

Oracle® Database

Database Quick Installation Guide

10g Release 2 (10.2) for IBM zSeries Based Linux

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This guide describes how to quickly install Oracle Database 10g on IBM zSeries Based Linux systems. It includes information about the following:

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1 Reviewing Information About This Guide

This guide describes how to install Oracle Database by using the default installation options.

Tasks Described in This Guide

The procedures in this guide describe how to:

- Configure your system to support Oracle Database
- Install Oracle Database on a local file system by using the Basic Installation option
- Configure a general-purpose Oracle Database installation that uses the local file system for database file storage

Results of a Successful Installation

After you successfully install Oracle Database:

- The database that you created and the default Oracle Net listener process run on the system.
- Oracle Enterprise Manager Database Control and iSQL*Plus are running and can be accessed by using a Web browser.

Tasks Not Described in This Guide

This guide covers the Basic Installation scenario and does *not* describe how to complete the following tasks:

- Using the Advanced Installation option to install the software
- Installing the software on a system that has an existing Oracle software installation
- Installing Oracle Clusterware and Oracle Real Application Clusters (RAC) on a cluster
- Enabling Enterprise Manager e-mail notifications or automated backups
- Using alternative storage options such as Automatic Storage Management or raw devices for database storage

Where to Get Additional Installation Information

For more information about installing Oracle Database, including information about the tasks not described in this guide, refer to one of the following guides:

- If you want to install the software on a single system, then refer to *Oracle Database Installation Guide for IBM zSeries Based Linux*.
- If you want to perform a Oracle Real Application Clusters installation, then refer to *Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide for Linux*. This guide also describes how to install Oracle Clusterware, which is a prerequisite for Oracle Real Application Clusters installations.

Both these guides are available on the product disc. To access them, use a Web browser to open the `welcome.htm` file located in the top-level directory of the installation media, and then select the **Documentation** tab.

2 Logging In to the System as root

Before you install Oracle Database, you must complete several tasks as the `root` user. To log in as the `root` user, complete one of the following procedures:

Note: You must install the software from an X Window System workstation, an X terminal, or a PC or other system with X server software installed.

- If you are installing the software from an X Window System workstation or X terminal, then:
 1. Start a local terminal session, for example, an X terminal (`xterm`).
 2. If you are not installing the software on the local system, then enter the following command to enable the remote host to display X applications on the local X server:

```
$ xhost fully_qualified_remote_host_name
```

For example:

```
$ xhost somehost.us.acme.com
```

3. If you are not installing the software on the local system, then use the `ssh`, `rlogin`, or `telnet` command to connect to the system where you want to install the software:

```
$ telnet fully_qualified_remote_host_name
```

4. If you are not logged in as the `root` user, then enter the following command to switch user to `root`:

```
$ sudo sh
password:
#
```

- If you are installing the software from a PC or other system with X server software installed, then:

Note: If necessary, refer to your X server documentation for more information about completing this procedure. Depending on the X server software that you are using, you may need to complete the tasks in a different order.

1. Start the X server software.
2. Configure the security settings of the X server software to permit remote hosts to display X applications on the local system.
3. Connect to the remote system where you want to install the software, and start a terminal session on that system, for example, an X terminal (`xterm`).
4. If you are not logged in as the `root` user on the remote system, then enter the following command to switch user to `root`:

```
$ sudo sh
password:
#
```

3 Checking the Hardware Requirements

The system must meet the following minimum hardware requirements:

- At least 1024 MB of physical RAM
- The following table shows the relationship between the available RAM and the required swap space.

Available RAM	Swap Space Required
Between 1024 MB and 2048 MB	1.5 times the size of RAM
Between 2049 MB and 8192 MB	Equal to the size of RAM
More than 8192 MB	0.75 times the size of RAM

- 400 MB of disk space in the /tmp directory
- Between 1.5 GB and 3.5 GB of disk space for the Oracle software, depending on the installation type
- 1.2 GB of disk space for a preconfigured database that uses file system storage (optional)

Note: The disk space requirement for databases that use Automatic Storage Management or raw device storage is described later in this chapter.

Additional disk space, either on a file system or in an Automatic Storage Management disk group, is required for the flash recovery area if you choose to configure automated backups.

To ensure that the system meets these requirements, follow these steps:

1. To determine the physical RAM size, enter the following command:

```
# grep MemTotal /proc/meminfo
```

If the size of the physical RAM installed in the system is less than the required size, then you must install more memory before continuing.

2. To determine the size of the configured swap space, enter the following command:

```
# grep SwapTotal /proc/meminfo
```

If necessary, refer to your operating system documentation for information about how to configure additional swap space.

3. To determine the amount of free disk space available in the /tmp directory, enter the following command:

```
# df -k /tmp
```

If there is less than 400 MB of disk space available in the /tmp directory, then complete one of the following steps:

- Delete unnecessary files from the /tmp directory.
 - Set the TMP and TMPDIR environment variables when setting the oracle user's environment (described later).
 - Extend the file system that contains the /tmp directory. If required, contact your system administrator for information about extending file systems.
4. To determine the amount of free disk space available on the system, enter the following command:

```
# df -k
```

The following table shows the approximate disk space requirements for software files for each installation type.

Installation Type	Requirement for Software Files (GB)
Enterprise Edition	1.5
Standard Edition	1.5
Custom (maximum)	1.5

- To determine whether the system architecture can run the software, enter the following command:

```
# grep "model name" /proc/cpuinfo
```

This command displays the processor type. Verify that the processor architecture matches the Oracle software release that you want to install. If you do not see the expected output, then you cannot install the software on this system.

4 Checking the Software Requirements

The system must meet the following minimum software requirements, depending on the distribution and version of your operating system:

Note: Oracle Universal Installer performs checks on your system to verify that it meets the listed requirements. To ensure that these checks pass, verify the requirements before you start Oracle Universal Installer.

- The operating system must be one of the following:
 - SUSE Linux Enterprise Server (SLES) 9.0 (service pack 2 or later)
 - Red Hat Enterprise Linux 4.0 (Update 2 or later)
- The system must be running the following (or later) kernel version:
 - **Red Hat Enterprise Linux 4.0 (Update 2 or later)**
2.6.9-22.EL
 - **SUSE Linux Enterprise Server 9**
2.6.5-139
- The following packages (or later versions) must be installed:
 - **Red Hat Enterprise 4.0:**

```
gcc-3.4.4-2
gcc-c++-3.4.4-2
libgcc-3.4.4-2
libstdc++-devel-3.4.4-2
compat-libgcc-295-2.95.3-81
compat-libstdc++-33-3.2.3-47.3
glibc-2.3.4-2.13
libaio-0.3.103-3
libaio-devel-0.3.103-3
libstdc++-devel 3.4.4-2
```
 - **SUSE Linux Enterprise Server 9**

```
gcc-3.3.3-43.34
gcc-c++-3.3.3-43.34
glibc-2.3.3-98
libaio-0.3.98-18
libaio-devel-0.3.98-18
Gmake-3.80-184.1
openmotif-libs-2.2.2-519.1
ibgcc (64 bit) unknown
libgcc 3.3.3-43.34
libstdc++ 3.3.3-43.34
libstdc++ devel 3.3.3-43.34
```

For the Oracle products that you want to install, the system must meet the following product-specific requirements:

- Oracle Messaging Gateway

This product supports the integration of Oracle Streams Advanced Queuing (AQ) with the following software:

IBM WebSphere MQ V5.3, client and server:

```
MQSeriesClient
MQSeriesServer
```

- PL/SQL native compilation, Pro*C/C++, Oracle Call Interface, Oracle C++ Call Interface, Oracle XML Developer's Kit (XDK)

The version of GNU C and C++ compilers listed previously for the distribution are supported for use with these products.

- The following JDK versions are supported with this release but are not mandatory for the installation:

- IBM SDK 1.5
- IBM SDK 1.4.2 (64-Bit)
- IBM SDK 1.3.1 (31-Bit)
- IBM SDK 1.4.2 (31-Bit)

- Pro*COBOL

The following products are certified for use with Pro*COBOL:

- **Red Hat Enterprise 4.0:**
AcuCobol 6.2
- **SUSE Linux Enterprise Server 9:**
Microfocus Server Express 4.0 SP 2

To ensure that the system meets these requirements, follow these steps:

1. To determine which distribution and version of the operating system is installed, enter the following command:

```
# cat /etc/issue
```

2. To determine whether the required kernel is installed, enter the following command:

```
# uname -r
```

The following is sample output displayed by running this command on a Red Hat Enterprise Linux 4.0 system:

```
2.6.9-22.EL
```

In this example, the output shows the kernel version (2.6.9) and errata level (22.EL) on the system.

If the kernel version does not meet the requirement specified earlier in this section, then contact your operating system vendor for information about obtaining and installing kernel updates.

3. To determine whether the required packages are installed, enter commands similar to the following:

```
# rpm -q package_name
```

If a package is not installed, then install it from your Linux distribution media or download the required package version from your Linux vendor's Web site.

4. If you require a CSD for WebSphere MQ, then refer to the following Web site for download and installation information:

<http://www-306.ibm.com/software/integration/wmq/support>

5 Creating Required Operating System Groups and User

The following local operating system groups and users are required if you are installing Oracle Database:

- The Oracle Inventory group (`oinstall`)
- The OSDBA group (`dba`)
- The Oracle software owner (`oracle`)
- An unprivileged user (`nobody`)

To determine whether these groups and users already exist, and if necessary, to create them, follow these steps:

1. To determine whether the `oinstall` group exists, enter the following command:

```
# more /var/opt/oracle/oraInst.loc
```

If the output of this command shows the `oinstall` group name, then the group already exists.

If the `oraInst.loc` file exists, then the output from this command is similar to the following:

```
inventory_loc=/u01/app/oracle/oraInventory
inst_group=oinstall
```

The `inst_group` parameter shows the name of the Oracle Inventory group, `oinstall`.

If the `oraInst.loc` file does not exist, then create the Oracle Inventory group by entering the following command:

```
# /usr/sbin/groupadd oinstall
```

2. If the OSDBA group does not exist or if you require a new OSDBA group, then create it as follows:

```
# /usr/sbin/groupadd dba
```

In this command, use the group name `dba` unless a group with that name already exists.

3. To determine whether the `oracle` user exists and belongs to the correct groups, enter the following command:

```
# id oracle
```

If the `oracle` user exists, this command displays information about the groups to which the user belongs. The output should be similar to the following, indicating that `oinstall` is the primary group and `dba` is a secondary group:

```
uid=440(oracle) gid=200(oinstall) groups=201(dba),202(oper)
```

4. If necessary, complete one of the following actions:

- If the `oracle` user exists, but its primary group is not `oinstall` or it is not a member of the `dba` group, then enter the following command:

```
# /usr/sbin/usermod -g oinstall -G dba oracle
```

- If the `oracle` user does not exist, enter the following command to create it:

```
# /usr/sbin/useradd -g oinstall -G dba oracle
```

This command creates the `oracle` user and specifies `oinstall` as the primary group and `dba` as the secondary group.

5. Enter the following command to set the password of the `oracle` user:

```
# passwd oracle
```

6. To determine whether the `nobody` user exists, enter the following command:

```
# id nobody
```

If this command displays information about the `nobody` user, then you do not have to create the user.

If the `nobody` user does not exist, then enter the following command to create it:

```
# /usr/sbin/useradd nobody
```

Specify the appropriate options to create an unprivileged `nobody` user, then press F10 to exit.

6 Configuring Kernel Parameters

Verify that the kernel parameters shown in the following table are set to values greater than or equal to the recommended value shown. The procedure following the table describes how to verify and set the values.

Parameter	Value	File
semmsl	250	/proc/sys/kernel/sem
semmns	32000	
semopm	100	
semmni	128	
shmall	2097152	/proc/sys/kernel/shmall
shmmax	Half the size of physical memory (in bytes)	/proc/sys/kernel/shmmax
shmmni	4096	/proc/sys/kernel/shmmni
file-max	65536	/proc/sys/fs/file-max
ip_local_port_range	Minimum: 1024 Maximum: 65000	/proc/sys/net/ipv4/ip_local_port_range
rmem_default	1048576	/proc/sys/net/core/rmem_default
rmem_max	1048576	/proc/sys/net/core/rmem_max
wmem_default	262144	/proc/sys/net/core/wmem_default
wmem_max	262144	/proc/sys/net/core/wmem_max

Note: If the current value of any parameter is higher than the value listed in this table, then do not change the value of that parameter.

To view the current value specified for these kernel parameters, and to change them if necessary:

1. Enter commands similar to the following to view the current values of the kernel parameters:

Note: Make a note of the current values and identify any values that you must change.

Parameter	Command
semmsl, semmns, semopm, and semmni	# /sbin/sysctl -a grep sem This command displays the value of the semaphore parameters in the order listed.
shmall, shmmax, and shmmni	# /sbin/sysctl -a grep shm This command displays the details of the shared memory
file-max	# /sbin/sysctl -a grep file-max This command displays the maximum number of file handles

Parameter	Command
ip_local_port_range	# /sbin/sysctl -a grep ip_local_port_range This command displays a range of port numbers
rmem_default	# /sbin/sysctl -a grep rmem_default
rmem_max	# /sbin/sysctl -a grep rmem_max
wmem_default	# /sbin/sysctl -a grep wmem_default
wmem_max	# /sbin/sysctl -a grep wmem_max

- If the value of any kernel parameter is different from the recommended value, then complete the following steps:

Using any text editor, create or edit the `/etc/sysctl.conf` file and add or edit lines similar to the following:

Note: Include lines only for the kernel parameter values that you want to change. For the semaphore parameters (`kernel.sem`), you must specify all four values. However, if any of the current values are larger than the recommended value, specify the larger value.

```
kernel.shmall = 2097152
kernel.shmmax = 2147483648
kernel.shmmni = 4096
kernel.sem = 250 32000 100 128
fs.file-max = 65536
net.ipv4.ip_local_port_range = 1024 65000
net.core.rmem_default = 1048576
net.core.rmem_max = 1048576
net.core.wmem_default = 262144
net.core.wmem_max = 262144
```

By specifying the values in the `/etc/sysctl.conf` file, they persist when you restart the system.

On SUSE systems only, enter the following command to ensure that the system reads the `/etc/sysctl.conf` file when it restarts:

```
# /sbin/chkconfig boot.sysctl on
```

Set Shell Limits for the oracle User

To improve the performance of the software, you must increase the following shell limits for the `oracle` user:

Shell Limit	Item in limits.conf	Hard Limit
Maximum number of open file descriptors	<code>nofile</code>	65536
Maximum number of processes available to a single user	<code>nproc</code>	16384

To increase the shell limits:

1. Add the following lines in the `/etc/security/limits.conf` file:

```
oracle      soft   nproc    2047
oracle      hard   nproc    16384
oracle      soft   nofile   1024
oracle      hard   nofile   65536
```

2. Add the following line to the `/etc/pam.d/login` file, if it does not already exist:

```
session required /lib/security/pam_limits.so
session required pamlimit.so
```

3. Depending on the `oracle` user's default shell, make the following changes to the default shell startup file:

- For the Bourne, Bash, or Korn shell, add the following lines in the `/etc/profile` file (or the `/etc/profile.local` file on SUSE systems):

```
if [ $USER = "oracle" ]; then
    if [ $SHELL = "/bin/ksh" ]; then
        ulimit -p 16384
        ulimit -n 65536
    else
        ulimit -u 16384 -n 65536
    fi
fi
```

- For the C shell, add the following lines in the `/etc/csh.login` file (or the `/etc/csh.login.local` file on SUSE systems):

```
if ( $USER == "oracle" ) then
    limit maxproc 16384
    limit descriptors 65536
endif
```

7 Creating Required Directories

Create directories with names similar to the following, and specify the correct owner, group, and permissions for them:

- The Oracle base directory
- An optional Oracle data file directory (optional)

The Oracle base directory must have 3 GB of free disk space, or 4 GB of free disk space if you choose not to create a separate Oracle data file directory.

To determine where to create these directories, perform the following:

To create the Oracle base directory:

1. Enter the following command to display information about all mounted file systems:

```
# df -k
```

This command displays information about all the file systems mounted on the system, including:

- The physical device name

- The total amount, used amount, and available amount of disk space, in kilobytes
 - The mount point directory for that file system
2. Note the name of the mount point directory for each file system that you identified.
 3. Enter commands similar to the following to create the recommended subdirectories in the mount point directory that you identified and set the appropriate owner, group, and permissions on them:

```
# mkdir -p /mount_point/app/oracle_sw_owner
# chown -R oracle:oinstall /mount_point/app/oracle_sw_owner
# chmod -R 775 /mount_point/app/oracle_sw_owner
```

For example, if the mount point you identify is `/u01` and `oracle` is the user name of the Oracle software owner, then the recommended Oracle base directory path is as follows:

```
/u01/app/oracle
```

8 Configuring the oracle User's Environment

You run Oracle Universal Installer from the `oracle` account. However, before you start Oracle Universal Installer, you must configure the environment of the `oracle` user. To configure the environment, you must:

- Set the default file mode creation mask (`umask`) to 022 in the shell startup file.
- Set the `DISPLAY` environment variable.

To set the `oracle` user's environment:

1. Start a new terminal session, for example, an X terminal (`xterm`).
2. Enter the following command to ensure that X Window applications can display on this system:

```
$ xhost fully_qualified_remote_host_name
```

3. Complete one of the following steps:
 - If the terminal session is not connected to the system where you want to install the software, then log in to that system as the `oracle` user.
 - If the terminal session is connected to the system where you want to install the software, then switch user to `oracle`:

```
$ su - oracle
```

4. To determine the default shell for the `oracle` user, enter the following command:

```
$ echo $SHELL
```

5. Open the `oracle` user's shell startup file in any text editor:

- Bourne shell (`sh`), Bash shell (`bash`), or Korn shell (`ksh`):

```
$ vi .bash_profile
```

- C shell (csh or tcsh):

```
% vi .login
```

6. Enter or edit the following line in the shell startup file, specifying a value of 022 for the default file mode creation mask:

```
umask 022
```

7. If the ORACLE_SID, ORACLE_HOME, or ORACLE_BASE environment variable is set in the file, then remove the corresponding lines from the file.
8. Save the file, and exit from the editor.
9. To run the shell startup script, enter the following command:

- Bash shell:

```
$ . ~/.bash_profile
```

- Bourne shell, or Korn shell:

```
$ . ~/.profile
```

- C shell:

```
% source ~/.login
```

10. If you are not installing the software on the local system, then enter a command similar to the following to direct X applications to display on the local system:

- Bourne, Bash, or Korn shell:

```
$ DISPLAY=local_host:0.0 ; export DISPLAY
```

- C shell:

```
% setenv DISPLAY local_host:0.0
```

In this example, *local_host* is the host name or IP address of the system that you want to use to display Oracle Universal Installer (your workstation or PC).

11. If you determined that the /tmp directory had insufficient free disk space when checking the hardware requirements, then identify a file system with the required amount of free space and set the TMP and TMPDIR environment variables as follows:

- a. Use the `df -k` command to identify a suitable file system with sufficient free space.

- b. If necessary, enter commands similar to the following to create a temporary directory on the file system that you identified, and set the appropriate permissions on the directory:

```
$ sudo mkdir /mount_point/tmp  
$ sudo chmod a+wr /mount_point/tmp
```

- c. Enter commands similar to the following to set the TMP and TMPDIR environment variables:

Bourne, Bash, or Korn shell:

```
$ TMP=/mount_point/tmp
$ TMPDIR=/mount_point/tmp
$ export TMP TMPDIR
```

C shell:

```
% setenv TMP /mount_point/tmp
% setenv TMPDIR /mount_point/tmp
```

12. Enter commands similar to the following to set the ORACLE_BASE and ORACLE_SID environment variables:

- Bourne, Bash, or Korn shell:

```
$ ORACLE_BASE=/u01/app/oracle
$ ORACLE_SID=sales
$ export ORACLE_BASE ORACLE_SID
```

- C shell:

```
% setenv ORACLE_BASE /u01/app/oracle
% setenv ORACLE_SID sales
```

13. Enter the following commands to ensure that the ORACLE_HOME and TNS_ADMIN environment variables are not set:

- Bourne, Bash, or Korn shell:

```
$ unset ORACLE_HOME
$ unset TNS_ADMIN
```

- C shell:

```
% unsetenv ORACLE_HOME
% unsetenv TNS_ADMIN
```

14. To verify that the environment has been set correctly, enter the following commands:

```
$ umask
$ env | more
```

Verify that the umask command displays a value of 22, 022, or 0022 and the environment variables that you set in this section have the correct values.

9 Mounting the Product Disc

On most Linux systems, the product disc mounts automatically when you insert it into the disc drive. If the disc does not mount automatically, then follow these steps to mount it:

1. If necessary, enter a command similar to the following to eject the currently mounted disc, then remove it from the drive:

- Red Hat:

```
$ sudo eject /mnt/dvd
```

- SUSE:

```
$ sudo eject /media/dvd
```

In these examples, `/mnt/dvd` and `/media/dvd` are the mount point directories for the disc drive.

2. Insert the appropriate disc into the disc drive.
3. To verify that the disc mounted automatically, enter a command similar to the following:

- Red Hat:

```
$ ls /mnt/dvd
```

- SUSE:

```
$ ls /media/dvd
```

4. If this command fails to display the contents of the disc, then enter a command similar to the following:

- Red Hat:

```
# mount -t iso9660 /dev/dvd /mnt/dvd
```

- SUSE:

```
# mount -t iso9660 /dev/dvd /media/dvd
```

In these examples, `/mnt/dvd` and `/media/dvd` are the mount point directories for the disc drive.

5. If Oracle Universal Installer displays the Disk Location dialog box, then enter the disc mount point directory path, for example:

```
/mnt/dvd
```

10 Installing Oracle Database

After configuring the `oracle` user's environment, start Oracle Universal Installer and install Oracle Database, as follows:

Note: If you are installing the software from a DVD, then use a command similar to the following:

```
$ /mount_point/db/runInstaller
```

1. To start Oracle Universal Installer, complete one of the following steps depending on the location of the installation files:

- If the installation files are on disc, enter commands similar to the following, where `directory_path` is the path of the `db` directory on the DVD:

```
$ cd /tmp
$ /directory_path/runInstaller
```

- If the installation files are on the hard disk, change directory to the `db` directory and enter the following command:

```
$ ./runInstaller
```

If Oracle Universal Installer does not start, then refer to *Oracle Database Installation Guide for IBM zSeries Based Linux* for information about how to troubleshoot X Window display problems.

2. The following table describes the recommended action for each Oracle Universal Installer screen. Use the following guidelines to complete the installation:

- If you need more assistance, or if you want to choose an option that is not a default, then click **Help** for additional information.
- If you encounter errors while installing or linking the software, then refer to *Oracle Database Installation Guide for IBM zSeries Based Linux* for information about troubleshooting.

Note: If you have completed the tasks listed previously, then you can complete the installation by choosing the default values on most screens.

Screen	Recommended Action
Select Installation Method	The Basic Installation option is selected by default. Specify the directory path of the Oracle home. Ensure that the UNIX DBA group <code>oinstall</code> is selected. If you want to create a starter database, then specify a name and password for it. Then, click Next .
Specify Inventory Directory and Credentials	This screen is displayed only during the first installation of Oracle products on a system. Specify the full path of the Oracle Inventory directory. Ensure that the operating system group selected is <code>oinstall</code> . Then, click Next .
Product-Specific Prerequisite Checks	Verify that all of the prerequisite checks succeed, then click Next . Oracle Universal Installer checks the system to verify that it is configured correctly to run Oracle software. If you have completed all of the preinstallation steps in this guide, all of the checks should pass. If a check fails, then review the cause of the failure listed for that check on the screen. If possible, rectify the problem and rerun the check. Alternatively, if you are satisfied that your system meets the requirements, then you can select the check box for the failed check to manually verify the requirement.
Summary	Review the information displayed on this screen, and then click Install .
Install	This screen displays status information while the product is being installed.
Configuration Assistants	This screen displays status information for the configuration assistants that configure the software and create a database. When the message is displayed at the end of this process, click OK to continue.

Screen	Recommended Action
Execute Configuration Scripts	When prompted, read the instructions and then run the scripts mentioned on this screen. Click OK to continue.
End of Installation	<p>The configuration assistants configure several Web-based applications, including Oracle Enterprise Manager Database Control. This screen displays the URLs configured for these applications. Make a note of the URLs used. The port numbers used in these URLs are also recorded in the following file:</p> <p><code>oracle_home/install/portlist.ini</code></p> <p>To exit from Oracle Universal Installer, click Exit and then click Yes.</p>

11 Installing Products from the Oracle Database 10g Companion CD

The Oracle Database 10g Companion CD contains additional products that you can install. Whether you need to install these products depends on which Oracle Database products or features you plan to use. If you plan to use the following products or features, then you must complete the Oracle Database 10g Products installation from the Companion CD:

- JPublisher
- Oracle JVM
- Oracle *interMedia*
- Oracle JDBC development drivers
- Oracle SQLJ
- Oracle Database Examples
- Oracle Text supplied knowledge bases
- Oracle Ultra Search
- Oracle HTML DB

For more information about installing software from the Companion CD, refer to *Oracle Database Companion CD Quick Installation Guide for IBM zSeries Based Linux*.

12 What to Do Next?

To become familiar with this release of Oracle Database, it is recommended that you complete the following tasks:

- Log in to Oracle Enterprise Manager Database Control using a Web browser. Oracle Enterprise Manager Database Control is a Web-based application that you can use to manage a single Oracle Database installation. The default URL for Database Control is similar to the following:

`http://host.domain:1158/em/`

To log in, use the user name SYS and connect as SYSDBA. Use the password that you specified for this user during the Oracle Database 10g installation.

- Refer to *Oracle Database Installation Guide for IBM zSeries Based Linux* for information about required and optional postinstallation tasks, depending on the products that you want to use.
- Refer to *Oracle Database Installation Guide for IBM zSeries Based Linux* Oracle Database Installation Guide for IBM zSeries based Linux for information about how to use Database Control to learn about the configuration of your installed database.
- To learn more about using Oracle Enterprise Manager Database Control to administer a database, refer to *Oracle Database 2 Day DBA*.

This guide, designed for new Oracle DBAs, describes how to use Database Control to manage all aspects of an Oracle Database installation. It also provides information about how to enable e-mail notifications and automated backups, which you might not have configured during the installation.

13 Additional Information

This section contains information about the following:

- [Product Licenses](#)
- [Purchasing Licenses, Version Updates, and Documentation](#)
- [Contacting Oracle Support Services](#)
- [Locating Product Documentation](#)

Product Licenses

You are welcome to install and evaluate the products included in this media pack for 30 days under the terms of the Trial License Agreement. However, you must purchase a program license if you want to continue using any product after the 30 day evaluation period. See the following section for information about purchasing program licenses.

Purchasing Licenses, Version Updates, and Documentation

You can purchase program licenses, updated versions of Oracle products, and printed versions of Oracle documentation from the Oracle Store Web site:

<http://oraclestore.oracle.com>

Contacting Oracle Support Services

If you have purchased Oracle Product Support, you can call Oracle Support Services for assistance 24 hours a day, seven days a week. For information about purchasing Oracle Product Support or contacting Oracle Support Services, go to the Oracle Support Services Web site:

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

Locating Product Documentation

Documentation for Oracle products is available in both HTML and Adobe portable document format (PDF) formats from several locations:

- On discs in the media pack:

- Platform-specific documentation is available on the product discs. To access this documentation, see the `welcome.htm` file located in the top-level directory of the installation media.
 - Generic product documentation is available in the Oracle Documentation Library.
- From the Oracle Technology Network Web site:

<http://www.oracle.com/technology/documentation/index.html>

To view PDF documents, download the free Adobe Acrobat Reader from the Adobe Web site, if necessary:

<http://www.adobe.com>

14 Documentation Accessibility

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Accessibility of Links to External Web Sites in Documentation

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

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

Oracle Database Quick Installation Guide, 10g Release 2 (10.2) for IBM zSeries Based Linux
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