Oracle® Application Server
CDC Adapters Installation Guide
11g Release 1 (11.1.1)
E16097-02

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Preface

This preface covers the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

This manual is intended for Oracle integration administrators who perform the following tasks:

- Installing and configuring OracleAS CDC Adapters
- Diagnosing errors
- Using OracleAS to access CDC transactions

**Note:** You should understand the fundamentals of OracleAS, Oracle WebLogic, the UNIX and Microsoft Windows operating system before using this guide to install or administer OracleAS CDCAdapters.

**Note:** For the purposes of this version of the Oracle Weblogic Server, Oracle Application Server refers to the Oracle WebLogic Server and OracleAS refers to Oracle WLS.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at [http://www.oracle.com/accessibility/](http://www.oracle.com/accessibility/).
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Related Documents
For more information, see the following documents in the Oracle Other Product One Release 7.0 documentation set or in the Oracle Other Product Two Release 6.1 documentation set:

- Oracle Application Server Adapter Concepts Guide
- Oracle Application Server Adapter Installation Guide
- Oracle Application Server Adapter Concepts Guide
- Oracle Application Server Containers for J2EE User’s Guide
- Oracle Application Server Containers for J2EE Services Guide
- Oracle Application Server Containers for J2EE Security Guide

Conventions
The following text conventions are used in this document:

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

This book describes how to install Oracle Connect, Oracle Application Server CDC Adapters, and Oracle Studio.

This section includes the following topics:

- **Overview**
- **System Requirements**

1.1 Overview

CDC adapters integrate Oracle Application Server to capture and deliver changes made to legacy and mainframe data sources. These adapters include OracleAS CDC Adapter for Adabas, OracleAS CDC Adapter for DB2, OracleAS CDC Adapter for IMS/DB, OracleAS CDC Adapter for SQL Server, and OracleAS CDC Adapter for VSAM.

Table 1–1 describes the CDC adapters. These adapters are deployed as J2CA 1.5 resource adapters within an Oracle WebLogic container during installation.

<table>
<thead>
<tr>
<th>Adapter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OracleAS CDC Adapter for Adabas</td>
<td>Captures and delivers changes (such as insert, update, and delete operations) made to data in Adabas data sources.</td>
</tr>
<tr>
<td>OracleAS CDC Adapter for DB2</td>
<td>Captures and delivers changes (such as insert, update, and delete operations) made to data in DB2 data sources.</td>
</tr>
<tr>
<td>OracleAS CDC Adapter for IMS/DB</td>
<td>Captures and delivers changes (such as insert, update, and delete operations) made to data in IMS/DB data sources.</td>
</tr>
<tr>
<td>OracleAS CDC Adapter for SQL Server</td>
<td>Captures and delivers changes (such as insert, update, and delete operations) made to data in SQL Server data sources.</td>
</tr>
<tr>
<td>OracleAS CDC Adapter for VSAM</td>
<td>Captures and delivers changes (such as insert, update, and delete operations) made to data in VSAM data sources.</td>
</tr>
</tbody>
</table>

1.2 System Requirements

Before installing OracleAS Adapters for CICS, ensure that your computer meets the following requirements:

- **IBM z/OS Hardware and Software Requirements**
- **UNIX Hardware and Software Requirements**
- **Windows Hardware and Software Requirements**
1.2.1 IBM z/OS Hardware and Software Requirements

This section describes the following requirements for installing Oracle Connect on an IBM z/OS platform:

- Hardware Requirements
- Software Requirements

1.2.1.1 Hardware Requirements

The following table summarizes the hardware requirements for Oracle Connect.

<table>
<thead>
<tr>
<th>Hardware Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>An IBM zSeries computer</td>
</tr>
<tr>
<td>Memory</td>
<td>The minimum requirement is 4 MB for each connection. A connection is defined</td>
</tr>
<tr>
<td></td>
<td>as a connection to a server process or daemon. The actual memory requirement</td>
</tr>
<tr>
<td></td>
<td>depends on such things as the size of the database and the number of</td>
</tr>
<tr>
<td></td>
<td>databases accessed.</td>
</tr>
<tr>
<td>Disk Space (3380 and 3390</td>
<td>150 cylinders</td>
</tr>
<tr>
<td>disks)</td>
<td>150 cylinders</td>
</tr>
</tbody>
</table>

1.2.1.2 Software Requirements

The following table summarizes the software requirements for Oracle Connect.

<table>
<thead>
<tr>
<th>Software Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>IBM z/OS</td>
</tr>
<tr>
<td>CICS TP Monitor</td>
<td>V4R1 or higher (recommended to use CICS V6R1 or higher)</td>
</tr>
<tr>
<td></td>
<td>CICS EXCI support must be installed and IRCSTRT=YES must be specified in the</td>
</tr>
<tr>
<td></td>
<td>CICS initialization parameters, so that the IRC (Inter Region Communication)</td>
</tr>
<tr>
<td></td>
<td>starts. You can also set the IRC to open by issuing the following command:</td>
</tr>
<tr>
<td></td>
<td>CEMT SET IRC OPEN. In addition, the IBM group DFH$EXCI (or an equivalent</td>
</tr>
<tr>
<td></td>
<td>user-defined group) must be installed in the CICS region using the CEDA RDO</td>
</tr>
<tr>
<td></td>
<td>facility.</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>The operating system must be able to use the TCP/IP protocol for using the</td>
</tr>
<tr>
<td></td>
<td>Internet.</td>
</tr>
<tr>
<td>C Runtime Library</td>
<td>The C runtime library has all the standard C runtime programs.</td>
</tr>
<tr>
<td>Oracle Application</td>
<td>Oracle Application Server 11 (11.1.1.2).</td>
</tr>
<tr>
<td>Server</td>
<td></td>
</tr>
</tbody>
</table>

1.2.2 UNIX Hardware and Software Requirements

This section describes the following requirements for installing Oracle Connect on a UNIX platform:

- Hardware Requirements
1. Software Requirements

1.2.2.1 Hardware Requirements
The following table summarizes the hardware requirements for Oracle Connect on a UNIX platform.

**Table 1-4 UNIX Hardware Requirements**

<table>
<thead>
<tr>
<th>Hardware Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>RedHat Linux</td>
</tr>
<tr>
<td></td>
<td>Linux Suse</td>
</tr>
<tr>
<td></td>
<td>HP-UX</td>
</tr>
<tr>
<td></td>
<td>IBM AIX</td>
</tr>
<tr>
<td></td>
<td>Solaris Operating System (SPARC)</td>
</tr>
<tr>
<td>Disk Space</td>
<td>70 MB free disk space</td>
</tr>
</tbody>
</table>

1.2.2.2 Software Requirements
The following table summarizes the software requirements for Oracle Connect.

**Table 1-5 UNIX Software Requirements**

<table>
<thead>
<tr>
<th>Software Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>RedHat Linux EL3.0 and 4.0 (32 and 64-bit)</td>
</tr>
<tr>
<td></td>
<td>Linux SUSE SLES 9 and 10 (32 and 64-bit)</td>
</tr>
<tr>
<td></td>
<td>HP-UX PA-RISC 64-bit (11.11, 11.23)</td>
</tr>
<tr>
<td></td>
<td>IBM AIX 5L (64-bit)</td>
</tr>
<tr>
<td></td>
<td>Sun Solaris SPARC 2.8 and 2.9 (32 and 64-bit)</td>
</tr>
<tr>
<td></td>
<td>Sun Solaris SPARC 2.10 (64-bit)</td>
</tr>
<tr>
<td>Oracle Application Server</td>
<td>Oracle Application Server 11g (11.1.1.2)</td>
</tr>
</tbody>
</table>

1.2.3 Windows Hardware and Software Requirements
This section describes the following requirements for installing Oracle Studio and Oracle Connect when OracleAS Adapters for Tuxedo run on a Windows platform:

- Hardware Requirements
- Software Requirements

1.2.3.1 Hardware Requirements
The following table summarizes the hardware requirements for installing Oracle Connect on Windows.

**Table 1-6 Oracle Connect Hardware Requirements for Windows**

<table>
<thead>
<tr>
<th>Hardware Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>An Intel or 100% compatible computer based on a Pentium processor.</td>
</tr>
<tr>
<td>Memory</td>
<td>256 MB RAM.</td>
</tr>
<tr>
<td>Disk Space</td>
<td>40 MB free disk space.</td>
</tr>
</tbody>
</table>
1.2.3.2 Software Requirements
The following table summarizes the software requirements when installing Oracle Connect on Windows.

Table 1–7 Oracle Connect Software Requirements for Windows

<table>
<thead>
<tr>
<th>Software Component</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Microsoft Windows 2000 with service pack 3 or higher (32-bit)</td>
</tr>
<tr>
<td></td>
<td>Microsoft Windows XP Professional service pack 2 (32-bit)</td>
</tr>
<tr>
<td></td>
<td>Microsoft Windows Server 2003 service pack 2 (32 and 64-bit).</td>
</tr>
<tr>
<td></td>
<td>Microsoft Windows Server 2008 (32 and 64-bit)</td>
</tr>
<tr>
<td>Microsoft</td>
<td>Network transport protocol software, TCP/IP, included with Microsoft Windows.</td>
</tr>
</tbody>
</table>

1.2.4 Oracle Studio Requirements
The following are the hardware requirements for Oracle Studio:

- Processor: Intel or 100% compatible computer, based on a Pentium processor
- Memory: 256 MB
- Disk space: 120 MB of free disk space

You can install Oracle Studio on the following operating systems:

- Windows 2000 with Service Pack 4 or higher
  - Windows XP Professional with Service Pack 2 or higher
  - Windows Server 2003 with Service Pack 2 or higher
  - Windows Server 2008
  - Windows Vista
- The following Linux operating systems with GTK:
  - Red Hat Linux EL 4
  - Red Hat Linux 5.x
  - Oracle Enterprise Linux 4
  - Oracle Enterprise Linux 5.x
  - Linux SUSE 10

1.2.5 PS2 Patch Requirement
PS2 adapter users must install one or more patches from Oracle before working with Oracle Connect. You can download the patches from:


For further assistance, contact Oracle support at

http://www.oracle.com/support/contact.html.

SOA users download and install patch number 9654566.
OSB users download and install patch numbers 10208806 and 10065292.
Installing the OracleAS CDC Adapters

This chapter describes how to deploy and install the components necessary to work with an OracleAS CDC Adapter.

To work with the OracleAS CDC Adapters, you must run the installer, deploy the components, and then perform the installation procedures. You should perform these procedures as follows:

1. Run the OracleAS CDC Adapter installer. The installer copies the components to your working computer. See Using the OracleAS CDC Adapters Installer.

2. Deploy the components to the correct computer. Note that the J2CA 1.5 adapter and JDBC are automatically deployed to the correct location. See Deploying the Components.

3. Install Oracle Connect. For information about installing Oracle Connect:
   - See Installing Oracle Connect on an IBM z/OS Series Platform if you are working with the OracleAS CDC Adapter for Adabas, DB2, IMS/DB, or VSAM.
   - See Updating an Existing Oracle Connect Installation on Mainframe Platforms if you have already have an earlier version of Oracle Connect installed on a mainframe computer.
   - See Installing Oracle Connect on a UNIX Platform if you are using a staging area on a UNIX computer.
   - See Installing Oracle Connect on Windows if you are working with the OracleAS CDC Adapter for SQL Server and/or you are using a staging area on a Windows computer.

4. Install Oracle Studio on a Windows or Linux computer. For more information, see Installing Oracle Studio.

2.1 Using the OracleAS CDC Adapters Installer

The OracleAS CDC Adapter installer installs or copies the components necessary to work with the CDC adapters. You can use the OracleAS CDC Adapters Installers for Windows or The OracleAS CDC Adapters Installer for UNIX/Linux. For information on the necessary system requirements, see Windows Hardware and Software Requirements and UNIX Hardware and Software Requirements.

The installer extracts the following:

- The J2CA 1.5 CDC adapter that you are using. For a list of available adapters, see Oracle Application Server CDC Adapters.
■ JDBC.

■ Oracle Connect for z/OS, UNIX platforms, and Windows. You can install Oracle Connect on one or more computers and operating systems depending on the adapter you are working with and other requirements of your system.

■ Oracle Studio. Oracle Studio is used to configure the CDC adapters you are using. For information on how to use Oracle Studio, see the User Guide for the OracleAS CDC Adapter you are using. Oracle Studio can be installed on Windows or Linux operating systems. For more information, see Installing Oracle Studio. For information on Oracle Studio system requirements, see Oracle Studio Requirements.

For more information, see Running the Installer.

2.1.1 Running the Installer

An installation file is provided by Oracle. Select and open the installation file to run the installation wizard on the machine where the Oracle Application Server is installed. The following table shows the installation file names. Select the correct file for the system you are using.

<table>
<thead>
<tr>
<th>System/Platform</th>
<th>File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 32-bit versions¹</td>
<td>Oracle_cdc_windows_11_1_1_2.exe</td>
</tr>
<tr>
<td>UNIX/Linux 32-bit versions²</td>
<td>Oracle_cdc_unix_11_1_1_2.sh</td>
</tr>
</tbody>
</table>

¹ For a list of all supported Windows 32-bit versions, see Windows Hardware and Software Requirements.
² For a list of all supported UNIX/Linux 32-bit versions, see UNIX Hardware and Software Requirements.

Note: To run the installer on a UNIX/Linux computer, you must have a Java home.

After you open the correct file, run the installation wizard and enter the correct information. You must enter information about the following:

■ Installation Target
■ Destination Directory
■ Components

2.1.1.1 Installation Target

You can use the OracleAS CDC Adapters within the SOA environment, with the Oracle Data Integrator (ODI), or with the Oracle Service Bus (OSB).

You should select:

■ SOA if you are working within a SOA environment.
■ ODI if you are working with the Oracle Data Integrator (ODI).
■ OSB if you are working with the Oracle Service Bus (OSB).
■ SOA and ODI/OSB if you are working with SOA and one or both of ODI /OSB.
2.1.1.2 Destination Directory

You must define a directory or folder where the components are extracted. The installer extracts to the correct locations.

For more information on installing the Oracle Application Server, see the Oracle Application Server Installation Guide for the platforms you are working with.

The following describes the information you must enter on this page for the:

- **SOA Environment** (If you selected SOA or SOA and ODI\OSB on the Installation Target page).
- **ODI\OSB** (If you selected ODI or OSB on the Installation Target page).

**SOA Environment**

Enter the Oracle Home ($ORACLE_HOME) directory or folder. The installer extracts the components to the correct locations.

The components are extracted to the following path:

$ORACLE_HOME/soa/thirdparty/cdcAdapters/component directory

The component directory is the folder or directory where each component is located. For more information see, Deploying the Components.

**ODI\OSB**

Enter the root directory or directory path where you want to extract the components.

The following is an example of the directory or folder path. You can create a path with additional subfolders or subdirectories.

root directory/component directory

For more information, see Deploying the Components.

2.1.1.3 Components

On this page, select the adapter you are working with. The installer automatically extracts the correct components to the selected folder or directory, including the correct platform installation program for Oracle Connect and Oracle Studio. In addition you must also select the platform for the machine with your staging area.

To select the correct components do the following.

- Select the OracleAS Adapter you are working with.
- Select the platform that you are using for the staging area machine.

Figure 2–1 shows the Select Components page.
Deploying the Components

2.2 Deploying the Components

After you run the installer you copy and install the components to the computer where they are used. You install each of the components as follows:

- J2CA 1.5 CDC Adapter
- JDBC
- Oracle Connect
- Oracle Connect
- Adapter Extension Template

2.2.1 J2CA 1.5 CDC Adapter

The J2CA CDC adapters is copied and deployed automatically when you run the installer. It is copied to the following path:
2.2.2 JDBC

JDBC is copied to the correct location automatically when you run the installer. It is copied to the following path:

- For SOA environments:
  
  $ORACLE_HOME/soa/thirdparty/CDCAdapters/JDBC

- For ODI and OSB:
  
  root directory/.../.../.../JDBC

**Note:** You determine the path. Intermediate levels are not required.

2.2.3 Oracle Connect

Oracle Connect is copied to the following location:

- For SOA environments:
  
  $ORACLE_HOME/soa/thirdparty/CDCAdapters/OracleConnect

- For ODI and OSB:
  
  root directory/.../.../.../OracleConnect

**Note:** You determine the path. Intermediate levels are not required.

Oracle Connect must be deployed to the computer or computers depending on the OracleAS CDC Adapter that you are using, as follows:

- On the computer with the OracleAS CDC Adapter that you are using:
  
  - For OracleAS CDC Adapter for Adabas, install Oracle Connect on an IBM z/OS Series Platform.
  
  - For OracleAS CDC Adapter for DB2, install Oracle Connect on an IBM z/OS Series Platform.
  
  - For OracleAS CDC Adapter for IMS/DB, install Oracle Connect on an IBM z/OS Series Platform.
  
  - For OracleAS CDC Adapter for VSAM, install Oracle Connect on an IBM z/OS Series Platform.
  
  - For OracleAS CDC Adapter for SQL Server, install Oracle Connect on Windows.

- On the computer where that you are using as the staging area for the change data capture. For a staging area, you can install Oracle Connect on Windows or on a UNIX Platform.
2.2.4 Oracle Studio

When you run the installer, the Oracle Studio installation file is copied to the following location:

- For SOA environments:
  
  \$ORACLE_HOME/soa/thirdparty/CDCAdapters/OracleStudio

- For ODI and OSB:
  
  root directory/.../.../OracleStudio

  Note: You determine the path. Intermediate levels are not required.

Install Oracle Studio on a Windows computer or a Linux platform computer. For more information, see Installing Oracle Studio.

2.2.5 Adapter Extension Template

The Adapter Extension Template is copied to the following location:

- For SOA Environments:
  
  \$ORACLE_HOME/soa/thirdparty/CDCAdapters/Adapter Type

- For ODI and OSB:
  
  root directory/.../.../Adapter Type

  Note: You determine the path. Intermediate levels are not required.

2.3 Verifying the Resource Adapter Version

After running the installer, you can verify the version of the resource adapter. To verify the version, perform the following:

1. Change the directory as follows:
   - For SOA environments:
     Change the directory to:
     
     \$ORACLE_HOME/soa/thirdparty/CDCAdapters/JCA
   - For ODI and OSB:
     Change the directory to:
     
     <installer target directory>/JCA


2.4 Installing Oracle Connect on an IBM z/OS Series Platform

This section explains how to install Oracle Connect. This section includes the following:

- Installation Worksheet
- Preinstallation Instructions
- Importing the Installation Kit
- Installation Instructions
- Postinstallation Instructions
2.4.1 Installation Worksheet

Verify that you have all the information detailed in the following installation worksheets, so you can refer to it during the configuration process.

**Table 2–2 Preinstallation Information**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Required Information</th>
<th>Default</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Operating system</td>
<td>-</td>
<td>z/OS</td>
</tr>
<tr>
<td></td>
<td>- Disk space</td>
<td>-</td>
<td>150 cylinders</td>
</tr>
<tr>
<td></td>
<td>- Memory</td>
<td>-</td>
<td>The minimum requirement is 4MB for each connection. A connection is defined as a connection to a server process or daemon. The actual memory requirement depends on such things as the size of the database and the number of databases accessed.</td>
</tr>
<tr>
<td></td>
<td>- Installation high-level qualifier</td>
<td>ac11112</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Volume</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Unit</td>
<td>3390</td>
<td>SMS only: unit where SMS resides.</td>
</tr>
<tr>
<td></td>
<td>- Output class</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- JCL job card</td>
<td>-</td>
<td>An optional card (up to 6 lines) to replace the prefix job (entered as it appears in the job)</td>
</tr>
<tr>
<td></td>
<td>- ISPF load library name</td>
<td>ISPSISPLOAD</td>
<td>-</td>
</tr>
<tr>
<td>CICS</td>
<td>CICS EXCI load library name</td>
<td>CICS.CICS.SDFHEXCI</td>
<td>-</td>
</tr>
</tbody>
</table>

**Table 2–3 Required Permissions**

**Permission**

Permission to define an APF-authorized library

Permission to write to an active proclib, such as user.proclib

Permission to read the CICS EXCI library

Permission to update the security manager, such as RACF

Optionally, permission to specify an output class for Oracle Connect output
Table 2–4  Installation Checklist

<table>
<thead>
<tr>
<th>Step</th>
<th>Comment/Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>tso profile noprefix</td>
<td>Ensures that the user name is not used as part of the data set name allocated in the next steps</td>
</tr>
<tr>
<td>Allocate dataset: [HLQ].TRANSMIT.KIT</td>
<td>130 tracks (3390), format=FB, record length=80, block size=3120</td>
</tr>
<tr>
<td>Allocate dataset: [HLQ].TRANSMIT.LOAD</td>
<td>500 tracks (3390), format=FB, record length=80, block size=3120</td>
</tr>
<tr>
<td>FTP files to z/OS</td>
<td>FTP using binary mode</td>
</tr>
<tr>
<td>RECEIVE INDSNAME('[HLQ].TRANSMIT.KIT')</td>
<td>-</td>
</tr>
<tr>
<td>da('[HLQ].TRANSMIT.LIB') UNIT(unit) VOLUME(volume)</td>
<td>-</td>
</tr>
<tr>
<td>EX [HLQ].TRANSMIT.LIB(PREPARE)</td>
<td>Successful MAXCC is 0, 4 or 8</td>
</tr>
<tr>
<td></td>
<td>BUILDKIT.SRC, BUILDKIT.LOAD, and BUILDKIT.GENDEMO created</td>
</tr>
<tr>
<td>EX [HLQ].BUILDKIT.SRC(NAVINST)</td>
<td>Successful MAXCC is 0 or 4</td>
</tr>
</tbody>
</table>

2.4.2 Preinstallation Instructions

Before starting the installation, ensure that the following information is available:

- The output class for the installation output if you do not want to use the default value, which is A.
- The unit where SMS resides. If you use SMS to manage all data sets, then you cannot provide unit and volume information.

Before starting the installation, ensure that you have the following permissions:

- Permission to define an APF-authorized library.
- Permission to write to an active proclib, such as user.proclib.
- Permission to read the CICS EXCI library.
- Permission to update the security manager, such as RACF

Note: Optionally, ensure that you have permission to specify an output class for Oracle Connect output. Assigning a device which is set on HOLD prevents the loss of log information when Oracle Connect started tasks finish.

Oracle Connect for the IBM z/OS platform is contained in the following data sets:

- ac11112.TRANSMIT.KIT
- ac11112.TRANSMIT.LOAD

2.4.3 Importing the Installation Kit

Perform the following steps on the Mainframe:

1. Run the following command:
   
   tso profile noprefix
The user name is not used as part of the data set name. On some systems this is the default.

2. Allocate data sets with the following space for each of these files:
   - *nnn.TRANSMIT.KIT* = 130 tracks (3380 and 3390 disks)
   - *nnn.TRANSMIT.LOAD* = 500 tracks (3380 and 3390 disks)

For each data set: RECFCM=FB and LRECL=80. The block size is 3120.

Where *nnn* represents the high-level qualifier you want to assign for the Oracle Connect installation. Assign the high-level qualifier you specified in the preinstallation procedure. The default value is ac11112.

3. Using FTP, copy *ac11112.TRANSMIT.KIT* and *ac11112.TRANSMIT.LOAD* in the binary mode to the mainframe.

### 2.4.3.1 Transferring the Kit to the Data Set

You must move the contents of the kit to the mainframe computer in the data set that you allocated. When you copy the contents of the kit, you see that the contents are now used.

Perform the following steps to copy the Oracle Connect installation kit contents to the mainframe:

1. Extract the compressed file to a folder on a computer running Microsoft Windows.
2. Open the Command console on the Windows computer.
3. Type `FTP` and the name of the mainframe computer where you want to connect. This creates an FTP connection to the mainframe machine. You may have to enter a user name and password to use the machine.
4. Type `bin` to transfer binary data.
5. Enter the following command to transfer the data from the `.KIT` file to the mainframe computer:
   ```
   put ac11112.transmit.kit 'nnn.transmit.kit' [replace]
   ```
   where:
   - *ac11112.transmit.kit* is the name of your installation file.
   - *replace* ensures that any data on the volume where the kit is installed is overwritten.
6. Enter the following command to transfer the data from the `.LOAD` file to the mainframe computer:
   ```
   put ac11112.transmit.load 'nnn.transmit.load' [replace]
   ```
7. Close the FTP connection.

### 2.4.4 Installation Instructions

Perform the following steps to install Oracle Connect:

1. Run the following command at the TSO prompt:
   ```
   RECEIVE INDSNAME('nnn.TRANSMIT.KIT')
   ```
2. Enter the following when prompted for the restore parameters:
   da('nnn.TRANSMIT.LIB') [UNIT(unit) VOLUME(volume)]

   This extracts the nnn.TRANSMIT.LIB library from the nnn.TRANSMIT.KIT kit to the specified unit and volume. If a unit and volume are not specified then the library is extracted to the current unit and volume.

3. In the Data Set List Utility screen, type the name of the high-level qualifier on the Dsname Level line. This returns a list of the files. Verify that the nnn.TRANSMIT.LIB file was created.

4. In the Command column next to the nnn.TRANSMIT.LIB, type M.

5. Execute the PREPARE member of the nnn.TRANSMIT.LIB library:
   ex PREPARE

   Follow the instructions in the Response column in the following table for each entry in the Screen column.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO YOU WANT TO USE SMS MANAGED STORAGE FOR THIS INSTALLATION Y/N [N] :</td>
<td>To manage the storage using SMS, then answer Y, otherwise answer N.</td>
</tr>
<tr>
<td>ENTER THE STORCLASS FOR INSTALLATION TEMP DATASETS [ ] :</td>
<td>This prompt is displayed only if SMS is used to manage the installation (you answered Y to the first prompt). Enter the storage class.</td>
</tr>
<tr>
<td>ENTER THE UNIT NAME FOR INSTALLATION TEMP DATASETS [3390] :</td>
<td>If a storage class is not specified, then enter the unit name for temporary data sets used during the installation procedure.</td>
</tr>
<tr>
<td>ENTER THE VOLUME NAME FOR INSTALLATION TEMP DATASETS :</td>
<td>This prompt is displayed only if SMS is not used to manage the installation (you answered N to the first prompt). The volume name for temporary data sets used during the installation procedure.</td>
</tr>
<tr>
<td>ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A] :</td>
<td>Enter the output class only if you do not want the default class used (the default is A).</td>
</tr>
<tr>
<td>DO YOU WANT TO USE THE DEFAULT JOB CARD Y/N [Y]</td>
<td>A job card is displayed. To use a replacement card, then it must be entered as it appears in the job. You can enter up to six lines. Enter a blank card to end input. If you do not enter a card, then the Oracle Connect default card is used.</td>
</tr>
<tr>
<td>DO YOU WANT TO PERFORM A MANUAL (M) OR AUTOMATIC (A) INSTALLATION [A] :</td>
<td>To review the JCL used to install Oracle Connect, before it is submitted, then respond M for a manual installation.</td>
</tr>
<tr>
<td>PLEASE REVIEW AND SUBMIT FOR EXECUTION THE HLQ.TRANSMIT.LIB(INSTJO)</td>
<td>This prompt is displayed only if a manual installation is requested (you answered M to the previous prompt).</td>
</tr>
</tbody>
</table>
The following libraries are generated:

```
nnn.BUILDKIT.LOAD
nnn.BUILDKIT.SRC
nnn.BUILDKIT.GENDEMO
```

Where nnn is the high-level qualifiers you assigned in step 1.

6. In the nnn.BUILDKIT.SRC library, run the NAVINST member, as shown:

```
ex NAVINST
```

Follow the instructions in the Response column in the following table for each entry in the Screen column.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO YOU WANT TO USE SMS MANAGED STORAGE FOR THIS INSTALLATION Y/N [N]:</td>
<td>To manage the storage using SMS, then answer Y, otherwise answer N.</td>
</tr>
<tr>
<td>THE SOFTWARE WILL BE INSTALLED UNDER THE HIGH LEVEL QUALIFIER THAT YOU WILL CHOOSE.</td>
<td>The high-level qualifier for the installation (referred to as INSTROOT throughout this guide) You can use multiple high-level qualifiers (such as ACME.DEV.VA10). The total length must be less than or equal to twenty characters. The qualifiers can be the same as the ones used for the installation (step 1). The words transmit and buildkit cannot be used as high-level qualifiers.</td>
</tr>
<tr>
<td>ENTER THE HIGH LEVEL QUALIFIER ['QUALIFIER']:</td>
<td></td>
</tr>
<tr>
<td>ENTER THE STORCLASS FOR TEMP DATASETS ['STORCLASS']:</td>
<td>This prompt is displayed only if SMS is used to manage the installation (you answered Y to the first prompt). Enter the storage class</td>
</tr>
<tr>
<td>ENTER THE UNIT NAME FOR INSTALLATION TEMP DATASETS [3390]:</td>
<td>The unit name for temporary data sets used during the installation procedure.</td>
</tr>
<tr>
<td>ENTER THE VOLUME NAME FOR INSTALLATION TEMP DATASETS:</td>
<td>This prompt is displayed only if SMS is not used to manage the installation (you answered N to the first prompt). The volume name for temporary data sets used during the installation procedure</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES]:</td>
<td>Confirm the entered details</td>
</tr>
<tr>
<td>ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A]:</td>
<td>Enter the output class for Oracle Connect output. Assigning a device which is set on HOLD prevents the loss of log information when the Oracle Connect started tasks finish (the default is A).</td>
</tr>
<tr>
<td>DO YOU WANT TO USE THE DEFAULT JOB CARD Y/N [Y]</td>
<td>A job card is displayed. To use a replacement card, then it must be entered as it appears in the job. You can enter up to six lines. Enter a blank card to end input. If you do not enter a card, then the Oracle Connect default card is used.</td>
</tr>
</tbody>
</table>
7. Continue with the Data Source Configuration.

### 2.4.5 Data Source Configuration Instructions

Install the data source according to the OracleAS CDC adapter you are using:

- Installing OracleAS Adapter for Adabas
- Installing OracleAS Adapter for DB2
- Installing OracleAS CDC Adapter for IMS/DB
- Installing OracleAS CDC Adapter for VSAM

#### 2.4.5.1 Installing OracleAS Adapter for Adabas

In the `nnn.BUILDKIT.SRC` library, execute the `ADADB` member:

```
ex ADABAS
```

Follow the instructions in the Response column for each entry in the Screen column.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER THE ADABAS SVC NUMBER</td>
<td>Enter the Adabas SVC number for your Adabas system</td>
</tr>
<tr>
<td>ENTER THE ADABAS DATABASE NUMBER</td>
<td>Enter the Adabas database number for your Adabas system</td>
</tr>
<tr>
<td>ENTER THE ADABAS LOAD LIBRARY NAME</td>
<td>Enter the Adabas Load Library name for your Adabas system</td>
</tr>
<tr>
<td>ENTER THE UNIT FOR ADABAS LOAD LIBRARY</td>
<td>Enter the Adabas Load Library unity for your Adabas system</td>
</tr>
<tr>
<td>YOUR ADABAS SVC IS:</td>
<td>This is a summary of the Adabas questions. Check the summary to be sure all is correct. You can select:</td>
</tr>
<tr>
<td>THE DATABASE NUMBER IS:</td>
<td>- Yes, to use the Adabas database as configured</td>
</tr>
<tr>
<td>THE ADABAS LOAD LIBRARY NAME IS:</td>
<td>- No, to not use the Adabas database</td>
</tr>
<tr>
<td>THE ADABAS LOAD LIBRARY UNIT IS:</td>
<td>- Quit, to leave the ADABAS process</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT):</td>
<td>YES:</td>
</tr>
</tbody>
</table>
The installation is completed. All JCL jobs and REXX procedures are written to the \texttt{INSTROOT.USERLIB} library. \texttt{INSTROOT} is the high-level qualifier for the installation.

\subsection*{2.4.5.2 Installing OracleAS Adapter for DB2}

In the \texttt{nnn.BUILDKIT.SRC} library, execute the \texttt{DB2DB} member:

\texttt{ex DB2}

Follow the instructions in the Response column for each entry in the Screen column.

\begin{table}[ht]
\centering
\caption{DB2Adapter Installation Prompts and Responses}
\begin{tabular}{|l|l|}
\hline
\textbf{Screen} & \textbf{Response} \\
\hline
Enter the DB2 HLQ & Enter the HLQ where DB2 is installed. \\
Enter the DB2 subsystem name & Enter the IDB2 subsystem. \\
The database DB2 resides on this machine & This is a summary of the DB2 questions. Check the summary to be sure all is correct. \\
The DB2 subsystem name is: & \begin{itemize}
  \item Yes, to use the DB2 database as configured
  \item No, to not use the DB2 database
  \item Quit, to leave the DB2 process
\end{itemize} \\
Please confirm (YES/NO/QUIT):YES & \\
\hline
\end{tabular}
\end{table}

The installation is completed. All JCL jobs and REXX procedures are written to the \texttt{INSTROOT.USERLIB} library. \texttt{INSTROOT} is the high-level qualifier for the installation.

\subsection*{2.4.5.3 Installing OracleAS CDC Adapter for VSAM}

In the \texttt{nnn.BUILDKIT.SRC} library, run the \texttt{VSAM} member:

\texttt{ex VSAM}

Follow the instructions in the Response column in the following table for each entry in the Screen column.

\begin{table}[ht]
\centering
\caption{VSAM Adapter-Specific Installation Prompts and Responses}
\begin{tabular}{|l|l|}
\hline
\textbf{Screen} & \textbf{Response} \\
\hline
Do you want Oracle Connect for Legacy Adapter to work with VSAM under CICS (YES/NO) [NO]: & Answer YES to this prompt to access VSAM data under CICS. \\
Enter the CICS EXCI load library name [CICSTS13.CICS.SDFHEXCI]: & If you responded YES to working with VSAM under CICS, then enter the CICS EXCI load library name only if you do not want the default. \\
Please confirm (YES/NO/QUIT) [YES]: & If you responded YES to working with VSAM under CICS, then confirm the entered details. \\
Enter the ISPF load library name [ISPSISPLoad]: & Enter the ISPF load library name only if you do not want the default. \\
\hline
\end{tabular}
\end{table}
The installation is completed. All JCL jobs and REXX procedures are written to the \texttt{INSTROOT.USERLIB} library. \texttt{INSTROOT} is the high-level qualifier for the installation.

### 2.4.5.4 Installing OracleAS CDC Adapter for IMS/DB

In the \texttt{nnn.BUILDKIT.SRC} library, execute the \texttt{IMSDB} member:

\begin{verbatim}
  ex  IMSDB
\end{verbatim}

Follow the instructions in the Response column in for each entry in the Screen column.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A]:</td>
<td>Enter the output class for Oracle Connect output. Assigning a device which is set on \texttt{HOLD} prevents the loss of log information when the Oracle Connect started tasks finish (the default is A).</td>
</tr>
<tr>
<td>DO YOU WANT TO USE THE DEFAULT JOB CARD Y/N [Y]</td>
<td>A job card is displayed. To use a replacement card, then it must be entered as it appears in the job. You can enter up to six lines. Enter a blank card to end input. If you do not enter a card, then the Oracle Connect default card is used.</td>
</tr>
</tbody>
</table>

The installation is completed. All JCL jobs and REXX procedures are written to the \texttt{INSTROOT.USERLIB} library. \texttt{INSTROOT} is the high-level qualifier for the installation.

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER DBD LIBRARY NAME</td>
<td>Enter the IMS DBD Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PSB LIBRARY NAME</td>
<td>Enter the IMS PSB Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER RES LIBRARY NAME</td>
<td>Enter the IMS RES Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PROC LIBRARY NAME</td>
<td>Enter the IMS PROC Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PGM LIBRARY NAME</td>
<td>Enter the IMS PGM Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER YOUR PSB NAME</td>
<td>Enter the name of the PSB file with the name of your IMS database.</td>
</tr>
<tr>
<td>YOUR DBDLIB IS:</td>
<td>This is a summary of the IMS questions. Check the summary to be sure all is correct. You can select:</td>
</tr>
<tr>
<td>YOUR PSBLIB IS:</td>
<td>Yes, to use the IMS database as configured</td>
</tr>
<tr>
<td>YOUR RESLIB IS:</td>
<td>No, to not use the IMS database</td>
</tr>
<tr>
<td>YOUR PROCLIB IS:</td>
<td>Quit, to leave the CUST process</td>
</tr>
<tr>
<td>YOUR PGMCLIB IS:</td>
<td></td>
</tr>
<tr>
<td>YOUR PSBNNAME IS:</td>
<td></td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT): [YES]</td>
<td></td>
</tr>
<tr>
<td>DO YOU WANT ORACLE CONNECT TO WORK WITH IMS/DB UNDER CICS</td>
<td>Answer Y for Oracle Connect to work with IMS/DB under CICS, otherwise answer N.</td>
</tr>
<tr>
<td>ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI]:</td>
<td>Enter the CICS EXCI load library name only if you do not want the default</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES]</td>
<td>Confirm the entered details</td>
</tr>
</tbody>
</table>
2.4.6 Postinstallation Instructions

The following postinstallation tasks must be done to work with Oracle Connect:

- Postinstallation Procedures
- Starting the Daemon
- Setting Up Oracle Connect for Reentrancy

2.4.6.1 Postinstallation Procedures

Perform the following procedures after completing the installation, to configure Oracle Connect.

- Allocate a data set for `INSTROOT.DEF.BRANDBIN`, using 1 track and with `RECFM=VB` and `LRECL=256`. The block size is 6233.

  `INSTROOT` is the high-level qualifier where Oracle Connect is installed.

- Using FTP, copy the `BRANDBIN` file, in the binary mode, from the `Oracle Connect\CICS Legacy Adapter` directory to the mainframe, to `INSTROOT.DEF.BRANDBIN`.

- Define the `LOADAUT` library as an APF-authorized library

---

**Note:** To define a DSN as APF-authorized, in the SDSF screen enter the following command:

```
* /setprog apf,add,dsn=INSTROOT.loadaut,volume=vol002
```

Where `vol002` is the volume where you installed Oracle Connect and `INSTROOT` is the high-level qualifier where Oracle Connect is installed.

If the site uses SMS, then when defining APF-authorization in the SDSF screen, enter the following command:

```
* /setprog apf,add,dsn=INSTROOT.loadaut,SMS
```

Ensure that the library is APF-authorized, even after an IPL (restart) of the computer.

- Move the `INSTROOT.USERLIB(ATTDÆMN)` and `INSTROOT.USERLIB(ATTSRVR)` members to any active proclib, such as `user.proclib`. The `ATTDÆMN` and `ATTSRVR` members are run as started tasks.

  If you decide to change the name of the `ATTSRVR` member when you move it to a general high-level qualifier, then change the name specified in the `StartupScript` parameter in the daemon configuration to the new name:

  - Run `INSTROOT.USERLIB(NAVCMD)` and enter `EDIT DAEMON IRPCDINI` at the prompt.

  - Change the `startupScript` parameter from `ATTSRVR` to the new name for the server:

    ```xml
    <Workspace name="Navigator"
    startupScript="NEW_NAME"
    serverMode="reusable"
    ... />
    ```

---
Exit and save the changes.

Change the following line in the ATTDAEMN script to include the IP address and port of the IBM z/OS platform.

For example, before:

```bash
// PARM='-B START IRPCDINI'
```

After:

```bash
// PARM='-B -L ip_address:2551 START IRPCDINI'
```

Where `ip_address` is ip address of the computer, 2551 is the default port for starting the daemon and IRPCDINI is the default daemon configuration.

The ATTDAEMN and ATTSRVR started tasks need permission to use an Open Edition TCP/IP stack. The owner must be a user with OMVS segment defined and OMVS UID=0000000000.

In the security manager, such as RACF, define ATTDAEMN and ATTSRVR with a started task class and a general profile that enables the following:

- Permission to issue master console commands.
- START authority for the ATTSRVR job.
- Access to an Open z/OS segment, which defines access to TCP/IP OA sockets.
- ALTER authority on data sets under INSTROOT to access to read, write, allocate, and delete data sets under INSTROOT.

The installation includes a PS, INSTROOT.DEF.GBLPARMS, which contains global environment information. This PS is read at startup and the correct software version is used, based on the details provided in the startup task.

If you change the location of this member, then you must also change the relevant cards in the following jobs to the new locations:

- ATTSRVR: located in an active proclib, such as user.proclib
- ATTDAEMN: located in an active proclib, such as user.proclib
- NAVSQL: located in INSTROOT.USERLIB

The input during the installation procedure is written to `nnn.BUILDKIT.SRC(PARS)`. You can use this file to provide the same inputs if you rerun the installation, where `nnn` is the high-level qualifier you assign for the installation.

For information about specifying Oracle Connect as the service using port 2551 in the TCP/IP network services file, consult TCP/IP documentation.

### 2.4.6.2 Starting the Daemon

Activate `INSTROOT.USERLIB(ATTDAEMN)` as a started task to invoke the daemon.

For example, in the SDSF screen enter the following:

```
'/s ATTDAEMN'
```

Where `INSTROOT` is the high-level qualifier where Oracle Connect is installed.

To submit the daemon as a job, uncomment the first two lines of the ATTDAEMN JCL, change the PARM line as described earlier, and run the job using the subcommand. The ATTDAEMN JCL is similar to the following:
2.4.6.3 Setting Up Oracle Connect for Reentrancy

All Oracle Connect load modules are reentrant to enable subtasking. Therefore, move `INSTROOT.LOAD` to the Link Pack Area (LPA).

Where `INSTROOT` is the high-level qualifier where Oracle Connect is installed.

Using the LPA reduces real storage usage (because everyone shares the LPA copy) and fetch time.

**Note:** If you intend using impersonation, so that you can run in a security context that is different than the context of the process that owns the server, then do the following:

- Place the `INSTROOT.LOAD(ATYSVCW)` member in an APF-authorized library outside the LPA.
- Change the `ATTSRVR` member (located in the active proclib), by adding the following to the `STEPLIB` list:

```
// DD DSN=apf_library,DISP=SHR
```

Where `apf_library` is the APF-authorized library outside the LPA where the ATYSVCW member was moved.

---

2.5 Updating an Existing Oracle Connect Installation on Mainframe Platforms

If you are using an OracleAS Legacy adapter, perform the appropriate procedure below to upgrade the existing Oracle Connect installation.

- Updating an Existing Oracle Connect Installation with CICS
- Updating an Existing Oracle Connect Installation with VSAM
- Updating an Existing Oracle Connect Installation with IMS/TM
- Updating an Existing Oracle Connect Installation with IMS/DB

2.5.1 Updating an Existing Oracle Connect Installation with CICS

Verify that you have all the information detailed in the following installation worksheets, so you can refer to it during the configuration process.
In the `nnn.BUILDKIT.SRC` library, run the `CICS` member, as shown:

```
  ex CICS
```

Follow the instructions in the Response column in the following table for each entry in the Screen column.

### Table 2–13  CICS Adapter Installation Prompts and Responses

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI] :</td>
<td>Enter the CICS EXCI load library name only if you do not want the default.</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES] :</td>
<td>Confirm the entered details</td>
</tr>
<tr>
<td>ENTER THE ISPF LOAD LIBRARY NAME [ISP.ISPFLOAD] :</td>
<td>Enter the ISPF load library name only if you do not want the default.</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES] :</td>
<td>Confirm the entered details</td>
</tr>
<tr>
<td>ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A] :</td>
<td>Enter the output class for Oracle Connect output. Assigning a device which is set on HOLD prevents the loss of log information when the Oracle Connect started tasks finish (the default is A).</td>
</tr>
<tr>
<td>DO YOU WANT TO USE THE DEFAULT JOB CARD Y/N [Y]</td>
<td>A job card is displayed. To use a replacement card, then it must be entered as it appears in the job. You can enter up to six lines. Enter a blank card to end input. If you do not enter a card, then the Oracle Connect default card is used.</td>
</tr>
</tbody>
</table>

The installation is completed. All JCL jobs and REXX procedures are written to the `INSTROOT.USERLIB` library. `INSTROOT` is the high-level qualifier for the installation.

After completing the installation, perform postinstallation tasks, as described in Postinstallation Instructions on page 2-15, as required.

### 2.5.2 Updating an Existing Oracle Connect Installation with VSAM

Verify that you have all the information detailed in the following installation worksheets, so you can refer to it during the configuration process.
In the nnn.BUILDKIT.SRC library, run the VSAM member:

ex VSAM

Follow the instructions in the Response column in the following table for each entry in the Screen column.

The installation is completed. All JCL jobs and REXX procedures are written to the INSTROOT.USERLIB library. INSTROOT is the high-level qualifier for the installation.

After completing the installation, perform postinstallation tasks, as described in Postinstallation Instructions on page 2-15, as required.

### 2.5.3 Updating an Existing Oracle Connect Installation with IMS/TM

Verify that you have all the information detailed in the following installation worksheets. You can refer to it during the configuration process.

#### Table 2–17 Preinstallation Information

<table>
<thead>
<tr>
<th>Topic</th>
<th>Required Information</th>
<th>Default</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICS</td>
<td>CICS EXCI load library name</td>
<td>CICS.CICS.SDFHEXCI</td>
<td></td>
</tr>
</tbody>
</table>
In the `nnn.BUILDKIT.SRC` library, run the `IMSTM` member:

```
ex IMSTM
```

Follow the instructions in the Response column in the following table for each entry in the Screen column.

### Table 2–18 Required Permissions

<table>
<thead>
<tr>
<th>Permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permission to read the CICS EXCI library</td>
</tr>
</tbody>
</table>

In the `nnn.BUILDKIT.SRC` library, run the `IMSTM` member:

```
ex IMSTM
```

Follow the instructions in the Response column in the following table for each entry in the Screen column.

### Table 2–19 IMS/TM Adapter Installation Prompts and Responses

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
</table>
| ENTER THE ISPF LOAD LIBRARY NAME
ISP.SISPLOAD: | Enter the ISPF load library name only if you do not want the default. |
| PLEASE CONFIRM (YES/NO/QUIT) [YES]: | Confirm the entered details |
| ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A]: | Enter the output class for Oracle Connect output. Assigning a device that is set on HOLD prevents the loss of log information when the Oracle Connect started tasks finish (the default is A). |
| DO YOU WANT TO USE THE DEFAULT JOB CARD Y/N [Y] | A job card is displayed. To use a replacement card, then it must be entered as it appears in the job. You can enter up to six lines. Enter a blank card to end input. If you do not enter a card, then the Oracle Connect default card is used. |

The installation is completed. All JCL jobs and REXX procedures are written to the `INSTROOT.USERLIB` library. `INSTROOT` is the high-level qualifier for the installation.

After completing the installation, perform postinstallation tasks, as described in Postinstallation Instructions on page 2-15.

### 2.5.4 Updating an Existing Oracle Connect Installation with IMS/DB

Verify that you have all the information detailed in the following installation worksheets, so you can refer to it during the configuration process.

### Table 2–20 Preinstallation Information

<table>
<thead>
<tr>
<th>Topic</th>
<th>Required Information</th>
<th>Default</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICS</td>
<td>CICS EXCI load library name</td>
<td>CICS.CICS.SDFHEXCI</td>
<td>-</td>
</tr>
</tbody>
</table>

### Table 2–21 Required Permissions

<table>
<thead>
<tr>
<th>Permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permission to read the CICS EXCI library</td>
</tr>
</tbody>
</table>

In the `nnn.BUILDKIT.SRC` library, run the `IMSDB` member:

```
ex IMSDB
```

Follow the instructions in the Response column in for each entry in the Screen column.
The installation is completed. All JCL jobs and REXX procedures are written to the \texttt{INSTROOT.USERLIB} library. \texttt{INSTROOT} is the high-level qualifier for the installation.

After completing the installation, perform postinstallation tasks, as described in \textit{Postinstallation Instructions} on page 2-15, as required.

### 2.6 Installing Oracle Connect on a UNIX Platform

This section explains how to install Oracle Connect on a UNIX platform. This section includes the following:

- Preinstallation Tasks
- Backing up the Original Installation (Upgrade Only)
- Installing Oracle Connect
- Installation Tasks
- Post Installation Tasks

#### 2.6.1 Preinstallation Tasks

Before starting the installation procedure, ensure that you have the following information is available:

- The root directory where you want to install Oracle Connect.

---

\textbf{Table 2–22} \textit{IMS/DB Adapter Installation Prompts and Responses}

<table>
<thead>
<tr>
<th>Screen</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER DBD LIBRARY NAME</td>
<td>Enter the IMS DBD Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PSB LIBRARY NAME</td>
<td>Enter the IMS PSB Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER RES LIBRARY NAME</td>
<td>Enter the IMS RES Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PROC LIBRARY NAME</td>
<td>Enter the IMS PROC Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER PGM LIBRARY NAME</td>
<td>Enter the IMS PGM Library name for IMS on your system</td>
</tr>
<tr>
<td>ENTER YOUR PSB NAME</td>
<td>Enter the name of the PSB file with the name of your IMS database.</td>
</tr>
<tr>
<td>YOUR DBDLIB IS:</td>
<td>This is a summary of the IMS questions. Check the summary to be sure all is correct. You can select:</td>
</tr>
<tr>
<td>YOUR PSBLIB IS:</td>
<td>- Yes, to use the IMS database as configured</td>
</tr>
<tr>
<td>YOUR RESLIB IS:</td>
<td>- No, to not use the IMS database</td>
</tr>
<tr>
<td>YOUR PROCLIB IS:</td>
<td>- Quit, to leave the CUST process</td>
</tr>
<tr>
<td>YOUR PGMLIB IS:</td>
<td>PLEASE CONFIRM (YES/NO/QUIT) :YES: :</td>
</tr>
<tr>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES]: Confirm the entered details</td>
<td>DO YOU WANT ORACLE CONNECT TO WORK WITH IMS/DB UNDER CICS Answer Y Oracle Connect to work with IMS/DB under CICS, otherwise answer N.</td>
</tr>
<tr>
<td>ENTER THE CICS EXCI LOAD LIBRARY NAME</td>
<td>Enter the CICS EXCI load library name only if you do not want the default</td>
</tr>
<tr>
<td>[CICSTS13.CICS.SDFHEXCI]:</td>
<td>PLEASE CONFIRM (YES/NO/QUIT) [YES]: Confirm the entered details</td>
</tr>
</tbody>
</table>
Installing Oracle Connect on a UNIX Platform

Notes: The root directory cannot be a system root directory, /var or /tmp.

- The account name where Oracle Connect runs.
- Whether the installation source media is removable media or a disk archive file.
  If you are installing from the removable media that is not a default device in the system, you must know the media device name (such as /dev/rmt/0m). See the operating system manuals or ask the system administrator to find out the device name for the site.
  If you are installing from the disk archive file, you must know the name of the Oracle Connect disk archive file (such as /tmp/nav.2.0.tar).
- The shell being used: C-shell Korn-shell, or Bourne-shell. The installation creates a startup file according to the indicated shell.

When running the installation below, use the following as the <filename>:

- For RedHat Linux: OCL11112-linuxrh.tar.Z
- For Linux Suse: OCL11112-linuxsuse.tar.Z
- For HP-UX: OCL11112-hpux.tar.Z
- For IBM AIX: OCL11112-ibmaix.tar.Z
- For Solaris Operating System (SPARC): OCL11112-sunsol2.8.tar.Z

2.6.2 Backing up the Original Installation (Upgrade Only)

To upgrade Oracle Connect computers, you must prevent all users from running the server during the upgrade procedure and ensure NAVROOT is defined to the system. This enables the installation procedure to identify that an existing version exists.

Perform the following to back up Oracle Connect before installing the new version.

1. Save a copy of the server definitions by running the following command:

   ```
   NAV_UTIL EXPORT ALL SYS out.xml
   ```

   where out.xml is the output file (including the path) that contains the current configuration. This file contains the complete configuration settings for the server machine except the metadata definitions for data sources that require Attunity metadata.

2. Run the following command:

   ```
   NAV_UTIL EXPORT ALL DS_NAME* out1.xml
   ```

   where DS_NAME is the name of a data source in the binding that has Attunity metadata defined.

3. Repeat the previous step for every data source that has Attunity metadata defined, changing the name of the output file for each data source.

   The collection of output files constitutes a complete backup of all the Attunity definitions on the machine.

2.6.3 Installing Oracle Connect

Perform the following steps to install Oracle Connect:
1. Transfer the tar.Z file to the system.

2. Decompress the file using the following command:
   
   `uncompress <filename>`

3. Run the tar command, as shown in the following example:
   
   `tar xvf <filename> nav_install`

   The following message is displayed:
   
   x nav_install, nnnn bytes, mmmm tape blocks

---

**Note:** Ensure that the directory used to run the installation files has WRITE privileges.

---

### 2.6.4 Installation Tasks

Perform the following steps to install Oracle Connect:

1. Run the following command:
   
   `./nav_install`

   This command initiates the installation procedure. The installation procedure is displayed in a series of screen prompts and responses.

2. Enter the full path of the disk archive (.tar) file, and press Enter.

3. Enter the root directory name for the installation, and press Enter. You must have a WRITE permission for this directory. The default directory is the users home directory.

---

**Notes:**

- The root directory cannot be a system root directory or `/var` or `/tmp` directory.
- Oracle Connect is installed into a fixed directory named `navroot`.

---

4. Confirm the directory name in which Oracle Connect is installed, and press Enter.

5. Enter the account name where you want Oracle Connect to run, and press Enter. This account name is used for anonymous access to the server by clients. It can be changed after the installation is complete.

6. Confirm the account name, and press Enter.

7. Specify the required shell, under which Oracle Connect should run, and press Enter. The following options are displayed:

   - C-shell (`/bin/csh`).
   - Korn-shell (`/bin/ksh`)  
   - Bourne-shell (`/bin/sh`)

8. Enter the account name for a user with administrative authorization or press Enter to enable any user to administer Oracle Connect.
2.6.5 Post Installation Tasks

After installing Oracle Connect, perform the following postinstallation tasks:

- Configuring the Oracle Connect Environment
- Configuring the Tuxedo Environment for Oracle Connect
- Configuring the Oracle Connect Script
- Starting the Oracle Connect Daemon
- Upgrading AIS Server

2.6.5.1 Configuring the Oracle Connect Environment

When Oracle Connect is installed on a UNIX platform, using FTP, copy the `brand.bin` file, in the binary mode, to the OracleAS Adapter for Tuxedo computer, to `NAVROOT/bin`.

Where `NAVROOT` is the directory where Oracle Connect is installed.

2.6.5.2 Configuring the Tuxedo Environment for Oracle Connect

If you are using the OracleAS Adapter for Tuxedo, you must verify that the following Tuxedo environment variables are correctly set:

- `TUXDIR` is set to the Tuxedo root directory.
- `WSNADDR` is set to OracleAS Adapter for Tuxedo network address.
- Check that the shared library environment variable (LD_LIBRARY_PATH, SHLIB_PATH under HP-UX and LIBPATH under IBM AIX) includes the path to the Tuxedo lib directory, as in the following example:
  
  ```
  LD_LIBRARY_PATH = /disk2/users/tuxedo/tuxedo8.0/lib
  ```

2.6.5.3 Configuring the Oracle Connect Script

The program that manages Oracle Connect server processes (`nav_server`) is accessed by a symbolic link to a file for the C-shell, Bourne and Korn shells.

To set up `nav_server`, perform the following steps:

1. In the `bin` directory, under the directory where Oracle Connect is installed, delete the existing link to `nav_server` using the following command:

   ```
   rm nav_server
   ```

2. In the `bin` directory, under the directory where Oracle Connect is installed, link to the required version of `nav_server` as follows:

   ```
   C-shell: ln -s nav_server.csh nav_server
   Bourne: ln -s nav_server.sh nav_server
   Korn: ln -s nav_server.ksh nav_server
   ```

---

**Note:** Instead of renaming files, use a symbolic link.

The Oracle Connect `nav_login` procedure defines the default environment when OracleAS Adapters for Tuxedo run. For site-dependent variables to be included in the environment, create a file called `site_nav_login` and save this file in the `bin` directory.
directory under the Oracle Connect root directory. `nav_login` runs `site_nav_login` automatically.

`nav_login` must be invoked to run Oracle Connect. It can be invoked from the user login script.

---

**Note:** It is recommended to add `TUXDIR` and `WSNADDR` environment variables to the site_nav_login file. Adding these environment variables facilitates their availability when new server processes are started to handle client requests.

The command line for invoking `nav_login` varies according to the shell the user is running. The following table lists the different options for invoking the command line:

<table>
<thead>
<tr>
<th>Shell</th>
<th>nav_login Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH</td>
<td><code>source root/bin/nav_login</code></td>
</tr>
<tr>
<td>Bourne</td>
<td><code>root/bin/nav_login.sh</code></td>
</tr>
<tr>
<td>Korn</td>
<td><code>root/bin/nav_login.sh</code></td>
</tr>
</tbody>
</table>

In the `nav_login` command, `root` represents the root directory of the Oracle Connect installation. After running the login procedure, the environment variable `NAVROOT` points to this root directory.

Ensure that users have `READ` and `EXECUTE` permissions on the Server files. Use the `chmod` command to change the permissions.

### 2.6.5.4 Starting the Oracle Connect Daemon

The Oracle Connect daemon must run on a server for client/server access to Oracle Connect. To start the daemon with the system startup, add the following command invoking the daemon to the end of the `/etc/inittab` file:

```
nv:3:once:navroot/bin/irpcd -l ip:2551 start >/dev/console 2>&1
```

In this command, the symbol `navroot` should be replaced with the directory where Oracle Connect is installed and `ip` replaced by the ip address of the computer.

**Note:** To allow automatic client/server access to Oracle Connect, start the daemon at system startup time from a super user account.

### 2.6.5.5 Upgrading AIS Server

To upgrade Oracle Connect from a previous version, you must import the XML file that you created earlier to back up your original installation (see Backing up the Original Installation (Upgrade Only)).

#### To import the XML files

- From the command prompt, run the following command:

  `nav_util import <ds-name|adapter-name><xml_file_name>`

  where `<xml_file_name>` is the name (including the path) of an XML file that the exported information was written to.
2.7 Installing Oracle Connect on Windows

Do the following to install Oracle Connect on Windows.

Notes: If you are upgrading from version 10.1.3.3, you must use the upgrade option in the installation wizard. Do not uninstall Version 10.1.3.3 and then install the newer version. In this case, you lose all data in the Def directory.

1. Copy the following installation files into a folder on the Windows computer where you are installing Oracle Connect.
   - OCL_11112.exe
   - brand.bin
2. Open the Windows command-line interface.
3. Change to the directory where you installed the installation files.
4. Type the following at the command prompt to install Oracle Connect.
   
   "OCL_11112_windows.exe" -a -bBRAND="brand.bin" -bSERVER

   The install wizard opens. Follow the directions in the installation wizard to complete the installation.

Note: If you are installing Oracle Connect on a Windows XP computer, you cannot use a logical drive as the destination folder for the installation.

2.8 Installing Oracle Studio

This following sections explain how to install Oracle Studio. For information on the system requirements necessary to install Oracle Studio, see Oracle Studio Requirements.

- Installing Oracle Studio on Windows
- Installing Oracle Studio on Linux

Note: If you have Oracle Studio version 10.1.3.4 or higher installed on your computer because you are using an OracleAS legacy adapter or OracleAS CDC adapter, you do not need to reinstall it. If you have an older version of Oracle Studio, you must install the newest version.

2.8.1 Installing Oracle Studio on Windows

Oracle Studio is installed with a standard install wizard. Do the following to install Oracle Studio.

- Run the installation file, either using the Run option in the Windows Start menu or through Windows Explorer. Follow the instructions on the wizard screen.
2.8.2 Installing Oracle Studio on Linux

The Oracle Studio installation on Linux can be performed with the Oracle Studio wizard (SH installation). Do the following for the Linux SH installation.

1. Install into a directory where you have permission.
2. Change the mode to execute mode. Type in:
   
   CHMOD +x <file name>

3. Enter the following:

   ./ file name

   If you are not installing to the current directory, enter the full path.
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