#### **Oracle® Fusion Middleware**

System Requirements and Specifications for Oracle Forms and Reports

E25460-01

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11*g* Release 2 (11.1.2)

This document contains system and platform-specific information for Oracle Fusion Middleware Forms and Reports 11*g* Release 2 (11.1.2) and later.

The following topics are covered in this document:

- Section 1, "Using This Document with the Certification Matrix and Product Installation Guide"
- Section 2, "Oracle Fusion Middleware Memory and Space Requirements"
- Section 3, "Oracle Weblogic Server and JDK Considerations"
- Section 4, "Oracle Universal Installer (OUI) Requirements"
- Section 5, "Oracle Fusion Middleware Network Requirements"
- Section 6, "System Requirements for UNIX Operating Systems"
- Section 7, "System Requirements for Windows Operating Systems"
- Section 8, "Documentation Accessibility"

# 1 Using This Document with the Certification Matrix and Product Installation Guide

This document is intended for use in conjunction with the *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports* and the *Oracle Fusion Middleware 11g Release 2 Certifications*.

#### Task 1 Find Out What is Certified

The following certification documents should be used to determine the proper combination of systems, database, clients, Identity and Access Management, and IP version that should be used for your product installation:

- System Requirements and Supported Platforms for Oracle Forms and Reports 11g Release
   2 (11.1.2.0.0) Certification Matrix
- System Requirements and Supported Platforms for Oracle Forms and Reports 11g Release 2 (11.1.2.1.0) Certification Matrix

Oracle has tested and verified the performance of your product on all certified systems and environments; whenever new certifications occur, they are added to the proper certification document right away. New certifications can occur at any time, and for this reason the certification documents are kept outside of the documentation libraries and are available on Oracle Technology Network.



#### Task 2 Verify the Requirements of the Certification

The *Oracle Fusion Middleware System Requirements and Specifications for Oracle Forms and Reports* (this document) should be used to verify that the requirements of the certification are met. For example, if the certification document indicates that your product is certified for installation on 32-Bit Oracle Linux 5, this document should be used to verify that your Oracle Linux 5 system has met the required minimum specifications, like disk space, available memory, specific platform packages and patches, and other operating system-specific items. This document is updated as needed and therefore also resides outside of the documentation libraries and is available on Oracle Technology Network.

#### Task 3 Install Your Software

After you have verified that your environment meets the requirements specified in both the certification documents and system requirements, you are ready to begin your installation.

Your product installation guides contain the step-by-step instructions to get your product physically installed and configured on your system. These guides are available only from the documentation library (http://docs.oracle.com/) and therefore are not updated unless there is a subsequent product release. Both the certification and system requirement documents can be updated multiple times in between product releases, depending on whether or not new information is available.

# 2 Oracle Fusion Middleware Memory and Space Requirements

This section contains the minimum memory and disk space requirements for Oracle Fusion Middleware products. The following topics are covered:

- Section 2.1, "General Memory Requirements"
- Section 2.2, "Oracle Forms and Reports Memory and Disk Space Requirements"
- Section 2.3, "Oracle Identity Management Memory and Disk Space Requirements"

## 2.1 General Memory Requirements

Unless otherwise noted, Table 1 lists the general minimum memory requirements for Oracle Fusion Middleware products. For the purposes of this document, "minimum available memory" is defined as the amount of physical memory (RAM) and swap memory combined.

Table 1 Memory Requirements

Operating System	Minimum Physical Memory Required	Minimum Available Memory Required
Linux	2 GB	4 GB
UNIX	2 GB	4 GB
Windows	2 GB	4 GB

#### 2.2 Oracle Forms and Reports Memory and Disk Space Requirements

This section describes the recommended hardware and system configuration requirements for Oracle Forms and Reports.

**Note:** On some Windows 32-bit operating systems, the available memory is limited to 3GB. For components that are certified on such systems, Oracle recommends using the /3GB switch, as specified in Microsoft Knowledge Base Article #291988.

For more information, see the certification information, as described in Section 1, "Using This Document with the Certification Matrix and Product Installation Guide".

THIS NOTE WAS ADDED, based on bugs 10212597 and 10229760, as well as an email thread with the subject "Updated Memory Requirements for Oracle Portal, Forms, Reports, and Discoverer".

- Section 2.2.1, "Memory and Disk Space Requirements for Installing Oracle Forms and Reports"
- Section 2.2.2, "Memory and Disk Space Requirements for Configuring Oracle Forms and Reports"

# **2.2.1** Memory and Disk Space Requirements for Installing Oracle Forms and Reports Table 2 lists the memory and disk space requirements for installing Oracle Forms and Reports.

Table 2 Memory and Disk Space Requirements for Installation

Requirement	Value
Physical Memory	Expected minimum value is 922MB.
Temp Space	Must be greater than 270MB
Swap Space	Must be greater than 500MB
Minimum Available Memory	Must be greater than 1422MB (physical memory and swap space combined)
Disk Space	3600MB

# 2.2.2 Memory and Disk Space Requirements for Configuring Oracle Forms and Reports

Table 2 lists the memory and disk space requirements for configuring Oracle Forms and Reports.

Table 3 Memory and Disk Space Requirements for Configuration

Requirement	Value	
Physical Memory	Expected minimum value is 922MB.	
Temp Space	Must be greater than 270MB	
Swap Space	Must be greater than 500MB	
Minimum Available Memory	ry Must be greater than 1422MB (physical memory and swap space combined)	
Disk Space	Depends on your configuration mode:	
	■ 805MB for development mode	
	■ 810MB for deployment mode	

#### 2.3 Oracle Identity Management Memory and Disk Space Requirements

Oracle Forms and Reports can be protected by Oracle Identity Management as described in *Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports*.

The memory and disk space requirements for Oracle Identity Management 11*g* Release 1 (11.1.1) can be found in *Oracle Fusion Middleware System Requirements and Specifications for 11g Release 1 (11.1.1)*. This document can be found on the following page:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirements-100147.html

# 3 Oracle Weblogic Server and JDK Considerations

Oracle Forms and Reports 11*g* Release 2 (11.1.2) is released and tested with Oracle WebLogic Server 11*g*R1 (10.3.5) and 11*g*R1 (10.3.6). Oracle WebLogic Server can be obtained from the following URL:

http://www.oracle.com/technetwork/middleware/weblogic/downloads/

Oracle WebLogic Server is a prerequisite for installing Oracle Forms and Reports; doing so creates the Middleware home directory where all 11g Release 2 (11.1.2) products must be installed. For instructions, refer to the *Oracle WebLogic Server Installation Guide* in the 11g Release 1 (11.1.1) documentation library.

Installing Oracle WebLogic Server also installs a JDK on your system. If you are using a 64-bit JVM in your environment, ensure that all your Oracle Fusion Middleware components are using the 64-bit JVM. Also make sure that Oracle WebLogic Server is installed with the 64-bit JDK. You cannot mix components using a 32-bit JVM with those using a 64-bit JVM.

Refer to the certification documents for information on the platforms that support a 64-bit JDK. Links to the certification documents can be found in Section 1, "Using This Document with the Certification Matrix and Product Installation Guide".

# 4 Oracle Universal Installer (OUI) Requirements

This section contains prerequisite information for the Oracle Universal Installer (OUI). The requirements in this section must be met in order for the installer to start:

- Section 4.1, "Environment Variables"
- Section 4.2, "Startup Requirements"
- Section 4.3, "Special Startup Requirements for Linux x86 or Linux x86-64 Operating Systems"

#### 4.1 Environment Variables

The environment variables on your system must be set as described in Table 4:

Table 4 Oracle Universal Installer Environment Variable Requirements

Variable	Description	
ORACLE_HOME	Applies to: all configuration tools for all products on all platforms.	
	This variable is automatically set by the configuration tool to the Oracle home from where the configuration tool is started. This is true even if the ORACLE_HOME variable is already set.	
ORACLE_SID	Applies to: all installers for all products on all platforms.	
	For the Oracle Forms and Reports installer, this variable must not be set.	
	For all other installers, there are no restrictions as to whether this variable is set or not set.	
PATH	<b>Applies to:</b> all installers for products with system components only on all platforms.	
	If you are installing on a Windows operating system, see "Resolving PATH and Directory Issues on Windows" in the <i>Oracle Fusion Middleware Release Notes for Microsoft Windows</i> (32-Bit) or <i>Oracle Fusion Middleware Release Notes for Microsoft Windows x64</i> for important additional information.	
	This variable is automatically set by the installer and prepended with <code>ORACLE_HOME\bin</code> . In addition, you must have the appropriate version of the JDK installed on your system, and include the <code>bin</code> directory of the JDK at the beginning of the <code>PATH</code> variable definition. Make sure this variable does not contain a reference to any other Oracle home directory.	
	<b>NOTE:</b> If your Oracle Fusion Middleware components are running in a 64-bit JVM environment, you must have the appropriate version of the JDK installed on your system, and include the bin directory of the JDK at the beginning of the PATH variable definition.	
SHLIB_PATH	<b>Applies to:</b> all installers for products with system components only on HP-UX and HP-IA operating systems.	
	This variable is automatically set by the installer and prepended with $\mbox{\it ORACLE\_HOME}/\mbox{lib}.$	
LIBPATH	<b>Applies to:</b> all installers for products with system components only on AIX operating systems.	
	This variable is automatically set by the installer and prepended with <code>ORACLE_HOME/lib</code> .	
LD_LIBRARY_PATH	<b>Applies to:</b> all installers for products with system components only on Linux and Solaris operating systems.	
	This variable is automatically set by the installer and prepended with <code>ORACLE_HOME/lib</code> .	
	<b>NOTE:</b> make sure this variable does not contain a reference to any other Oracle home directory.	

Table 4 (Cont.) Oracle Universal Installer Environment Variable Requirements

Variable	Description	
DISPLAY	Applies to: all installers for all products on all platforms.	
	If you are installing with a graphical user interface (GUI), this variable must be set to the monitor where you want the installer GUI to appear.	
	Refer to your operating system documentation for specific instructions on how to do this, as procedures vary depending on your exact operating system.	
TMP	Applies to: all installers for all products on all platforms.	
TMPDIR	Optional variable. If not set, then the default value is /tmp.	
TNS_ADMIN	Applies to: all installers for all products on all platforms.	
ORA_NLS	For the Oracle Forms and Reports installer, these variables must not	
LD_BIND_NOW	be set.	
	For all other installers, there are no restrictions as to whether these variables are set or not set.	

## 4.2 Startup Requirements

The items in Table 5 are checked as the installer is being started:

Table 5 Oracle Universal Installer Startup Requirements

Category	Accepted or Minimum Values	
Platforms	For a complete list of supported platforms, refer to the <i>System Requirements</i> and Supported Platforms for Oracle Forms and Reports 11g Release 2 (11.1.2.x) Certification Matrix on the Oracle Fusion Middleware Supported System Configurations page, as described in Section 1, "Using This Document with the Certification Matrix and Product Installation Guide".	
CPU Speed	At least 300MHz	
Temp Space	At least 270MB	
Swap Space	At least 500MB	
Monitor	At least 256 colors	

# 4.3 Special Startup Requirements for Linux x86 or Linux x86-64 Operating Systems

If you are running Oracle Universal Installer on Linux x86 or Linux x86-64 operating systems, you must modify the value of the SHMMAX kernel parameter to avoid seeing errors generated by the Oracle Universal Installer. To do so:

1. Change the value of SHMMAX to 4294967295 by including the following line in /etc/sysctl.conf:

kernel.shmmax = 4294967295

**2.** Activate the new SHMMAX setting by running the command:

/sbin/sysctl -p

**3.** Start the Oracle Universal Installer and install your software.

# 5 Oracle Fusion Middleware Network Requirements

Typically, the computer on which you want to install Oracle Fusion Middleware is connected to the network. The computer has local storage to store the Oracle Fusion Middleware installation and also contains a display monitor and DVD drive.

If your environment is not a typical scenario, you should read the "Oracle Fusion Middleware Network Requirements" section in the 11g Release 1 (11.1.1) System Requirements and Specification document:

http://docs.oracle.com/html/E18558\_01/fusion\_requirements.htm

# 6 System Requirements for UNIX Operating Systems

This section contains system requirement information for UNIX operating systems.

In some cases, a particular platform may be de-supported for use with Oracle Fusion Middleware products. While this particular platform's requirements may remain in this document for legacy purposes, it would no longer be listed in the certification document and would no longer be considered a "certified" platform.

Links to the certification document can be found in Section 1, "Using This Document with the Certification Matrix and Product Installation Guide".

All packages listed are minimum versions.

The following topics are covered in this section:

- Section 6.1, "General UNIX Operating System Requirements"
- Section 6.2, "Supported Linux Operating System Versions, Packages, and Patches"
- Section 6.3, "Supported Solaris Operating System Versions, Packages, and Patches"
- Section 6.4, "Supported HP-UX Operating System Versions, Packages, and Patches"
- Section 6.5, "Supported IBM AIX Operating System Versions, Packages, and Patches"

# 6.1 General UNIX Operating System Requirements

This section contains the following topics:

- Section 6.1.1, "Checking the Open File Limit"
- Section 6.1.2, "Installing as a Non-Default User on UNIX Operating Systems"

#### 6.1.1 Checking the Open File Limit

The Open File Limit on all UNIX and Linux operating systems should also be checked. The minimum Open File Limit should be 4096.

The following examples are for Linux operating systems. Equivalent commands should be followed for other UNIX operating systems.

You can see how many files are open with the following command:

```
/usr/sbin/lsof | wc -l
```

To check your open file limits, use the commands below.

For C-shell:

```
limit descriptors
```

#### For Bash:

```
ulimit -n
```

To change the open file limits, login as root and edit the /etc/security/limits.conf file. Look for the following two lines:

```
* soft nofile 2048
* hard nofile 2048
```

Change the values from 2048 to 4096, then reboot the machine.

#### 6.1.2 Installing as a Non-Default User on UNIX Operating Systems

On UNIX operating systems, the installation of Fusion Middleware products is owned and controlled as a known user (for example, "oracle"). The file permissions associated with this installation are configured to ensure the highest level of security possible, which by default are 700 (meaning all files are owned and accessible by the owner only).

Changing the default permissions settings will reduce the security of the installation and possibly your system. Therefore, making such a change is not recommended. If access to particular files or executables is required by other users, the UNIX sudo command (or other similar command) should be considered in lieu of changing file permissions.

Refer to your UNIX operating system Administrator's Guide or contact your operating system vendor if you need further assistance.

# 6.2 Supported Linux Operating System Versions, Packages, and Patches

Table 6 lists the platform, operating system, package, and patch information for Linux operating systems that are either currently supported or were supported in a previous release.

In addition, you should also review the following Linux-specific issues to see if they are applicable to your environment:

- Section 6.2.1, "Obtaining the Font RPM Package for Forms and Reports on Oracle Linux 6"
- Section 6.2.3, "Installing Oracle HTTP Server on Linux Operating Systems Requires NPTL"

Table 6 Supported Linux Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Kernel
Linux x86	Oracle Linux 4 (UL7+) Red Hat Linux 4 (UL4+)	binutils-2.15.92.0.2-13 compat-libstdc++-296-2.96-132.7.2 compat-db-4.1.25-9 control-center-2.8.0-12 gcc-3.4.3-22.1 gcc-c++-3.4.3-22.1 glibc-common-2.3.4-2.9 gnome-libs-1:1.4.1.2.90-44.1 libaio-0.3.105 libaio-devel-0.3.105 libstdc++-3.4.3-22.1 libstdc++-devel-3.4.3-22.1 make-1:3.80-5 openmotif-2.2.3 openmotif21-2.1.30-11.RHEL4.4 pdksh-5.2.14-30 setarch-1.6-1 sysstat-5.0.5-1 xscreensaver-4.18-5.rhel4.2	Kernel 2.6.9
Linux x86	Oracle Linux 5 (UL3+) Red Hat Linux 5 (UL3+)	binutils-2.16.91.0.5-23.4 compat-libstdc++-296-2.96-132.7.2 compat-db-4.1.25-9 control-center-2.8.0-12 gcc-4.1.0-28.4 gcc-c++-4.1.0-28.4 glibc-common-2.3.4-2.9 libaio-0.3.106 libaio-devel-0.3.106 libstdc++-4.1.0-28.4 libstdc++-devel-4.1.0-28.4 make-3.80-202.2 openmotif-2.2.3 openmotif22-2.2.3 pdksh-5.2.14-30 setarch-1.6-1 sysstat-5.0.5-1	Kernel 2.6.18
Linux x86	SUSE 10 (SP1+)	binutils (version 2.16.91.0.5-23) compat-libstdc++ (version 5.0.7-22.2) compat (version 2006.1.25-11.2) gcc (version 4.1.0-28.4) glibc-devel (version 2.4-31.2) gcc-c++ (version 4.1.0-28.4) libaio (version 0.3.104) libaio-devel (0.3.104) libgcc (version 4.1.0-28.4) libstdc++ (version 4.1.0-28.4) libstdc++-devel (version 4.1.0-28.4) make (version 3.80-202.2) openmotif (version 2.2.3) openmotif21-libs (version 2.1.30)	Kernel 2.6.16.21

Table 6 (Cont.) Supported Linux Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Kernel
Linux x86	SUSE 11 (all SP levels included)	binutils-2.19-11.28 gcc-4.3-62.198 gcc-c++-4.3-62.198 glibc-2.9-13.2 glibc-devel-2.9 ksh-93t libaio-0.3.104-140.22 libaio-devel-0.3.104-140.22 libstdc+43-4.3.3_20081022 libstdc++43-4.3.3_20081022-11.18 libstdc++43-devel-4.3.3_20081022-11.18 libstdc++43-allerant and an analysis openmotif22-libs-2.2.4-138.17¹ openmotif22-libs-2.2.4-138.17¹ openmotif21-libs-2.1.30MLI4-143.9 openmotif-1ibs-2.3.1-3.13 openmotif-devel-2.3.1-3.13 sysstat-8.1.5-7.8	Kernel 2.6.27.19-5- default
Linux x86-64	Oracle Linux 4 (UL7+) Red Hat Linux 4 (UL4+)	binutils-2.15.92.0.2 compat-libstdc++-33-3.2.3 for x86_64 compat-libstdc++-33-3.2.3 for i386 elfutils-libelf-0.97 elfutils-libelf-devel-0.97 gcc-3.4.5 gcc-c++-3.4.5 glibc-2.3.4-2.19 for x86_64 glibc-2.3.4-2.19 for i686 glibc-common-2.3.4 glic-devel-2.3.4 for x86_64 glic-devel-2.3.4 for i386 libaio-0.3.105 for x86_64 libaio-0.3.105 for i386 libaio-devel-0.3.105 libgcc-3.4.5 for x86_64 libstdc++-3.4.5 for x86_64 libstdc++-3.4.5 for x86_64 libstdc++-devel-3.4.5 for x86_64 libstdc++-devel-3.4.5 for i386 make-3.80 openmotif21-2.1.30-11.RHEL4.4 sysstat-5.0.5	Kernel 2.6.9

Table 6 (Cont.) Supported Linux Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Kernel
Linux x86-64	Oracle Linux 5 (UL3+) Red Hat Linux 5 (UL3+)	binutils-2.17.50.0.6 compat-libstdc++-33-3.2.3 for x86-64 compat-libstdc++-33-3.2.3 for i386 elfutils-libelf-0.125 elfutils-libelf-devel-0.125 gcc-4.1.1 gcc-c++-4.1.1 glibc-2.5-12 for x86_64 glibc-common-2.5 glibc-devel-2.5 for x86-64 glibc-devel-2.5-12 for i386 libaio-0.3.106 for x86_64 libaio-0.3.106 for x86_64 libaio-devel-0.3.106 libgcc-4.1.1 for x86_64 libstdc++-4.1.1 for i386 libstdc++-4.1.1 for i386 libstdc++-4.1.1 for i386 libstdc++-devel-4.1.1 make-3.81 openmotif-2.2.3 openmotif-2.2.3 redhat-lsb-3.1-12.3.EL.0.2 sysstat-7.0.0 xorg-x11-utils	Kernel 2.6.18
Linux x86-64	Oracle Linux 6 (UL1+) Red Hat Linux 6 (UL1+)	binutils-2.20.51.0.2-5.28.el6 compat-libcap1-1.10-1 compat-libstdc++-33-3.2.3-69.el6 for x86_64 compat-libstdc++-33-3.2.3-69.el6 for i686 gcc-4.4.4-13.el6 gcc-c++-4.4.4-13.el6 glibc-2.12-1.7.el6 for x86_64 glibc-2.12-1.7.el6 for i686 glibc-devel-2.12-1.7.el6 for i686 libaio-0.3.107-10.el6 libaio-devel-0.3.107-10.el6 libstdc++-4.4.4-13.el6 for x86_64 libstdc++-4.4.4-13.el6 for i686 libstdc++-devel-4.4.4-13.el6 libxtxt for i686 libXtst for i686 libXtst for i686 openmotif22-2.2.3 for x86_64 redhat-lsb-core-4.0-7.el6 for x86_64 sysstat-9.0.4-11.el6 uln-internal-setup-1.0.1-1.el6.noarch.rpm²	2.6.32-100.2 8.5.el6

Table 6 (Cont.) Supported Linux Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Kernel
Linux x86-64	SUSE 10(SP1+)	binutils-2.16.91.0.5 compat-libstdc++-5.0.7-22.2 gcc-4.1.0 gcc-c++-4.1.0 glibc-2.4-31.2 glibc-32bit-2.4-31.2 glibc-devel-2.4 glibc-devel-32bit-2.4 libaio-0.3.104 libaio-devel-0.3.104 libelf-0.8.5 libgcc-4.1.0 libstdc++-4.1.0 libstdc++-devel-4.1.0 make-3.80 openmotif-2.2.3 openmotif21-libs-2.1.30 sysstat-6.0.2	Kernel 2.6.16.21
Linux x86-64	SUSE 11 (all SP levels included)	binutils-2.19-11.28 gcc-4.3-62.198 gcc-c++-4.3-62.198 gcc-32bit-4.3 glibc-2.9-13.2 glibc-32bit-2.9-13.2 glibc-devel-2.9 glibc-devel-32bit-2.9-13.2 ksh-93t libaio-0.3.104-140.22 libaio-devel-0.3.104-140.22 libaio-devel-0.3.104 libaio-devel-32bit-0.3.104 libaio-devel-32bit-0.3.104 libaio-devel-32bit-0.3.104 libstdc++43-4.3.3_20081022 libstdc++43-4.3.3_20081022-11.18 libstdc++43-devel-4.3.3_20081022-11.18 libstdc++33-3.3.3 libstdc++33-32bit-3.3.3 libstdc++43-devel-4.3.3_20081022 libstdc++43-devel-32bit-4.3.3_20081022 libstdc++devel-4.3 make-3.81 openmotif-2.3.1-3.13 openmotif-2-1ibs-32bit-2.3.1-3.13 openmotif-1evel-2.3.1-3.13 openmotif-1ibs-2.3.1-3.13 openmotif-1ibs-2.3.1-3.13 openmotif-1ibs-32bit-2.3.1-3.13 openmotif-1ibs-32bit-2.3.1-3.13 openmotif-1ibs-32bit-2.3.1-3.13 openmotif-1ibs-32bit-2.3.1-3.13 openmotif-1ibs-32bit-2.3.1-3.13 openmotif-2-1ibs-32bit-2.3.1-3.13 openmotif-2-1ibs-32bit-2.3.1-3.13 openmotif-2-1ibs-32bit-2.3.1-3.13 openmotif-2-1ibs-32bit-2.3.1-3.13	Kernel 2.6.27.19-5- default

This package is required for Oracle Forms and Reports. For more information, see Section 6.2.2, "Obtaining the openmotif22 Package on SUSE 10 and SUSE 11 Operating Systems".

#### 6.2.1 Obtaining the Font RPM Package for Forms and Reports on Oracle Linux 6

Follow the instructions in this section if you need to run the Oracle Forms and Reports builder functionality on Oracle Linux 6:

- **1.** Log in to your system as root.
- **2.** Go to the /etc/yum.repos.d directory.
- **3.** Run the following command:

```
wget http://public-yum.oracle.com/public-yum-ol6.repo
```

- **4.** Edit the public-yum-ol6.repo file and modify section [ol6\_\*] to change enabled=0 to enabled=1.
- **5.** Install the fonts with the following command:

```
yum install *font*
```

If you are not able to use yum to perform this, install the following packages using the rpm -i package\_name command:

baekmuk-ttf-batang-fonts	noarch 2.2-28.el6	ol6_ga_base 4.0
baekmuk-ttf-dotum-fonts	noarch 2.2-28.el6	ol6_ga_base 1.7
baekmuk-ttf-fonts-common	noarch 2.2-28.el6	ol6_ga_base 8.8
baekmuk-ttf-fonts-ghostscript	noarch 2.2-28.el6	ol6_ga_base 7.5
baekmuk-ttf-gulim-fonts	noarch 2.2-28.el6	ol6_ga_base 3.7
baekmuk-ttf-hline-fonts	noarch 2.2-28.el6	ol6_ga_base 372
bitmap-console-fonts	noarch 0.3-15.el6	ol6_ga_base 20
bitmap-fangsongti-fonts	noarch 0.3-15.el6	o16_ga_base 623
bitmap-fonts-compat	noarch 0.3-15.el6	ol6_ga_base 5.3
bitmap-miscfixed-fonts	noarch 0.3-15.el6	ol6_ga_base 531
bpg-algeti-fonts	noarch 2.005-6.1.el6	ol6_ga_base 32
bpg-courier-s-fonts	noarch 4.000-6.1.el6	ol6_ga_base 25
bpg-elite-fonts	noarch 3.000-6.1.el6	ol6_ga_base 31
bpg-ingiri-fonts	noarch 4.000-6.1.el6	ol6_ga_base 28
bpg-nino-medium-cond-fonts	noarch 4.005-6.1.el6	ol6_ga_base 26
bpg-nino-medium-fonts	noarch 4.005-6.1.el6	ol6_ga_base 26
bpg-sans-fonts	noarch 1.005-6.1.el6	ol6_ga_base 37
bpg-sans-medium-fonts	noarch 1.005-6.1.el6	ol6_ga_base 37
bpg-sans-modern-fonts	noarch 2.025-6.1.el6	ol6_ga_base 29
bpg-sans-regular-fonts	noarch 1.005-6.1.el6	ol6_ga_base 37
bpg-serif-fonts	noarch 1.005-6.1.el6	ol6_ga_base 44
bpg-serif-modern-fonts	noarch 2.028-6.1.el6	ol6_ga_base 40
ctan-kerkis-calligraphic-fonts	noarch 2.0-23.el6	ol6_ga_base 93
culmus-fonts-compat	noarch 0.103-7.el6	ol6_ga_base 5.3
dejavu-lgc-sans-fonts	noarch 2.30-2.el6	ol6_ga_base 1.1
dejavu-lgc-serif-fonts	noarch 2.30-2.el6	ol6_ga_base 701
fontforge	x86_64 20090622-3.1.el6	ol6_latest 6.6
fontforge-devel	x86_64 20090622-3.1.el6	ol6_latest 123
fontpackages-devel	noarch 1.41-1.1.el6	ol6_ga_base 22
fontpackages-tools	noarch 1.41-1.1.el6	ol6_ga_base 33
libXfont-devel	x86_64 1.4.5-2.el6	ol6_latest 22
libfontenc-devel	x86_64 1.0.5-2.el6	ol6_ga_base 10
libfonts	x86_64 1.0.0-3.00o31.el6	o16_ga_base 326
libfonts-javadoc	noarch 1.0.0-3.00o31.el6	ol6_ga_base 118
libreoffice-opensymbol-fonts	noarch 1:3.4.5.2-16.1.0.1.6	el6_3 ol6_latest
170		

<sup>&</sup>lt;sup>2</sup> This package is required for the Oracle Forms and Reports builders. For more information, see Section 6.2.1, "Obtaining the Font RPM Package for Forms and Reports on Oracle Linux 6".

atin internals forts		0 0 12 1 -16	-16 wa basa 35	
stix-integrals-fonts	noarcn	0.9-13.1.el6	ol6_ga_base 35	)
stix-pua-fonts	noarch	0.9-13.1.el6	ol6_ga_base 104	Ė
stix-sizes-fonts	noarch	0.9-13.1.el6	ol6_ga_base 25	ó
stix-variants-fonts	noarch	0.9-13.1.el6	ol6_ga_base 13	}
terminus-fonts-console	noarch	4.30-1.el6	ol6_ga_base 578	3
thai-scalable-fonts-compat	noarch	0.4.12-2.1.el6	ol6_ga_base 5.8	3
wqy-zenhei-fonts-common	noarch	0.9.45-3.el6	ol6_ga_base 28	3
xorg-x11-fonts-ISO8859-15-100dpi	noarch	7.2-9.1.el6	ol6_ga_base 1.1	_
Installing for dependencies:				
autotrace	x86_64	0.31.1-26.el6	ol6_latest 128	3
libbase	x86_64	1.0.0-3.00o31.1.el6	ol6_ga_base 216	5
libloader	x86_64	1.0.0-2.00o31.1.el6	ol6_ga_base 143	3
libuninameslist	x86_64	20080409-3.1.el6	ol6_ga_base 457	7
perl-Font-TTF	noarch	0.45-6.el6	ol6_ga_base 314	Į

**6.** Set the NLS\_LANG variable appropriately for your system. For example:

set NLS\_LANG=AMERICAN\_AMERICA.WE8ISO8859P15

#### 6.2.2 Obtaining the openmotif22 Package on SUSE 10 and SUSE 11 Operating Systems

The openmotif22 package is not included by default on SUSE 10 and SUSE 11 operating systems. If you need to obtain this package, you must go to the Novell website to obtain the package and then perform the installation using the instructions provided by Novell.

#### 6.2.3 Installing Oracle HTTP Server on Linux Operating Systems Requires NPTL

If you are installing Oracle HTTP Server on a Linux operating system, the operating system needs to set Native POSIX Threads Library (NPTL) as the default threads-implementation. To check for this, run the following command:

```
getconf GNU_LIBPTHREAD_VERSION
```

The expected results should be "NPTL 2.3.4". Failing to have NPTL can result in unexpected behavior for the Oracle HTTP Server, especially if the Multi-Processing Module (MPM) is the Worker MPM.

# 6.3 Supported Solaris Operating System Versions, Packages, and Patches

Table 7 lists the platform, operating system, package, and patch information for Solaris operating systems that are either currently supported or were supported in a previous release.

In addition, you should also review the following Solaris-specific issues to see if they are applicable to your environment:

- Section 6.3.2, "Installing Oracle Identity Management on Solaris x86-64 Platforms"
- Section 6.3.3, "Applying Solaris Patches in Non-Global Zones"

Table 7 Supported Solaris Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Patches
SPARC64	Solaris 10 (Update 4+)	SUNWarc SUNWbtool SUNWhea SUNWlibC SUNWlibm SUNWlibms SUNWsprot SUNWsprot SUNWtoo SUNWi1of SUNWi1cs SUNWi1cs SUNWi1cs SUNWi15cs SUNWxwfnt SUNWmfrun Motif: 2.1.0	127111-02 137111-04
	Solaris 11	SUNWlibC developer/assembler Motif: 2.1.0 /x11/library/libxp See Section 6.3.1, "Installing Font Packages on Solaris 11 for Forms and Reports" for additional Solaris 11 package requirements.	
x86-64	Solaris 10 (Update 6+)	SUNWarc SUNWbtool SUNWhea SUNWlibC SUNWlibm SUNWlibms SUNWsprot SUNWsprot SUNWitoo SUNWi1of SUNWi1cs SUNWi15cs SUNWxwfnt Motif: 2.1.0	127111-02 137111-04
	Solaris 11	SUNWlibC developer/assembler Motif: 2.1.0 /x11/library/libxp See Section 6.3.1, "Installing Font Packages on Solaris 11 for Forms and Reports" for additional Solaris 11 package requirements.	

# 6.3.1 Installing Font Packages on Solaris 11 for Forms and Reports

For Oracle Forms and Reports, the following packages must also be installed on Solaris 11 systems:

system/font/daewoo-misc
system/font/gnome-fonts
system/font/isas-misc

```
system/font/jis-misc
system/font/misc-ethiopic
system/font/misc-meltho
system/font/sun-ja-bitmap
system/font/sun-ja-bitmap-unicode
system/font/truetype/arphic-ukai
system/font/truetype/bh-luxi
system/font/truetype/bitstream-vera
system/font/truetype/fonts-core
system/font/truetype/gentium
system/font/truetype/google-droid
system/font/truetype/hanyang-ko
system/font/truetype/ipafont-mincho
system/font/truetype/sil
system/font/truetype/unfonts-ko-core
system/font/truetype/unfonts-ko-extra
system/font/truetype/unifont
system/font/truetype/wqy-zenhei
system/font/xorg/cyrillic
system/font/xorg/iso8859-10
system/font/xorg/iso8859-11
system/font/xorg/iso8859-13
system/font/xorg/iso8859-14
system/font/xorg/iso8859-15
system/font/xorg/iso8859-16
system/font/xorg/iso8859-2
system/font/xorg/iso8859-3
system/font/xorg/iso8859-4
system/font/xorg/iso8859-5
system/font/xorg/iso8859-7
system/font/xorg/iso8859-8
system/font/xorg/iso8859-9
```

After these packages are installed, you must also set the following environment variables:

- On Solaris x86-64 operating systems, set the NLS\_LANG environment variable to AMERICAN\_AMERICA.WE8ISO8859P15, or set the DISPLAY variable to any 64-Bit Linux machine.
- On Solaris SPARC64 operating systems:
  - **a.** Set LC\_ALL=C.
  - **b.** Set the NLS\_LANG environment variable to AMERICAN\_ AMERICA.WE8ISO8859P15, or set the DISPLAY variable to any 64-Bit Linux machine.

#### 6.3.2 Installing Oracle Identity Management on Solaris x86-64 Platforms

If you are installing Oracle Identity Management on a Solaris x86-64 platform, you must patch all software versions to the most recent version before you configure a domain. Below is a recommended installation procedure; refer to the product documentation (*Oracle Fusion Middleware Installation Guide for Oracle Identity Management*) for more details.

- 1. Install the most recent version of Oracle WebLogic Server.
- 2. If necessary, run Repository Creation Utility (RCU) to create the database schemas.

- **3.** Perform a software-only installation (do not configure a domain) of the Release 11.1.1.2.0 software.
- **4.** Patch the software to the latest version with the Patch Set Installer.
- **5.** Run the configuration tool to configure a domain.

#### 6.3.3 Applying Solaris Patches in Non-Global Zones

On Solaris operating systems, the prerequisite patches that are applied in the global zone can be considered applied in the non-global zones. There is only one kernel running on the system, and all zones must be at the same patch level with respect to the kernel and other Solaris system components. Kernel patches can only be applied from the global zone, and they affect the global and all non-global zones equally.

To check if a kernel patch is applied in the global zone, use the following command:

```
showrev -p | grep patch_number
```

For example, to check if patch 137111-04 is applied:

```
showrev -p | grep 137111
```

# 6.4 Supported HP-UX Operating System Versions, Packages, and Patches

Table 8 lists the platform, operating system, package, and patch information for HP-UX operating systems that are either currently supported or were supported in a previous release.

Table 8 Supported HP-UX Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Patches
Itanium	11i (11.31)	HPDesktopDev (version	PHKL_36248
	B.11.31.0803.318a Base Quality Pack	B.11.31.01)	PHKL_36249
	Bundle for HP-UX 11i v3, March 2008+	B3394BA (version 2.1.0)	PHSS_37202
			PHSS_37501
			PHCO_38050
			PHSS_38139

**Note:** The B3394BA package is obsoleted in HP-UX Itanium 11i v3 machines. This is causing an error message to be seen during prerequisite checking.

This error message can be safely ignored provided that the open Motif package can be confirmed as installed on the machine using the following command:

/usr/sbin/swlist -l fileset | grep -i motif

The B3394BA package

## 6.5 Supported IBM AIX Operating System Versions, Packages, and Patches

Table 9 lists the platform, operating system, package, and patch information for IBM AIX operating systems that are either currently supported or were supported in a previous release.

Table 9 Supported IBM AIX Operating Systems

Platform	Operating System Version	Required Packages	Required Operating System Patches
AIX	6.1 (TL2+)	X11.motif.lib (version 2.1.30)	
	7.1 (TL0+)	bos.adt.base bos.adt.lib bos.adt.libm bos.perf.libperfstat bos.perf.perfstat bos.perf.proctools rsct.basic.rte rsct.compat.clients.rte xlC.aix61.rte (version 10.1.0.0) xlC.rte (version 10.1.0.0)	

# 7 System Requirements for Windows Operating Systems

This section contains the following:

- Section 7.1, "Certified Windows Operating Systems"
- Section 7.2, "Disabling Anti-Virus Software"
- Section 7.3, "Enabling User Account Control (UAC)"
- Section 7.4, "Understanding Required Installation Privileges"

# 7.1 Certified Windows Operating Systems

Refer to the certification documents for the latest information on certified Windows operating systems. See Section 1, "Using This Document with the Certification Matrix and Product Installation Guide" for a link to these documents.

# 7.2 Disabling Anti-Virus Software

If you encounter issues related to anti-virus software during your Fusion Middleware product installation, disable your anti-virus software for the entire duration of the installation. If the system is restarted before the installation is complete, ensure the anti-virus software was not restarted before continuing with the installation.

Anti-virus software can be re-enabled when the installation is complete.

# 7.3 Enabling User Account Control (UAC)

On Microsoft Windows operating systems, you must enable User Account Control (UAC) so that the correct permissions are applied to the cwallet.sso file.

To enable UAC:

- 1. Run secpol.msc from the command prompt.
- 2. Select Security Settings > Local Policies > Security Options.
- **3.** Set the **User Account Control:Run all Administrator in Admin Approval Mode** option to enabled.
- **4.** Restart the host.
- Restart the servers.

## 7.4 Understanding Required Installation Privileges

In order to install Oracle Forms and Reports or use the Oracle Forms and Reports Builders after installation, the operating system user must have Windows "Administrator" privileges.

Although the current user may have Windows "Administrator" privileges, if they are not the installation owner, the Windows UAC settings may need to be relaxed.

# 8 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.

#### **Access to Oracle Support**

Oracle customers have access to electronic support through My Oracle Support. For information, visit

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