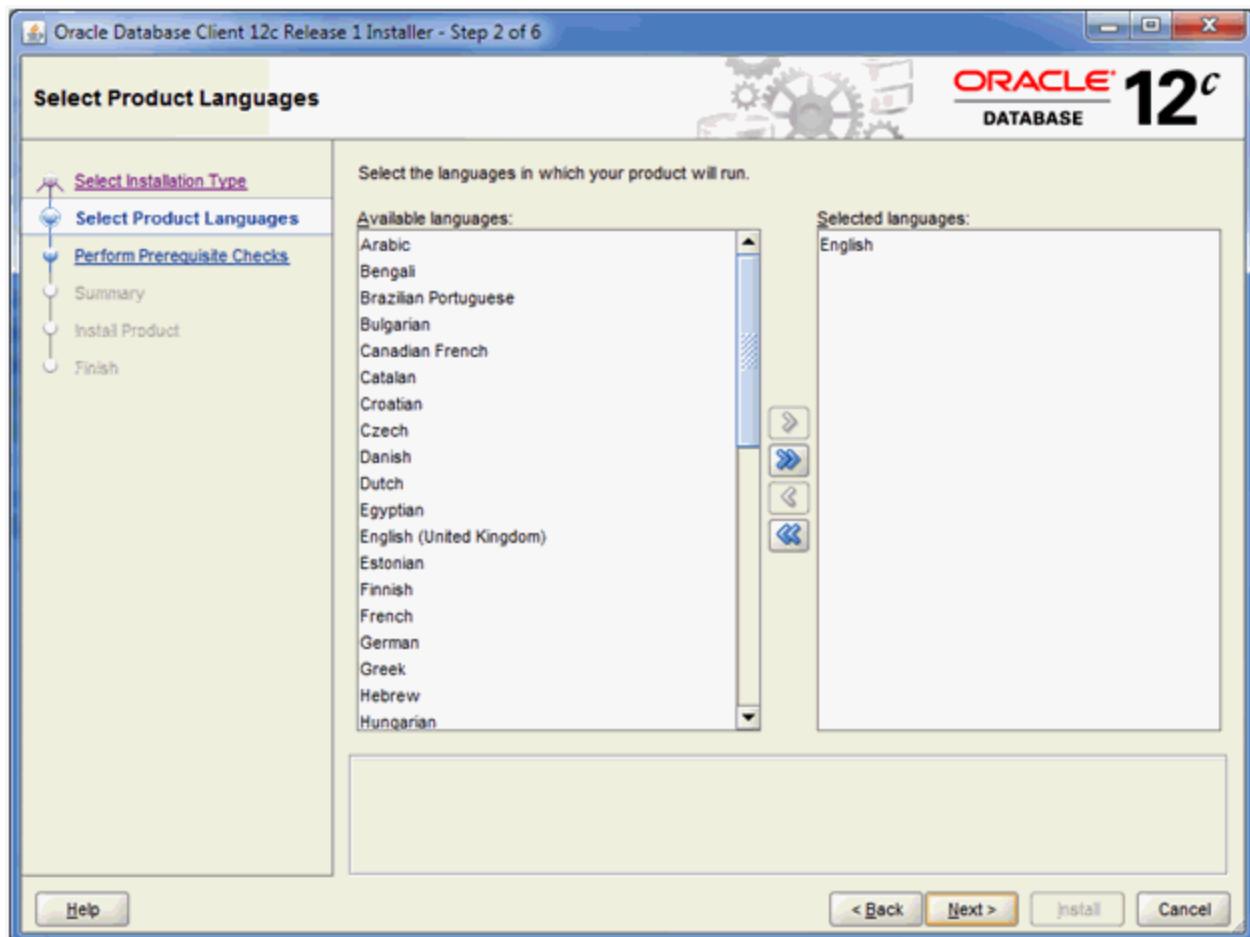
To install a 32-bit Oracle database client:

1. In the directory where you expanded the download in the previous step in this chapter, run this setup file to start the Oracle database client installer:

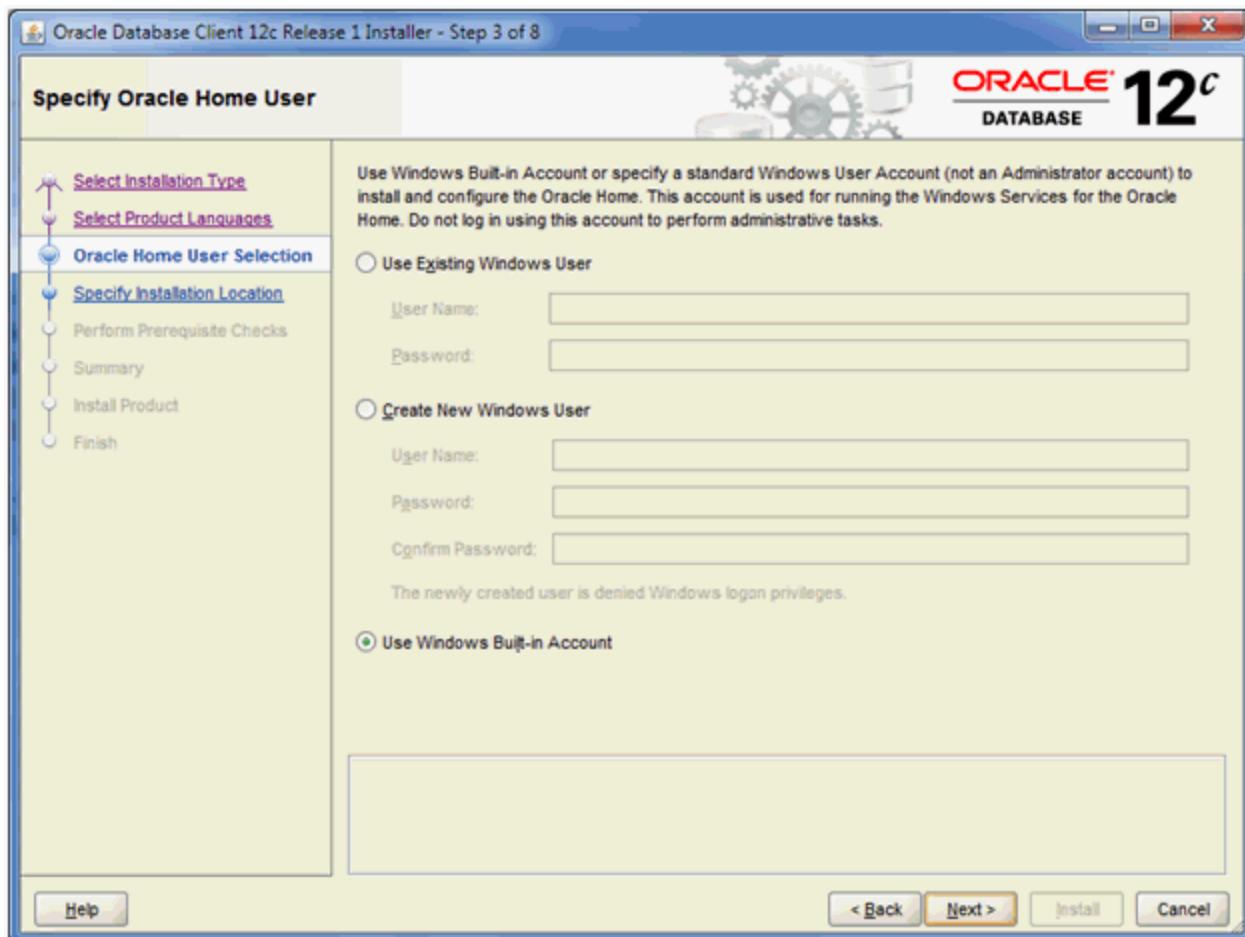
\client32\setup.exe



2. On Step 1 of 6, select the **Administrator** radio button and click the **Next** button.



3. On Step 2 of 6, select the **English** language from the list of **Available languages** and click the **Next** button.

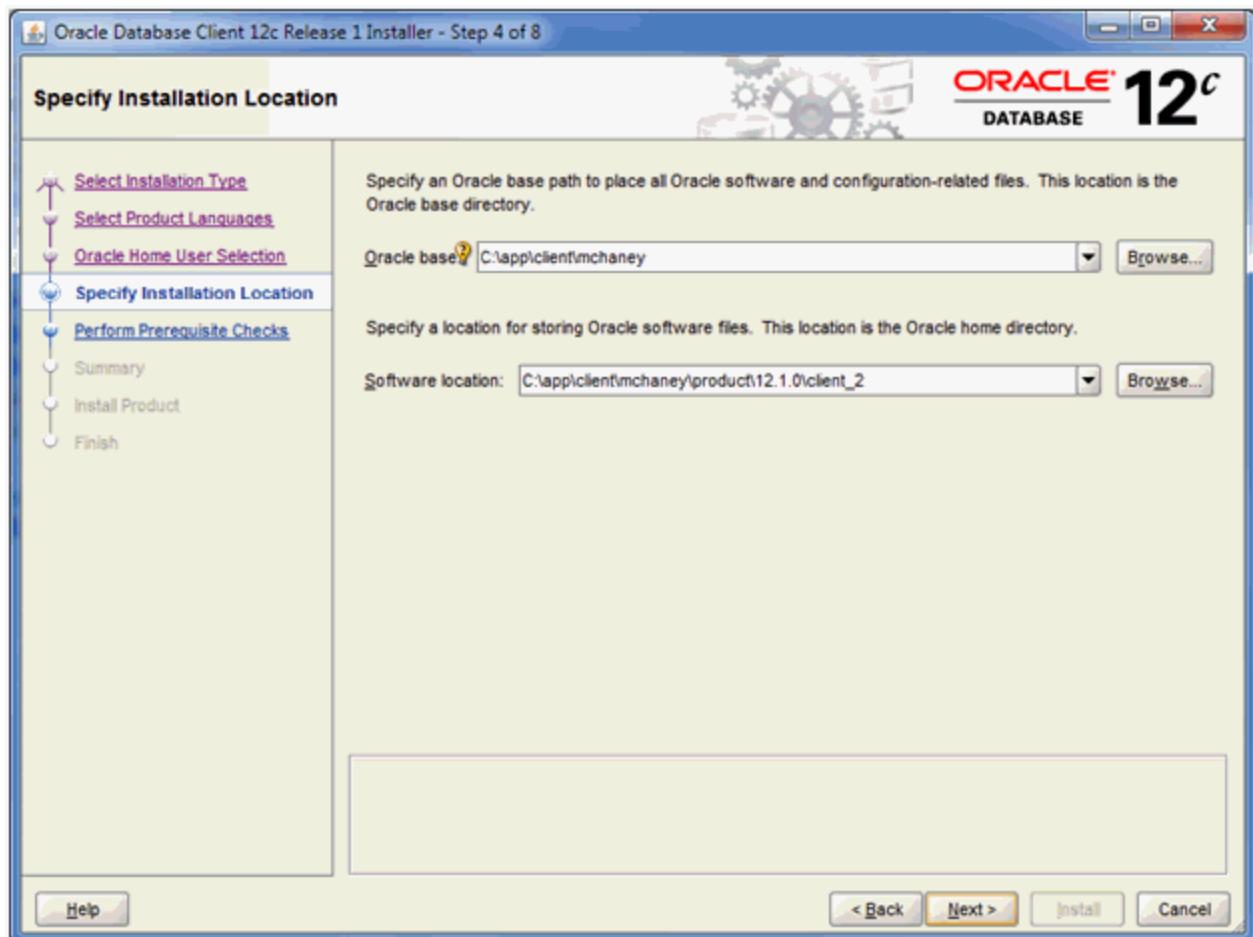


4. On Step 3 of 8, you can accept the default value which is:

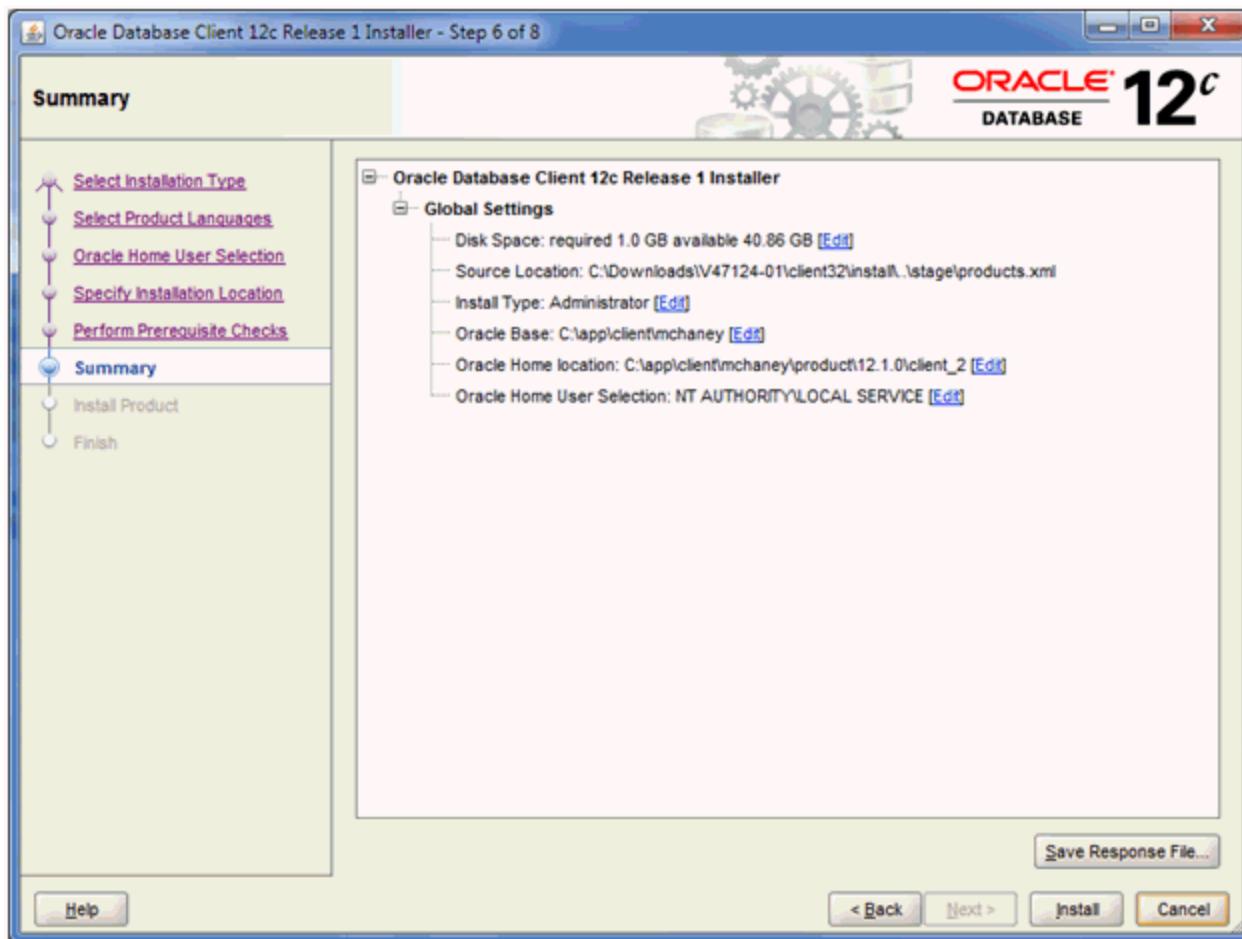
Use Windows Built-in Account

Note: Unlike the installation of the database where Oracle recommends not using the built-in account, this option for the database client is acceptable.

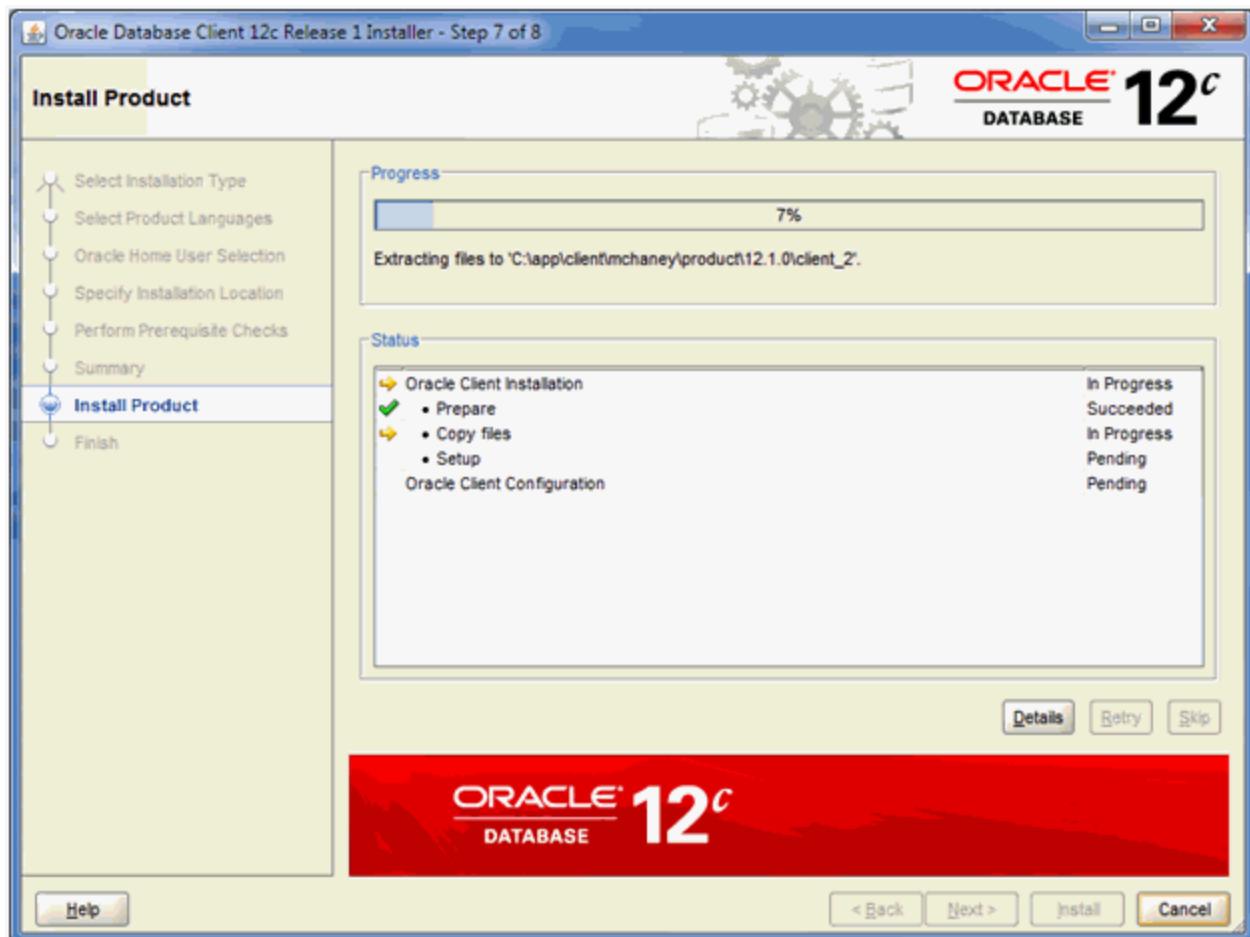
5. Click the **Next** button.



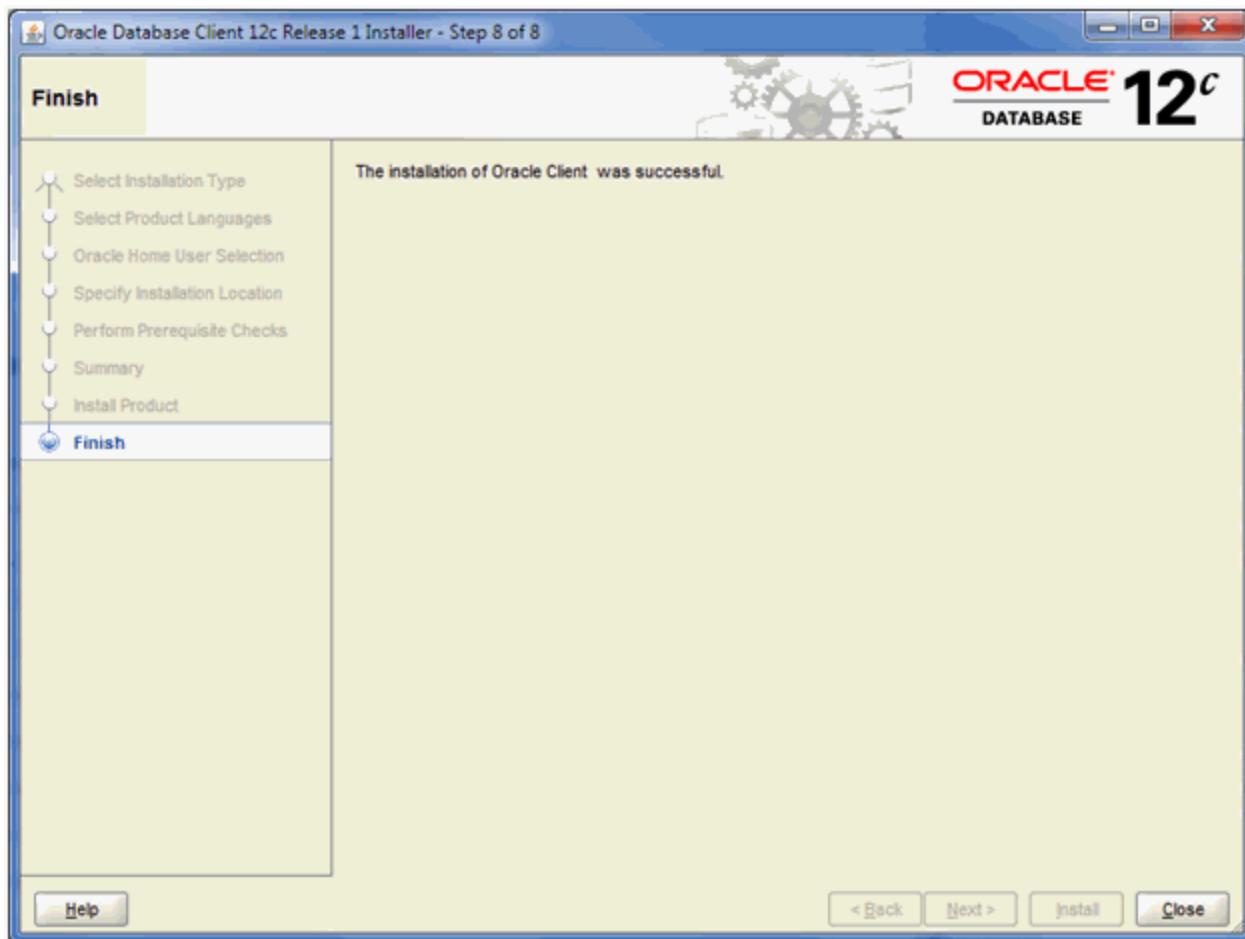
6. On Step 4 of 8, enter path values for the **Oracle base** and **Software location**.
7. Click the **Next** button.



8. On Step 6 of 8, verify the **Global Settings** and click the **Install** button.



9. On Step 7 of 8, the installer displays the **Progress**.



10. On Step 8 of 8, the installer indicates the installation was successful. Click the **Close** button to exit the installer.

6.3 Working with the Microsoft Windows PATH Environment Variable

Note: This section provides important instructions on working with the PATH environment variable as it relates to the Oracle database and the Oracle database client.

If you installed the 64-bit Oracle database, the installer placed the path to the database (for example, c:\Oracle\E11local\bin) at the start of the Windows PATH environment variable. Then when you installed the 32-bit Oracle database client, the installer placed the path to the database client (for example, c:\Oracle\product\12.1.0\client_1\bin) at the start of the Windows PATH environment variable.

When EnterpriseOne runs, it looks for database drivers in each directory from start to finish in the PATH. The first occurrence of a driver DLL that EnterpriseOne finds will be loaded. This means that the path to the 32-bit Oracle database client must come **BEFORE** the path to the 64-bit Oracle database.

If you installed the 64-bit database and 32-bit database client in that order, the order in the PATH should be correct. However, if you installed them in the opposite order, you need to correct the order in the PATH.

To reverse the order of the 64-bit database and 32-bit database client paths in the Windows PATH, follow these steps:

1. From the Start button, select Control Panel and then System.
2. On the left side of the window that comes up, click Advanced system settings.
3. Click the **Advanced** tab.
4. Click the **Environment Variables...** button.
5. In the **System variables** box, highlight the variable path and click the **Edit...** button.
6. In the **Variable value** field, cut the 32-bit database client's path including the trailing semicolon. For example:
c:\Oracle\product\12.1.0\client_1\bin;
7. Paste the client's path and semicolon at the start of the Path value.
8. Click the **OK** button.
9. Click the **OK** button to exit from the **Environment Variables** window.
10. Click the **OK** button to exit from the **System Properties** window.
11. Close the **Control Panel** system window.

6.4 Working with the impdp.exe and expdp.exe Programs

There is a known issue with the Oracle 12c 32-bit database client programs that import (impdp.exe) and export (expdp.exe) JD Edwards EnterpriseOne data and spec databases during installation of the Development Client. To work around the problem, you can force the system to use the impdp.exe and expdp.exe in the Oracle 12c 64-bit database \bin folder for importing and exporting data. This resolves the issue because the 64-bit version of these files do not exhibit the known issue that is observed with the 32-bit version.

After you install the 32-bit database client, you must either delete or rename these files (so they are not executable) within the \bin folder of the 32-bit client:

- impdp.exe
- expdp.exe

For example, you could change the extension on these files (so they are not executable) using these commands:

```
cd <32-bit_db_client_install_dir>\bin
rename impdp.exe impdp.exe.bak
rename expdp.exe expdp.exe.bak
```

6.5 Copy the tnsnames.ora File

In order for your Oracle database client to function properly, you must copy the tnsnames.ora file:

From:

```
\\"<deployment server name>\<release>\client
```

To:

Copy the tnsnames.ora File

<32-bit Oracle Client Install Dir>\network\admin

Installing the Development Client and Web Client Features (WLSH4A and WASH4A)

This chapter describes installing the Development Client. Optionally, the Web Client may be installed during the Development Client installation or during a separate installation. As described earlier in this document, the Web Client uses an application server that processes requests from a browser and then returns the results back to the browser. The application server may be either Oracle WebLogic Server, IBM WebSphere Express, IBM WebSphere for Developers, or WebSphere 9.0.

Note: Tools Release 9.2 Update 2. The existing installer H4A85 is renamed to WASH4A and is enhanced to support IBM WebSphere 9.0 along with existing support of IBM WAS 8.5.5.

Note: To include the Web Client installation in the Development Client installation process, a JD Edwards EnterpriseOne Administrator would define a feature and include that feature in the package to install. For details on these package builds, refer to the *JD Edwards EnterpriseOne Deployment Server Reference Guide* in the chapter entitled: *Working With the Full Client Package*.

In addition to Web Client Features, a client package can include additional features that perform tasks such as installing the Visual Studio runtime libraries. Refer to the appendix of this guide entitled: [Appendix D, "Using the Microsoft Visual C++ Compiler"](#).

Caution: This document concentrates on using the latest releases of E1 Tools, E1 Applications, and OEE. However in some cases, it is possible to mix old or new releases of E1 with various versions of the OEE database. For example, an Applications 9.1 package can be installed on a computer with OEE 12c or 11gR2 installed. Special considerations need to be observed when doing this. See [Appendix J, "Mixing Releases of EnterpriseOne Development Client and OEE"](#).

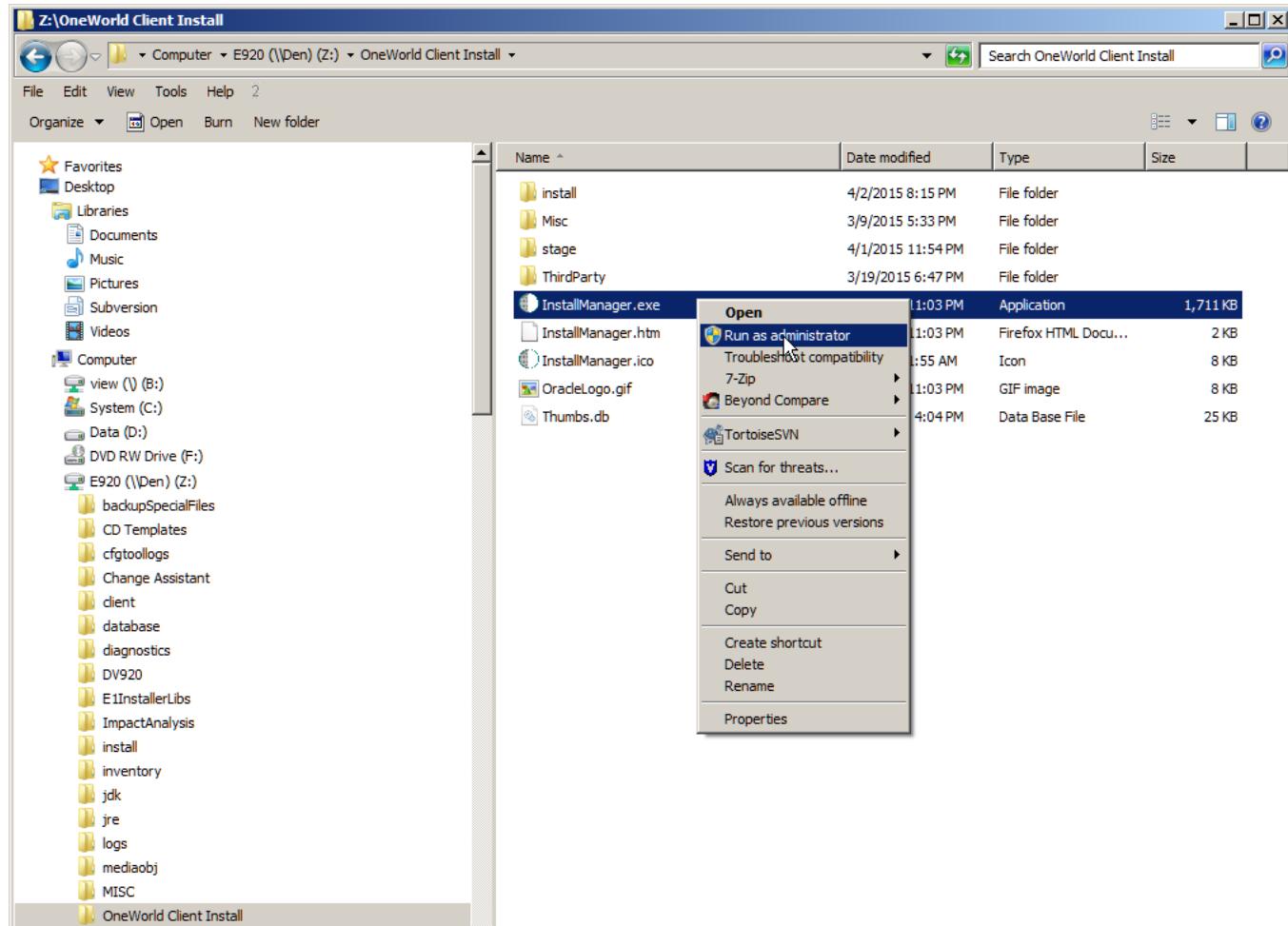
This chapter discusses these topics:

- [Section 7.1, "Installing the Development Client"](#)
- [Section 7.2, "Installing the WebLogic Web Client \(WLSH4A\)"](#)

- Section 7.3, "Installing the Development Client with a Package Including the WebSphere (WASH4A) Feature"

7.1 Installing the Development Client

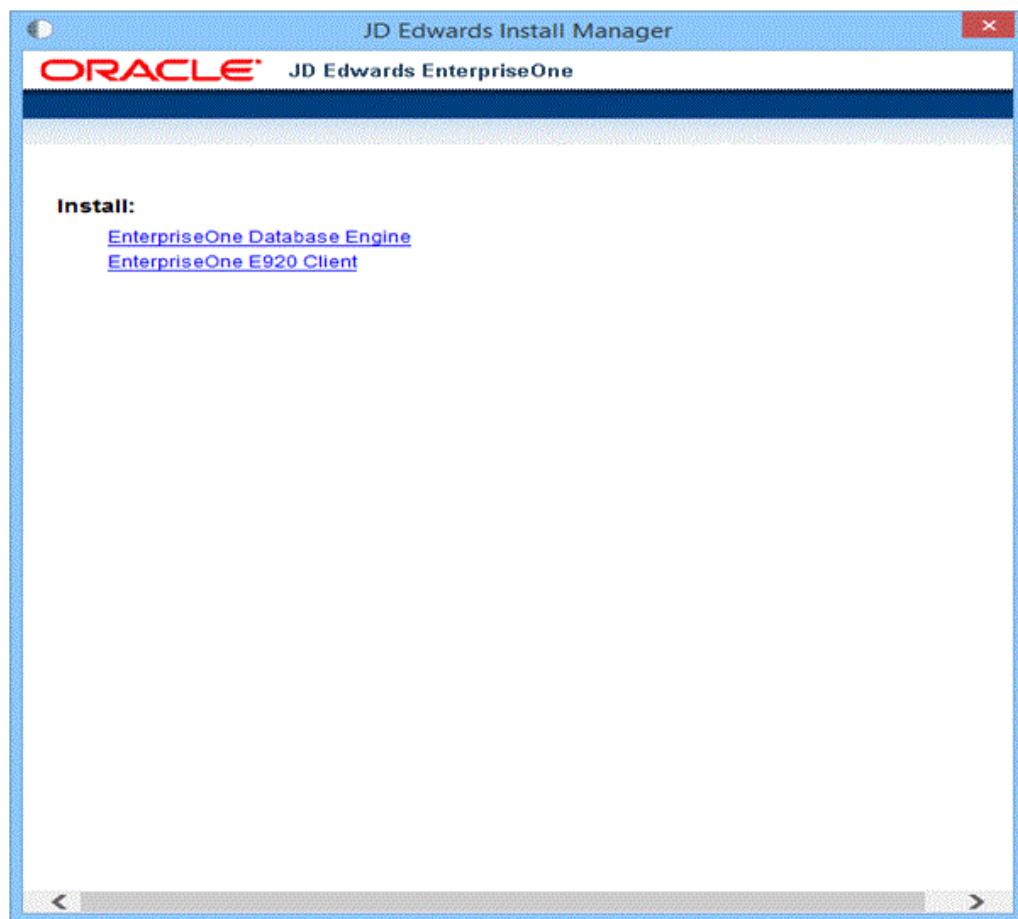
The InstallManager program is the JD Edwards EnterpriseOne front-end program used to launch the OUI installer for the Development Client. Locate and run this program as described below.



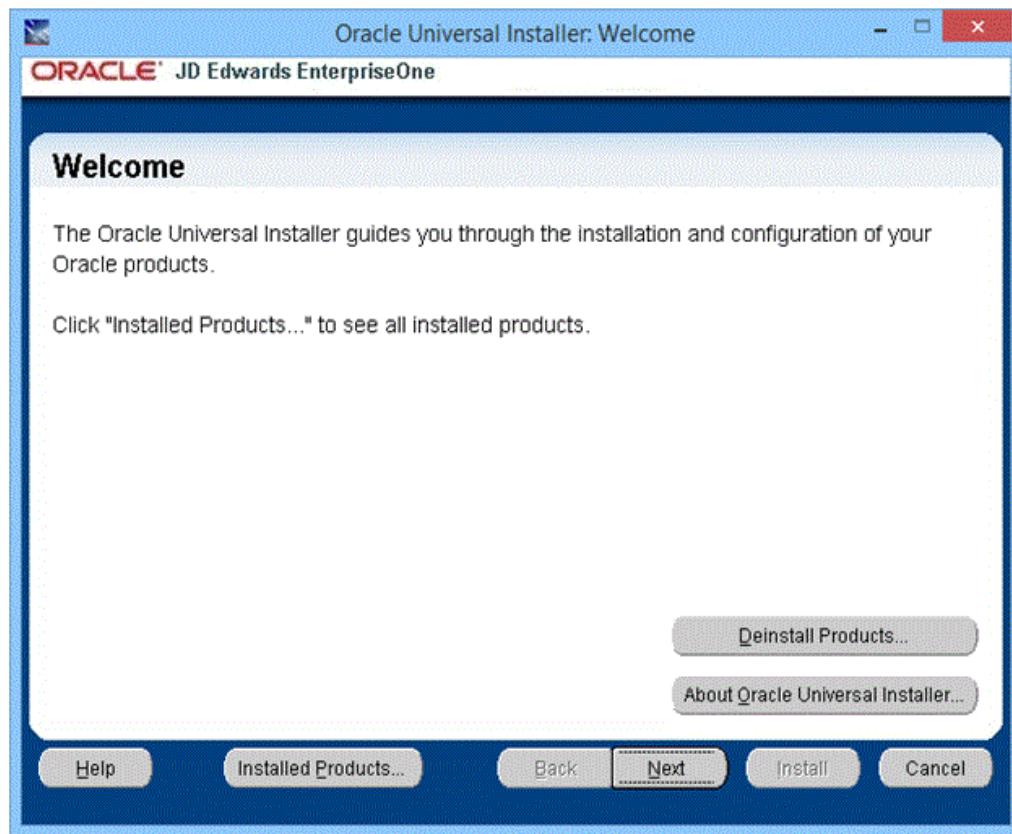
1. Run this program:

```
\\"<deployment server name>\<release>\OneWorld Client
Install\InstallManager.exe
```

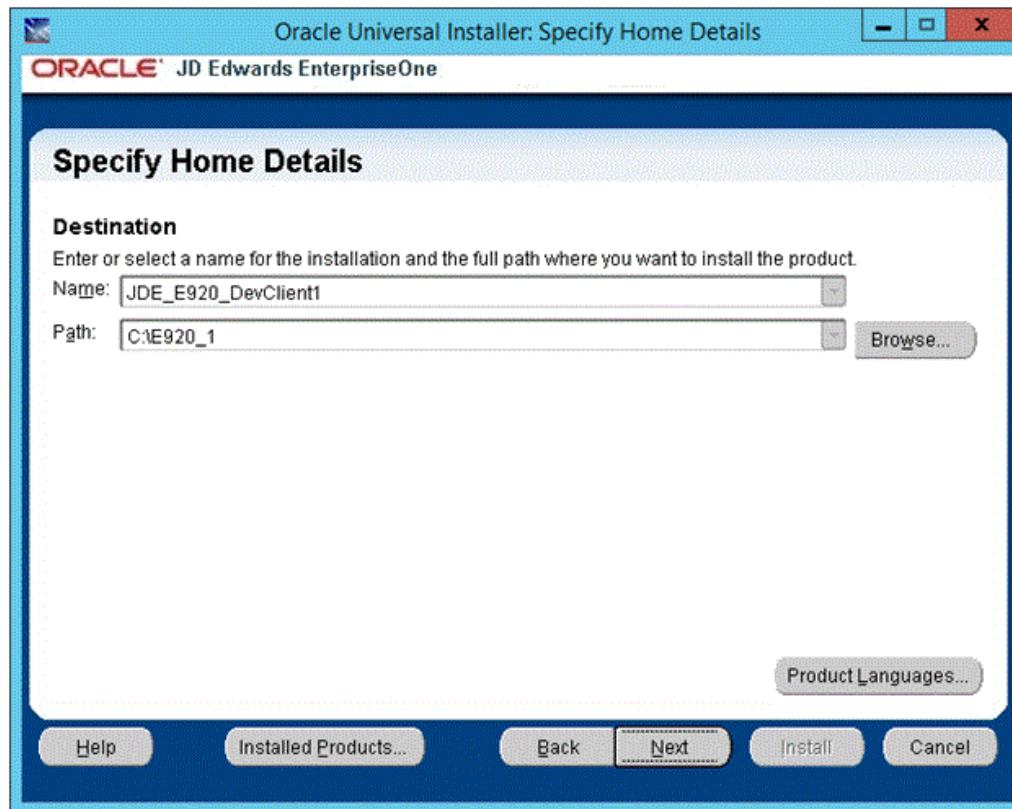
Caution: You must right-click on the executable and select **Run as Administrator** from the drop-down. Likewise, if you have a shortcut assigned to `InstallManager.exe`, you must either configure the shortcut to automatically Run as Administrator or right click the shortcut and choose **Run as Administrator**.



2. Click the option to install the JD Edwards EnterpriseOne Development Client:
[EnterpriseOne E920 Client](#)



3. On **Welcome**, click the **Next** button.



4. On **Specify Home Details**, you must specify an **Oracle Home** path and a name for that path.

Each Oracle product that is installed on a machine has what is termed an **Oracle Home** path. This path contains all the files for each Oracle product. This path has a user-specified name as well.

Caution: Do not specify the same **Oracle Home** name or path into which you installed the local OEE database; however, you can specify a path that has the same parent path as the OEE database's Oracle Home.

Note: The OUI installer appends a number to the ends of the default Oracle Home name and path. This number is initially "1." If an Oracle Home already exists with the given default name and path, the OUI installer increments this number in both the name and path.

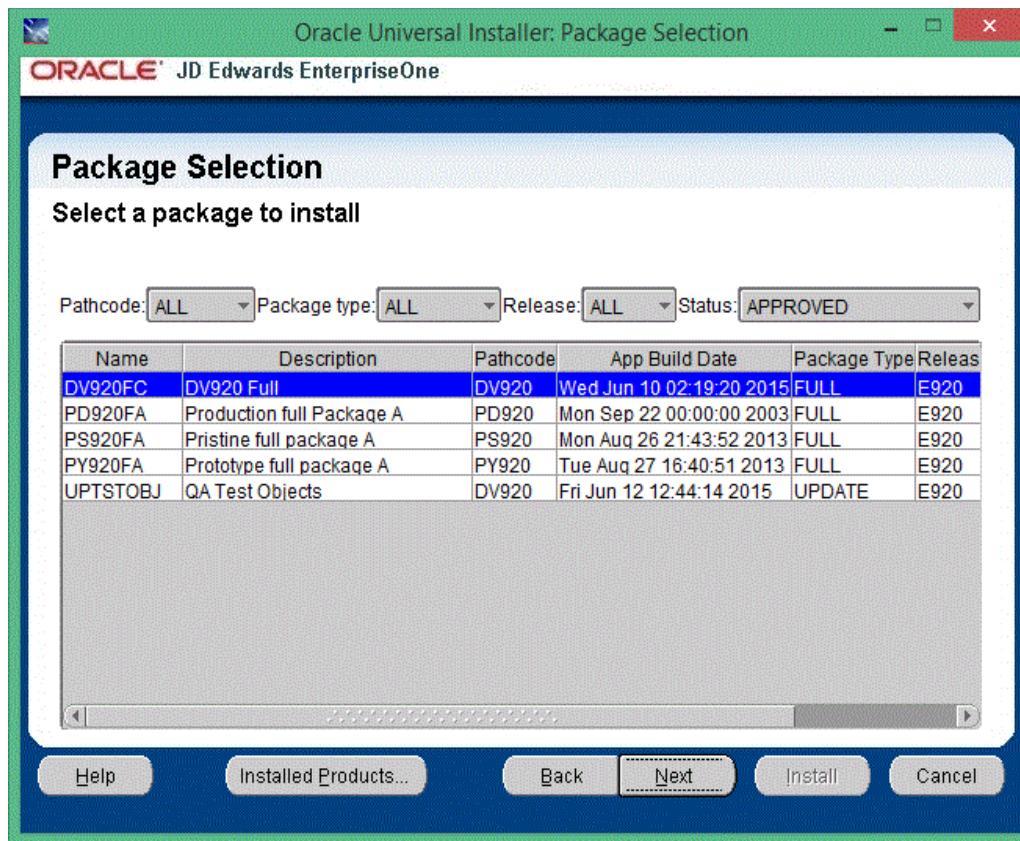
You do not have to take the default values; you can enter your own name and path values.

Note: If you have an existing installation of the Development Client and you want to perform another installation on the same machine, you have several options:

1. Select the same Oracle Home as the existing Development Client.
 - If the package that you select is an update package, the existing Development Client will be updated with files and data from the update package.
 - If the package that you select is a full package and the pathcodes of the package and the existing Development Client are the same, components of the existing Development Client will be removed before the new package is installed.
 - If the package that you select is a full package and the pathcodes of the package and the existing Development Client are NOT the same, the pathcode of the existing Development Client will remain and the new package will be installed giving you multiple pathcodes.
2. Uninstall the existing Development Client before installing the new one.
3. Run SnapShot and save the existing Development Client before installing the new one.

Additional information is included in [Appendix I, "Installing Multiple Pathcodes"](#).

5. Click the **Next** button.



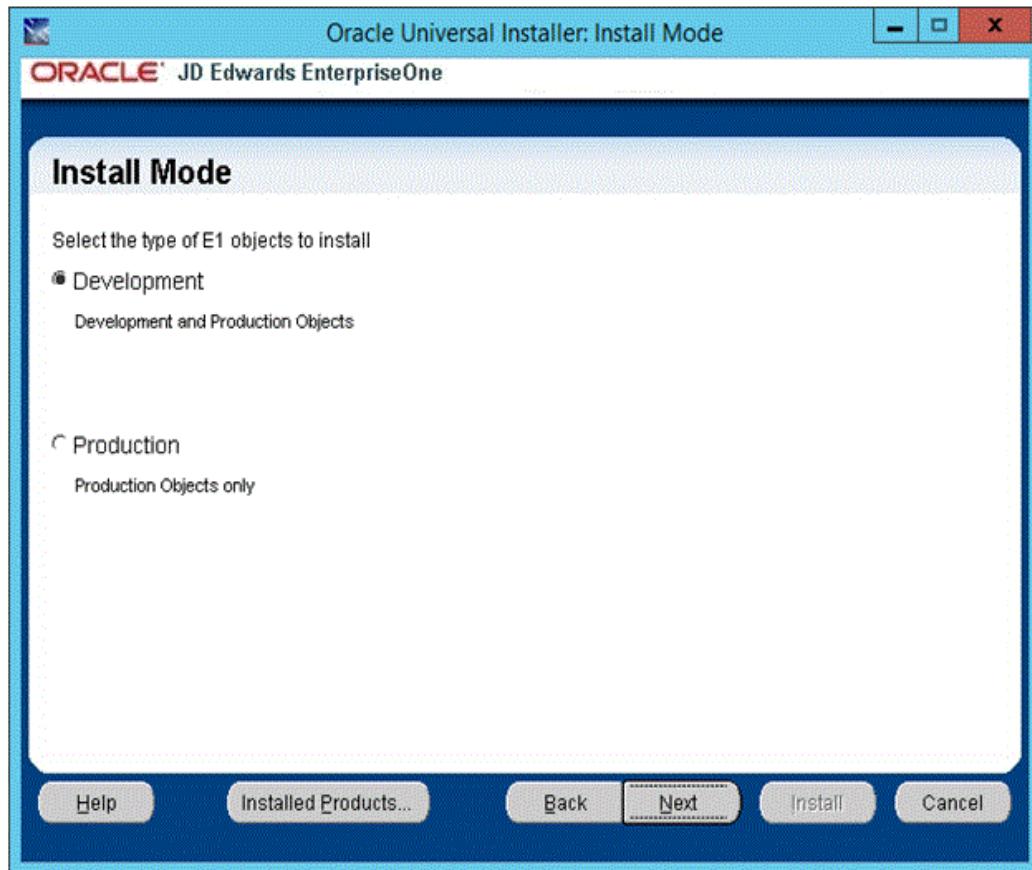
- On Package Selection, select the appropriate package for the Development Client.

Note: If the Package Selection screen includes multiple Development Client installation packages, for either the Oracle WebLogic Application Server, WebSphere Express, or WebSphere 9.0, be sure to select the package for the application server you are using.

Note: You may filter the list of packages using the combo boxes above the table. You can also sort the list of packages by clicking on a column header.

Note: See [Appendix I, "Installing Multiple Pathcodes"](#) for information about installing multiple pathcodes on your workstation.

- Click the **Next** button.



8. On Install Mode, select the type of JD Edwards EnterpriseOne (E1) objects to install:

- Development

These are needed if you plan to modify E1 objects such as business functions, applications, forms, etc.

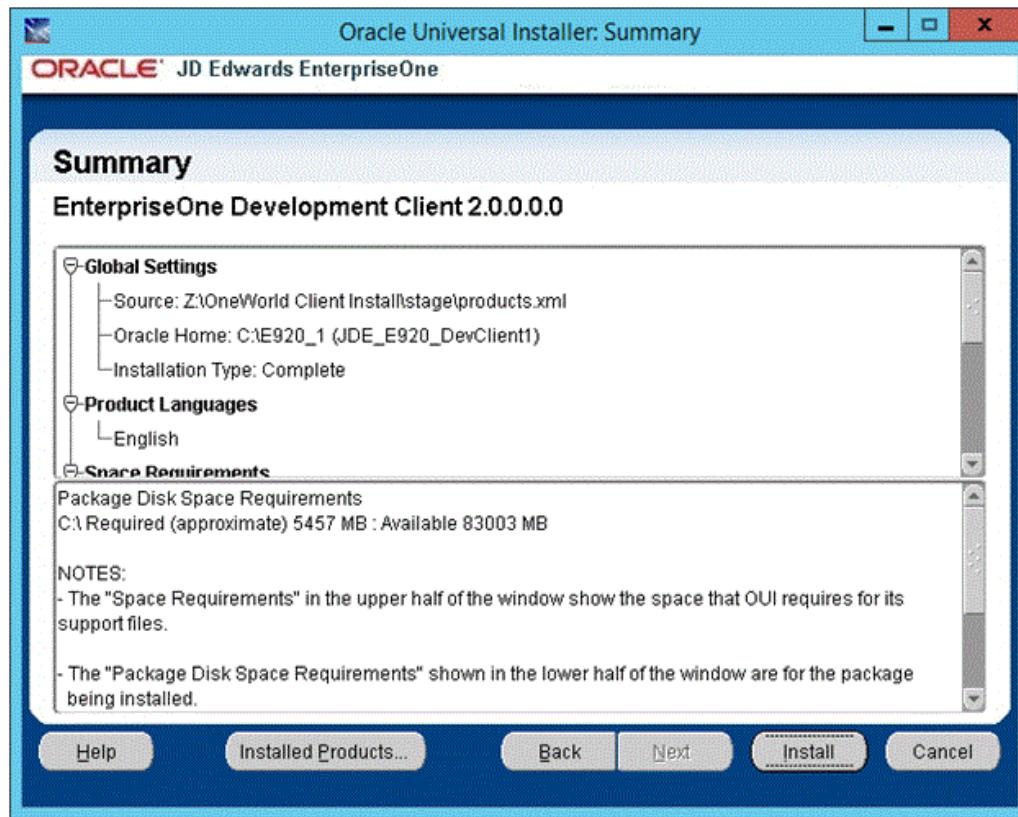
- Production

Select this type if you do not plan to modify E1 objects.

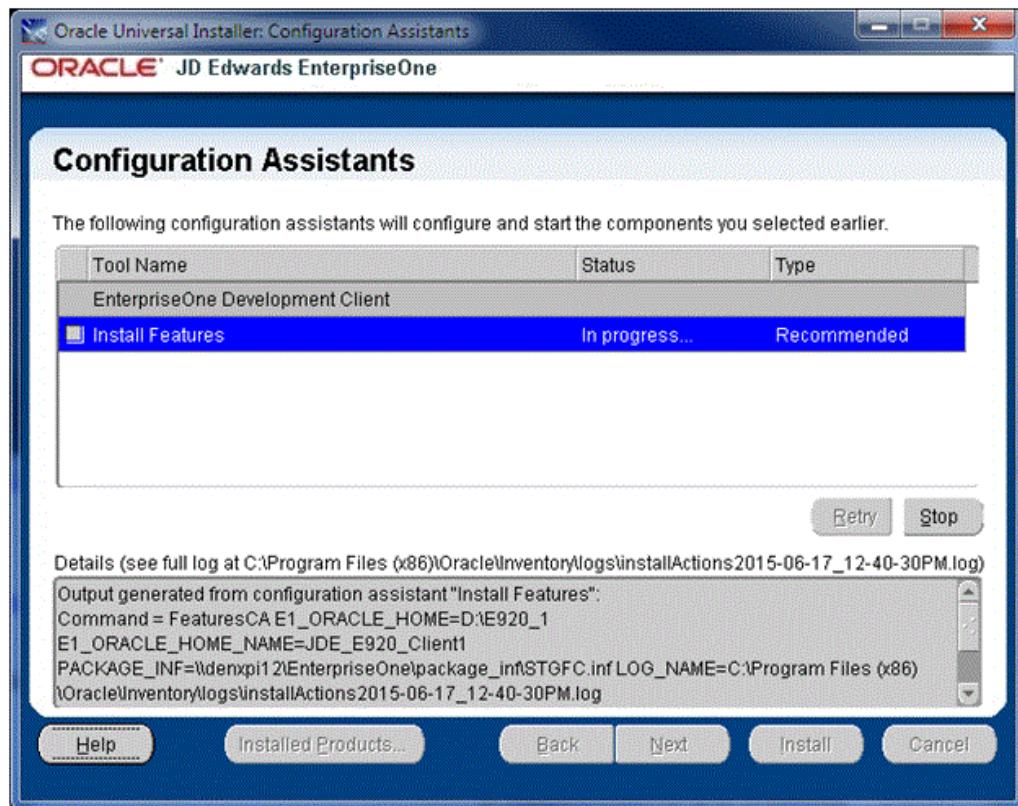
If you selected an update package, you will not see this screen. The install mode will be the same as the already installed full package.

9. Click the **Next** button.

Note: If you selected an update package that includes specs, you will be prompted for an E1 user and password.



10. On Summary, verify that what will be installed is what you expect.
 - The "Space Requirements" in the upper half of the window show the space that OUI requires for its support files. This space does not include the size of the package that you selected.
 - The "Package Disk Space Requirements" shown in the lower half of the window are for the package being installed.
 - If this is an update package or you are installing into an existing Development Client's Oracle Home, the value for the "Package Disk Space Requirements" does not include disk space of the existing installed package. Because some components of the new package may replace existing components or be installed in addition to existing components, the package value may be lower or higher than the actual amount of required disk space.
11. Click the **Install** button.



If the package you are installing contains a Web Client Feature for WLSH4A or WASH4A, the above screen is displayed near the end of the installation. At this point, the Development Client installer spawns additional installers. Which installers are run depends on which features were included in the package that you selected. Those features were specified by the person that created the package.

As the Configuration Assistants spawned installers run, the OUI installer displays the name of the log file at the bottom of the screen in "Details (see full log at ...)". If you do not note the location of the log before the message or screen closes, you can find the installation logs in this directory:

C:\Program Files (x86)\Oracle\Inventory\logs

When you display that directory using Windows Explorer, you should sort the contents by date. The results of each installation will be logged in three files, all with the same date_time in their names, but with different file extensions:

- .log
- .err
- .out

For information about the WLSH4A installer, refer to the section of this guide entitled: [Section 7.2, "Installing the WebLogic Web Client \(WLSH4A\)"](#).

7.2 Installing the WebLogic Web Client (WLSH4A)

As noted earlier, the WebLogic Web Client (WLSH4A) can be installed as a feature included in the installation package or the WLSH4A installer can be run manually.

If run as a feature, the Development Client installer would have already prompted for the installation location (that is, the Oracle Home path and name). This information is passed to the WLSH4A installer so there will not be a prompt asking again. In this case, the installer will go straight to the Step 4 in the following procedure.

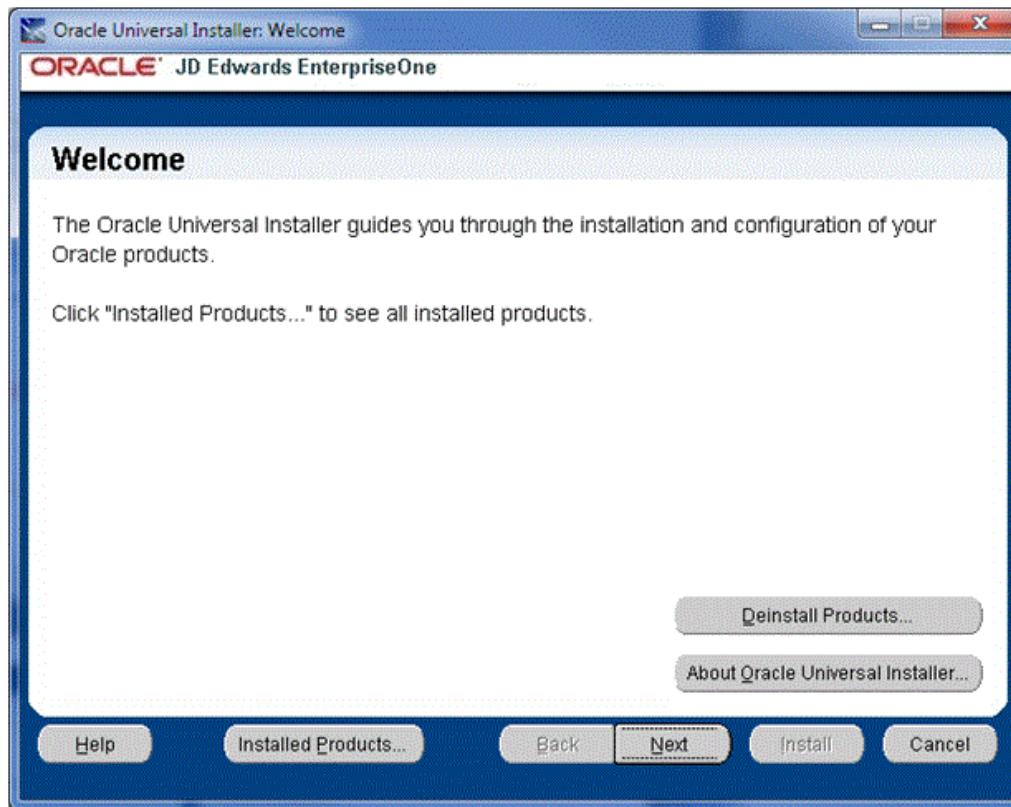
If you run the WLSH4A installer manually, you will need to perform the following steps:

1. Right-click on the following program and select **Run as Administrator**.

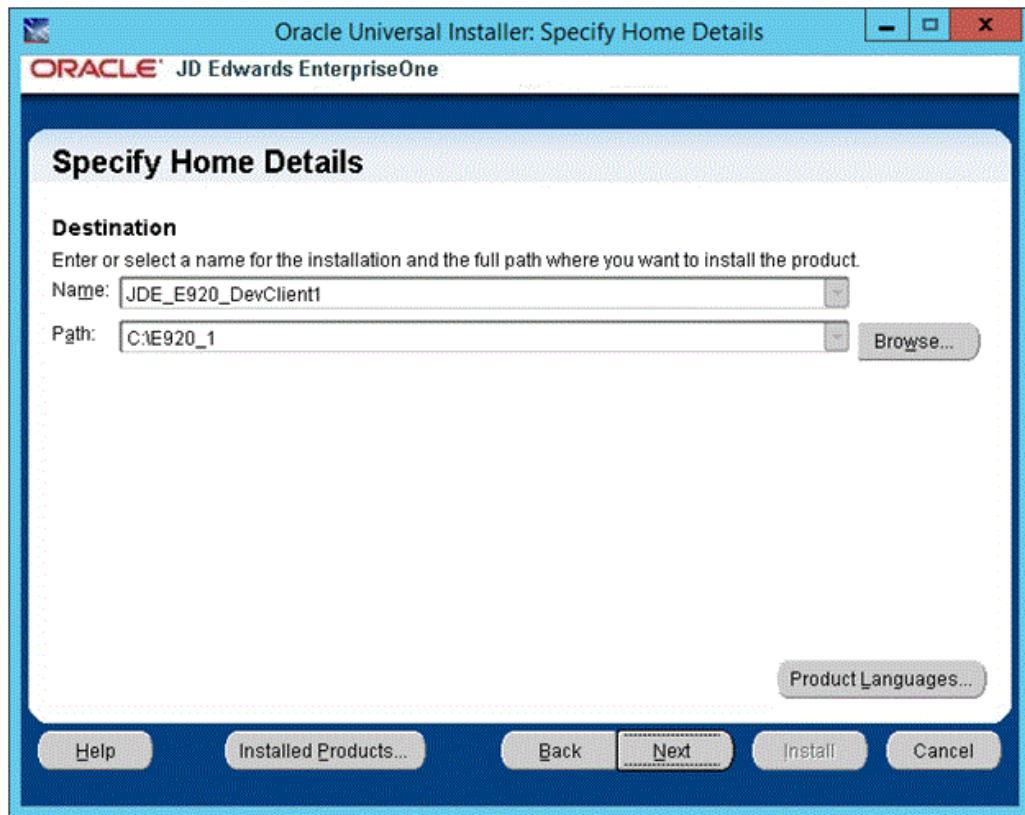
```
\\"<deployment server name>\<release>\OneWorld Client Install  
\ThirdParty\WebDevFeature\WLSH4A\install\setup.exe
```

Caution: For Microsoft Windows, you must right-click on the executable and select **Run as Administrator** from the drop-down.

Note: Right-click on the following program and select **Run as Administrator**.

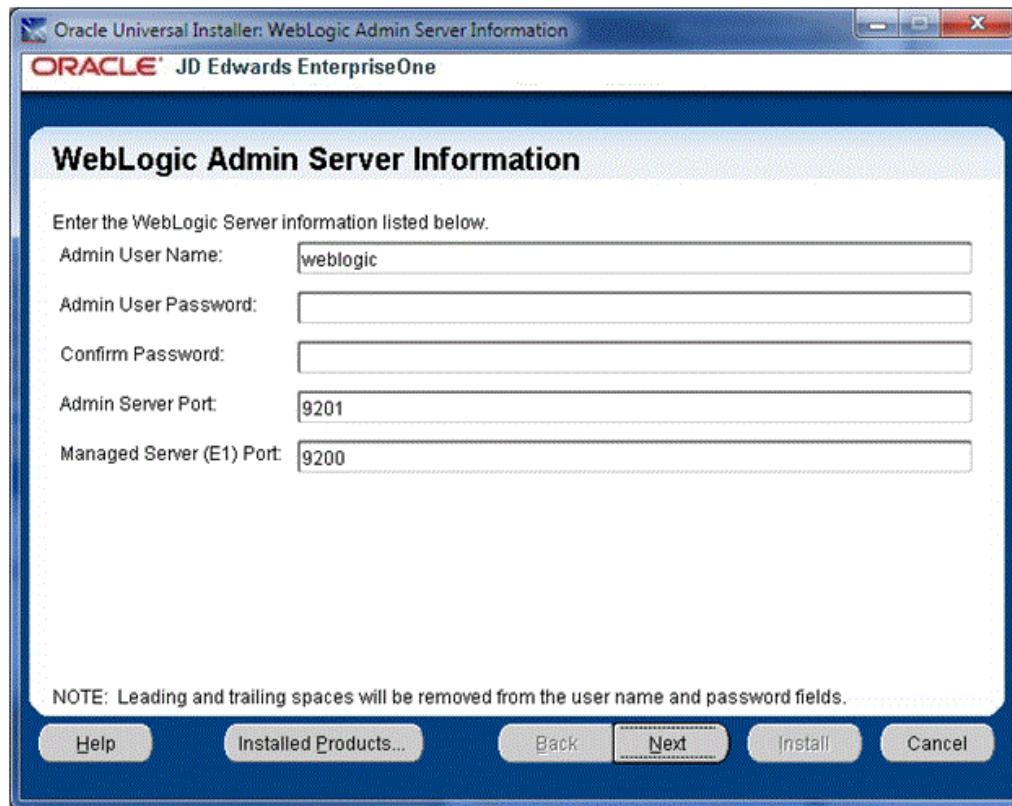


2. On Welcome, click the **Next** button.



3. On Specify Home Details, click either one of the drop downs and select the same name or path as the Development Client. When you select a path or name from one of the drop downs, the corresponding name or path will automatically be displayed in the other field.

Caution: It is imperative that you select the Oracle Home Name and Path where the Development Client is installed. If you do not do this, the installation will fail or the resulting installation will not be runnable.



4. On WebLogic Admin Server Information, you are prompted for information that is necessary to access and configure the local WebLogic Server, which is already installed on the Development Client. Using these credentials the WLSH4A installer is able to create and configure a WebLogic Admin user and domain.

Note: If it not necessary for users to know any of this information for an existing WebLogic Server Admin user or installation because this installation process deletes any such existing information and recreates the required components using the information entered on this screen.

Note: The Admin user is required by the WLSH4A installer during the installation. Although not normally needed by users on the Development Client, you may need to sign into the WebLogic Server Administrative Console (for example, to perform administrative tasks). In that case, you will need to provide this same Admin user and its password when signing in. Therefore you should record or remember these Admin user and password credentials.

Complete these fields:

- *Admin User Name*

Enter the name of the WebLogic administrative user account to be created.

The value you enter here can be any value that contains valid characters as allowed by the WebLogic application server.

- *Admin User Password:*

Enter the password for the WebLogic administrative user account to be created.

This password must meet the password security policy for WebLogic.

Tip: Password Complexity Policy. The Password Validation provider in WebLogic determines the password complexity policy for the WebLogic Admin user. The default policy requires that the password be a minimum of 8 characters. The OUI installer cannot programmatically determine and return these policy requirements. Therefore it is beyond the scope of this documentation to guide the end user to determine the exact policy requirements for user names and their associated passwords.

If the password you enter here does not meet the WebLogic password policy on your machine the WLSH4A installer will fail later in the installation process. To recover, you must determine a valid value for your WebLogic Server and re-run the WLSH4A installer and enter a valid password.

- *Confirm Password*

Re-enter the password to confirm it.

- *Admin Server Port*

Enter the port number for the WebLogic Server Administrative Console. In most cases you can accept the value that defaults into this field. You should not change this value unless you understand the impact of doing so.

- *Managed Server (E1Server) Port*

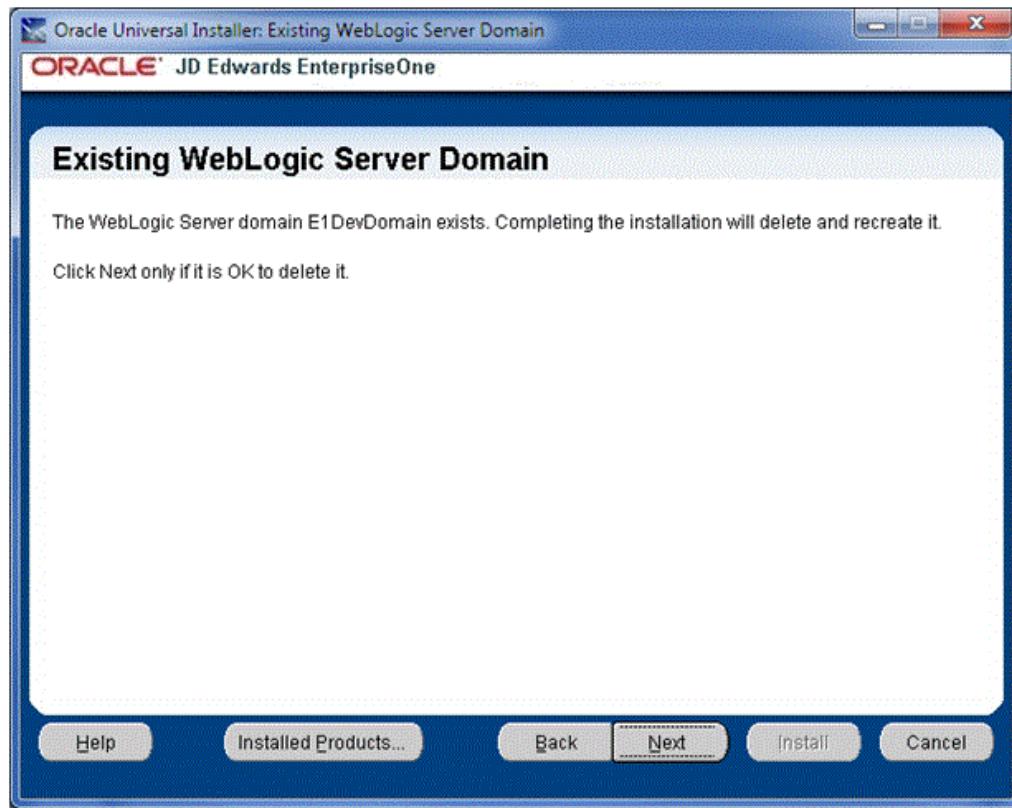
Enter the port number for the instance of the JD Edwards EnterpriseOne server (called E1Server) that is created on WebLogic. This server is a scaled-down JD Edwards EnterpriseOne HTML Server that is used by the Development Client to service the web client.

5. Click the **Next** button.

6. If the package you are installing contains the WLSH4A Web Dev Feature, you will see the above screen.

This information is required to access and configure the local WebLogic Server that is already installed on the Development Client. Using these credentials the WLSH4A installer will be able to create and configure a WebLogic Admin user and domain. If the Admin user and the Admin domain already exists, the installer will delete them and recreate them using the values you enter on this screen.

7. Click the **Next** button.



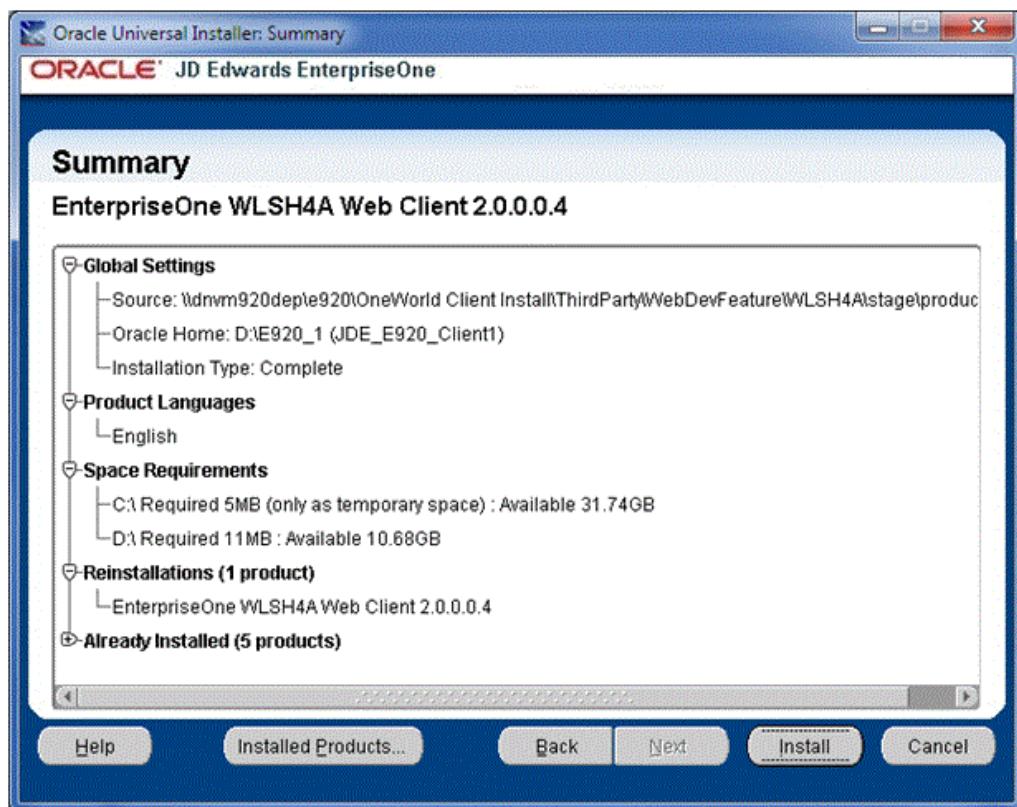
8. If the installer detects an existing WLSH4A configuration, it displays the above screen informing you that the existing configuration will be deleted before the new configuration is created.

Caution: In the unlikely case that you have data in that location that you want to save, you should do so before you proceed.

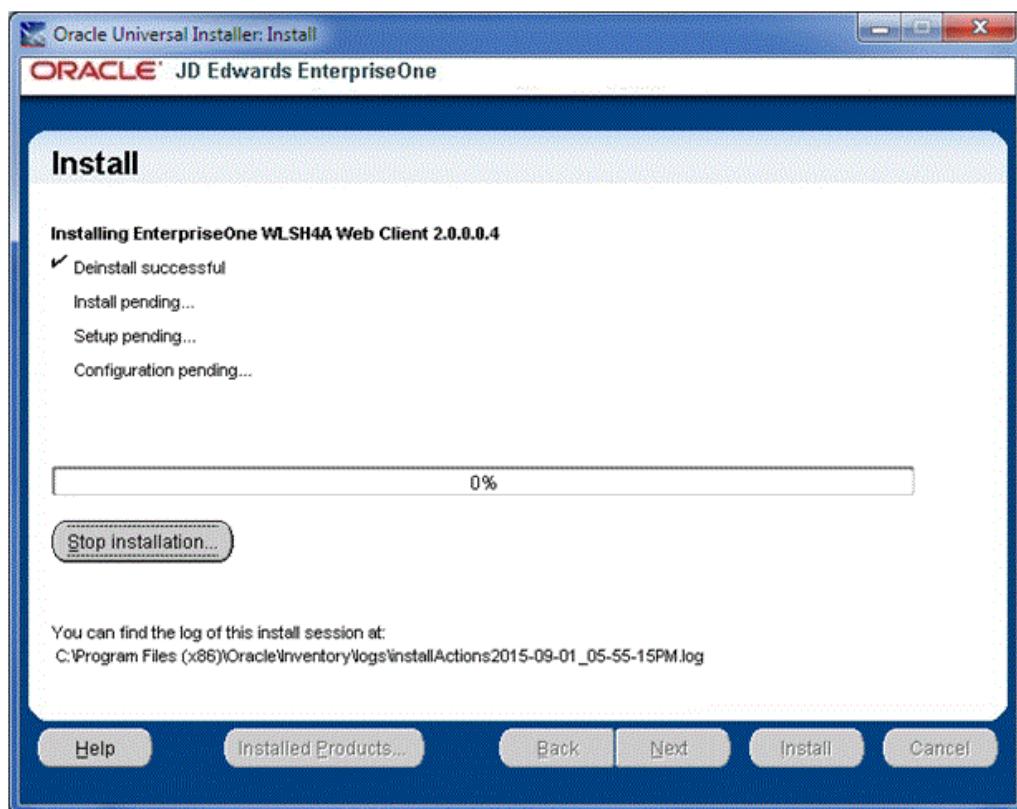
The directories to save are:

- <WebLogic_install_dir>\user_projects\domains\E1DevDomain
 - <E1_install_dir>\system\JAS\EA_JAS_80.ear
-

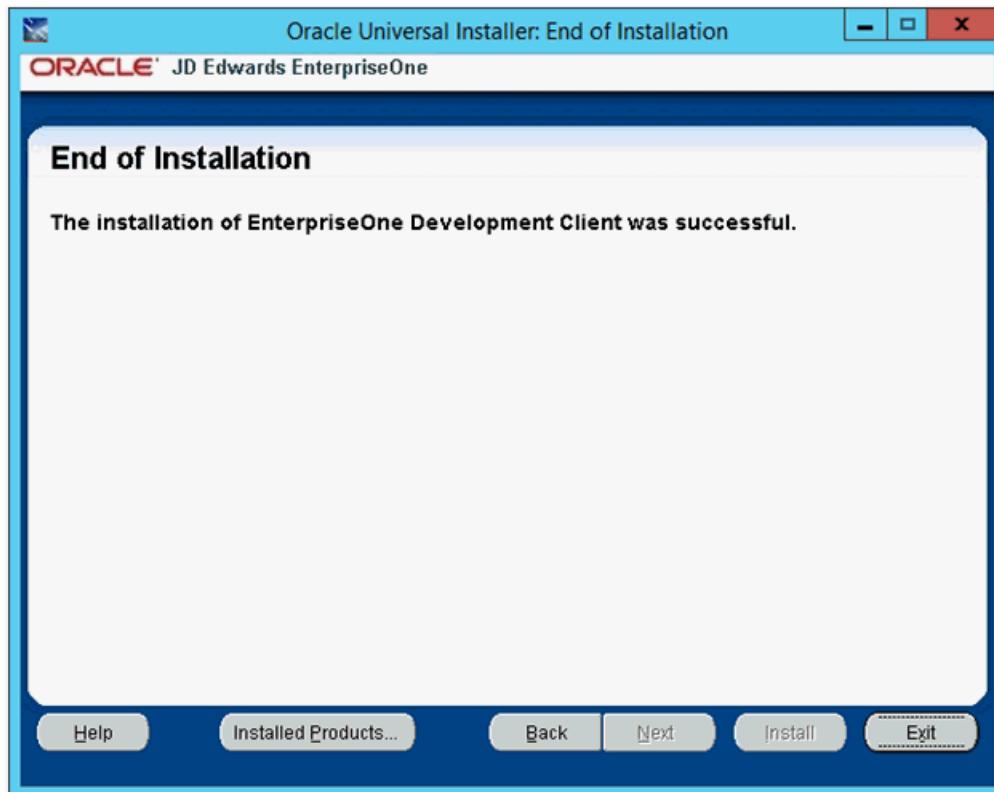
Note: Multiple WebLogic Servers. It is possible for your machine to have multiple installations of WebLogic Server (perhaps because they are different versions). If so, the WLSH4A installer will prompt you to specify which version you want to use for this installation. Select the one that you want and click the **Next** button to proceed.



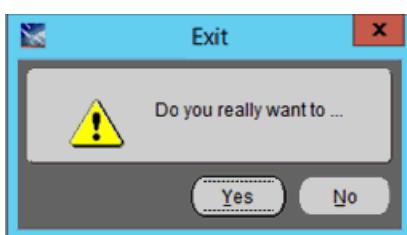
9. On Summary, click the **Install** button.



10. The installer displays a progress screen.



11. If running as a feature in a package, you will see the End of Installation screen. Click the **Exit** button to complete the Development Client installation and return to the OUI installer.
Otherwise, if you are running the WLSH4A installer manually, you will not see the End of Installation screen.



12. On the Exit dialog, click the **Yes** button to exit the OUI installer.
If you encounter errors during the installation process, refer to these troubleshooting chapters in this guide:
 - [Chapter 11, "Troubleshooting the Installation Process"](#)
 - [Chapter 12, "Troubleshooting the Workstation"](#)

7.3 Installing the Development Client with a Package Including the WebSphere (WASH4A) Feature

Even though the WebSphere Express, WebSphere for Developers, or WebSphere 9.0 Web Client (WASH4A) can be installed manually, the recommended method is to install it as a package feature as described in this section.

Caution: For a package that includes an WASH4A Web Client, be aware that the installers for IBM WebSphere Express, IBM WebSphere for Developers, and WebSphere 9.0 place data into the registry specifically for the Microsoft Windows user that is signed into Microsoft Windows at the time of installation. You must sign into Microsoft Windows using this same user when you install and run the JD Edwards EnterpriseOne Development and Web Clients.

Caution: For WebSphere Application Server 9 (9.0.0.0 to 9.0.0.2 only) version, before installing WASH4A, you must perform this prerequisite procedure:

1. Run Regedit.exe to edit the Windows Registry.
 2. Back up Windows Registry. For example, you could use File > Export registry.
 3. In the Windows Registry, rename this entry **from 8.5.0.0 to 9.0.0.0** by right clicking and choosing **Rename**:
HKEY_CURRENT_USER\SOFTWARE\WebSphere Application Server\8.5.0.0
 4. Highlight and right click the 9.0.0.0 directory, choose **MajorVersion** name, and click **Modify...**
 5. Update the **Value data** field from 8 to 9.
 6. Close the Windows Registry window and restart the system.
-

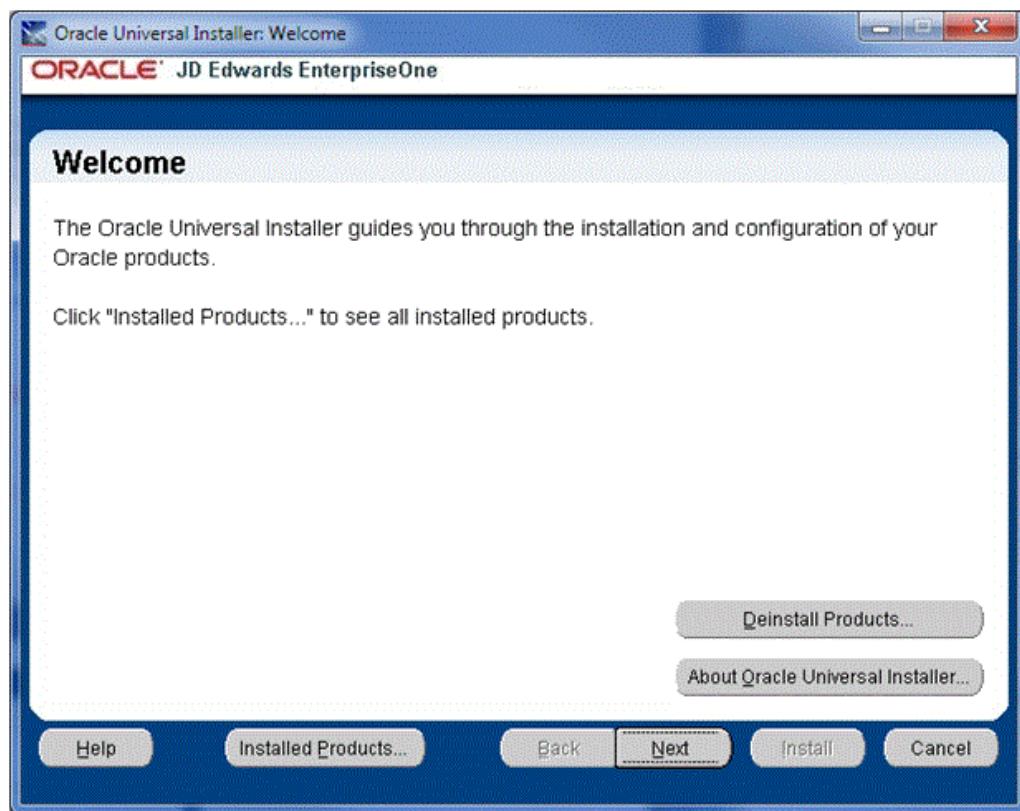
Note: If you run the Development Client installer that includes the installation of a package for the WASH4A Web Client and the corresponding version of WebSphere Express, Developers is not installed, the installer displays an error during the installation of the web component. The standard Microsoft Windows components of the Development Client will install and function normally, but you will not be able to run the Web Client.

Perform these steps to install the WebSphere Express, WebSphere for Developers, or WebSphere 9.0 Web Client (WASH4A):

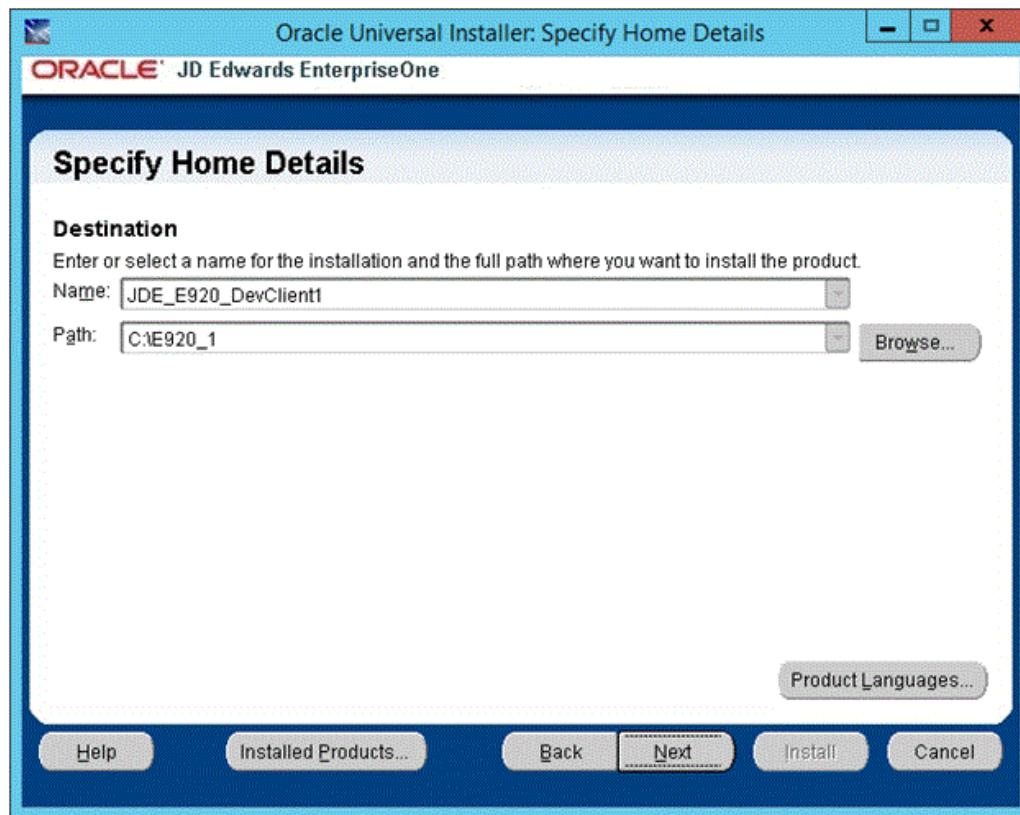
1. Right-click on the following program and select **Run as Administrator**.

```
\\"<deployment server name>\<release>\OneWorld Client Install  
\ThirdParty\WebDevFeature\WASH4A\install\setup.exe
```

Caution: For Microsoft Windows, you must right-click on the executable and select **Run as Administrator** from the drop-down.



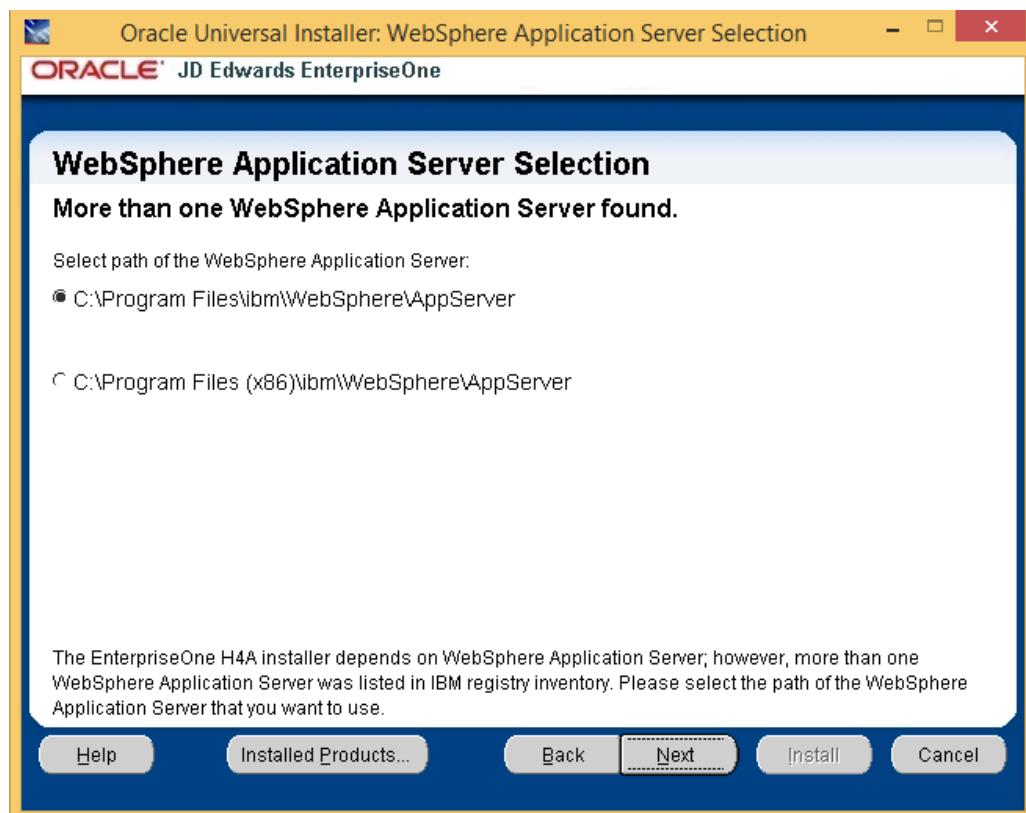
2. On Welcome, click the **Next** button.



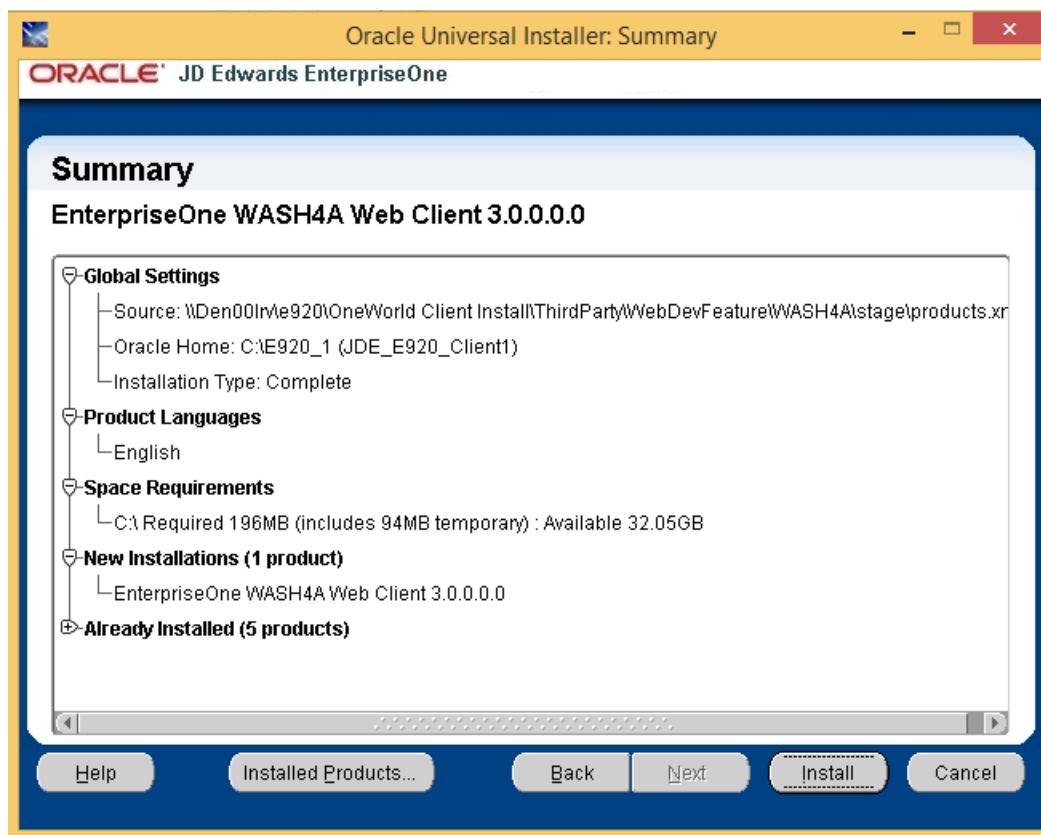
3. On Specify Home Details, click either one of the drop downs and select the same name or path as the Development Client. When you select a path or name from one of the drop downs, the corresponding name or path will automatically be displayed in the other field.

Caution: It is imperative that you select the Oracle Home Name and Path where the Development Client is installed. If you do not do this, the installation will fail or the resulting installation will not be runnable.

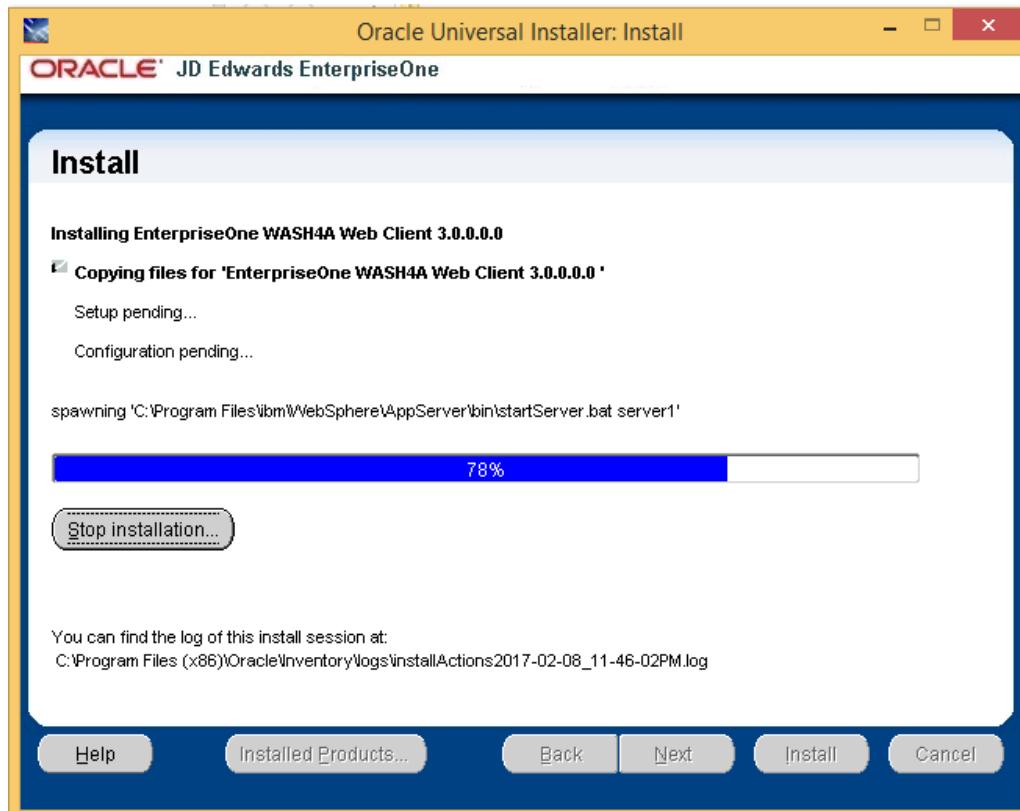
4. Click the **Next** button.
5. If multiple WebSphere Application Servers are installed, you will see the window entitled: **WebSphere Application Server Selection**. You should verify the radio button is selected that corresponds to the WebSphere Application Server path that the Development Client should use. By default, the system selects the highest version. You can change the version if required.



6. Click the **Next** button.

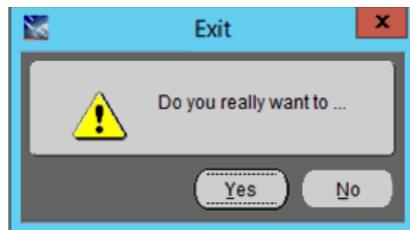


7. On Summary, click the **Install** button.



8. The installer displays a progress screen.
9. If running as a feature in a package, you will see the End of Installation screen. Click the **Exit** button to complete the Development Client installation and return to the OUI installer.

Otherwise, if you are running the WASH4A installer manually, you will not see the End of Installation screen.



10. On the Exit dialog, click the **Yes** button to exit the OUI installer.

If you encounter errors during the installation process, refer to these troubleshooting chapters in this guide:

- [Chapter 11, "Troubleshooting the Installation Process"](#)
- [Chapter 12, "Troubleshooting the Workstation"](#)

Working With SnapShot on the Development Client

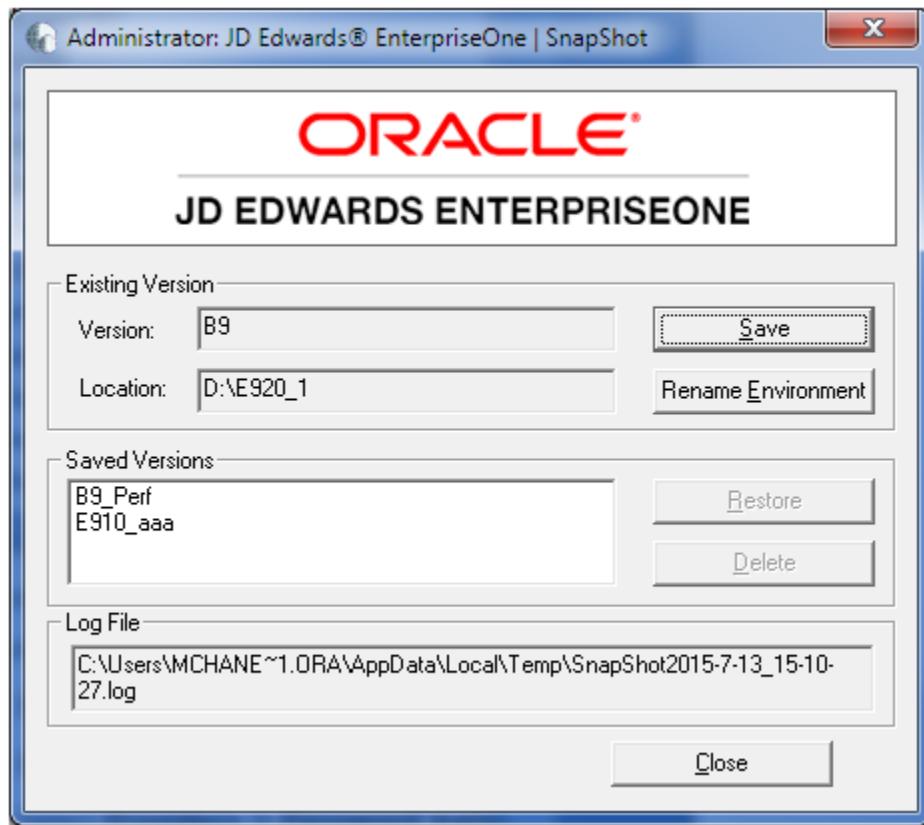
This section discusses these topics:

- [Section 8.1, "Understanding SnapShot"](#)
- [Section 8.2, "Prerequisites"](#)
- [Section 8.3, "Using SnapShot on the Development Client"](#)
- [Section 8.4, "Renaming an Environment"](#)
- [Section 8.5, "Manually Backing Up Files and Settings"](#)
- [Section 8.6, "Set Logging for SnapShot Using the Registry"](#)
- [Section 8.7, "Troubleshooting"](#)

8.1 Understanding SnapShot

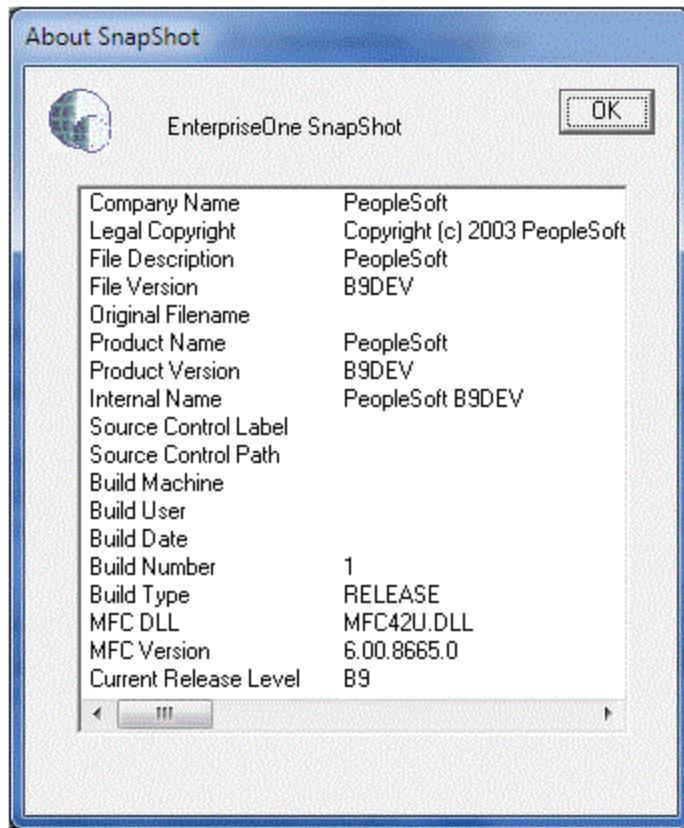
The SnapShot program (note the terminology uses upper case S's in the naming convention for this program) manages multiple instances of the JD Edwards EnterpriseOne Development Client on a single machine. Using this program you can save and restore copies of an installed Development Client. A saved copy is called a "snapshot" (note the terminology uses lower case s's in the naming convention for this entity).

Below is an example of SnapShot managing multiple tools releases including E920 and two installations of E910 (B9_Perf and E910_aaa).



The preceding image shows the JD Edwards main SnapShot window. The main features of this window, from top to bottom, include:

- *Close (icon)*
The Close icon is located in the upper right hand corner. Click this icon to exit SnapShot.exe.
- *System (icon)*
The System icon is located in the upper left hand corner. Click on this icon or right-click on the title bar to display a drop-down menu that contains "About EnterpriseOne SnapShot...." Selecting this item displays version and build information about SnapShot as shown below:



- *Existing Version*

This area contains these fields and buttons:

- *Version*

Lists the existing installed Development Client. Initially, this is the release specified in the installed package. After you save and then restore a SnapShot, this field will be the name that you gave the SnapShot when you saved it.

- *Location*

The JD Edwards EnterpriseOne installation directory.

- *Save Button*

Saves the installed JD Edwards EnterpriseOne to a snapshot.

- *Rename Environment Button*

Renames the path code and environment names of the installed JD Edwards EnterpriseOne. This function is not available on the Deployment Server.

- *Saved Versions*

This area contains a field that lists saved versions (also called snapshots). The example in this image shows the following versions: B9_Perf and E910_aaa.

- *Restore Button*

Restores a saved version (snapshot) to a runnable JD Edwards EnterpriseOne installation.

- *Delete Button*

Removes a saved version (snapshot).

- *Log File*
Displays the log file path and name.
- *Close Button*
Exits the SnapShot.exe program.

8.2 Prerequisites

Before saving or restoring a JD Edwards EnterpriseOne installation using SnapShot, be sure that:

- You are signed into Microsoft Windows using an account with sufficient privileges (for example: read, write, execute) to the registry and to the JD Edwards EnterpriseOne installation and saved directories.
- All JD Edwards EnterpriseOne programs are closed.
- No applications (for example, Windows Explorer) have a file or subfolder open in either the installation or the saved directory or one of their subdirectories.
- The SnapShot.exe that you are running is not in either the installation or the saved directory or one of their subdirectories.
- The database(s) that both the JD Edwards EnterpriseOne installation and the saved snapshot use is installed and running.
- Ensure that the Oracle product JDeveloper is not running.

Additional considerations:

- Before installing a new Development Client into a new Oracle Home, make sure you do not have any previous versions in the **Existing Version** field of SnapShot. All versions must be saved and should appear in the **Saved Versions** field.

8.3 Using SnapShot on the Development Client

To use SnapShot with multiple releases of the JD Edwards EnterpriseOne applications, you must use the most current version of SnapShot when switching between different releases of JD Edwards EnterpriseOne. For example, if you install the foundation code for both JD Edwards EnterpriseOne Applications Release 9.2 and Applications Release 8.12, you must use the version of SnapShot corresponding to the most current JD Edwards EnterpriseOne tools release, in this case, Tools Release 9.2.

This section describes these tasks:

- [Section 8.3.1, "Starting SnapShot"](#)
- [Section 8.3.2, "Saving a Snapshot"](#)
- [Section 8.3.3, "Restoring a Snapshot"](#)
- [Section 8.3.4, "Deleting a Snapshot"](#)

8.3.1 Starting SnapShot

Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

- [Section 1.3, "Microsoft Windows Security"](#)

As noted in this section, you do not have to right click on the SnapShot.exe icon and select **Run as administrator**. This is because SnapShot.exe is designed to automatically attempt to start with the elevated permissions. If you are not signed into Windows with an administrative account, you will be prompted to enter the credentials for an administrative account.

- [Section 1.4, "Minimizing Locked Files"](#)

The SnapShot utility is delivered with the installation of the JD Edwards EnterpriseOne Development Client. It is located in this directory:

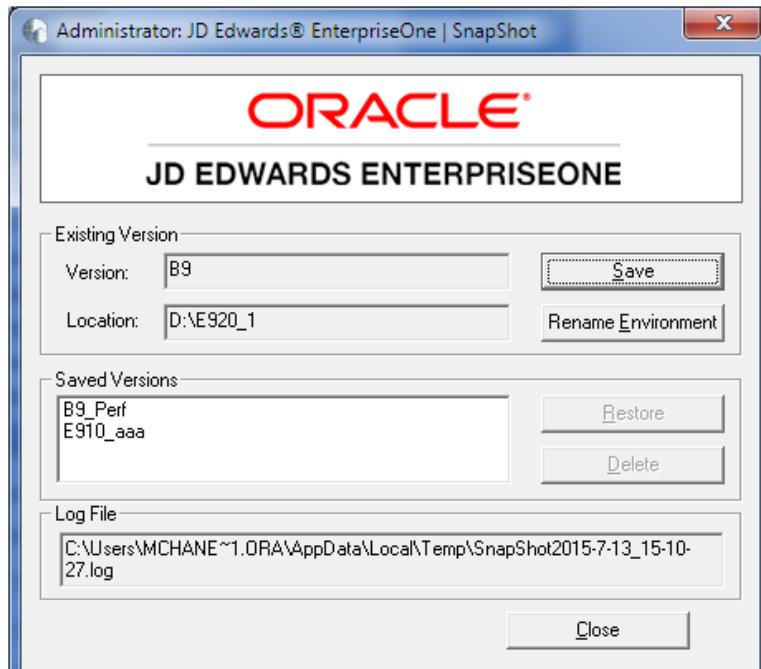
<dev_client_installation_directory>\System\Bin32

To run the most current version of SnapShot for multiple releases, you must copy the SnapShot.exe program to a directory outside the Development Client installation directory. For example, the installation directory might be c:\E920. If you attempt to run SnapShot from within the Development Client installation directory (for example, c:\E920), SnapShot will fail to rename the installation directory.

Tip: You can create a shortcut to SnapShot.exe, but you still must copy SnapShot.exe to a location outside the original installation directory where it was delivered.

8.3.2 Saving a Snapshot

To save a snapshot:



1. On the main SnapShot window, click the Save button.



2. On Make a New Snapshot, complete this field:

- *Snapshot Name*

Enter a name for the snapshot that will be saved. You may choose any name with the exceptions that the name cannot be empty and it cannot contain a backslash ('\\'). A recommended scheme is to make it release specific, for example, Xe, B9, or E920.

- *New Folder Name*

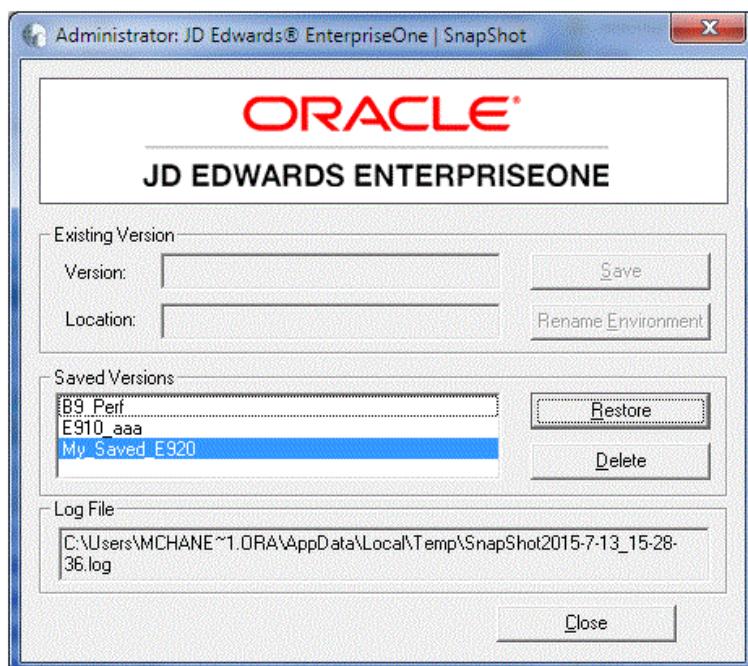
Provide a directory in which the snapshot will be saved. The directory should start with a backslash and be a valid Microsoft Windows directory name. It will be created on the indicated drive.

3. Click the **OK** button.

SnapShot saves a snapshot of the Development Client.

8.3.3 Restoring a Snapshot

To restore a snapshot:

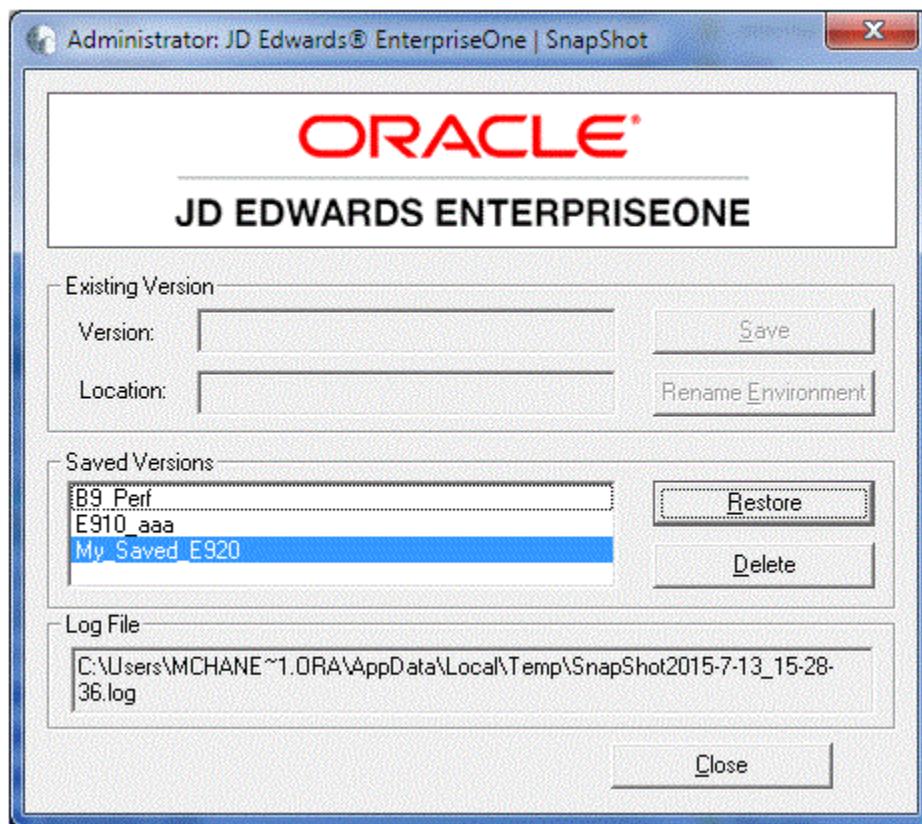


1. On the main SnapShot window and in the Saved Versions section, highlight the saved instance that you want to restore.
2. Click the **Restore** button.

SnapShot restores the selected instance of JD Edwards EnterpriseOne and makes it active.

8.3.4 Deleting a Snapshot

To delete a snapshot:



1. On the main SnapShot window and in the Saved Versions section, highlight the instance that you want to delete.
2. Click the **Delete** button.

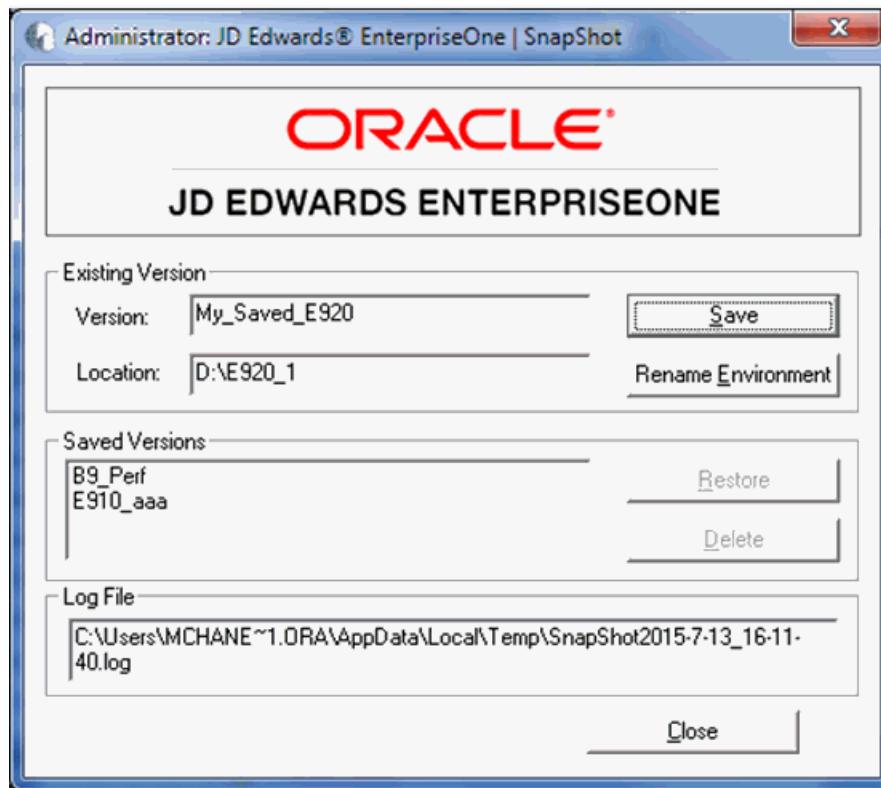
SnapShot completely removes the saved instance from the JD Edwards EnterpriseOne Development Client.

8.4 Renaming an Environment

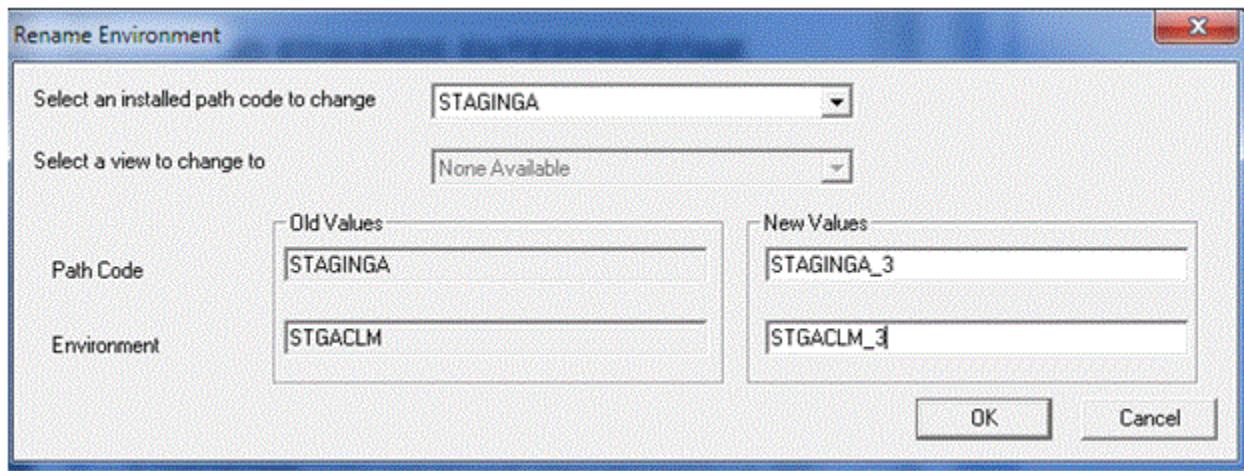
You can use SnapShot to rename the installed JD Edwards EnterpriseOne environment and path code. An example of a use case for this functionality is when a JD Edwards EnterpriseOne administrator needs to promote one path code/environment combination to another.

Note: When you use SnapShot the program does not update the database tables with the new path code and environment names. Instead, it simply updates the path code directory name and occurrences of the path code and environment in various files (for example, jde.ini, jdbj.ini, jas.ini, and pathcode.inf). If the new path code or environment does not exist in the JD Edwards EnterpriseOne system tables, you will need to update those tables yourself either through JD Edwards EnterpriseOne or by using a database editing tool such as Oracle SQLPlus.

To rename an environment in SnapShot:



1. On the main SnapShot window, ensure that an existing version of JD Edwards EnterpriseOne is active.
2. Click the **Rename Environment** button.



3. On Rename Environment, use the **Select an installed path code to change** drop-down to select the path code that you want to rename.

Note: The **Old Values** section on the left side of the window displays old path code and environment names.

4. In the New Values section of the window, enter the new names for the environment you want to rename.
5. Click the **OK** button.

Note: The section of the screen entitled **Select a view to change to** is available only to JD Edwards EnterpriseOne internal application developers.

8.5 Manually Backing Up Files and Settings

Once you have saved a snapshot for the Development Client, it is a good idea to manually backup the saved directory to ensure that your settings for that Development Client are secure.

The files and subdirectories that need to be backed up are found in the folder of each saved snapshot. You should backup these files and subdirectories only while the SnapShot .exe program is not running. These files contain the information necessary to restore registry values and settings for each snapshot.

8.6 Set Logging for SnapShot Using the Registry

The Tools 9.2 version of SnapShot always outputs the maximum amount of logging information. Furthermore, by design there is no way to turn off logging. You can specify the name and location of the log file that is generated by adjusting a single registry setting.

Caution: Changes made to the Microsoft Windows registry happen immediately, and no backup is automatically made. Do not edit the Windows registry unless you are confident about doing so.

Microsoft has issued the following warning with respect to the Registry Editor:

"Using Registry Editor incorrectly can cause serious, system-wide problems that may require you to re-install Windows to correct them. Microsoft cannot guarantee that any problems resulting from the use of Registry Editor can be solved. Use this tool at your own risk."

By default, the SnapShot log is located in the `temp` directory of the Microsoft Windows user. This is the directory pointed to by the `TEMP` environment variable. You can determine the value of this `TEMP` variable in a number of ways including:

1. Control Panel > System
2. In a command prompt window, enter this command:
`echo %TEMP%`
3. In the Address Bar of Windows Explorer, enter this string:
`%TEMP%`

The default log file name is `SnapShot_<date-time>.log`.

Both the directory and name of the SnapShot log can be specified by editing the registry; however, the date-time stamp will always be inserted immediately before the period.

To change the log file directory and/or name:

1. Open the registry by clicking on Windows Start button and entering `regedit` in the search field.
2. Navigate to this node:

`\HKEY_LOCAL_MACHINE\Software\Wow6432Node\JDEdwards\SnapShot`

The first time that you run SnapShot, it creates a value (shown on the right-hand pane in regedit) called **LogFile** with the default value `SnapShot.log`. You can change this value or, if it does not exist yet, you can add the value with name `LogFile`, type string value, and the directory and/or file name of your choice.

3. The rules listed below are used for determining the final log file directory and name based on the value of `LogFile`:
 - In all cases, the date and time that `SnapShot.exe` is run will be inserted immediately before the period in the extension of the file name.
 - If the value of `LogFile` does not contain any backslashes, the name represents only the file name. The value of the Windows `TEMP` variable will be used as the directory.
 - If the value of `LogFile` contains backslashes but does not start with a drive letter or a backslash, everything up to the last backslash represents a subdirectory or hierarchy of subdirectories below the directory designated by the Windows `TEMP` variable. Everything after the last backslash is the file name.

- If the value of **LogFileName** starts with a backslash, it represents a subdirectory below the root directory of the drive (that is, directory "\\"). The drive letter is derived from the drive specified in the Windows TEMP variable.
- If the value of **LogFileName** starts with a letter followed by a colon and backslash, the letter is considered the drive letter where the log will reside. Any other applicable rule in the preceding rules above then apply.

The following are examples of values of the **LogFileName** registry entry and the resulting log file path and name. In these examples, the assumed value of the TEMP variable is C:\\Users\\John\\AppData\\Local\\Temp and assumes the log was created on June 5, 2012, at 3:46:9 PM.

Value for LogFileName	Resulting Log File
SnapShot.log	C:\\Users\\John\\AppData\\Local\\Temp\\SnapShot_2012-6-5_15-46-9.log
MyFile.txt	C:\\Users\\John\\AppData\\Local\\Temp\\MyFile_2012-6-5_15-46-9.txt
MyTempDir\\MyFile.txt	C:\\Users\\John\\AppData\\Local\\Temp\\MyTempDir\\MyFile_2012-6-5_15-46-9.txt
MyTempDir\\MyFile.txt	C:\\MyTempDir\\MyFile_2012-6-5_15-46-9.txt
D:\\MyTempDir\\MyFile.txt	D:\\MyTempDir\\MyFile_2012-6-5_15-46-9.txt

4. Save the changes and exit the registry.

8.7 Troubleshooting

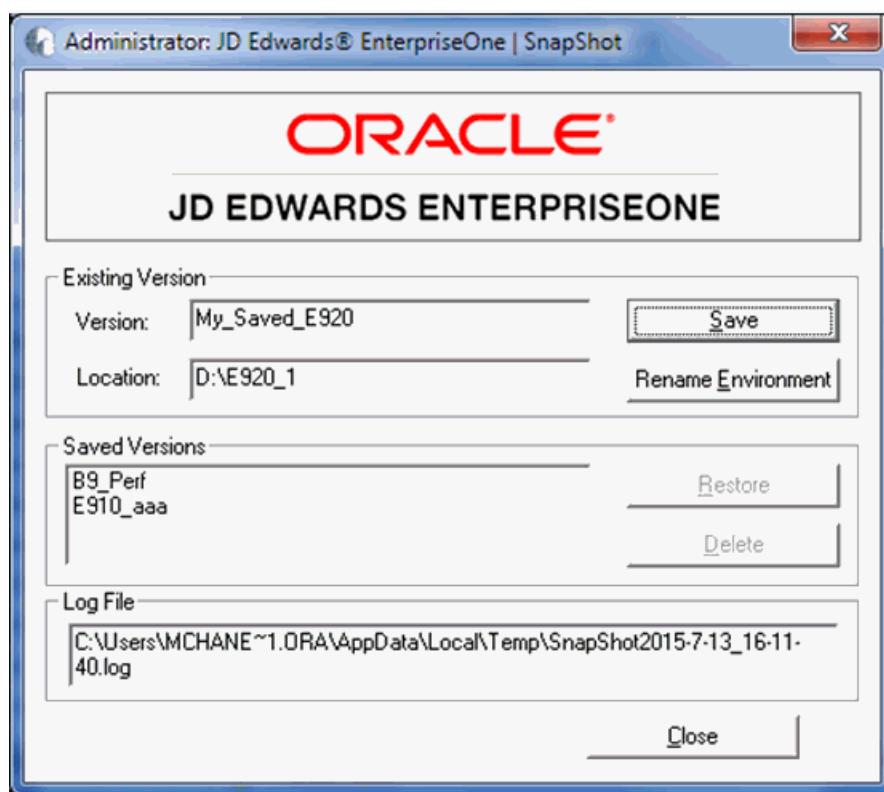
If SnapShot encounters a problem when trying to perform an action, it is designed to attempt to rollback the actions performed up to the point of failure. This means that during a save operation, SnapShot attempts to restore the JD Edwards EnterpriseOne instance back to a runnable state. If a failure occurs during a restore action, SnapShot attempts to resave the JD Edwards EnterpriseOne snapshot so you can correct the problem and then retry the action.

Caution: If a second error occurs when SnapShot is attempting to rollback changes, the error will likely result in either a non-runnable instance of JD Edwards EnterpriseOne or a saved snapshot that is corrupt. In either case, you will probably need to reinstall JD Edwards EnterpriseOne.

This section describes these topics:

- [Section 8.7.1, "Examining the Log File"](#)
- [Section 8.7.2, "Error Handling"](#)
- [Section 8.7.3, "Remedial Actions"](#)

8.7.1 Examining the Log File



When an error is encountered in SnapShot, the first thing that you should do is to carefully examine any on screen error messages for an indication of what went wrong and why. If you are not able to determine the cause and possible resolution of an error by examining the error message on the screen, examine the log file. As shown in the preceding screen example, the location and name of the log file is specified in the **Log File** section near the bottom of the main SnapShot window.

```

1 SnapShot Log
2
3 Time      Level    Type      Message
4 -----
5 03:51:25  5  INFO   CSnapShotApp::VerifyAdminPermissions()-----
6 03:51:25  5  INFO   CSnapShotApp::GetProcessElevation()-----
7 03:51:25  5  INFO   CMainSnapDlg::OnInitDialog()-----
8 03:51:25  5  INFO   CMainSnapDlg::_loadSnapshotList()-----
9 03:51:25  5  INFO   CMainSnapDlg::_setDefaultButton()-----
10 03:51:25  5  INFO   COWInstallation::Init()-----
11 03:51:25  5  INFO   Initializing OW installation. Version:-----
12 03:51:25  5  INFO   COWInstallation::_readINI()-----
13 03:51:25  5  INFO   Attempting to read ini file.-C:\windows\jde.ini-----
14 03:51:25  5  INFO   INI read.-----
15 03:51:25  5  INFO   CFiles::_dirExist()-----
16 03:51:25  1  WRNG   Install directory does not exist.-----
17 03:51:25  5  INFO   CFiles::_dirExist()-----
18 03:51:30  5  INFO   CMainSnapDlg::OnRestore()-----
19 03:51:30  4  INFO   **** -----
20 03:51:30  4  INFO   **** -----
21 03:51:30  4  INFO   *** User restoring configuration (restoring snapshot) ***
22 03:51:30  4  INFO   **** -----

```

Normal text file length : 118055 lines : 2021 Ln:13 Col:77 Sel:0|0 Dos/Windows ANSI as UTF-8 INS

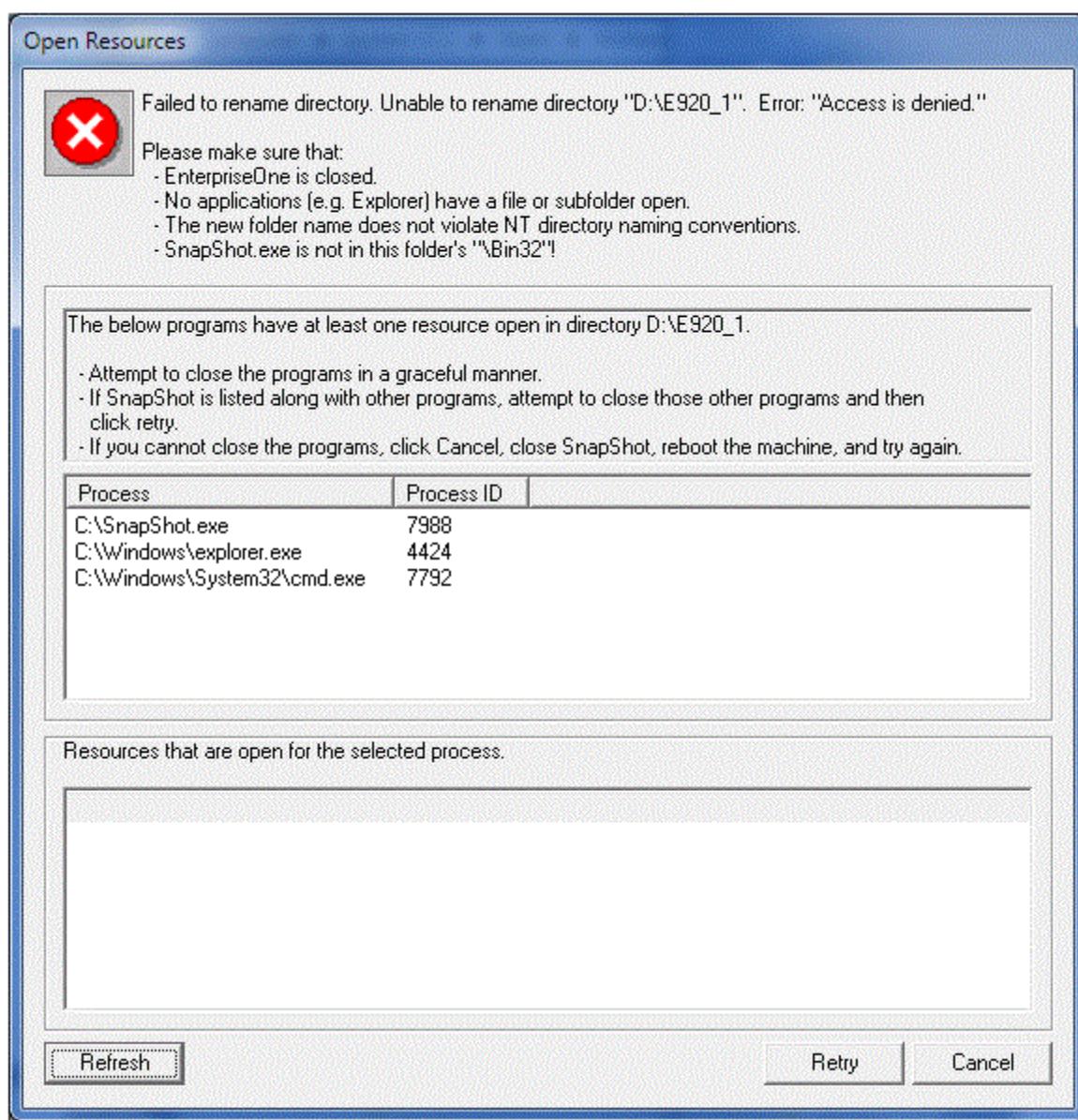
Above is an example of a SnapShot log file. When troubleshooting within the SnapShot log file, you should scan the **Type** column for a status of **ERR**, which indicates an error. If the error message itself is insufficient to isolate the cause of the problem, examine the messages immediately before and after the error for hints as to the root cause.

8.7.2 Error Handling

This section discusses these topics:

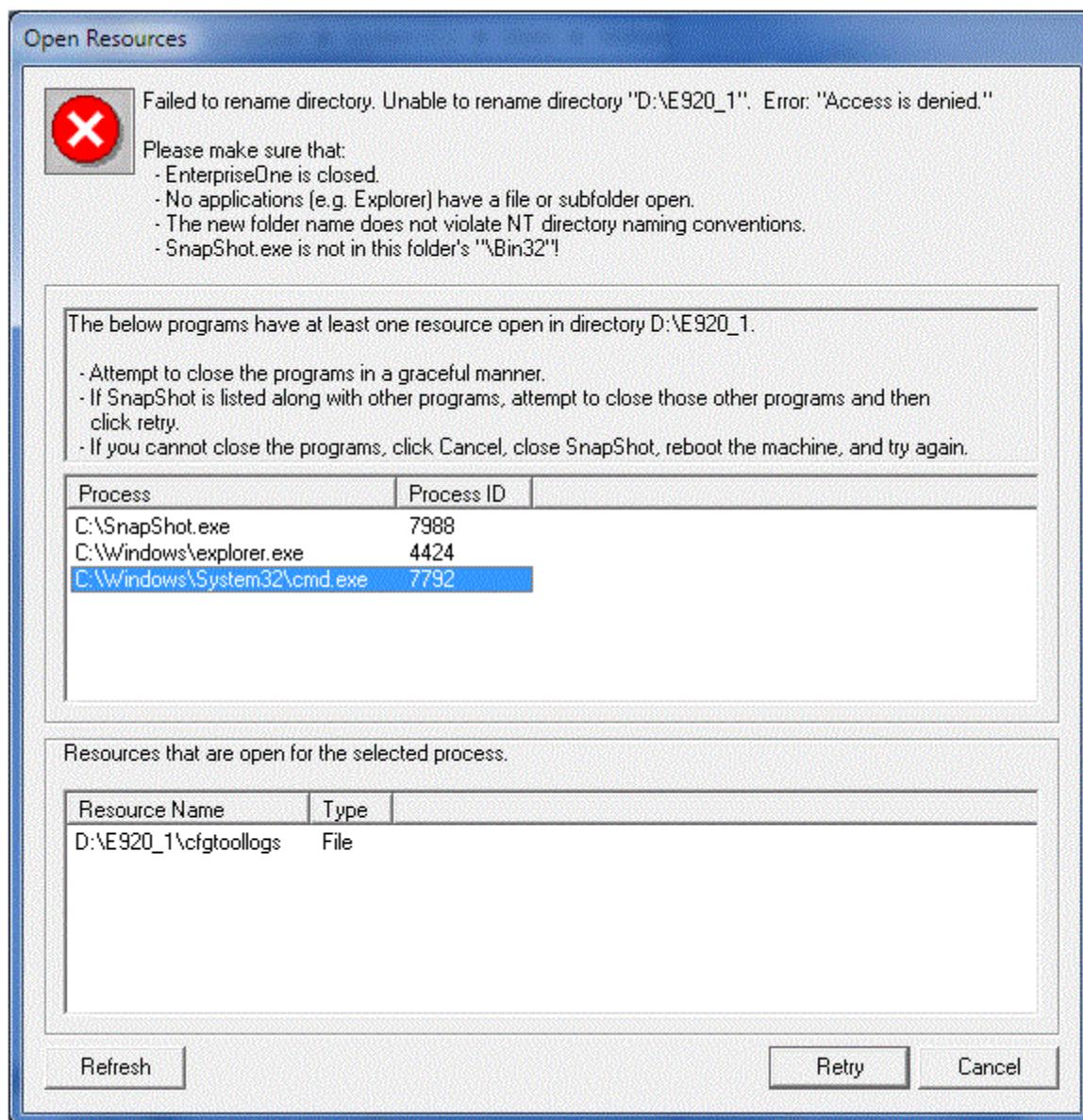
- [Section 8.7.2.1, "Locked Resources Prevent Directory Renaming"](#)
- [Section 8.7.2.2, "Other Causes of Directory Renaming Failure"](#)

8.7.2.1 Locked Resources Prevent Directory Renaming



If an error occurs during a directory rename operation (for example, when saving or restoring a snapshot), the preceding window may appear.

The reason for the failure is displayed at the top of the window followed by some suggested remedies. In a box immediately below that are some recommendations to resolve the error. Another box lists processes running on the workstation that have one or more resources (for example, files, directories, handles, and so on) locked that prevented the directory rename action from succeeding—resulting in the **Access is denied** error. Click on a process in the list to get a list of open resources for that particular process.



When you highlight a Process, the list of resources in the **Resources that are open for the selected process** section at the bottom of the window shows the type as **File** for both files and directories.

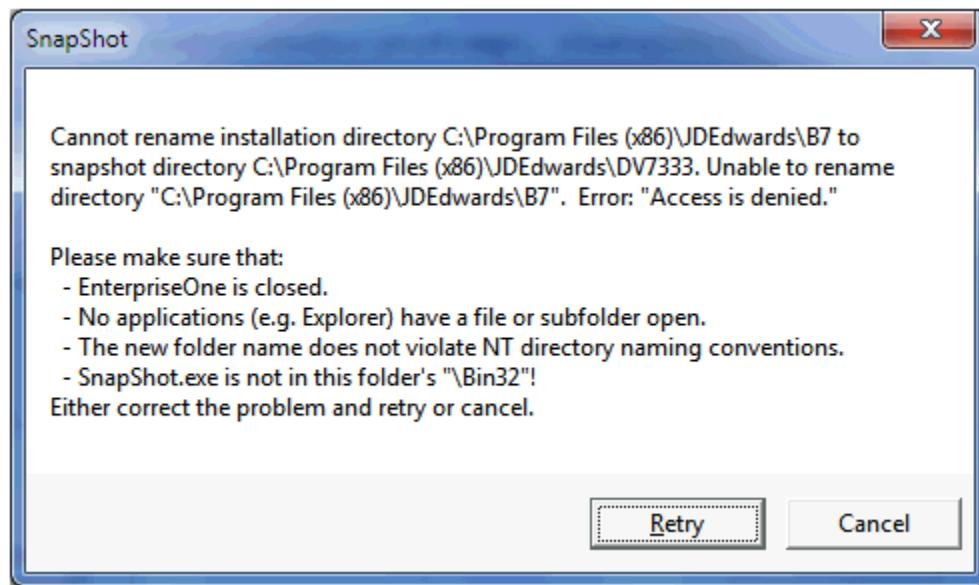
It is important that you follow these steps to resolve the file or directory locking problem:

1. Attempt to gracefully close the programs that have a resource open. That is, close the program in the normal manner such as selecting File > Exit from the program's main menu. You can attempt to close just the resource, but many programs continue to hold a lock on a resource (such as a file) even after closing that resource. Freeing the resource may require closing the actual program. For example, if Microsoft Word has a file locked, you may have to close Microsoft Word instead of simply closing the file from within Microsoft Word.
2. If the program does not terminate, you may have to resort to forcefully terminating it using Microsoft Task Manager.

3. The SnapShot.exe program may appear in the list of active programs either by itself or along with other processes that are locking resources. First, be sure that you are not running SnapShot.exe from within either the installation or the save directory or one of their subdirectories.
4. If the SnapShot.exe program is listed with other programs, try to close those other programs and then click **Retry**.
5. If SnapShot.exe is the lone program listed, simply click **Retry**. Many times, the rename action will continue after the second Retry.
6. Not all 64-bit programs are automatically shown in the list of locking processes. You may need to examine all the running programs on your system to determine which one may be preventing the rename action from succeeding.
7. If you cannot close the program(s) that holds the lock(s) on the necessary resource(s) or determine which program(s) holds a lock, click **Cancel**, exit from SnapShot, reboot the machine, run SnapShot and try the action again.

8.7.2.2 Other Causes of Directory Renaming Failure

Besides locked resources described in the preceding section, there are other reasons that can cause a directory rename operation to fail.



The preceding window may appear during a directory rename operation (that is, when saving or restoring a snapshot). In this case, either SnapShot could not determine which processes hold locks on resources in the installation or save directories or some other reason caused the directory rename to fail. For example, perhaps the user did not have read or write permissions on one of the affected directories or subdirectories.

8.7.3 Remedial Actions

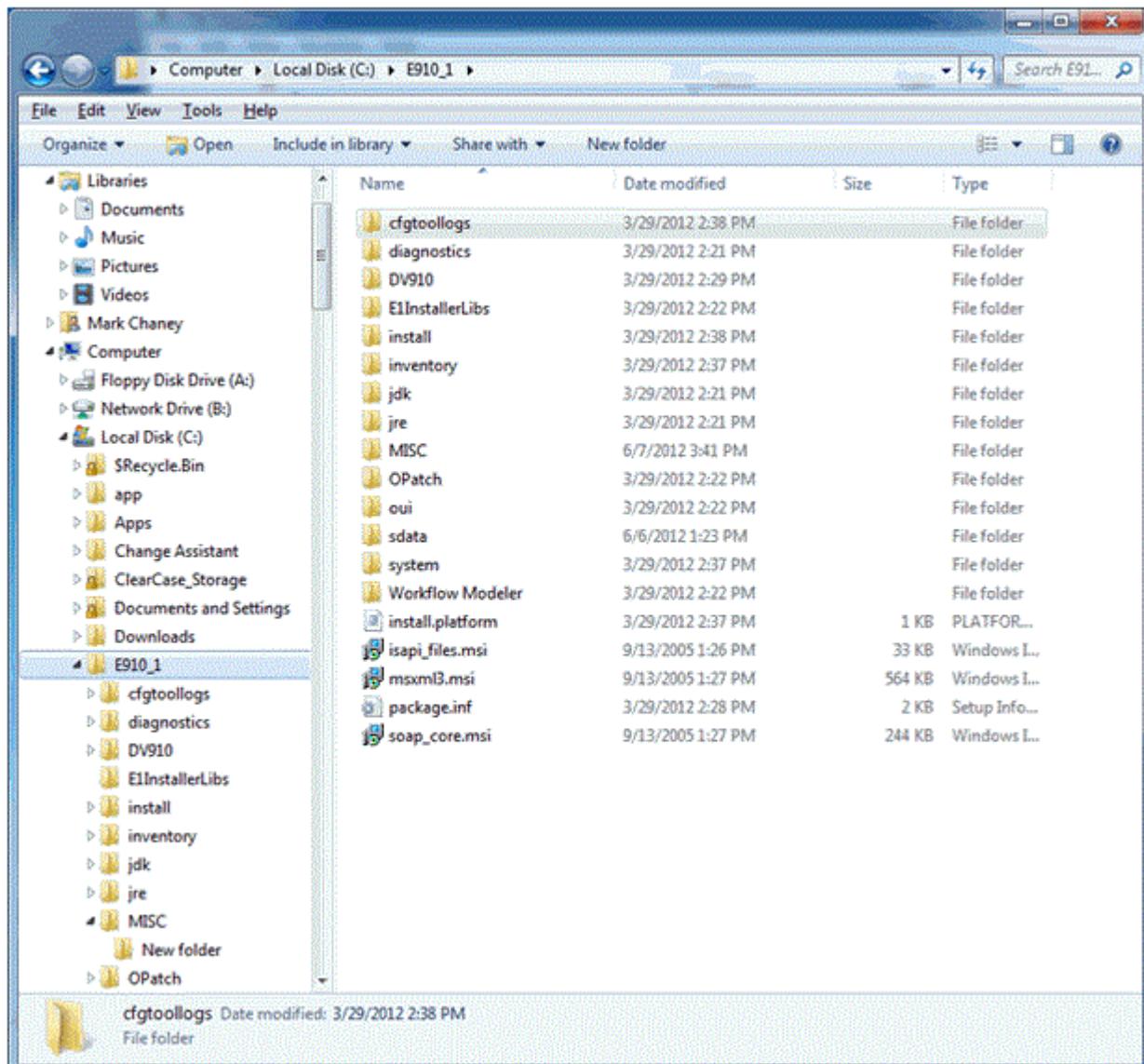
In some cases, SnapShot may not be able to recover from errors that occur during a save or restore action. You may be able to salvage either the JD Edwards EnterpriseOne installation or the saved instance. If these operations fail, you will need to reinstall JD Edwards EnterpriseOne.

This section describes these topics:

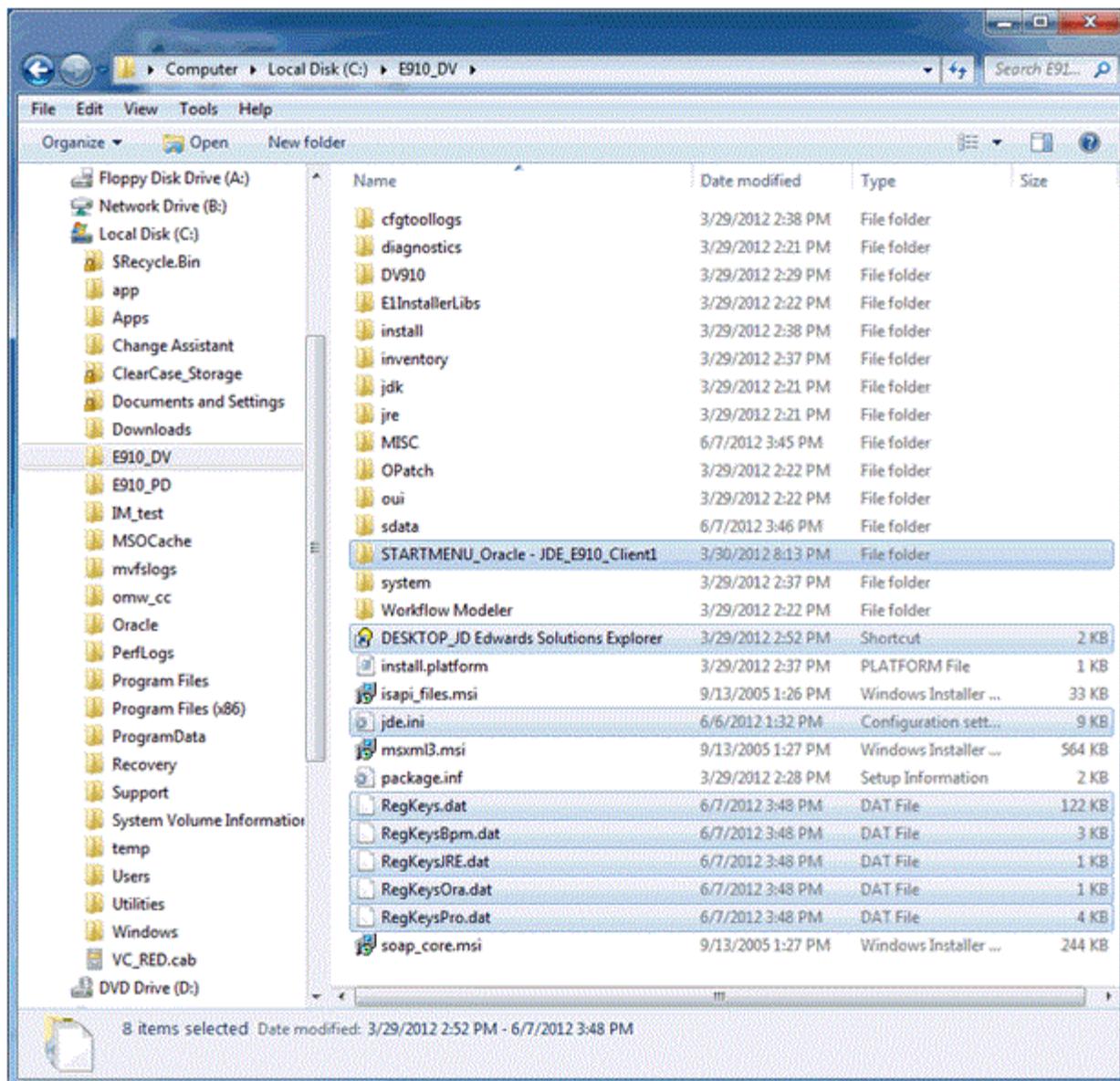
- [Section 8.7.3.1, "Examples of Healthy Environments"](#)
- [Section 8.7.3.2, "Simple Fixes"](#)

8.7.3.1 Examples of Healthy Environments

This section illustrates a healthy JD Edwards EnterpriseOne installation and saved snapshot directories and registry settings.



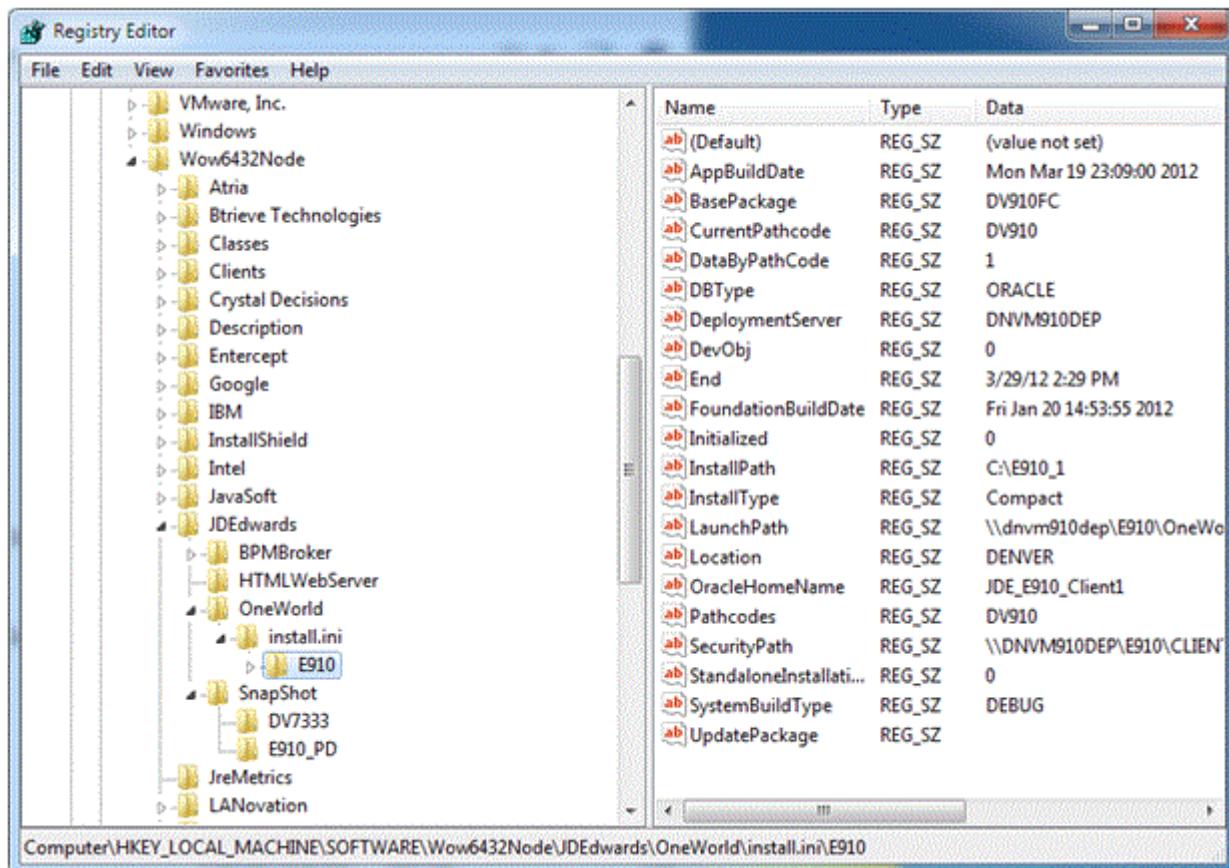
The preceding image shows the installation directory of a healthy JD Edwards EnterpriseOne instance.



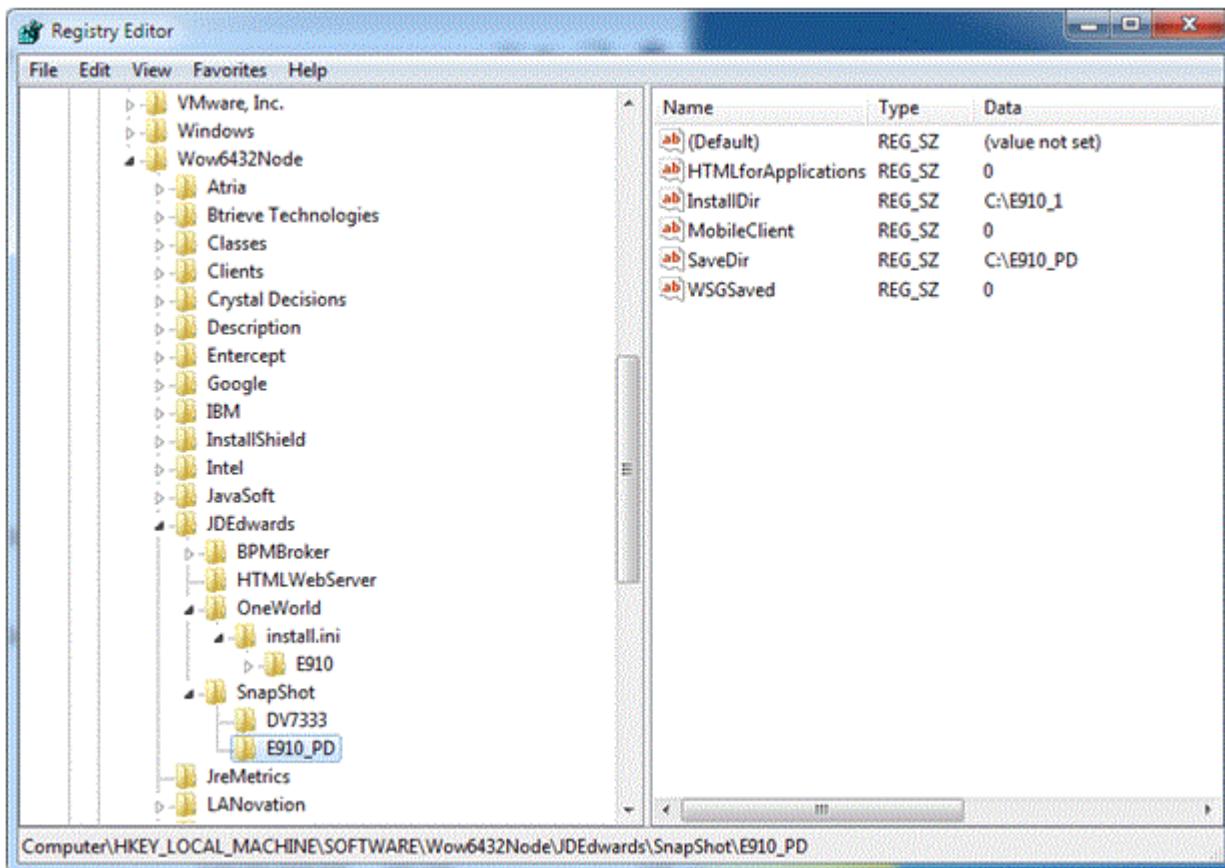
In the preceding image example, note that when you save a snapshot of the JD Edwards EnterpriseOne installation, the highlighted files and subdirectory shown above are created. Here are brief descriptions of the new files and subdirectory.

- **STARTMENU*.***
The subdirectory that is prefixed with STARTMENU is the folder in the Start menu for the original installation.
- **DESKTOP*.***
The file that starts with DESKTOP is the shortcut to JD Edwards EnterpriseOne that was on the desktop of the workstation.
- **jde.ini**
The jde.ini file is the same file that was in the c:\Windows directory.
- **RegKeys*.***

The files that are prefixed with RegKeys are binary files that contain the saved registry entries.



The preceding image shows the registry entries for a healthy JD Edwards EnterpriseOne Development Client installation.



The preceding image shows the registry keys for a saved JD Edwards EnterpriseOne snapshot.

8.7.3.2 Simple Fixes

Not all issues can be resolved by simple steps. However this section describes a few simple fixes for these conditions:

- [Section 8.7.3.2.1, "Missing Version Information"](#)
- [Section 8.7.3.2.2, "Missing Saved Version"](#)

8.7.3.2.1 Missing Version Information

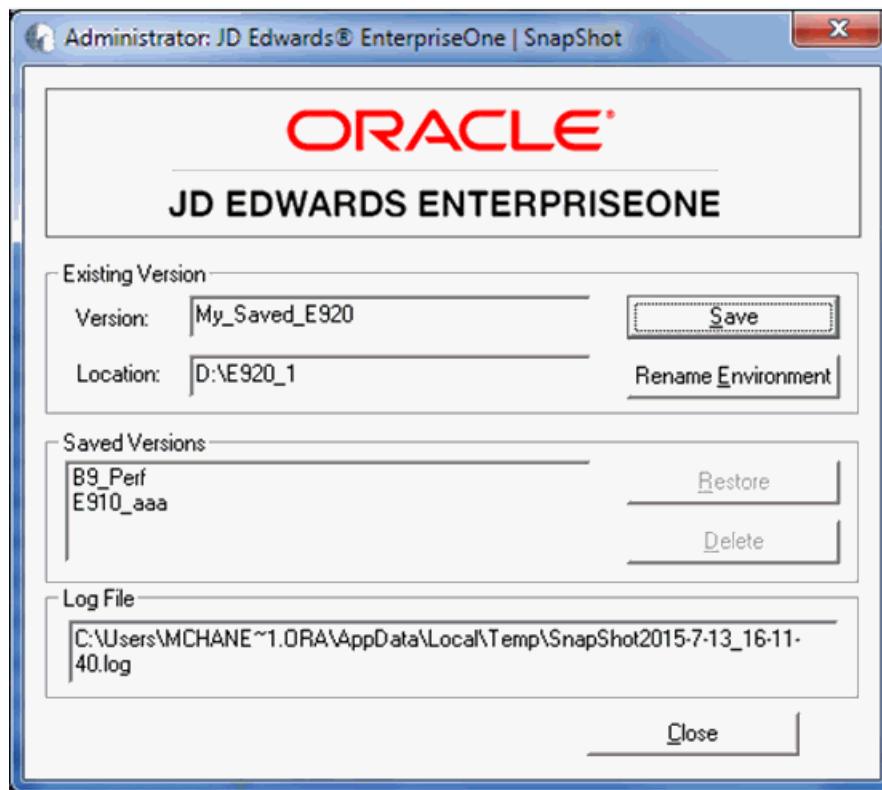


If the **Existing Version** fields are empty when you run `SnapShot.exe` and you are certain that a JD Edwards EnterpriseOne instance is active, it is likely that this file is missing:

`c:\Windows\jde.ini`

If you happened to save a copy of the `jde.ini` file when you last saved a snapshot of this installation, you can copy that `jde.ini` file into the `c:\Windows` directory and rerun `SnapShot.exe`.

8.7.3.2.2 Missing Saved Version



If a saved snapshot is not listed in the **Saved Versions** field and you know that the saved snapshot exists, some registry entries are probably missing or pointing to the wrong directory.

To resolve this issue, perform these steps:

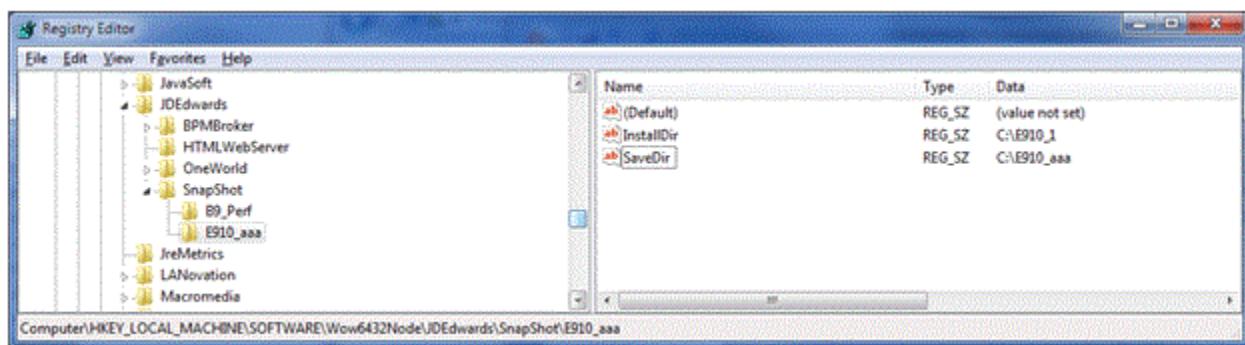
1. Edit the registry with regedit.exe.
2. Create a subkey under this path:

`\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\SnapShot`

The name that you give for the subkey should be the name of the saved snapshot.

3. Click on the subkey that you just created.
4. Create a string value called **SaveDir**.
5. Set the value data for this to the directory where the saved snapshot is stored.
6. Create a second string value called **InstallDir**.
7. Set the value data for this to the installation directory (that is, the directory in which the saved snapshot will be restored).

The following image illustrates properly configured registry entries.



Uninstalling the Development Client

This chapter describes how to uninstall the Development Client. This uninstall is interactive. If you want to perform a silent uninstall by running OUI from the command line, refer to the instructions in [Appendix F, "Uninstalling a Development Client from the Command Line"](#).

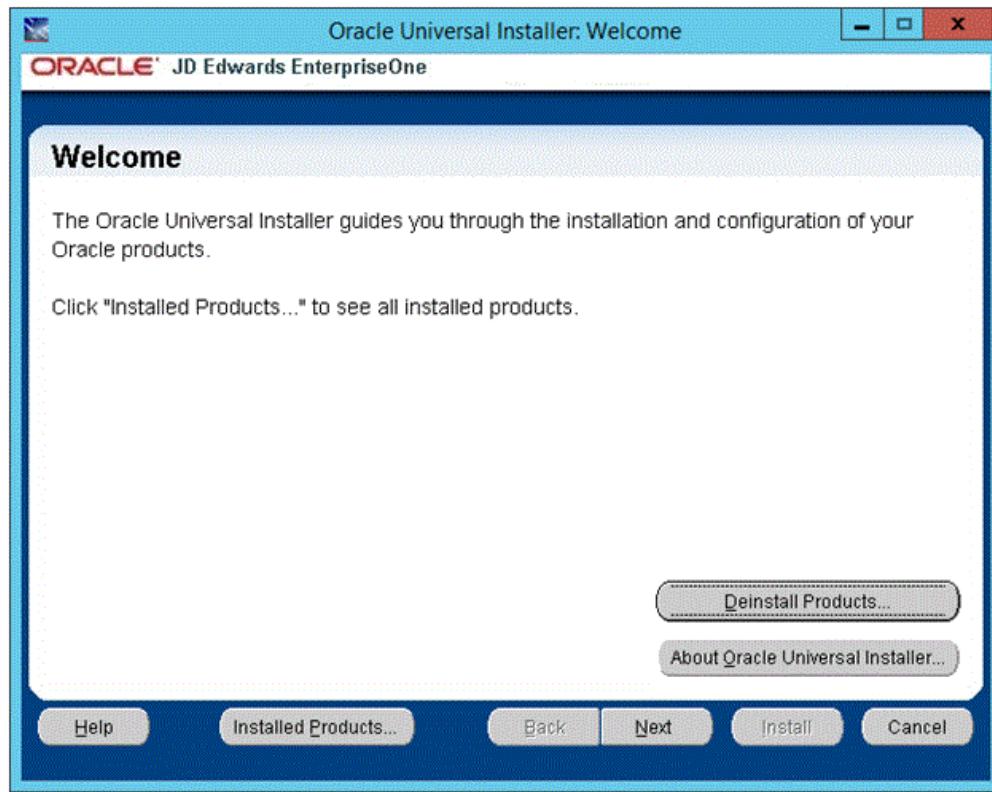
Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

- [Section 1.3, "Microsoft Windows Security"](#)
 - [Section 1.4, "Minimizing Locked Files"](#)
-

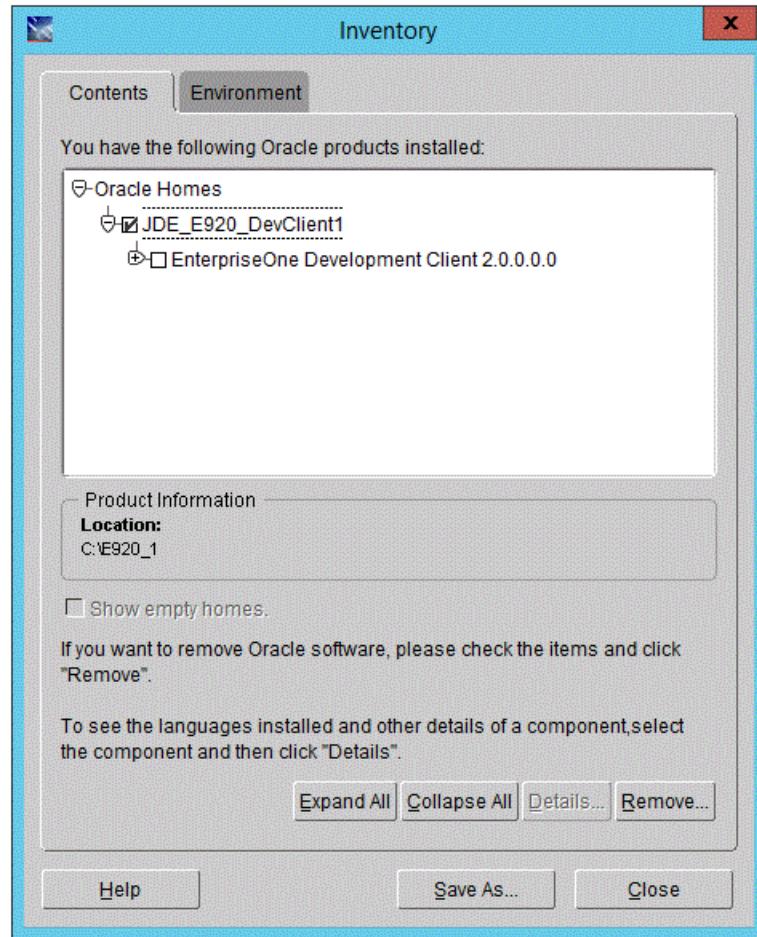
Note: This document uses the terms "deinstall" and "uninstall" interchangeably. The terms are synonymous and describe the removal of a product from your workstation.

To uninstall the Development Client:

1. Navigate to Oracle - *Oracle_Home_Name* > Oracle Installation Products > Universal Installer
where *Oracle_Home_Name* is the name of the installation directory that you provided when installing the Development Client. There can be multiple *Oracle_Home_Names* if you installed multiple Development Client Packages or multiple Oracle products. Each of these homes is associated with a particular product and has a unique setup and association for uninstalling using the OUI installer. It is important that you navigate to and run the correct OUI installer for the specific product you want to uninstall.
2. Highlight the Universal Installer, right click and choose to **Run as administrator**.



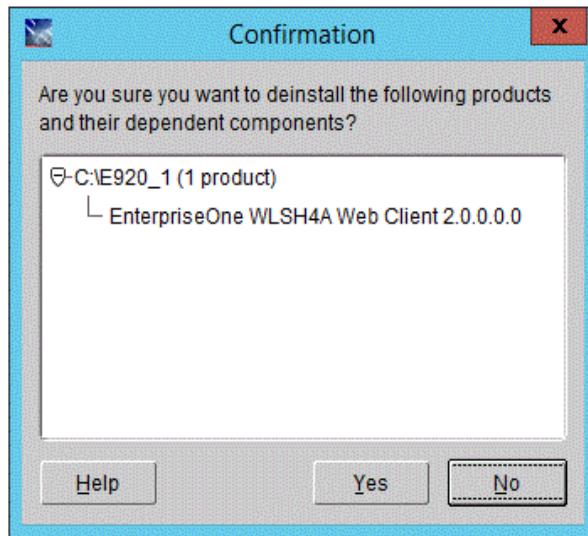
3. On Welcome, click the Deinstall Products... button.



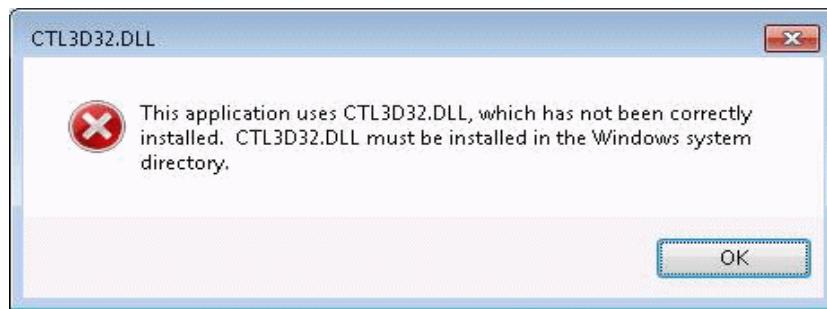
4. On Inventory, turn on the check box next to the Oracle Home for the Development Client that you want to uninstall.

Note: At this step, you should select only the Oracle Home that is associated with this particular OUI. That is, the Oracle Home name that you select on this screen should match the Oracle Home name that you navigated to in Step 1.

5. Click the **Remove...** button.



- When prompted for confirmation, click the **Yes** button.



- If you get the pop-up message box shown above, you can ignore it. Click the **OK** button.
- After the uninstallation is complete, exit the OUI installer.
- Verify that the installation directory (Oracle Home) for the uninstalled Development Client has been deleted. If it still exists, you should manually delete it.

Uninstalling the Oracle Local Database

Note: This document uses the terms "deinstall" and "uninstall" interchangeably. The terms are synonymous and describe the removal of a product from your workstation.

With one small exception, the steps are identical to uninstall either the Oracle 12c and Oracle 11gR2 local database from the Development Client. The exception is noted in the steps below.

When the Oracle Enterprise Edition (OEE) database was installed, it was installed into a subdirectory called **E1Local** under a base directory. By default, this base directory is C:\Oracle. This means that the database was installed into C:\Oracle\E1Local by default. This path is used in the uninstall steps listed below.

Follow these steps to uninstall the OEE local database.

1. Stop the database services from Control Panel:
 - OracleE1LocalTNSListener
 - OracleServiceE1LOCAL
2. Be sure no Oracle processes from the C:\Oracle\E1Local directory are running.
3. Open a command prompt window with **Run as administrator**.
4. Run this program:

C:\Oracle\E1Local\deinstall\deinstall.bat

Note: It is important that you do not "cd" to any directory below C:\Oracle to run this command. If you do make one of these directories the current directory, the OUI deinstaller will not be able to delete that directory.

5. During installation, the OEE12Setup.exe program should have created several files in the C:\Oracle\E1Local\deinstall directory. If the files were successfully created, the deinstall.bat program will not prompt for any input from the user. If for some reason the files were not created, the deinstall.bat program prompts the user for information needed to uninstall the database. You can take the default values (shown in square brackets) for most of the prompts. These are the prompts:
 - a. Specify all Single Instance listeners that are to be de-configured [LISTENER]:

-
- b. Specify the list of database names that are configured in this Oracle home [E1LOCAL]:
 - c. Specify the type of this database (1.Single Instance Database | 2.Oracle Restart Enabled Database) [1]:
 - d. Specify the diagnostic destination location of the database [C:\Oracle\diag\rdbms\elocal]:
 - e. Specify the storage type used by the Database ASM | FS []:
This prompt requires a response. Enter FS.
 - f. Specify the list of directories if any database files exist on a shared file system. If 'E1LOCAL' subdirectory is found, then it will be deleted. Otherwise, the specified directory will be deleted. Alternatively, you can specify list of database files with full path []:
 - g. Specify the flash recovery area location, if it is configured on the file system. If "E1LOCAL" subdirectory is found, then it will be deleted. []:
 - h. Specify the database spfile location []:
 - i. Do you want to continue (y - yes, n - no)? [n]:
This requires a response. Enter "y".
Important: If you go through the above prompts, you also need to delete the registry key \HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ORACLE\KEY_E1Local..
 - 6. When the uninstall finishes, be sure that the following directories do not exist. If they do, you will need to manually delete them.

Oracle 12c and 11gR2

C:\Oracle\E1Local

Oracle 12c only

C:\Oracle\oradata

Caution: It is very important that no files exist in the above directory or directories (as applicable) when you next attempt to install the OEE database. If any files do exist, the OEE installation will probably fail.

If the database does not uninstall cleanly for some reason, you will need to manually remove it. Follow the instructions in the Appendix of this guide entitled: [Appendix H, "Manual Cleanup of an Uninstalled Oracle Database"](#).

Troubleshooting the Installation Process

This section contains the following topics:

- [Section 11.1, "Log Files"](#)
- [Section 11.2, "Microsoft Firewall"](#)
- [Section 11.3, "Microsoft Windows IPv4 Requirement"](#)

11.1 Log Files

One of the first things that you should do when an installation finishes-whether successfully or not-is to examine the log files. Not all errors are propagated up to OUI where the main Graphical User Interface can display an error message box.

Open OUI log files in a text editor and search for these words:

- SEVERE - This indicates that an error occurred that should not be ignored.
- Exception - Some of these may be ignored. You have to determine if they are serious enough to warrant concern. For example, an exception that occurs when copying a file may not be of concern to you because you will not run the Development Client's functionality that uses that file. If you are in doubt whether or not you can ignore an error, contact Oracle's Global Customer Support.

This section contains the following topics:

- [Section 11.1.1, "Development Client"](#)
- [Section 11.1.2, "Web Client"](#)
- [Section 11.1.3, "OEE Local Database"](#)

11.1.1 Development Client

Because the Development Client's installer runs as a 32-bit program, its installation logs on 64-bit versions of Microsoft Windows are located at:

C:\Program Files (x86)\Oracle\inventory\logs

Three files will be created in the above directory:

- installActions<date_time>.log
- oraInstall<date_time>.err
- oraInstall<date_time>.out

where <date_time> is the date and time that the installation started.

Note: Determining which logs belong to a particular OUI installer.

Because OUI is used for multiple 32-bit Oracle products (for example, OEE database client, E1 Development Client, WebLogic Server Web Client (WLSH4A), WebSphere Server Web Client (WASH4A), and others), the logs directory will contain installation files for multiple products. To determine which installer created a set of files (.log, .err, and .out), you should edit the `installActions<date_time>.log`. The first line of the log has this form

Using paramFile: <installer_directory>\oraparam.ini

For example:

Using paramFile: \\dep_svr\e920\OneWorld Client
Install\install\oraparam.ini

Use the path of the `oraparam.ini` file to determine the installer. In the above example, note that the installer is on the Deployment Server and is in this directory:

OneWorld Client Install\install

This indicates that the set of `.log`, `.err`, and `.out` files with the given time stamp were created by the Development Client installer.

When the installation completes, the logs relevant to the current installation are copied to the directory

<Oracle_Home_dir>\cfgtoollogs

For example:

C:\E920\cfgtoollogs

Additional logs are located in subdirectories under:

<Oracle_Home_dir>\cfgtoollogs

For example:

C:\E920\cfgtoollogs\oui

11.1.2 Web Client

The WebLogic Web Client (WLSH4A) and WebSphere Web Client (WASH4A) installers are also based on a 32-bit version of OUI, so their logs (`.log`, `.err`, and `.out`) are also located in this directory:

C:\Program Files (x86)\Oracle\inventory\logs

Three files will be created in the above directory:

- `installActions<date_time>.log`
- `oraInstall<date_time>.err`
- `oraInstall<date_time>.out`

where `<date_time>` is the date and time that the installation started.

Note: Determining which logs belong to a particular OUI installer. Because OUI is used for multiple 32-bit Oracle products (for example, OEE database client, E1 Development Client, WebLogic Server Web Client (WLSH4A), WebSphere Express Web Client (WASH4A), and others), the logs directory will contain installation files for multiple products. To determine which installer created a set of files (.log, .err, and .out), you should edit the `installActions<date_time>.log`. The first line of the log has this form

Using paramFile: <installer_directory>\oraparam.ini

For example:

Using paramFile: \\dep_svr\e920\OneWorld Client
Install\ThirdParty\WebDevFeature\WLSH4A\install\oraparam.ini

Use the path of the `oraparam.ini` file to determine the installer. In the above example, note that the installer is on the Deployment Server and is in this directory:

WLSH4A\install

This indicates that the set of `.log`, `.err`, and `.out` files with the given time stamp were created by the WLSH4A installer.

When the installation completes, the logs relevant to the current installation are copied to the directory

<Oracle_Home_dir>\cfgtoollogs

For example:

C:\E920\cfgtoollogs

Additional logs are located in subdirectories under:

<Oracle_Home_dir>\cfgtoollogs

For example:

C:\E920\cfgtoollogs\oui

11.1.3 OEE Local Database

The log for `OEE12Setup.exe` which spawns the OEE database installer (OUI) is `C:\OEEInstall.log`.

Because the OEE installer runs as a 64-bit program, its installation logs on 64-bit versions of Microsoft Windows are located in this directory:

C:\Program Files\Oracle\inventory\logs

On 32-bit versions of Microsoft Windows, the installation logs for OEE are located in this directory:

C:\Program Files\Oracle\inventory\logs

When the installation completes, the logs relevant to the current installation are copied to this directory:

<Oracle_Home_dir>\cfgtoollogs

For example:

C:\Oracle\E1Local\cfgtoollogs

Additional logs are located under:

<Oracle_Base_dir>\cfgtoollogs

Where <Oracle_Base_dir> is the parent directory of the E1Local directory. For example:

C:\Oracle\cfgtoollogs

Note that this cfgtoollogs directory is at the same level as the E1Local directory.

11.2 Microsoft Firewall

Symptom:

The WLSH4A installer hangs and the bottom of the installation log shows an error indicating an attempt to connect to Node Manager (WebLogic) timed out. The installation log is located at:

C:\Program Files (x86)\Oracle\inventory\logs

Cause:

The Windows firewall blocked the connection to 127.0.0.1 using port 5556, which is the default port used by WLSH4A to connect to the Node Manager of WebLogic.

Solution:

Temporarily turn off Windows firewall and re-run the installer.

11.3 Microsoft Windows IPv4 Requirement

The JD Edwards EnterpriseOne Development Client requires Microsoft Windows Internet Protocol Version 4 (IPv4) for connectivity to the OEE database. It cannot function with OEE using IPv6.

If your Development Client installation is not working as expected, use this procedure to determine if the problem is due to your Windows machine using IPv6 and if so, to remedy:

1. After installing the local Oracle database, use a text editor to open the log.xml file which is typically located in this directory
C:\Oracle\diag\tnslsnr\[MACHINE NAME]\listener\alert\.
2. Examine the contents of the log.xml file for indicators that the machine is using IPv6 addresses.

IPv6 addresses can be distinguished by alphanumeric digits separated by colons, rather than periods as in IPv4 addresses.

One example is if you see host_addr='::1'. This indicates an IPv6 address, which in this case is the machine's local loopback address, whose equivalent IPv4 address is 127.0.0.1.

Another example that indicates the use of IPv6 is if this string exists:

host_addr='fe80::7045:1aba:cb6d:1b50%13'

3. If you see references to IPv6 addresses in the logs after installing the Oracle local database, then you may need to uninstall the Development Client and Oracle

database as described in the chapters of this guide entitled: [Chapter 9, "Uninstalling the Development Client"](#) and [Chapter 10, "Uninstalling the Oracle Local Database"](#).

Also, you may possibly need to perform additional cleanup for the Development Client and Oracle Database as described in the appendices of this guide entitled: [Appendix G, "Manual Cleanup of an Uninstalled Development Client"](#) and [Appendix H, "Manual Cleanup of an Uninstalled Oracle Database"](#).

4. After the uninstall and cleanup is complete, you must apply a software patch from Microsoft to disable IPv6 before reinstalling the Development Client and the Oracle local database. The Microsoft patch for disabling IPv6 is at the following link:

How to disable IPv6 or its components in Windows

<http://support.microsoft.com/kb/929852>

On the above Microsoft web page, click the link labeled **Disable IPv6** (Microsoft Fix it 50409).

5. After you apply the Microsoft patch to disable IPv6, you can reinstall the Oracle database and JD Edwards EnterpriseOne Development Client using the procedures in this guide.

Caution: MICROSOFT DISCLAIMER ON DISABLING IPV6

Important: Internet Protocol version 6 (IPv6) is a mandatory part of Windows Vista and later versions. We do not recommend that you disable IPv6 or its components, or some Windows components may not function. For more information, see the "What are Microsoft's recommendations about disabling IPv6?" question in IPv6 for Microsoft Windows: Frequently Asked Questions at this link:

<http://technet.microsoft.com/en-us/network/cc987595.aspx>

12

Troubleshooting the Workstation

This chapter contains the following topics:

- [Section 12.1, "Understanding Error Messages"](#)
- [Section 12.2, "Troubleshooting the Production Workstation"](#)
- [Section 12.3, "Troubleshooting the Development Workstation"](#)
- [Section 12.4, "Working with the Workstation Log Files"](#)

12.1 Understanding Error Messages

Use this section as a general guide for basic troubleshooting techniques on the Oracle JD Edwards EnterpriseOne workstation. To troubleshoot problems, you will need a thorough understanding of the interactive error messages, Oracle's EnterpriseOne Work Center, logging process, and associated log files.

This section provides solutions to these problems that you might encounter on the workstation:

- [Section 12.1.1, "Report Batch Process"](#)
- [Section 12.1.2, "Environment Issues"](#)
- [Section 12.1.3, "Data Source Setup Problems"](#)
- [Section 12.1.4, "Error Message Details"](#)
- [Section 12.1.5, "Error Messages Generated by Applications"](#)
- [Section 12.1.6, "Frequent Generic Error Messages"](#)
- [Section 12.1.7, "Memory Violations"](#)
- [Section 12.1.8, "Form and Grid Add Failures"](#)
- [Section 12.1.9, "Communication Failure"](#)

12.1.1 Report Batch Process

You might encounter these issues when running a batch process:

- Report displays no data.
It displays only the report headers and the text No Data Selected.
- Batch process displays errors on the report.
- Batch process gives unexpected data on the report.

12.1.2 Environment Issues

You might encounter these environment issues:

- Works when the batch process or business function runs locally but not when it runs on the enterprise server.
- For store-and-forward operation, data entered to the local database is not moved to the server as expected.
- Tables are missing.

12.1.3 Data Source Setup Problems

You might encounter these problems with the data source setup:

- Unable to connect to the enterprise server environment.
- Data is displayed incorrectly on the interactive form or batch report.

See Also:

- "Running the Object Configuration Copy Report" in the *System Administration Guide*.

12.1.4 Error Message Details

When you encounter an error in a JD Edwards EnterpriseOne application, right-click the error message in the error message window and select Detail to provide additional information about the error. This information provides the source file and the source line that caused the error.

For example, if you try to set up an Item/Branch record in P41026 with an invalid item number, you will receive error number 0267 (Item Number Invalid).

When indicating the source file that generated the error, the system provides the entire path of the source location. In this hypothetical example, the source file is C:\E920\MSTR900\X4101.C, and business function X4101 created the error. The other pieces of the path are directory names. The important information in this example is the file with the .C extension (X4101.C).

If the detail for the error includes the name of the source file, you can identify the process that the file performs to determine what might occur to cause an error. For example, the name of the source file might include a system code that indicates the process performed by the file. The process might attempt to run in a module that is not fully functional. The cause of the error might be a constant set to perform a function that is currently unavailable. When you disable the constant, you avoid the error.

Note: If you see a source file description that begins with C:\E920\SYSTEM, the error did not occur through a business function. Possibly, the error occurred through an event rule or the tool, while automatically triggering a data dictionary edit.

Look for conditional statements that determine whether to activate the error message. Look for table names to determine whether the program attempts to retrieve data. Look for other programs that the program might call. Also, read the programmer comments that are included in the source, which might provide a literal explanation for why the code issues an error.

Also look at the data item that caused the error. The data item represents a control on the form. If you get a Blanks Invalid error without an indication of what field you left blank, look at the data item in this error detail box to see which control triggered the error. The field that contains the error might be a hidden field. For example, if you process a transaction that requires a supplier number determined by an Item/Branch combination decided by JD Edwards EnterpriseOne (not by a value that you define on the form) but no supplier number exists for the Item/Branch combination, the software returns the Blanks Invalid error. The field for supplier number does not appear on the form, so the cause of the error is not readily apparent. The data item might alert you to the hidden field and help you resolve the error.

12.1.5 Error Messages Generated by Applications

These error messages are maintained in the data dictionary and are intentionally set to inform the user of a problem. The error message might indicate that the setup is incorrect or that the user is attempting an invalid action. Examples of these kinds of error messages include Record Invalid and Blanks Invalid. Some generic errors lack applicable descriptions; techniques for troubleshooting these errors are discussed in this chapter.

12.1.6 Frequent Generic Error Messages

Some error messages are too generic to immediately explain an error. Examples are Null Pointer and File Can Not Be Accessed. The full descriptions of these error messages do not provide much information as to how to resolve the problem.

To troubleshoot generic errors, retrace the exact steps that led to the original error. The goal is to reproduce the error. If you cannot duplicate an error condition, then the application is accessing different lines of code than it did when the error occurred. Also look at the information in the error detail box, such as the source file, the source line, and the data item.

12.1.7 Memory Violations

Memory violations occur when you encounter memory leaks in an application. A memory leak is a bug that prevents a program from freeing memory that the program no longer needs. The program continues to consume more memory until no memory remains, and the program crashes. JD Edwards EnterpriseOne applications set aside memory while they run. When the application no longer needs that memory, the application should free the memory for other applications to use. When an application does not properly free memory or when an application attempts to use invalid memory, you receive a memory violation.

Use these techniques to troubleshoot these errors:

- Look at the `jdedebug.log` to find information about the processing that occurred at the time of the error, such as programs called and tables accessed.
- Follow the exact steps that led to the error to reproduce the memory violation.

If you cannot duplicate the violation, then the application is accessing different lines of code than it did when the violation occurred. Also look at the information in the error detail box, such as the source file, the source line, and the data item. For UBEs, if the UBE uses a business function that causes memory violations, the UBE will simply stop. In this case, the `ube.log` is the only way to find out what failed.

12.1.8 Form and Grid Add Failures

The two error messages that follow indicate that an attempt to add a new record to the database failed. The first message indicates that an add within a fix/inspect form failed. The second message indicates that an add within a grid failed. If you receive these errors, you could be attempting to add a duplicate record.

- Attempt to add form record failed.
- Attempt to add grid record failed.

The `jde.log` is a helpful reference when these errors occur. In general, it includes detailed information about the table into which the user attempted to add a duplicate record.

12.1.9 Communication Failure

When submitting batch processes to a server, you might receive an error telling you that a communication failure has occurred.

When you submit a batch job to a server, you are first asked whether you would like to install the specifications. If the job is submitted successfully, JD Edwards EnterpriseOne reverts to the initial form.

12.2 Troubleshooting the Production Workstation

This section provides an overview of production workstation troubleshooting and discusses how to:

- Perform preliminary troubleshooting
- Troubleshoot interactive application problems
- Troubleshoot batch processes resulting in no data
- Troubleshoot batch processes displaying errors on the report
- Troubleshoot batch processes displaying unexpected data on the report
- Troubleshoot batch processes ending in an error when submitted on the server
- Troubleshoot local data-availability problems
- Troubleshoot .DLL problems
- Troubleshoot data source setup problems

12.2.1 Understanding Production Workstation Troubleshooting

The troubleshooting procedures that you use for a workstation depend on whether the workstation is a production or development machine. Production machines contain only JD Edwards EnterpriseOne applications, so the scope of problems that can occur is limited. In addition to containing prebuilt applications, development machines are equipped with JD Edwards EnterpriseOne and third-party tools. These tools enable developers to create, modify, compile, generate, and troubleshoot JD Edwards EnterpriseOne applications.

As a system administrator, you can perform preliminary troubleshooting on the production workstation to verify the nature of the problem. You will also want to isolate problems to a user's particular workstation and environment.

In general, when you are running an interactive application, the system displays errors at the bottom of a form. The system highlights the fields with errors in red. You can

select Details on an error message to see information about where the error was set. For example, if the error resulted from within a business function, the system displays the business function and line number where the error was set.

If the errors cannot be resolved through the error messages that are received in the application, check the error messages in the log files for additional information.

If an application has stopped running, you might need to create or retrieve a new set of specifications for that application. You can overwrite a single application by building a partial package and deploying that package.

A user might encounter several problems when attempting to run a batch process. For example, the output might display only the report headings or it might print a message such as "No Data Selected." If the result of a batch process is no data, several factors could be causing the problem.

Some batch processes will give error messages directly on the report. These messages should include both the short description and error message number. You can view the full description of the error by opening the message in Data Dictionary Design.

If errors are received when you are attempting to sign in to a JD Edwards EnterpriseOne environment, a possible cause is an incorrect data source setup on the workstation. Some indications of incorrect setup are:

- A form continues to request a user ID, a password, and a data source even after valid ones are entered.
- Data is displayed incorrectly on an interactive application.
- Messages in the logs refer to problems connecting to data sources or concerning incorrect passwords.

12.2.1.1 Troubleshooting a Standalone Installation of JD Edwards EnterpriseOne

If you find that you cannot perform a force checkout on a PC running a standalone installation of JD Edwards EnterpriseOne, it is because the software cannot determine the system name for a standalone installation.

The solution is to disable the DNS name in Microsoft Windows.

12.2.1.2 Troubleshooting Enterprise Server Data-Availability Problems

If the workstation is running a report against any enterprise server database, such as Oracle, SQL Server, or DB2 for i, you need to check the database to see whether the SQL statement can find data in the tables. With the help of a database administrator, you can run the same SQL statement against the server database to verify that the expected data exists in the tables.

As an alternative or in addition to these procedures, you can also use the Universal Table Browser (UTBrowse.exe which is also known as UTB) to verify table structure and data availability.

If you do not find any data in the tables for the environment against which you are running, then the SQL statement might be incorrect or the table is empty. Check the data selection and processing options, and verify that they are selecting data that is in the tables. If you do not have data in the tables to match what you are searching, then you will get unexpected results or no data on the report.

For example, if you leave the processing options blank (even though that may be a valid entry for a JD Edwards EnterpriseOne batch process), the process might be searching for blank values or for all values. For example, if the data selection is

selecting on a company that does not have any records, then the report batch process does not find any records.

12.2.1.3 Troubleshooting Printing Problems

Most printing errors are written to the batch process log. However, some errors might appear on reports or be visible in another form. For example, the report prints an error message, prints in the wrong font, or prints landscape instead of portrait.

These printing problems can occur:

- The batch application produces error messages on the report, for example, Invalid Company Number.
- The report batch process displays the wrong font on the report.

Check the report properties of the version that you just ran. Also, for the section that is not printing the correct font, check the section properties for the font. If the font is correct, then try printing to a different printer. Otherwise, try using another workstation to see whether the font that is being sent to the printer is not interpreted correctly.

- The report batch process prints portrait instead of landscape or landscape instead of portrait.

Check the report properties of the version that you just ran and verify that the properties are correct.

See Also:

- "Understanding the Package Build Process" in the *JD Edwards EnterpriseOne Tools Package Management Guide*.
- *JD Edwards EnterpriseOne Tools Workflow Tools Guide*.
- "Using the Universal Table Browser" in the *JD Edwards EnterpriseOne Tools System Administration Guide*.
- "Troubleshooting Business Function Processing Problems" in the *JD Edwards EnterpriseOne Tools Runtime Administration Guide*.

12.2.2 Performing Preliminary Troubleshooting

To perform preliminary troubleshooting:

1. Determine whether you can consistently duplicate the problem.
2. If you can duplicate the problem, restart the current application.
3. If the error recurs, restart JD Edwards EnterpriseOne.
4. If the error recurs, reboot the workstation.

These steps clear any memory or caching problems with the workstation.

12.2.3 Troubleshooting Interactive Application Problems

To troubleshoot interactive application problems:

1. Select one of these to see the text of the message:
 - Display Errors from the Help menu selection.
 - Display button on the toolbar.
 - Press F8.

2. To see the full description of an error message, right-click and select Full Description.

The system displays a full glossary of the error and includes information for resolving the issue.

12.2.4 Troubleshooting Batch Processes Resulting in No Data

This task provides a solution to previously discussed problems.

To troubleshoot batch processes resulting in no data:

1. Verify that the data selection on the batch process is appropriate and that data should result.

Data selection on an item that has no data, such as an inactive company, or an incorrect value will result in a batch process with no data.

2. Check the Work Center to see whether the batch process resulted in an error.

Most error messages are not printed on the report but are sent as an email message to the user who submitted the report.

These messages will give the user an example of why the batch process ended without producing the desired results. For example, when the system runs a GL post that ends in error, the report will print only the report headings. All error messages are sent to the Work Center.

Upon quitting the Work Center, the user receives error messages and a glossary description that indicate why the batch process resulted in no data. Some error messages include hot links that link the user directly to the appropriate interactive application to correct the error.

3. If checking the data selection and correcting any errors does not resolve the issue, activate the applicable logs and continue with these steps.
4. Run the batch process and locate the batch process log for the report that you ran.

JD Edwards EnterpriseOne names this log with these conventions:

```
report name_version_other identifiers.log
```

This log is located in the local directory under \E920\PrintQueue. If you ran report R04431, it would appear in the local directory, \E920\PrintQueue, like this:

```
R04431_XJDE0001_D960823_T104512.log
```

5. View the log file using the JD Edwards EnterpriseOne Log Viewer or an ASCII editor such as Notepad or Wordpad.

Inspect the log for errors or failures of any kind. Also examine the SQL statements that were created by the batch process and verify that they should result in data on the report. The batch process log is the main source for debugging batch processes. However, you can look in the jde.log and jdedebug.log for errors or failures of any kind.

6. Verify that data exists in the tables for the database that you are accessing.

Use the Universal Table Browser tool to view the database table.

12.2.5 Troubleshooting Batch Processes Displaying Errors on the Report

Access Error Messages from the Data Dictionary Design menu (GH951).

To troubleshoot batch processes displaying errors on the report:

1. On Error Messages, complete the Glossary Group field.
2. Complete these optional fields:
 - Language
 - Alpha Description
3. On the grid, enter values in the Data Item field and click Find to narrow the search to the particular error code.
For example, enter 0002 to search for the data item that is associated with the Record Invalid error condition.
4. To see an extended description of the error, select Glossary from the Row menu.

12.2.6 Troubleshooting Batch Processes Displaying Unexpected Data on the Report

To troubleshoot batch processes displaying unexpected data on the report:

1. Verify that the data selection on the batch process is correct and should result in the data output that is expected.
2. Activate the batch process log and run the report.
3. Examine the report process flow and SQL statements to see why the data output on the report is selected.

12.2.7 Troubleshooting Batch Processes Ending in an Error When Submitted on the Server

The default processing location for batch jobs is the server. If a job gives incorrect results or ends in error when run on the server, the problem could lie with the batch process or with the server. When you troubleshoot batch processes ending in an error when submitted on the server, perform these steps:

1. Rerun the report, but override the location to run on the workstation rather than the server.
You should be aware that if this is a very large report, the processing may take a significant amount of time. You may want to select less material to speed up the processing time.
2. Verify whether the outcome is the same as when the report was run on the server. If so, use the other troubleshooting procedures for batch processing to resolve the issue.

12.2.8 Troubleshooting Local Data-Availability Problems

Inspect the local database to verify that data exists in the tables that the batch application is accessing.

To troubleshoot local data-availability problems:

1. To find the calling SQL statement, open the batch process log.
JD Edwards EnterpriseOne names this log using these conventions: `report_name_version_other_identifiers.log`. This log is located in the local directory, `\E920\PrintQueue`.
2. Highlight the SQL statement, right-click, and copy the contents to the clipboard.

3. To view data in the local database, open the Universal Table Browser (UTB) and retrieve the table that the batch application is accessing from the local data source.
4. Use the information that you copied from the SQL statement to query the table in UTB.

If this action causes the expected records to be found, the data that you specified in the data selection matches the SQL statement, which means that data selection is not the cause of the problem.

12.2.9 Troubleshooting .DLL Problems on a Production Workstation

Problems with workstation .DLL files are indicated if you receive an error message such as this:

CALLBSFN.DLL Load Lib failed

Such a message might indicate that the object does not exist on the workstation. Use a tool such as Windows Explorer to verify whether the file exists. You can find consolidated .DLLs in the \E920\path code\bin32 directory.

If the .DLL does not exist on the workstation or if it exists but you continue to get the error even after restarting JD Edwards EnterpriseOne, you can get the correct parent .DLL by reinstalling JD Edwards EnterpriseOne on the workstation from the deployment server. Another option is to copy the parent .DLL from the deployment server package location or another functioning workstation. This option will be successful if the business functions that are built into the parent .DLL are the same on the workstation that you are copying to as they are on the one that you are copying from. Use caution when copying .DLLs. A workstation installation is the preferred method.

12.2.10 Troubleshooting Data Source Setup Problems

To troubleshoot data source setup problems:

1. From the Control Panel, verify that the ODBC settings are correctly defined and that the data source exists.

Note: Be sure to look at 32-bit ODBC data sources -- not 64-bit ODBC data sources.

The proper settings vary by data source.

2. If other users will sign in to the same workstation, verify that the data sources are set up as system data sources rather than user data sources.

Data sources that are set up as user data sources must be set up for each user who is accessing JD Edwards EnterpriseOne on the workstation.

12.3 Troubleshooting the Development Workstation

This section provides an overview of development workstation troubleshooting and discusses how to troubleshoot:

- .DLL problems on a development workstation
- Event rule problems
- Business function problems

- Global table problems

This section discusses these topics:

- [Section 12.3.1, "Understanding Development Workstation Troubleshooting"](#)
- [Section 12.3.2, "Troubleshooting .DLL Problems on a Development Workstation"](#)
- [Section 12.3.3, "Troubleshooting Event Rule Problems"](#)
- [Section 12.3.4, "Troubleshooting Business Function Problems"](#)
- [Section 12.3.5, "Troubleshooting Global Table Problems"](#)

12.3.1 Understanding Development Workstation Troubleshooting

The troubleshooting procedures that you use on a workstation depend on whether the workstation is a production or development machine. Production machines contain only JD Edwards EnterpriseOne applications, so the scope of the problems that can occur is limited.

When troubleshooting on a development machine, you can use many of the same employed techniques and gathered information on production machines and detailed in [Section 12.2, "Troubleshooting the Production Workstation"](#). In addition to containing prebuilt JD Edwards EnterpriseOne applications, development machines are equipped with JD Edwards EnterpriseOne and third-party tools. These tools enable developers to create, modify, compile, generate, and troubleshoot JD Edwards EnterpriseOne applications. Because of these additional tools on a development workstation, you are better equipped to track down and resolve issues than on a production workstation.

12.3.2 Troubleshooting .DLL Problems on a Development Workstation

Problems with workstation .DLL files are indicated if you receive an error message such as this:

CALLBSFN.DLL Load Lib failed

Such a message might indicate that the object does not exist on the workstation. Use a tool such as Windows Explorer to verify whether the file exists. You can find consolidated .DLLs in \E920\path\code\bin32 and \E920\system\bin32.

If the .DLL does not exist on the workstation or if it does exist but you continue to get the error even after restarting JD Edwards EnterpriseOne, the workstation has a problem with the build of one or more consolidated .DLLs. You can rebuild libraries or .DLLs using the Busbuild application from Microsoft Windows Explorer. The path to Busbuild.exe is \E920\system\bin32\Busbuild.exe.

If you are receiving the error on a specific business function that cannot be found in the parent .DLL, use this procedure:

1. Verify that the correct parent .DLL for the business function that is being run is referenced when you receive the error.
2. If the wrong parent .DLL is referenced, run Busbuild and select Synchronize JDEBLIC from the Tools menu within Busbuild to correctly synchronize the parent .DLLs.
3. Attempt to rebuild the business function from within Busbuild.

The rebuild should include the business function in the parent .DLL.

4. To verify which business functions are part of a parent .DLL, select Dumpbin from the Tools menu within Busbuild.

This option lists all of the business functions that are included in the parent .DLL.

12.3.3 Troubleshooting Event Rule Problems

When you encounter problems with event rules on an interactive or batch application, several tools are available to help resolve the problem.

- Review the event rules that are attached to the application or batch process for obvious problems such as disconnected assignments or incorrect parameters that were passed to business functions.
- When the system generates the application, a compile error log is generated, which documents errors in the event rules.
Review this log for errors within the Event Rules.
- The ERDebugger application within JD Edwards EnterpriseOne enables you to debug the event rules for an application or batch process.

12.3.4 Troubleshooting Business Function Problems

You might be having business function problems if you are getting unexpected results or getting a .DLL error when you run a business function.

Microsoft Visual C++ enables you to debug a business function. You can use this tool to step through the logic and inspect variables, which often helps you detect the error.

See Also: "Troubleshooting Business Function Processing Problems" in the *JD Edwards EnterpriseOne Tools Runtime Administration Guide*.

12.3.5 Troubleshooting Global Table Problems

Each JD Edwards EnterpriseOne workstation uses global tables (`g1tbltbl.xdb` and `g1tbltbl.ddb`) to write disk cache files containing internal session-specific and workstation-specific information. For example, information about data dictionary tables and business views is cached in these files. By maintaining a history of this cached session information, individual workstations will improve runtime performance based on their usage.

If you are doing application development, you might need to delete the global tables to see the results of your changes. This is because the system looks first to the disk cache to read certain table information. The information that is contained in the disk cache might not be synchronized with your current development modifications. You cannot edit the contents of the disk cache.

Oracle recommends that normal startup of JD Edwards EnterpriseOne in a production environment not include the deletion of these global tables. These files should be deleted only as a troubleshooting technique or a development aid.

If the global table files do not exist when JD Edwards EnterpriseOne is started, they will be created. If they do exist, they will be appended, not overwritten. The files are located in the `\E920\pathcode\spec` directory.

12.4 Working with the Workstation Log Files

This section provides an overview of the workstation log files and discusses how to:

- View log files
- Configure Logging Options
- Use Logs to Troubleshoot Issues

This section discusses these topics:

- [Section 12.4.1, "Understanding the Workstation Log Files"](#)
- [Section 12.4.2, "Viewing Log Files"](#)
- [Section 12.4.3, "Configuring Logging Options"](#)
- [Section 12.4.8, "Using Logs to Troubleshoot Issues"](#)
- [Section 12.4.9, "Compile Error Log"](#)
- [Section 12.4.10, "jdecpy.log"](#)

12.4.1 Understanding the Workstation Log Files

You should be familiar with the various logs that are used to troubleshoot problems on the workstation. By using these logs and the procedures outlined in this chapter, you can troubleshoot problems with interactive applications, batch applications, or business functions running locally on the JD Edwards EnterpriseOne workstation.

Note: Determine whether you can duplicate the problem consistently or whether it is intermittent.

Do not leave the debugging logs active when the logs are not in use. The logs consume disk and processor resources, and therefore affect performance.

If you do not use data replication in the configuration, ignore error messages that refer to these tables in the `jde.log` and `jdedebug.log`:

- F98DRPUB
- F98DRENV
- F98DRSUB
- F98DRLOG
- F98RPCN

In general, on JD Edwards EnterpriseOne workstations, logs are classified in these categories:

- Logic processing.
- Batch processing.
- Application development (compiling and generating).
- Object Management Workbench transactions.

12.4.1.1 Logic Processing Logs

You use two major log file sources for troubleshooting processing faults on the workstation:

- `jde.log`

This log displays fatal errors. The `jde.log` can track any fault that might occur within JD Edwards EnterpriseOne.

- `jdedebug.log`

This log tracks API calls and SQL statements as well as other messages. You can use this file to determine the point in time when normal processing stopped. The system does not use `jdedebug.log` to track errors. Instead, this log is used to track the timing of JD Edwards EnterpriseOne processes.

12.4.1.2 Batch Processing Log

You can use this batch process log to identify faults in JD Edwards EnterpriseOne processing that are related to batch processes.

- `UBE.log`

12.4.1.3 Application Development Logs

For JD Edwards EnterpriseOne workstations in application development environments, you can use these logs to identify faults in processing that are related to compiling and generating applications and business functions:

- `compile_error.log`

The `compile_error.log` contains compilation errors for event rules. You can use this log to view event rules that might not properly compile and run. These include Named Event Rules, Table Event Rules, and event rules that are embedded in applications.

- `jdecpy.log`

This log is produced each time you run the copy table program (`cpytbl.exe`). Copy table error messages and IDs are logged. This log also indicates whether any inserts failed that could indicate a possible error.

- `sql.log`

You use this log to view exactly what is being sent through the ODBC driver. This is not a JD Edwards EnterpriseOne log; another software vendor provides this log process.

12.4.1.4 Object Management Workbench Transactions

To be supplied.

12.4.2 Viewing Log Files

You can view JD Edwards EnterpriseOne log files from within any JD Edwards EnterpriseOne application. If you want to view log files outside of JD Edwards EnterpriseOne, you can use a text editor like Notepad or Wordpad.

To view log files:

1. From within any JD Edwards EnterpriseOne application, right-click to open the pop-up menu.
2. On the pop-up menu, select the View System Log option.
3. On Log Viewer, select File, Open to locate and open a JD Edwards EnterpriseOne log file.

You can also use the View menu selection to select log files. If you have viewed log files previously, the File menu keeps a history of those files.

12.4.3 Configuring Logging Options

Note: Although the names of the Job File (jde.log) and Debug File (jdedebug.log) logs are specified in the jde.ini (as described in the below sections), the value of the Output flag can alter those log file names.

If the value of Output is other than NONE, a new Job File and Debug File will be created for each EnterpriseOne process that is started on the Development Client. In these cases, the Windows process ID (PID) will be inserted into the log file names immediately before the dot.

For example, if we use the default file names (jde.log and jdedebug.log), Output is set to FILE, activConsole.exe is run, and the PID of activConsole.exe is 123, two new logs will be created:

- jde_123.log
- jdedebug_123.log

Similarly, if a new Busbuild.exe process is started with process ID 456, the logs associated with Busbuild.exe would be jde_456.log and jdedebug_456.log. Because the process ID is generated anew when a process first starts, restarting activConsole.exe or Busbuild.exe in this example would result in new sets of jde_xxx.log and jdedebug_xxx.log files for these processes (where "xxx" is the ID of the new process).

12.4.4 Setting Up the Workstation jde.log

You can use the workstation jde.log as a general purpose log to track fatal errors that are generated by JD Edwards EnterpriseOne processing. The jde.log tracks any fault that might occur within JD Edwards EnterpriseOne. When you are looking for startup errors, you should read the jde.log from the top down. For other errors, you should read from the bottom up.

The workstation jde.log is created (if it does not exist) or overwritten (if it already exists) at the start of every JD Edwards EnterpriseOne session.

To set up the workstation jde.log:

1. Locate the workstation jde.ini file.

The JD Edwards EnterpriseOne installation program places this file in the working Microsoft Windows directory; for example, C:\Windows\jde.ini. If you are unsure of the workstation's working Microsoft Windows directory, use the Find command to locate the jde.ini file.

2. Use an ASCII editor (like Notepad or Wordpad) to open the file.
3. In the [DEBUG] section, verify or change this setting for the JobFile variable:

Setting	Purpose
JobFile=	<p>Specifies the location and name of the jde.log file. The default value is C:\jde.log.</p> <p>Note: You can disable the jde.log on the workstation by specifying a blank or invalid value for JobFile. If you delete or disable (comment out) the JobFile parameter, JD Edwards EnterpriseOne automatically creates and writes to a log file called jde.log in the C:\ directory of the workstation.</p>

4. Save the changes and close the jde.ini file.

Note: If you get the error **Access denied** when trying to save the jde.ini, you may need to exit from your text editor, discarding your changes, and restart it with **Run as administrator**.

12.4.5 Setting Up the Workstation jdededbug.log

To set up the workstation jdededbug.log:

1. Locate the workstation jde.ini file.

The JD Edwards EnterpriseOne setup program places this file in the working Microsoft Windows directory, for example, C:\Windows\jde.ini. If you are unsure of the workstation's working Microsoft Windows directory, use the Find command to locate the jde.ini file.

2. Use an ASCII editor (like Notepad or Wordpad) to open the file.
3. Verify or change this setting for the DebugFile variable.

Setting	Purpose
DebugFile=	Specifies the location and name of the jdededbug.log file. The default value is C:\jdededbug.log.

4. Enable or disable the logging of events to the jdededbug.log file through this setting in the [DEBUG] section:

Setting	Purpose
Output=	Valid values are: <ul style="list-style-type: none"> ▪ NONE: No trace information is written to jdededbug.log. ▪ FILE: Database and runtime trace information is written to the file that is specified by the DebugFile= parameter in the [DEBUG] section. ▪ EXCFILE: Runtime trace information is written to the file that is specified by the DebugFile= parameter in the [DEBUG] section. ▪ BOTH: Trace information is written to both jde.log and jdededbug.log.

Note: The primary method of disabling the jdededbug.log is by using the Output parameter. However, if you set **Output=FILE** and you leave the **DebugFile** value blank (or specify an invalid location), JD Edwards EnterpriseOne still performs debug tracing but does not write the results to any jdededbug.log file. If you delete or disable (comment out) the **DebugFile** parameter, JD Edwards EnterpriseOne automatically creates and writes to a log file called jdededbug.log in the C:\ directory of the workstation.

See the **Note** at the start of section [Section 12.4.3, "Configuring Logging Options"](#) for more information about how changing the value of the Output setting affects the name of the log files.

5. Set the level of debugging information that you want written to the jdededbug.log file.

The debug level is determined by this parameter in the [DEBUG] section:

Setting	Purpose
LEVEL=	<p>Specifies the debug level. You can specify any combination of allowable values using commas as delimiters. The default setting is LEVEL=BSFN,EVENTS.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> ▪ EVENTS ▪ BSFN ▪ SF_x ▪ GRID ▪ PARENT_CHILD ▪ GENERAL ▪ MESSAGING ▪ WORKFLOW ▪ WORKFLOW_ADMIN ▪ MEDIA_OBJ ▪ CONTROL

For example, LEVEL=SFCONTROL. In addition, you can specify multiple system functions by separating them with commas. For example, LEVEL=SFGRID,SFCONTROL. You can also specify numeric values:

- 1: Traces critical errors. This is the default level. That is, whether you specify this value or not, the system will always trace critical errors.
- 2: Traces critical errors. This is the default level. That is, whether you specify this value or not, the system will always trace critical errors.
- 3: Traces statements as the software enters and exits each event. Specifying this value is the equivalent of specifying the EVENTS value.
- 4: Traces main messages that the software sends to a controlling parent of a child. These messages concern the processing functions such as the grid.
- 5: Provides a detailed trace report of every function that the software calls in the interactive runtime module. This setting is applicable only to developers of the runtime module.
6. Save the changes and close the jde.ini file.

Note: If you get the error **Access denied** when trying to save the jde.ini, you may need to exit from your text editor, discarding your changes, and restart it with **Run as administrator**.

12.4.6 Setting Up the Batch Process Log

To set up the batch process log:

1. Locate the workstation jde.ini file.

The JD Edwards EnterpriseOne setup program places this file in the working Microsoft Windows directory, for example, C:\Windows\jde.ini. If you are unsure of the workstation's working Microsoft Windows directory, use the Find command to locate the jde.ini file.

2. Use an ASCII editor (such as Notepad or Wordpad) to open the file.
3. Set the level of batch report debugging information that you want written to the batch process log file, and set whether you want the file to be saved.

These settings are controlled by these parameters in the [UBE] section:

Setting	Purpose
UBEDebugLevel=	Specifies the level of UBE debug logging. The default value is 0, and values are: <ul style="list-style-type: none"> ■ 0: No message in a log file. ■ 1: Error messages, and log entry and section level messages. ■ 2: Object level messages (plus Level 1 messages). ■ 3: ER messages and database mapping messages (plus Level 1 and 2 messages). ■ 4: SQL statements (plus Level 1, 2, and 3 messages). ■ 5: Batch process function calls and printed output values (plus Level 1, 2, 3, and 4 messages). ■ 6: Batch process function calls and printed output values (plus Level 1, 2, 3, 4, and 5 messages).
UBESaveLogFile=	Specifies whether the <batch_report>.log file will be saved. Values are: <ul style="list-style-type: none"> ■ 0: The <batch_report>.log file is not saved. ■ 1: The <batch_report>.log file is saved in this workstation JD Edwards EnterpriseOne print queue directory \JDE\PrintQueue

4. Save the changes and close the jde.ini file.

Note: If you get the error "Access denied" when trying to save the jde.ini, you may need to exit from your text editor, discarding your changes, and restart it with **Run as administrator**.

12.4.7 Setting Up the SQL Log

You can use sql.log to view exactly what is being sent through the ODBC driver. This log is not a JD Edwards EnterpriseOne log; another software vendor provides this log process. For workstations, sql.log resides in the default root directory of the workstation, usually in C:\. You can direct the output to any file in any location. In general, instead of using the sql.log, you can use the jddebug.log because it also tracks SQL statements.

To activate sql.log:

1. From the Microsoft Windows Control Panel, select 32bitODBC.
2. On Data Sources, click Options.

Note: Leave the **Stop Tracing Automatically** option selected. Because this log grows rapidly, we recommend that you stop the trace in this way to preserve disk space resources and CPU cycles.

Ensure that Trace ODBC Calls is cleared when you are not debugging. The log files can consume large amounts of disk space as well as CPU cycles.

12.4.8 Using Logs to Troubleshoot Issues

You can create a normal (successful) set of logs by logging on to JD Edwards EnterpriseOne and then immediately logging off. Use this set of logs of successful startup statements to compare against logs that have a problem.

If you know the problem is not related to startup, you can clear and save the logs without quitting JD Edwards EnterpriseOne. When you recreate the problem, the contents of the logs should contain only errors that occurred since you cleared the logs.

You can also rename the logs to indicate the kind of problem. For example, you might delete the logs and then run an application that causes an error condition. You could group the set of logs in a common directory such as C:\P01012_error_logs_run_1.

Another alternative is to add comment lines to a log indicating the sequence of events that you are performing. For example, you might be running an application that you know causes an error. Just before you run the application, you could edit the jde_xxx.log to add a comment line stating that you are about to start the suspect application.

Most error messages in the jde.log have a unique number assigned to them. You can view an extended description of the error, including possible causes and resolutions, by searching on the error number in the Error Messages application (P92002).

This section discusses these logs:

- [Section 12.4.8.1, "Workstation jdedebug_xxx.log"](#)
- [Section 12.4.8.2, "Batch Process Log"](#)
- [Section 12.4.8.3, "Troubleshooting ODBC Problems Using sql.log"](#)

12.4.8.1 Workstation jdedebug_xxx.log

The workstation jdedebug_xxx.log file contains messages relating to API calls and SQL statements, as well as other messages. You can use this file to determine the point in time when normal processing stopped. The system does not use jdedebug_xxx.log to track errors. Instead, it uses this log to track the timing of JD Edwards EnterpriseOne processes.

You can use jdedebug_xxx.log to determine where a process has ended. For example, log data can include what the ODBC was trying to connect to, the SQL statement that was being run for a specific table, and whether memory has been freed.

If the process failed and you have logging turned on, look in the jdedebug_xxx.log for these messages:

- Not Found
- Failure

Also, look at the end of the log to see what commands or tasks ran last. In general, important lines in the log are:

- SELECT
The SELECT lines indicate which table you are selecting. The log tells you in which library (for the IBM i) or environment (for the non- IBM i) the table resides. You should verify that the selected libraries and environments are correct.
- ODBC Version

The ODBC lines indicate whether you are having problems connecting to the driver.

12.4.8.2 Batch Process Log

You can use the batch process log to identify faults in JD Edwards EnterpriseOne processing that are related to batch processes. The batch process log resides in the \E920\PrintQueue directory. The log file name is composed of the report name, version name, date, and time suffixed by the extension .log.

Based on the setting of the **UBESaveLogFile** parameter in the [UBE] section of the jde.ini file, this log file is deleted or saved on successful completion of batch processes. This log file displays different types of messages that can help in tracking errors in the batch process. The messages are:

- Section Level Process
- Object Level Process
- ER Level Process
- DB Level Process

The batch process log can contain ER references, batch process flow, and SQL statements, among other messages. You can use the batch process log file to determine when normal processing stopped.

The batch process log file displays the process flow in batch processes. This flow is completed in these steps:

1. When batch processes complete a section, starting with the INIT section, a business view is opened.
After the INIT Section log, you should see a SQL statement.
2. After INIT Section, the batch engine calls Adv Section to retrieve a record.
3. After the retrieve, batch engine processes the Do Section Processing.
4. From Do Section, each object is processed in Init Object - Do Object - End Object order.
5. After Do Object message, you should see Printed value in the log.

ER events are logged in a different event level.

12.4.8.3 Troubleshooting ODBC Problems Using sql.log

To troubleshoot ODBC problems using sql.log:

- Ensure that the data source names are set up correctly (as system data sources) and that a driver has been set up in the **32bitODBC** in Control Panel.
- Make sure that Client Access has the correct parameters.
- Ensure that the library to which you are pointing is set up correctly.
- Look for these ODBC error messages in jde.log and jddebug.log:
 - Table not in library

If the table that is specified could not be found in the specified location, go to the appropriate DBMS and attempt to locate the table.

If the table does not exist, you must generate the table.

If the table exists but has been moved, you must change the data source to point at the new library.

- Not Binding Column Data Types

This error message means that the row is in use and that another program has a lock on that data. As a result, you cannot use this row until the program that is currently using it releases it.

12.4.9 Compile Error Log

For JD Edwards EnterpriseOne workstations in development environments, use this log to identify faults in JD Edwards EnterpriseOne processing that are related to compiling and generating applications and business functions. This log for compiled event rules provides an account of event rules (Named Event Rules, Table Event Rules, and applications) that do not properly compile and process. JD Edwards EnterpriseOne generates this log file every time the Code Generator program (`cg.exe`) is run and errors occur with compiled event rules.

The `<compile_error>` portion of the log file name refers to a variable value for the name of the event rules being compiled. For example, a name of a log file for compiling NER N3200780 is `N3200780.log`. The error log from an application containing compiled event rules replaces the first letter of the application name with an E; for example, P0101 generates an error log named `E0101.log`.

Use this log when errors have occurred within the Code Generator while you were compiling an application, Named Event Rules, or Table Event Rules. When this happens, a message box appears beneath the JD Edwards EnterpriseOne Code Generation form with the source member and the problem description. You can use the log file to keep a record of such problems. The compile error log resides in the log folder under the path code portion of the E920 directory tree, for example, `C:\E920\PD920\LOG`.

12.4.10 jdecpy.log

The system produces output for `jdecpy.log` each time the copy table program (`cpytbl.exe`) is run on the workstation. In general, the file contains records of those tables that were successfully copied from the local database to the chosen server. This log also indicates whether any inserts failed. Such failures indicate a possible error. This log is automatically stopped after `cpytbl.exe` finishes.

The `jdecpy.log` resides in the root directory of the workstation, usually in `c:\`. JD Edwards EnterpriseOne automatically generates this log every time you run `cpytbl.exe`. The log is created or overwritten each time it runs.

After you use `jdecpy.log` to determine that a copy table error has occurred, you should refer to the `jde.log`. If a table does not copy properly, the detail of the error text is written to `jde.log`. The `jde.log` contains the actual error message and message ID. The message ID relates to the line prefix numbers in the `jdecpy.log`. This ID will help you locate the applicable error text that was written to the `jde.log`.

A

Running OEE12Setup.exe from the Command Line

This appendix describes the command line arguments for OEE12Setup.exe that can be used to set these default parameters to install the local Oracle database:

- Oracle Base Directory
- System password
- Use the Microsoft Windows built-in user account to install

Depending on which switch or combination of switches are used, running OEE12Setup.exe from the command line will prompt for additional user input by displaying the OEE12Setup GUI. The following command line scenarios will cause OEE12Setup.exe to display the GUI:

- The Windows built-in account is specified and the Oracle Base Directory is specified but is invalid or empty. The GUI prompts for a valid install directory.
- The Windows built-in account is not specified and the Oracle Base Directory is not specified, invalid, or empty. The GUI prompts for the Oracle Home User and/or the Oracle Base Directory as necessary.

There are two scenarios in which the install is silent (that is, the OEE12Setup GUI is not displayed):

1. The only switch specified is to use the Windows built-in account. In this case the default installation directory is assumed, which is c:\Oracle.
2. The switch to use the Windows built-in account is used in combination with the switch and valid argument that specifies a valid Oracle Base Directory.

This section describes these topics:

- [Section A.1, "Locating and Running the OEE12Setup.exe Program from the Command Line"](#)
- [Section A.2, "Use an OEE12Setup.exe Command Line Switch to Change the Installation Directory"](#)
- [Section A.3, "Use an OEE12Setup.exe Command Line Switch to Set the Passwords for the SYSTEM and SYS Database Users"](#)
- [Section A.4, "Use an OEE12Setup.exe Command Line Switch to Install as the Built-in User"](#)

A.1 Locating and Running the OEE12Setup.exe Program from the Command Line

Use this procedure to locate and run the OEE12Setup.exe program from the command line.

1. If you downloaded the OEE12Setup.exe installer and have not already done so, expand all disk images to be under a common directory called Disk1 on your Deployment Server. If you are using the OEE12Setup.exe installer provided by your EnterpriseOne administrator, determine the location of the installer on the Deployment Server.

Caution: You can run OEE12Setup.exe whether you are logged into Windows with an administrative or non-administrative account.

For optimal security, you should configure the Oracle database services to run under a Windows User Account with limited privileges. For additional details on the Oracle policy regarding **Supporting Oracle Home User on Windows**, refer to this link:

http://docs.oracle.com/database/121/NTQRF/oh_usr.htm

2. Open a command prompt window with **Run as Administrator**.
3. From within the command prompt window, change directory (cd) to the directory that contains the OEE12Setup.exe installer. For example:

\DeploymentServer\OneWorld Client Install\ThirdParty\ORACLE

Caution: Be sure you use the correct set of files for the Oracle 12c local database as described below.

The OEE installer for OEE 11g was called OEESetup.exe and was accompanied by 15 "cab" files named E1Local.cab through E1Local15.cab.

The OEE installer for OEE 12c is called OEE12Setup.exe and has 20 "cab" files called E1Local12c.cab through E1Local12c20.cab.

A.2 Use an OEE12Setup.exe Command Line Switch to Change the Installation Directory

Run the OEE12Setup.exe program with the -i switch to specify the installation directory. The syntax is:

OEE12Setup.exe -i<OracleBaseInstallPath>

where the -i switch tells OEE12Setup.exe where to install the local database **E1Local**.

For example:

OEE12Setup.exe -ix:\oracle\JDE

where "x" is the drive letter. Do not include a space character between the switch and the argument.

If both this switch and the OracleBaseInstallPath argument are omitted, the local database will be installed under the default location. If you specify the -i switch

without the OracleBaseInstallPath argument or if the specified directory is invalid, the OEE12Setup GUI displays and prompts for this value.

Tip: Do not include E1Local as part of this path.

A.3 Use an OEE12Setup.exe Command Line Switch to Set the Passwords for the SYSTEM and SYS Database Users

Run the OEE12Setup.exe program with the -p switch to set the passwords of the **SYSTEM** and **SYS** database users to the same value. The syntax is:

```
OEE12Setup.exe -p<SystemPassword>
```

where the -p switch tells OEE12Setup.exe the value to set for the password of the **SYSTEM** and **SYS** database users.

For example:

```
OEE12Setup.exe -pMyPassword
```

Do not include a space character between the switch and the argument.

If you specify the -p switch without the <SystemPassword> argument, no operation occurs.

A.4 Use an OEE12Setup.exe Command Line Switch to Install as the Built-in User

Caution: For strongest security, Oracle recommends that you do not configure the Oracle database services to run under the Windows built-in user account. To provide optimal security, you should configure with a Windows User Account with limited privileges. For additional details on the Oracle policy regarding **Supporting Oracle Home User on Windows**, refer to this link:

http://docs.oracle.com/database/121/NTQRF/oh_usr.htm

Run the OEE12Setup.exe program with the -b switch to install the local Oracle database as the Microsoft Windows built-in user "LocalService":

```
OEE12Setup.exe -b
```

where the -b switch tells OEE12Setup.exe the value to install the local Oracle database using the Microsoft Windows built-in account.

B

Working with ReconfigureDB.exe

This appendix discusses these topics

- [Section B.1, "Understanding the ReconfigureDB.exe Program"](#)
- [Section B.2, "Encrypting and Decrypting the Password of the Local Database"](#)

B.1 Understanding the ReconfigureDB.exe Program

The installation of the Development Client delivers a utility called ReconfigureDB.exe. This program can be used by a database superuser who for Oracle is the user for the **SYSTEM** and **SYS** accounts, while for SQL Server Express (SSE) it is the user of the **SA** account. Only users of these accounts can encrypt and decrypt the password for the **local database** on the Development Client. Throughout this text, the term **local database** refers to the database that is installed directly on the Development Client. Depending on the release of EnterpriseOne, the supported database could be Oracle or SQL Server Express as specified in the Certifications for JD Edwards EnterpriseOne (refer to [Section 1.2, "Certifications"](#) of this guide).

The **local database** password must be encrypted for JD Edwards EnterpriseOne to run on the Development Client. In order to provide security and uniqueness, JD Edwards EnterpriseOne generates this password using a combination of the serial number of the local C drive and a proprietary encryption algorithm. Therefore it is assured that this password will not be the same on different computers.

Tip: With EnterpriseOne Tools Release 9.2.0.0 and later and an Oracle local database, the method of creating the password changed to produce a more complex and secure password. In these notes and the ReconfigureDB.exe program, the old method is referred to as using **Legacy** encryption; whereas, the new method uses **Enhanced** encryption.

Important: Enhanced encryption is applicable only to an Oracle local database when using Tools Release 9.2.0.0 and greater. Legacy encryption is used with an Oracle local database when using Tools Releases prior to 9.2.0.0 or with SQL Server Express (using any supported Tools Release).

Important: Prior to running JD Edwards EnterpriseOne on the Development Client, you must ensure that the password of the superuser of the local database is set to the relevant encryption using ReconfigureDB.exe. This is done by selecting a program option appropriate for your database and Tools Release:

- **Enhanced Encryption**

You should use this option with the local Oracle database and Tools Release 9.2.0.0 and greater.

- **Legacy Encryption**

You should use this option with any local database and Tools Releases prior to 9.2.0.0.

You can also use this option with the SQL Server local database with any supported Tools Release.

Note: With Tools Release 9.2.0.0 and greater, the program for changing the password of the superuser of the local database is ReconfigureDB.exe. The program allows these password options:

- Plain Text
- Enhanced Encryption
- Legacy Encryption

Prior to Tools Release 9.2.0.0, the comparable program was called ReconfigureMSDE.exe and provided only the options for plain text and (Legacy) Encryption.

The ReconfigureDB.exe program runs in either interactive or silent mode. If no command-line options are given, the program launches a Graphical User Interface (GUI). If any command-line options are specified, the ReconfigureDB.exe program runs silently. In both cases, output from the program is written to this log:

C:\ReconfigureDB.log

You can determine the functionality and command syntax of the ReconfigureDB.exe program by executing the program with either the /? or -H options. For example:

ReconfigureDB.exe /?

or

ReconfigureDB.exe -H

When you execute the command with these options the output is not directed to the console; instead the output is written to this file:

```
c:\ReconfigureDB.log
```

The contents of the ReconfigureDB.log file are shown below:

```
ReconfigureDB.exe
```

- 1) Changes the password for the database "superusers" for the LOCAL EnterpriseOne database.
- 2) Can change to or from an encrypted password which is needed for E1 to run. This password is generated based on the C drive's serial number and then encrypted based on E1 proprietary algorithms; hence, this password will not be the same on different computers.
- 3) Can also change to or from user-specified passwords.
- 4) The program works on the following local databases--and ONLY these databases:
 - E1Local
 - Type: Oracle Enterprise Edition (OEE)
 - Users: SYSTEM and SYS
 - JDESSELocal
 - Type: Microsoft SQL Server 2005 Express Edition (SSE)
 - User: SA

IMPORTANT NOTE: With EnterpriseOne Tools Release 9.2.0.0 and later, the method of creating the password changed to produce a more complex and secure password.

In this program, the old method is referred to as using "Legacy" encryption; whereas, the new method uses "Enhanced" encryption.

```
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!! IMPORTANT !!! IMPORTANT !!! IMPORTANT !!! IMPORTANT !!!
!!! The superuser password must be set to the E1 encrypted password !!!
!!! for E1 to work. Select "Enhanced" for Tools Release 9.2.0.0 !!!
!!! and later. Select "Legacy" for older Tools Releases. !!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

SYNTAX

```
ReconfigureDB [-options] [Old_Password|-E|-L] [New_Password|-E|-L]
```

LOG FILE

- The log file is C:\ReconfigureDB.log

OPTIONS

- May be preceded by either a slash (/) or hyphen (-).
- May be either upper- or lowercase.
- Include one space before the slash or hyphen.
- The order of the options is important. The old password (or option -E or -L) must come before the new password (or option -E or -L).
- If an old password (or option -E or -L) is given, a new password (or option -E or -L) must be given.
- If no options are provided, a GUI will prompt for the type of database and the passwords.

? or -H	- Writes this help to the log file.
	- Optional.

-T[ORACLE SSE]	- The database server instance type.
----------------	--------------------------------------

- Optional. If not specified, the default value is ORACLE.

Old_Password|-E|-L - May be one of the following:
1) Old password
2) -E = Indicates that old password was created using the ENHANCED (i.e., more complex) generation algorithm.
3) -L = Indicates that old password was created using the LEGACY (i.e., less complex) generation algorithm.

New_Password|-E|-L - May be one of the following:
1) New password
2) -E = Indicates that new password should be created using the ENHANCED (i.e., more complex) generation algorithm.
3) -L = Indicates that new password should be created using the LEGACY (i.e., less complex) generation algorithm.

EXAMPLE

In this example, the password for the JDESSELocal database SA user will be changed from "MyOldPassword" to a generated password that is then encrypted with the new enhanced method:

```
ReconfigureDB -TSSE MyOldPassword -E
```

B.2 Encrypting and Decrypting the Password of the Local Database

When the **local database** is Oracle, JD Edwards EnterpriseOne uses an encrypted password to connect to **E1Local** through the **SYSTEM** and **SYS** accounts.

When the **local database** is SQL Server Express, JD Edwards EnterpriseOne uses an encrypted password to connect to **JDESSELocal** through the **SA** account.

Some of the administrative database scripts on the Development Client decrypt this password before submitting database commands. Upon exit, such programs subsequently then re-encrypt the password. If one of these scripts fails to complete (for example, it is killed or it otherwise fails) before it can encrypt the password again, JD Edwards EnterpriseOne will not be able to connect to the database. You can determine if this is the case by attempting to sign into the local Oracle database using this command:

```
SQLPlus.exe system/admin@E1Local
```

where "admin" is the default password that the scripts use.

If you can sign in, the password must still be decrypted. You must re-encrypt the **SYSTEM**, **SYS**, or **SA** account password using the following steps for EnterpriseOne to operate correctly.

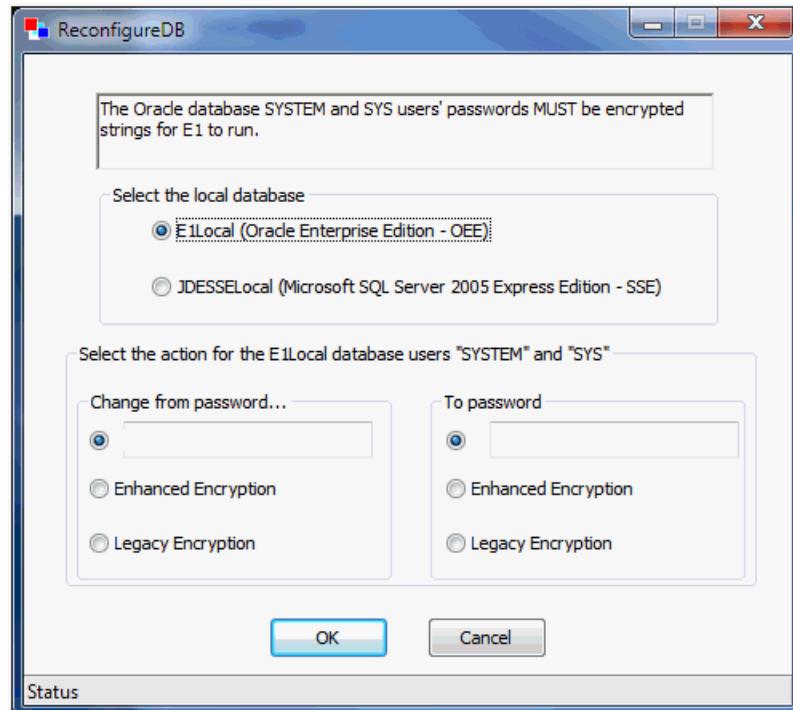
1. Launch the ReconfigureDB.exe program located in this directory:

```
<E1_install_dir>\system\bin32\ReconfigureDB.exe
```

Note: You do not have to right click on ReconfigureDB.exe and select **Run as administrator**. This is because this version of the program is designed to automatically attempt to start with the elevated permissions. If you are not signed into Windows with an administrative account, you will be prompted to enter the credentials for an administrative account.

If you do not specify any command line options, this program will launch in GUI mode and you can proceed as described in the following steps in this section. Optionally you can use command line options to execute ReconfigureDB.exe .

Tip: For details of syntax and command line options for ReconfigureDB.exe , refer to the preceding section in this document entitled: [Section B.1, "Understanding the ReconfigureDB.exe Program"](#) .



2. On the main ReconfigureDB screen, the **Select the local database** section lists the types of local databases that are currently installed; options for database types that are not installed will be inactive.
 - **E1Local (Oracle Enterprise Edition - OEE)**
This is the only valid option for JD Edwards Applications Release 9.1 (E910) and greater.
 - **JDESSELocal (Microsoft SQL Server 2005 Express Edition - SEE)**
You should choose this if the local database is SSE, which is a valid option in JD Edwards Applications Releases prior to 9.1 (E910).
3. In the **Select the action for the E1Local database users** section, the first column titled **Change from password...** indicates the old password; that is, the **from** password that you want to change. Select one of the available options:

- **A plain text password**

Specify the password in the input field if you know that it was not generated with one of the two types of encryption. For security purposes, your keystrokes are displayed as asterisks.

- **Enhanced Encryption**

Click this radio button if the old password was encrypted with the enhanced encryption that is applicable to a local Oracle database and Tools Release 9.2.0.0 or greater. This option uses an enhanced encryption algorithm (relative to prior releases) providing greater security for the local Oracle database.

- **Legacy Encryption**

Click this radio button if the old password was encrypted with the legacy encryption that is applicable to the local databases which can be either:

- Oracle on Tools Release prior to 9.2.0.0
- SQL Server Express on any supported Tools Release

This option uses an older, less secure encryption algorithm (relative to later releases) providing less security for the local database.

4. The second column titled **To password** indicates the new password; that is, to what you want to change the password. Select one of the available options:

- **A plain text password**

Use this option if you do not want to use either of the two types of encryption. For security purposes, your keystrokes are displayed as asterisks.

Caution: If you select the plain text password option, ensure that you re-encrypt the password before attempting to run JD Edwards EnterpriseOne. If the password is not encrypted with the correct type of encryption, JD Edwards EnterpriseOne will fail because it cannot access the local database.

Note: The password cannot contain any spaces. Spaces at the start or end of the password will be removed.

- **Enhanced Encryption**

Click this radio button if the new password will be encrypted with the enhanced encryption that is applicable to a local Oracle database and Tools Release 9.2.0.0. The option uses an enhanced encryption algorithm (relative to prior releases) providing greater security for the local Oracle database.

- **Legacy Encryption**

Click this radio button if the old password will be encrypted with the legacy encryption that is applicable to the local databases which can be either:

- Oracle on Tools Releases prior to 9.2.0.0
- or
- SQL Server Express on any supported Tools Release

This option uses an older, less secure encryption algorithm (relative to later releases) providing less security for the local database.

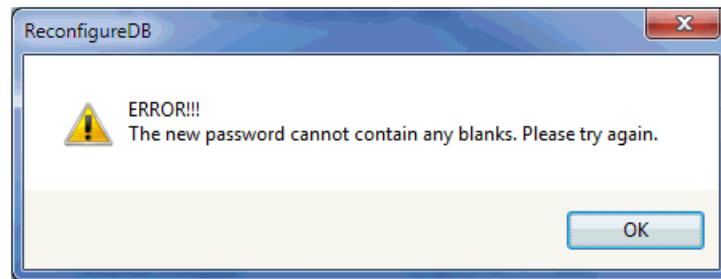
5. Click the **OK** button.



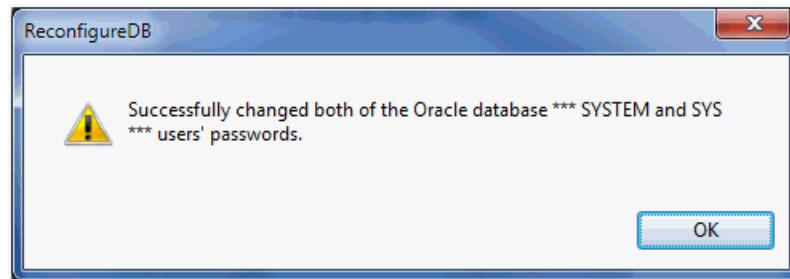
6. On Confirm Password, re-enter the password in the **New password:** field.

This is to confirm the new password for local database users which are **SYSTEM** and **SYS** for an Oracle database and **SA** for an SSE database.

The password value cannot contain a space character (blank). Attempting to do so causes this error to be displayed



7. Click the **OK** button.



A dialog box indicates that the password was successfully changed. Click the **OK** button to exit the dialog.

8. Watch the status bar at the bottom of the dialog for informational messages.

Tip: If changing the password fails, look in this log file for additional information:

C:\ReconfigureDB.log

Also, ensure you are using the correct password as perhaps the password you are trying is not what you thought it was.

If neither of the above helps resolve a password failure, attempt to stop and restart these database services:

Oracle Database

- OracleServiceE1LOCAL
- OracleE1LocalTNSListener

SSE Database

- JDESSELOCAL

After the database services are stopped and restarted, you can retry ReconfigureDB.exe.

C

Understanding Executable Files on the Development Client

This appendix contains the following topics:

- [Section C.1, "JD Edwards EnterpriseOne Linked Executable Files"](#)
- [Section C.2, "JD Edwards EnterpriseOne Standalone Executable Files"](#)

C.1 JD Edwards EnterpriseOne Linked Executable Files

This section provides a list of linked executable files (executables) that are in the workstation system/bin32 directory.

Linked executables:

- Are called by other JD Edwards EnterpriseOne programs.
- Are called by the JD Edwards EnterpriseOne kernel.
- Have no value if they are run independently of JD Edwards EnterpriseOne.
- Will not run unless they are called by JD Edwards EnterpriseOne.

This table includes descriptions and instructions for running the linked executable files:

Executable	Description	Call Details
Ap22.exe	Displays spreadsheets in a dialog box. This executable is obsolete and has no function in SP10 and beyond.	Obsolete.
BLC2Text.exe	Reads workstation JDEBLC spec files and generate a text file with details about each business function source file that is listed in the spec file.	Obsolete.
Dir2txt.exe	Takes a path and a text file name as arguments and places the directory name of the highest branch in the path into the text file.	Called from makefiles that are generated by BusBuild.
Drilldwn.exe	Used when generating Balance Auditor functions in Tabular reports.	Called by the JD Edwards EnterpriseOne UBE kernel.
DSArguments.exe	Used to create a CID argument when attempting to connect to a JD Edwards EnterpriseOne Data Source.	Called by the JD Edwards EnterpriseOne kernel.

Executable	Description	Call Details
GBLib.exe	BusBuild uses this program to determine whether the object files exist.	Called from makefiles generated by BusBuild.
InstMon.exe	Used during sign-in to install update packages if an update package is selected.	Called by the JD Edwards EnterpriseOne kernel.
JDEGenEx.exe	Generates a list of exports for each dll.	Called from makefiles that are generated by BusBuild.
Rtt.exe	Used by business partners only. Builds resource files for language translation. The risk is that the existing resource files could be confused with the newly generated files. The user would have to intentionally continue through multiple screens for this to happen.	Do not use this program.
Ubemon.exe	Monitored long-running UBEs and reported their completion. This program is obsolete and was disabled in SP10.	Obsolete.
Vdt.exe	Business View Design Tool creates business views.	Called from Object Librarian or Object Management Workbench (OMW).
ubeprint.exe	Not for direct customer use, although the JD Edwards EnterpriseOne product suite does use it.	Called by the JD Edwards EnterpriseOne kernel.
genver.exe	Creates the win32 version information for the build process.	Called by the JD Edwards EnterpriseOne kernel.
poda.exe	Processing Option Design Aid used to create processing options.	Called from OMW when you design a processing option.
RDA.exe	Report Design Aid used to create batch reports (UBEs).	Called from OMW when you design a batch application. RDA can also be opened without command line parameters.
FDA.exe	Form Design Aid (FDA) used to create interactive applications. FDA is currently configured to run on a fat client.	Called from the design window in OMW for an application.
JdeCabExtract.exe	Creates self-extracting.exe files.	JD Edwards internal tool.
JdeCompress.exe	Creates JD Edwards-compatible cabinet files.	JD Edwards internal tool.
pssg.exe	An obsolete file that is not called by any JD Edwards EnterpriseOne applications.	Obsolete.
GLBUILD.exe	Replaced by Busbuild.exe. It was used to build the business functions.	Obsolete.
krnlspc.exe	Generates jdekrl.xdb and jdekrl.ddb specs from the pristine database.	JD Edwards internal tool.

C.2 JD Edwards EnterpriseOne Standalone Executable Files

You can run standalone executable files directly from either the command line or through Windows Explorer.

This table includes descriptions and instructions for running the standalone executable files:

Executable	Description	Run Instructions
JDECOMConnector2.exe	Sets up COM connections to the server using the COM Connector product and only works in that context. Contact Customer Support for full documentation.	Run from the command line with a -regserver option.
LogViewer.exe	Employs a user friendly interface to view and modify plain ASCII JD Edwards EnterpriseOne files such as: <ul style="list-style-type: none">▪ jdedebug.log▪ jde.log▪ olt.log▪ jde.ini	Double-click the executable.
SnapShot.exe	Manages multiple workstation installations on the same PC. See the chapter of this guide entitled: Chapter 8, "Working With SnapShot on the Development Client" .	Exit JD Edwards EnterpriseOne and then double-click the executable.
Vercheck.exe	Displays, on one screen, the properties of all the files in a directory. The properties are the same as those that are displayed when you right-click a file and select Properties.	Open a DOS window, change the directory to the desired target, and double-click the executable.
GenCORBA.exe	Creates CORBA wrappers around JD Edwards EnterpriseOne business functions. This is a command line utility that requires a script file as an input. GenCORBA generates CORBA interfaces for JD Edwards EnterpriseOne business functions.	Syntax: GenCORBA[options] [libraries] For example: GenCORBA /Cat /UserID Devuser1 /Password Denuser1 /Environment ADEVHPO2 CAEC
GenJava.exe	Provides access to JD Edwards EnterpriseOne business functions by generating pure Java interfaces to them.	Run GenJava. Syntax: GenJava [options] [libraries] For example: GenJava /Cat /UserID Devuser1 /Password Denuser1 /Environment ADEVHPO2 CAEC

Executable	Description	Run Instructions
LaunchUBE.exe	Launches the UBE job stand-alone (not going through JD Edwards EnterpriseOne). It replaces the User Interface of UBEPrint.exe.	Double-click the executable or start using the command line.
VSMerge.exe	JD Edwards EnterpriseOne ER Compare tool used to compare and merge Event Rules (ER) for JD Edwards EnterpriseOne Applications, Reports, Table Conversions, NERs (Named Event Rules), and TERs (Table Event Rules). It also can be used to compare and merge C Business functions.	You can launch JD Edwards ER Compare tool from OMW or from the command line.
UTBrowse.exe	Displays the records in tables. We also use it to view local JD Edwards EnterpriseOne object specifications.	Type UTB in the EnterpriseOne Fast Path field or click the executable.
tda.exe	Modifies JD Edwards EnterpriseOne tables.	On the Command Line, type tda.exe -idtablename, where tablename is the name of the table that you want to modify. For example, F0101. You do not need to run JD Edwards EnterpriseOne before running tda.
tc.exe	The JD Edwards EnterpriseOne Table Conversion Design Tool used to design JD Edwards EnterpriseOne Table Conversion batch applications.	Double-click the executable, or run it from the command line using the optional parameter idXXXX, where XXXX is the name of an existing Table Conversion object.
tamtool.exe	Can perform these functions: <ul style="list-style-type: none"> ■ Recreate a tam file. ■ Copy a tam file. ■ Print index information. ■ Print the index key. ■ Verify the tam file. 	Run from the command line.

Executable	Description	Run Instructions
tampack.exe	<p>Backup utility in case tamftp.exe does not work for the customer. tampack.exe has about half the functionality of tamftp.exe.</p> <p>tampack.exe is included with the workstation and the deployment server. tampack.exe creates a translated copy of TAM files (RDASPEC.DDB, GBRSPEC.DDB, and so on) on the PC.</p> <p>The translated copies are known as pack files. When the program is finished, the user can manually run ftp.exe to transfer them to a remote enterprise server. When the pack files are on a remote enterprise server, the user can unpack them on the enterprise server.</p>	You must run tampack.exe from a DOS shell and pass in parameters.
pdf2pdl.exe	Converts PDF files into files containing the printer-specific protocol language for a selected printer. This application is intended only for development to troubleshoot problems with a customer's JD Edwards EnterpriseOne output. The tool can help solve configuration problems.	Double-click the executable.
activConsole.exe	Main EnterpriseOne interactive program.	Double-click the executable.
appgen.exe		Obsolete.
BsfnBuilder.exe	Builds business functions.	Obsolete.
Busbuild.exe	Builds business functions.	Double-click the executable.
Debugger.exe	Debug Event Rules (ER)	Called from the design window in OMW for an application.
EndEOneMobileUI.exe		Obsolete.
endnet.exe		Obsolete.
EOneMobileUI.exe		Obsolete.
Jdeclntuni_Blocks.exe		Obsolete.
jdenet_n.exe		Obsolete.
Jdesnet.exe		Obsolete.
ReconfigureDB.exe	Set local database password.	Double-click the executable.
ServerAdministrationWorkbe nch.exe	Monitored EnterpriseOne servers	Obsolete.

D

Using the Microsoft Visual C++ Compiler

This appendix contains the following topics:

- [Section D.1, "Understanding Microsoft Visual C++ Runtime Libraries"](#)
- [Section D.2, "Creating a Visual Studio Runtime Library Package Feature"](#)
- [Section D.3, "Creating an Update Package with the Visual Studio Runtime Library Feature"](#)
- [Section D.4, "Building and Deploying an Update Package with the Visual Studio Runtime Library Feature"](#)

Note: All references to Microsoft Visual C++ refer to the defined JD Edwards EnterpriseOne minimum technical requirement Microsoft Windows platform compiler. Please refer to the Oracle Certifications to identify supported versions of the Microsoft Windows platform compiler for the JD Edwards EnterpriseOne Client.

D.1 Understanding Microsoft Visual C++ Runtime Libraries

This section discusses these topics:

- [Section D.1.1, "Microsoft Visual C++ Runtime Libraries Background"](#)
- [Section D.1.2, "Redistribution of Microsoft Visual C++ Runtime Libraries"](#)

D.1.1 Microsoft Visual C++ Runtime Libraries Background

When you build new packages using the Microsoft Visual C++ compiler, you must ensure that all machines receiving these packages have the corresponding runtime libraries installed. Assuming Microsoft makes a new service pack available or requires an update for its Microsoft Visual C++ compiler and it is installed on your JD Edwards EnterpriseOne Microsoft Windows build machines, you must do the following:

- Ensure that all JD Edwards EnterpriseOne Microsoft Windows build machines, both servers and workstations, have the identical compiler service pack release levels installed.
- Distribute the new Microsoft Visual C++ runtime libraries to all Microsoft Windows machines that are receiving packages built by Microsoft Visual C++ and do not have a compiler installed.

Note: You can download the latest SP (service pack) from the Microsoft Download Center.

D.1.2 Redistribution of Microsoft Visual C++ Runtime Libraries

All JD Edwards EnterpriseOne Microsoft Windows machines receiving application foundation packages require the runtime libraries to be installed.

The absence of the Microsoft Visual C++ runtime libraries from a machine using a JD Edwards EnterpriseOne application foundation package built by the same compiler will result in "Business function Library load failed..." error messages. Once the Microsoft Visual C++ runtime libraries are installed on a Microsoft Windows machine, only new service pack updates or Microsoft Updates to the Microsoft Visual C++ compiler require redistribution of new runtime libraries.

Note: Please refer to the JD Edwards EnterpriseOne defined Microsoft Windows platform compiler minimum technical requirements in Oracle Certifications.

A Microsoft or third-party system management tool such as SMS can be used to distribute the Microsoft Visual C++ runtime libraries. This is generally the recommended approach for the distribution of Microsoft packaged products. The JD Edwards EnterpriseOne package build feature can also be used to push Microsoft's redistributable runtime library package to all Microsoft Windows client machines. Delivery of Microsoft Visual C++ runtime libraries for JD Edwards EnterpriseOne enterprise, logic, application, or batch servers is also explained in this appendix.

D.2 Creating a Visual Studio Runtime Library Package Feature

The JD Edwards EnterpriseOne package build feature makes it possible to distribute third party applications with the deployment of a client package. Create a package feature for the Microsoft Visual C++ compiler runtime libraries to leverage this facility.

The Deployment Server should have a copy of the compatible vcredist_x86.exe. The **x86** indicates that this installs 32-bit runtime libraries—which is exactly what JD Edwards EnterpriseOne needs because the JD Edwards EnterpriseOne programs on the Development Client are 32-bit programs. For example, the Runtime Libraries installer for the 2013 compiler release is:

```
C:\Program Files (x86)\Microsoft Visual Studio  
12.0\VC\redist\1033\vcredist_x86.exe
```

Note the string **12.0** in the path even though it is for Visual Studio 2013.

To create a Visual Studio runtime library package feature:

1. On the deployment server, open Windows Explorer and navigate to your JD Edwards EnterpriseOne solution's shared folder. For example, E920.
2. Expand the shared node and open **OneWorld Client Installs\ThirdParty**.
3. Under the folder ThirdParty, create a new folder with the name **VS20xxRTL** (xx is equal to the current version).
4. Locate and copy the vcredist_x86.exe file from your installed compiler path.
5. Paste the vcredist_x86.exe file into the VS20xxRTL folder.
6. Log into the deployment server's DEP900 environment.
7. Fast path to menu GH9083, Package and Deployment Tools, and select the Package Assembly application.

8. On the Work with Packages form, select Form and then Features.
9. On the Work with Features form, click Add.
10. Click Next to begin the Feature Based Deployment Director.
11. On the Feature Information form, complete these fields and click Next:

Field	Value
Feature	VS20xx_RTL where you will replace xx with the version number.
Feature Type	1
Description	Visual C++ 20xx Runtime Libraries where you will replace xx with the version number.
Feature Installation Options	Required
Components	Additional Install Processes

12. On the Additional Install Processes form, select the Execute After Install option.
13. Complete these fields and click Next:

Field	Value
Third Party	VS20xxRTL
Description	Visual C++ 20xx Runtime Libraries where you will replace xx with the version number.
Sequence	1
Executable Name	vcredist_x86.exe This is the name of the executable file found in the ...\\ThirdParty\\VS20xxRTL folder.
Source Path	\\\<deploymentservername>\E900\OneWorld Client Install\ThirdParty\VS20xxRTL Note: Do not use the Select Directory browse function to obtain the aforementioned path. Instead type the UNC path or cut and paste the Universal Naming Convention (UNC) path from Windows Explorer into the Source Path field.
Parameters	/Q /Q denotes Quiet Mode and does not require any user intervention.

14. Click Save to preserve the feature settings and then click Next to continue.
15. On the Feature Summary form, click End to complete the feature definition.

Note: If you expand the nodes describing each package feature you may inspect the feature definition. You may notice that the UNC share path has been truncated for your newly created entry. This is NOT an issue as this line entry serves only as a description. The complete UNC share path has been properly preserved in System table F96604.

D.3 Creating an Update Package with the Visual Studio Runtime Library Feature

Once the Visual Studio runtime library package feature has been created, it can be associated with either an update or full package. Creating an update package containing this feature will cause the full parent package assembly information to include this same feature.

To create an update package with the Visual Studio runtime library feature:

1. Go to menu GH9083, Package and Deployment Tools, and select the Package Assembly application.
2. On the Work with Packages form, click Add.
3. On the Package Assembly Director, click Next to begin the package assembly process.
4. On the Package Information form, select the Express option, complete these fields, and click Next:

Field	Example Value
Package Name	DV20xxRTL where you will replace xx with the version number.
Description	Visual C++ 20xx RTL for DV where you will replace xx with the version number.
Path Code	DV900

5. On the Package Component Revisions form, select the Update option and type or select the parent package. For example, **DV900FA**.
6. Click the Features button.
7. On the Features Components form, click the Browse button.
8. On the Feature Component Selection form, click Find.
9. Highlight the entry associated with VS20xx_RTL and click Select to mark the entry with a check mark.
10. Click Close and Close again to return to the Package Component Revisions form.
11. Verify that the form shows "Individual Features Selected" and click End to complete the package assembly process.
12. On the Work with Packages form, select Row and Active/Inactive to activate the package.

D.4 Building and Deploying an Update Package with the Visual Studio Runtime Library Feature

After creating the update package, you will need to build and deploy the package. To build and deploy an update package with the VS2013 runtime library feature:

1. Highlight your package and select Row and Define Build.
2. On the Package Build Definition Director, click Next to begin the build definition process.
3. On the Package Build Revisions form, ensure that the Build Location Client check box is checked and click Next.
4. On the Build Features tab, select the Build Feature INFs option.
5. On the Package Build Revisions form, click End to complete the build definition process.
6. On the Work with Package Build Definition form, select Row and Active/Inactive to activate the package build definition.
7. Select Row and Submit Build to build the package.
8. On the Report Output Destination form, select On Screen and click OK.
9. Once the package build has completed, review the R9622C PDF report file to verify that the build completed successfully.

The successful package build with the included package feature results in the creation of a feature-specific INF file.

10. After building the package, the appropriate person must approve it for client deployment.

Afterwards, both the update and associated parent package will automatically include the Microsoft Visual C++ runtime libraries as part of the client installation process.

Since this feature was configured to install in Quiet Mode (/Q), it does not require any user intervention. If the Microsoft Visual C++ runtime libraries are already installed on the machine, the feature-specific installer will exit.

Installing a Development Client from the Command Line

Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

- [Section 1.3, "Microsoft Windows Security"](#)
 - [Section 1.4, "Minimizing Locked Files"](#)
-

Instead of using the OUI-based installer in interactive mode for the Development Client, optionally you can run the installation from the Microsoft Windows command line. This may be more efficient if you have many Development Clients that you need to install.

The OUI installer for the Development Client is setup.exe, which is located in this directory:

```
\\"<deployment server name>\<release>\OneWorld Client Install\install
```

You can provide options to the setup.exe on the command line. Most of the options are generic OUI options, but a few are specific to the EnterpriseOne Development Client installer.

You can enter the following line to get a list of and descriptions of the generic OUI options:

```
\\"<deployment server name>\<release>\OneWorld Client  
Install\install\setup.exe -help
```

Below is an example command line string using some of the available options (which are listed and described later in this section). The command should be entered on a single contiguous line with no line breaks or returns:

```
setup.exe -debug -force PACKAGE_NAME=DV920FA E1_INSTALL_MODE=Compact  
ORACLE_HOME=c:\E920 ORACLE_HOME_NAME=JDE_E920_Client
```

Below is a list of the most useful generic OUI options:

- -logLevel
- -debug
- -force
- -help
- -silent

- ORACLE_HOME
 - Directory where EnterpriseOne will be installed
 - Required
 - Must be of the form ORACLE_HOME=installation_directory
 - Case sensitive
- ORACLE_HOME_NAME
 - Name of the Oracle Home directory.
 - Required
 - Must be of the form ORACLE_HOME_NAME=name
 - Case sensitive

Note: Any generic options other than those listed above have not been tested with the EnterpriseOne Development Client installer.

The EnterpriseOne-specific options are specified as KEY=value pairs.
The keys are case sensitive.

The following table lists the command line options for OUI for the Development Client.

Key	Description	Value Case Sensitive?	Required?	Example
E1_USER	EnterpriseOne user account.	No	Yes, if installing an update package that has XML specs stored in the database.	E1_USER=JDE
E1_PASSWORD	EnterpriseOne user password. Must be specified in plain text; it cannot be encrypted).	Yes	Yes, if installing an update package that has XML specs stored in the database.	E1_PASSWORD=MyPassword
PACKAGE_NAME	Name of package to install.	Yes	Yes	PACKAGE_NAME=DV920FA
E1_INSTALL_MODE	Indicates which EnterpriseOne objects to include in the installation. Valid values are Typical = include the pathcode's development and production objects (default). Compact = include the pathcode's production objects only.	Yes	No	E1_INSTALL_MODE=Compact

Key	Description	Value Case Sensitive?	Required?	Example
COPY_FILES	<p>Specifies whether package's files should be copied to the target.</p> <p>Valid values are</p> <p>A string starting with 'N', 'n', 'F', or 'f' = do not copy the files</p> <p>Any other string = copy the files (default)</p> <p>Useful if you are repeating an installation that failed after all files were copied to the target machine.</p>	No	No	COPY_FILES=Y

Uninstalling a Development Client from the Command Line

This appendix describes how to uninstall the JD Edwards EnterpriseOne Development Client from the command line.

Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

- [Section 1.3, "Microsoft Windows Security"](#)
 - [Section 1.4, "Minimizing Locked Files"](#)
-

Instead of using the OUI-based installer in interactive mode to uninstall the Development Client, you can optionally perform a silent deinstall by running OUI from the Microsoft Windows command line. This may be more efficient if you have many Development Clients that you need to uninstall.

Although any copy of OUI that you have on your machine may be used for the uninstallation, we recommend that you use the particular one that was automatically copied to your machine when you installed the Development Client. This copy of OUI is setup.exe, which is located in this directory:

<dev_client_installation_directory>\oui\bin

To uninstall the Development Client using the command line:

Note: The local database of the Development Client may or may not be running. When you use OUI as described in this procedure, it will attempt to start the database if it is not already running.

1. Right-click on an icon to open a command prompt window and click "**Run as Administrator**".

2. Enter and run the following command on one line:

```
"<location_of_OUI>\setup.exe" -deinstall -nowait -waitforcompletion  
REMOVE_HOMES={"<Oracle_Home_directory_to_remove>"} -silent ORACLE_HOME_  
NAME="<Oracle_Home_Name_to_remove>"
```

where

- <location_of_OUI> is the directory where setup.exe resides; for example, C:\E920_1\oui\bin

-
- <Oracle_Home_directory_to_remove> is the directory of the **Oracle_Home** to uninstall; for example, C:\E920_1
 - <Oracle_Home_Name_to_remove> is the name of the **Oracle_Home** to deinstall; for example, JDE_E920_Client1
-

Notes: Be sure to include all punctuation (that is, double quotes and curly braces) in the above command line except for the greater than and less than signs that are used to delimit the variables.

The words REMOVE_HOMES and ORACLE_HOME_NAME must be capitalized.

There are no spaces in the option switches between the hyphen and the name of the option switch (for example, -nowait).

For example, a command line entry to uninstall the Development Client might be:

```
"C:\E920_1\oui\bin\setup.exe" -deinstall -nowait -waitforcompletion  
REMOVE_HOMES={"C:\E920_1"} -silent ORACLE_HOME_NAME="JDE_E920_Client1"
```

3. Examine the latest log file in this directory:

```
C:\Program Files (x86)\Oracle\Inventory\logs
```

4. Verify that the **Oracle_Home** directory (for example, C:\E920_1) was deleted. If not, delete it.

You can provide additional options to the setup.exe on the command line. Most of the options are generic OUI options, but those listed above must be used at a minimum.

You can enter the following line to get a list of and descriptions of the generic OUI options:

```
<location_of_OUI>\setup.exe -help
```

Note: Any options other than those listed above have not been tested with the JD Edwards EnterpriseOne Development Client installer or uninstaller.

Manual Cleanup of an Uninstalled Development Client

Caution: Be sure to follow the guidelines in the preceding sections of this guide entitled:

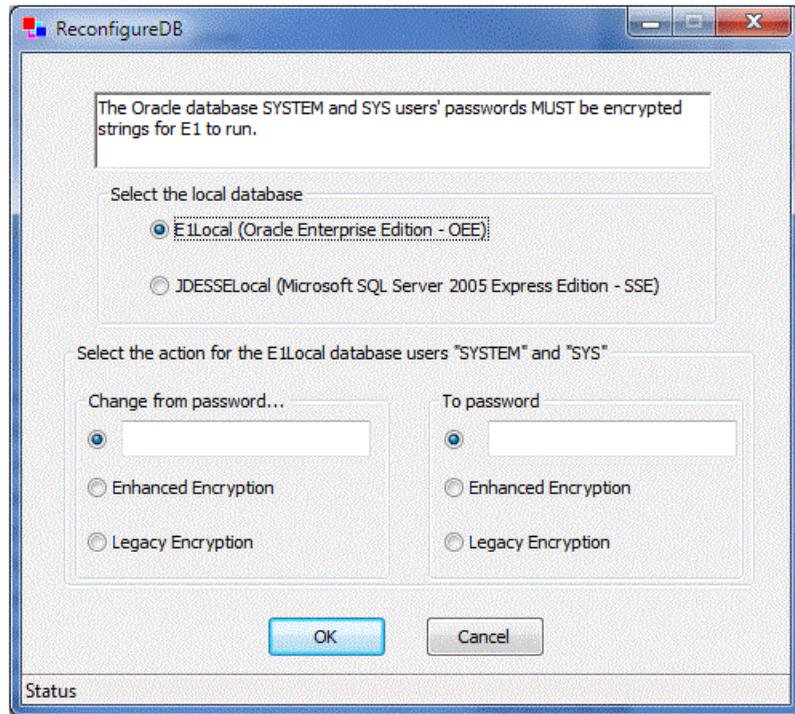
- [Section 1.3, "Microsoft Windows Security"](#)
 - [Section 1.4, "Minimizing Locked Files"](#)
-

If the uninstallation of the Development Client fails for some reason, you need to perform the manual steps in this procedure to completely remove the old installation before reinstalling the Development Client.

1. Export the OEE tablespaces.
 - a. Decrypt the database password by running this program:
c:\E920\system\bin32\ReconfigureDB.exe
-

Note: This program is available in Tools Releases 9.2 and higher. For Tools 9.1, the program is called ReconfigureMSDE.exe. Note that regardless of the fact that the program has the name has "MSDE" in it, it also works with OEE and SSE.

The difference between ReconfigureDB and ReconfigureMSDE is that ReconfigureDB includes the options to change to or from Enhanced encryption. Only one type of encryption is available in ReconfigureMSDE and is the same as Legacy encryption in ReconfigureDB.



- b. Near the top, select the type of local database.
- c. Under Change from password, turn on the appropriate encryption type: .

If the Tools Release is 9.2 or higher and OEE is used, select **Enhanced Encryption**.

- ii. All other cases, select **Legacy Encryption**.

- d. In the **To password** text field, enter a password that you will remember.

- e. Click the **OK** button.

- f. Perform the below steps.

- i. Open a command prompt window with **Run as administrator**.

- ii. Enter this command:

```
set ORACLE_HOME=c:\Oracle\E1Local
```

- iii. Enter this command:

```
sqlplus sys as sysdba
```

- iv. When prompted, enter the password that you specified in ReconfigureDB.exe.

- v. Enter this command:

```
select unique tablespace_name from all_tables;
```

- vi. Note the EnterpriseOne tablespace names.

- vii. Repeat this command for each EnterpriseOne tablespace:

```
drop tablespace <tablespace_name> including contents and datafiles;
```

- viii. Enter this command:

```
shutdown;
```

-
- ix. Enter this command:
startup;
 - x. Exit the command prompt window.
2. Delete the following registry keys, where <JDE_Client_Oracle_Home_Name> is the name of the Oracle Home for the Development Client that you specified during installation.
- \HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ORACLE\KEY_<JDE_Client_Oracle_Home_Name>
3. Delete the following registry keys:
- \HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\BPMBroker
\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\HTMLWebServer
\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\OneWorld
4. Delete the installation directory for the Development Client (for example, c:\E920_1).
- If you cannot delete the installation directory because a file in that directory is locked, follow these steps:
- a. Determine which file is locked and which process has the lock on the file. A freeware program called Process Explorer can be helpful in determining this information. You can obtain a free copy of Process Explorer from this web site:
<http://technet.microsoft.com/en-us/sysinternals>
 - b. Either kill the locking process with Process Explorer or Microsoft Windows Task Manager or, if the process was started as a Microsoft Windows service, change the Startup Type to Manual and reboot the computer.
 - c. Try again to delete the E1Local subdirectory.
5. Remove the Oracle inventory entries.
- a. With a text editor (such as Notepad), edit this file:
c:\Program Files (x86)\Oracle\inventory\ContentsXML\inventory.xml
 - b. Delete any lines that start with:
<HOME NAME="JDE_Client_Home_Name"
where JDE_Client_Home_Name is the name that you gave the installation directory when you installed the Development Client.
 - c. Save the file.
6. Remove the entry from the Windows PATH.
- a. From Windows' Start button, go to Control Panel / System.
 - b. Click **Advanced** system settings on the left.
 - c. Click **Environment Variables...** near the bottom.
 - d. In the System variables box near the bottom, highlight Path and click the **Edit...** button.
 - e. In the Variable value field, delete the value <JDE_Client_Home>\system\bin32 where <JDE_Client_Home> is the path that you specified when you installed the Development Client. Be sure to remove the semicolon as well.

-
- f. In the Variable value field, delete the value <JDE_Client_Home>\<pathcode>\bin32 where <pathcode> is the name of an installed pathcode. Be sure to remove the semicolon as well. Repeat this for each pathcode that you installed.
 - g. Click OK.
 - 7. Remove the **JDE_B9_ICU_DATA** Windows environment variable.
 - a. Navigate to Control Panel > System.
 - b. Click Advanced system settings on the left.
 - c. Click **Environment Variables...** near the bottom.
 - d. In the System variables box near the bottom, highlight JDE_B9_ICU_DATA and click Delete.
 - e. Click OK.

Manual Cleanup of an Uninstalled Oracle Database

If the uninstallation of the OEE database fails for some reason, you need to perform the manual steps in this procedure to completely remove the old installation before reinstalling the database. These steps apply to either 12c or 11gR2 releases of the OEE database.

1. Uninstall the Development Client.

Be sure the Development Client is uninstalled or saved using the SnapShot program before attempting to uninstall the database. This should ensure that no EnterpriseOne tablespaces are imported (attached) to the OEE database.

2. Stop the database services from Control Panel:

- OracleE1LocalTNSListener
- OracleServiceE1LOCAL

3. Be sure no Oracle processes from the c:\Oracle\E1Local directory are running.

4. Delete the following registry keys:

\HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\KEY_E1Local

\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\ (see **Keys** below)

Keys. Delete any keys with names that start with the string **Oracle** and contain the string **E1Local**.

\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ORACLE\KEY_E1Local

where this key may or may not exist.

5. Delete these directories:

c:\Oracle\E1Local

c:\Oracle\oradata\E1Local

If you cannot delete the E1Local subdirectory because a file in that directory is locked, follow these steps:

- a. Determine which file is locked and which process has the lock on the file. A freeware program called Process Explorer can be helpful in determining this information. You can obtain a free copy of Process Explorer from this web site:

<http://technet.microsoft.com/en-us/sysinternals>

-
- b. Either kill the locking process with Process Explorer or Microsoft Windows Task Manager or, if the process was started as a Microsoft Windows service, change the Startup Type to Manual and reboot the computer again.
 - c. Try again to delete the E1Local subdirectory.
 - 6. Remove the Oracle inventory entries.
 - a. With a text editor (such as Notepad), edit this file:
c:\Program Files\Oracle\inventory\ContentsXML\inventory.xml
 - b. Delete any lines that start with:
<HOME NAME="E1Local"
 - c. Save the file.
 - 7. Remove the entry from the Windows PATH.
 - a. Navigate to Control Panel > System.
 - b. Click **Advanced** system settings on the left.
 - c. Click **Environment Variables...** near the bottom.
 - d. In the System variables box near the bottom, highlight Path and click the **Edit...** button.
 - e. In the Variable value field, delete this value:
c:\Oracle\E1Local\bin
Be sure to remove the semicolon as well.
 - f. Click OK.
 - 8. Remove the ORACLE_HOME Windows environment variable.
 - a. Navigate to Control Panel > System.
 - b. Click **Advanced** system settings on the left.
 - c. Click **Environment Variables...** near the bottom.
 - d. In the System variables box near the bottom, highlight **ORACLE_HOME** and click **Delete**.
 - e. Click OK.

Installing Multiple Pathcodes

If you install a full package with a given pathcode and later install another full package with a different pathcode, the already installed foundation will be removed before the second package is installed. If the foundation for the second package is not the same one with which the first pathcode's business functions were built, you may need to rebuild the business functions for the first pathcode.

When installing multiple full packages with different pathcodes on a workstation, the settings in the ini files (`jde.ini`, `jdbj.ini`, etc.) and registry will match those from the last package to be installed. The initial (bootstrap) settings for the JD Edwards EnterpriseOne Development Client are read from the ini files; however, when you sign into EnterpriseOne, you can select from a list of available environments. This list of environments is dependent upon the installed pathcodes. If the selected environment does not match the bootstrap environment or pathcode in the ini files, JD Edwards EnterpriseOne will be reinitialized with the new environment and pathcode after sign in.

Mixing Releases of EnterpriseOne Development Client and OEE

This document concentrates on using the latest releases of E1 Tools, E1 Applications (Apps), and OEE (Oracle Enterprise Edition database which is installed on the Development Client). These releases are documented in Oracle's Certifications. However in some cases, it is possible to mix old or new releases of E1 with various versions of the OEE database. For example, an Apps 9.1 package can be installed on a computer with OEE 12c or 11gR2 installed.

This appendix discusses these topics:

- [Section J.1, "Special Considerations for Mixing Releases of the Various Products"](#)
- [Section J.2, "Local Database Password Considerations"](#)

J.1 Special Considerations for Mixing Releases of the Various Products

This section discusses these special considerations that need to be observed when mixing releases of the various products:

- The Development Client installers are the same release as the E1 Tools Release, which is the release of the **foundation** or **system**.
For example, if the E1 foundation is Release 9.2.3, the installers that you run to install the Development Client and H4A Web Client are also at Release 9.2.3.
- E1 Tools Release 9.2.x and Apps Release 9.2 are compatible; however, a given Tools Release may be applied to the same or an older Apps Release, where older Apps Releases are defined as the previous two releases.

- For example, Tools Release 9.2.0 can be applied to Apps Releases 9.2, 9.1, or 9.0.
- The releases of non-E1 products that are supported by E1 are based on the E1 Apps Release.

Examples include:

- Apps Release 9.2 can be installed on a machine with OEE 12c installed.
- Apps Release 9.1 can be installed on a machine with either OEE 12c or 11gR2 installed.
- Apps Release 9.0 can be installed on a machine with OEE 10g installed.

J.2 Local Database Password Considerations

JD Edwards EnterpriseOne installers and foundation connect to the local Oracle database (OEE) using the database users SYSTEM and SYS. The passwords for both of these users are the same and are generated and then encrypted by E1.

If the local database is SQL Server Express (which is supported only with Apps Release 9.0), E1 connects with the **sa** account. This password for this account is also generated and then encrypted by E1.

This section discusses these topics:

- [Section J.2.1, "Local Oracle Database Password Changed"](#)
- [Section J.2.2, "Local Oracle Database Password Must Be Compatible with E1 Tools Release"](#)

J.2.1 Local Oracle Database Password Changed

With JD Edwards EnterpriseOne Tools Release 9.2.0.0 and later and when using a local Oracle database (OEE), the method of creating the password of the database SYSTEM and SYS users changed to produce a more complex and secure password. The old method is referred to as using Legacy encryption; whereas, the new method uses Enhanced encryption.

These passwords (for the Oracle SYSTEM and SYS users) can be set and changed to either the Legacy encryption or Enhanced encryption by a program called ReconfigureDB.exe. The ReconfigureDB.exe program is found only in the system\bin32 directory of a Tools Release 9.2.0.0 or higher. For more information refer to the section of this guide entitled: [Section B.1, "Understanding the ReconfigureDB.exe Program"](#).

J.2.2 Local Oracle Database Password Must Be Compatible with E1 Tools Release

The OEE 12c installer initially sets the SYSTEM and SYS users to use Enhanced encryption; whereas, the OEE 11gR2 installer sets the passwords to Legacy encryption. The SQL Server Express (SSE) installer continues to use only Legacy encryption.

Note: Because the SQL Server Express password encryption did not change with Tools Release 9.2, SQL Server Express will not be discussed further in this document.

The E1 Development Client installer and foundation need to connect to the local database. The password that is set for OEE needs to match the Tools Release of the installer and foundation.

The following scenarios lists the steps required when installing various releases of the OEE database and E1 Development Client.

- [Section J.2.2.1, "Scenario 1: OEE 12c with Tools Release 9.2"](#)
- [Section J.2.2.2, "Scenario 2: OEE 12c with Tools Release 9.1"](#)
- [Section J.2.2.3, "Scenario 3: OEE 11gR2; Tools Release 9.1"](#)

J.2.2.1 Scenario 1: OEE 12c with Tools Release 9.2

To support this mixture of products and releases:

1. Install OEE 12c, where the installer sets password to Enhanced encryption.

2. Install the Development Client using the Tools Release 9.2 installer, which requires Enhanced encryption.
3. Run E1 on Development Client using Tools Release 9.2 foundation, where that foundation requires Enhanced encryption.

J.2.2.2 Scenario 2: OEE 12c with Tools Release 9.1

To support this mixture of products and releases:

1. Install OEE 12c, where the installer sets password to Enhanced encryption.
2. Run ReconfigureDB.exe to change password from Enhanced to Legacy encryption.
3. Install Development Client using Tools Release 9.1 installer, which requires Legacy encryption.
4. Run E1 on Development Client using Tools Release 9.1 foundation, where that foundation requires Legacy encryption.

J.2.2.3 Scenario 3: OEE 11gR2; Tools Release 9.1

To support this mixture of products and releases:

1. Install OEE 11gR2, where the installer sets password to Legacy encryption.
2. Install Development Client using Tools Release 9.1, where the installer requires Legacy encryption.
3. Run E1 on Development Client using Tools Release 9.1 foundation, where that foundation requires Legacy encryption.

