

Oracle® Application Server

Legacy Adapters Installation Guide

11g Release 1 (11.1.1)

E16096-02

January 2011

Oracle Application Server Legacy Adapters Installation Guide, 11g Release 1 (11.1.1)

E16096-02

Copyright © 2005, 2011, Oracle and/or its affiliates. All rights reserved.

Primary Author: David Goldman

Contributor: Sami Zeitoun, Itamar Ankorion, Marian Jones, Vikas Anand, Vimmika Dinesh, Manoj Neelapu

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	v
1 Introduction to Legacy Adapter Installation	
Overview	1-1
System Requirements	1-2
IBM z/OS Hardware and Software Requirements	1-2
Hardware Requirements	1-2
Software Requirements	1-2
UNIX Hardware and Software Requirements	1-3
Hardware Requirements	1-3
Software Requirements	1-3
Windows Hardware and Software Requirements	1-3
Hardware Requirements	1-4
Software Requirements	1-4
Oracle Studio Requirements	1-4
PS2 Patch Requirement	1-5
2 Installing OracleAS Legacy Adapters	
Using the OracleAS Legacy Adapters Installer	2-1
Running the Installer	2-2
Installation Target	2-2
Destination Directory	2-3
Components	2-3
Deploying the Components	2-4
J2CA 1.5 Legacy Adapter	2-4
JDBC	2-5
Oracle Connect	2-5
Oracle Studio	2-5
Adapter Extension Template	2-6
Verifying the Resource Adapter Version	2-6
Installing Oracle Connect on an IBM z/OS Series Platform	2-6
Installation Worksheet	2-6
Preinstallation Instructions	2-8
Importing the Installation Kit	2-8
Transferring the Kit to the Data Set	2-8

Installation Instructions.....	2-9
Adapter Configuration Instructions.....	2-11
Installing OracleAS for CICS.....	2-12
Installing OracleAS for VSAM.....	2-12
Installing OracleAS for IMS/TM.....	2-13
Installing OracleAS for IMS/DB.....	2-14
Postinstallation Instructions	2-14
Postinstallation Procedures	2-14
Starting the Daemon.....	2-16
Setting Up Oracle Connect for Reentrancy	2-17
Updating an Existing Oracle Connect Installation on Mainframe Platforms	2-17
Updating an Existing Oracle Connect Installation with CICS	2-17
Updating an Existing Oracle Connect Installation with VSAM.....	2-18
Updating an Existing Oracle Connect Installation with IMS/TM.....	2-19
Updating an Existing Oracle Connect Installation with IMS/DB	2-20
Installing Oracle Connect on a UNIX Platform.....	2-21
Preinstallation Tasks.....	2-21
Backing up the Original Installation (Upgrade Only)	2-22
Installing Oracle Connect.....	2-22
Installation Tasks.....	2-23
Post Installation Tasks	2-23
Configuring the Oracle Connect Environment.....	2-24
Configuring the Tuxedo Environment for Oracle Connect.....	2-24
Configuring the Oracle Connect Script.....	2-24
Starting the Oracle Connect Daemon.....	2-25
Upgrading AIS Server	2-25
Installing Oracle Connect on Windows.....	2-25
Working with the OracleAS Adapter for Tuxedo.....	2-26
Installing Oracle Studio	2-26
Installing Oracle Studio on Windows	2-27
Installing Oracle Studio on Linux.....	2-27

Index

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 Legacy Adapters
- Diagnosing errors
- Using OracleAS to access Legacy 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 LegacyAdapters.

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/>.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/support/contact.html> or visit <http://www.oracle.com/accessibility/support.html> if you are hearing impaired.

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:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Introduction to Legacy Adapter Installation

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

This section includes the following topics:

- [Overview](#)
- [System Requirements](#)

1.1 Overview

Legacy adapters integrate Oracle Application Server with legacy and mainframe applications. These adapters include OracleAS Adapter for Tuxedo, OracleAS Adapter for CICS, OracleAS Adapter for VSAM, OracleAS Adapter for IMS/TM, and OracleAS Adapter for IMS/DB.

[Table 1–1](#) describes the legacy adapters. These adapters are deployed as J2CA resource adapters within an Oracle WebLogic container during installation.

Table 1–1 Oracle Application Server Legacy Adapters

Adapter	Description
OracleAS Adapter for Tuxedo	Models services running on the BEA Tuxedo application server. Captures and maintains a metadata schema for the Tuxedo system by importing Tuxedo metadata and transforming this metadata into mapping definitions for Oracle Connect.
OracleAS Adapter for CICS	Connects Oracle Application Server with CICS. This adapter supports two-phase commit and can fully participate in a distributed transaction.
OracleAS Adapter for VSAM	Enables access to VSAM data managed by CICS or directly. This adapter implements interactions as parameterized SQL with the parameters forming the input record, and with the output (in cases where there is an output) aggregated into an XML document forming the output record.
OracleAS Adapter for IMS/TM	Provides access to MPP based IMS/TM transactions. Each OracleAS Adapter for IMS/TM outbound interaction is mapped to a specific IMS/TM transaction.
OracleAS Adapter for IMS/DB	Captures and maintains a metadata schema for IMS/DB by importing various IMS definition files such as a PSB file, DBD files, and COBOL copybooks.

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](#)
- [Oracle Studio Requirements](#)
- [PS2 Patch Requirement](#)

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 1–2 Oracle Connect Hardware Requirements

Hardware Component	Requirements
Processor	An IBM zSeries computer
Memory	The minimum requirement is 4 MB 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.
Disk Space (3380 and 3390 disks)	150 cylinders

1.2.1.2 Software Requirements

The following table summarizes the software requirements for Oracle Connect.

Table 1–3 Oracle Connect Software Requirements

Software Component	Requirements
Operating System	IBM z/OS Version 1.8-1.10
CICS TP Monitor	V4R1 or higher (recommended to use CICS V6R1 or higher) CICS EXCI support must be installed and IRCSTRT=YES must be specified in the CICS initialization parameters, so that the IRC (Inter Region Communication) starts. You can also set the IRC to open by issuing the following command: CEMT SET IRC OPEN. In addition, the IBM group DFH\$EXCI (or an equivalent user-defined group) must be installed in the CICS region using the CEDA RDO facility.
TCP/IP	The operating system must be able to use the TCP/IP protocol for using the Internet.

Table 1–3 (Cont.) Oracle Connect Software Requirements

Software Component	Requirements
C Runtime Library	The C runtime library has all the standard C runtime programs.
Oracle Application Server	Oracle Application Server 11g (11.1.1.2).

1.2.2 UNIX Hardware and Software Requirements

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

- [Hardware Requirements](#)
- [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

Hardware Component	Requirements
Processor	RedHat Linux Linux Suse HP-UX IBM AIX Solaris Operating System (SPARC)
Disk Space	70 MB free disk space

1.2.2.2 Software Requirements

The following table summarizes the software requirements for Oracle Connect.

Table 1–5 UNIX Software Requirements

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

1.2.3 Windows Hardware and Software Requirements

This section describes the following requirements for installing Oracle Connect on Windows:

- [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

Hardware Component	Requirements
Processor	An Intel or 100% compatible computer based on a Pentium processor.
Memory	256 MB RAM.
Disk Space	40 MB free disk space.

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

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

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:

<http://support.oracle.com>.

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 9654566 and 10065292.

Installing OracleAS Legacy Adapters

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

To work with the OracleAS Legacy 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 Legacy Adapter installer. The installer copies the components to your working computer. See [Using the OracleAS Legacy 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 Legacy Adapter for CICS, VSAM, IMS/TM, or IMS/DB.
 - See [Updating an Existing Oracle Connect Installation on Mainframe Platforms](#) if you have have an earlier version of Oracle Connect installed on a mainframe computer.
 - See [Installing Oracle Connect on a UNIX Platform](#) if you are working with the OracleAS Adapter for Tuxedo on a UNIX computer. For additional information about working with the OracleAS Adapter for Tuxedo, see [Working with the OracleAS Adapter for Tuxedo](#).
 - See [Installing Oracle Connect on Windows](#) if you are working with the OracleAS Adapter for Tuxedo on a Windows computer. For additional information about working with the OracleAS Adapter for Tuxedo, see [Working with the OracleAS Adapter for Tuxedo](#).
4. Install Oracle Studio on a Windows or Linux computer. For more information, see [Installing Oracle Studio](#).

2.1 Using the OracleAS Legacy Adapters Installer

The OracleAS Legacy Adapter installer installs or copies the components necessary to work with the legacy adapters. You can use the OracleAS Legacy Adapters Installers for Windows or The OracleAS Legacy 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 Legacy adapter that you are using. For a list of available adapters, see [Oracle Application Server Legacy 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 Legacy adapters you are using. For information on how to use Oracle Studio, see the User Guide for the OracleAS Legacy 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 for the. Select the correct file for the system you are using.

Table 2–1 Installation Files

System/Platform	File Name
Windows 32-bit versions ¹	Oracle_legacy_windows_11_1_1_2.exe
UNIX/Linux 32-bit versions ²	Oracle_legacy_unix_11_1_1_2.sh

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 Legacy Adapters within the Oracle SOA suite environment or with the Oracle Service Bus (OSB). You should select:

- **SOA** if you are working within a SOA environment.
- **OSB** if you are working with the Oracle Service Bus (OSB).

Note: If you select **SOA**, the installer checks to be sure you have the Oracle SOA Suite version 11.1.1.1.0 or higher installed. If the correct SOA Suite is not installed, the installation stops.

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 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](#)
- [OSB](#)

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/LegacyAdapters/component directory`

The component directory is the folder or directory where each component is located. For more information see, [Deploying the Components](#).

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.

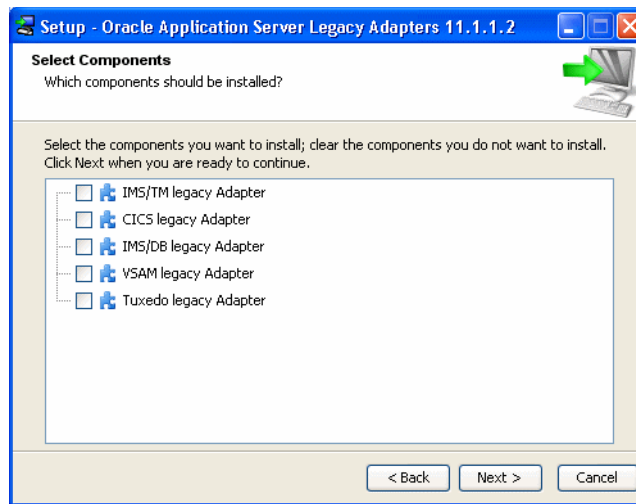
`root directory/component directory`

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 including the correct platform installation program for Oracle Connect and Oracle Studio.

To select the correct components, select the OracleAS Adapter you are working with. [Figure 2–1](#) shows the Select Components page.

Figure 2–1 Select Components

The available adapters are:

- OracleAS Adapter for IMS/TM
- OracleAS Adapter for CICS
- OracleAS Adapter for IMS/DB
- OracleAS Adapter for VSAM
- OracleAS Adapter for Tuxedo

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 Legacy Adapter](#)
- [JDBC](#)
- [Oracle Connect](#)
- [Oracle Studio](#)
- [Adapter Extension Template](#)

2.2.1 J2CA 1.5 Legacy Adapter

The J2CA Legacy adapter is copied and deployed automatically when you run the installer. It is copied to the following path.

- For SOA environments:
\$ORACLE_HOME/soa/thirdparty/LegacyAdapters/JCA
- For OSB:
root directory/.../.../.../JCA

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

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/LegacyAdapters/JDBC
- For 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/LegacyAdapters/OracleConnect
- For 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 Legacy Adapter that you are using, as follows:

- For OracleAS Legacy Adapter for CICS, install Oracle Connect on [an IBM z/OS Series Platform](#).
- For OracleAS Legacy Adapter for VSAM, install Oracle Connect on [an IBM z/OS Series Platform](#).
- For OracleAS Legacy Adapter for IMS/TM, install Oracle Connect on [an IBM z/OS Series Platform](#).
- For OracleAS Legacy Adapter for IMS/DB, install Oracle Connect on [an IBM z/OS Series Platform](#).
- For OracleAS Legacy Adapter for Tuxedo, install Oracle Connect [on a UNIX Platform](#) or [on Windows](#).

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/LegacyAdapters/OracleStudio
- For 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/LegacyAdapters/*Adapter Type*
 - For 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/LegacyAdapters/JCA
 - For OSB:
Change the directory to:
<installer target directory>/JCA
2. Run: `java attunityResourceAdapterVersion.`

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](#)

Note: If you have an Oracle Connect back-end adapter or CDC adapter installed on the IBM z/OS platform, then follow the instructions described in [Updating an Existing Oracle Connect Installation on Mainframe Platforms](#) on page 2-17.

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

Topic	Required Information	Default	Comment
General	Operating system	-	z/OS
-	Disk space	-	150 cylinders
-	Memory	-	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.
-	Installation high-level qualifier	ac11112	-
-	Volume	-	-
-	Unit	3390	SMS only: unit where SMS resides.
-	Output class	A	-
-	JCL job card	-	An optional card (up to 6 lines) to replace the prefix job (entered as it appears in the job)
-	ISPF load library name	ISP.SISPLOAD	-
CICS	CICS EXCI load library name	CICS.CICS.SDFHEXCI	-

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

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

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:

- `ac11112.TRANSMIT.KIT` = 130 tracks (3380 and 3390 disks)
- `ac11112.TRANSMIT.LOAD` = 500 tracks (3380 and 3390 disks)

For each data set: `RECFM=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 step 7 of the preinstallation procedure.

3. Using FTP, copy `ac11112.TRANSMIT.KIT` and `ac11112.TRANSMIT.LOAD` in the binary mode to the mainframe. You can replace the `ac11112` high-level qualifier to any qualifier you want.

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 utilized.

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')
```

Note: You can use multiple high-level qualifiers, such as ACME.DEV.ac11112, with the following conditions:

- The total length must be less than or equal to twenty characters.
 - The words transmit and buildkit cannot be used as high-level qualifiers.
-

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 2–5 Installation Prepare Job Prompts and Responses

Screen	Response
DO YOU WANT TO USE SMS MANAGED STORAGE FOR THIS INSTALLATION Y/N [N] :	To manage the storage using SMS, then answer Y, otherwise answer N.
ENTER THE STORCLASS FOR INSTALLATION TEMP DATASETS [] :	This prompt is displayed only if SMS is used to manage the installation (you answered Y to the first prompt). Enter the storage class
ENTER THE UNIT NAME FOR INSTALLATION TEMP DATASETS [3390] :	If a storage class is not specified, then enter the unit name for temporary data sets used during the installation procedure
ENTER THE VOLUME NAME FOR INSTALLATION TEMP DATASETS :	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
ENTER THE OUTPUT CLASS FOR INSTALLATION OUTPUT [A] :	Enter the output class only if you do not want the default class used (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.
DO YOU WANT TO PERFORM A MANUAL (M) OR AUTOMATIC (A) INSTALLATION [A] :	To review the JCL used to install Oracle Connect, before it is submitted, then respond M for a manual installation.
PLEASE REVIEW AND SUBMIT FOR EXECUTION THE HLQ.TRANSMIT.LIB(INSTJO)	This prompt is displayed only if a manual installation is requested (you answered M to the previous prompt).

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.

- 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 2–6 Installation Prompts and Responses

Screen	Response
DO YOU WANT TO USE SMS MANAGED STORAGE FOR THIS INSTALLATION Y/N [N]:	To manage the storage using SMS, then answer Y, otherwise answer N.
THE SOFTWARE WILL BE INSTALLED UNDER THE HIGH LEVEL QUALIFIER THAT YOU WILL CHOOSE. ENTER THE HIGH LEVEL QUALIFIER ["QUALIFIER"]:	The high-level qualifier for the installation (referred to as <i>INSTROOT</i> throughout this guide) You can use multiple high-level qualifiers (such as <i>ACME.DEV.VA10</i>). 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.
ENTER THE STORCLASS FOR TEMP DATASETS ['STORCLASS']:	This prompt is displayed only if SMS is used to manage the installation (you answered Y to the first prompt). Enter the storage class
ENTER THE UNIT NAME FOR INSTALLATION TEMP DATASETS [3390] :	The unit name for temporary data sets used during the installation procedure.
ENTER THE VOLUME NAME FOR INSTALLATION TEMP DATASETS:	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
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 which 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.
ADDING AND UPDATING ORACLE CONNECT FOR CICS CONFIGURATION ON THIS MACHINE, FROM A REMOTE ORACLE ADMINISTRATION CONSOLE, CAN ONLY BE DONE BY SOMEONE DEFINED AS AN ADMINISTRATOR FOR ORACLE CONNECT ON THIS MACHINE. ENTER A VALID USER NAME FOR AN ORACLE CONNECT ADMINISTRATOR [ALL]:	In order to manage Oracle Connect on this computer from Oracle Studio, you must enter a user account of a user who have administrative authorization, or press Enter to enable any user to administer Oracle Connect on this computer. The administrative rights can be changed from within Oracle Studio after the installation.
DO YOU WANT TO PERFORM A MANUAL (M) OR AUTOMATIC (A) INSTALLATION [A] :	To review the JCL used to install Oracle Connect, before it is submitted, then respond M for a manual installation.
PLEASE REVIEW AND SUBMIT FOR EXECUTION THE DSN1 (INSTJBOR)	This prompt is displayed only if a manual installation is requested (you answered M to the previous prompt). DSN1 is the data set name where INSTJBOR is located.

7. Continue with the [Adapter Configuration](#).

2.4.5 Adapter Configuration Instructions

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

- [Installing OracleAS for CICS](#)
- [Installing OracleAS for VSAM](#)
- [Installing OracleAS for IMS/TM](#)
- [Installing OracleAS for IMS/DB](#)

2.4.5.1 Installing OracleAS for CICS

In the *nnn.BUILDKIT.SRC* library, run the following command:

```
ex CICS
```

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

Table 2–7 CICS Adapter-Specific Installation Prompts and Responses

Screen	Response
ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI]:	Enter the CICS EXCI load library name only if you do not want the default
PLEASE CONFIRM (YES/NO/QUIT) [YES]:	Confirm the entered details
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 which 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.

2.4.5.2 Installing OracleAS for VSAM

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.

Table 2–8 VSAM Adapter-Specific Installation Prompts and Responses

Screen	Response
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 [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 which 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.

2.4.5.3 Installing OracleAS for IMS/TM

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 2–9 IMS/TM Adapter-Specific Installation Prompts and Responses

Screen	Response
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.

2.4.5.4 Installing OracleAS for IMS/DB

In the *nnn.BUILDKIT.SRC* library, execute the *IMSDB* member:

ex *IMSDB*

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

Table 2–10 IMS/DB Adapter Installation Prompts and Responses

Screen	Response
ENTER DBD LIBRARY NAME	Enter the IMS DBD Library name for IMS on your system
ENTER PSB LIBRARY NAME	Enter the IMS PSB Library name for IMS on your system
ENTER RES LIBRARY NAME	Enter the IMS RES Library name for IMS on your system
ENTER PROC LIBRARY NAME	Enter the IMS PROC Library name for IMS on your system
ENTER PGM LIBRARY NAME	Enter the IMS PGM Library name for IMS on your system
ENTER YOUR PSB NAME	Enter the name of the PSB file with the name of your IMS database.
YOUR DBDLIB IS:	This is a summary of the IMS questions. Check the summary to be sure all is correct. You can select:
YOUR PSBLIB IS:	
YOUR RESLIB IS:	
YOUR PROCLIB IS:	
YOUR PGMCLIB IS:	
YOUR PSBNAME IS:	
PLEASE CONFIRM (YES/NO/QUIT) :YES: :	<ul style="list-style-type: none"> ■ Yes, to use the IMS database as configured ■ No, to not use the IMS database ■ Quit, to leave the CUST process
DO YOU WANT ORACLE CONNECT TO WORK WITH IMS/DB UNDER CICS	Answer Y for Oracle Connect to work with IMS/DB under CICS, otherwise answer N.
ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI]:	Enter the CICS EXCI load library name only if you do not want the default
PLEASE CONFIRM (YES/NO/QUIT) [YES]:	Confirm the entered details

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.

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 (ATTDAEMN)* and *INSTROOT.USERLIB (ATTSRVR)* members to any active proclib, such as *user.proclib*. The *ATTDAEMN* 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 (NAVCMO)* and enter *EDIT DAEMON IRPCDINI* at the prompt.
- Change the *startupScript* parameter from *ATTSRVR* to the new name for the server:

```
<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:

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

After:

```
// 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`
- `NAVSQ`: 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:

```

/*ATTDAEMN JOB 'RR', 'TTT', MSGLEVEL=(1,1), CLASS=A,
/* MSGCLASS=A, NOTIFY=&SYSUID, REGION=8M
//STEP1 EXEC PGM=IRPCD,
// PARM='-B START IRPCDINI'
/* PARM='-B -L :8883 START'
//STEPLIB DD DSN=INSTROOT.LOADAUT, DISP=SHR
//SYSPRINT DD SYSOUT=A
//GBLPARMS DD DSN=INSTROOT.DEF.GBLPARMS, DISP=SHR
// EXEC PGM=IRPCD, COND=((1, EQ, STEP1), (2, EQ, STEP1)),
// PARM='-KATTDAEMN START ''INSTROOT.DEF.IRPCDINI'' '
//STEPLIB DD DSN=INSTROOT.LOADAUT, DISP=SHR
//SYSPRINT DD SYSOUT=A
//GBLPARMS DD DSN=INSTROOT.DEF.GBLPARMS, DISP=SHR
//SYSDUMP DD DUMMY

```

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 *ATYSCVW* member was moved.

2.5 Updating an Existing Oracle Connect Installation on Mainframe Platforms

If you are using one of the OracleAS Legacy adapters, perform the required 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.

Table 2–11 Preinstallation Information

Topic	Required Information	Default	Comment
CICS	CICS EXCI load library name	CICS.CICS.SDFHEXCI	-

Table 2–12 Required Permissions

Permission
Permission to read the CICS EXCI library

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

Screen	Response
ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI] :	Enter the CICS EXCI load library name only if you do not want the default.
PLEASE CONFIRM (YES/NO/QUIT) [YES] :	Confirm the entered details
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 which 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 2-14, 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.

Table 2–14 Preinstallation Information

Topic	Required Information	Default	Comment
CICS	CICS EXCI load library name	CICS.CICS.SDFHEXCI	-

Table 2–15 Required Permissions

Permission
Permission to read the CICS EXCI library

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.

Table 2–16 VSAM Adapter Installation Prompts and Responses

Screen	Response
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 [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 which 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 2-14, 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

Topic	Required Information	Default	Comment
CICS	CICS EXCI load library name	CICS.CICS.SDFHEXCI	

Table 2–18 Required Permissions

Permission
Permission to read the CICS EXCI library

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

Screen	Response
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 2-14.

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

Topic	Required Information	Default	Comment
CICS	CICS EXCI load library name	CICS.CICS.SDFHEXCI	-

Table 2–21 Required Permissions

Permission
Permission to read the CICS EXCI library

In the *nnn*.BUILDKIT.SRC library, execute the IMSDB member:

ex IMSDB

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

Table 2–22 IMS/DB Adapter Installation Prompts and Responses

Screen	Response
ENTER DBD LIBRARY NAME	Enter the IMS DBD Library name for IMS on your system
ENTER PSB LIBRARY NAME	Enter the IMS PSB Library name for IMS on your system
ENTER RES LIBRARY NAME	Enter the IMS RES Library name for IMS on your system
ENTER PROC LIBRARY NAME	Enter the IMS PROC Library name for IMS on your system
ENTER PGM LIBRARY NAME	Enter the IMS PGM Library name for IMS on your system
ENTER YOUR PSB NAME	Enter the name of the PSB file with the name of your IMS database.

Table 2–22 (Cont.) IMS/DB Adapter Installation Prompts and Responses

Screen	Response
YOUR DBDLIB IS:	This is a summary of the IMS questions. Check the summary to be sure all is correct. You can select: <ul style="list-style-type: none"> ■ Yes, to use the IMS database as configured ■ No, to not use the IMS database ■ Quit, to leave the CUST process
YOUR PSBLIB IS:	
YOUR RESLIB IS:	
YOUR PROCLIB IS:	
YOUR PGMLIB IS:	
YOUR PSBNAME IS:	
PLEASE CONFIRM (YES/NO/QUIT) :YES: :	
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.
ENTER THE CICS EXCI LOAD LIBRARY NAME [CICSTS13.CICS.SDFHEXCI]:	Enter the CICS EXCI load library name only if you do not want the default
PLEASE CONFIRM (YES/NO/QUIT) [YES]:	Confirm the entered details

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 2-14, 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](#)

Note: If you are working with the OracleAS Adapter for Tuxedo, see [Working with the OracleAS Adapter for Tuxedo](#) before you install Oracle Connect.

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.

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 that `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, mmmmm 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](#)
- [Configuring the Oracle Connect Script](#)
- [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 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:

Shell	nav_login Command
CSH	<code>.source root/bin/nav_login</code>
Bourne	<code>. root/bin/nav_login.sh</code>
Korn	<code>. root/bin/nav_login.sh</code>

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.

If you are working with the OracleAS Adapter for Tuxedo, see [Working with the OracleAS Adapter for Tuxedo](#) before you install Oracle Connect.

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 Working with the OracleAS Adapter for Tuxedo

Before you install Oracle Connect when working with an OracleAS Tuxedo adapter, you must ensure that you have the correct version of Tuxedo installed and that you are working with a supported platform. The following Tuxedo versions are supported:

- BEA Tuxedo Version 8.0
- BEA Tuxedo Version 9.0

Note: OracleAS adapters for Tuxedo run using 32-bit APIs. The Tuxedo 32-bit adapters can run on 64-bit platforms using the platform support for 32-bit applications. However, because they use the 32-bit APIs, they do not work with 64-bit Tuxedo.

2.9 Installing Oracle Studio

The 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.

2.9.1 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.

2.9.2 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.

Index

C

component locations, 2-4

D

daemon
 starting, 2-25
destination directory, 2-3
disk space requirements
 IBM mainframe, 1-2
 PC, 1-4
 UNIX, 1-3

H

hardware and software requirements
 Oracle Studio, 1-4
 unix, 1-3
 Windows, 1-3
 z/OS, 1-2
hardware requirements
 IBM mainframe disk space, 1-2
 IBM mainframe memory, 1-2
 PC disk space, 1-4
 PC memory, 1-4
 PC processor, 1-4
 UNIX, 1-2, 1-3
 unix, 1-3
 UNIX disk space, 1-3
 Windows, 1-4
 z/OS, 1-2

I

IBM mainframe
 post-installation, 2-14
 preinstallation, 2-8
IBM mainframe
 installing, 2-9
installation process, 2-1
installation target, 2-2
installer, 2-1
installing
 IBM mainframe, 2-9
 Solaris Operating System (SPARC), 2-23
installing the components, 2-1

L

legacy adapter installation process, 2-1
location of components, 2-4

M

memory requirements
 IBM mainframe, 1-2
memory requirements, PC, 1-4
Microsoft software requirements, 1-4

O

operating system requirements
 PC, 1-4
 UNIX, 1-2, 1-3
Oracle Application Server requirements, 1-3
Oracle Studio requirements, 1-4

P

post-installation, IBM mainframe, 2-14
postinstallation, Solaris Operating System
 (SPARC), 2-23
preinstallation, IBM mainframe, 2-8
preinstallation, Solaris Operating System
 (SPARC), 2-21
processor requirements
 PC, 1-4
 UNIX, 1-2, 1-3

R

requirements
 PC software requirements, 1-4
 UNIX hardware, 1-2

S

SMS
 See system managed storage
software requirements
 Microsoft, 1-4
 Oracle Application Server, 1-3
 PC operating system, 1-4
 unix, 1-3

- UNIX operating system, 1-2, 1-3
- Windows, 1-4
- z/OS, 1-2
- Solaris Operating System (SPARC)
 - installing, 2-23
 - postinstallation, 2-23
 - preinstallation, 2-21
- system managed storage, 2-8
- system requirements, 1-2

U

- UNIX
 - hardware requirements, 1-2
- unix hardware and software requirements, 1-3
- unix hardware requirements, 1-3
- unix software requirements, 1-3

W

- Windows hardware and software requirements, 1-3
- Windows hardware requirements, 1-4
- Windows software requirements, 1-4

Z

- z/OS hardware and software requirements, 1-2
- z/OS hardware requirements, 1-2
- z/OS software requirements, 1-2