

# **Oracle® Fusion Middleware**

Installing Oracle Traffic Director

12c (12.2.1.2.0)

**E79508-02**

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Oracle Fusion Middleware Installing Oracle Traffic Director, 12c (12.2.1.2.0)

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# Preface

This document provides information about installing Oracle Traffic Director.

[Audience](#)

[Documentation Accessibility](#)

[Related Documents](#)

[Conventions](#)

## Audience

The intended audience for this document is the person who administers and maintains .

This document assumes you are familiar with the following topics:

- Working in a terminal window
- HTTP
- XML
- Executing operating system commands on Microsoft Windows and UNIX-like platforms

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## Related Documents

For more information, see the following documents, which are available on the Oracle Technology Network:

- *Configuration Files Reference for Oracle Traffic Director*
- *Oracle Fusion Middleware WebLogic Scripting Tool Command Reference for Oracle Traffic Director Reference*
- *Oracle Fusion Middleware Administering Oracle Traffic Director*
- *Release Notes for Oracle Traffic Director*
- *Oracle Fusion Middleware Using Oracle WebLogic Server Multitenant*

## Conventions

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	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.

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# Overview of Installing Oracle Traffic Director

Oracle Traffic Director is a software load balancer for load balancing HTTP/S and TCP traffic to back-end servers. These back-end servers, which are referred to as origin servers within Oracle Traffic Director, can be application servers, web servers, LDAP servers and so on.

Starting from 12c Release 1, in addition to being available for use with the engineered systems (Oracle Exalogic running either Oracle Linux or Oracle Solaris and Oracle SuperCluster running Oracle Solaris), Oracle Traffic Director is available for customers with the Oracle WebLogic Server Multi-tenancy or Oracle WebLogic Server Continuous Availability add-on options.

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**Note:**

Before you start installing Oracle Traffic Director, it is recommended that you get a basic understanding of its features, the related terminology, and the installation topology. For more information, see the Getting Started with Oracle Traffic Director section of the *Oracle Traffic Director Administrator's Guide*.

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This chapter contains the following section:

- [Installation, Deinstallation and Reinstallation](#)  
[Installation, Deinstallation and Reinstallation](#)

## 1.1 Installation, Deinstallation and Reinstallation

[Table 1-1](#) provides information about the tasks that need to be performed for installing Oracle Traffic Director.

**Table 1-1** *Installation, Deinstallation and Reinstallation*

Task	For more information, see...
Installing Oracle Traffic Director	<a href="#">Installation Procedure</a>
Verifying the installation	<a href="#">Verifying the Installation</a>





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# Installing Oracle Traffic Director

While installing Oracle Traffic Director on engineered systems, you need to understand its prerequisites and procedures.

If installing Oracle Traffic Director on engineered systems, first perform the procedures described in [Requirements for Installing Oracle Traffic Director on Engineered Systems](#)

This chapter contains the following sections:

- [Microsoft C Runtime Libs Required for OTD Installation](#)
- [Prerequisites for Installing Oracle Traffic Director](#)
- [Installation Procedure](#)
- [Troubleshooting Installation Problems](#)

## [Microsoft C Runtime Libs Required for OTD Installation](#)

### [Prerequisites for Installing Oracle Traffic Director](#)

There are mandatory configurations and packages required to Install Oracle Traffic Director.

### [Installation Procedure](#)

There are different modes for installing Oracle Traffic Director. You can use one of them to Install Oracle Traffic Director.

### [Troubleshooting Installation Problems](#)

It is important to understand the known errors that may occur during the installation. You can follow the troubleshooting procedure in order to fix them.

## 2.1 Microsoft C Runtime Libs Required for OTD Installation

MSVC 12 runtime Libraries must be installed separately before installing OTD. You must install Visual C++ Redistributable Packages for Visual Studio, which can be found at:

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

## 2.2 Prerequisites for Installing Oracle Traffic Director

There are mandatory configurations and packages required to Install Oracle Traffic Director.

The following are the prerequisites for installing Oracle Traffic Director.

- At least 1 core CPU with 4 GB RAM and 4 GB Swap.

- The following packages are mandatory for installing Oracle Traffic Director on Oracle Linux 6 for Exalogic.
  - compat-glibc-2.3.4-x86\_64 or higher
  - binutils-2.20.51.0.2-5.11.el6-x86\_64 or higher
  - compat-libcap1-1.10-1-x86\_64 or higher
  - compat-libstdc++-33-3.2.3-69.el6-x86\_64 or higher
  - compat-libstdc++-33-3.2.3-69.el6-i686 or higher
  - libgcc-4.4.4-13.el6-i686 or higher
  - libgcc-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-devel-4.4.4-13.el6-x86\_64 or higher
  - sysstat-9.0.4-11.el6-x86\_64 or higher
  - gcc-4.4.4-13.el6-x86\_64 or higher
  - gcc-c++-4.4.4-13.el6-x86\_64 or higher
  - glibc-2.12-1.7.el6-i686 or higher
  - glibc-2.12-1.7.el6-x86\_64 or higher
  - glibc-devel-2.12-1.7.el6-x86\_64 or higher
  - glibc-devel-2.12-1.7.el6 or higher
  - libaio-0.3.107-10.el6-x86\_64 or higher
  - libaio-devel-0.3.107-10.el6-x86\_64 or higher
  
- The following packages are mandatory for installing Oracle Traffic Director on Oracle Linux 6 or 7 for other hardware.
  - binutils-2.20.51.0.2-5.11.el6-x86\_64 or higher
  - compat-libcap1-1.10-1-x86\_64 or higher
  - compat-libstdc++-33-3.2.3-69.el6-x86\_64 or higher
  - compat-libstdc++-33-3.2.3-69.el6-i686 or higher
  - libgcc-4.4.4-13.el6-i686 or higher
  - libgcc-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-4.4.4-13.el6-x86\_64 or higher
  - libstdc++-devel-4.4.4-13.el6-x86\_64 or higher

- sysstat-9.0.4-11.el6-x86\_64 or higher
- gcc-4.4.4-13.el6-x86\_64 or higher
- gcc-c++-4.4.4-13.el6-x86\_64 or higher
- glibc-2.12-1.7.el6-i686 or higher
- glibc-2.12-1.7.el6-x86\_64 or higher
- glibc-devel-2.12-1.7.el6-x86\_64 or higher
- glibc-devel-2.12-1.7.el6 or higher
- libaio-0.3.107-10.el6-x86\_64 or higher
- libaio-devel-0.3.107-10.el6-x86\_64 or higher

For information on installing Oracle WebLogic Server, see *Installing and Configuring Oracle WebLogic Server and Coherence*. For information on performing administration tasks, see *Administering Oracle WebLogic Server* and *Administering Oracle Traffic Director*. For a list of custom Oracle Traffic Director WLST commands see *Oracle Traffic Director WLST Command Reference*.

### [Prerequisites for Installation in a Collocated Domain](#)

## 2.2.1 Prerequisites for Installation in a Collocated Domain

These additional prerequisites are required if installing Oracle Traffic Director in a collocated domain with Oracle WebLogic Server. In this configuration, Oracle Traffic Director is administered through Oracle WebLogic Server.

- Oracle WebLogic Server (`fmw_12.2.1.2.0_infrastructure_generic.jar`)
- Java SE Development Kit 8

The recommended configuration for a collocated domain uses the Restricted JRF template and does not include a database. If this template is not used, the following are additional requirements:

- Oracle Database (Without a Restricted JRF template, the Oracle Traffic Director domain creation requires a running Oracle database to successfully complete the installation).
- Creation of a domain repository.

## 2.3 Installation Procedure

There are different modes for installing Oracle Traffic Director. You can use one of them to Install Oracle Traffic Director.

This section describes how to install Oracle Traffic Director as a physical application.

You can install Oracle Traffic Director either by using a graphical wizard or in silent mode.

- [Installing Oracle Traffic Director in Graphical Mode](#)
- [Installing Oracle Traffic Director in Silent Mode](#)

### [Installing Oracle Traffic Director in Graphical Mode](#)

## Installing Oracle Traffic Director in Silent Mode

### 2.3.1 Installing Oracle Traffic Director in Graphical Mode

You install Oracle Traffic Director using an interactive graphical wizard provided by the Oracle Universal Installer. To configure Oracle Traffic Director for high availability, you must follow the procedure.

1. Download the installer file.

The location that you download the installer file from depends on how you intend to use the product:

- **For development:** Oracle Technology Network

<http://www.oracle.com/technetwork/indexes/downloads/index.html>

- **For production:** Oracle Software Delivery Cloud

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

2. Click **Sign-in/Register**.

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**Note:**

If you are not already logged in, the Oracle Single Sign-On page appears. Enter your Oracle user id and password and click **Sign In**.

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The Terms & Restrictions page appears

3. Click **Accept** to agree to the Export Restrictions, and then click **Continue**.

The Oracle Software Delivery Cloud page appears.

4. Go to the directory in which you downloaded the installer

5. Run the following command to launch the installation wizard:

- On Linux:

```
$. /fmw_12.2.1.2.0_otd_linux64.bin
```

- On Windows:

```
setup_fmw_12.2.1.2.0_otd_win64.exe
```

6. Follow the installation wizard on-screen prompts and instructions. [Table 2-1](#) provides a brief description of each screen and the action required on the screen.

For more information about a specific screen, click the **Help** button on the screen.

**Table 2-1 Screens of the Installation Wizard**

Screen	Description and Action Required
Installation Inventory Setup	<p>On UNIX operating systems, this screen will appear if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.</p> <p>For more information about the central inventory, see About the Oracle Central Inventory in <i>Oracle Fusion Middleware Installing Software with the Oracle Universal Installer</i>.</p> <p>This screen doesn't appear on Windows operating systems.</p>
Welcome	Click <b>Next</b> .
Auto Updates	Select whether or not you want to receive automatic updates for this product.
Installation Location	<p>Use this screen to specify the location of your Oracle home directory.</p> <p>Oracle home is the directory in which software binaries for Oracle products are stored. Note that run-time processes cannot write to this directory.</p> <p>If you are installing using the standard installation topology for Oracle Traffic Director in a WebLogic Server domain, then you must enter the path to an existing Oracle Fusion Middleware Infrastructure Oracle home.</p> <p>If you are installing using the standard installation topology for Oracle Traffic Director in a standalone domain, you can specify an Oracle home directory of your choice. However, ensure that you install the software in a new Oracle home.</p> <p>For more information about Oracle Fusion Middleware directory structure, see About the Recommended Directory Structure in <i>Planning an Installation of Oracle Fusion Middleware</i>.</p>
Installation Type	<p>Use this screen to select the type of installation and consequently, the products and feature sets you want to install.</p> <p>Select <b>Standalone OTD (Managed independently of WebLogic server)</b> if you are installing Oracle Traffic Director in a Standalone domain or installing Oracle Traffic Director in a remote node of a collocated domain.</p> <p>Select <b>Collocated OTD (Managed through WebLogic server)</b> if you are installing Oracle Traffic Director in a WebLogic Server domain on the administration server node.</p>

**Table 2-1 (Cont.) Screens of the Installation Wizard**

Screen	Description and Action Required
Prerequisite Checks	<p>The installer analyzes the host computer to ensure that the prerequisites are fulfilled. The results of the prerequisite checks are displayed on this screen.</p> <p>If a prerequisite check fails, an error or warning message is displayed.</p> <ul style="list-style-type: none"> <li>• Fix the error and click <b>Rerun</b>. For example, if any of the required packages listed in <a href="#">Prerequisites for Installing Oracle Traffic Director</a> are not available in the system, install them.</li> <li>• To ignore the error or warning and continue with the installation, click <b>Skip</b>.</li> <li>• To stop the prerequisite checking process, click <b>Stop</b>. Click <b>Next</b> to continue.</li> </ul>
Specify Security Updates	<p>If you already have an Oracle Support account, use this screen to indicate how you would like to receive security updates.</p> <p>If you do not have one and are sure you want to skip this step, clear the check box and verify your selection in the follow-up dialog box.</p>
Installation Summary	<p>This screen displays the Oracle home directory that you specified earlier. It also indicates the amount of disk space that will be used for the installation and the free space available.</p> <p>Review information on this screen.</p> <p>To change the Oracle home directory, click the <b>Back</b> button or the <b>Installation Location</b> link in the left navigation pane.</p> <p>To save the settings specified so far in the installation wizard in a text file (called a <i>response</i> file), click <b>Save</b>. If necessary, you can use the response file to perform the same installation from the command line.</p> <p>Click <b>Install</b> to proceed with the installation process.</p> <p>For more information about silent or command line installation, see <i>Using the Oracle Universal Installer in Silent Mode in Installing Software with the Oracle Universal Installer</i>.</p>
Installation Progress	<p>This screen shows the progress and status of the installation process.</p> <p>If you want to cancel the installation, click <b>Cancel</b>. The files that were copied to your system before you canceled the installation will remain on the system; you should remove them manually.</p> <p>Click <b>Next</b> to continue.</p>
Installation Complete	Click <b>Finish</b> .

---

**Note:**

After installing Oracle Traffic Director, you must create the administration server instance.

---

## 2.3.2 Installing Oracle Traffic Director in Silent Mode

This section describes how to install Oracle Traffic Director in noninteractive mode by specifying installation options at the command line. On Exalogic, in order to configure Oracle Traffic Director for high availability, the steps below must be performed:

If a central inventory directory is not already available on the host on which you are installing Oracle Traffic Director, you must create an `oraInst.loc` file before starting the silent installation. For more information, see Oracle Central Inventory Location on UNIX Operating Systems in *Oracle Fusion Middleware Installing Software with the Oracle Universal Installer*

1. Perform steps 1, 2, and 3 of [Installing Oracle Traffic Director in Graphical Mode](#)
2. Verify that the prerequisites listed in [Prerequisites for Installing Oracle Traffic Director](#) are fulfilled.
3. Run the following command:

```
./otd_linux64.bin -silent ORACLE_HOME=$stesthome  
DECLINE_SECURITY_UPDATES=true INSTALL_TYPE="Collocated OTD  
(Managed through WebLogic server)" -invPtrLoc $stesthome/  
oraInventory/inv.txt
```

The path that you provide for `ORACLE_HOME` must be the NFS share that is mounted locally within the compute node.

---

**Note:**

The `ignoreSysPrereqs` option should not be used while performing silent installation of Oracle Traffic Director, as this option will cause the installation to fail.

---

For information about the options of the `runInstaller` command, see [Running the Oracle Universal Installer in Silent Mode](#) section of *Fusion Middleware Installing Software with the Oracle Universal Installer*.

## 2.4 Troubleshooting Installation Problems

It is important to understand the known errors that may occur during the installation. You can follow the troubleshooting procedure in order to fix them.

If you encounter an error while installing Oracle Traffic Director, do the following:

- Verify that your computer meets the requirements specified in [Prerequisites for Installing Oracle Traffic Director](#)
- While using the installation wizard, if you realize that you entered incorrect information on one of the installation screens, then return to that screen by clicking **Back**, enter the correct information and proceed with the installation.

- If an error occurs while the installer is copying or linking files:
  1. Note the error and review the installation log files. For more information, see [Examine the Installation Log](#).
  2. Remove the failed installation by running the following command:

```
$ORACLE_HOME/oui/bin/deinstall.sh
```
  3. Correct the issue that caused the error.
  4. Restart the installation process.



---

## Post Installation

You can verify and validate the installation with the help of post installation validations. In case of failed installation, you can follow the procedure to deinstall and reinstall Oracle Traffic Director.

This document contains the following sections:

- [Verifying the Installation](#)
- [Deinstalling Oracle Traffic Director](#)
- [Reinstalling Oracle Traffic Director](#)

### [Verifying the Installation](#)

You can validate the installation by looking at the installation log files.

### [Configuring Oracle Traffic Director Domain](#)

You need to configure WebLogic domain after installing Oracle Traffic Director.

### [Deinstalling Oracle Traffic Director](#)

It is recommended not to remove Oracle Traffic Director, manually. You need to follow the recommended procedure to deinstall the Oracle Traffic Director to avoid issues while reinstalling it in future.

### [Reinstalling Oracle Traffic Director](#)

You must deinstall Oracle Traffic Director from the directory in order to reinstall it.

## 3.1 Verifying the Installation

You can validate the installation by looking at the installation log files.

You can verify whether the installation was completed properly by examining the installation log file, looking at the directories and files in the Oracle home directory, and by trying to access the Oracle Traffic Director administration console.

- [Examine the Installation Log](#)
- [Verifying the Installation Directory Structure](#)

### [Examine the Installation Log](#)

### [Verifying the Installation Directory Structure](#)

### 3.1.1 Examine the Installation Log

The installer creates log files in the logs subdirectory within the Oracle inventory directory.

---

**Note:**

If you do not know the location of the Oracle inventory directory, you can find the path to it in the `ORACLE_HOME/oraInst.loc` file.

---

The logs directory contains the following files:

- `installdate-time-stamp.log`  
This is the main log file.
- `installdate-time-stamp.out`  
This log file contains the output and error streams during the installation.
- `installdate-time-stamp.out`  
This log file contains the output and error streams during the installation.
- `launcher-time-stamp.log`  
This file contains the date/time the launcher was initiated.
- `installProfiledate-time-stamp.log`  
This log file contains the overall statistics, like time taken to complete the installation, as well as configuration, memory, and CPU details.
- `oraInstalldate-time-stamp.log`  
This log file contains the output stream of the copy session.
- `timeTakedate-time-stamp.log`  
This file is created only if you start the installer with the `-printtime` option. It contains information for the amount of time taken to move between screens (applicable for GUI installations only).
- `timedate-time-stamp.log`  
This file is created only if you start the installer with the `-printtime` option. It contains time information for the copy session.
- `memorydate-time-stamp.log`  
This file is created only if you start the installer with the `-printmemory` option. It contains memory usage information for the copy session.

### 3.1.2 Verifying the Installation Directory Structure

After installing and performing the post-installation steps, verify that the Oracle home directory contains the following directories:

```
bin
cfgtoollogs
coherence
crs
css
em
has
install
inventory
```

```
jlib
ldap
lib
network
nls
OPatch
oracle_common
oracore
otd
oui
plsql
plugins
precomp
rdbms
slax
sqlplus
srvm
webgate
wlserver
xdk
```

## 3.2 Configuring Oracle Traffic Director Domain

You need to configure WebLogic domain after installing Oracle Traffic Director.

After you successfully install WebLogic Server, create and configure a WebLogic domain using the Configuration Wizard. For more information, see [Configuring a WebLogic Domain for Oracle Traffic Director in Administering Oracle Traffic Director](#).

## 3.3 Deinstalling Oracle Traffic Director

It is recommended not to remove Oracle Traffic Director, manually. You need to follow the recommended procedure to deinstall the Oracle Traffic Director to avoid issues while reinstalling it in future.

You might want to remove an Oracle Traffic Director installation, either to remove files pertaining to a failed installation or to install a newer version.

You should always use the instructions provided here for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software at a later time. Following the procedure described here will ensure that the software is properly removed.

To deinstall Oracle Traffic Director, perform the following steps:

1. Delete all the configured *OTD instances* from the Oracle Traffic Director WLST command-line interface to remove the all instances of Oracle Traffic Director available in the specified DOMAIN\_HOME. This procedure also ensures that all related configuration settings such as services, failover configurations and so on are fully removed.

2. After deleting all OTD instances and Configurations, run the following command:

```
$ORACLE_HOME/oui/bin/deinstall.sh
```

The deinstallation wizard starts.

3. Follow the on-screen prompts and instructions provided on the screens of the installation wizard.

For more information about a specific screen, click the **Help** button on the screen.

## 3.4 Reinstalling Oracle Traffic Director

You must deinstall Oracle Traffic Director from the directory in order to reinstall it.

You cannot reinstall Oracle Traffic Director in a directory that already contains an installation of the product.

To reinstall Oracle Traffic Director, perform the following steps:

1. Deinstall the existing installation by following the procedure described in [Deinstalling Oracle Traffic Director](#).
2. Install Oracle Traffic Director as described in [Installation Procedure](#).

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# Configuring OAM Agent (WebGate) for Oracle Traffic Director 12.2.1.2

WebGate is installed by default along with Oracle Traffic Director. However, you still need to configure it.

A WebGate intercepts HTTP requests and forwards them to the Oracle Access Manager for authentication and authorization. WebGate gets installed by default when you install Oracle Traffic Director.

This appendix contains the following sections:

- [Prerequisites for Configuring Webgate](#)
- [Configuring Oracle Traffic Director 12c WebGate](#)
- [Verifying the Configuration of Oracle Traffic Director 12c WebGate](#)
- [Getting Started with a New Oracle Traffic Director 12c WebGate](#)

## [Prerequisites for Configuring Webgate](#)

You need to install Oracle Access Manager (OAM) before configuring Oracle Traffic Director. Also, there are version and environment related limitations for installing OAM.

## [Configuring Oracle Traffic Director 12c WebGate](#)

## [Verifying the Configuration of Oracle Traffic Director 12c WebGate](#)

## [Getting Started with a New Oracle Traffic Director 12c WebGate](#)

## A.1 Prerequisites for Configuring Webgate

You need to install Oracle Access Manager (OAM) before configuring Oracle Traffic Director. Also, there are version and environment related limitations for installing OAM.

Before you can configure Oracle Traffic Director 12c (12.2.1.2.0) WebGate, you must install one of the following versions of Oracle Access Manager.

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**Note:**

It is highly recommended that Oracle Access Manager is installed in its own environment and not on the same machine as WebLogic Server. Oracle Access Manager and WebLogic Server can be installed on the same machine if they are both 11g versions.

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- [Oracle Fusion Middleware 11gR2 Release 2\(11.1.2.2.0\)](#)

- [Oracle Fusion Middleware 11gR2 Release 2\(11.1.2.3.0\)](#)

## A.2 Configuring Oracle Traffic Director 12c WebGate

Complete the following steps after installing Oracle Traffic Director to configure Oracle Traffic Director 12c (12.2.1.2.0) WebGate for Oracle Access Manager:

- **On UNIX**

1. Go to the `$(Oracle_Home)/webgate/otd/tools/deployWebGate` directory (Please note that `$(Oracle_Home)` is the location set as the OracleHome when installing Oracle Traffic Director) by running the following command:

```
cd $(Oracle_Home)/webgate/otd/tools/deployWebGate
```

2. Run the following command to create the OTD WebGate Instance Directory from `$(Oracle_Home)/webgate/otd/tools/deployWebGate`:

```
./deployWebGateInstance -w webgate_instanceDirectory -oh $
(Oracle_Home) -ws otd
```

In this command:

- `$(Oracle_Home)` is the path to where Oracle Traffic Director has been installed.

Example:

```
/home/oracle
```

- `webgate_instanceDirectory` is the location of the directory where you will copy the WebGate profile.

Example:

```
$(Domain_Home)/config/fmwconfig/components/OTD/
instances/Instance_Name
```

(Please note that `$(Domain_Home)` is the path to the directory which contains the OTD domain.)

3. Set the environment variable `LD_LIBRARY_PATH` to `WebGate_$(Oracle_Home)/lib`

For example:

For Linux 64

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$(Oracle_Home)/lib
```

For Windows

```
set PATH=%(Oracle_Home)%\bin;%path%
```

For Solaris/Sparc

```
export LD_PRELOAD_64=$(Oracle_Home)/lib/libclntsh.so.
11.1:$(Oracle_Home)/lib/libnnz11.so
```

4. Go to the following directory:

For Unix-based platforms

```
$(Oracle_Home)/webgate/otd/tools/setup/InstallTools
```

For Windows

```
%(Oracle_Home)%\webgate\otd\tools\EditObjConf
```

5. On the command line, run the following command for updating OTD conf files, such as `magnus.conf` and `obj.conf`.

For a standalone Oracle Traffic Director installation:

```
./EditObjConf -f Domain_Home/config/fmwconfig/  
components/OTD/instances/Instance_Name/config/Instance_Name-  
obj.conf -w webgate_instanceDirectory [-oh Oracle_Home] -ws  
otd
```

For a collocated Oracle Traffic Director installation:

```
./EditObjConf -f Domain_Home/config/fmwconfig/  
components/OTD/Instance_Name/config/Instance_Name-obj.conf  
-w webgate_instanceDirectory [-oh Oracle_Home] -ws otd
```

In this command:

- `Oracle_Home` is the path to the parent directory of a valid WebLogic Server installation, or to where Oracle Traffic Director is installed.

Example:

```
/home/oracle
```

- `webgate_instanceDirectory` is the location of the directory where you will copy the WebGate profile.

Example:

```
Domain_Home/config/fmwconfig/components/OTD/instances/  
Instance_Name
```

- **On Windows**

1. Go to the `%Oracle_Home%\webgate\otd\tools\deployWebGate` directory by running the following command:

```
cd %Oracle_Home%\webgate\otd\tools\deployWebGate
```

2. Run the following command to copy the required bits of agent from the `%Oracle_Home%` directory to the `webgate_instanceDirectory` location:

```
deployWebGateInstance.bat -w webgate_instanceDirectory [-  
oh Oracle_Home] -ws otd
```

In this command:

- `Oracle_Home` is the directory in which you have installed Oracle Traffic Director WebGate.

Example:

```
\home\oracle
```

- `webgate_instanceDirectory` is the location of the directory where you will copy the WebGate profile.

Example:

```
Domain_Home/config/fmwconfig/components/OTD/instances/  
Instance_Name
```

3. Run the following command to set the PATH environment variable:

```
set %PATH%=%PATH%;%Oracle_Home%\webgate\otd\lib;  
%Oracle_Home%\bin
```

4. Go to the following directory:

```
%Oracle_Home%\webgate\otd\tools>EditObjConf
```

5. On the command line, run the following command for updating OTD conf files, such as magnus.conf and obj.conf.

For a standalone Oracle Traffic Director installation:

```
EditObjConf -f Domain_Home/config/fmwconfig/  
components/OTD/instances/Instance_Name/config/  
Instance_Name-obj.conf -w webgate_instanceDirectory [-oh $  
(Oracle_Home)] -ws otd
```

For a collocated Oracle Traffic Director installation:

```
./EditObjConf -f Domain_Home/config/fmwconfig/  
components/OTD/Instance_Name/config/Instance_Name-obj.conf  
-w webgate_instanceDirectory [-oh $(Oracle_Home)] -ws otd
```

In this command:

- Oracle\_Home is the directory in which you have installed Oracle Traffic Director WebGate for Oracle Access Manager.

Example:

```
\home\oracle
```

- webgate\_instanceDirectory is the location of the directory where you will copy the WebGate profile.

Example:

```
Domain_Home/config/fmwconfig/components/OTD/instances/  
Instance_Name
```

## A.3 Verifying the Configuration of Oracle Traffic Director 12c WebGate

After installing Oracle Traffic Director 12c (12.2.1.2.0) WebGate for Oracle Access Manager and completing the configuration 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**

```
$(Oracle_Home)/oraInst.loc
```

- **On Windows**

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



## A.4 Getting Started with a New Oracle Traffic Director 12c WebGate

Before you can use the new Oracle Traffic Director 12c (12.2.1.2.0) WebGate agent for Oracle Access Manager, you must complete the following tasks:

1. [Registering the New Oracle Traffic Director 12c WebGate](#)
2. [Copying Generated Files and Artifacts to the Oracle Traffic Director WebGate Instance Location](#)
3. [Restarting the Oracle Traffic Director Instance](#)

[Registering the New Oracle Traffic Director 12c WebGate](#)

[Copying Generated Files and Artifacts to the Oracle Traffic Director WebGate Instance Location](#)

[Restarting the Oracle Traffic Director Instance](#)

### A.4.1 Registering the New Oracle Traffic Director 12c 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 an OAM Agent Using the Console* in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*.

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](#)

[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](#)

#### A.4.1.1 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.

#### A.4.1.2 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 Traffic Director 12c WebGate is installed.
- `preferredHost`  
Specify the host and the port of the machine on which Oracle Traffic Director 12c 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.

**A.4.1.3 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 Traffic Director 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
```

#### A.4.1.4 Using the Out-Of-Band Mode

If you are an end user with no access to the server, you can e-mail 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 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 `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 an OAM Agent Using the Console in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*, 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 `$(Oracle_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 Traffic Director 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\nAgent_ID_Response.xml
```

**Note:**

If you register the WebGate agent by using the Oracle Access Manager Administration Console, as described in "Registering an OAM Agent Using the Console in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*, 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 `$(Oracle_Home)/user_projects/domains/name_of_the_WebLogic_domain_for_OAM/output/Agent_ID` directory.

#### A.4.1.5 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:

- `wallet/cwallet.sso`
- `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`.

---

---

#### A.4.2 Copying Generated Files and Artifacts to the Oracle Traffic Director 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\_instanceDirectory* 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\_instanceDirectory/webgate/config* directory:
  - `wallet/cwallet.sso`
  - `ObAccessClient.xml`
  - `cwallet.sso`
- In **SIMPLE** mode, copy the following files from the *RREG\_Home/output/Agent\_ID* directory to the *webgate\_instanceDirectory/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_instanceDirectory/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_instanceDirectory/webgate/config` directory:
  - `ObAccessClient.xml`
  - `cwallet.sso`
  - `password.xml`

### Generating a New Certificate

### Migrating an Existing Certificate

#### **A.4.2.1 Generating a New Certificate**

You can generate a new certificate as follows:

1. Go to the `$(Oracle_Home)/webgate/otd/tools/openssl` directory.
2. Create a certificate request as follows:
 

```
./openssl req -utf8 -new -nodes -config
openssl_silent_otd11g.cnf -keyout aaa_key.pem -out
aaa_req.pem -rand $(Oracle_Home)/webgate/otd/config/random-
seed/
```
3. Self-sign the certificate as follows:
 

```
./openssl ca -config openssl_silent_otd11g.cnf -policy
policy_anything -batch -out aaa_cert.pem -infiles
aaa_req.pem
```
4. Copy the following generated certificates to the `webgate_instanceDirectory/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`.

---



---

### A.4.2.2 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_instanceDirectory/webgate/config` directory.
2. Copy the following certificates to the `webgate_instanceDirectory/webgate/config` directory:
  - `aaa_key.pem`
  - `aaa_cert.pem`
  - `aaa_chain.pem`

### A.4.3 Restarting the Oracle Traffic Director Instance

For information about restarting the Oracle Traffic Director instance, see "Starting, Stopping, and Restarting Oracle Traffic Director Instances by Using WLST" in *Administering Oracle Traffic Director*.

If you have configured Oracle Traffic Director in a WebLogic Server domain, you can also use Oracle Fusion Middleware Control to restart the Oracle Traffic Director Instances. For more information, see "Starting, Stopping, and Restarting Oracle Traffic Director Instances Using Fusion Middleware Control" in *Administering Oracle Traffic Director*.

For a standalone instance, you can restart from `Domain_Home/config/fmwconfig/components/OTD/instances/Instance_Name/bin` using the `./restart` command.



---

## Requirements for Installing Oracle Traffic Director on Engineered Systems

This appendix describes additional procedures required for configuring engineered systems before installing Oracle Traffic Director.

This appendix contains the following sections:

- [Configuring Shared Storage on Exalogic for Installing Oracle Traffic Director](#)
- [Configuring and Creating Zones on Oracle SuperCluster for Installing Oracle Traffic Director](#)

[Configuring Shared Storage on Exalogic for Installing Oracle Traffic Director](#)

[Configuring and Creating Zones on Oracle SuperCluster for Installing Oracle Traffic Director](#)

### B.1 Configuring Shared Storage on Exalogic for Installing Oracle Traffic Director

This section describes how to configure shared storage on the ZFS appliance in Exalogic, before installing Oracle Traffic Director.

The setup that is discussed in this section is ideal when you are looking for application-level traffic management capabilities to monitor and shape the traffic within Exalogic. In order to achieve this, two compute nodes are allocated, wherein incoming traffic is appropriately screened and routed to one of the back-end application servers. In this scenario, Oracle Traffic Director (web tier) is typically hosted on two compute nodes and the application tier is located on other compute nodes. The web tier and application tier traffic here are isolated both at the physical level as well as the network level.

---

**Note:**

On Exalogic (Solaris), Oracle Traffic Director can be configured for high availability only when installed on a global zone. In addition, all administration nodes must be running on the global zone.

---

This section contains the following subsections:

- [Overview of Shared Storage in Exalogic](#)
- [Creating Projects and Shares](#)
- [Mounting Shares](#)

[Overview of Shared Storage in Exalogic](#)

[Creating Projects and Shares](#)

[Mounting Shares](#)

## B.1.1 Overview of Shared Storage in Exalogic

In an Exalogic environment, all compute nodes are connected to a shared storage array (ZFS storage appliance) through the InfiniBand fabric. The shared storage array is used to install and configure all applications, and it is mounted locally within each of these compute nodes through Network File System (NFS).

Before installing Oracle Traffic Director on Exalogic, you must first create new projects and shares, and then mount these shares locally.

For an Oracle Traffic Director installation, it is recommended that the share hosting Oracle Traffic Director is unique to the compute node. For example, if Oracle Traffic Director is installed on two compute nodes for high availability, then the following installation layout is recommended:

- Create a share named `primary` within the storage array and mount this share locally within one compute node.
- Create a share named `secondary` within the storage array and mount this share locally within another compute node.

## B.1.2 Creating Projects and Shares

If you wish to configure Oracle Traffic Director for high availability, the administration server and administration node must have `root` access within the instance root directory. Similarly, the ZFS share location needs to be configured appropriately so that a `root` user can read and write to this share location. This can be accomplished by enabling `root` access as NFS exception within the ZFS console.

Perform the following steps for creating and mounting shares with `root` access:

---

---

**Note:**

It is recommended that you install Oracle Traffic Director on each node. This is to ensure that there is no application downtime while patching Oracle Traffic Director.

---

---

1. Create a new project and create new shares within it, or create new shares within an existing project.
  - [Creating Custom Projects](#)
  - [Creating Custom Shares](#)
2. Log in to the ZFS storage appliance.
3. Ensure that the shares that you just created are configured to allow `root` access on the compute nodes that will host Oracle Traffic Director. This can be done by:
  - [Using the ZFS shared storage administration console:](#)

In the NFS Exceptions section in the ZFS shared storage administration console, ensure that the share hosting Oracle Traffic Director configuration has appropriate NFS exceptions to allow `root` access.

In addition, in the Properties section in the Project Settings page, deselect the following options

- Update access time on read
- Restrict ownership change

For more information about using these options, see the following guides:

- Oracle Exalogic Elastic Cloud Machine Owner's Guide
  - Oracle Exalogic Elastic Cloud Administrator's Guide
- Using the CLI:
    - Run the following command:
 

```
sharenfms ="sec=sys,rw=@<ip-address-1>/<network-prefix-bits>,root=@<ip-address-2>/<network-prefix-bits>"
```
    - For an Exalogic physical configuration, `ip-address-1` and `ip-address-2` would be the BOND0 IP addresses of the compute nodes.
    - For an Exalogic virtual configuration, `ip-address-1` and `ip-address-2` would be the IP addresses of the vServers on the IPoIB-vServer-shared-storage network.

**Example:**

```
set sharenfms="sec=sys,rw=@196.168.10.0/24,root=@192.168.10.1/24"
```

---



---

**Note:**

- The terms BOND0 and BOND1 refer to the default interfaces for IP over InfiniBand (IPoIB) and Ethernet over InfiniBand (EoIB), respectively, on the Oracle Linux operating system.
  - Oracle Solaris uses the IP Multipathing (IPMP) technology to support IPMP Groups that consist of one or more physical interfaces on the same system that are configured with the same IPMP group name. This technology provides the same functionality as Bonded Interfaces on Oracle Linux. You can name the IPMP groups anything. In this guide, BOND0 and BOND1 are used as example names to keep the terminology consistent with Oracle Linux.
- 
- 

For shares that were created without `root` access, run the following commands. This ensures that a `root` user within a compute node that hosts Oracle Traffic Director is able to start the administration server and administration node:

```
<ZFS-SharedStorage> shares
<ZFS-SharedStorage> select <Project-used-for-OTD>
<ZFS-SharedStorage> get sharenfms
<ZFS-SharedStorage> set sharenfms ="sec=sys,rw=@<<ip-address-1>/<network-prefix-
```

```
bits>,root=@<ip-address-2>/<network-prefix-bits>"
<ZFS-SharedStorage> commit
```

## B.1.3 Mounting Shares

After creating the shares with the appropriate permission, mount the shares based on your requirement:

- For information about mounting shares on an Exalogic physical configuration, see *Creating NFSv4 Mount Points on Oracle Linux in Oracle Exalogic Elastic Cloud Machine Owner's Guide*.
- For information about mounting shares on an Exalogic virtual configuration, see *Setting Up Access to the ZFS Storage Appliance for a vServer in Oracle Exalogic Elastic Cloud Administrator's Guide*.

The mount point that you create is the location where Oracle Traffic Director will be installed. For more information, see [Installing Oracle Traffic Director](#).

## B.2 Configuring and Creating Zones on Oracle SuperCluster for Installing Oracle Traffic Director

This section provides information about global and non-global zones, and discusses the various options for installing Oracle Traffic Director on Oracle SuperCluster.

The setup that is discussed in this chapter is ideal when you are looking for application-level traffic management capabilities to monitor and shape the traffic within Oracle SuperCluster. In Oracle SuperCluster, two zones (global or non-global) are allocated, wherein incoming traffic is screened and routed to one of the back-end application servers. In this scenario, Oracle Traffic Director (web tier) is typically hosted on two zones and the application tier is located on another zone.

This section contains the following subsections:

- [Overview of Installing Oracle Traffic Director on Oracle SuperCluster](#)
- [Installing Oracle Traffic Director on Oracle SuperCluster](#)

[Overview of Installing Oracle Traffic Director on Oracle SuperCluster](#)

[Installing Oracle Traffic Director on Oracle SuperCluster](#)

### B.2.1 Overview of Installing Oracle Traffic Director on Oracle SuperCluster

Before installing Oracle Traffic Director on Oracle SuperCluster, you must consider the following.

- Oracle Traffic Director requires an application domain, such as Oracle VM Server for SPARC (formerly called Logical Domains), running Solaris 11.1 for it to run successfully.
- In an Oracle VM Server for SPARC, Oracle Traffic Director can be installed on either a global zone or a non-global zone.

The global zone is the default operating system and has control over all the processes. A global zone always exists even when no other zones are configured. A global zone is also used for system-wide administrative control.

A non-global zone, referred to as a zone, is configured inside the global zone. Each zone is an isolated OS environment that you can use to run applications. The applications and processes that are running in one zone do not affect what is running in other zones.

For more information about global and non-global zones, see "Oracle Solaris Zones" section of *Oracle Solaris 11.1 Administration: Oracle Solaris Zones, Oracle Solaris 10 Zones, and Resource Management*: [http://docs.oracle.com/cd/E26502\\_01/html/E29024/zone.html](http://docs.oracle.com/cd/E26502_01/html/E29024/zone.html).

- One important factor to consider when choosing global or non-global is that Oracle Traffic Director can be configured for high availability only when installed on a global zone. In addition, all administration nodes must be running on the global zone.

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**Note:**

Configuring VRRP and hence configuring failover groups is supported only in the global zone, and for a privileged user. This is because of Solaris VRRP limitations. For more information, see the "VRRP Limitations" section of the *Managing Oracle Solaris 11.1 Network Performance Guide*: [http://docs.oracle.com/cd/E26502\\_01/html/E28993/gkmfl.html](http://docs.oracle.com/cd/E26502_01/html/E28993/gkmfl.html).

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## B.2.2 Installing Oracle Traffic Director on Oracle SuperCluster

Oracle Traffic Director can be installed on a global zone or a non-global zone. Note that in order to take advantage of Oracle Traffic Director's high availability capability, it must be installed on a global zone.

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**Note:**

Another option to configure Oracle Traffic Director for HA is to install Oracle Solaris Cluster. For more information, see the *Oracle Solaris Cluster Data Services Planning and Administration Guide*, [http://docs.oracle.com/cd/E29086\\_01/html/E29475/index.html](http://docs.oracle.com/cd/E29086_01/html/E29475/index.html).

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For an Oracle Traffic Director installation, it is recommended that the zone (global or non-global) hosting Oracle Traffic Director is unique. Note that for installing Oracle Traffic Director on a non-global zone, it must be configured with appropriate disk and network information.

The steps for installing Oracle Traffic Director on Oracle SuperCluster are as follows:

1. Configure and create a new zone, either global or non-global. For more information about leveraging zones, see "Oracle Solaris Zones" in *Oracle Solaris 11.1 Administration: Oracle Solaris Zones, Oracle Solaris 10 Zones, and Resource Management*:

[http://docs.oracle.com/cd/E26502\\_01/html/E29024/zone.html](http://docs.oracle.com/cd/E26502_01/html/E29024/zone.html)

2. Download and install Oracle Traffic Director on the zone. For more information, see [Installing Oracle Traffic Director](#).



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