JD Edwards EnterpriseOne

Development Client Installation Guide

Applications Release 9.0 or 9.1 and Tools Release 9.1.x for Oracle Application Server (OAS) and WebSphere Application Server (WAS) Express

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JD Edwards EnterpriseOne Development Client Installation Guide, Applications Release 9.0 or 9.1 and Tools Release 9.1.x for Oracle Application Server (OAS) and WebSphere Application Server (WAS) Express

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Contents

Preface

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

> **Note:** This guide has been updated for JD Edwards EnterpriseOne Tools Release 9.1 Update 2. For details on documentation updates, refer to the *JD Edwards EnterpriseOne Tools Net Change Guide*.

Audience

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

Documentation Accessibility

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Access to Oracle Support

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Related Documents

You can access related documents from the JD Edwards EnterpriseOne Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 876932.1, or by using this link:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=876932.1

To navigate to this page from the My Oracle Support home page, click the Knowledge tab, and then click the Tools and Training menu, JD Edwards EnterpriseOne, Welcome Center, Release Information Overview.

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.
italic	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.

1 Introduction

This chapter contains the following topics:

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 Web Client part of the Development Client runs inside an Application Server. The supported Application Servers are:

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

The Oracle Application Server is included as part of the JD Edwards EnterpriseOne system code and is automatically configured to work with the Web Client when you install the Web Client for OAS. This version of the Web Client is known by any of the following names:

- Oracle Containers for Java HTML for Applications,
- OC4J for H4A, or simply
- OH4A.

Although OAS is included with JD Edwards EnterpriseOne system code, 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
- H4Ax (where the "x" denotes the version of WAS Express or WAS for Developers; currently, the supported version is 7).

This guide describes how to install Web Clients for both Application Servers: OH4A and H4A7. In addition, it covers the installation of WAS 7 Express or WAS 7 for Developers.

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

1.2 Accessing Minimum Technical Requirements

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne Minimum Technical Requirements (MTRs). 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

Access the current Minimum Technical Requirements (MTR) from My Oracle Support (https://support.oracle.com) by searching for this document:

- **JD Edwards EnterpriseOne Current MTR Index [ID 747323.1]**

Within the MTR Index, search for the section entitled: **Clients (All Clients)**.

The computer on which you are installing the Development Client needs to meet the MTRs of all types of clients described in this section. Therefore you should review and ascertain that your machine meets the requirements listed in these topics of the client MTR document:

- Information Common for all Clients
- Web Client
- Microsoft Windows Client
- Development Client

Notes:

EnterpriseOne Releases. The MTRs refer to the JD Edwards EnterpriseOne tools release level (for example, 9.1.x) and not the JD Edwards EnterpriseOne application release level (for example, E910).

Third-party software. Read the section entitled Important Notes before installing any additional third-party software.

Local Database. Applications Release 9.1 supports only the Oracle Enterprise Edition (OEE) as the local database. It does not support Microsoft SQL Server 2005 Express Edition (SSE); however, Applications Release 9.0 supports both OEE and SSE.

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. **"Run as administrator"**

   If Microsoft's User Access Control (UAC) is turned on, right-click on a program's icon or shortcut and select "Run as administrator." If a shortcut is configured to automatically "Run as administrator," you do not need to right-click and select "Run as administrator."

   Note: Tools Release 9.1 Update 2. An exception to this rule is the Tools Release 9.1 Update 2 and higher releases of `SnapShot.exe`. These versions of SnapShot are designed to automatically attempt to start with the elevated permissions. If you are not signed into Microsoft Windows with an administrative account, you will be prompted to enter the credentials for an administrative account when SnapShot starts.

   If a file that you need to edit and then save is located in a directory with access restricted by UAC, you will need to right-click on your text editor program's icon, select "Run as administrator," and open the file from within the editor. If you do not follow those steps and UAC is turned on, you may not be able to save the modified file.

3. **Remote Desktop connections**

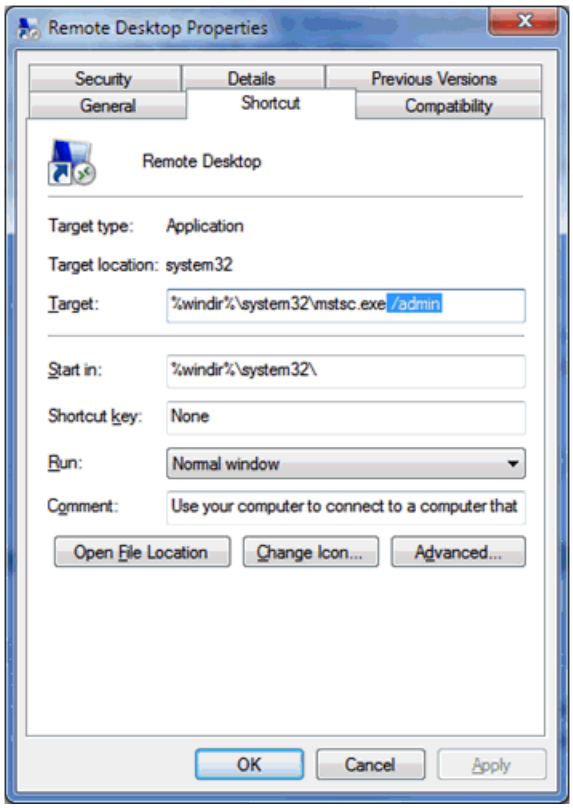
   When connecting to a remote Microsoft Windows computer using Microsoft's Remote Desktop, run Remote Desktop with the "/admin" flag. Not running with this setting may cause subtle, hard-to-explain errors in the program. You can do this using these steps:

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 "admin" (without the quotes) 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 deinstaller 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.

2

Understanding the Development Client Installation

This chapter contains the following topics:

2.1 Understanding Installation Steps

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

1. Understanding Oracle Homes
2. Understanding important notes
3. Meeting the Minimum Technical Requirements
4. Installing WebSphere Express 7.0 or WebSphere Developer 7.0 (H4A7 only)
5. Running Install Manager
6. Installing a local database
7. Installing a local database client
8. Installing the Development Client (this uses the Oracle Universal Installer (OUI)).
9. Troubleshooting any installation errors.
10. Running the Development Client.

2.2 Understanding Destination Paths

As of Tools Release 9.1, the Development Client is installed using the Oracle Universal Installer (OUI). In addition, the Web Client is installed as a package feature using OUI.

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 name as well. You can specify a name that is intuitive so you do not have to remember the path.

When you install the Oracle Enterprise Edition (OEE) database engine on the Development Client, by default the Oracle Home path will be:

```
c:\Oracle\E1Local
```

The value E1Local cannot be changed, but you may specify another drive and/or directory instead of `c:\Oracle`. The Oracle Home name for the OEE database is **E1Local.** SSE does not install into an Oracle Home path.

When you install the Development Client, you specify an **Oracle Home** and name for that installation as well. For example, you may enter `C:\E910` as the **Oracle Home** path and **JDE_E910_Client** as the **Oracle Home** name.

If you are using OEE and, following the above examples, you would now have two Oracle Homes:

1. The first **Oracle Home** is the **Oracle Home** of the OEE database; it has these properties:
   a. Oracle Home Path

      `C:\Oracle\E1Local`

   b. Oracle Home Name

      `E1Local`
2. The second **Oracle Home** is the **Oracle Home** of the Development Client; it has these properties:
   a. Oracle Home Path

      `C:\E910`

   b. Oracle Home Name

      `JDE_E910_Client`

During the installation of a Development Client installation package, OUI will copy the files from the package to subdirectories under the Oracle Home path and then perform 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 a link to the EnterpriseOne Solution Explorer and another submenu for 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 deinstall (remove) the EnterpriseOne Development Client, it is safest to deinstall using the link in Start / All Programs / Oracle - <Oracle_Home_Name> / Oracle Installation Products / Universal Installer.

2.3 Important Notes

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

Caution: Please verify all JD Edwards EnterpriseOne Minimum Technical Requirements (MTRs) for supported versions of third party software. See the section Accessing Minimum Technical Requirements.

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1. OUI uses the term "deinstall" to mean removal of an Oracle product. This document will do the same.

2. JDK 1.6 is supplied with the installation for the Development Client to run. Do not replace this with another version of the JDK because higher versions of the JDK have not been validated with EnterpriseOne Tools Release 9.1. Also, do not replace this JDK with a 64-bit version because EnterpriseOne is a 32-bit program which requires a 32-bit version of the JDK even when running on a 64-bit version of Microsoft Windows.

3. 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.

4. Microsoft Visual Studio is not required unless you are building business functions on the Development Client. The installation of the Development Client installs the Microsoft libraries that are necessary to run EnterpriseOne, but if you plan to build business functions, you will need the compiler and additional libraries that Visual Studio provides.

5. Verify that all previous releases of JD Edwards EnterpriseOne (Development and Standalone) Clients have been completely deinstalled or saved via Snapshot before installing a new Development or Standalone Client. For instructions on how to deinstall the Development Client, refer to the section of this guide entitled: Chapter 7, "Deinstalling the Development Client."

6. 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.

7. Applications Release 9.1 supports **only** the Oracle Enterprise Edition (OEE) as the local database. It does **not** support Microsoft SQL Server 2005 Express Edition (SSE); however, Applications Release 9.0 supports both OEE and SSE.

8. If you previously had installed a local Oracle 11gR2 database for the Development Client and you are reinstalling the Development Client, you do not have to deinstall the database first. However, if you need to reinstall the OEE or SSE database for some reason, follow the instructions in the appropriate section of this guide entitled: Chapter 4, "Installing the Local Database."

9. 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.

3

Installing WebSphere Express 7.0 or WebSphere for Developers 7.0

This chapter describes how to install WebSphere Express 7.0 or WebSphere for Developers 7.0. These procedures must be followed only if you are using one of the above WebSphere products for the H4A7 web client.

> **Note:** You can skip this chapter if you are using the Oracle Application Server for the OH4A web client.

This chapter contains the following tasks:

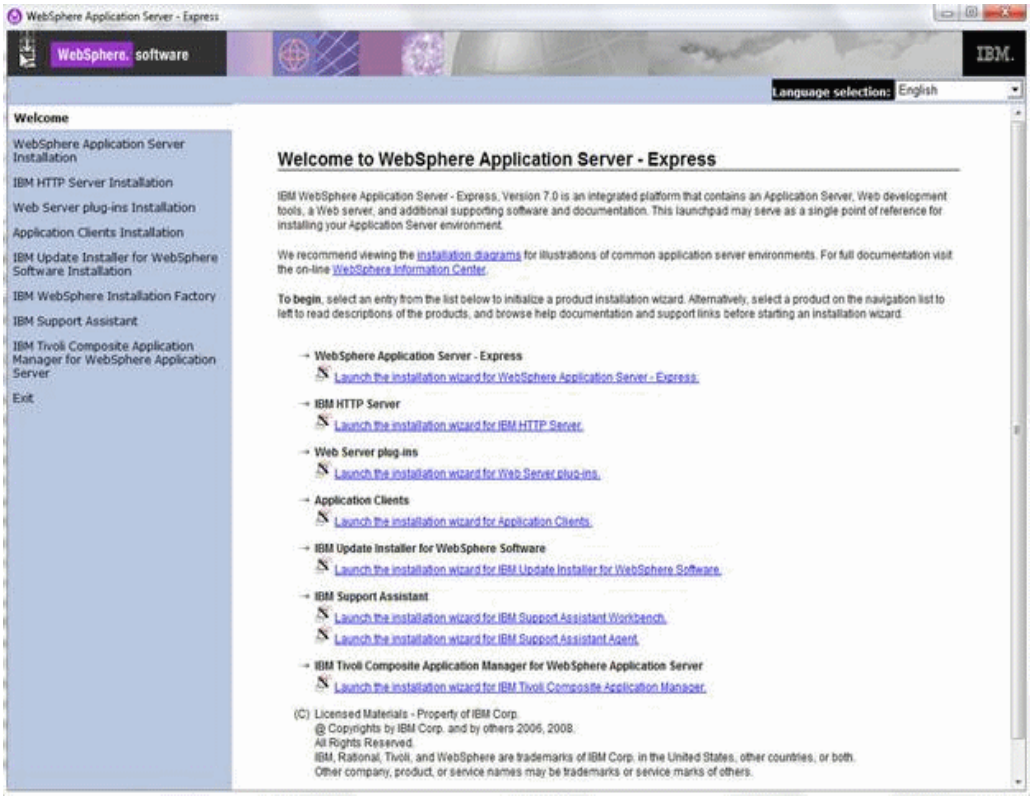
- Section 3.1, "Running the Installation Wizard for the WebSphere Express or Developers"
- Section 3.2, "Updating WebSphere Express or Developers 7.0 to the Latest Fix Pack Level"

3.1 Running the Installation Wizard for the WebSphere Express or Developers

> **Caution:** The installers for WebSphere Express and WebSphere for Developers 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.

1. The WebSphere Express 7.0 installer may be downloaded from the Oracle Software Delivery Cloud (`https://edelivery.oracle.com`) or the IBM support site. If you choose to use WebSphere for Developers 7.0, you must download it from the IBM support site.
2. To start the installation, run `launchpad.exe` from the download location.

> **Note:** On Development Clients running Microsoft Windows 7 with User Access Control (UAC) turned on, you must right click on launchpad.exe and select "Run as administrator."



3. On Welcome to WebSphere Application Server - Express, click the link to launch the installation wizard:

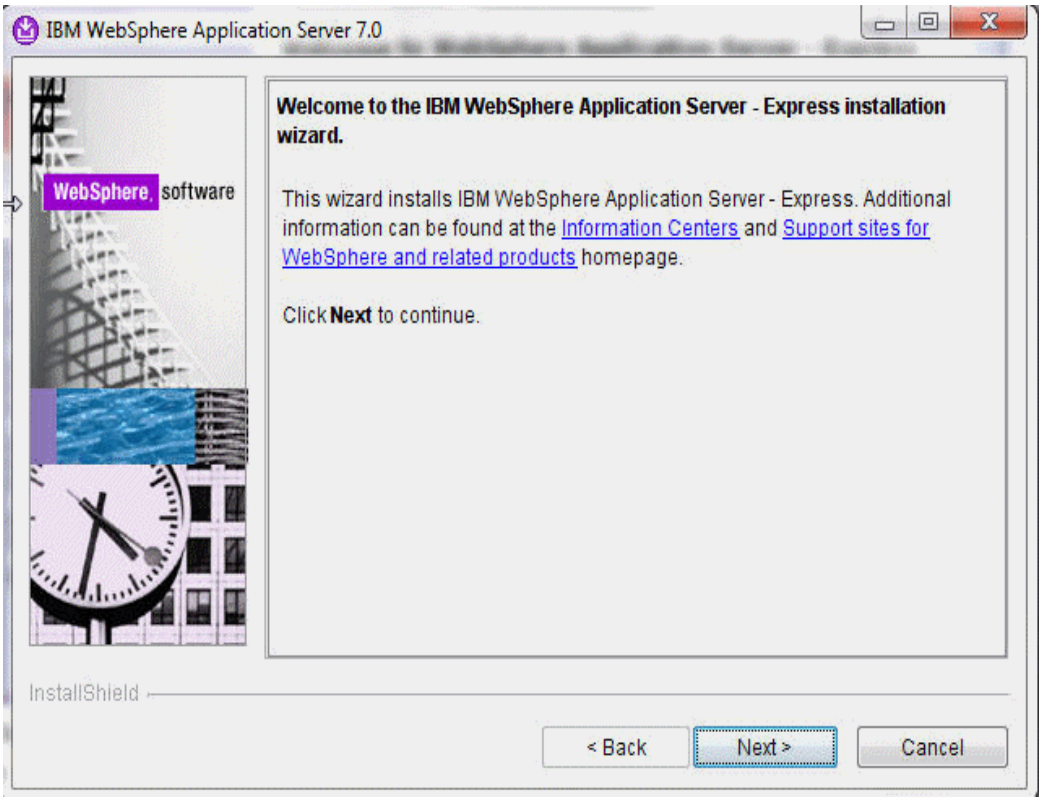
   WebSphere Application Server - Express

   Launch the installation wizard for WebSphere Application Server - Express

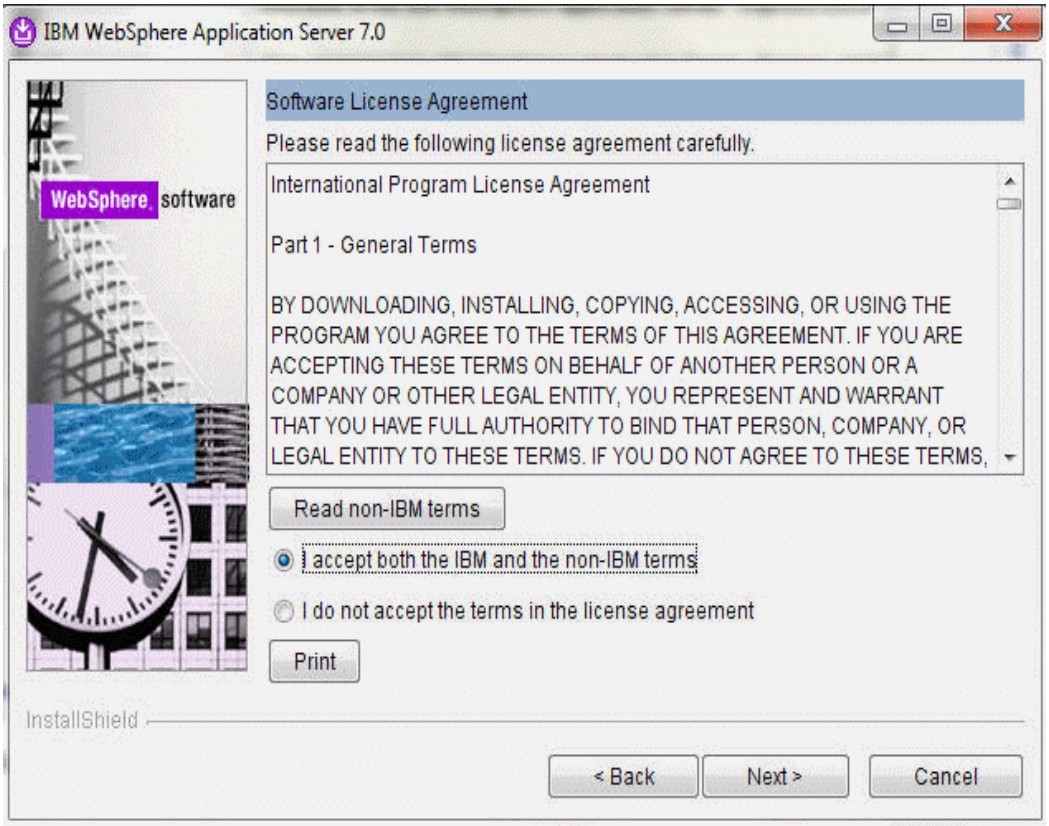
   WebSphere Application Server - Developers

   Launch the installation wizard for WebSphere Application Server - Developers

   Note: The WebSphere Express and WebSphere for Developers screens are branded identically. Both refer to "WebSphere Express" in the title section of the screens.



4. On Welcome to the IBM WebSphere Application Server - Express installation wizard, click the **Next** button.

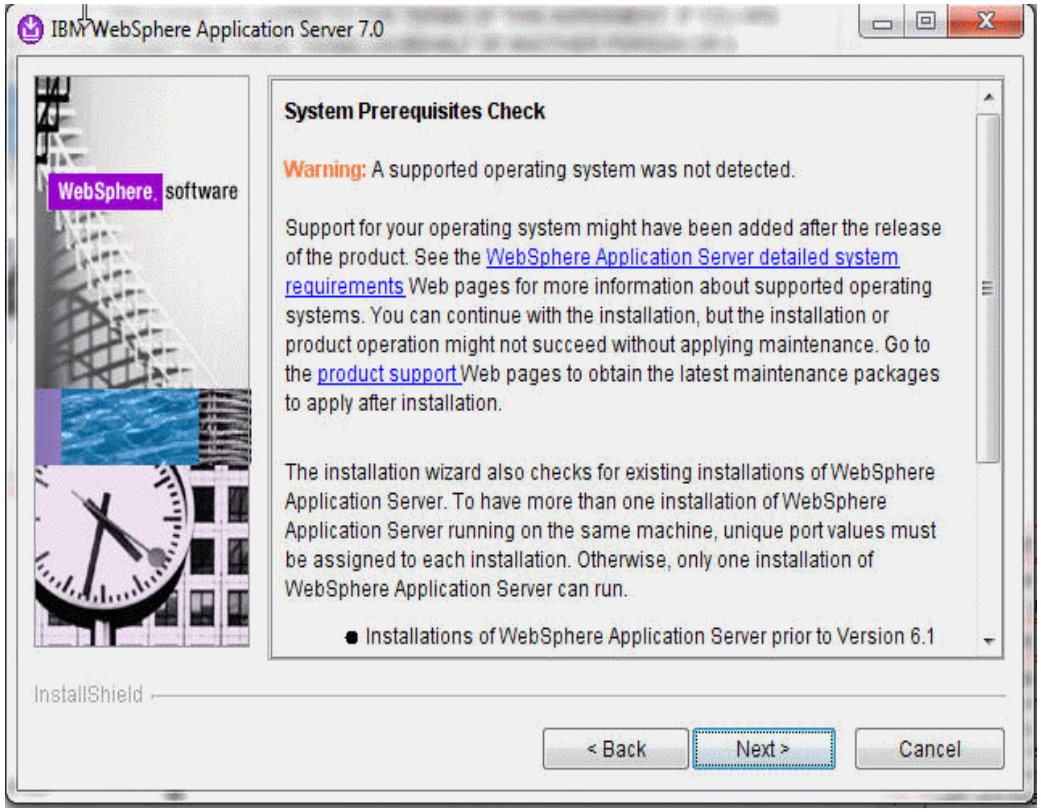


5. On Software License Agreement, click the radio button to accept the license agreement.

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

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

6. Click the **Next** button.



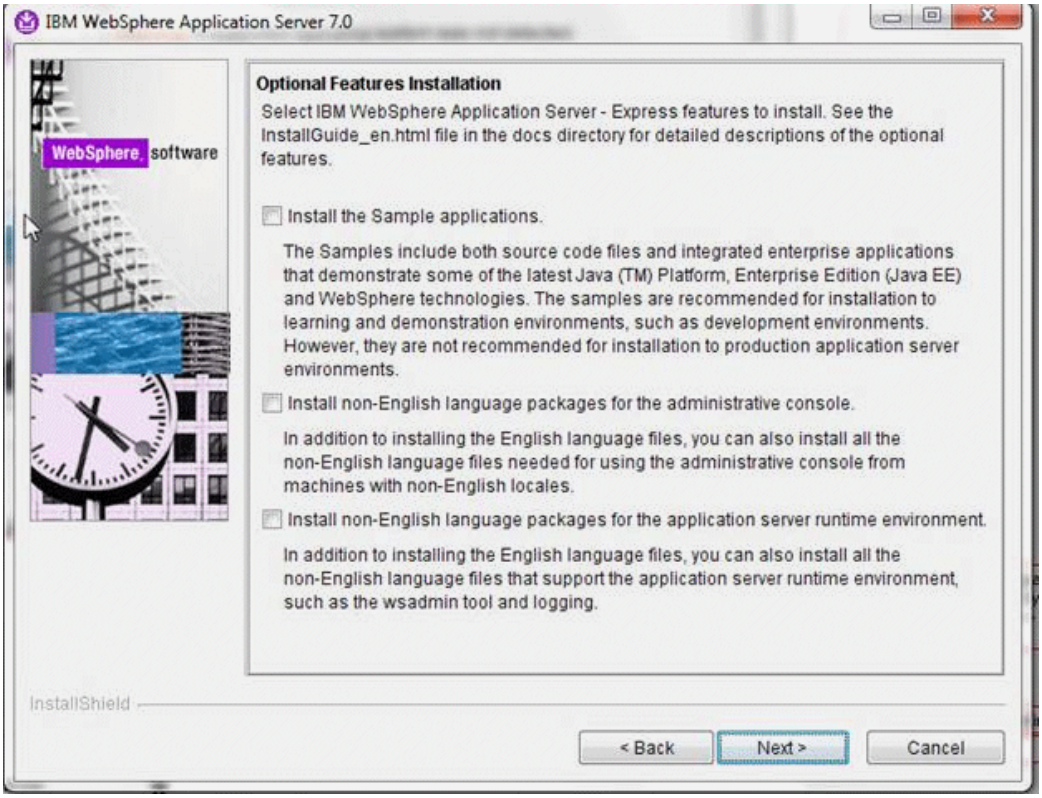
7. On System Prerequisites Check, the below **Warning** may be displayed:

   - **A supported operating system was not detected.**

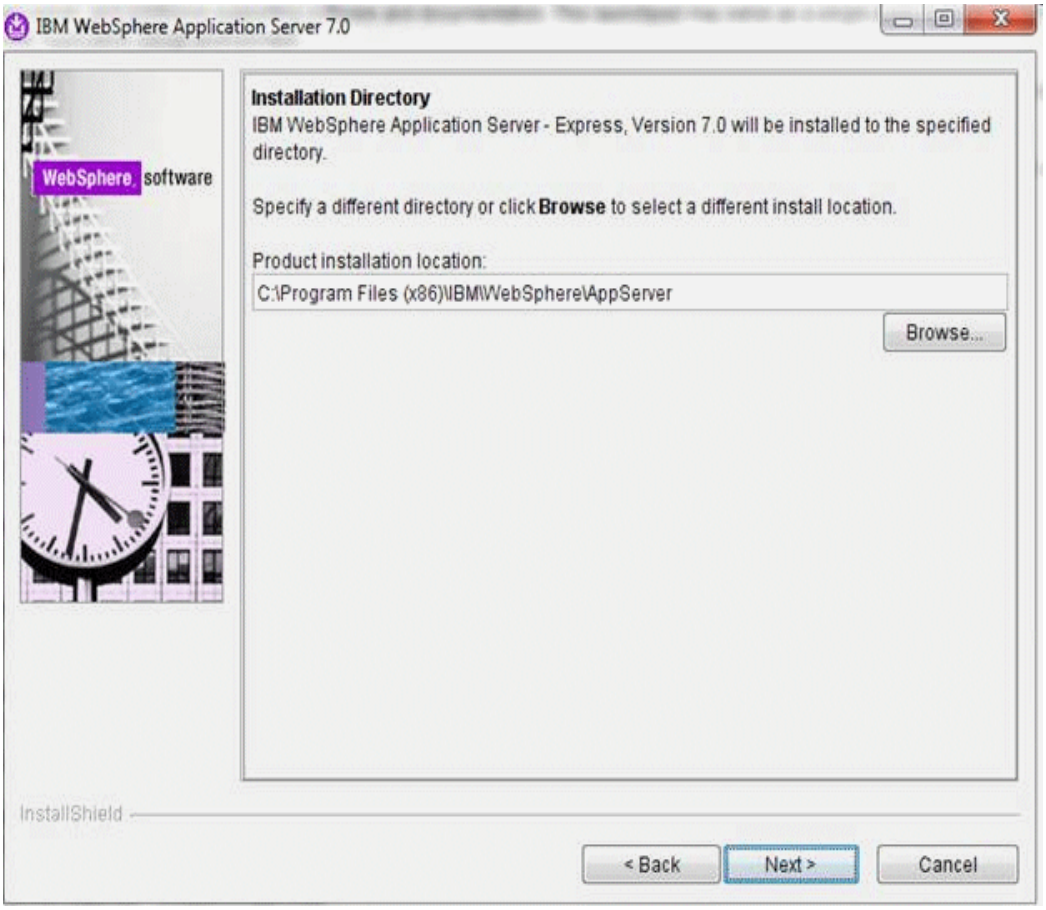
   You can ignore this **Warning** provided the operating system conforms to the current Oracle JD Edwards Minimum Technical Requirements as well as the current IBM System Requirements.

   Review all the information on this screen, using the scroll bar if necessary.

8. Click the **Next** button.



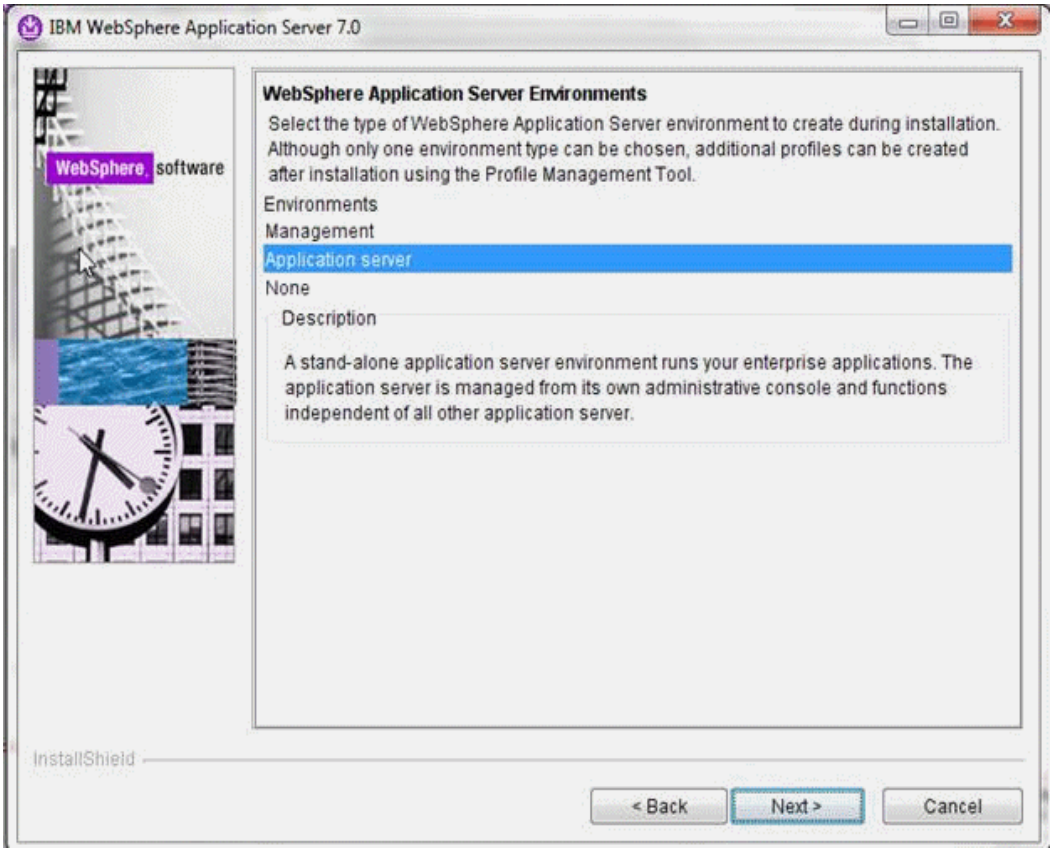
9. On Optional Features Installation, you can accept the default which will not install any optional features; none of these are required by JD Edwards EnterpriseOne.
10. Click the **Next** button.



11. On Installation Directory, you can accept the default value or enter or browse to a different installation location. For example, the default value might be:

    ```
    c:\Program Files (x86)\IBM\WebSphere\AppServer
    ```

12. Click the **Next** button.

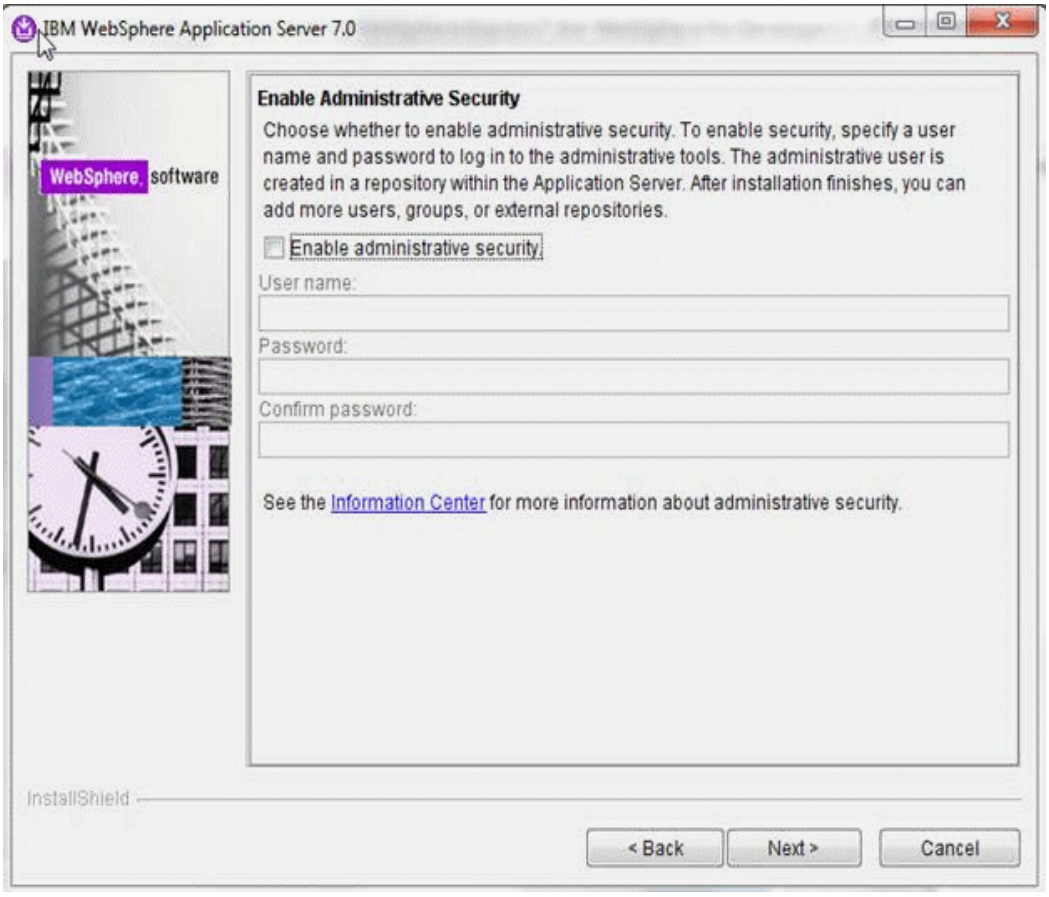


13. On WebSphere Application Server Environments, you must select this environment:

    - Application server

    Note: No other WebSphere Application Server environment type is supported. This value must be "Application server."

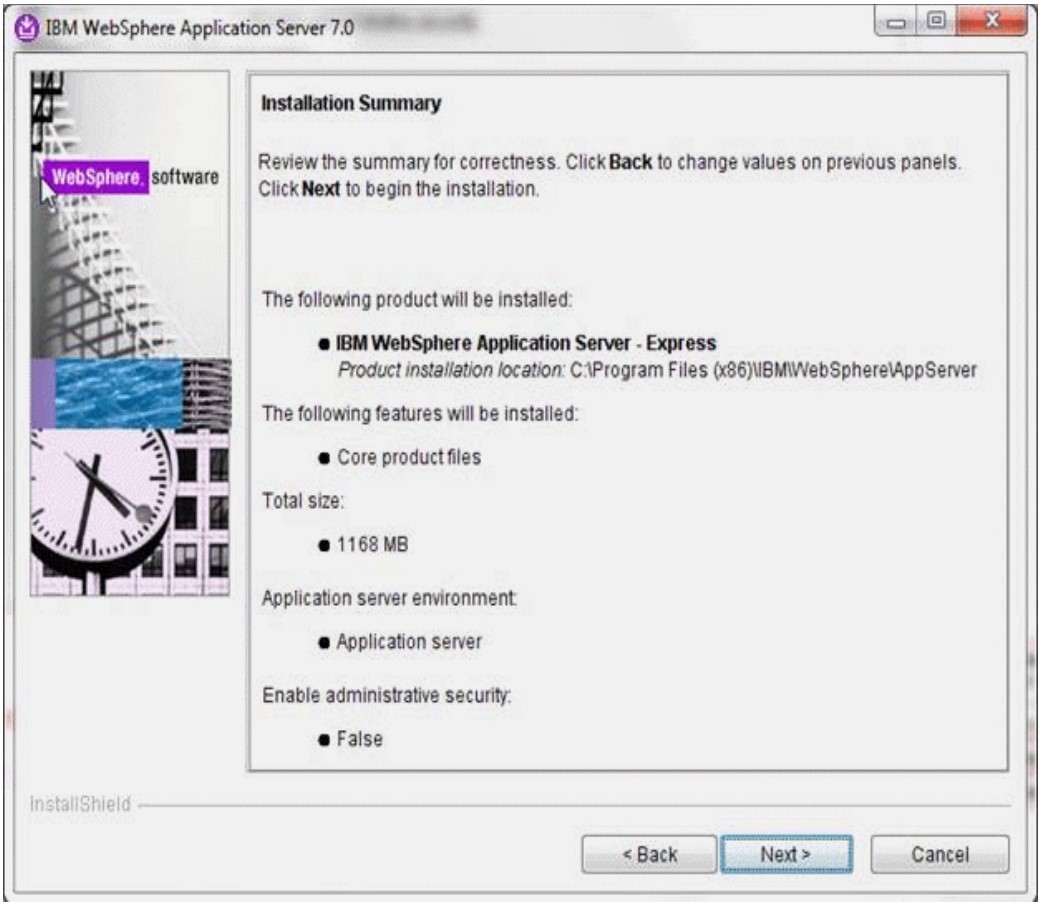
14. Click the Next button.



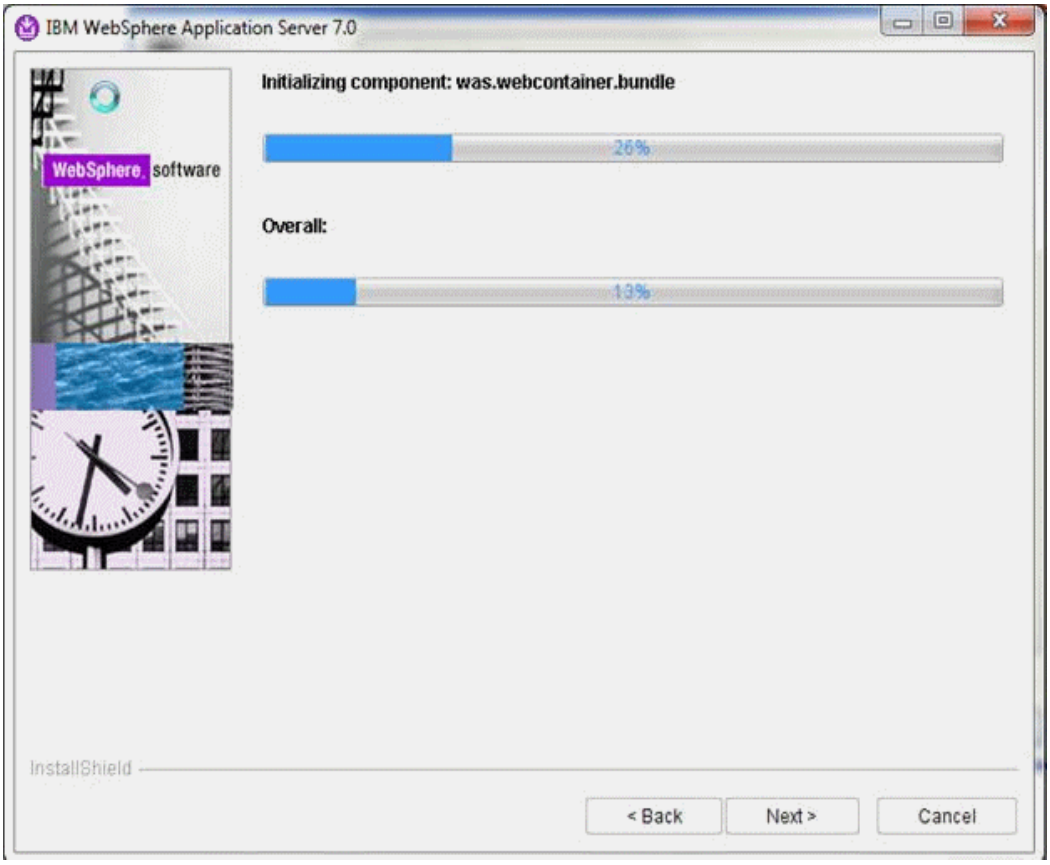
15. On Enable Administrative Security, clear this check box:

Enable administrative security

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



16. On Installation Summary, review the summary for correctness.
17. Click the **Next** button.



The installation wizard displays a progress screen. If required, the wizard may prompt for the location of a second disk or installation directory.

18. On Installation Successful screen, click the **Finish** button.

Note: If the Installation Successful screen indicates only partial success refer to this IBM support document, option 2:

`http://www-01.ibm.com/support/docview.wss?uid=swg21433197`

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19. You must update your WebSphere installation to the required fix pack level as described in the next section of this guide entitled: Updating WebSphere Express or Developers 7.0 to the Latest Fix Pack Level.

3.2 Updating WebSphere Express or Developers 7.0 to the Latest Fix Pack Level

Unlike previous releases of WebSphere Express, you might need to manually update your WebSphere 7.0 Express or WebSphere Developers 7.0 in order to meet the JD Edwards Minimum Technical Requirements. If required, you can use the update installer and fix pack instructions in the JD Edwards document entitled: *JD Edwards EnterpriseOne HTML Web Server Reference Guide for WebSphere 7.0* (use the version of the guide that matches your release and platform). Within that guide, use the steps in this chapter and sections:

- Chapter 3. Installing and Configuring WebSphere 7.0

- Installing the WebSphere Update Installer
- Installing the WebSphere 7.0 Fix Pack

Note: WebSphere Express 7.0, WebSphere for Developers 7.0, and WebSphere Application Server 7.0 use the same files for the update install and fix pack. No separate versions exist for the different products.

4

Installing the Local Database

Complete this section to install the local database that the Development Client will use. If you encounter errors during the installation process, refer to the troubleshooting section at the end of this guide.

4.1 Installing the OEE 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"

When OEE is installed, it will be installed into a subdirectory called "E1Local" under an Oracle directory. By default, this base directory is `C:\Oracle`. This means that the database will be installed into `C:\Oracle\E1Local` by default.

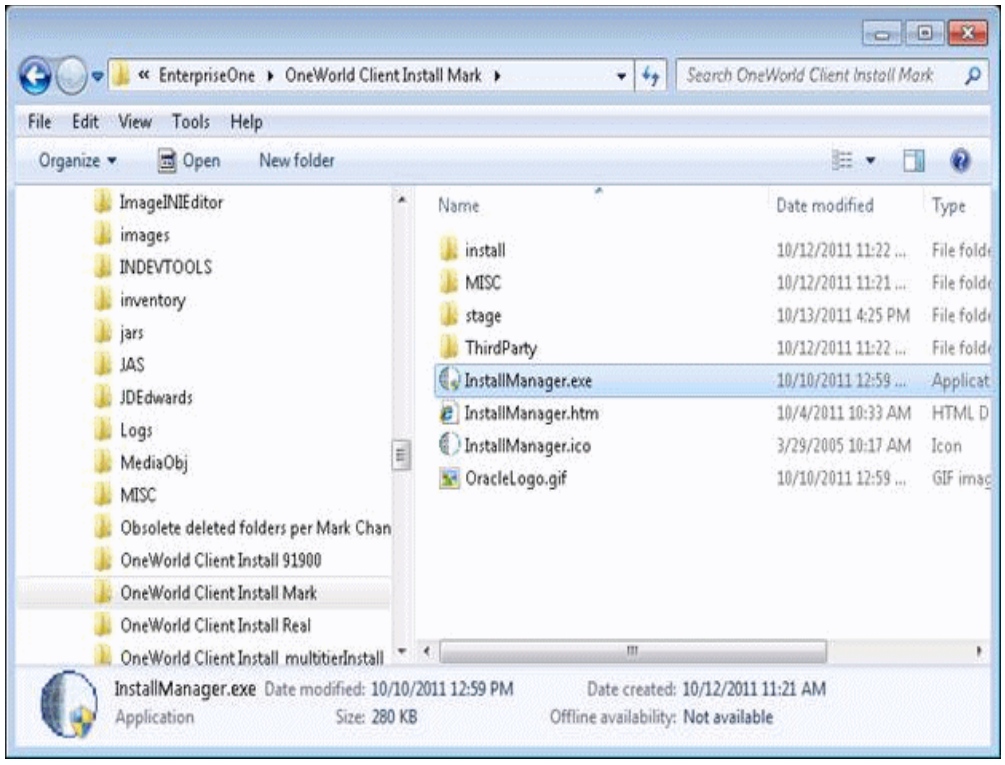
If you cannot delete the E1Local subdirectory because a file in that directory is locked, follow these steps:

1. 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`

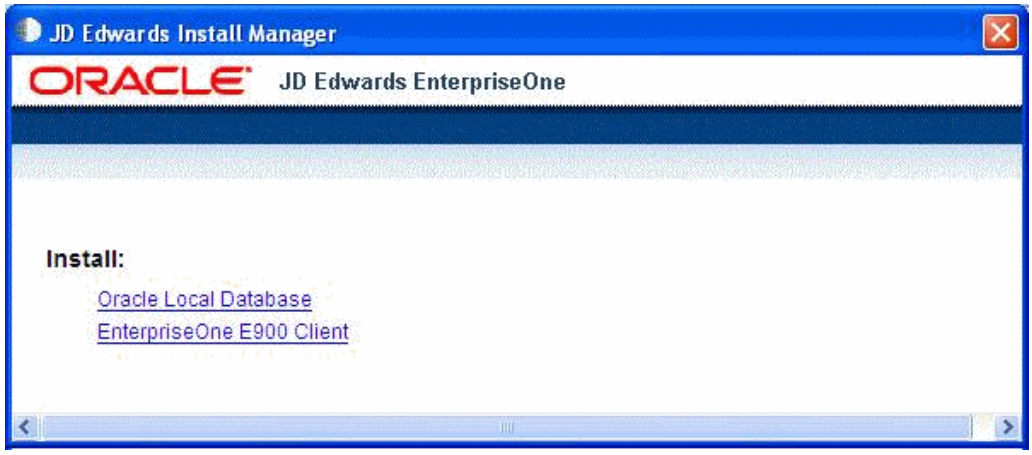
2. Either kill the locking process with Process Explorer or Microsoft Windows Task Manager or, if the process was started as a Microsoft Windows service, change the Startup Type to Manual and reboot the computer again.
3. Try again to delete the E1Local subdirectory.

Follow these steps to install the local OEE database.



1. Run this program:

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



2. Click the option to install an Oracle local database. If this option is missing or points to the SSE database installer, contact your EnterpriseOne administrator.
3. If the database is already installed, a message will indicate that. In some cases, the message will not appear making it look like nothing happened. If that occurs, look at the contents of the log file c:\OEEInstall.log for more information.
4. If you are running a 64-bit version of Microsoft Windows, you will need to install a 64-bit version of the OEE database. If you are on a 32-bit version of Microsoft Windows, you will need a 32-bit version of the database. If after clicking the option to install the Oracle local database, you get an error indicating that the

"bitness" of the database and operating system do not match, you will need to contact your EnterpriseOne administrator. He or she should be able you identify and locate the correct database installer.

5. If the database is not installed, you may be prompted for the target or base directory for the database. The default location is `C:\Oracle`. The database will be installed into a folder called "E1Local" under the base directory, for example, `C:\Oracle\E1Local`.

   Note: Do not specify "E1Local" as part of the base directory. If you do this, you may not get what you want. For example, if you enter `C:\MyDB\E1Local` as the base directory, the database will be installed into `C:\MyDB\E1Local\E1Local`.

6. Examine the installer log:

   `c:\OEEInstall.log`

   Caution: Even though the screen says that the installation was successful, you should perform a quick determination that all the database installation steps were successful before rebooting the computer. Follow these steps:

   1. From the Microsoft Windows Control Panel, run Administrative Tools > Services.
   2. In the list of Services, look for the services named OracleE1LocalTNSListener and OracleServiceE1LOCAL.
   3. If either one of these is missing, there was a problem in completing all the installation and configuration steps. Examine the logs specified in Chapter 9, "Troubleshooting the Installation Process" in Section 9.1.2, "OEE Local Database". You will probably need to deinstall the database engine using the steps in the section Deinstalling the OEE 11gR2 Local Database, reboot, and then reinstall the OEE database.

7. If the installation seems to be successful, reboot the computer.
8. If **both** of the following are true, you will need to also install a 32-bit Oracle database client:
   - The Windows operating system on your machine is 64 bits, and
   - The OEE database that you just installed is 64 bits.

   Note: 64- vs. 32-bit Oracle database drivers. Because EnterpriseOne is a 32-bit program and runs as a 32-bit program -- even on 64-bit versions of Windows -- it needs to load 32-bit Oracle database driver DLLs. Therefore, if you installed a 64-bit Oracle database in the steps above, you also need to install 32-bit Oracle database driver DLLs. These 32-bit DLLs are provided by a 32-bit Oracle database client. You can download the 32-bit Oracle database client from the Oracle Software Delivery Cloud download site.

   When installing the database client, be sure to select "Runtime" on the Select Installation Type screen.

9. If you installed the 64-bit OEE and a 32-bit Oracle database client, you may need to update the Windows PATH environment variable. Read the following caution to determine what to do.

Caution: PATH environment variable. If you installed the 64-bit Oracle database, the installer placed the path to the database (for example, `c:\Oracle\E1local\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\11.2.0\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 Environment Variables….
5. In the "System variables" box, highlight the variable Path and click Edit….
6. In the "Variable value" field, cut the 32-bit database client's path and the following semicolon (for example, `c:\Oracle\product\11.2.0\client_1\bin;`).
7. Paste the client's path and semicolon at the start of the Path value.
8. Click OK.
9. Click OK to exit from the Environment Variables window.
10. Click OK to exit from the System Properties window.
11. Close the Control Panel's System window.

---

10. This step explains how to synchronize multiple copies of the file `tnsnames.ora`.

    Various components of EnterpriseOne and the Oracle database look for copies of `tnsnames.ora` in different paths. For EnterpriseOne and the Oracle database to work correctly all of these copies of `tnsnames.ora` must contain identical information.

    The Development Client installer will copy the `tnsnames.ora` to the places that EnterpriseOne uses; however, it cannot copy them to the locations required by the Oracle database (either 64- or 32-bit) and the 32-bit Oracle database client (if installed). You must manually copy the `tnsnames.ora` to locations under the Oracle database's and the database client's installation directories.

    a. Copy the tnsnames.ora as directed below:

from:

```
\\<deployment server name>\<release>\client\tnsnames.ora
```

to:

```
<Oracle Database Install Dir>\network\admin
```

For example:

```
c:\Oracle\E1Local\network\admin
```

b. If you installed a 32-bit Oracle database client, copy the tnsnames.ora as directed below:

from:

```
\\<deployment server name>\<release>\client\tnsnames.ora
```

to:

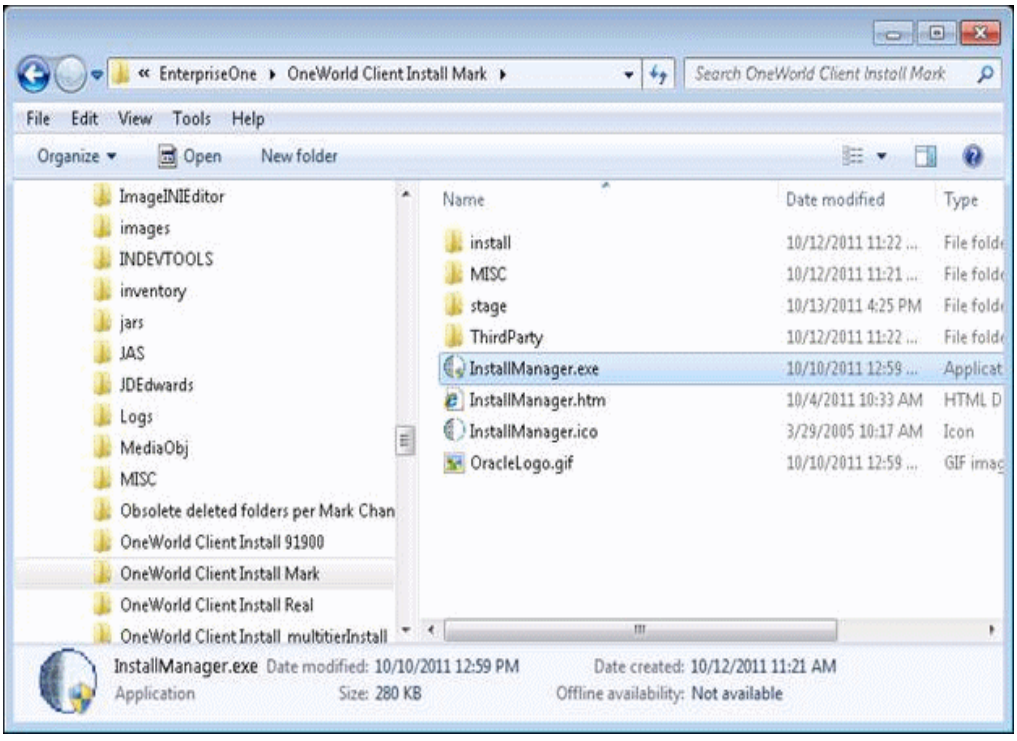
```
<32-bit Oracle Client Install Dir>\network\admin
```

For example:

```
c:\Oracle\product\11.2.0\client_1\network\admin
```

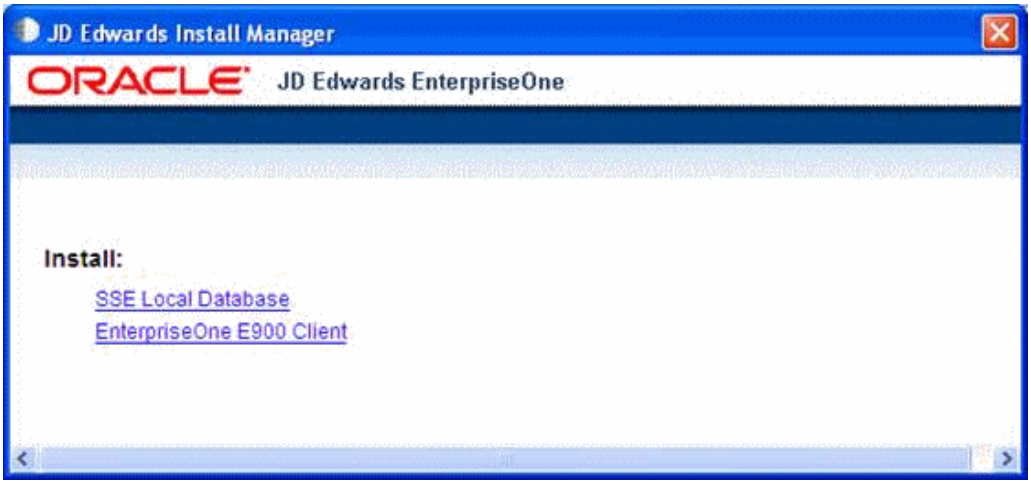
4.2 Installing the SSE Local Database

Follow these steps to install the SSE local database.



1. Run this program:

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



2. Click the option to install a local SSE database. If this option is missing or points to the OEE database installer, contact your EnterpriseOne administrator. The SSE installer automatically installs the proper "bitness" of database on the Windows operating system that you are using.

5

Installing the Development Client

Complete this section to install the Development Client and install the latest version of SnapShot. If you encounter errors during the installation process, refer to the troubleshooting section at the end of this guide.

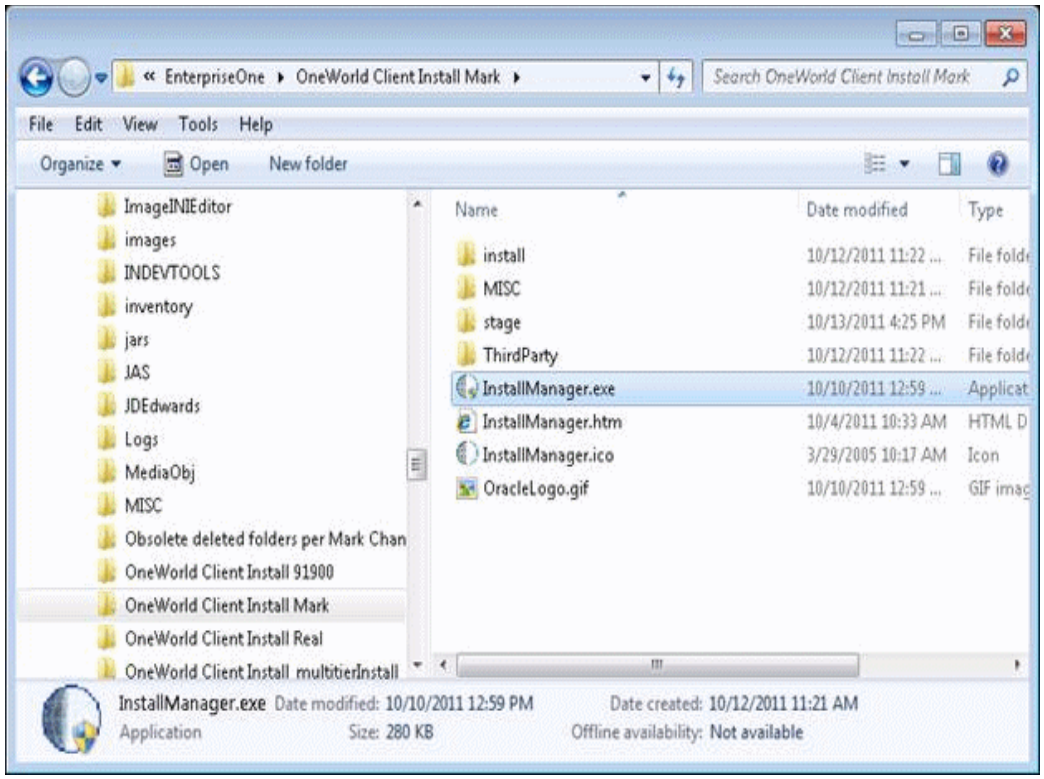
Note: If the package that you install includes an H4A7 Web Client and WebSphere Express is not installed, the installer displays an error during the installation of the web component. The standard Microsoft Windows components of the Development Client will install and function normally, but you will not be able to run the Web Client.

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"

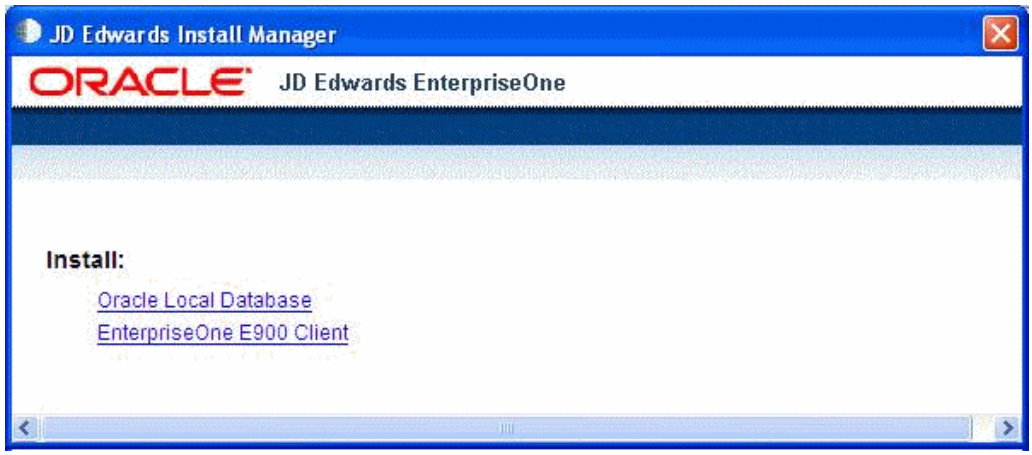
Caution: If the package that you install includes an H4A7 Web Client, be aware that the installers for WebSphere Express and WebSphere for Developers place data into the registry specifically for the Microsoft Windows user that is signed into Microsoft Windows at the time of installation. You must sign into Microsoft Windows using this same user when you install and run the JD Edwards EnterpriseOne Development and Web Clients.

If the package includes an OH4A Web Client or no Web Client, the above limitation does not apply.

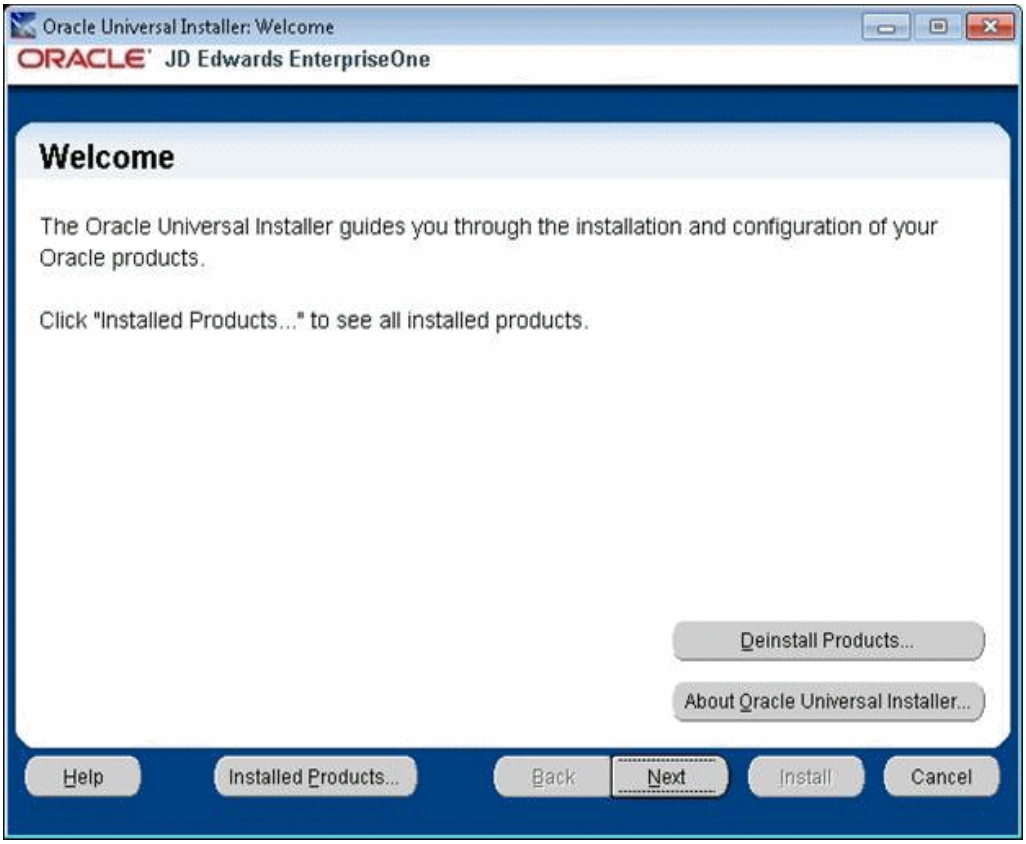


1. Run this program:

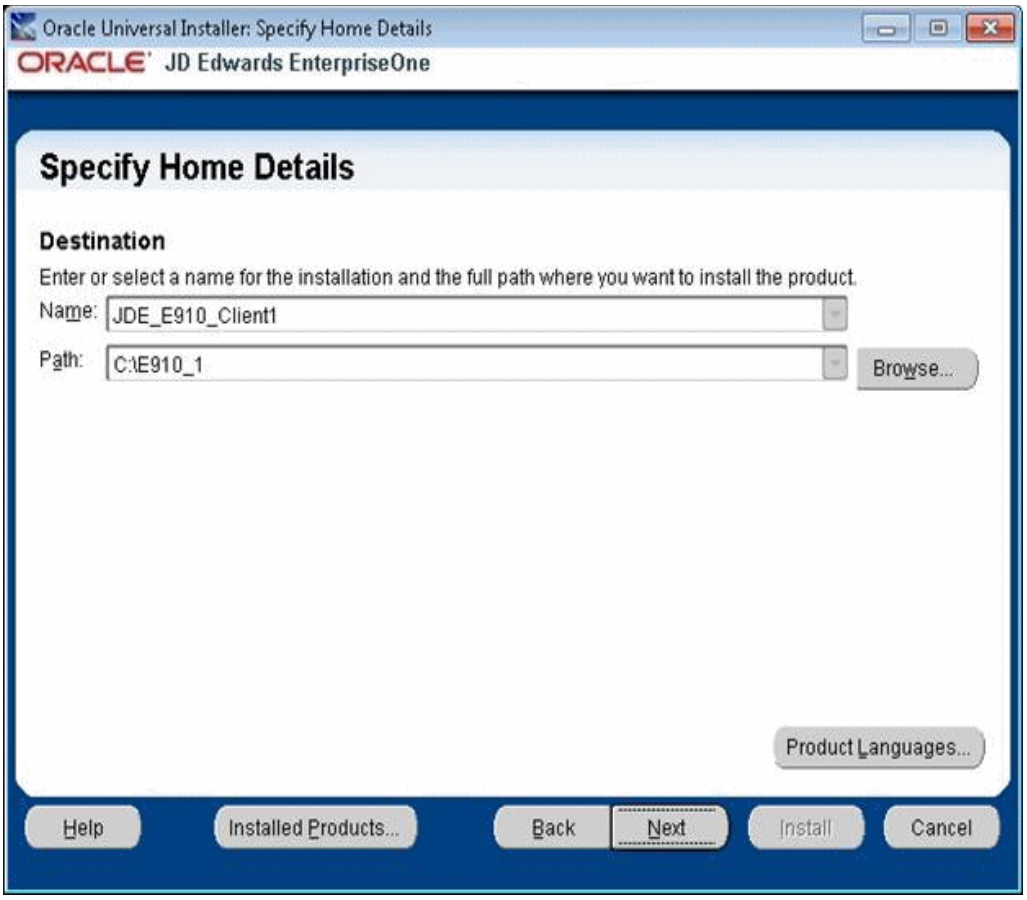
```
\\<deployment server name>\<release>\OneWorld Client
Install\InstallManager.exe
```



2. Click the option to install the EnterpriseOne Client.



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



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.

   The path you enter here is for the **Oracle Home** path where the Development Client will be installed.

   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 is at the same level as the OEE database's Oracle Home; that is, the Development Client's and database's Oracle Homes can share the same parent directory.

   Note: OUI will append 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, OUI will increment 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.

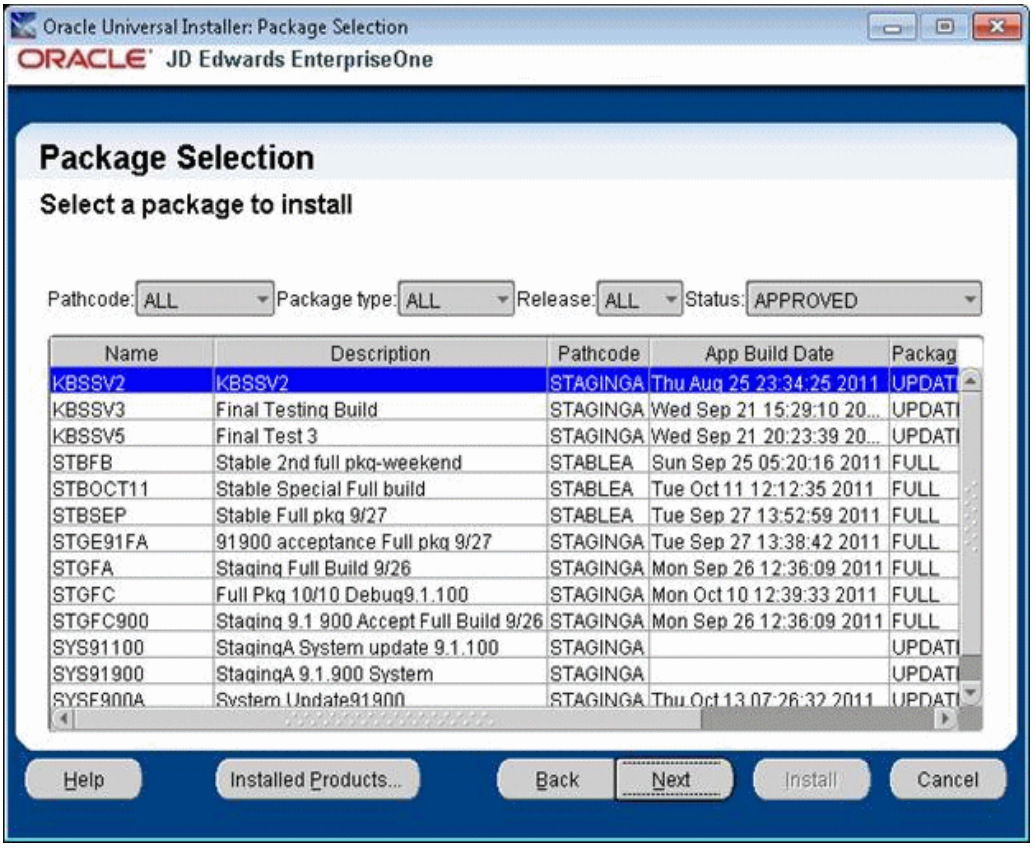
   - If the package that you select is a full package and the pathcodes of the package and the existing Development Client are the same, components of the existing Development Client will be removed before the new package is installed.

   - 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. Deinstall 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 D, "Installing Multiple Pathcodes".

5. Click Next.



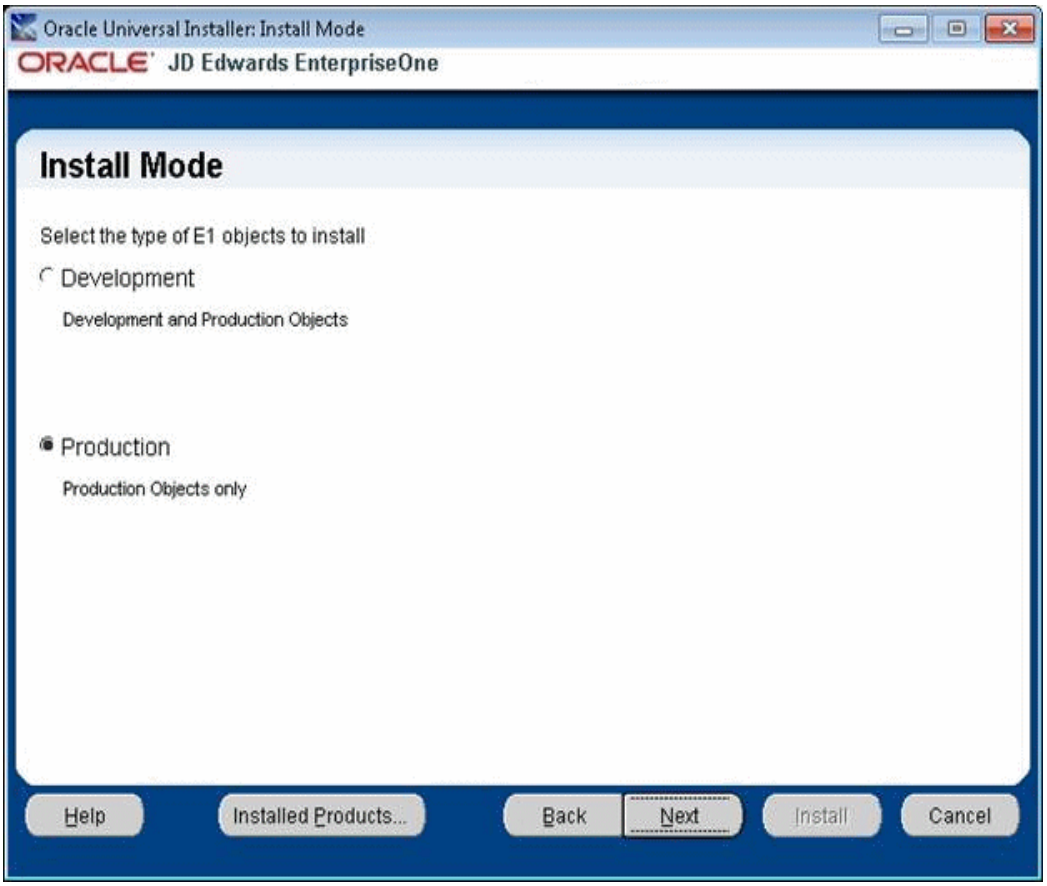
6. On Package Selection, select the appropriate package for the Development Client.

Note: If the Package Selection screen includes two Development Client installation packages, one for the Oracle Application Server and one for WebSphere Express, 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 D, "Installing Multiple Pathcodes" for information about installing multiple pathcodes on your workstation.

7. Click Next.



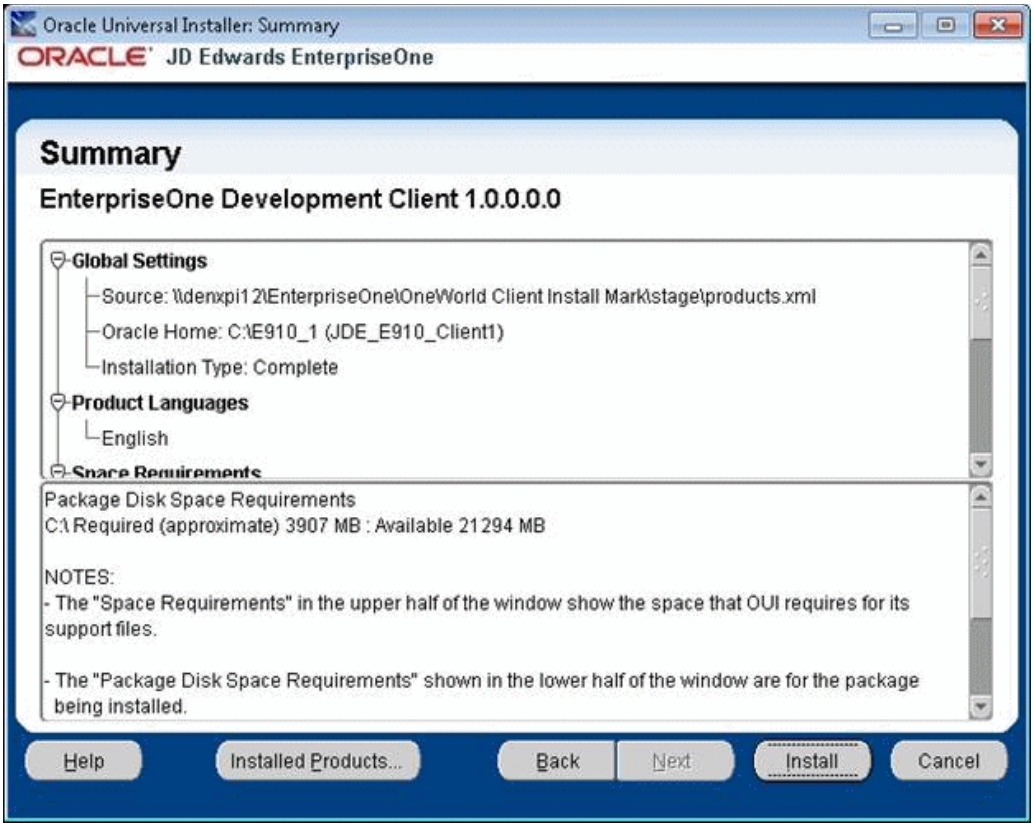
8. On Install Mode, select the type of EnterpriseOne (E1) objects to install:
   - Development

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

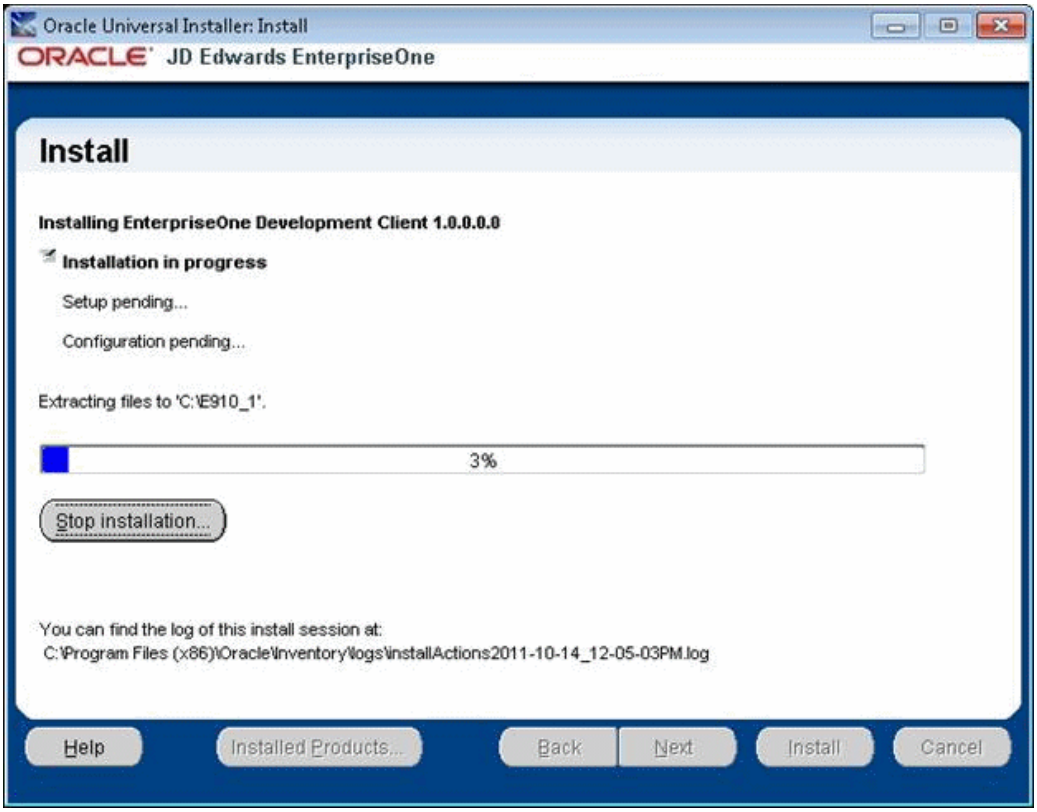
Select this type if you do not plan to modify EnterpriseOne objects.

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. If you selected an update package that includes specs, you will be prompted for an EnterpriseOne 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 Install.



The screen shows the progress of the installation and the name of the log file.

12. When the installation completes, click the **Cancel** button to exit OUI.

6

Working With SnapShot on the Development Client

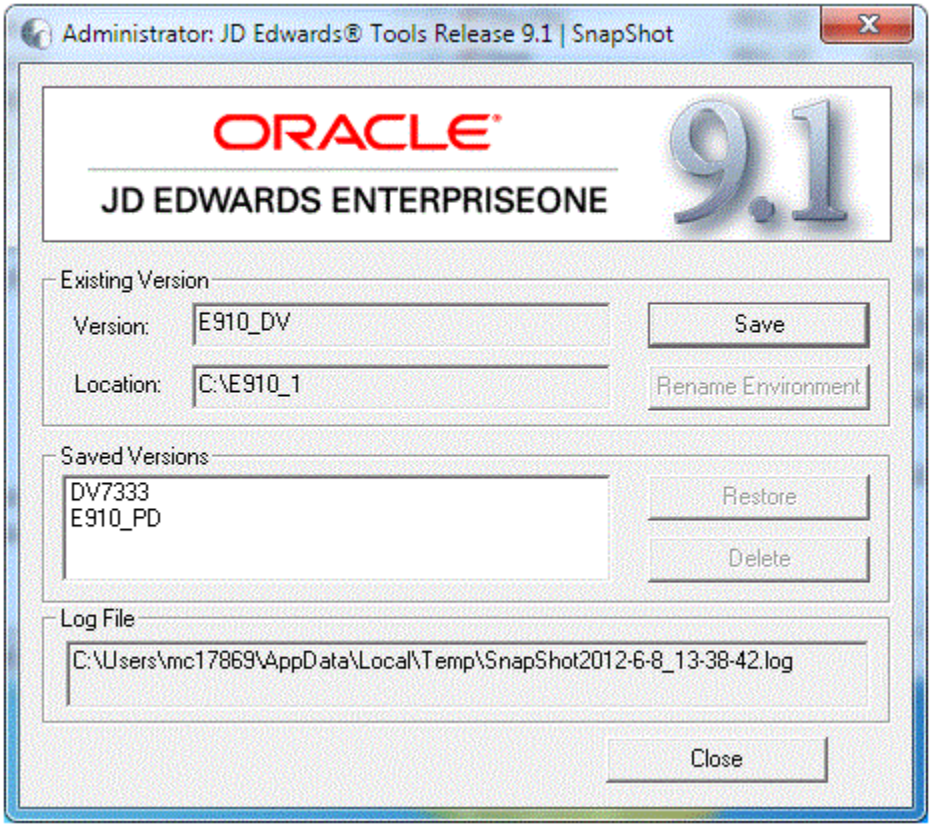
Note: **Tools Release 9.1 Update 2.** This entire chapter is revised to support a significantly enhanced version of SnapShot that is available with Tools Release 9.1 Update 2 and higher. For the version of SnapShot that was included with the base release of JD Edwards EnterpriseOne Tools Release 9.1, refer to the appendix of this guide entitled: Appendix E, "Working With SnapShot on the Development Client (Base Release of Tools Release 9.1)".

This section discusses these topics:

6.1 Understanding SnapShot

The SnapShot 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.

Below is an example of SnapShot managing multiple tools releases including B7333 (DV7333) and two installations of E910 (E910_DV and E910_PD).



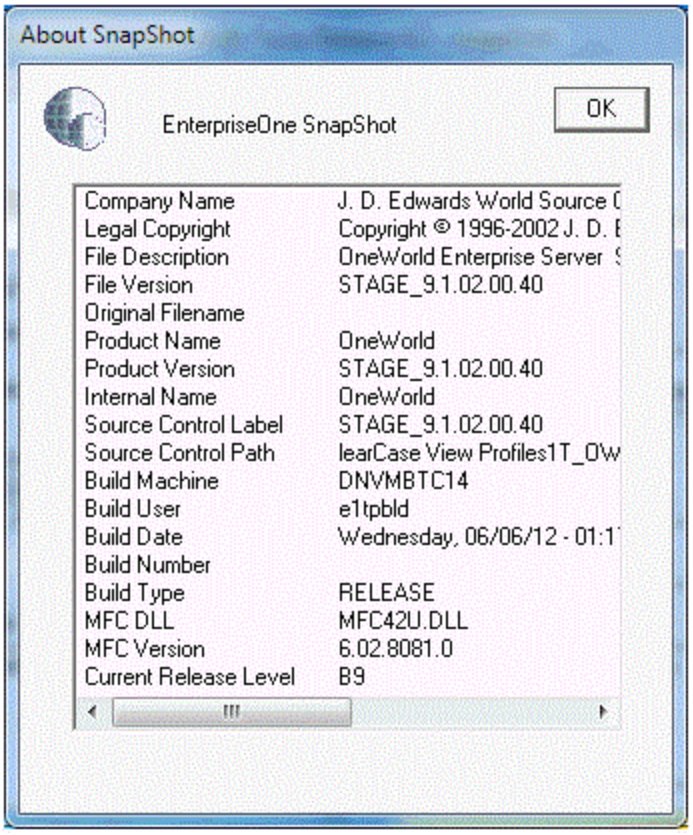
The preceding image shows the JD Edwards main SnapShot window. The main features of this window, from top to bottom, include:

- *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*

  The **Existing Version** area contains these fields and buttons:

  - *Version*

    The **Version** field 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 **Location** field shows the JD Edwards EnterpriseOne installation directory.

  - *Save*

    Use the **Save** button to save the installed JD Edwards EnterpriseOne to a SnapShot.

  - *Rename*

    Use the **Rename Environment** button to rename the path code and environment names of the installed JD Edwards EnterpriseOne. This function is not available on the Deployment Server.

- *Saved Versions*

  The **Saved Versions** area contains a field that lists saved versions (also called SnapShots). The example in this image shows the following versions: DV7333 and E910_PD.

- *Restore*

Use the **Restore** button to restore a saved version (SnapShot) to a runnable JD Edwards EnterpriseOne installation.

- *Delete*

  Use the **Delete** button to remove a saved version (SnapShot).

- *Log File*

  The **Log File** area displays the log file path and name.

- *Close*

  Use the Close button to exit `SnapShot.exe`.

6.2 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.

6.3 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 9.1 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 9.1.

This section describes these tasks:

- Section 6.3.1, "Starting SnapShot"
- Section 6.3.2, "Saving a SnapShot"
- Section 6.3.3, "Restoring a SnapShot"
- Section 6.3.4, "Deleting a SnapShot"

6.3.1 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, with the Tool Release 9.1 Update 2 and later version of SnapShot, you do not have to right click on the `SnapShot.exe` icon and select "Run as administrator." This is because these versions of `SnapShot.exe` are 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:

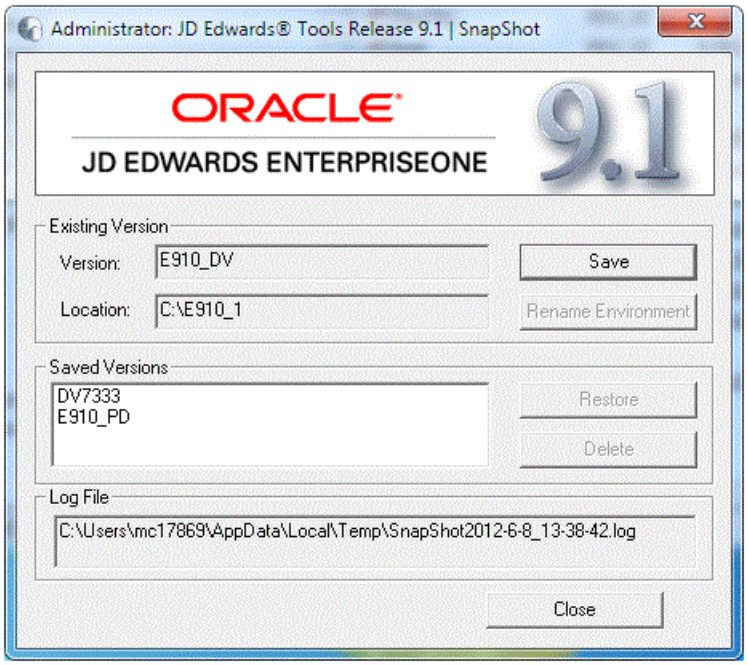
`<dev_client_installation_directory>\System\Bin32`

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:\E910`. If you attempt to run SnapShot from within the Development Client installation directory (for example, `c:\E910`), Snapshot will fail to rename the installation directory.

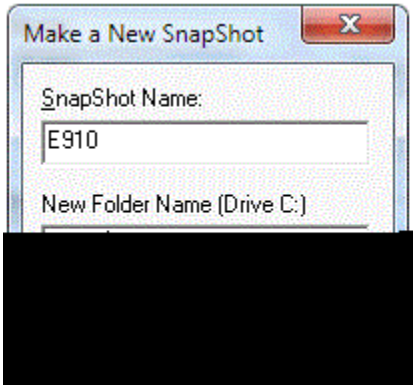
Tip: You can create a shortcut to `SnapShot.exe`, but you still must copy `SnapShot.exe` to a location outside the original installation directory where it was delivered.

6.3.2 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 E910.

   - *New Folder Name*

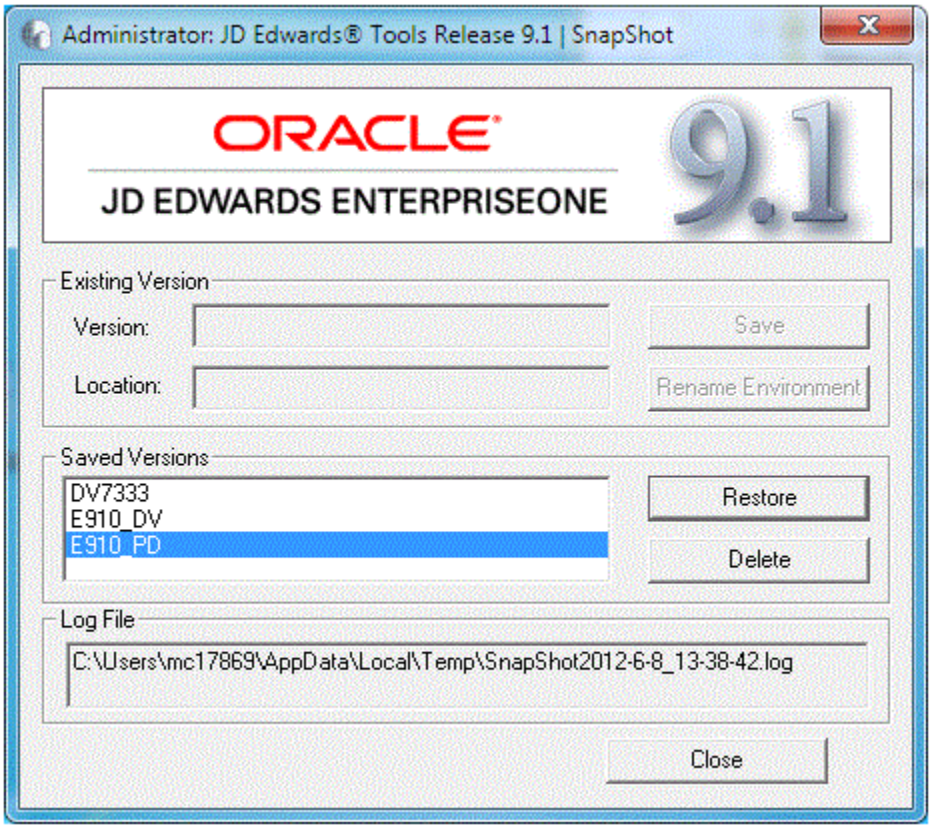
     Provide a directory in which the SnapShot will be saved. The directory should start with a backslash and be a valid Microsoft Windows directory name. It will be created on the indicated drive.

3. Click the **OK** button.

   SnapShot saves a snapshot of the Development Client.

6.3.3 Restoring a SnapShot

To restore a SnapShot:

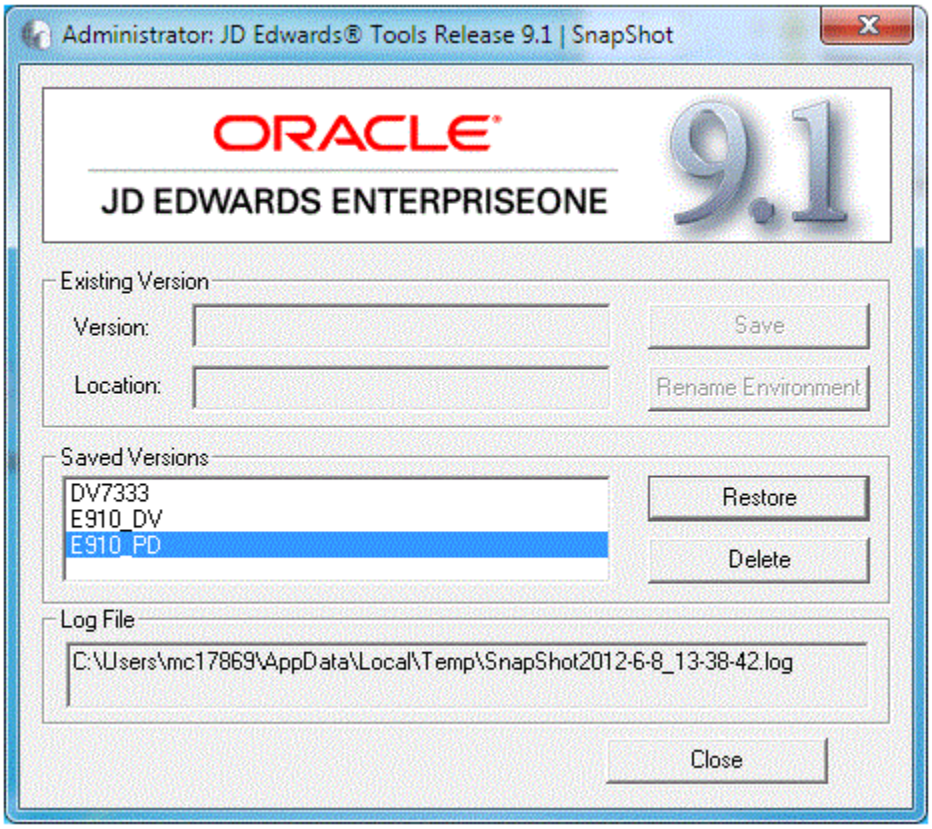


1. On the main SnapShot window and in the Saved Versions section, highlight the saved instance that you want to restore.
2. Click the **Restore** button.

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

6.3.4 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.

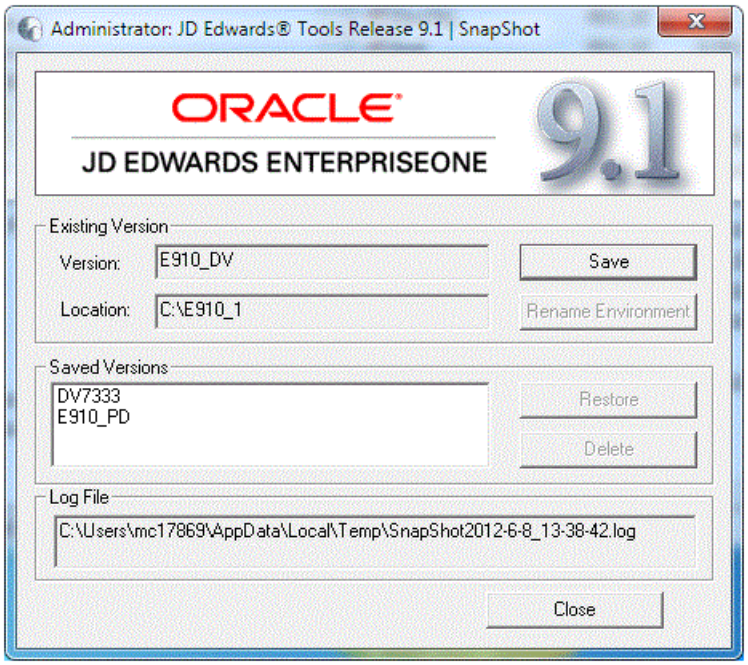
   SnapShot completely removes the saved instance from the JD Edwards EnterpriseOne Development Client .

6.4 Renaming an Environment

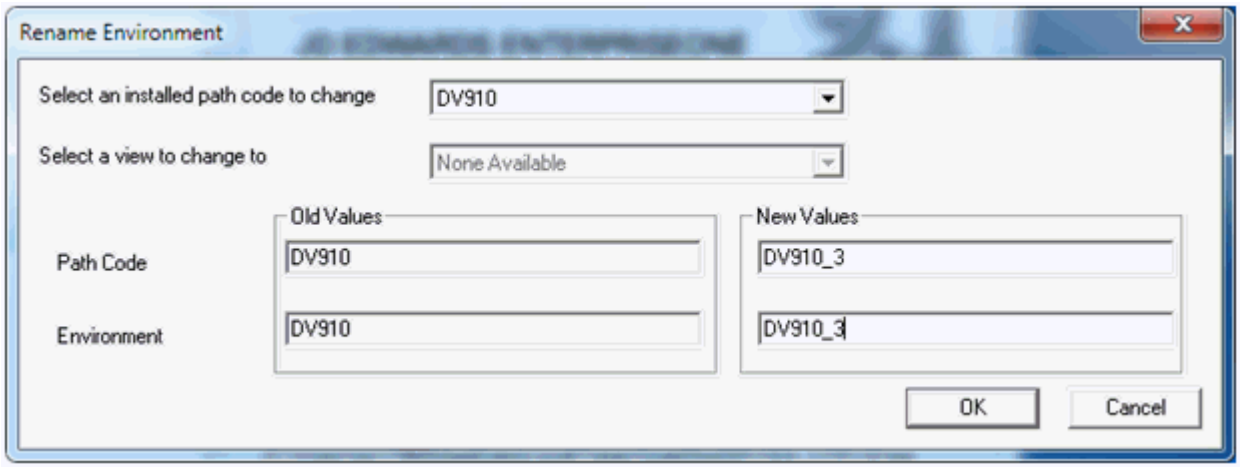
You can use SnapShot to rename the installed JD Edwards EnterpriseOne environment and path code. An example of a use case for this functionality is when a JD Edwards EnterpriseOne administrator needs to promote one path code/environment combination to another.

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 only available to JD Edwards EnterpriseOne internal application developers.

6.5 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.

6.6 Set Logging for SnapShot Using the Registry

The version of SnapShot that is shipped with Tools Release 9.1 Update 2 and later 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 **LogFileName** 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 LogFileName, 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 LogFileName:

   - 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 **LogFileName** 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 **LogFileName** 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.

6.7 Troubleshooting

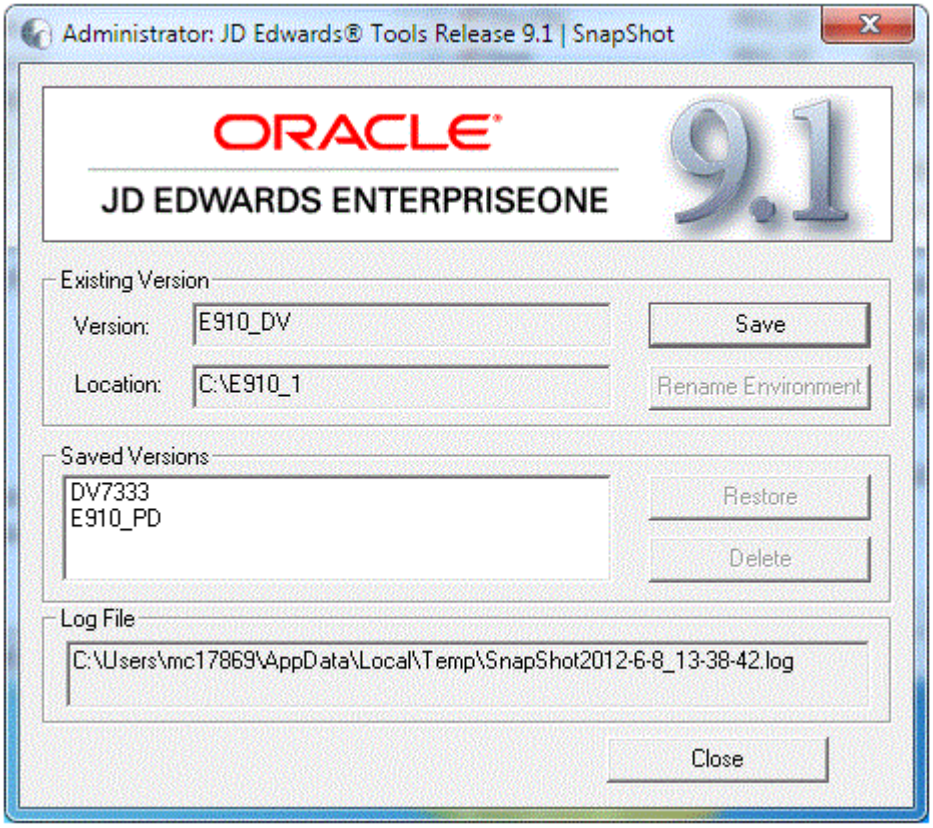
If SnapShot encounters a problem when trying to perform an action, it is designed to attempt to rollback the actions performed up to the point of failure. This means that during a save operation, SnapShot attempts to restore the JD Edwards EnterpriseOne instance back to a runnable state. If a failure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

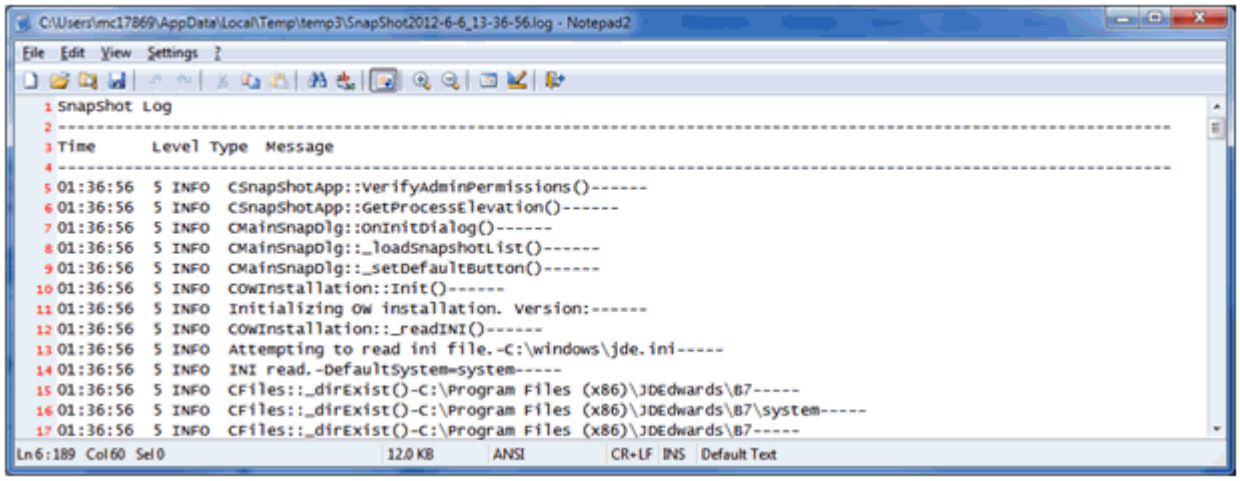
This section describes these topics:

- Section 6.7.1, "Examining the Log File"
- Section 6.7.2, "Error Handling"
- Section 6.7.3, "Remedial Actions"

6.7.1 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.



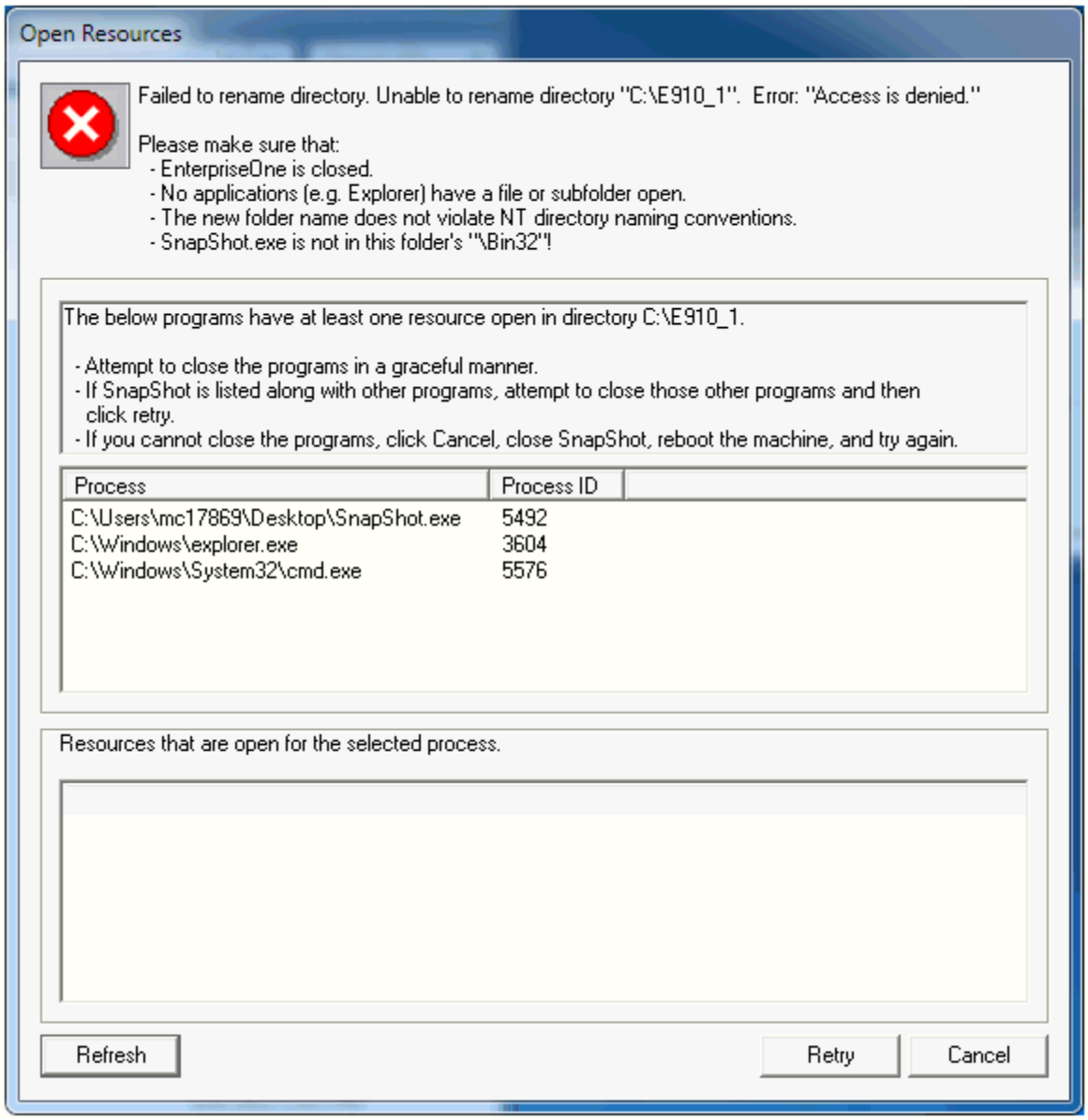
Above is an example of a SnapShot log file. When troubleshooting within the SnapShot log file, you should scan the **Type** column for a status of **ERR**, which indicates an error. If the error message itself is insufficient to isolate the cause of the problem, examine the messages immediately before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

6.7.2 Error Handling

This section discusses these topics:

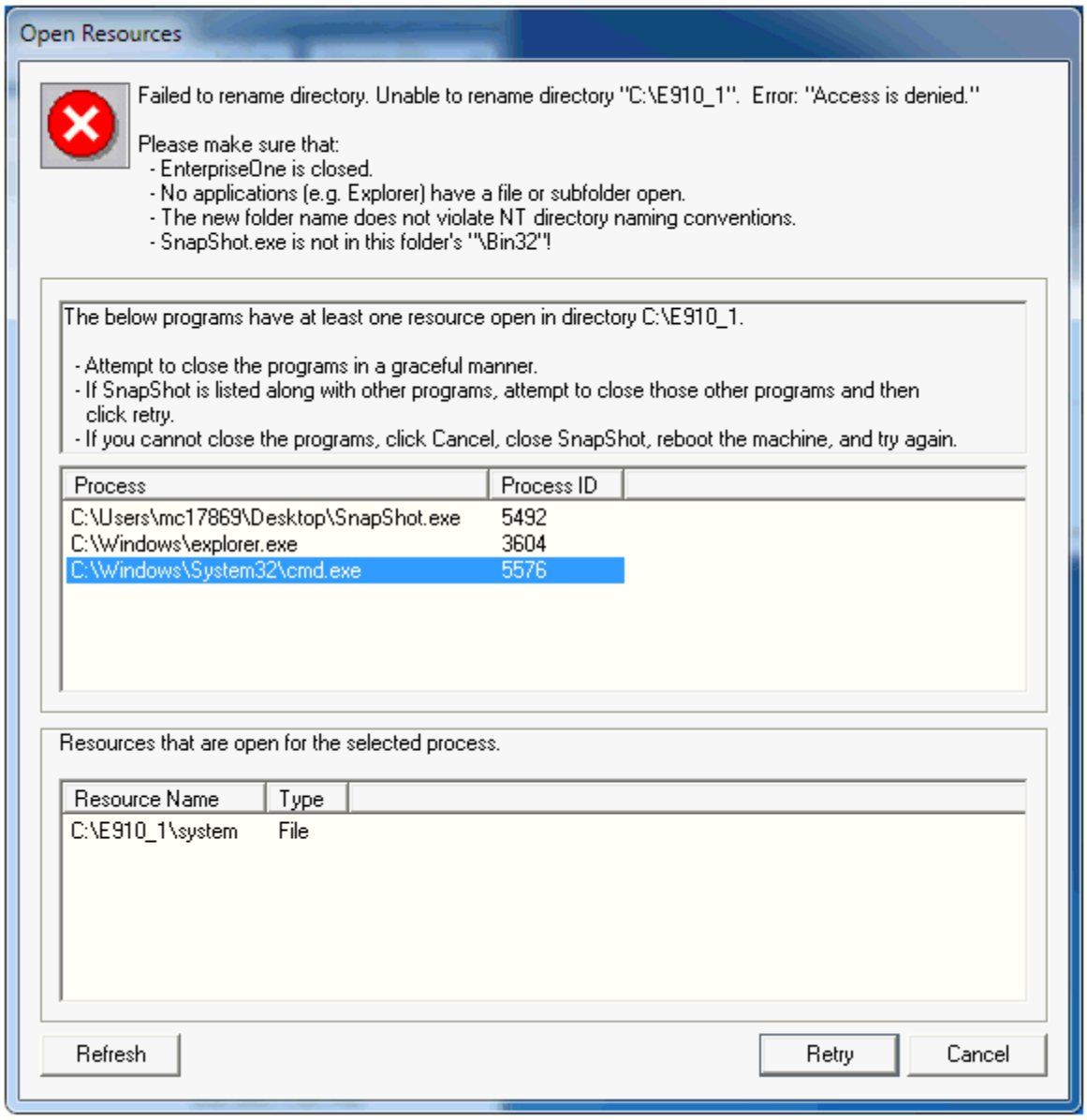
- Section 6.7.2.1, "Locked Resources Prevent Directory Renaming"
- Section 6.7.2.2, "Other Causes of Directory Renaming Failure"

6.7.2.1 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.

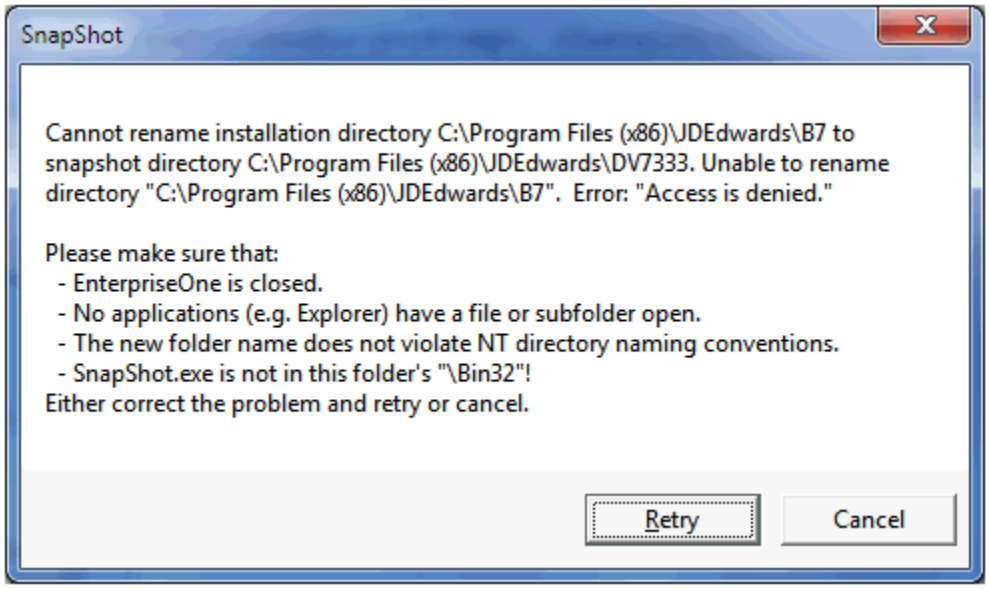
It is important that you follow these steps to resolve the file or directory locking problem:

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, 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 the **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.

6.7.2.2 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.

6.7.3 Remedial Actions

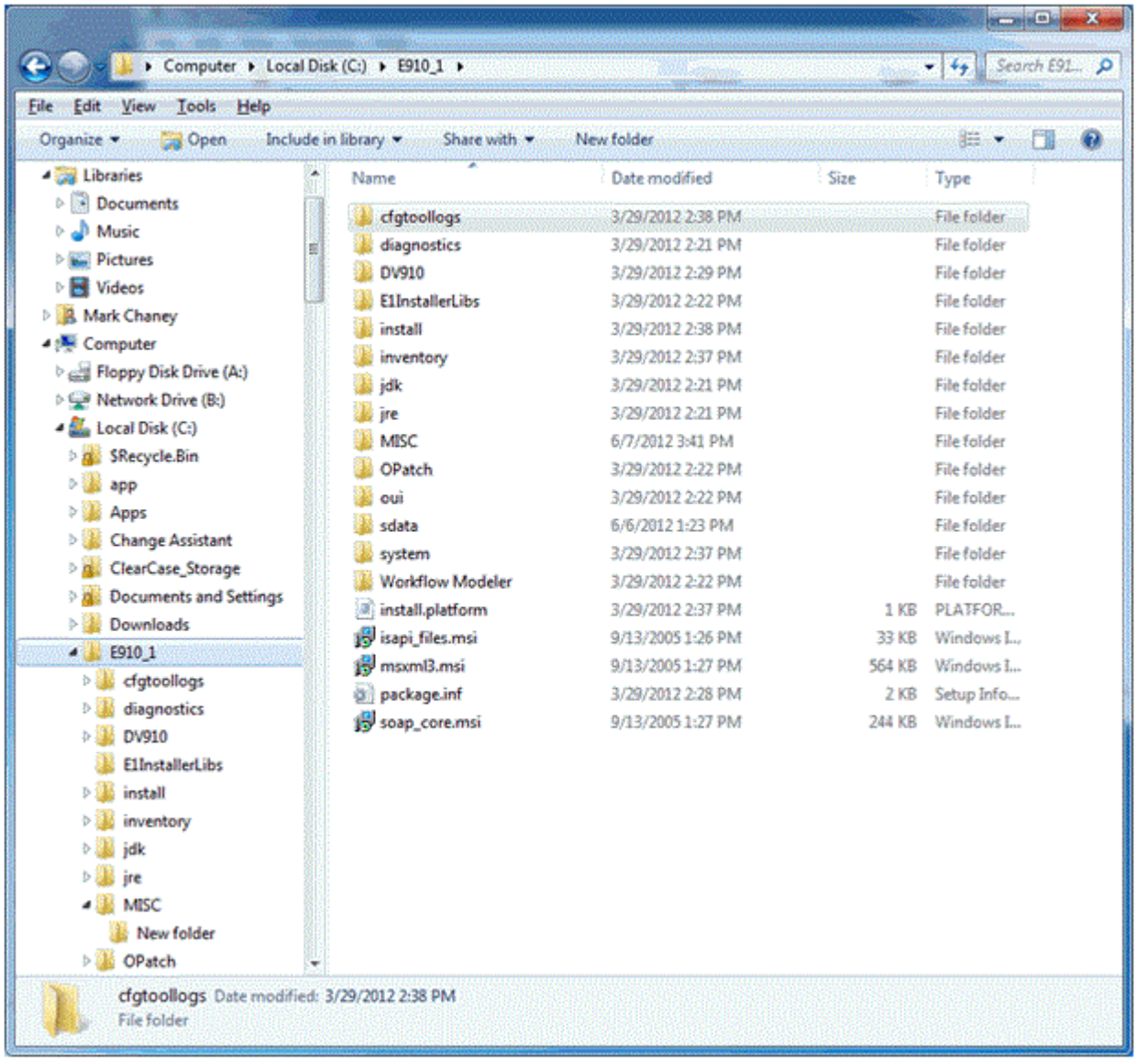
In some cases, SnapShot may not be able to recover from errors that occur during a save or restore action. You may be able to salvage either the JD Edwards EnterpriseOne installation or the saved instance. If these operations fail, you will need to reinstall JD Edwards EnterpriseOne.

This section describes these topics:

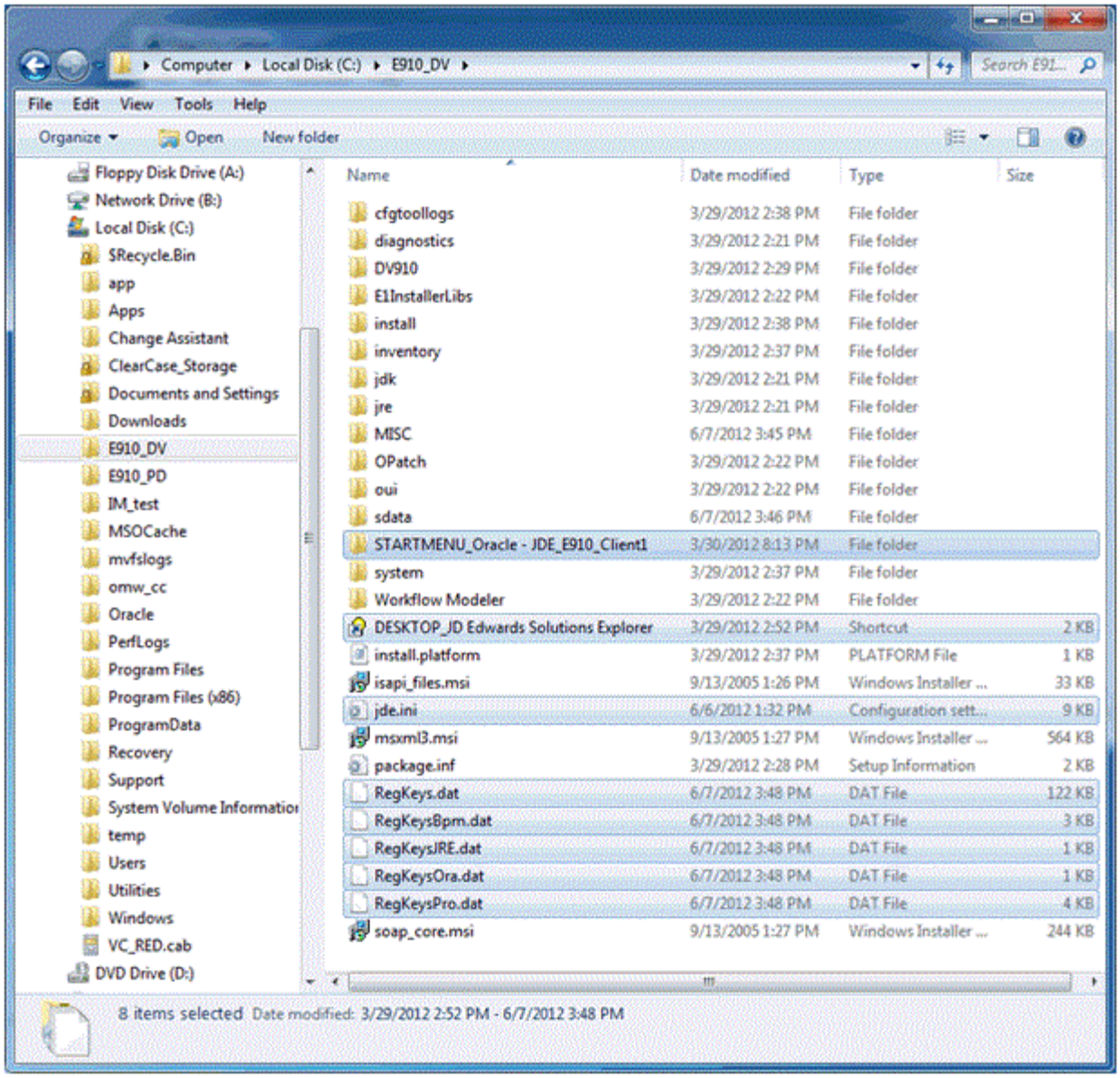
- Section 6.7.3.1, "Examples of Healthy Environments"
- Section 6.7.3.2, "Simple Fixes"

6.7.3.1 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*.**

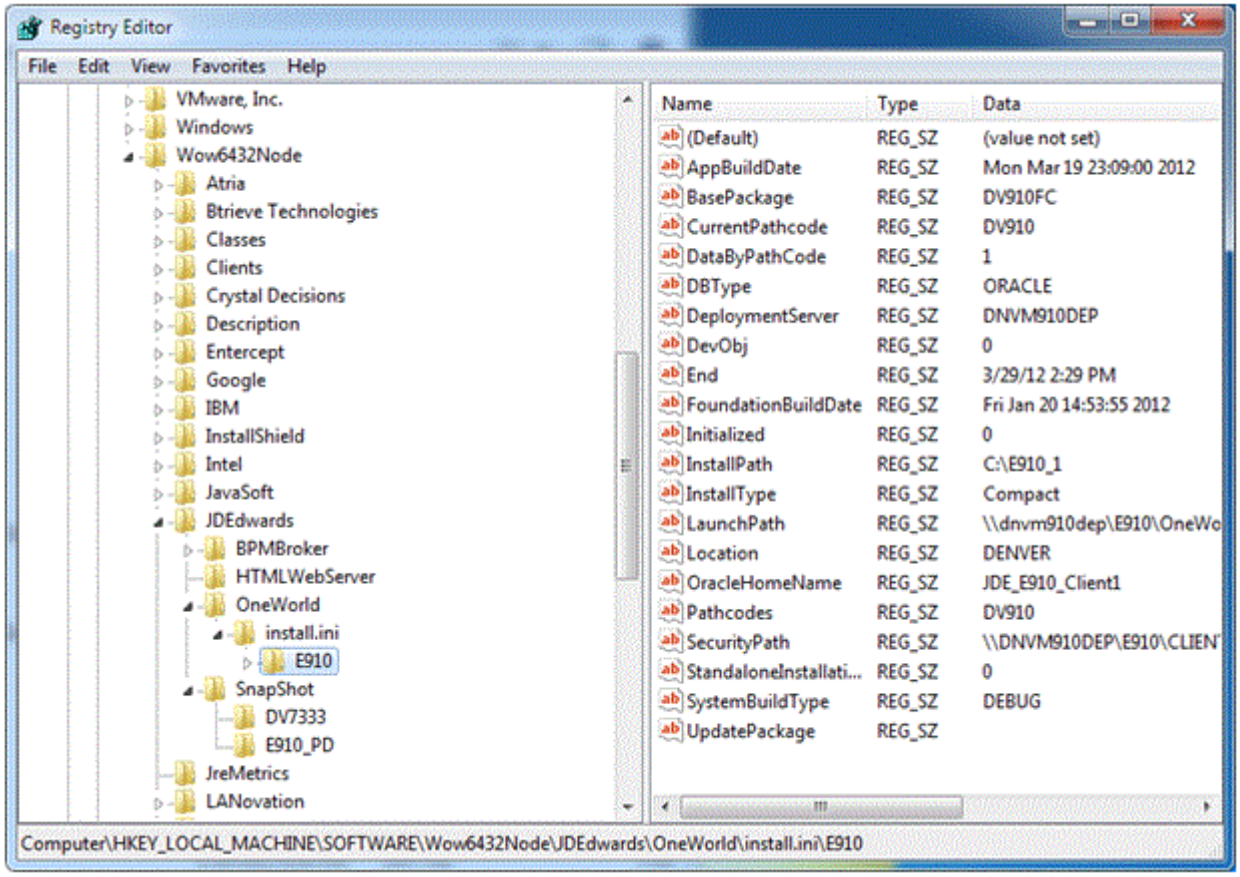
  The file that starts with `DESKTOP` is the shortcut to JD Edwards EnterpriseOne that was on the desktop of the workstation.

- *jde.ini*

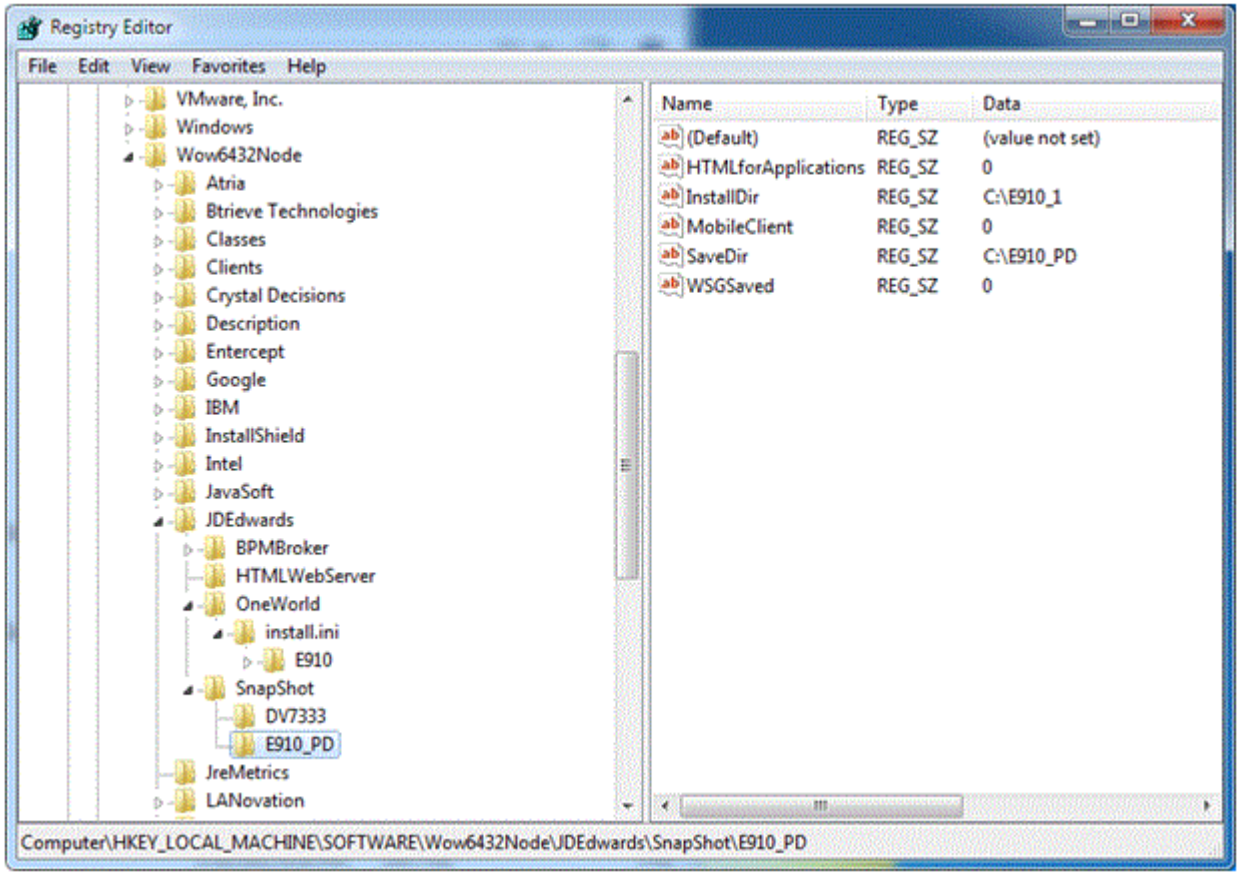
  The `jde.ini` file is the same file that was in the `c:\Windows` directory.

- *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.



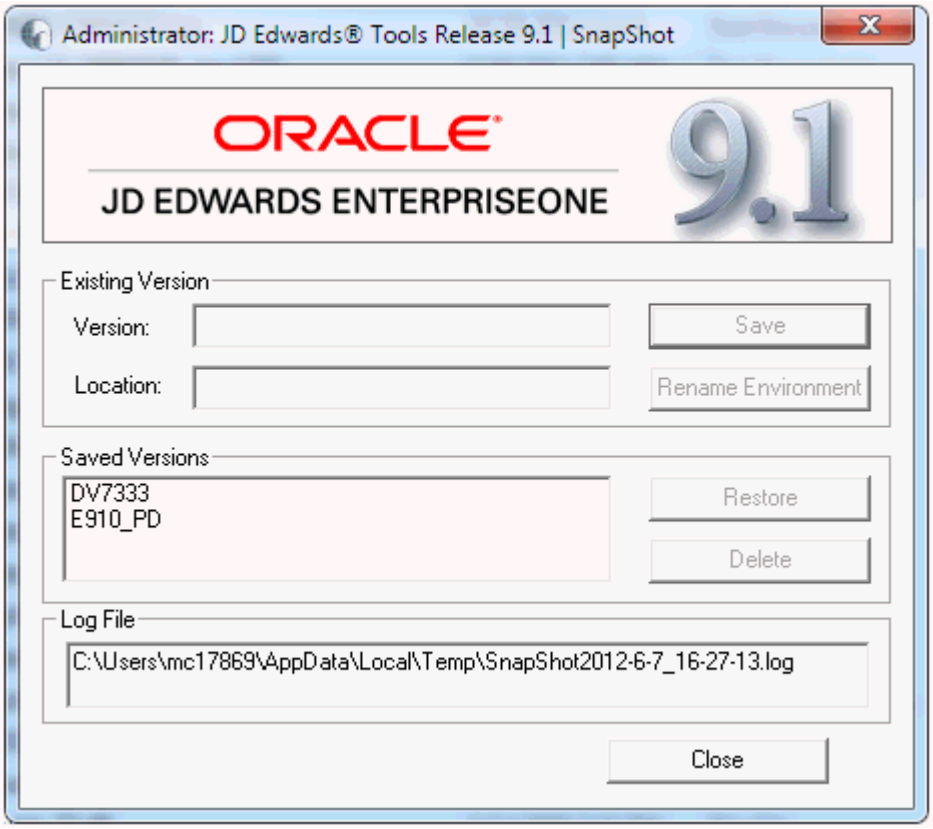
The preceding image shows the registry keys for a saved JD Edwards EnterpriseOne snapshot.

6.7.3.2 Simple Fixes

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

- Section 6.7.3.2.1, "Missing Version Information"
- Section 6.7.3.2.2, "Missing Saved Version"

6.7.3.2.1 Missing Version Information

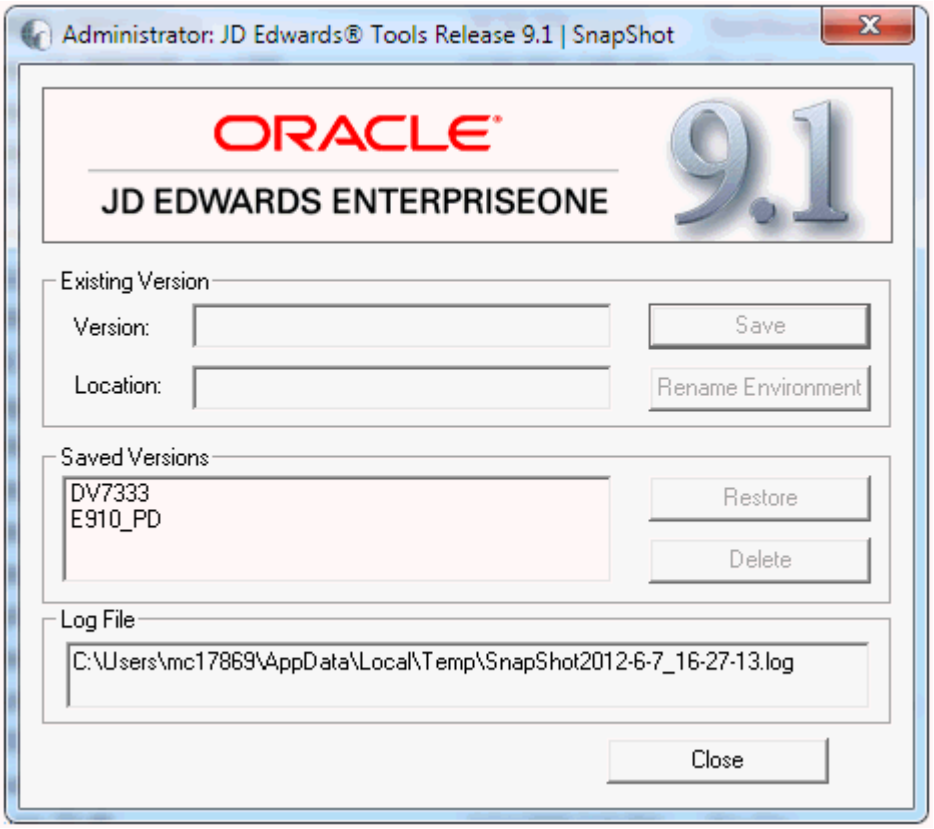


If the **Existing Version** fields are empty when you run `SnapShot.exe` and you are certain that a JD Edwards EnterpriseOne instance is active, it is likely that this file is missing:

`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`.

6.7.3.2.2 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.

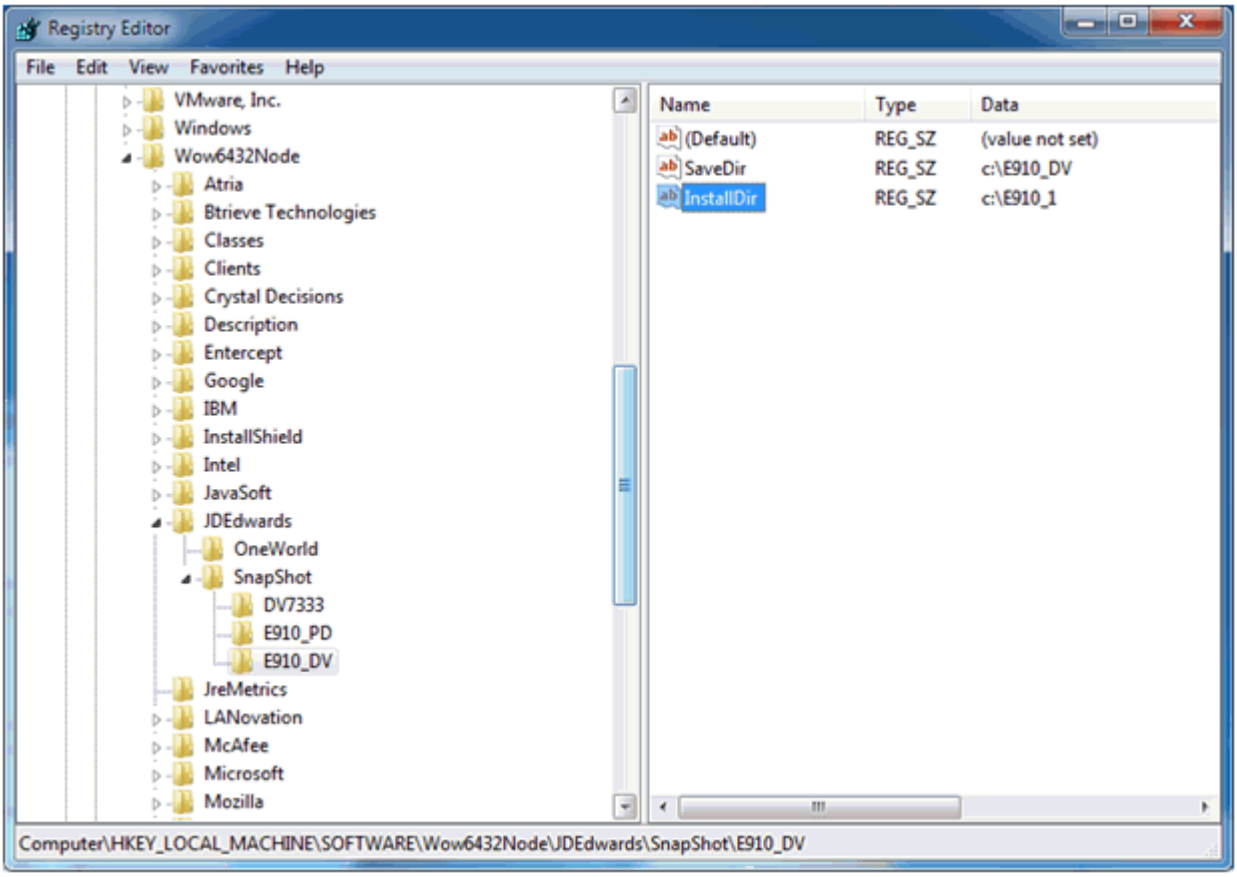
To resolve this issue, perform these steps:

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.


Registry Editor
File Edit View Favorites Help
VMware, Inc.
Windows
Wow6432Node
Atria
Btrieve Technologies
Classes
Clients
Crystal Decisions
Description
Entercept
Google
IBM
InstallShield
Intel
JavaSoft
JDEdwards
OneWorld
SnapShot
DV7333
E910_PD
E910_DV
JreMetrics
LANovation
McAfee
Microsoft
Mozilla
Name
Type
Data
(Default)
REG_SZ
(value not set)
SaveDir
REG_SZ
c:\E910_DV
InstallDir
REG_SZ
c:\E910_1
Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\SnapShot\E910_DV

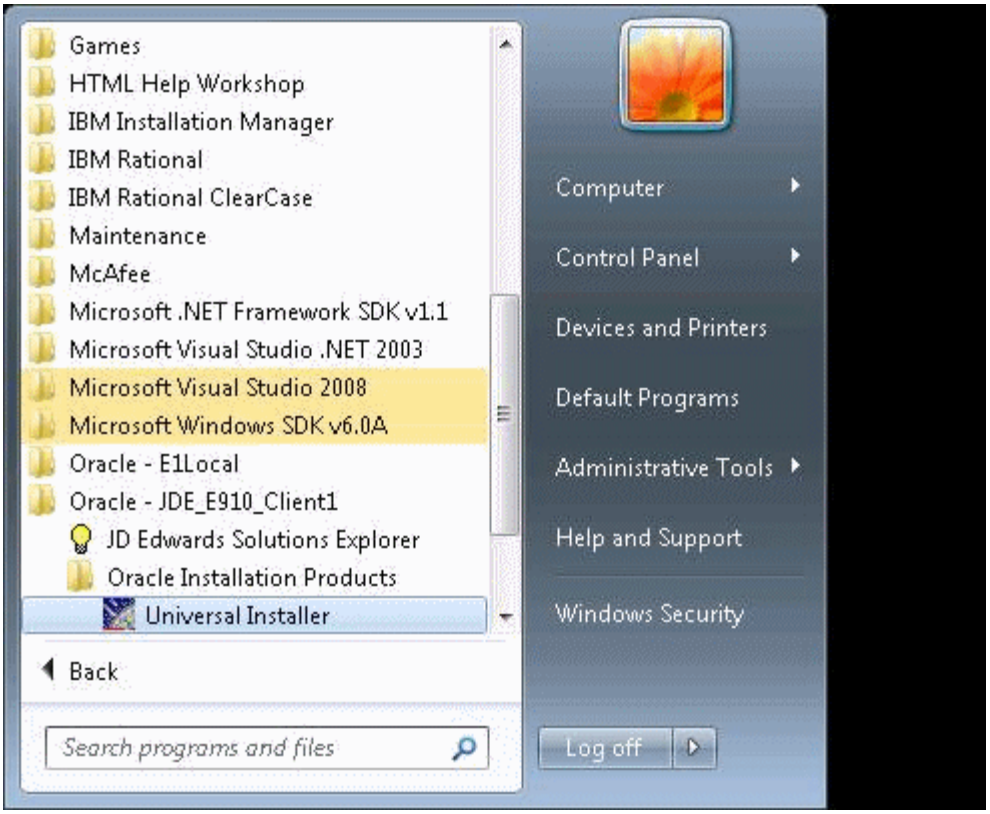
7

Deinstalling the Development Client

This chapter describes how to deinstall the Development Client.

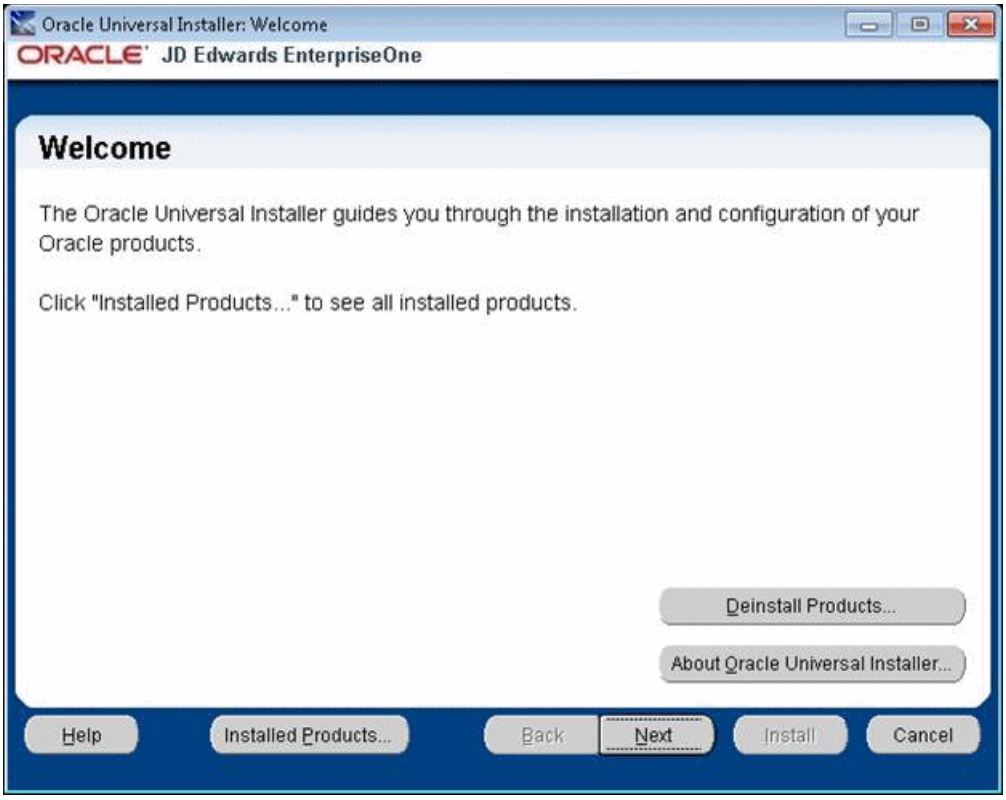
> **Caution:** Be sure to follow the guidelines in the preceding sections of this guide entitled:
>
> - Section 1.3, "Microsoft Windows Security"
> - Section 1.4, "Minimizing Locked Files"

To deinstall the Development Client:

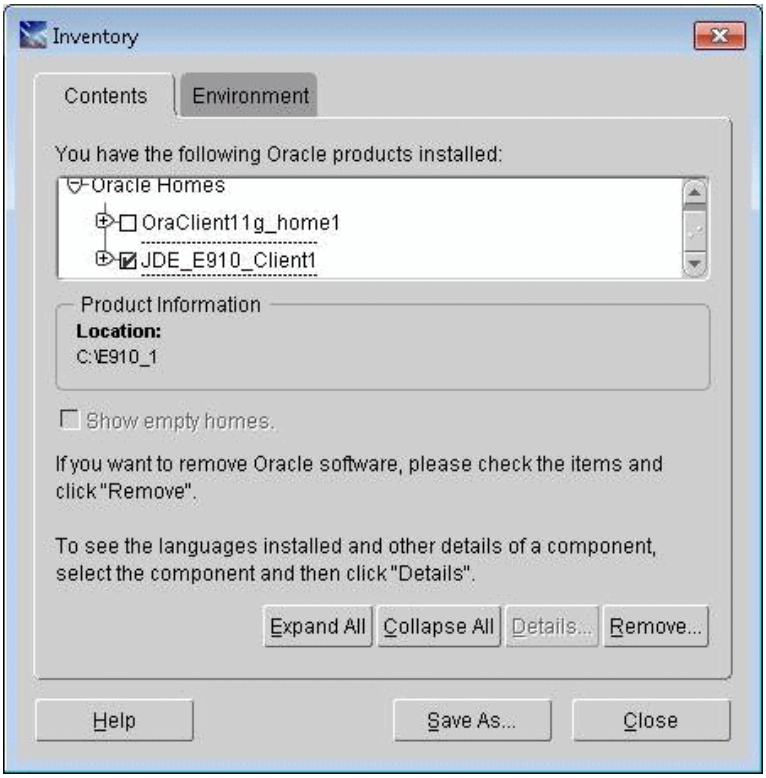


1. From the Start button, navigate to Programs > Oracle - *Oracle_Home_Name* > Oracle Installation Products > Universal Installer

   where *Oracle_Home_Name* is the name of the installation directory that you provided when installing the Development Client.



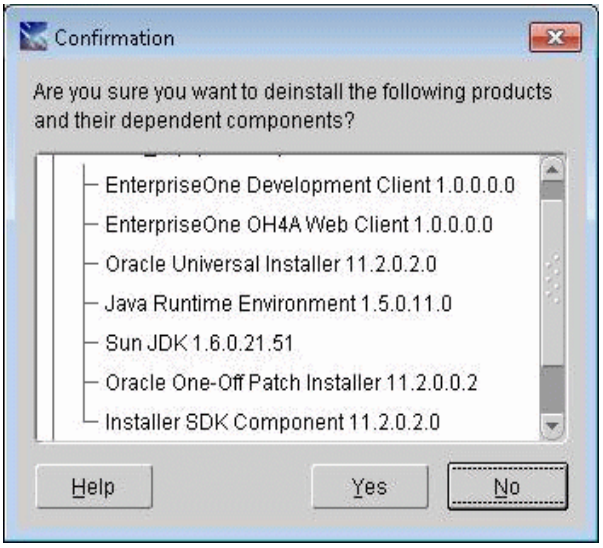
2. Click the **Deinstall Products…** button.



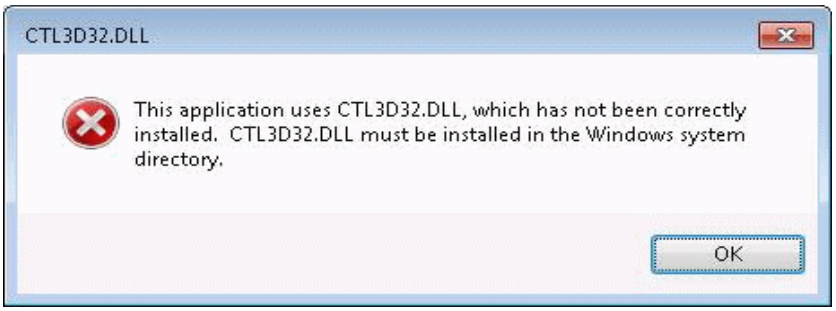
3. Turn on the check box next to the Development Client's Oracle Home.

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 selected from Start > Programs.

4. Click the **Remove…** button.



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



6. If you get the pop-up message box shown above, you can ignore it. Click the **OK** button.
7. Verify that the installation directory (Oracle Home) has been deleted. If it still exists, you can delete it.

8

Removing the Local Database

This chapter contains the following topics:

8.1 Deinstalling the OEE 11gR2 Local Database

When OEE 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 deinstall steps listed below.

Follow these steps to deinstall the OEE 11gR2 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 OEESetup.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 will prompt the user for information needed to deinstall 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\e1local]:

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 deinstall finishes, be sure that the `c:\Oracle\E1Local` directory no longer exists. If it does, you will need to manually delete it.

Caution: It is very important that no files exist in the E1Local subdirectory 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 deinstall cleanly for some reason, you will need to manually remove it. Follow the instructions in the Appendix of this guide entitled: Appendix C, "Manual Cleanup of a Deinstalled Oracle Database".

8.2 Deinstalling the OEE 10g Local Database

When OEE 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 deinstall steps listed below.

Follow these steps to deinstall the OEE 10g 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. From the Start button, navigate to Programs > Oracle - E1Local > Oracle Installation Products > Universal Installer
4. Click the Deinstall Products… button.
5. Turn on the check box next to the E1Local database's Oracle Home.

6. Click the Remove… button.
7. When prompted for confirmation, click the Yes button.

When the deinstall finishes, be sure that the c:\Oracle\E1Local directory no longer exists. If it does, you will need to manually delete it.

Caution: It is very important that no files exist in the E1Local subdirectory 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 deinstall cleanly for some reason, you will need to manually remove it. Follow the instructions in the appendix of this guide entitled: Appendix C, "Manual Cleanup of a Deinstalled Oracle Database".

8.3 Uninstalling the SSE Local Database

To uninstall the SSE local database:

1. From the Start button, navigate to Control Panel / Programs and Features.
2. Right-click on Microsoft SQL Server 2005 and select Uninstall.
3. Follow the prompts to remove all components.
4. At the Programs and Features screen, likewise uninstall any other products and features that contain the string "SQL Server 2005."

9

Troubleshooting the Installation Process

This section contains the following topic:

9.1 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.

9.1.1 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
```

On 32-bit versions of Microsoft Windows, the installation logs are at:

```
C:\Program Files\Oracle\inventory\logs
```

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

```
<Oracle_Home_dir>\cfgtoollogs
```

For example:

```
c:\E910\cfgtoollogs
```

Additional logs are located in subdirectories under:

```
<Oracle_Home_dir>\cfgtoollogs
```

For example:

```
c:\E910\cfgtoollogs\oui
```

9.1.2 OEE Local Database

The log for OEESetup.exe which spawns the OEE database installer (OUI) is c:\OEEInstall.log.

Because the 11.2 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 10.2 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.

9.1.3 SSE Local Database

The log for DotNetSSESetup.exe which kicks off the .NET Framework and SSE database installers is located in this directory:

- c:\DotNetSSESetup.log

The SSE database installer runs as a 32-bit program so its logs on a 64-bit version of Windows are in this directory:

C:\Program Files (x86)\Microsoft SQL Server\90\Setup Bootstrap\LOG

On a 32-bit version of Windows, the logs are located in this directory:

C:\Program Files\Microsoft SQL Server\90\Setup Bootstrap\LOG

A

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=DV910FA E1_INSTALL_MODE=Compact
ORACLE_HOME=c:\E910 ORACLE_HOME_NAME=JDE_E910_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	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=MyPas sword
PACKAGE_NAME	Name of package to install.	Yes	Yes	PACKAGE_ NAME=DV910FA
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	Case Sensitive?	Required?	Example
COPY_FILES	Specifies whether package's files should be copied to the target. Valid values are A string starting with 'N', 'n', 'F', or 'f' = do not copy the files Any other string = copy the files (default) Useful if you are repeating an installation that failed after all files were copied to the target machine.	No	No	COPY_FILES=Y

B

Manual Cleanup of a Deinstalled Development Client

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

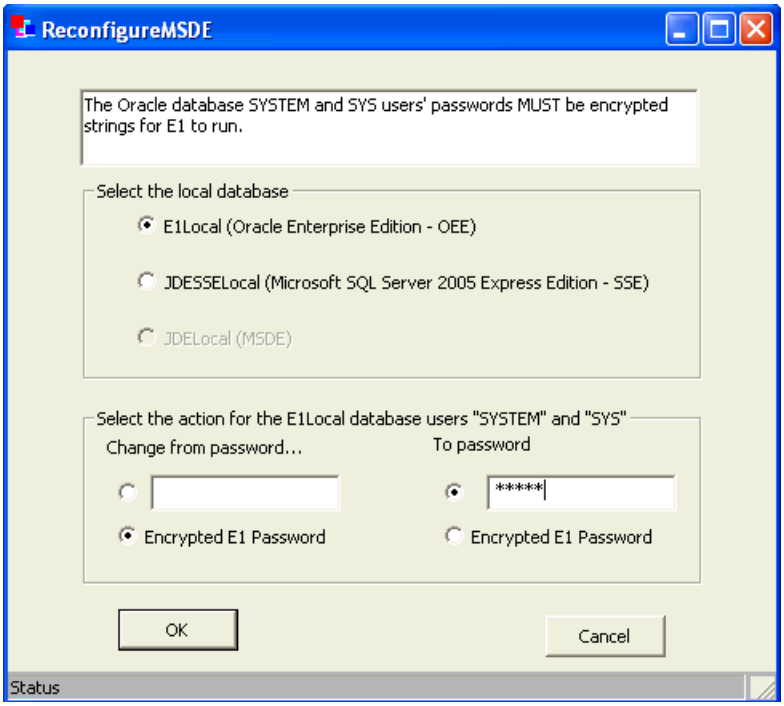
- Section 1.3, "Microsoft Windows Security"
- Section 1.4, "Minimizing Locked Files"

If the deinstallation 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 or detach the SSE databases.

   a. Decrypt the database password by running this program:

   ```
   c:\E910\system\bin32\ReconfigureMSDE.exe
   ```



   b. Near the top, select the type of local database.

c. Under Change from password, turn on "Encrypted E1 Password."

d. In the To password field, enter a password that you will remember.

e. Click OK.

f. If using OEE, perform the below steps. If using SEE, skip to the next step.

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 `ReconfigureMSDE.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.

g. If using SSE:

i. Download, install, and run the Microsoft SQL Server 2005 Management Studio Express. This program is free from the Microsoft Download Center.

ii. Sign in using the SA user account and the password that you specified in `ReconfigureMSDE.exe`.

iii. Note the EnterpriseOne databases.

iv. Detach each EnterpriseOne database.

v. Exit the program.

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.

64-bit Versions of Windows

```
\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ORACLE\KEY_<JDE_Client_Oracle_Home_Name>
```

32-bit Versions of Windows

```
\HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\KEY_<JDE_Client_Oracle_Home_Name>
```

3. Delete the following registry keys:

64-bit Versions of Windows

\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\BPMBroker

\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\HTMLWebServer

\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JDEdwards\OneWorld

32-bit Versions of Windows

\HKEY_LOCAL_MACHINE\SOFTWARE\JDEdwards\BPMBroker

\HKEY_LOCAL_MACHINE\SOFTWARE\JDEdwards\HTMLWebServer

\HKEY_LOCAL_MACHINE\SOFTWARE\JDEdwards\OneWorld

4. Delete the installation directory for the Development Client (for example, c:\E910).

   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 whichever of the following files applies:

      64-bit Versions of Windows

      c:\Program Files (x86)\Oracle\inventory\ContentsXML\inventory.xml

      32-bit Versions of Windows

      c:\Program Files\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 <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 <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.

C

Manual Cleanup of a Deinstalled Oracle Database

If the deinstallation 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 11gR2 or 10g releases of the OEE database.

1. Deinstall the Development Client.

   Be sure the Development Client is deinstalled before attempting to deinstall the database. This should ensure that no EnterpriseOne tablespaces are imported (attached) to the EnterpriseOne 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:

   Both 32-bit and 64-bit Versions of Windows

   `\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 "Oracle" and contain "E1Local" (on both 32- and 64-bit versions of Windows).

   64-bit Versions of Windows

   `\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ORACLE\KEY_E1Local`

5. Delete this directory:

   `c:\Oracle\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.

D

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.

E

Working With SnapShot on the Development Client (Base Release of Tools Release 9.1)

Note: Tools Release 9.1 Update 2. This appendix is applicable to the version of SnapShot that was included with the base release of JD Edwards EnterpriseOne Tools Release 9.1.

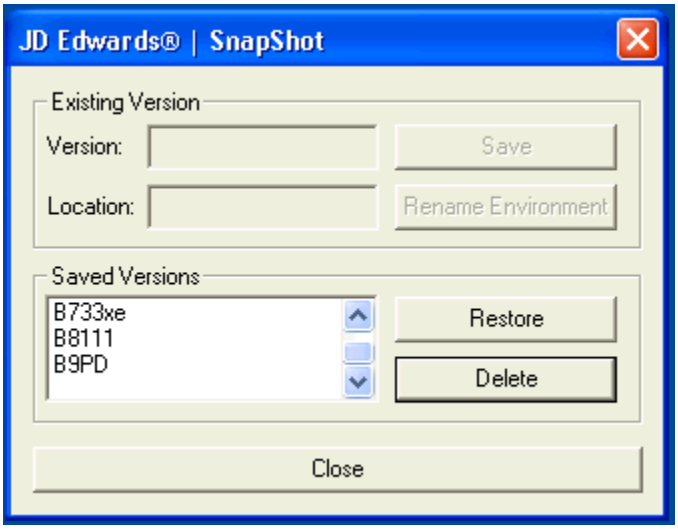
This section discusses these topics:

- Section E.1, "Understanding SnapShot"
- Section E.2, "Prerequisites"
- Section E.3, "Using Snapshot on the Development Client"
- Section E.4, "Manually Backing Up Files and Settings"
- Section E.5, "Set Logging for SnapShot Using the Registry"

E.1 Understanding SnapShot

The SnapShot 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.

Below is an example of SnapShot managing multiple tools releases including Xe, 8.11 SP1, and 9.0 (B9PD).



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

- A close button in the upper-right corner.
- The Existing Version area, which contains these fields and buttons:
  - Version field that lists the existing installed Development Client with the Save button adjacent to this field.
  - Location field with the Rename Environment button adjacent to this field.
- The Saved Versions area, which contains a field that lists saved versions. The example in this image shows the following versions: B733xe, B8111, and B9PD.
- The Restore and Delete buttons are adjacent to this field.
- The bottom of the form contains a Close button.

E.2 Prerequisites

This is a list of general considerations for using SnapShot:

- Make sure that you do not have a `JDE.INI` file open when you save or restore SnapShot.
- Make sure that you do not have the ODBC Data Source Administrator open when restoring a SnapShot.
- Make sure before installing a new Development Client into a new Oracle Home, 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.

E.3 Using Snapshot on the Development Client

Caution: Before using SnapShot on the Development Client, ensure that JDeveloper is not running.

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 9.1 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 9.1.

This section describes these tasks:

- Section E.3.1, "Starting SnapShot"
- Section E.3.2, "Saving a SnapShot"
- Section E.3.3, "Restoring a SnapShot"
- Section E.3.4, "Deleting a SnapShot"

E.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"
- 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:

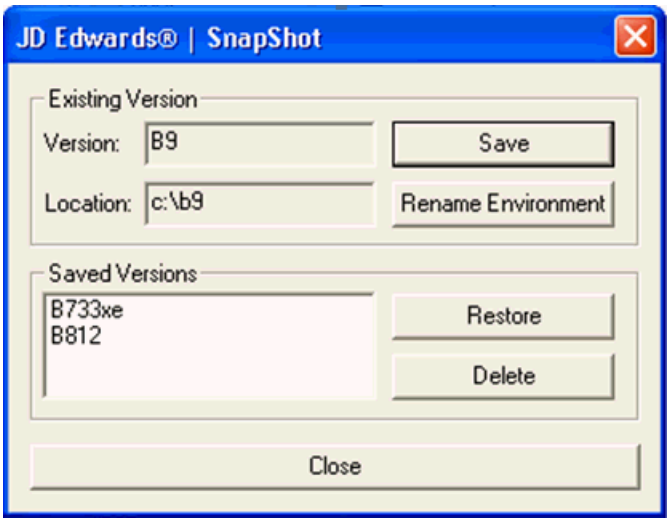
`<dev_client_installation_directory>\System\Bin32`

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:\E910`. If you attempt to run SnapShot from within the Development Client installation directory (for example, `c:\E910`), Snapshot will fail to rename the installation directory.

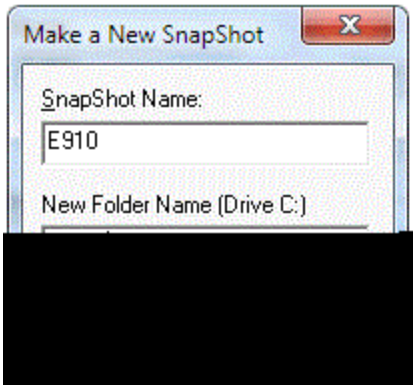
Tip: You can create a shortcut to `SnapShot.exe`, but you still must copy `SnapShot.exe` to a location outside the original installation directory where it was delivered.

E.3.2 Saving a SnapShot

To save a SnapShot:



1. On JD Edwards | SnapShot, click the **Save** button.



2. On Make a New SnapShot, complete these fields:

   - SnapShot Name

     Enter a name for the SnapShot that will be saved. You may choose any name, but a recommended scheme is to make it release specific, for example, Xe, B9, or E910.

   - New Folder Name

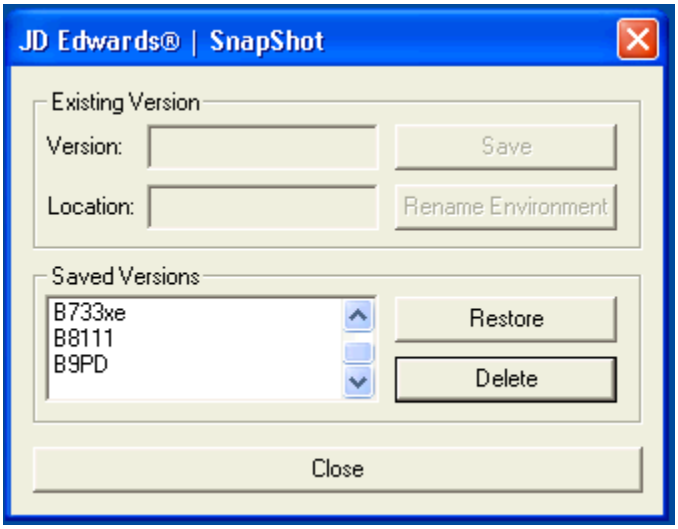
     Provide a directory in which the snapshot will be saved. The directory should start with a backslash and will be on the indicated drive.

3. Click the OK button.

   SnapShot saves a snapshot of the Development Client.

E.3.3 Restoring a SnapShot

To restore a SnapShot:

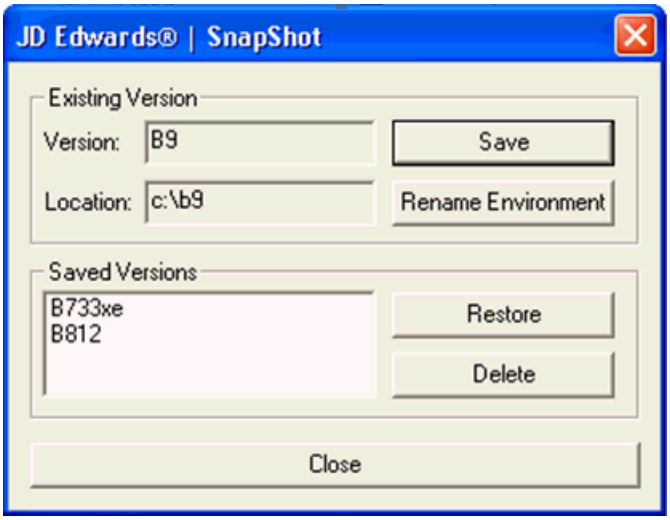


1. On JD Edwards | SnapShot, in the Saved Versions section, highlight the saved instance you want to restore.
2. Click the **Restore** button.

   SnapShot makes the selected instance active.

E.3.4 Deleting a SnapShot

To delete a SnapShot:



1. On JD Edwards | SnapShot, in the Saved Versions section, highlight the saved instance you want to delete.
2. Click the **Delete** button.

   SnapShot completely removes the instance from the Development Client.

E.4 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 files to ensure that your settings for that Development Client are secure.

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

The files to backup are listed below:

- `jde.ini`
- `regkeys*.dat`
- `package.inf`

E.5 Set Logging for SnapShot Using the Registry

Logging is controlled by adjusting registry settings that control SnapShot.

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."

To set the logging for SnapShot using the registry:

1. Open the Registry by navigating to Run > Regedit.
2. Navigate to this node:

   `\HKEY_LOCAL_MACHINE\Software\Wow6432Node\JDEdwards\Snapshot`
3. To enable logging, change the **LoggingEnabled** key value to 1 (where a value of 0 is off). If this key does not exist, create it as a **REG_SZ** type.
4. Change the **LoggingLevel** to a value between 1 and 5, where 1 provides the least amount and 5 provides the most amount of logging details. If this key does not exist, create it as a **REG_SZ** type.
5. Save the changes and exit the Registry.

   Logs will be located in the directory from which the `SnapShot.exe` program is being executed.