

Oracle® Fusion Middleware

Installing WebGates for Oracle Access Manager

11g Release 1 (11.1.1.9.0)

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Oracle Fusion Middleware Installing WebGates for Oracle Access Manager, 11g Release 1 (11.1.1.9.0)

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Preface

This Preface provides supporting information for *Oracle Fusion Middleware Installing WebGates for Oracle Access Manager* and includes the following topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

The *Oracle Fusion Middleware Installing WebGates for Oracle Access Manager* guide is intended for administrators that are responsible for installing 11g WebGates for Oracle Access Manager.

This document assumes you have experience installing enterprise components. Basic knowledge about Oracle Access Manager, WebGates, and Oracle Application Server is recommended.

Documentation Accessibility

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

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Related Documents

For more information, see the following documents in the Oracle Identity and Access Management 11g Release 1 (11.1.1.7.9) documentation library:

- *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*
- *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*
- *Oracle Fusion Middleware Release Notes*

- *Oracle Fusion Middleware Installation Guide for Web Tier*

You can also access Oracle documentation online from the Oracle Technology Network (OTN) Web site at the following URL:

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

Conventions

The following text conventions are used in this document:

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

A WebGate is a web-server plug-in for Oracle Access Manager (OAM) that intercepts HTTP requests and forwards them to the Access Server for authentication and authorization.

For information about the typical workflow in an environment with a WebGate and OAM, see "About SSO Log In Processing with OAM Agents" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager with Oracle Security Token Service*.

[Table 1–1](#) lists the web-servers for which this document describes the procedure for installing and configuring WebGates for Oracle Access Manager (OAM) 11.1.1.7.0.

Table 1–1 WebGate Installation and Configuration Topic Roadmap

WebGate for Web Server	WebGate Installation and Configuration Procedure
Oracle HTTP Server 11.1.1.7.0	Installing and Configuring Oracle HTTP Server 11g WebGate for OAM
Oracle Traffic Director 11.1.1.7.0	Installing and Configuring Oracle Traffic Director 11g WebGate for OAM
Oracle iPlanet Web Server 7.0.9	Installing and Configuring Oracle iPlanet 11g WebGate for OAM

Overview of the WebGate Installation Workflow

Installing a WebGate for Oracle Access Manager involves the following steps:

1. Installing the web server
2. Installing a WebGate for Oracle Access Manager
3. Completing the post-installation configuration steps
4. Verifying the WebGate installation and configuration
5. Registering the new WebGate agent

Installing and Configuring Oracle HTTP Server 11g WebGate for OAM

This chapter describes how to install and configure Oracle HTTP Server 11g WebGate for Oracle Access Manager. For an introduction to WebGates and an overview of installing WebGates, see [Chapter 1](#).

This chapter contains the following topics:

- [Prerequisites for Installing Oracle HTTP Server 11g WebGate](#)
- [Installing Oracle HTTP Server 11g WebGate](#)
- [Post-Installation Steps for Oracle HTTP Server 11g WebGate](#)
- [Verifying the Installation and Configuration of Oracle HTTP Server 11g WebGate](#)
- [Getting Started with a New Oracle HTTP Server 11g WebGate](#)
- [Deinstalling Oracle HTTP Server 11g WebGate](#)
- [Silent Installation for OHS 11g WebGate](#)
- [Upgrading OHS Webgate 11.1.1.5.0 or 11.1.1.6.0 to 11.1.1.7.0](#)

2.1 Prerequisites for Installing Oracle HTTP Server 11g WebGate

This section discusses the following topics:

- [Oracle Fusion Middleware Certification](#)
- [Installing and Configuring Oracle HTTP Server 11g](#)
- [Installing and Configuring OAM 11g](#)
- [Prerequisites for 64-Bit Oracle HTTP Server 11g WebGates on Windows 2003 and Windows 2008 64-Bit Platforms](#)

2.1.1 Oracle Fusion Middleware Certification

The *Oracle Fusion Middleware Supported System Configurations* document provides certification information for Oracle Fusion Middleware, including supported installation types, platforms, operating systems, databases, JDKs, and third-party products related to Oracle Identity and Access Management 11g Release 1 (11.1.1.9.0).

You can access the *Oracle Fusion Middleware Supported System Configurations* document by searching the Oracle Technology Network (OTN) web site:

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

2.1.2 Installing and Configuring Oracle HTTP Server 11g

You can download the Installer from the Oracle Technology Network (OTN):

http://www.oracle.com/technology/software/products/middleware/htdocs/fmw_11_download.html

Alternatively, you can download the latest Oracle Fusion Middleware 11g software from the following website:

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

For information about installing and configuring Oracle HTTP Server 11g (11.1.1.7.0), see the *Oracle Fusion Middleware Installation Guide for Oracle Web Tier*.

Note: After you install and configure Oracle HTTP Server, a working instance of Oracle HTTP Server is configured in an Instance Home.

2.1.3 Installing and Configuring OAM 11g

For information about installing Oracle Access Manager (OAM), see "Installing and Configuring Oracle Identity and Access Management (11.1.1.7.0)" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

For information about configuring Oracle Access Manager in a new or existing WebLogic administration domain, see "Configuring Oracle Access Manager" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

In addition, see the "Securing Communication Between OAM 11g Servers and WebGates" topic in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager* for information about configuring Oracle Access Manager in Open, Simple, or Cert mode.

2.1.4 Prerequisites for 64-Bit Oracle HTTP Server 11g WebGates on Windows 2003 and Windows 2008 64-Bit Platforms

If you are using Windows 2003 or Windows 2008 64-bit operating systems, you must install Microsoft Visual C++ 2005 libraries on the machine hosting the Oracle HTTP Server 11g WebGate for Oracle Access Manager.

These libraries are included in the Microsoft Visual C++ 2005 SP1 Redistributable Package (x64), which can be downloaded from the following website:

<http://www.microsoft.com/Downloads/details.aspx?familyid=EB4EBE2D-33C0-4A47-9DD4-B9A6D7BD44DA&displaylang=en>

In addition, install the Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package MFC Security Update, which can be downloaded from the following website:

<http://www.microsoft.com/downloads/en/details.aspx?familyid=fb01abe6-9099-4544-9aec-0ac13f19bc50&displaylang=en>

2.2 Installing Oracle HTTP Server 11g WebGate

This section discusses the following topics:

- [Obtaining the Software](#)
- [Starting the Oracle HTTP Server 11g WebGate Installer](#)

- [Installation Flow and Procedure of Oracle HTTP Server 11g WebGate](#)

2.2.1 Obtaining the Software

For information about obtaining the OHS 11.1.1.7.0 WebGate software, see the *Oracle Fusion Middleware Download, Installation, and Configuration ReadMe*.

2.2.2 Starting the Oracle HTTP Server 11g WebGate Installer

The installer for Oracle HTTP Server 11g WebGate for Oracle Access Manager is included in the `WebGate.zip` file.

To start the installation wizard, perform the following steps:

- **On UNIX**

1. Extract the contents of the `WebGate.zip` file to a directory. By default, this directory is named `WebGate`.
2. Go to the `Disk1` directory under the `WebGate` folder.
3. Run the following command:

```
full_path_to_the_runInstaller_directory./runInstaller
-jreLoc WebTier_Home/jdk
```

- **On Windows**

1. Extract the contents of the `WebGate.zip` file to a directory. By default, this directory is named `WebGate`.
2. Go to the `Disk1` directory under the `WebGate` folder.
3. Run the following command:

```
full_path_to_the_setup.exe_directory setup.exe -jreLoc
WebTier_Home\jdk
```

Note: When you install Oracle HTTP Server, the `jdk` directory is created under the `WebTier_Home` directory. You must enter the absolute path of the JRE folder located in this JDK when launching the installer. For example, on Windows, if the JDK is located in `D:\oracle\Oracle_WT1\jdk`, then launch the installer from the command prompt as follows:

```
D:\setup.exe -jreLoc D:\oracle\Oracle_WT1\jdk
```

After the Installer starts, the Welcome screen is displayed. Proceed with the installation by referring to the section "[Installation Flow and Procedure of Oracle HTTP Server 11g WebGate](#)" for installing Oracle HTTP Server 11g WebGate for Oracle Access Manager.

2.2.3 Installation Flow and Procedure of Oracle HTTP Server 11g WebGate

To install Oracle HTTP Server 11g WebGate for Oracle Access Manager, follow the instructions in [Table 2-1](#).

If you need additional help with any of the installation screens, click **Help** to access the online help.

Table 2-1 Installation Flow

No.	Screen	Description and Action Required
1	Welcome Screen	Click Next to continue.
2	Prerequisite Checks Screen	Click Next to continue.
3	Specify Installation Location Screen	Specify the Middleware Home and Oracle Home locations. Note that the Middleware Home should contain an Oracle Home for Oracle Web Tier. Oracle WebLogic Server is not a prerequisite for installing Oracle HTTP Server WebGate. However, Oracle HTTP Server, which is a component of Oracle Web Tier, requires only the directory structure for the Middleware home. For more information about these directories, see "Understanding Oracle Fusion Middleware Concepts and Directory Structure" in the <i>Oracle Fusion Middleware Installation Planning Guide</i> . Click Next to continue.
4	Installation Summary Screen	Verify the information on this screen. Click Install to begin the installation.
5	Installation Progress Screen	If you are installing on a UNIX system, you may be asked to run the <code>ORACLE_HOME/oracleRoot.sh</code> script to set up the proper file and directory permissions. Click Next to continue.
6	Installation Complete Screen	Click Finish to dismiss the installer.

2.3 Post-Installation Steps for Oracle HTTP Server 11g WebGate

You must complete the following steps after installing Oracle HTTP Server 11g WebGate for Oracle Access Manager:

- **On UNIX**

1. Go to the `WebGate_Home/webgate/ohs/tools/deployWebGate` directory by running the following command:

```
cd WebGate_Home/webgate/ohs/tools/deployWebGate
```

2. Run the following command to copy the required bits of agent from the `WebGate_Home` directory to the `WebGate_Instance` location:

```
./deployWebGateInstance.sh -w WebGate_Instance_Directory  
-oh WebGate_Oracle_Home
```

In this command:

- `WebGate_Oracle_Home` is the directory in which you have installed Oracle HTTP Server WebGate and created it as the Oracle home for WebGate.

Example:

```
MW_HOME/Oracle_OAMWebGate1
```

- `WebGate_Instance_Directory` is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

```
MW_HOME/Oracle_WT1/instances/instance1/config/OHS/ohs1
```

Note: An Instance Home for Oracle HTTP Server is created after you configure Oracle HTTP Server. This configuration is performed after installing Oracle HTTP Server 11.1.1.2.0 or patching to Oracle HTTP Server 11.1.1.5.0.

3. Run the following command to ensure that the `LD_LIBRARY_PATH` variable contains `Oracle_Home_for_Oracle_HTTP_Server/lib`:

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:Oracle_Home_for_Oracle_HTTP_Server/lib
```

4. From your present working directory, move up one directory level:

```
WebGate_Home/webgate/ohs/tools/setup/InstallTools
```

5. On the command line, run the following command to copy the `apache_WebGate.template` from the `WebGate_Home` directory to the WebGate Instance location (re-named to `WebGate.conf`) and update the `httpd.conf` file to add one line to include the name of `WebGate.conf`:

```
./EditHttpConf -w WebGate_Instance_Directory [-oh WebGate_Oracle_Home] [-o output_file]
```

Note: The `-oh WebGate_Oracle_Home` and `-o output_file` parameters are optional.

In this command:

- `WebGate_Oracle_Home` is the directory where you have installed Oracle HTTP Server WebGate for Oracle Access Manager and created as the Oracle Home for WebGate.

Example:

```
MW_HOME/Oracle_OAMWebGate1
```

- `WebGate_Instance_Directory` is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

```
MW_HOME/Oracle_WT1/instances/instance1/config/OHS/ohs1
```

- `output_file` is the name of the temporary output file used by the tool.

Example:

```
Edithttpconf.log
```

■ On Windows

1. Move to the following directory under your Oracle Home for WebGate:

```
WebGate_Home\webgate\ohs\tools\deployWebGate
```

2. Run the following command to copy the required bits of agent from the `WebGate_Home` directory to the `WebGate_Instance` location:

```
deployWebGateInstance.bat -w WebGate_Instance_Directory -oh WebGate_Oracle_Home
```

In this command:

- `WebGate_Oracle_Home` is the directory where you have installed Oracle HTTP Server WebGate for Oracle Access Manager and created as the Oracle Home for WebGate.

Example:

```
MW_HOME\Oracle_OAMWebGate1
```

- `WebGate_Instance_Directory` is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

```
MW_HOME\Oracle_WT1\instances\instance1\config\OHS\ohs1
```

Note: An Instance Home for Oracle HTTP Server is created after you configure Oracle HTTP Server. This configuration is performed after installing Oracle HTTP Server 11.1.1.2.0 or patching to Oracle HTTP Server 11.1.1.7.0.

3. Run the following command to ensure that the `LD_LIBRARY_PATH` variable contains `Oracle_Home_for_Oracle_HTTP_Server\lib`:

Set the `WebGate_Installation_Directory\webgate\ohs\lib` location and the `Oracle_Home_for_Oracle_HTTP_Server\bin` location in the `PATH` environment variable. Add a semicolon (;) followed by this path at the end of the entry for the `PATH` environment variable.

4. From your present working directory, move up one directory level:

```
WebGate_Home\webgate\ohs\tools>EditHttpConf
```

5. Run the following command to copy the `apache_WebGate.template` from the `WebGate_Home` directory to the WebGate Instance location (renamed to `WebGate.conf`) and update the `httpd.conf` file to add one line to include the name of `WebGate.conf`:

```
EditHttpConf.exe -w WebGate_Instance_Directory [-oh WebGate_Oracle_Home] [-o output_file]
```

Note: The `-oh WebGate_Oracle_Home` and `-o output_file` parameters are optional.

In this command:

- `WebGate_Oracle_Home` is the directory in which you have installed Oracle HTTP Server WebGate for Oracle Access Manager and created as the Oracle Home for WebGate.

Example:

```
MW_HOME\Oracle_OAMWebGate1
```

- `WebGate_Instance_Directory` is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

```
MW_HOME\Oracle_WT1\instances\instance1\config\OHS\ohs1
```

- `output_file` is the name of the temporary output file used by the tool.

Example:

```
Editthttpconf.log
```

2.4 Verifying the Installation and Configuration of Oracle HTTP Server 11g WebGate

After installing Oracle HTTP Server 11g WebGate for Oracle Access Manager, including the post-installation steps, you can examine the *installDATE-TIME_STAMP.out* log file to verify the installation. The default location of the log are as follows:

- **On UNIX**

```
WebGate_Home/oraInst.loc
```

- **On Windows**

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

2.5 Getting Started with a New Oracle HTTP Server 11g WebGate

Before you can use the new Oracle HTTP Server 11g WebGate agent for Oracle Access Manager, you must complete the following tasks:

1. [Registering the New Oracle HTTP Server 11g WebGate](#)
2. [Copying Generated Files and Artifacts to the Oracle HTTP Server WebGate Instance Location](#)
3. [Restarting the Oracle HTTP Server Instance](#)

2.5.1 Registering the New Oracle HTTP Server 11g WebGate

You can register the new WebGate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console. For more information, see "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager with Oracle Security Token Service*.

Alternatively, you can use the RREG command-line tool to register a new WebGate agent. You can use the tool to run in two modes: **In-Band** and **Out-Of-Band**.

This section contains the following topics:

- [Setting Up the RREG Tool](#)
- [Updating the OAM11gRequest.xml File](#)
- [Using the In-Band Mode](#)
- [Using the Out-Of-Band Mode](#)
- [Files and Artifacts Generated by RREG](#)

2.5.1.1 Setting Up the RREG Tool

To set up the RREG tool, complete the following steps:

- **On UNIX**

1. After installing and configuring Oracle Access Manager, go to the following directory:

`Oracle_IDM2/oam/server/rreg/client`

2. Untar the `RREG.tar.gz` file.

Example:

```
gunzip RREG.tar.gz
```

```
tar -xvf RREG.tar
```

The tool for registering the agent is located at:

`RREG_Home/bin/oamreg.sh`

Note: `RREG_Home` is the directory in which you extracted the contents of `RREG.tar.gz/rreg`.

■ On Windows

1. After installing and configuring Oracle Access Manager, go to the following location:

`Oracle_IDM2\oam\server\rreg\client`

2. Extract the contents of the `RREG.tar.zip` file to a destination of your choice.

The tool for registering the agent is located at:

`RREG_Home\bin\oamreg.bat`

Note: `RREG_Home` is the directory in which you extracted the contents of `RREG.tar.gz/rreg`.

Set the following environment variables in the `oamreg.sh` script, on UNIX, and `oamreg.bat` script, on Windows:

- `OAM_REG_HOME`

Set this variable to the absolute path to the directory in which you extracted the contents of `RREG.tar/rreg`.

- `JDK_HOME`

Set this variable to the absolute path to the directory in which Java or JDK is installed on your machine.

2.5.1.2 Updating the `OAM11gRequest.xml` File

You must update the agent parameters, such as `agentName`, in the `OAM11GRequest.xml` file in the `RREG_Home\input` directory on Windows. On UNIX, the file is in the `RREG_Home/input` directory.

Note: The `OAM11GRequest.xml` file or the short version `OAM11GRequest_short.xml` is used as a template. You can copy this template file and use it.

Modify the following required parameters in the `OAM11GRequest.xml` file or in the `OAM11GRequest_short.xml` file:

- `serverAddress`

Specify the host and the port of the OAM Administration Server.

- `agentName`
Specify any custom name for the agent.
- `agentBaseUrl`
Specify the host and the port of the machine on which Oracle HTTP Server 11g WebGate is installed.
- `preferredHost`
Specify the host and the port of the machine on which Oracle HTTP Server 11g WebGate is installed.
- `security`
Specify the security mode, such as `open`, based on the WebGate installed.
- `primaryServerList`
Specify the host and the port of Managed Server for the Oracle Access Manager proxy, under a `Server` container element.

After modifying the file, save and close it.

2.5.1.3 Using the In-Band Mode

If you run the RREG tool once after updating the WebGate parameters in the `OAM11GRequest.xml` file, the files and artifacts required by WebGate are generated in the following directory:

On UNIX:

`RREG_Home/output/agent_name`

On Windows:

`RREG_Home\output\agent_name`

Note: You can run RREG either on a client machine or on the server. If you are running it on the server, you must manually copy the artifacts back to the client.

Complete the following steps:

1. Open the `OAM11GRequest.xml` file, which is in `RREG_Home/input/` on UNIX and `RREG_Home\input` on Windows. `RREG_Home` is the directory on which you extracted the contents of `RREG.tar.gz/rreg`.

Edit the XML file and specify parameters for the new Oracle HTTP Server WebGate for Oracle Access Manager.

2. Run the following command:

On UNIX:

```
./RREG_Home/bin/oamreg.sh inband input/OAM11GRequest.xml
```

On Windows:

```
RREG_Home\bin\oamreg.bat inband input\OAM11GRequest.xml
```

2.5.1.4 Using the Out-Of-Band Mode

If you are an end user with no access to the server, you can email your updated `OAM11GRequest.xml` file to the system administrator, who can run RREG in the out-of-band mode. You can collect the generated `AgentID_Response.xml` file from the system administrator and run RREG on this file to obtain the WebGate files and artifacts you require.

After you receive the generated `AgentID_Response.xml` file from the administrator, you must manually copy the file to the `input` directory on your machine.

■ On UNIX

Complete the following steps:

1. If you are an end user with no access to the server, open the `OAM11GRequest.xml` file, which is in `RREG_Home/input/`.

RREG_Home is the directory on which you extracted the contents of `RREG.tar.gz/rreg`. Edit this XML file and specify parameters for the new Oracle HTTP Server WebGate for Oracle Access Manager. Send the updated file to your system administrator.
2. If you are an administrator, copy the updated `OAM11GRequest.xml` file, which is in `RREG_Home/input/` directory.

This is the file that you received from the end user. Go to your (administrator's) `RREG_Home` directory and run the following command:

```
./RREG_Home/bin/oamreg.sh outofband
input/OAM11GRequest.xml
```

An `Agent_ID_Response.xml` file is generated in the output directory on the administrator's machine, in the `RREG_Home/output/` directory. Send this file to the end user who sent you the updated `OAM11GRequest.xml` file.

3. If you are an end user, copy the generated `Agent_ID_Response.xml` file, which is in `RREG_Home/input/`.

This is the file that you received from the administrator. Go to your (client's) RREG home directory and run the following command on the command line:

```
./RREG_Home/bin/oamreg.sh outofband input/Agent_ID_
Response.xml
```

Note: If you register the WebGate agent by using the Oracle Access Manager Administration Console, as described in "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager*, you must manually copy the files and artifacts generated after the registration from the server (the machine on which the Oracle Access Manager Administration Console is running) to the client machine. The files and artifacts are generated in the `MW_HOME/user_projects/domains/name_of_the_WebLogic_domain_for_OAM/output/Agent_ID` directory.

■ On Windows

Complete the following steps:

1. If you are an end user with no access to the server, open the `OAM11GRequest.xml` file, which is in `RREG_Home\input\` directory.

RREG_Home is the directory in which you extracted the contents of *RREG.tar.gz/rreg*. Edit this XML file, specify parameters for the new Oracle HTTP Server WebGate for Oracle Access Manager, and send the updated file to your system administrator.

2. If you are an administrator, copy the updated *OAM11GRequest.xml* file, which is in *RREG_Home\input*. This is the file you received from the end user. Go to your (administrator's) *RREG_Home* directory and run the following command:

```
RREG_Home\bin\oamreg.bat outofband input\OAM11GRequest.xml
```

An *Agent_ID_Response.xml* file is generated on the administrator's machine in the *RREG_Home\output* directory. Send this file to the end user who sent you the updated *OAM11GRequest.xml* file.

3. If you are an end user, copy the generated *Agent_ID_Response.xml* file, which is in *RREG_Home\input*. This is the file you received from the administrator. Go to your (client's) *RREG* home directory and run the following command:

```
RREG_Home\bin\oamreg.bat outofband input\Agent_ID_Response.xml
```

Note: If you register the WebGate agent by using the Oracle Access Manager Administration Console, as described in "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager*, you must manually copy the files and artifacts generated after the registration from the server (the machine where Oracle Access Manager Administration Console is running) to the client machine. The files and artifacts are generated in the *MW_HOME/user_projects/domains/name_of_the_WebLogic_domain_for_OAM/output/Agent_ID* directory.

2.5.1.5 Files and Artifacts Generated by RREG

Regardless of the method or mode you use to register the new WebGate agent, the following files and artifacts are generated in the *RREG_Home/output/Agent_ID* directory:

- *cwallet.sso*
- *ObAccessClient.xml*
- In the **SIMPLE** mode, RREG generates:
 - *password.xml*, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be the same as the passphrase used on the server.
 - *aaa_key.pem*
 - *aaa_cert.pem*
- In the **CERT** mode, RREG generates *password.xml*, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be different than the passphrase used on the server.

Note: You can use these files generated by RREG to generate a certificate request and get it signed by a third-party Certification Authority. To install an existing certificate, you must use the existing `aaa_cert.pem` and `aaa_chain.pem` files along with `password.xml` and `aaa_key.pem`.

2.5.2 Copying Generated Files and Artifacts to the Oracle HTTP Server WebGate Instance Location

After RREG generates these files and artifacts, you must manually copy them, based on the security mode you are using, from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home` directory.

Do the following according to the security mode you are using:

- In **OPEN** mode, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config` directory:
 - `ObAccessClient.xml`
 - `cwallet.sso`
- In **SIMPLE** mode, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config` directory:
 - `ObAccessClient.xml`
 - `cwallet.sso`
 - `password.xml`

In addition, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config/simple` directory:

- `aaa_key.pem`
- `aaa_cert.pem`
- In **CERT** mode, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config` directory:
 - `ObAccessClient.xml`
 - `cwallet.sso`
 - `password.xml`

Generating a New Certificate

You can generate a new certificate as follows:

1. Go to the `WebGate_Home/webgate/ohs/tools/openssl` directory.
2. Create a certificate request as follows:

```
./openssl req -utf8 -new -nodes -config openssl_silent_ohs11g.cnf -keyout aaa_key.pem -out aaa_req.pem -rand WebGate_Home/webgate/ohs/config/random-seed
```

3. Self-sign the certificate as follows:

```
./openssl ca -config openssl_silent_ohs11g.cnf -policy
policy_anything -batch -out aaa_cert.pem -infile aaa_req.pem
```

4. Copy the following generated certificates to the *WebGate_Instance_Home/webgate/config* directory:

- *aaa_key.pem*
- *aaa_cert.pem*
- *cacert.pem* located in the *simpleCA* directory

Note: After copying the *cacert.pem* file, you must rename the file to *aaa_chain.pem*.

Migrating an Existing Certificate

If you want to migrate an existing certificate (*aaa_key.pem*, *aaa_cert.pem*, and *aaa_chain.pem*), ensure that you use the same passphrase that you used to encrypt *aaa_key.pem*. You must enter the same passphrase during the RREG registration process. If you do not use the same passphrase, the *password.xml* file generated by RREG does not match the passphrase used to encrypt the key.

If you enter the same passphrase, you can copy these certificates as follows:

1. Go to the *WebGate_Instance_Home/webgate/config* directory.
2. Copy the following certificates to the *WebGate_Instance_Home/webgate/config* directory:
 - *aaa_key.pem*
 - *aaa_cert.pem*
 - *aaa_chain.pem*

2.5.3 Restarting the Oracle HTTP Server Instance

You can use the Oracle Process Manager and Notification Server (OPMN) command-line tool to start or stop your Oracle HTTP Server instance. If any instances are running, run the following command on the command-line to stop all running instances:

```
Oracle_Home_for_Oracle_HTTP_Server/opmn/bin/opmnctl stopall
```

To restart the Oracle HTTP Server instance, run the following commands on the command line:

1. *Oracle_Home_for_Oracle_HTTP_Server/opmn/bin/opmnctl start*
2. *Oracle_Home_for_Oracle_HTTP_Server/opmn/bin/opmnctl startproc ias-component=Oracle_HTTP_Server_Instance_Name*

2.6 Deinstalling Oracle HTTP Server 11g WebGate

You should always use the instructions provided in this section for removing the Oracle HTTP Server 11.1.1.7.0 WebGates for Oracle Access Manager. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this section will ensure that the software is properly removed.

To deinstall the WebGate agent, do the following:

1. Go to the `MW_HOME/webgate_Home/oui/bin` directory on UNIX, and `MW_HOME\Webgate_home\oui\bin` on Windows.
2. Run the following command:
On UNIX: `./runInstaller -deinstall`
On Windows: `setup.exe -deinstall -jreLoc JRE_LOCATION`
 Ensure that you specify the absolute path to your `JRE_LOCATION`; relative paths are not supported.

After the deinstaller starts, the **Welcome** screen is displayed. Proceed with the deinstallation by referring to [Section 2.6.1](#).

2.6.1 Deinstallation Screens and Instructions

Follow the instructions in [Table 2–2](#) to complete the deinstallation.

If you need additional help with any of the deinstallation screens, click **Help** to access the online help.

Table 2–2 Deinstallation Flow

Sl. No.	Screen	Description	Action Required
1.	Welcome	Each time the deinstaller starts, the Welcome screen is displayed.	Click Next .
2.	Deinstall Oracle Home	The Deinstall Oracle Home screen shows the Oracle home you are about to deinstall.	Verify the Oracle home you are about to deinstall. Click Deinstall . On the Warning screen, select whether or not you want the deinstaller to remove the Oracle home directory in addition to removing the software. Click Yes to have the deinstaller remove the software and Oracle home, No to remove only the software, or Cancel to return to the previous screen. If you select No , go to Section 2.6.2 for instructions on how to manually remove your Oracle home directory.
3.	Deinstallation progress	The Deinstallation Progress screen shows the progress and status of the deinstallation.	Wait until the Deinstallation Complete screen appears.
4.	Deinstallation Complete	The Deinstallation Complete screen appears when the deinstallation is complete.	Click Finish to dismiss the screen.

2.6.2 Manually Removing the Oracle Home Directory

If you have selected **No** on the warning screen during deinstallation, you must manually remove your `Webgate_Home` directory and any sub-directories. For

example: if your Oracle WebGate home directory was
/home/Oracle/Middleware/Oracle_OAMWebGate1, run the following command:

```
cd /home/Oracle/Middleware/  
rm -rf Oracle_OAMWebGate1
```

On Windows, if your Oracle Common home directory was
C:\Oracle\Middleware\Oracle_OAMWebGate1, then use a file manager window,
go to the C:\Oracle\Middleware directory, right-click on the Oracle_
OAMWebGate1 folder, and then select **Delete**.

2.7 Silent Installation for OHS 11g WebGate

To run the OHS 11g WebGate in silent mode, complete the following steps:

1. Set the contents of the `silent.rsp` file. For example:

```
[ENGINE]  
#DO NOT CHANGE THIS.  
Response File Version=1.0.0.0.0  
[GENERIC]  
ORACLE_HOME=/home/MW_HOME/ohs_Webgate_home  
MIDDLEWARE_HOME=/home/MW_HOME  
[SYSTEM]  
[APPLICATIONS]  
[RELATIONSHIPS]
```

In the preceding file, the parameters are as follows:

- `ORACLE_HOME`: Provide the Oracle Home location. This is the directory in which you want to install the new OHS WebGate. The location must be an immediate child folder under the specified Middleware Home location. The Oracle Home directory name can contain only alphanumeric, hyphen (-), dot (.), and underscore (_) characters, and must begin with an alphanumeric character. The total length has to be less than or equal to 128 characters. For example, `home/middleware/ohs_webgate`.
 - `MIDDLEWARE_HOME`: Specify the full path to your Middleware home directory.
2. Extract the contents of the installer to a directory.
 3. Run the following command:

```
WebGate_Installer_Directory/Disk1/runInstaller -jreLoc jre_  
location -invPtrLoc Absolute_Path_Of_the_oraInst.loc_file  
-silent -response Absolute_Path_Of_the_silent.rsp_file
```

In the preceding command:

- `WebGate_Installer_Directory` is the absolute path to the directory in which you have extracted the contents of the WebGate installer.
- `jre_location` is the absolute path to the JRE directory.
- `Absolute_Path_Of_the_oraInst.loc_file` is the absolute path to the `oraInst.loc` file.
- `Absolute_Path_Of_the_silent.rsp_file` is the absolute path to the `silent.rsp` file you created.

2.8 Upgrading OHS Webgate 11.1.1.5.0 or 11.1.1.6.0 to 11.1.1.7.0

To upgrade from Oracle HTTP Server WebGate 11.1.1.5.0 or 11.1.1.6.0 to 11.1.1.7.0, complete all of the steps described in this chapter. However, in the "Specify Installation Location" screen ([Table 2-1](#), step 3), specify the same Oracle home in which the Oracle HTTP Server 11g WebGate for OAM version 11.1.1.5.0 or 11.1.1.6.0 was installed.

Installing and Configuring Oracle Traffic Director 11g WebGate for OAM

This chapter describes how to install and configure Oracle Traffic Director 11g WebGate for Oracle Access Manager. For an introduction to WebGates and an overview of installing WebGates, see [Chapter 1](#).

This chapter contains the following sections:

- [Prerequisites for Oracle Traffic Director 11g WebGate](#)
- [Installing Oracle Traffic Director 11g WebGate](#)
- [Post-Installation Steps for Oracle Traffic Director 11g WebGate](#)
- [Verifying the Installation and Configuration of Oracle Traffic Director 11g WebGate](#)
- [Getting Started with a New Oracle Traffic Director 11g WebGate](#)
- [Deinstalling Oracle Traffic Director 11g WebGate](#)
- [Silent Installation for Oracle Traffic Director 11g WebGate](#)

3.1 Prerequisites for Oracle Traffic Director 11g WebGate

This section discusses the following topics:

- [Oracle Fusion Middleware Certification](#)
- [Installing JRE](#)
- [Installing and Configuring Oracle Traffic Director 11g](#)
- [Installing and Configuring OAM 11g](#)

3.1.1 Oracle Fusion Middleware Certification

The *Oracle Fusion Middleware Supported System Configurations* document provides certification information for Oracle Fusion Middleware, including supported installation types, platforms, operating systems, databases, JDKs, and third-party products related to Oracle Identity and Access Management 11g Release 1 (11.1.1.9.0).

You can access the *Oracle Fusion Middleware Supported System Configurations* document at:

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

3.1.2 Installing JRE

You must have a 64-bit Java runtime environment (JRE), 1.6 or higher installed.

3.1.3 Installing and Configuring Oracle Traffic Director 11g

If you do not have Oracle Traffic Director 11.1.1.7.0 installed, you can download the Installer from the Oracle Technology Network (OTN):

http://www.oracle.com/technology/software/products/middleware/htdocs/fmw_11_download.html

Alternatively, you can download the latest Oracle Fusion Middleware 11g software from the following website:

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

For information about installation and configuration, see the *Oracle Traffic Director Installation Guide*.

3.1.4 Installing and Configuring OAM 11g

For information about installing Oracle Access Manager (OAM), see "Installing and Configuring Oracle Identity and Access Management (11.1.1.7.0)" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

For information about configuring Oracle Access Manager in a new or existing WebLogic administration domain, see "Configuring Oracle Access Manager" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

In addition, see "Securing Communication Between OAM 11g Servers and WebGates" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager* for information about configuring Oracle Access Manager in Open, Simple, or Cert mode.

3.2 Installing Oracle Traffic Director 11g WebGate

This section includes the following topics:

- [Obtaining the Software](#)
- [Starting the Oracle Traffic Director 11g WebGate Installer](#)
- [Installation Flow and Procedure of Oracle Traffic Director 11g WebGate](#)

3.2.1 Obtaining the Software

For information about obtaining the Oracle Traffic Director 11.1.1.7.0 WebGate software, see the *Oracle Fusion Middleware Download, Installation, and Configuration ReadMe*.

3.2.2 Starting the Oracle Traffic Director 11g WebGate Installer

To start the installation wizard, do the following:

1. Go to the directory in which you extracted the contents of the Installer.
2. Go to the following location:

```
cd Disk1
```
3. Run the following command:

```
./runInstaller
```

4. Provide the `jre` location when the Oracle Universal Installer (OUI) prompts for it.

After the Installer starts, the Welcome screen appears. Continue by referring to the section [Installation Flow and Procedure of Oracle Traffic Director 11g WebGate](#) for installing Oracle Traffic Director 11g WebGate for Oracle Access Manager.

3.2.3 Installation Flow and Procedure of Oracle Traffic Director 11g WebGate

To install Oracle Traffic Director 11g WebGate for Oracle Access Manager, follow the instructions in [Table 3-1](#).

If you need additional help with any of the installation screens, click **Help** to access the online help.

Table 3-1 Installation Flow of OTD WebGate

No.	Screen	Description and Action Required
1	Welcome Screen	Click Next to continue.
2	Prerequisite Checks Screen	Click Next to continue.
3	Specify Installation Location Screen	Specify the Middleware Home and Oracle Home locations. For more information about these directories, see "Understanding Oracle Fusion Middleware Concepts and Directory Structure" in the <i>Oracle Fusion Middleware Installation Planning Guide</i> . Oracle Home in case of OTD WebGate is any valid directory, not necessarily in the Middleware Home. So, if you do not provide a Middleware Home or if you provide an invalid Middleware Home, the Installer proceeds without any error. Click Next to continue.
4	Installation Summary Screen	Verify the information on this screen. Click Install to begin the installation.
5	Installation Progress Screen	Click Next to continue.
6	Installation Complete Screen	Click Finish to dismiss the Installer.

3.3 Post-Installation Steps for Oracle Traffic Director 11g WebGate

This section includes the following topics:

- [Deploying the Oracle Traffic Director WebGate Instance](#)
- [Setting the Environment Variable](#)
- [Running the EditObjConf Tool](#)

3.3.1 Deploying the Oracle Traffic Director WebGate Instance

Create an Oracle Traffic Director instance by using the `deployWebGateInstance.sh` tool from the WebGate Oracle Home directory.

To deploy the WebGate instance, do the following:

1. Go to the `WebGate_Oracle_Home/webgate/iplanet/tools/deployWebGate` directory by running the following command:

```
cd WebGate_Oracle_Home/webgate/iplanet/tools/deployWebGate
```

2. Run the following command:

```
./deployWebGateInstance -w WebGate_InstanceDir -oh WebGate_Oracle_Home  
-ws ohs|iplanet|otd
```

In this command:

- *WebGate_InstanceDir* is the directory in which the new WebGate instances should be created.
- *WebGate_Oracle_Home* is the WebGate Oracle home directory you specified while installing OTD 11g WebGate.
- Web server is OTD.

Example:

```
./deployWebGateInstance.sh -w /home/wg_instance4otd/ -oh /home/Oracle_  
OAMWebGate1/ -ws otd
```

3.3.2 Setting the Environment Variable

Set the environment variable `LD_LIBRARY_PATH` to *WebGate_Oracle_Home/lib*

Example:

```
export LD_LIBRARY_PATH=/home/Oracle_OAMWebGate1/lib
```

3.3.3 Running the EditObjConf Tool

To run the `EditObjConf` tool, do the following:

1. Go to the *WebGate_Oracle_Home/webgate/iplanet/tools/setup/InstallTools* directory by running the following command:

```
cd WebGate_Oracle_Home/webgate/iplanet/tools/setup/InstallTools
```

2. Run the following command:

```
./EditObjConf -f path_to_webserver_config_file -w WebGate_Instance_Dir  
-oh WebGate_Oracle_Home -ws WebServer
```

In this command:

- *path_to_webserver_config_file* is the full path of the OTD instance `obj.conf` file.
- *WebGate_Instance_Dir* is the directory in which new WebGate instances are created.
- *WebGate_Oracle_Home* is the full path to the WebGate Oracle home.
- *WebServer* is OTD.

Example:

```
cd /home/OAMWebGate1/webgate/iplanet/tools/setup/InstallTools/  
./EditObjConf -f /home/instanceHome1/net-test_otd1/config/test_  
otd1-obj.conf -oh /home/Oracle_OAMWebGate1/ -w /home/Oracle_  
OAMWebGate1/wg_instance4otd/ -ws otd
```

3.4 Verifying the Installation and Configuration of Oracle Traffic Director 11g WebGate

After installing Oracle Traffic Director 11g WebGate for Oracle Access Manager, you can examine the `installDATE-TIME_STAMP.out` log file to verify the installation. The default location of the log is in the following file:

```
WebGate_Home/oraInst.loc
```

3.5 Getting Started with a New Oracle Traffic Director 11g WebGate

Before you can use the new Oracle Traffic Director 11g WebGate for Oracle Access Manager, you must complete the following tasks:

1. [Registering the New WebGate Agent for Oracle Traffic Director 11g WebGate](#)
2. [Copying Generated Files and Artifacts to the WebGate Instance Location](#)
3. [Restarting the Oracle Traffic Director Instance](#)

3.5.1 Registering the New WebGate Agent for Oracle Traffic Director 11g WebGate

You can register the new WebGate with Oracle Access Manager by using the Oracle Access Manager Administration Console. For more information, see "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager with Oracle Security Token Service*.

Alternatively, you can use the RREG command-line tool to register a new WebGate agent. You can run the tool in two modes: **In-Band** and **Out-Of-Band**.

This section includes the following topics:

- [Setting Up the RREG Tool](#)
- [Updating the OAM11gRequest.xml File](#)
- [Using the In-Band Mode](#)
- [Using the Out-Of-Band Mode](#)
- [Files and Artifacts Generated by RREG](#)

3.5.1.1 Setting Up the RREG Tool

To set up the RREG tool, complete the following steps :

1. After installing and configuring Oracle Access Manager, go to the following directory:

```
Oracle_IDM2/oam/server/rreg/client
```

2. Untar the `RREG.tar.gz` file.

Example:

```
gunzip RREG.tar.gz
tar -xvf RREG.tar
```

The tool for registering the agent is located at:

```
RREG_Home/bin/oamreg.sh
```

Note: *RREG_Home* is the directory in which you extracted the contents of *RREG.tar.gz/rreg*.

Set the following environment variables in the *oamreg.sh* script:

- `OAM_REG_HOME`
Set this variable to the absolute path to the directory in which you extracted the contents of *RREG.tar/rreg*.
- `JDK_HOME`
Set this variable to the absolute path to the directory in which Java or JDK is installed on your machine.

3.5.1.2 Updating the OAM11gRequest.xml File

You must update the agent parameters, such as *agentName*, in the *OAM11GRequest.xml* file in the *RREG_Home/input* directory.

Note: The *OAM11GRequest.xml* file or the short version *OAM11GRequest_short.xml* is used as a template. You can copy this template file and use it.

Modify the following required parameters in the *OAM11GRequest.xml* file or in the *OAM11GRequest_short.xml* file:

- `serverAddress`
Specify the host and the port of the OAM Administration Server.
- `agentName`
Specify any custom name for the agent.
- `agentBaseUrl`
Specify the host and the port of the machine on which Oracle Traffic Director 11g WebGate is installed.
- `preferredHost`
Specify the host and the port of the machine on which Oracle Traffic Director 11g WebGate is installed.
- `security`
Specify the security mode, such as *open*, based on the WebGate installed.
- `primaryServerList`
Specify the host and the port of Managed Server for the Oracle Access Manager proxy, under a *Server* container element.

After modifying the file, save and close it.

3.5.1.3 Using the In-Band Mode

If you run the *RREG* tool once after updating the WebGate parameters in the *OAM11GRequest.xml* file, the files and artifacts required by WebGate are generated in the following directory:

RREG_Home/output/agent_name

Note: You can run RREG either on a client machine or on the server. If you are running it on the server, you must manually copy the artifacts back to the client.

Complete the following steps:

1. Open the `OAM11GRequest.xml` file, which is in the input directory at `RREG_Home/input/`. `RREG_Home` is the directory where you extracted the contents of `RREG.tar.gz/rreg` to. Edit the XML file and fill in parameters for the new Oracle Traffic Director WebGate for Oracle Access Manager.

2. Run the following command:

```
./RREG_Home/bin/oamreg.sh inband input/OAM11GRequest.xml
```

3.5.1.4 Using the Out-Of-Band Mode

If you are an end user with no access to the server, you can email your updated `OAM11GRequest.xml` file to the system administrator, who can run RREG in the out-of-band mode. You can collect the generated `AgentID_Response.xml` file from the system administrator and run RREG on this file to obtain the WebGate files and artifacts you require.

After you receive the generated `AgentID_Response.xml` file from the administrator, you must manually copy the file to the input directory on your machine.

Complete the following steps:

1. If you are an end user with no access to the server, open the `OAM11GRequest.xml` file, which is in `RREG_Home/input/`.

`RREG_Home` is the directory in which you extracted the contents of `RREG.tar.gz/rreg`. Edit this XML file and specify parameters for the new Oracle Traffic Director WebGate for Oracle Access Manager. Send the updated file to your system administrator.

2. If you are an administrator, copy the updated `OAM11GRequest.xml` file, which is in the `RREG_Home/input/` directory.

This is the file that you received from the end user. Go to your (administrator's) `RREG_Home` directory and run the following command:

```
./RREG_Home/bin/oamreg.sh outofband input/OAM11GRequest.xml
```

An `Agent_ID_Response.xml` file is generated in the output directory on the administrator's machine, in the `RREG_Home/output/directory`. Send this file to the end user who sent you the updated `OAM11GRequest.xml` file.

3. If you are an end user, copy the generated `Agent_ID_Response.xml` file, which is in the `RREG_Home/input/` directory.

This is the file that you received from the administrator. Move to your (client's) RREG home directory and run the following command:

```
./RREG_Home/bin/oamreg.sh outofband input/Agent_ID_Response.xml
```

Note: If you register the WebGate agent by using the Oracle Access Manager Administration Console, as described in "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager*, you must manually copy the files and artifacts generated after the registration from the server (the machine on which the Oracle Access Manager Administration Console is running) to the client machine. The files and artifacts are generated in the `MW_HOME/user_projects/domains/name_of_the_WebLogic_domain_for_OAM/output/Agent_ID` directory.

3.5.1.5 Files and Artifacts Generated by RREG

Regardless of the method or mode you use to register the new WebGate agent, the following files and artifacts are generated in the `RREG_Home/output/Agent_ID` directory:

- `cwallet.sso`
- `ObAccessClient.xml`
- In the **SIMPLE** mode, RREG generates:
 - `password.xml`, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be the same as the passphrase used on the server.
 - `aaa_key.pem`
 - `aaa_cert.pem`
- In the **CERT** mode, RREG generates `password.xml` file, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be different than the passphrase used on the server.

Note: You can use these files generated by RREG to generate a certificate request and get it signed by a third-party Certification Authority. To install an existing certificate, you must use the existing `aaa_cert.pem` and `aaa_chain.pem` files along with `password.xml` and `aaa_key.pem`.

3.5.2 Copying Generated Files and Artifacts to the WebGate Instance Location

After RREG generates these files and artifacts, you must manually copy the following files, based on the security mode you are using, from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home` directory.

Do the following according to the security mode you are using:

- In **OPEN** mode, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config` directory:
 - `ObAccessClient.xml`
 - `cwallet.sso`
- In **SIMPLE** mode, copy the following files from the `RREG_Home/output/Agent_ID` directory to the `WebGate_Instance_Home/webgate/config` directory:
 - `ObAccessClient.xml`

- cwallet.sso
- password.xml

In addition, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config/simple* directory:

- aaa_key.pem
- aaa_cert.pem

- In **CERT** mode, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config* directory:

- ObAccessClient.xml
- cwallet.sso
- password.xml

After copying the files, you must either generate a new certificate or migrate an existing certificate.

Generating a New Certificate

You can generate a new certificate as follows:

1. Go to the *WebGate_Home/webgate/otd/tools/openssl* directory.
2. Create a certificate request as follows:

```
./openssl req -utf8 -new -nodes -config openssl_silent_ohs11g.cnf
-keyout aaa_key.pem -out aaa_req.pem -rand WebGate_
Home/webgate/otd/config/random-seed
```

3. Self-sign the certificate as follows:

```
./openssl ca -config openssl_silent_ohs11g.cnf -policy policy_anything
-batch -out aaa_cert.pem -infiles aaa_req.pem
```

4. Copy the following generated certificates to the *WebGate_Instance_Home/webgate/config* directory:

- aaa_key.pem
- aaa_cert.pem
- cacert.pem located in the simpleCA directory

Note: After copying the cacert.pem file, you must rename the file to aaa_chain.pem.

Migrating an Existing Certificate

If you want to migrate an existing certificate (aaa_key.pem, aaa_cert.pem, and aaa_chain.pem), ensure that you use the same passphrase that you used to encrypt aaa_key.pem. You must enter the same passphrase during the RREG registration process. If you do not use the same passphrase, the password.xml file generated by RREG does not match the passphrase used to encrypt the key.

If you enter the same passphrase, then you can copy these certificates as follows:

1. Go to the *WebGate_Instance_Home/webgate/config* directory.
2. Copy the following certificates to the *WebGate_Instance_Home/webgate/config* directory:

- `aaa_key.pem`
- `aaa_cert.pem`
- `aaa_chain.pem`

3.5.3 Restarting the Oracle Traffic Director Instance

Use the `startserv` command to start or `stopserv` command to stop your Oracle Traffic Director instance.

To stop the server, run the following command:

```
/home/bin/stopserv
```

To start the server, run the following command:

```
export LD_LIBRARY_PATH=/WebGate_Home/lib
```

```
/home/bin/startserv
```

To restart the Oracle Traffic Director instance, stop all running instances, and then run the start command.

3.6 Deinstalling Oracle Traffic Director 11g WebGate

You should always use the instructions provided in this section for removing the Oracle Traffic Director 11g WebGate for Oracle Access Manager. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this section will ensure that the software is properly removed.

To deinstall the WebGate agent, do the following:

1. Go to the `MW_HOME/webgate_Home/oui/bin` directory on UNIX, and `MW_HOME\Webgate_home\oui\bin` on Windows.
2. Run the following command:

On UNIX: `./runInstaller -deinstall`

On Windows: `setup.exe -deinstall -jreLoc JRE_LOCATION`

Ensure that you specify the absolute path to your `JRE_LOCATION`; relative paths are not supported.

After the deinstaller starts, the **Welcome** screen is displayed. Proceed with the deinstallation by referring to [Section 3.6.1](#).

3.6.1 Deinstallation Screens and Instructions

Follow the instructions in [Table 3–2](#) to complete the deinstallation.

If you need additional help with any of the deinstallation screens, click **Help** to access the online help.

Table 3–2 Deinstallation Flow

Sl. No.	Screen	Description	Action Required
1.	Welcome	Each time the deinstaller starts, the Welcome screen is displayed.	Click Next .

Table 3–2 (Cont.) Deinstallation Flow

Sl. No.	Screen	Description	Action Required
2.	Deinstall Oracle Home	The Deinstall Oracle Home screen shows the Oracle home you are about to deinstall.	Verify the Oracle home you are about to deinstall. Click Deinstall . On the Warning screen, select whether or not you want the deinstaller to remove the Oracle home directory in addition to removing the software. Click Yes to have the deinstaller remove the software and Oracle home, No to remove only the software, or Cancel to return to the previous screen. If you select No , go to Section 3.6.2 for instructions on how to manually remove your Oracle home directory.
3.	Deinstallation progress	The Deinstallation Progress screen shows the progress and status of the deinstallation.	Wait until the Deinstallation Complete screen appears.
4.	Deinstallation Complete	The Deinstallation Complete screen appears when the deinstallation is complete.	Click Finish to dismiss the screen.

3.6.2 Manually Removing the Oracle Home Directory

If you have selected **No** on the warning screen during deinstallation, you must manually remove your *Webgate_Home* directory and any sub-directories. For example: if your Oracle WebGate home directory was `/home/Oracle/Middleware/Oracle_OAMWebGate1`, run the following command:

```
cd /home/Oracle/Middleware/
rm -rf Oracle_OAMWebGate1
```

On Windows, if your Oracle Common home directory was `C:\Oracle\Middleware\Oracle_OAMWebGate1`, then use a file manager window, go to the `C:\Oracle\Middleware` directory, right-click on the `Oracle_OAMWebGate1` folder, and then select **Delete**.

3.7 Silent Installation for Oracle Traffic Director 11g WebGate

To run the Oracle Traffic Director 11g WebGate in silent mode, complete the following steps:

1. Go to the `Disk1` directory under the `WebGate` folder.
2. Run the following command:

```
./runInstaller -silent -waitForCompletion -invPtrLoc
/home/wg.customInventory ORACLE_HOME=/home/Oracle_OAMWebGate -jreloc
/usr
```

Installing and Configuring Oracle iPlanet 11g WebGate for OAM

This chapter describes how to install and configure Oracle iPlanet 11g WebGate for Oracle Access Manager. For an introduction to WebGates and an overview of installing WebGates, see [Chapter 1](#).

This chapter contains the following sections:

- [Prerequisites for Oracle iPlanet 11g WebGate](#)
- [Installing Oracle iPlanet 11g WebGate](#)
- [Post-Installation Steps for Oracle iPlanet 11g WebGate](#)
- [Verifying the Installation and Configuration of Oracle iPlanet 11g WebGate](#)
- [Getting Started with a New Oracle iPlanet 11g WebGate](#)
- [Deinstalling Oracle iPlanet 11g WebGate](#)
- [Silent Installation for Oracle iPlanet 11g WebGate](#)

4.1 Prerequisites for Oracle iPlanet 11g WebGate

This section discusses the following topics:

- [Oracle Fusion Middleware Certification](#)
- [Installing JRE](#)
- [Installing and Configuring Oracle iPlanet 11g Web Server](#)
- [Installing and Configuring OAM 11g](#)

4.1.1 Oracle Fusion Middleware Certification

The *Oracle Fusion Middleware Supported System Configurations* document provides certification information for Oracle Fusion Middleware, including supported installation types, platforms, operating systems, databases, JDKs, and third-party products related to Oracle Identity and Access Management 11g Release 1 (11.1.1.9.0).

You can access the *Oracle Fusion Middleware Supported System Configurations* document by searching the Oracle Technology Network (OTN) web site:

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

4.1.2 Installing JRE

You must have a 64-bit Java runtime environment (JRE), 1.6 or higher installed.

4.1.3 Installing and Configuring Oracle iPlanet 11g Web Server

If you do not have Oracle iPlanet Web Server 7.0.9 installed, you can download the Installer from the Oracle Technology Network (OTN):

http://www.oracle.com/technology/software/products/middleware/docs/fmw_11_download.html

For information about installation and configuration, see the *Oracle iPlanet Web Server 7.0.9 Installation and Migration Guide*.

4.1.4 Installing and Configuring OAM 11g

For information about installing Oracle Access Manager (OAM), see "Installing and Configuring Oracle Identity and Access Management (11.1.1.7.0)" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

For information about configuring Oracle Access Manager in a new or existing WebLogic administration domain, see "Configuring Oracle Access Manager" in the *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

In addition, see the "Securing Communication Between OAM 11g Servers and WebGates" topic in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager* for information about configuring Oracle Access Manager in Open, Simple, or Cert mode.

4.2 Installing Oracle iPlanet 11g WebGate

This section includes the following topics:

- [Obtaining the Software](#)
- [Starting the Oracle iPlanet 11g WebGate Installer](#)
- [Installation Flow and Procedure of Oracle iPlanet 11g WebGate](#)

4.2.1 Obtaining the Software

For information about obtaining the Oracle iPlanet 11g WebGate software, see the *Oracle Fusion Middleware Download, Installation, and Configuration ReadMe*.

4.2.2 Starting the Oracle iPlanet 11g WebGate Installer

To start the installation wizard, do the following:

1. Go to the directory in which you extracted the contents of the Installer.
2. Go to the following location:

```
cd Disk1
```
3. Run the following command:

```
./runInstaller
```
4. Provide the `jre` location when the Oracle Universal Installer (OUI) prompts for it.

After the Installer starts, the Welcome screen is displayed. Proceed with the installation by referring to the section "[Installation Flow and Procedure of Oracle iPlanet 11g WebGate](#)" for installing Oracle iPlanet 11g WebGate for Oracle Access Manager.

4.2.3 Installation Flow and Procedure of Oracle iPlanet 11g WebGate

To install Oracle iPlanet 11g WebGate for Oracle Access Manager, follow the instructions in [Table 4-1](#).

If you need additional help with any of the installation screens, click **Help** to access the online help.

Table 4-1 Installation Flow of Oracle iPlanet WebGate

No.	Screen	Description and Action Required
1	Welcome Screen	Click Next to continue.
2	Prerequisite Checks Screen	Click Next to continue.
3	Specify Installation Location Screen	Specify the Middleware Home and Oracle Home locations. For more information about these directories, see "Understanding Oracle Fusion Middleware Concepts and Directory Structure" in <i>Oracle Fusion Middleware Installation Planning Guide</i> . Click Next to continue.
4	Installation Summary Screen	Verify the information on this screen. Click Install to begin the installation.
5	Installation Progress Screen	Click Next to continue.
6	Installation Complete Screen	Click Finish to dismiss the Installer.

4.3 Post-Installation Steps for Oracle iPlanet 11g WebGate

This section includes the following topics:

- [Deploying the Oracle iPlanet WebGate Instance](#)
- [Setting the Environment Variable](#)
- [Setting the Environment Variable](#)

4.3.1 Deploying the Oracle iPlanet WebGate Instance

Create an Oracle Traffic Director instance by using the `deployWebGateInstance.sh` tool from the WebGate Oracle Home directory.

To deploy the Oracle iPlanet WebGate instance, do the following:

1. Go to the `WebGate_Oracle_Home/webgate/iplanet/tools/deployWebGate` directory, by running the following command:

```
cd WebGate_Oracle_Home/webgate/iplanet/tools/deployWebGate
```

2. Run the following command:

```
./deployWebGateInstance -w WebGate_InstanceDir -oh WebGate_Oracle_Home  
-ws ohs|iplanet|otd
```

In this command:

- `WebGate_InstanceDir` is the directory in which new WebGate instances should be created.

- `WebGate_Oracle_Home` is the WebGate Oracle home directory you specified while installing iPlanet 11g WebGate.
- Web server is iPlanet.

Example:

```
./deployWebGateInstance.sh -w /home/wg_instance4iplanet/ -oh
/home/Oracle_OAMWebGate1/ -ws iPlanet
```

4.3.2 Setting the Environment Variable

Set the environment variable `LD_LIBRARY_PATH` to `WebGate_Oracle_Home/lib`

Example:

```
bash$ export LD_LIBRARY_PATH=/home/Oracle_OAMWebGate1/lib
```

4.3.3 Running the EditObjConf Tool

To run the `EditObjConf` tool, do the following:

1. Go to the `WebGate_Oracle_Home/webgate/iplanet/tools/setup/InstallTools` directory, by running the following command:

```
cd WebGate_Oracle_Home/webgate/iplanet/tools/setup/InstallTools
```

2. Run the following command:

```
./EditObjConf -f path_to_webserver_config_file -w WebGate_Instance_Dir
-oh WebGate_Oracle_Home -ws WebServer
```

In this command:

- `path_to_webserver_config_file` is the full path of the iPlanet instance `obj.conf` file.
- `WebGate_Instance_Dir` is the directory in which the new WebGate instances are created.
- `WebGate_Oracle_Home` is the full path to the WebGate Oracle home.
- `WebServer` is iPlanet.

Example:

```
cd /home/OAMWebGate1/webgate/iplanet/tools/setup/InstallTools/
./EditObjConf -f /home/instanceHome1/net-test_iplanet1/config/test_
iplanet1-obj.conf -oh /home/Oracle_OAMWebGate1/ -w /home/Oracle_
OAMWebGate1/wg_instance4iplanet/ -ws iplanet
```

4.4 Verifying the Installation and Configuration of Oracle iPlanet 11g WebGate

After installing Oracle iPlanet 11g WebGate for Oracle Access Manager, you can examine the `installDATE-TIME_STAMP.out` log file to verify the installation. The default location of the log is in the following file:

```
WebGate_Home/oraInst.loc
```

4.5 Getting Started with a New Oracle iPlanet 11g WebGate

Before you use the new Oracle Traffic Director 11g WebGate for Oracle Access Manager, you must complete the following tasks:

1. [Registering the New WebGate Agent for Oracle iPlanet 11g WebGate](#)
2. [Copying Generated Files and Artifacts to the WebGate Instance Location](#)
3. [Restarting the Oracle iPlanet Instance](#)

4.5.1 Registering the New WebGate Agent for Oracle iPlanet 11g WebGate

You can register the new iPlanet WebGate with Oracle Access Manager by using the Oracle Access Manager Administration Console. For more information, see "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager with Oracle Security Token Service*.

Alternatively, you can use the RREG command-line tool to register a new WebGate agent. You can run the tool in two modes: **In-Band** and **Out-Of-Band**.

This section includes the following topics:

- [Setting Up the RREG Tool](#)
- [Updating the OAM11gRequest.xml File](#)
- [Using the In-Band Mode](#)
- [Using the Out-Of-Band Mode](#)
- [Files and Artifacts Generated by RREG](#)

4.5.1.1 Setting Up the RREG Tool

To set up the RREG tool, complete the following steps:

1. After installing and configuring Oracle Access Manager, go to the following directory:

```
Oracle_IDM2/oam/server/rreg/client
```

2. Untar the RREG.tar.gz file.

Example:

```
gunzip RREG.tar.gz
```

```
tar -xvf RREG.tar
```

The tool for registering the agent is at:

```
RREG_Home/bin/oamreg.sh
```

Note: `RREG_Home` is the directory in which you extracted the contents of `RREG.tar.gz/rreg`.

Set the following environment variables in the `oamreg.sh` script:

- `OAM_REG_HOME`

Set this variable to the absolute path to the directory in which you extracted the contents of `RREG.tar/rreg`.

- `JDK_HOME`

Set this variable to the absolute path to the directory in which Java or JDK is installed on your machine.

4.5.1.2 Updating the `OAM11gRequest.xml` File

You must update the agent parameters, such as `agentName`, in the `OAM11GRequest.xml` file in the `RREG_Home/input` directory.

Note: The `OAM11GRequest.xml` file or the short version `OAM11GRequest_short.xml` is used as a template. You can copy this template file and use it.

Modify the following required parameters in the `OAM11GRequest.xml` file or in the `OAM11GRequest_short.xml` file:

- `serverAddress`
Specify the host and the port of the OAM Administration Server.
- `agentName`
Specify any custom name for the agent.
- `agentBaseUrl`
Specify the host and the port of the machine on which Oracle Traffic Director 11g WebGate is installed.
- `preferredHost`
Specify the host and the port of the machine on which Oracle Traffic Director 11g WebGate is installed.
- `security`
Specify the security mode, such as `open`, based on the WebGate installed.
- `primaryServerList`
Specify the host and the port of Managed Server for the Oracle Access Manager proxy, under a `Server` container element.

After modifying the file, save and close it.

4.5.1.3 Using the In-Band Mode

If you run the RREG tool once after updating the WebGate parameters in the `OAM11GRequest.xml` file, then the files and artifacts required by WebGate are generated in the following directory:

`RREG_Home/output/agent_name`

Note: You can run RREG either on a client machine or on the server. If you are running it on the server, then you must manually copy the artifacts back to the client.

Complete the following steps:

1. Open the `OAM11GRequest.xml` file, which is in `RREG_Home/input/`. `RREG_Home` is the directory in which you extracted the contents of `RREG.tar.gz/rreg`. Edit the XML

file and specify parameters for the new Oracle Traffic Director WebGate for Oracle Access Manager.

2. Run the following command:

```
./RREG_Home/bin/oamreg.sh inband input/OAM11GRequest.xml
```

4.5.1.4 Using the Out-Of-Band Mode

If you are an end user with no access to the server, then you can email your updated `OAM11GRequest.xml` file to the system administrator, who can run RREG in the out-of-band mode. You can collect the generated `Agent_ID_Response.xml` file from the system administrator and run RREG on this file to obtain the WebGate files and artifacts you require.

After you receive the generated `Agent_ID_Response.xml` file from the administrator, you must manually copy the file to the `input` directory on your machine.

Complete the following steps:

1. If you are an end user with no access to the server, then open the `OAM11GRequest.xml` file, which is in the `RREG_Home/input/` directory.

RREG_Home is the directory in which you extracted the contents of `RREG.tar.gz/rreg`. Edit the XML file and specify parameters for the new Oracle iPlanet WebGate for Oracle Access Manager. Send the updated file to your system administrator.
2. If you are an administrator, copy the updated `OAM11GRequest.xml` file, which is in the `RREG_Home/input/` directory.

This is the file that you received from the end user. Go to your (administrator's) `RREG_Home` directory and run the following command:

```
./RREG_Home/bin/oamreg.sh outofband input/OAM11GRequest.xml
```

An `Agent_ID_Response.xml` file is generated in the `output` directory on the administrator's machine in the `RREG_Home/output/` directory. Send this file to the end user who sent you the updated `OAM11GRequest.xml` file.

3. If you are an end user, copy the generated `Agent_ID_Response.xml` file, which is in the `RREG_Home/output/` directory.

This is the file that you received from the administrator. Move to your (client's) RREG home directory and run the following command:

```
./RREG_Home/bin/oamreg.sh outofband input/Agent_ID_Response.xml
```

Note: If you register the WebGate agent by using the Oracle Access Manager Administration Console, as described in "Registering Partners (Agents and Applications) by Using the Console" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager*, you must manually copy the files and artifacts generated after the registration, from the server (the machine on which the Oracle Access Manager Administration Console is running) to the client. The files and artifacts are generated in the `MW_HOME/user_projects/domains/name_of_the_WebLogic_domain_for_OAM/output/Agent_ID` directory.

4.5.1.5 Files and Artifacts Generated by RREG

Regardless of the method or mode you use to register the new WebGate agent, the following files and artifacts are generated in the *RREG_Home/output/Agent_ID* directory:

- *cwallet.sso*
- *ObAccessClient.xml*
- In the **SIMPLE** mode, RREG generates:
 - *password.xml*, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be the same as the passphrase used on the server.
 - *aaa_key.pem*
 - *aaa_cert.pem*
- In the **CERT** mode, RREG generates *password.xml* file, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be different than the passphrase used on the server.

Note: You can use these files generated by RREG to generate a certificate request and get it signed by a third-party Certification Authority. To install an existing certificate, you must use the existing *aaa_cert.pem* and *aaa_chain.pem* files along with *password.xml* and *aaa_key.pem*.

4.5.2 Copying Generated Files and Artifacts to the WebGate Instance Location

After RREG generates these files and artifacts, you must manually copy the following files, based on the security mode you are using, from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home* directory.

Do the following according to the security mode you are using:

- In **OPEN** mode, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config* directory:
 - *ObAccessClient.xml*
 - *cwallet.sso*
- In **SIMPLE** mode, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config* directory:
 - *ObAccessClient.xml*
 - *cwallet.sso*
 - *password.xml*

In addition, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config/simple* directory:

- *aaa_key.pem*
- *aaa_cert.pem*
- In **CERT** mode, copy the following files from the *RREG_Home/output/Agent_ID* directory to the *WebGate_Instance_Home/webgate/config* directory:
 - *ObAccessClient.xml*

- cwallet.sso
- password.xml

After copying the files, you must either generate a new certificate or migrate an existing certificate.

Generating a New Certificate

You can generate a new certificate as follows:

1. Go to the *WebGate_Home/webgate/iplanet/tools/openssl* directory.
2. Create a certificate request as follows:

```
./openssl req -utf8 -new -nodes -config openssl_silent_ohs11g.cnf
-keyout aaa_key.pem -out aaa_req.pem -rand WebGate_
Home/webgate/iplanet/config/random-seed
```

3. Self-sign the certificate as follows:

```
./openssl ca -config openssl_silent_ohs11g.cnf -policy policy_anything
-batch -out aaa_cert.pem -infile aaa_req.pem
```

4. Copy the following generated certificates to the *WebGate_Instance_Home/webgate/config* directory:

- aaa_key.pem
- aaa_cert.pem
- cacert.pem located in the simpleCA directory

Note: After copying the cacert.pem file, you must rename the file to aaa_chain.pem.

Migrating an Existing Certificate

If you want to migrate an existing certificate (aaa_key.pem, aaa_cert.pem, and aaa_chain.pem), ensure that you use the same passphrase that you used to encrypt aaa_key.pem. You must enter the same passphrase during the RREG registration process. If you do not use the same passphrase, the password.xml file generated by RREG does not match the passphrase used to encrypt the key.

If you enter the same passphrase, you can copy these certificates as follows:

1. Go to the *WebGate_Instance_Home/WebGate/config* directory.
2. Copy the following certificates to the *WebGate_Instance_Home/webgate/config* directory:
 - aaa_key.pem
 - aaa_cert.pem
 - aaa_chain.pem

4.5.3 Restarting the Oracle iPlanet Instance

Use the startserv command to start or stopserv command to stop your Oracle iPlanet instance.

To stop the server, run the following command:

```
/home/bin/stopserv
```

To start the server, run the following command:

```
export LD_LIBRARY_PATH=/WebGate_Home/lib
/home/bin/startserv
```

To restart the Oracle iPlanet instance, stop all running instances, and then run the start command.

4.6 Deinstalling Oracle iPlanet 11g WebGate

You should always use the instructions provided in this section for removing the Oracle iPlanet 11g WebGates for Oracle Access Manager. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this section will ensure that the software is properly removed.

To deinstall the WebGate agent, do the following:

1. Go to the `MW_HOME/webgate_Home/oui/bin` directory on UNIX, and `MW_HOME\Webgate_home\oui\bin` on Windows.

2. Run the following command:

On UNIX: `./runInstaller -deinstall`

On Windows: `setup.exe -deinstall -jreLoc JRE_LOCATION`

Ensure that you specify the absolute path to your `JRE_LOCATION`; relative paths are not supported.

After the deinstaller starts, the **Welcome** screen is displayed. Proceed with the deinstallation by referring to [Section 4.6.1](#).

4.6.1 Deinstallation Screens and Instructions

Follow the instructions in [Table 4-2](#) to complete the deinstallation.

If you need additional help with any of the deinstallation screens, click **Help** to access the online help.

Table 4-2 Deinstallation Flow

Sl. No.	Screen	Description	Action Required
1.	Welcome	Each time the deinstaller starts, the Welcome screen is displayed.	Click Next .

Table 4–2 (Cont.) Deinstallation Flow

Sl. No.	Screen	Description	Action Required
2.	Deinstall Oracle Home	The Deinstall Oracle Home screen shows the Oracle home you are about to deinstall.	Verify the Oracle home you are about to deinstall. Click Deinstall . On the Warning screen, select whether or not you want the deinstaller to remove the Oracle home directory in addition to removing the software. Click Yes to have the deinstaller remove the software and Oracle home, No to remove only the software, or Cancel to return to the previous screen. If you select No , go to Section 4.6.2 for instructions on how to manually remove your Oracle home directory.
3.	Deinstallation progress	The Deinstallation Progress screen shows the progress and status of the deinstallation.	Wait until the Deinstallation Complete screen appears.
4.	Deinstallation Complete	The Deinstallation Complete screen appears when the deinstallation is complete.	Click Finish to dismiss the screen.

4.6.2 Manually Removing the Oracle Home Directory

If you have selected **No** on the warning screen during deinstallation, you must manually remove your *Webgate_Home* directory and any sub-directories. For example: if your Oracle WebGate home directory was `/home/Oracle/Middleware/Oracle_OAMWebGate1`, run the following command:

```
cd /home/Oracle/Middleware/
rm -rf Oracle_OAMWebGate1
```

On Windows, if your Oracle Common home directory was `C:\Oracle\Middleware\Oracle_OAMWebGate1`, then use a file manager window, go to the `C:\Oracle\Middleware` directory, right-click on the `Oracle_OAMWebGate1` folder, and then select **Delete**.

4.7 Silent Installation for Oracle iPlanet 11g WebGate

To run the Oracle iPlanet 11g WebGate in silent mode, complete the following steps:

1. Go to the `Disk1` directory under the `WebGate` folder.
2. Run the following command:

```
./runInstaller -silent -waitForCompletion -invPtrLoc
/home/wg.customInventory ORACLE_HOME=/home/Oracle_OAMWebGate -jreloc
/usr -response
```

