

RedHat ES4 (64bit) + Oracle 10g-64bit (10.1.0.3) Installation

Checking Memory and Swap Space

2GB

512M

1G

```
[root@soma]# grep memtotal /proc/meminfo
```

```
[root@soma]# grep swaptotal /proc/meminfo
```

Temporary swap space (swap)

```
[root@soma]# dd if=/dev/zero of=tmpswap bs=1k count=900000
```

```
[root@soma]# chmod 600 tmpswap
```

```
[root@soma]# mkswap tmpswap
```

```
[root@soma]# swapon tmpswap
```

Temporary swap space

```
[root@soma]# swapoff tmpswap
```

```
[root@soma]# rm tmpswap
```

Checking /tmp space

/tmp

80M

```
[root@soma]# df /tmp
```

/tmp

```
[root@soma]# mkdir /<AnotherFilesystem>/tmp
[root@soma]# chown root.root /<AnotherFilesystem>/tmp
[root@soma]# chmod 1777 /<AnotherFilesystem>/tmp
[root@soma]# export TEMP=/<AnotherFilesystem>          # used by Oracle
[root@soma]# export TMPDIR=/<AnotherFilesystem>        # used by Linux programs like the linker "ld"
```

```
[root@soma]# rmdir /<AnotherFilesystem>/tmp
[root@soma]# unset TEMP
[root@soma]# unset TMPDIR
```

Checking Software Packages (RPMs)

DB

10g R2(32bit)

```
make-3.79.1
gcc-3.2.3-34
glibc-2.3.2-95.20
compat-db-4.0.14-5
compat-gcc-7.3-2.96.128
compat-gcc-c++-7.3-2.96.128
compat-libstdc++-7.3-2.96.128
compat-libstdc++-devel-7.3-2.96.128
```

openmotif21-2.1.30-8
setarch-1.3-1

```
rpm )  
rpm -q make gcc glibc compat-db compat-gcc compat-gcc-c++ compat-libstdc++ compat-libstdc++-devel openmotif21  
setarch libaio
```

10g R1(32bit)

make-3.79.1
gcc-3.2.3-34
glibc-2.3.2-95.20
compat-db-4.0.14-5
compat-gcc-7.3-2.96.128
compat-gcc-c++-7.3-2.96.128
compat-libstdc++-7.3-2.96.128
compat-libstdc++-devel-7.3-2.96.128
openmotif21-2.1.30-8
setarch-1.3-1

```
rpm )  
rpm -q make gcc glibc compat-db compat-gcc compat-gcc-c++ compat-libstdc++ compat-libstdc++-devel openmotif21  
setarch
```

10g R1(64bit)

make-3.79.1
gcc-3.2.3-34
glibc-2.3.2-95.20
glibc-devel-2.3.2-95.20
glibc-devel-2.3.2-95.20 (32 bit)

```
compat-db-4.0.14-5
compat-gcc-7.3-2.96.128
compat-gcc-c++-7.3-2.96.128
compat-libstdc++-7.3-2.96.128
compat-libstdc++-devel-7.3-2.96.128
gnome-libs-1.4.1.2.90-34.1 (32 bit)
openmotif21-2.1.30-8
setarch-1.3-1
libaio-0.3.96-3
libaio-devel-0.3.96-3
```

```
rpm      )
rpm -q --qf '%{NAME}-%{VERSION}-%{RELEASE} (%{ARCH}) n'
        gcc glibc glibc-devel compat-db compat-gcc compat-gcc-c++ compat-libstdc++
        compat-libstdc++-devel gnome-libs openmotif21 setarch libaio libaio-devel
```

```
[root@soma]# uname -mi
```

Checking Kernel Parameters

```
[root@soma]# sysctl -a
```

10g

```
shmmax = 2147483648    (To verify, execute: cat /proc/sys/kernel/shmmax)
shmmni = 4096         (To verify, execute: cat /proc/sys/kernel/shmmni)
shmall = 2097152     (To verify, execute: cat /proc/sys/kernel/shmall) (for 10g R1)
shmmin = 1           (To verify, execute: ipcs -lm |grep "min seg size")
shmseg = 10          (It's hardcoded in the kernel - the default is much higher)

semmsl = 250         (To verify, execute: cat /proc/sys/kernel/sem | awk '{print \$1}')
semms = 32000       (To verify, execute: cat /proc/sys/kernel/sem | awk '{print \$2}')
semopm = 100        (To verify, execute: cat /proc/sys/kernel/sem | awk '{print \$3}')
semnmi = 128        (To verify, execute: cat /proc/sys/kernel/sem | awk '{print \$4}')

file-max = 65536     (To verify, execute: cat /proc/sys/fs/file-max)

ip_local_port_range = 1024 65000 (To verify, execute: cat /proc/sys/net/ipv4/ip\_local\_port\_range)
```

```
[root@soma]# vi /etc/sysctl.conf
kernel.shmmax=2147483648
kernel.sem=250 32000 100 128
fs.file-max=65536
net.ipv4.ip_local_port_range=1024 65000
[root@soma# source /etc/sysctl.conf
```

Sizing Disk Space For Oracle 10g

2.5G

Creating Oracle User Accounts

```
[root@soma]# groupadd dba                # group of users to be granted SYSDBA system privilege
[root@soma]# groupadd oinstall           # group owner of Oracle files
[root@soma]# useradd -c "Oracle software owner" -g oinstall -G dba oracle
[root@soma]# passwd oracle
```

Creating Oracle Directory

Directory

```
[root@soma]# mkdir -p /oracle
[root@soma]# chown oracle.oinstall /oracle
```

Setting Oracle Environments

```
[oracle@soma]# vi /home/oracle/.bash_profile

export ORACLE_BASE=/oracle
export ORACLE_SID=orcl
export ORACLE_HOME=$ORACLE_BASE/product/10.1.0
export PATH=$PATH:$ORACLE_HOME/bin
export LD_LIBRARY_PATH=$ORACLE_HOME/lib
```

Runninstaller

```
[oracle@soma]# gunzip ship.db_Disk1.lnx86-64.cpio.gz  
[oracle@soma]# gunzip ship.db_Disk2.lnx86-64.cpio.gz  
[oracle@soma]# cpio -idmv < ship.db_Disk1.lnx86-64.cpio  
[oracle@soma]# cpio -idmv < ship.db_Disk2.lnx86-64.cpio
```

/etc/redhat-release

```
[root@soma]# vi /etc/redhat-release
```

Red Hat Enterprise Linux ES release 3

```
10.1.0.3   ES4                redhat-release  
가
```

Error Message)

Using paramFile: /home/oracle/Disk1/db/install/oraparam.ini

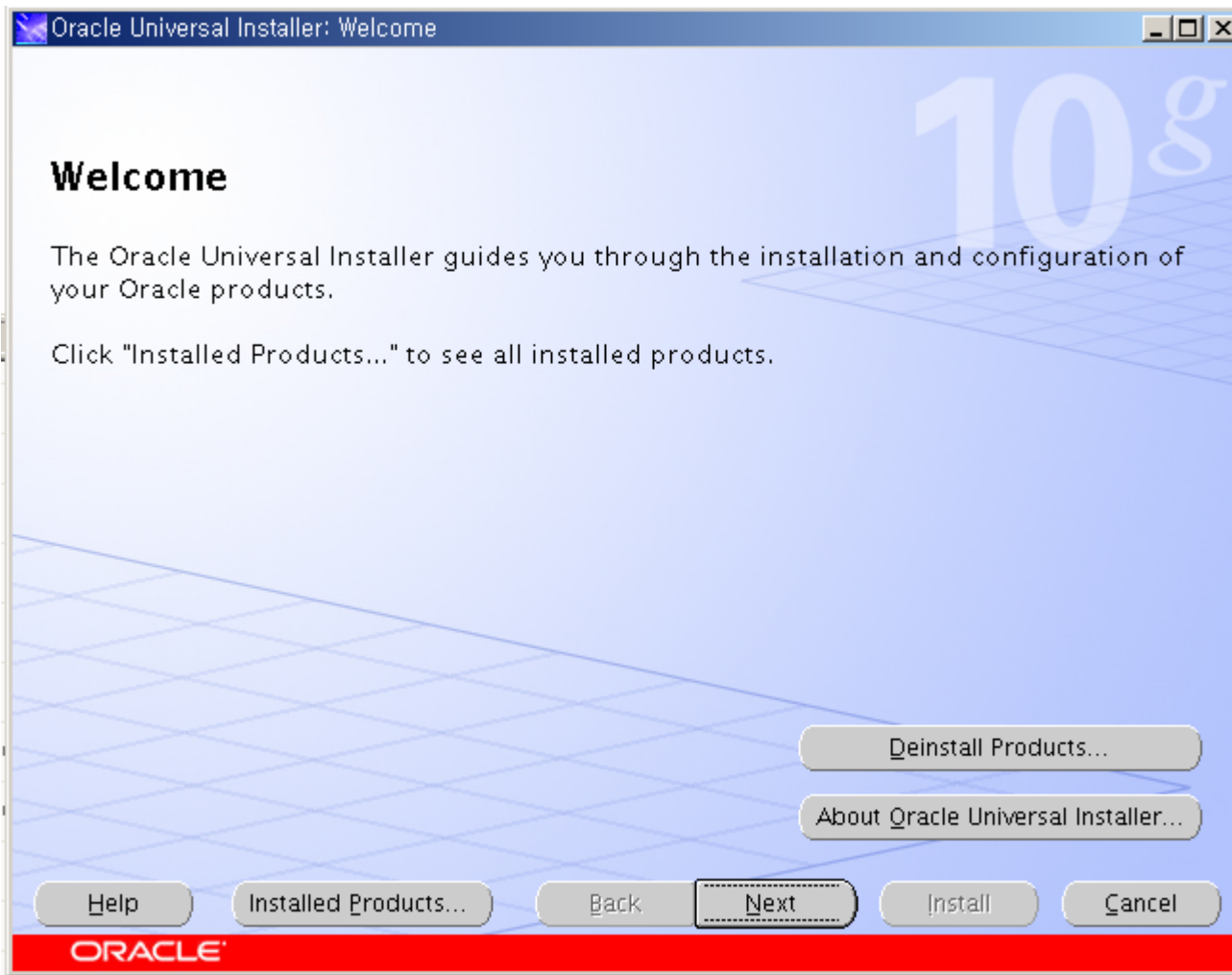
Checking installer requirements...

Checking operating system version: must be redhat-2.1, UnitedLinux-1.0 or redhat-3 Failed <<<<

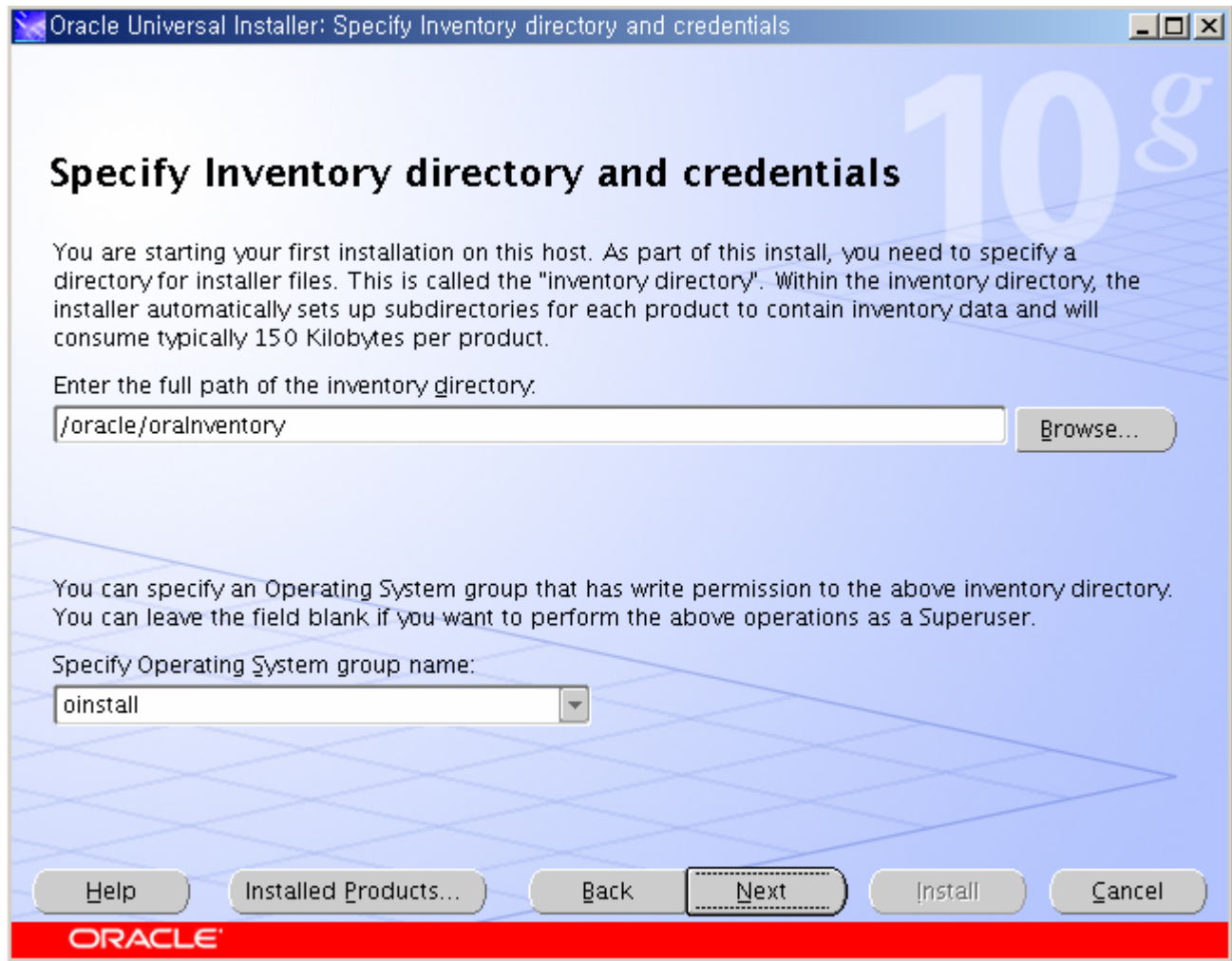
Exiting Oracle Universal Installer, log for this session can be found at /tmp/OralInstall2004-12-05_09-12-31PM/installActions2004-12-05_09-12-31PM.log

Runninstaller

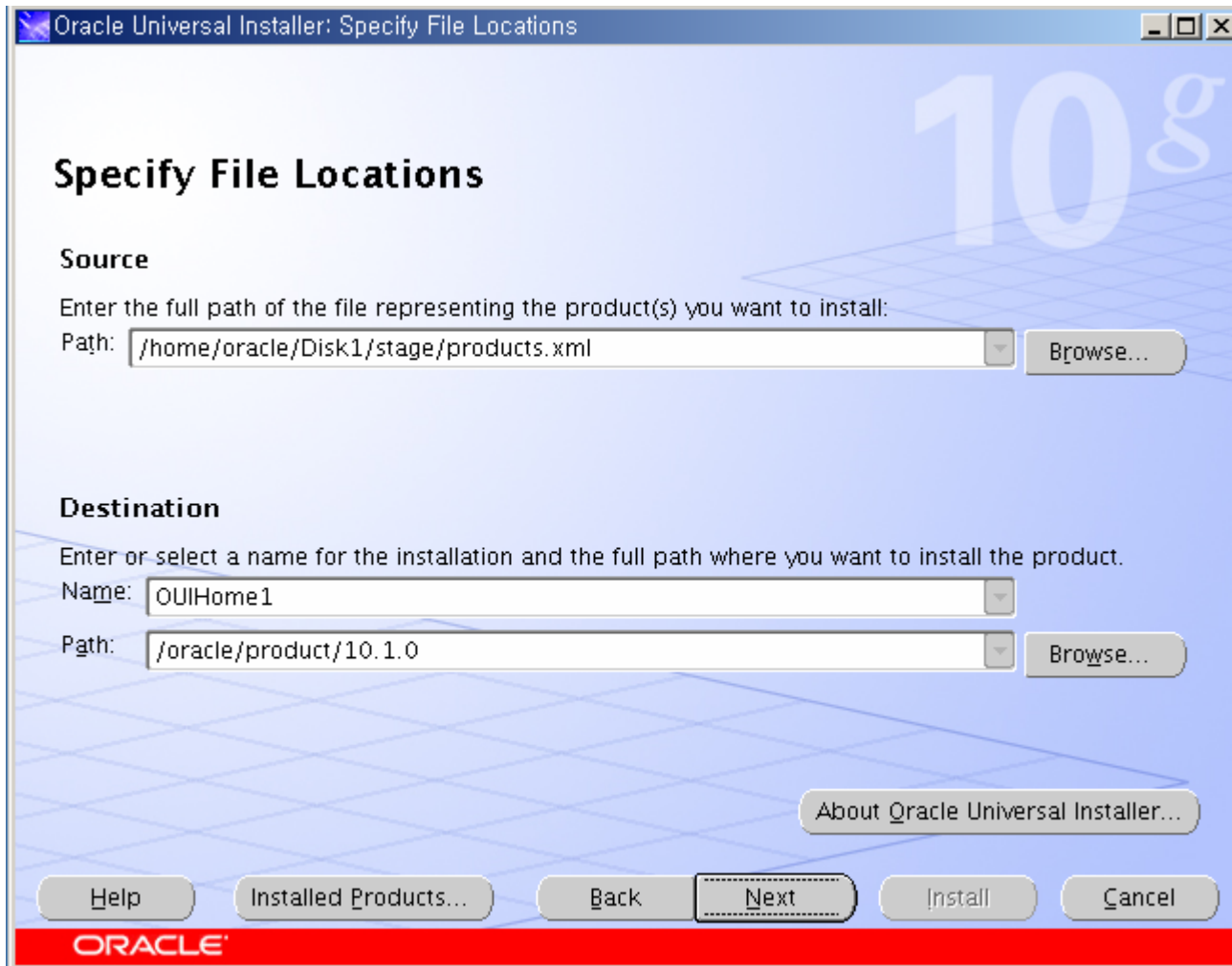
```
[oracle@soma]# cd /home/oracle/Disk1  
[oracle@Disk1]# ./runInstaller
```



Next

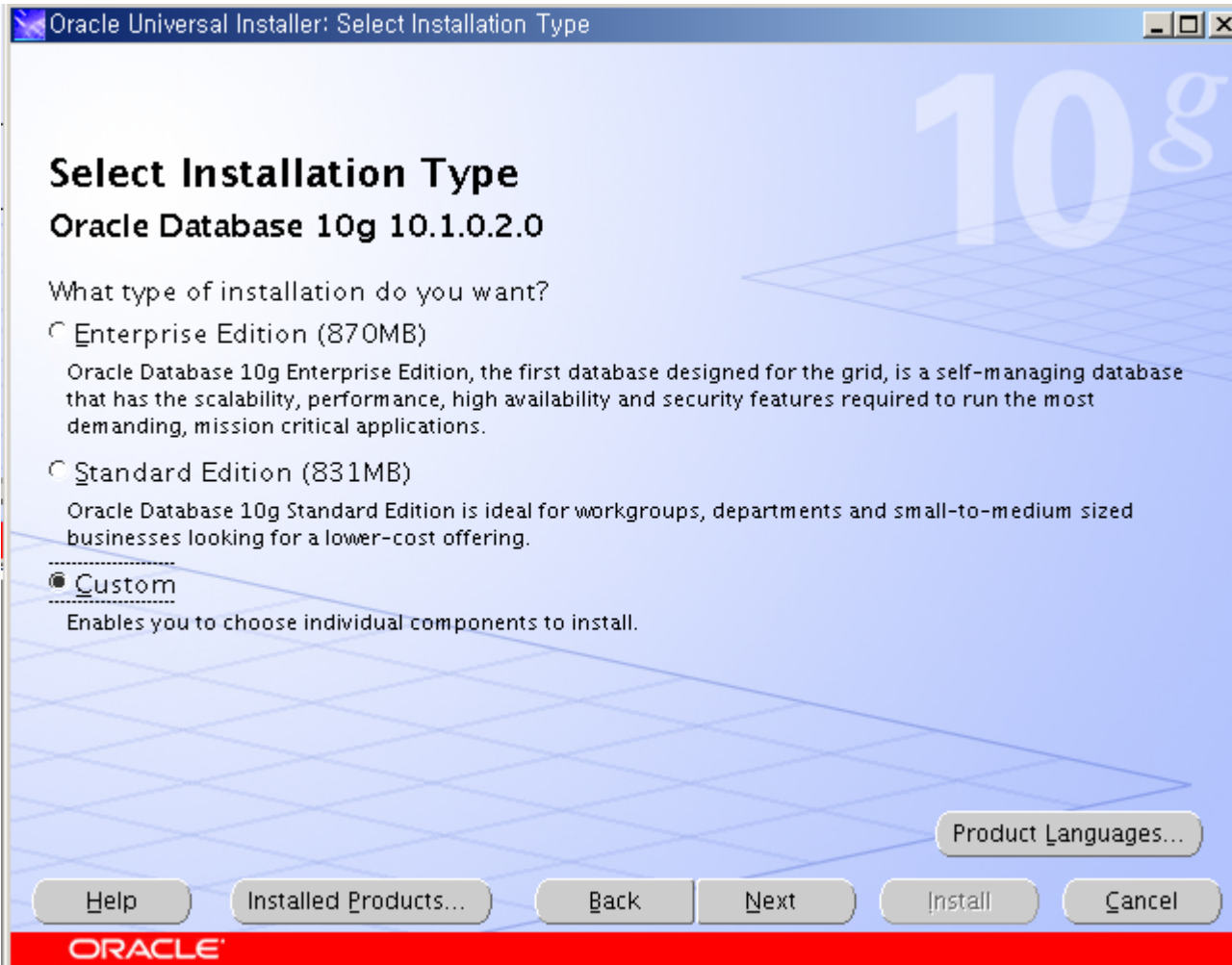


Oinstall -> Next

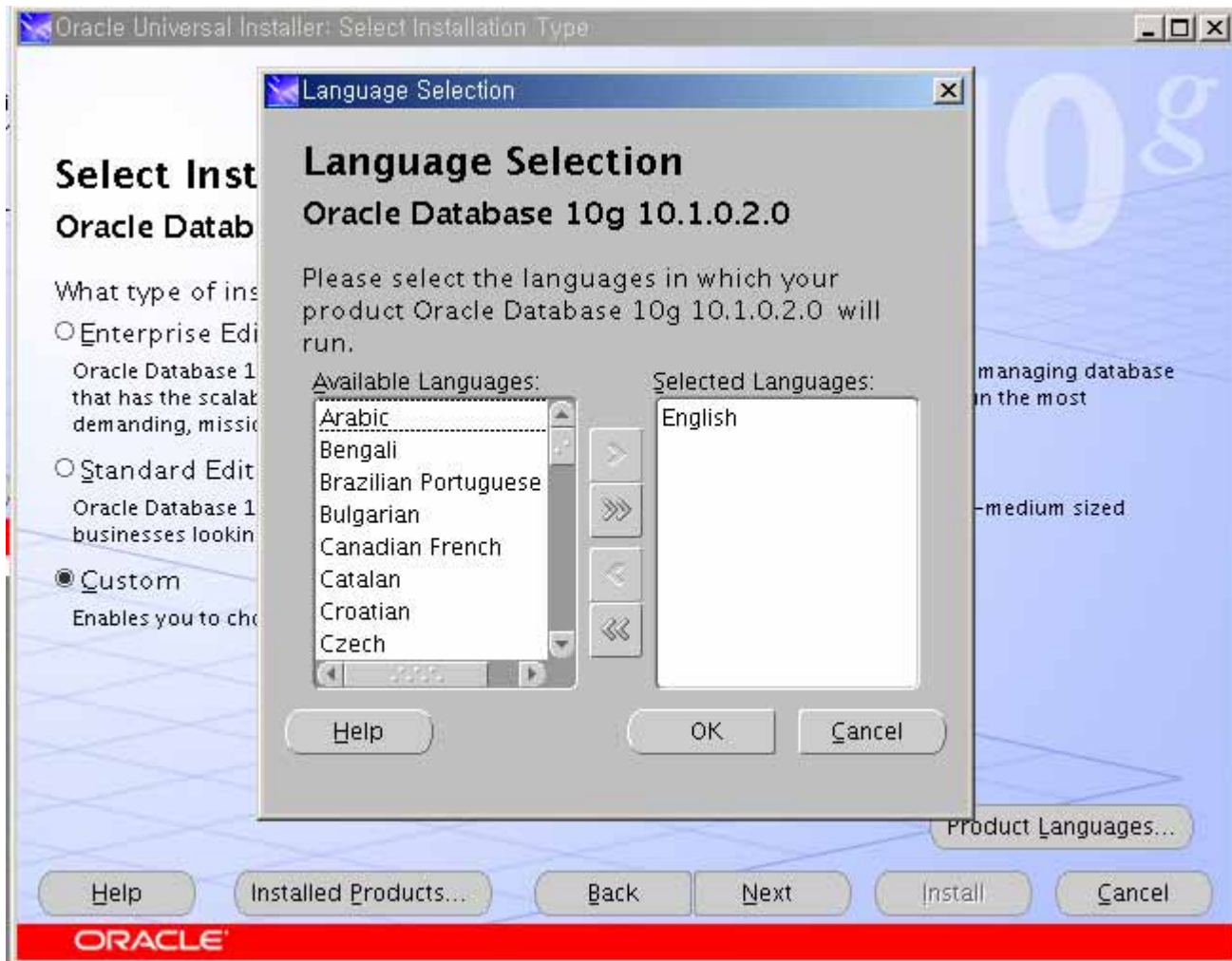


Path [/home/oracle/.bash_profile](#)

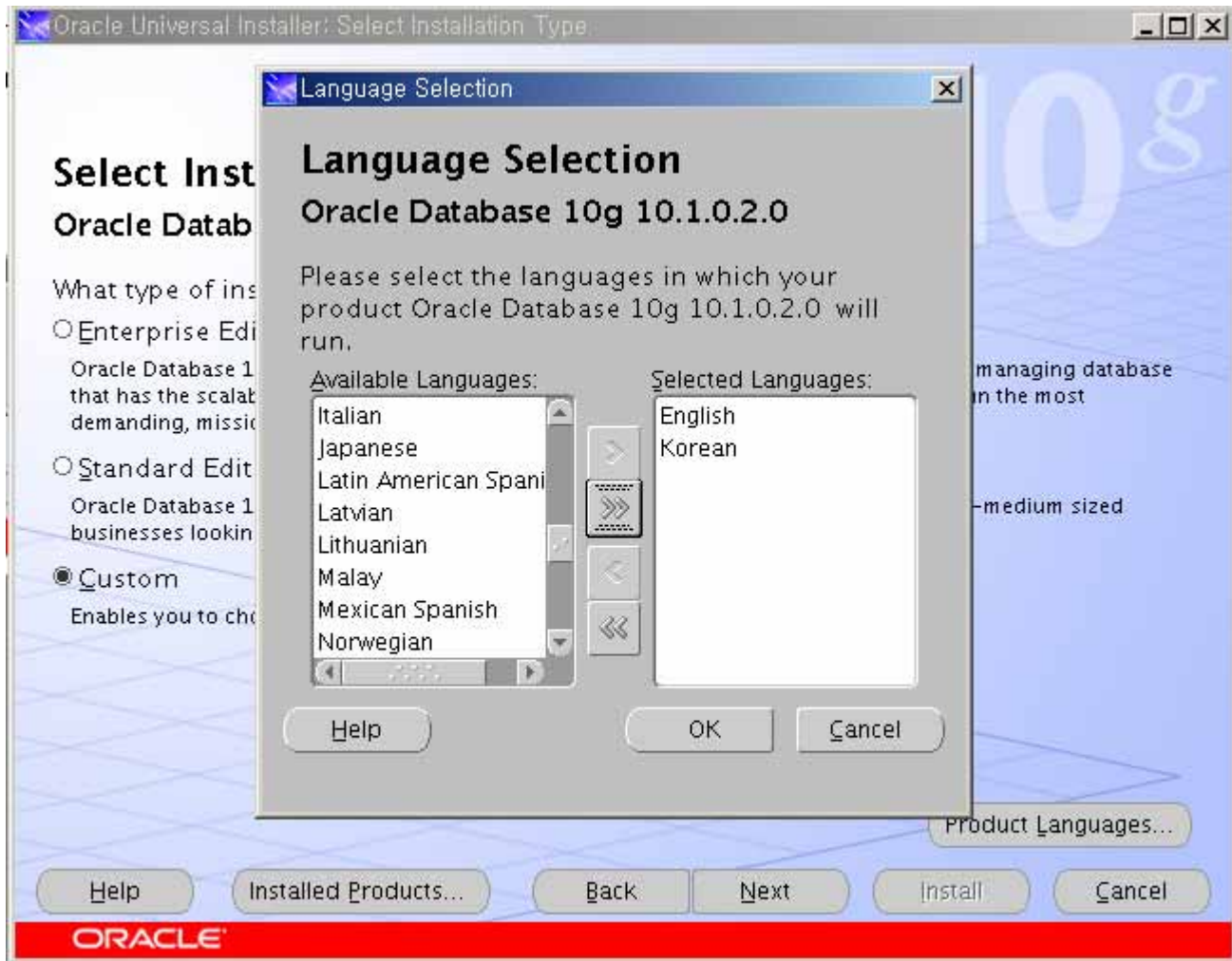
-> [Next](#)



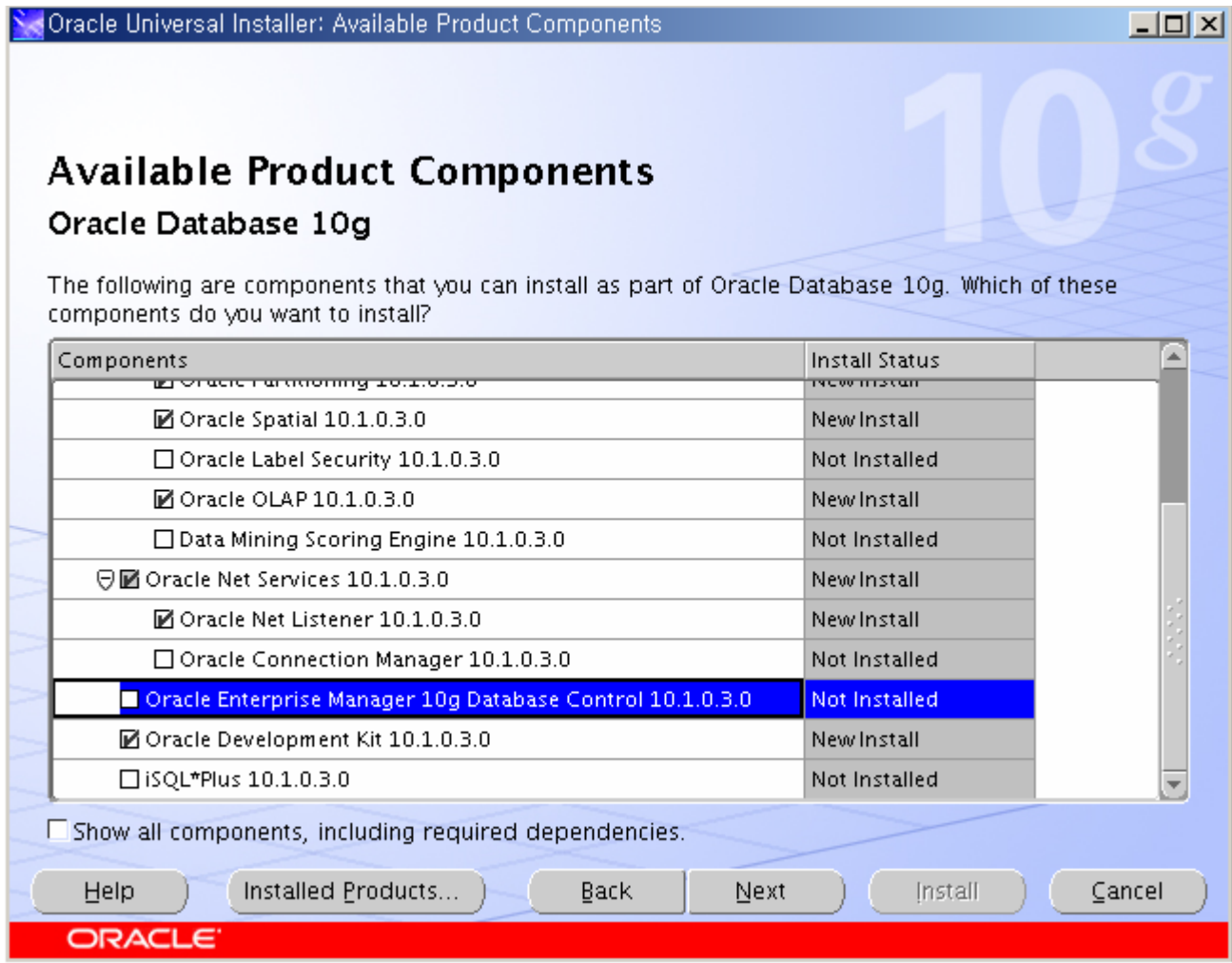
Custom -> Next



Product Languages.. -> Korean

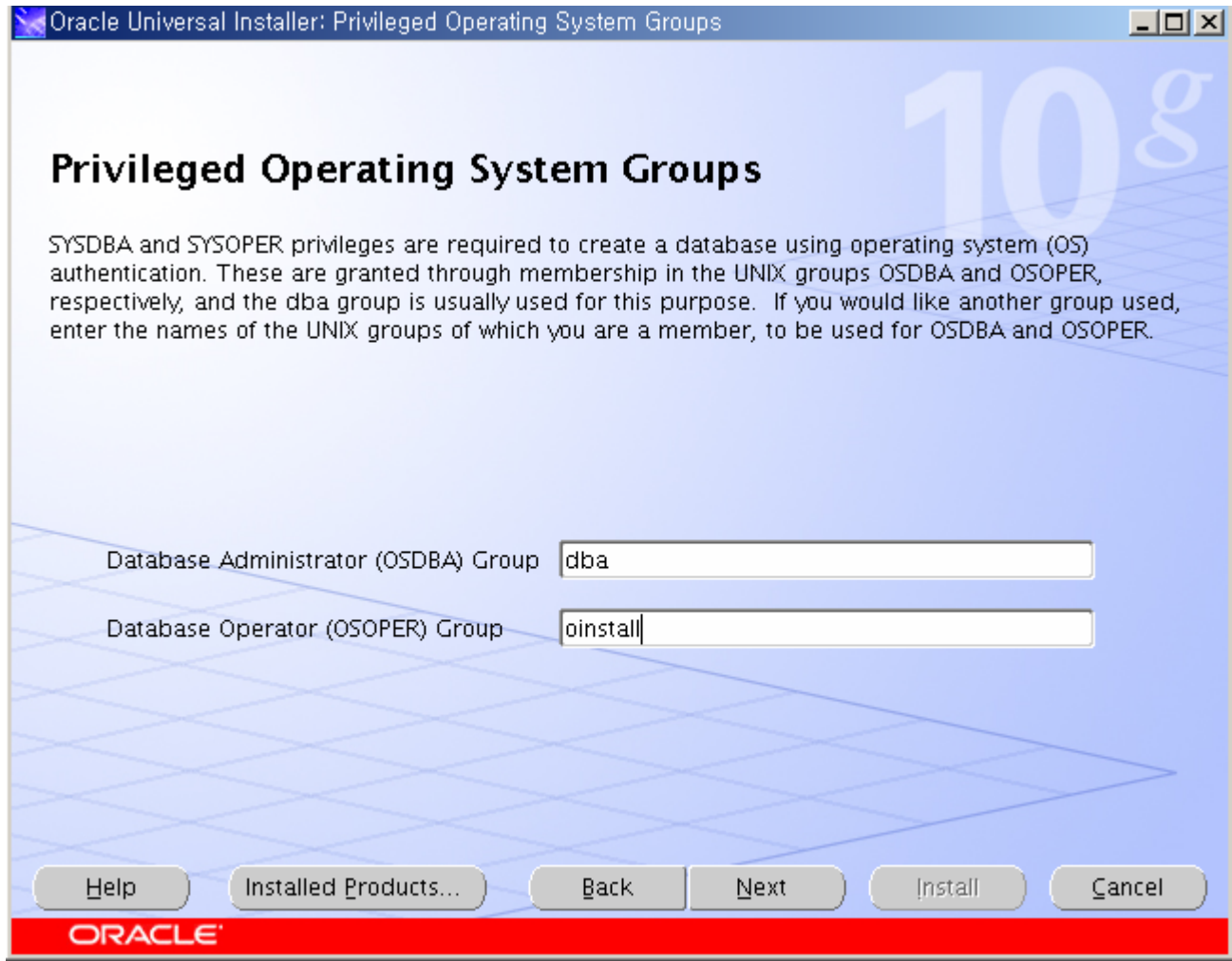


Korean 가 -> OK

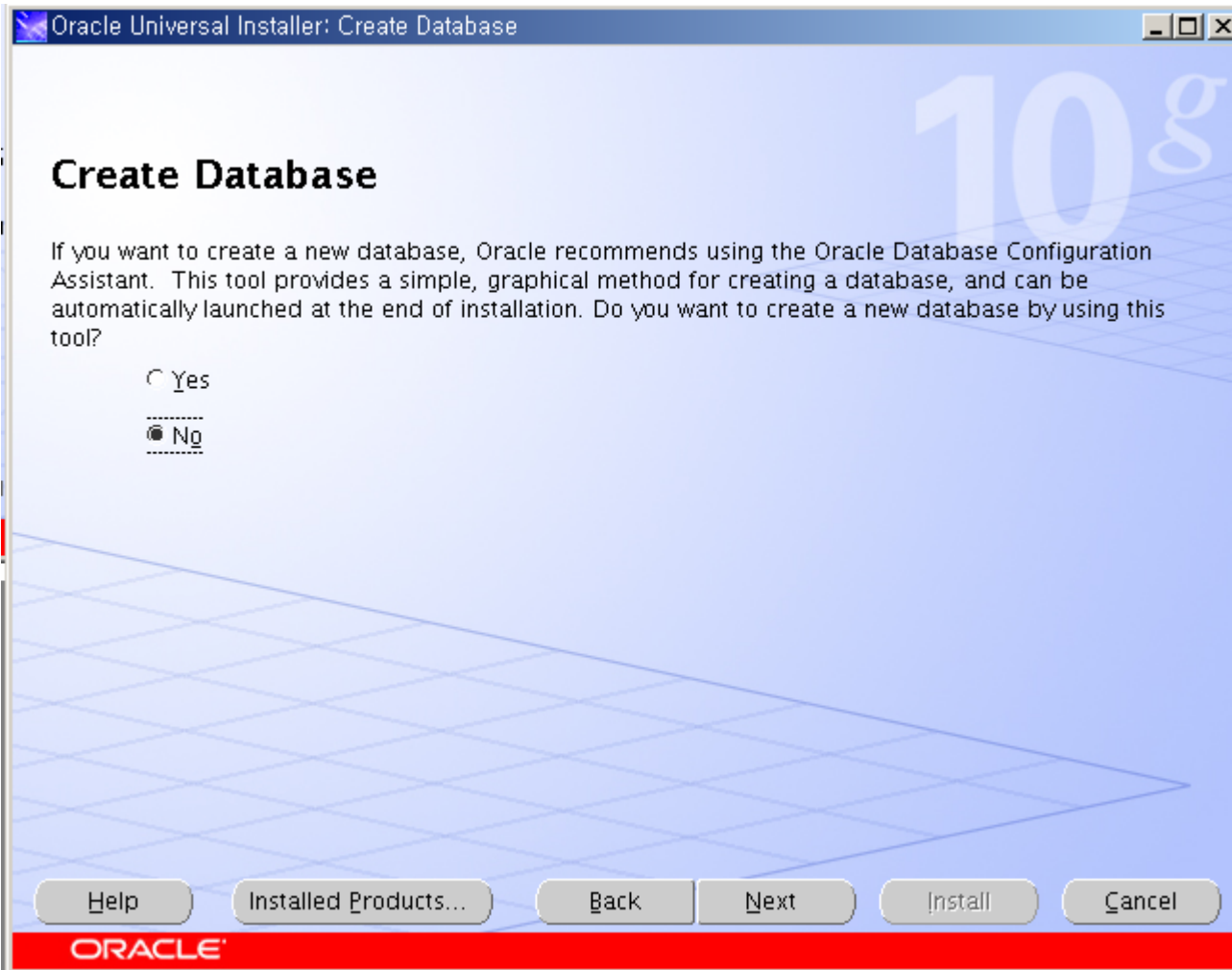


Oracle Enterprise Manager 10g Database Control 10.1.0.3.0

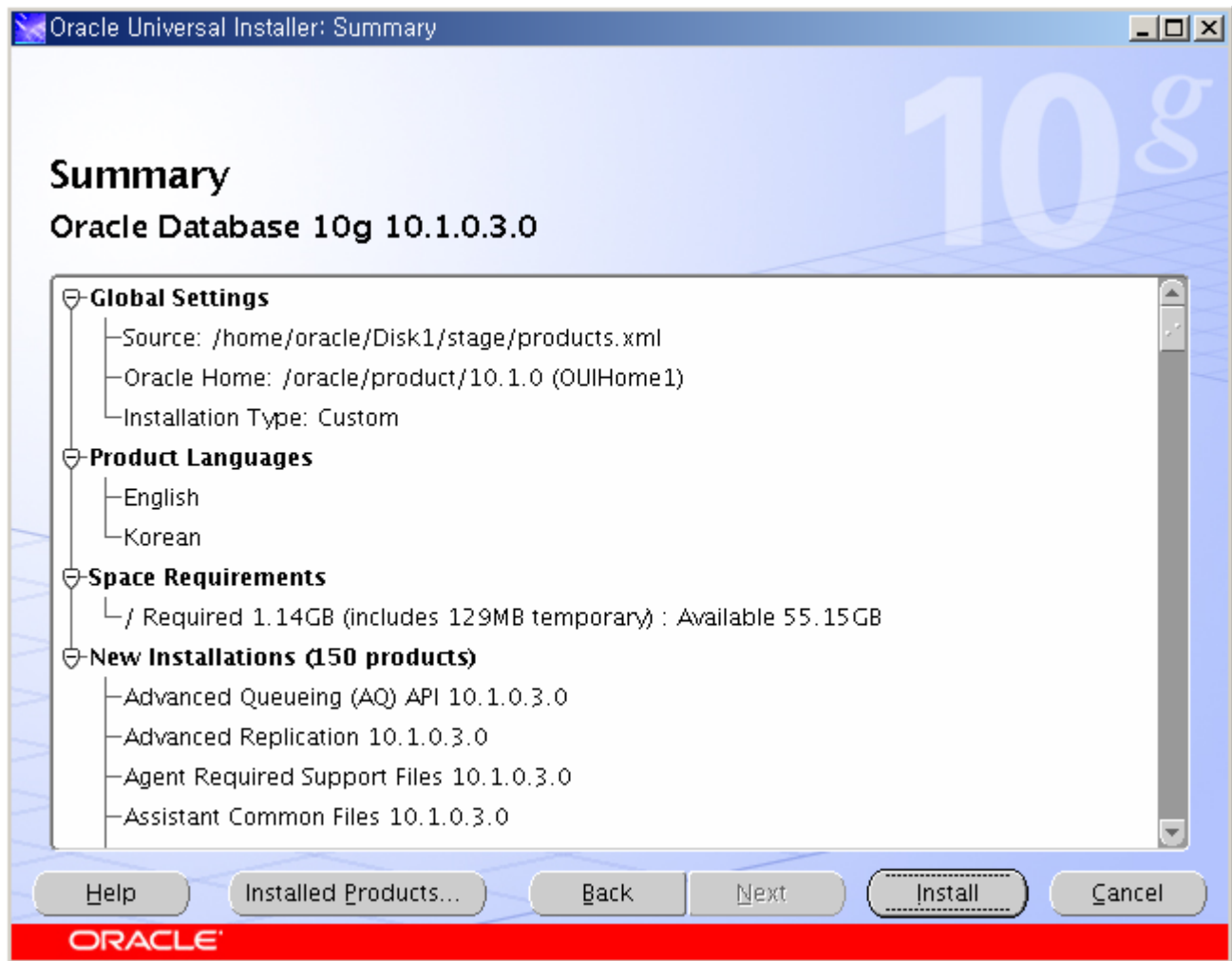
-> Next



Group -> Next



No -> Next



[Install](#)

Install

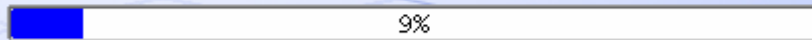
Copying files for 'Java Runtime Environment 1.4.2.02.0'

Link pending...

Setup pending...

Configuration pending...

copying 'jre/1.4.2/lib/jsse.jar'



Stop installation...

You can find a log of this install session at:

`/oracle/orainventory/logs/installActions2004-12-07_10-14-06PM.log`

Oracle Database 10g: The Database for the Grid

- Virtualization at every layer
- Policy-based provisioning
- Resource pooling

1

Help

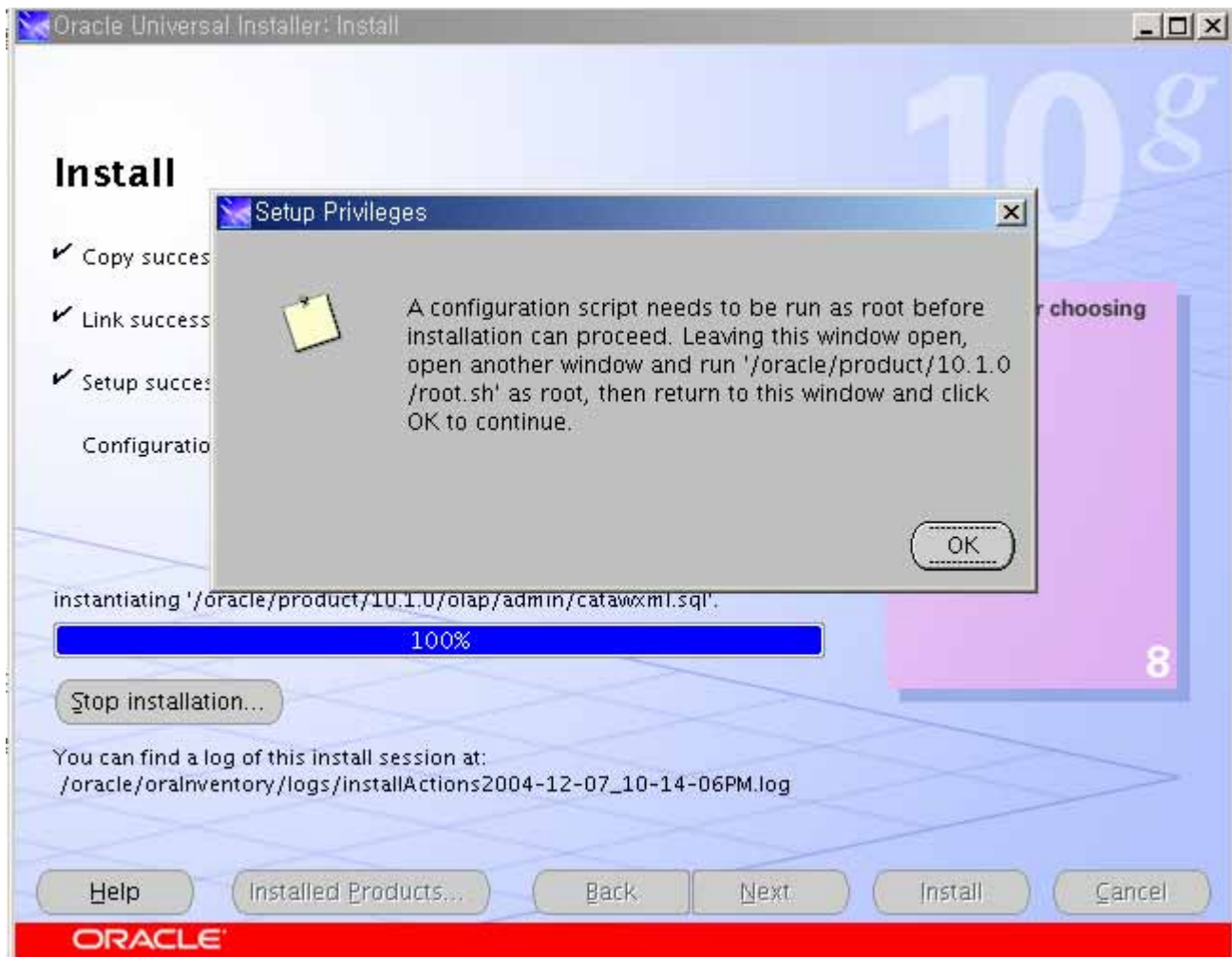
Installed Products...

Back

Next

Install

Cancel



Root.sh -> OK



Welcome to the Oracle Net Configuration Assistant.
This tool will take you through the common configuration steps,
listed below.

- Listener configuration
- Naming Methods configuration

Or, you can choose to have the Oracle Net Configuration Assistant
complete a typical configuration for you. Click Help for more
information.

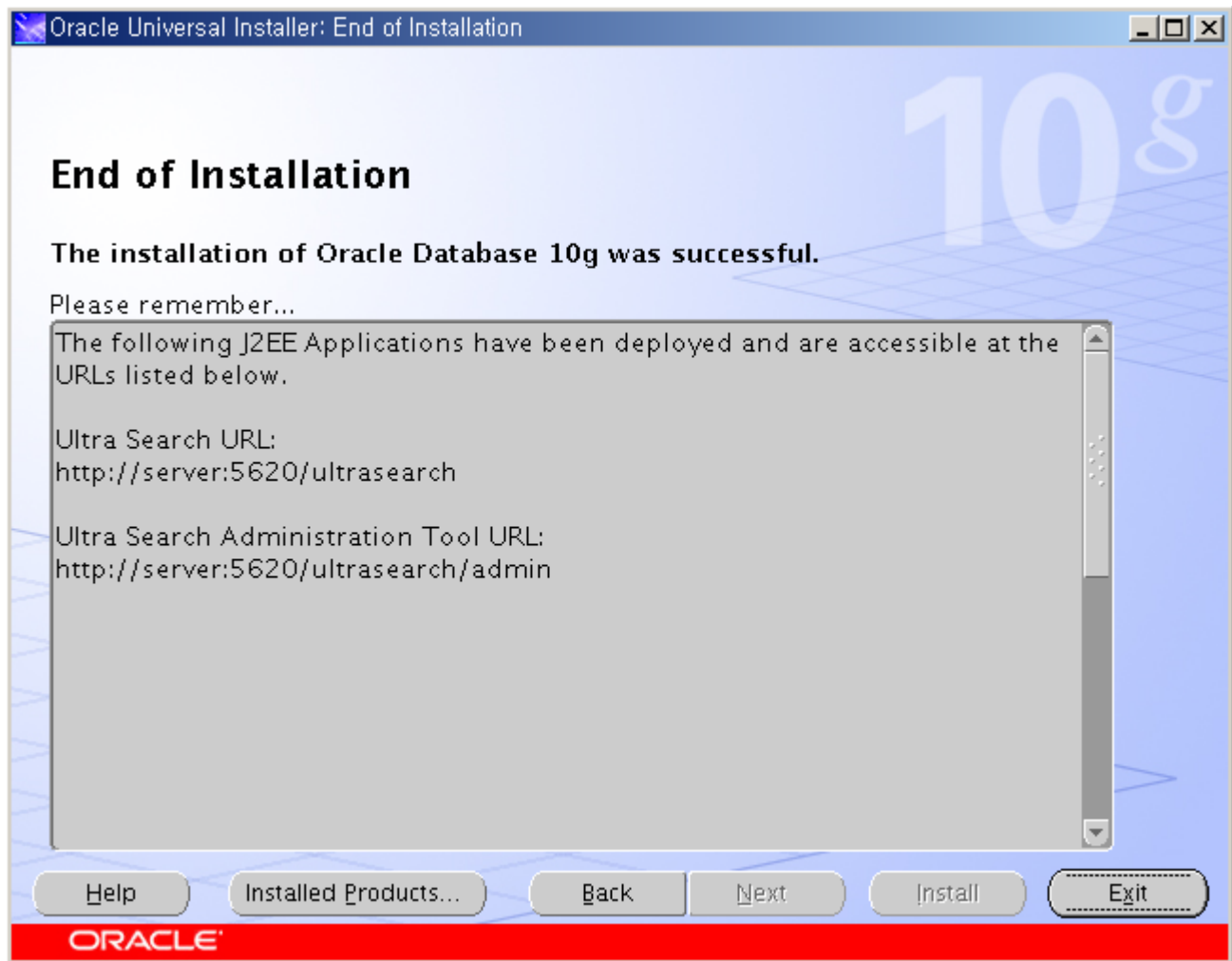
Perform typical configuration.

Cancel Help < Back Next >

Help Installed Products... Back Next Install Cancel



-> Next

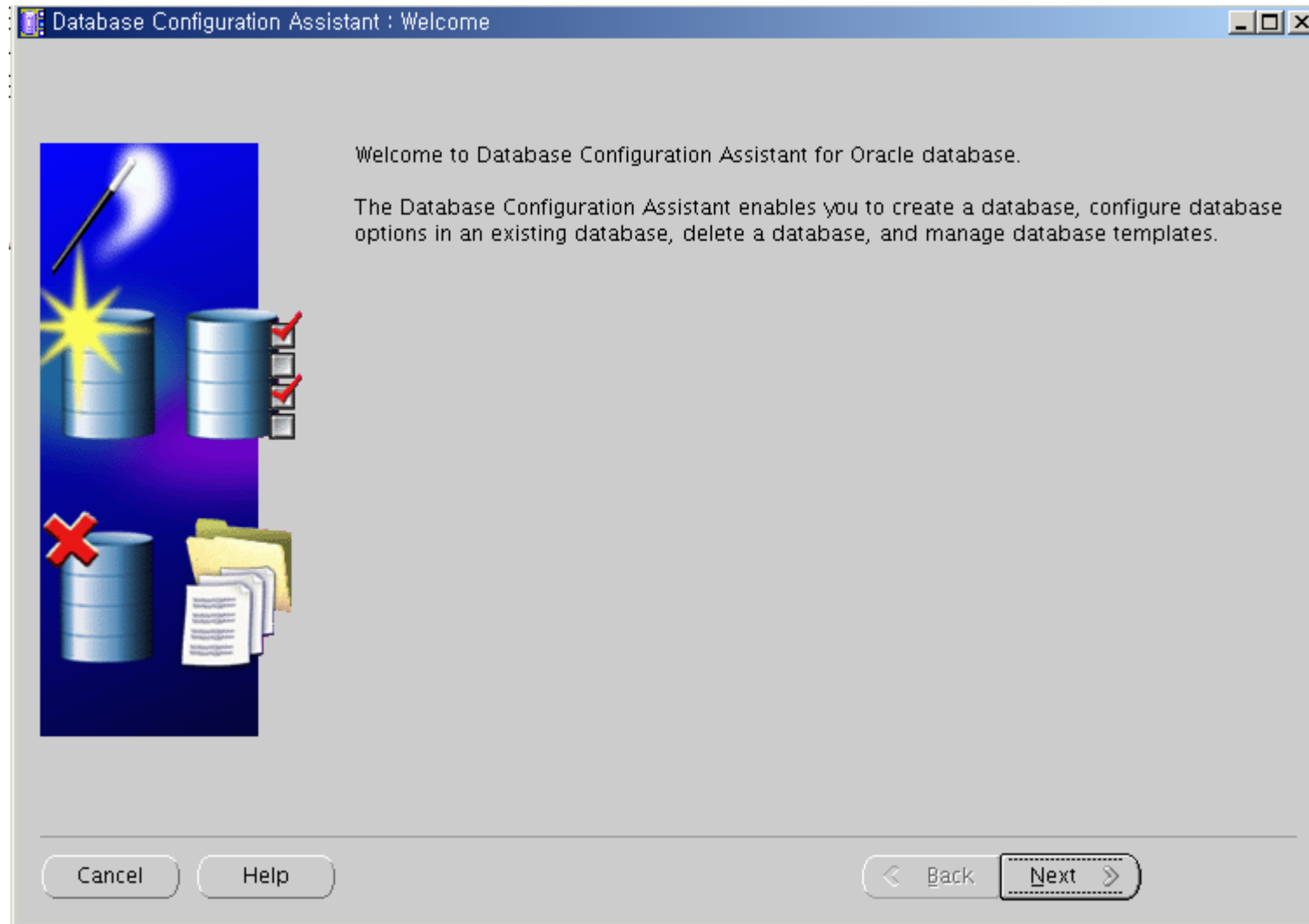


Exit

!!

DB

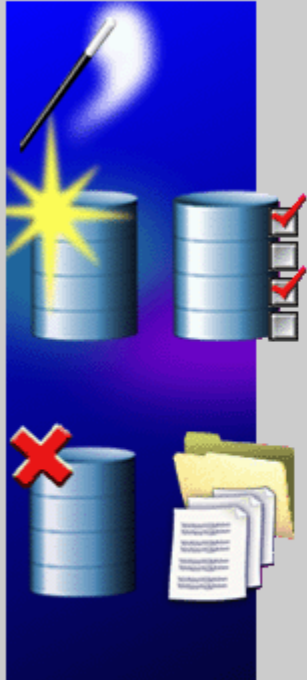
[oracle@soma]# dbca



Database Configuration Assistant, Step 1 of 12 : Operations

Select the operation that you want to perform:

- Create a Database
- Configure Database Options
- Delete a Database
- Manage Templates



Cancel

Help

< Back

Next >

Create Database

-> Next

Select a template from the following list to create a database:



Select	Template	Includes Datafiles
<input type="radio"/>	Custom Database	No
<input type="radio"/>	Data Warehouse	Yes
<input checked="" type="radio"/>	General Purpose	Yes
<input type="radio"/>	Transaction Processing	Yes

Show Details...

Cancel

Help

< Back

Next >

General Purpose -> Next



An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain".

Global Database Name:

A database is referenced by at least one Oracle instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID).

SID:

Cancel

Help

< Back

Next >

DBname SID -> Next

Each Oracle database may be managed centrally using the Oracle Enterprise Manager Grid Control or locally using the Oracle Enterprise Manager Database Control. Choose the management option that you would like to use to manage this database.



Configure the Database with Enterprise Manager

Use Grid Control for Database Management

Select the Management Service:

Use Database Control for Database Management

Enable Email Notifications

Outgoing Mail (SMTP) Server:

Email Address:

Enable Daily Backup

Backup Start Time: AM PM

OS Username:

Password:

Next

For security reasons, you must specify passwords for the following user accounts in the new database.



Use the Same Password for All Accounts

Password:

Confirm Password:

Use Different Passwords

User Name	Password	Confirm Password
SYS		
SYSTEM		
DBSNMP		
SYSMAN		

Cancel

Help

< Back

Next >

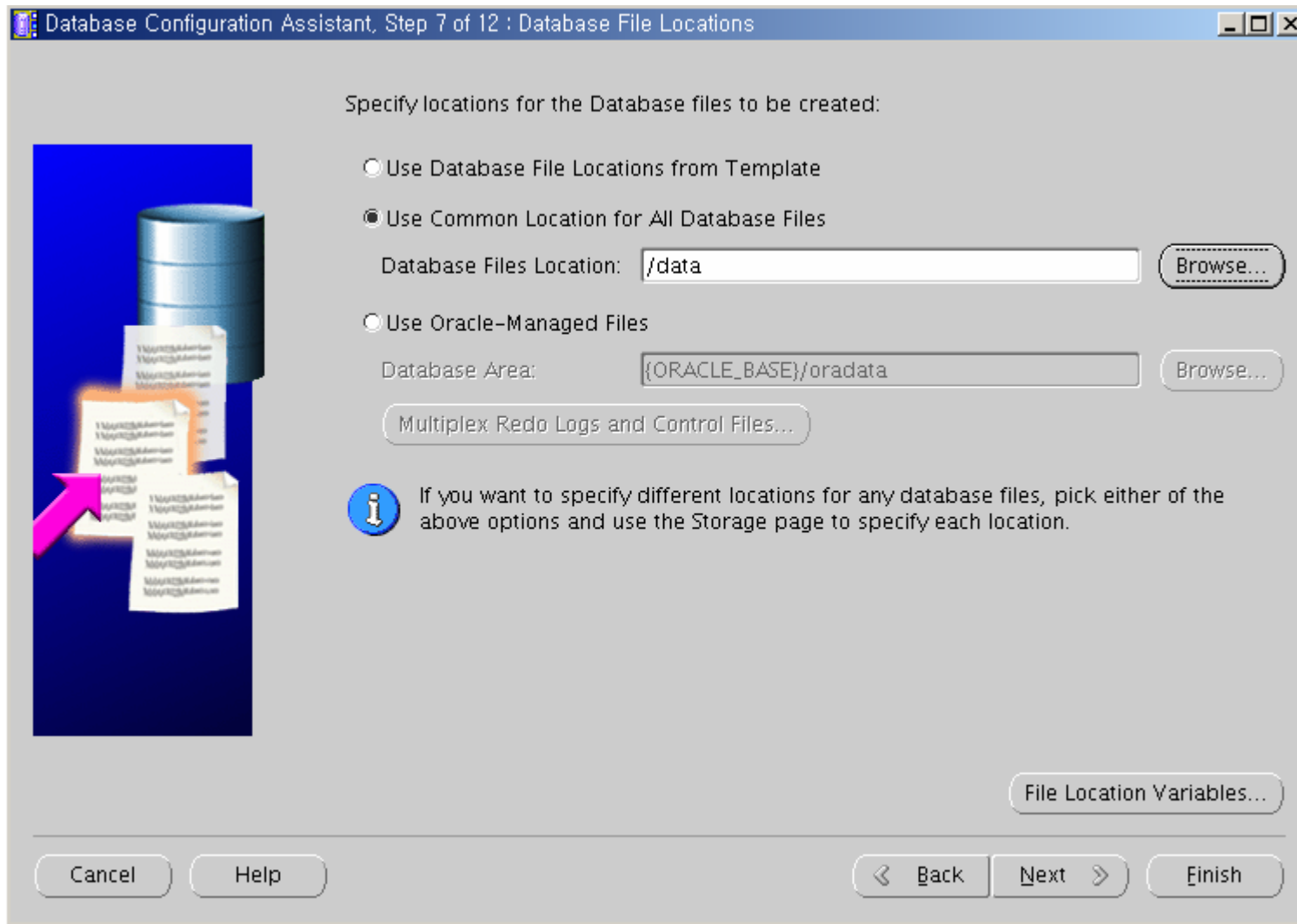
-> Next

Select the storage mechanism you would like to use for the database.



- File System
Use the File System for Database storage.
- Automatic Storage Management (ASM)
Automatic Storage Management simplifies database storage administration and optimizes database layout for I/O performance. To use this option you must either specify a set of disks to create an ASM disk group or specify an existing ASM disk group.
- Raw Devices
Raw partitions or volumes can provide the required shared storage for Real Application Clusters (RAC) databases if you do not use Automatic Storage Management and a Cluster File System is not available. You need to have created one raw device for each datafile, control file, and log file you are planning to create in the database.
 Specify Raw Devices Mapping File

File System -> Next



Database File Location File(datafile,control,redo)

-> Next

Choose the recovery options for the database:

Specify Flash Recovery Area

This is used as the default for all backup and recovery operations, and is also required for automatic backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.

Flash Recovery Area:

Flash Recovery Area Size:

Enable Archiving



Next (arch Enable Archiving)

Sample Schemas Custom Scripts

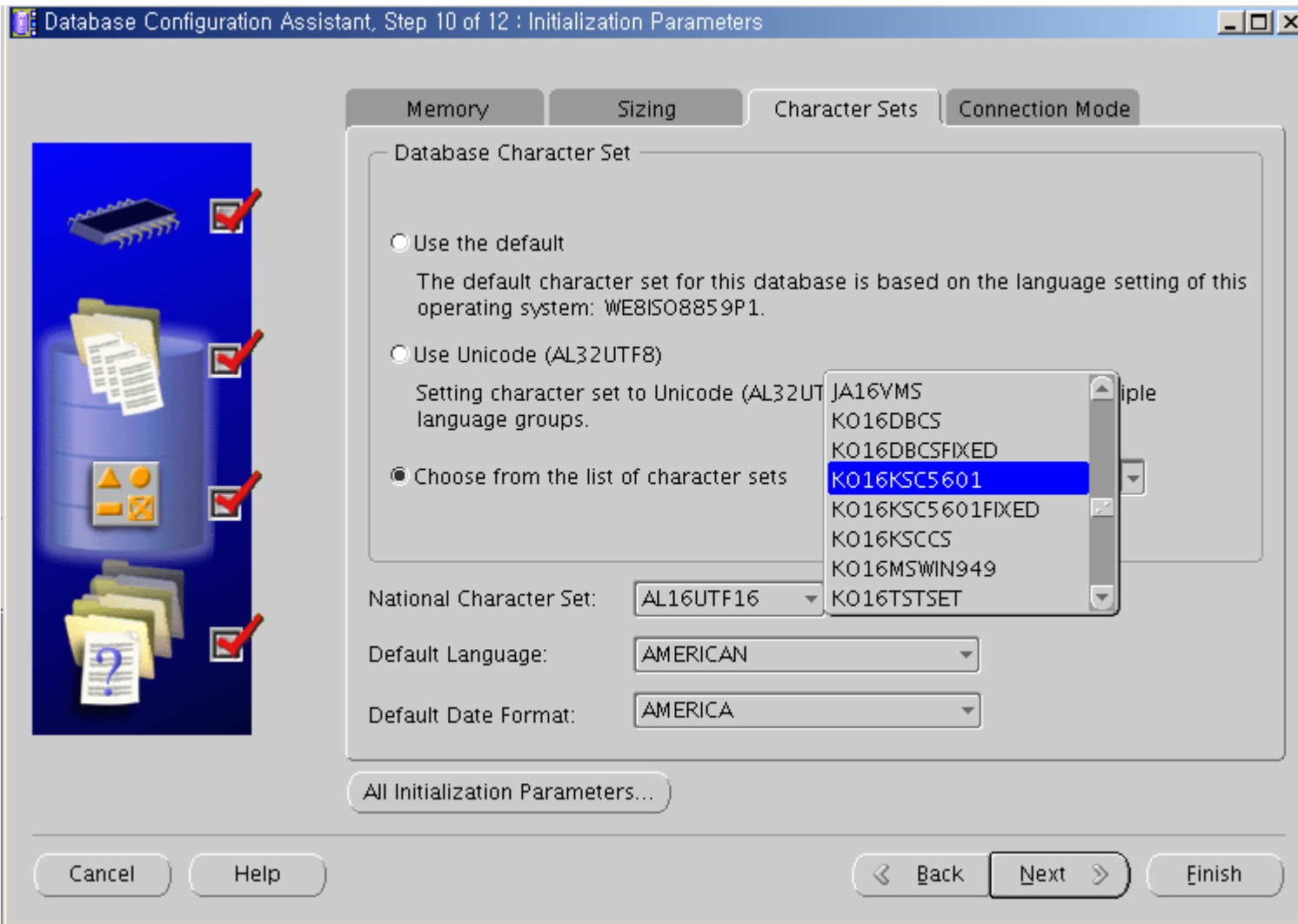


Sample Schemas illustrate the use of a layered approach to complexity, and are used by some demonstration programs. Installing this will give you the following schemas in your database: Human Resources, Order Entry, Online Catalog , Product Media, Queued Shipping, Sales History . It will also create a tablespace called EXAMPLE. The tablespace will be about 130 MB.

Specify whether or not to add the Sample Schemas to your database.

Sample Schemas

Next



KO16KSC5601

-> Next

Database Storage

From the **Database Storage** page, you can specify storage parameters for the database creation. This page displays a tree listing and summary view (multi-column lists) to allow you to change and view the following objects:

- Control files
- Tablespaces
- Datafiles
- Rollback Segments
- Redo Log Groups

From any object type folder, click **Create** to create a new object. To delete an object, select the specific object from within the object type folder and click **Delete**.

Important: If you select a database template including data files, you will not be able to add or remove data files, tablespaces, or rollback segments. Selecting this type of template allows you to change the following:

- Destination of the datafiles
- Control files or log groups.

Storage

- Controlfile
- Datafiles
- Redo Log Groups

Create Delete File Location Variables...

Cancel Help Back Next Finish

Next

Select the database creation options:

Create Database

Save as a Database Template

Name:

Description:



Cancel

Help

< Back

Next >

Finish

Finish

Confirmation

The following operations will be performed:
A database called "orcl" will be created.

Database Details:

/data/{DB_NAME}/undotbs01.dbf	UNDOTBS1	25
/data/{DB_NAME}/sysaux01.dbf	SYSAUX	210
/data/{DB_NAME}/users01.dbf	USERS	5
/data/{DB_NAME}/temp01.dbf	TEMP	20

Control Files

Name
/data/{DB_NAME}/control01.ctl
/data/{DB_NAME}/control02.ctl
/data/{DB_NAME}/control03.ctl

Redo Log Groups

Group	Size(K)
1	10240
2	10240
3	10240

Save as an HTML file...

OK Cancel Help

OK

Database Configuration Assistant, Step 12 of 12 : Creation Options

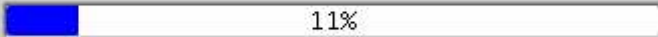
Select the database creation options:



Database Configuration Assistant

Copying database files
Creating and starting Oracle instance
Completing Database Creation

Clone database creation in progress

 11%

Stop

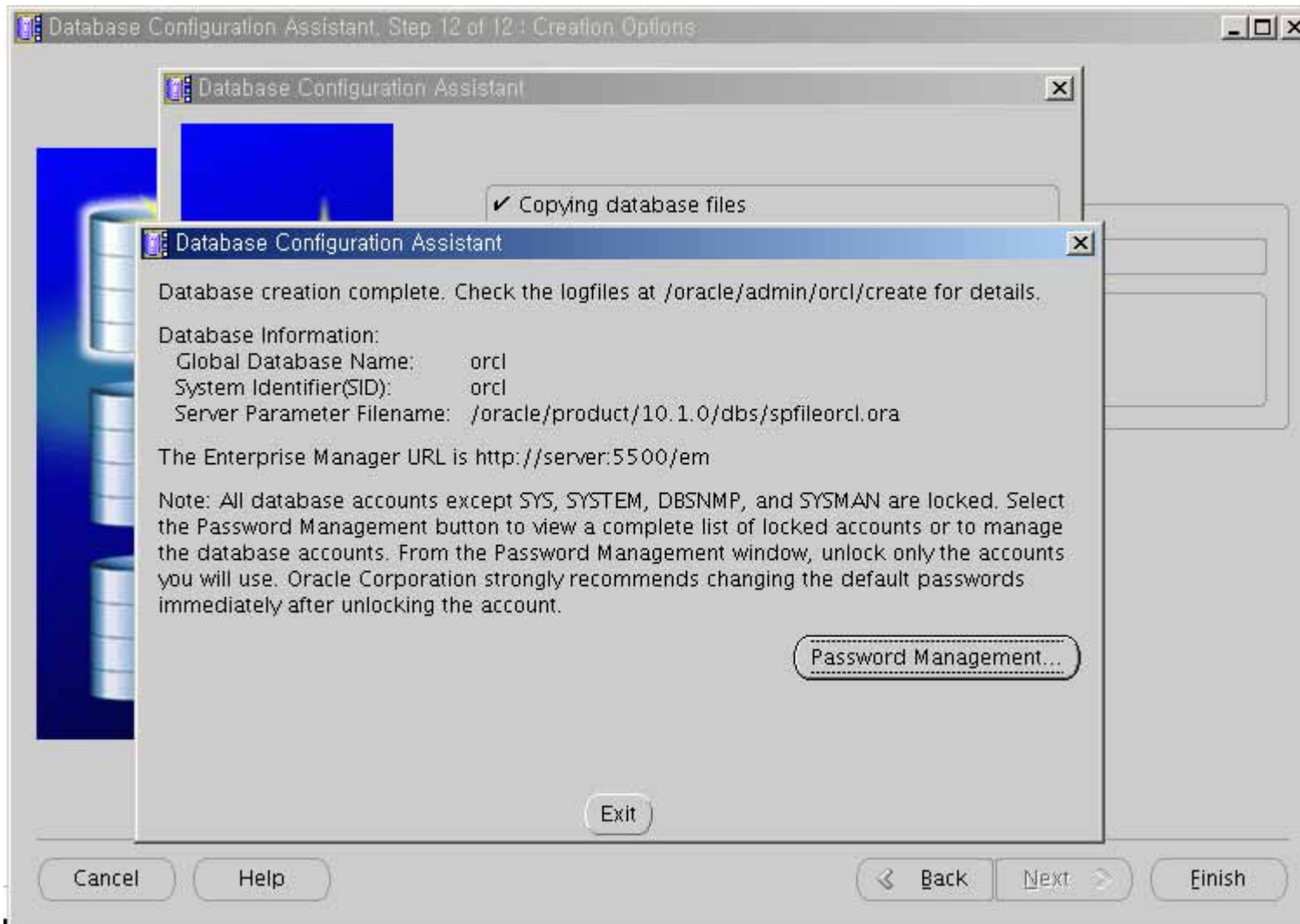
Cancel

Help

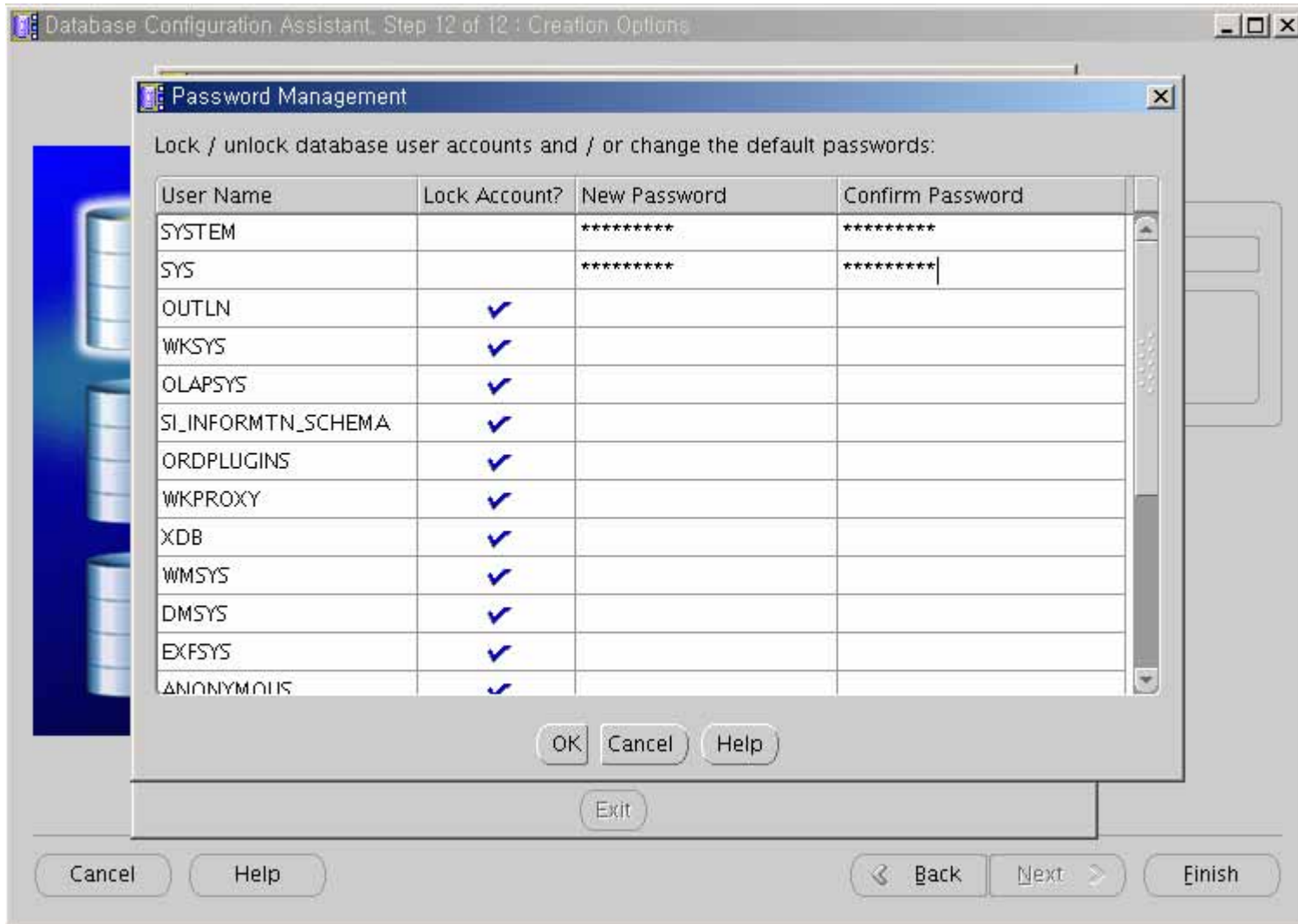
< Back

Next >

Finish

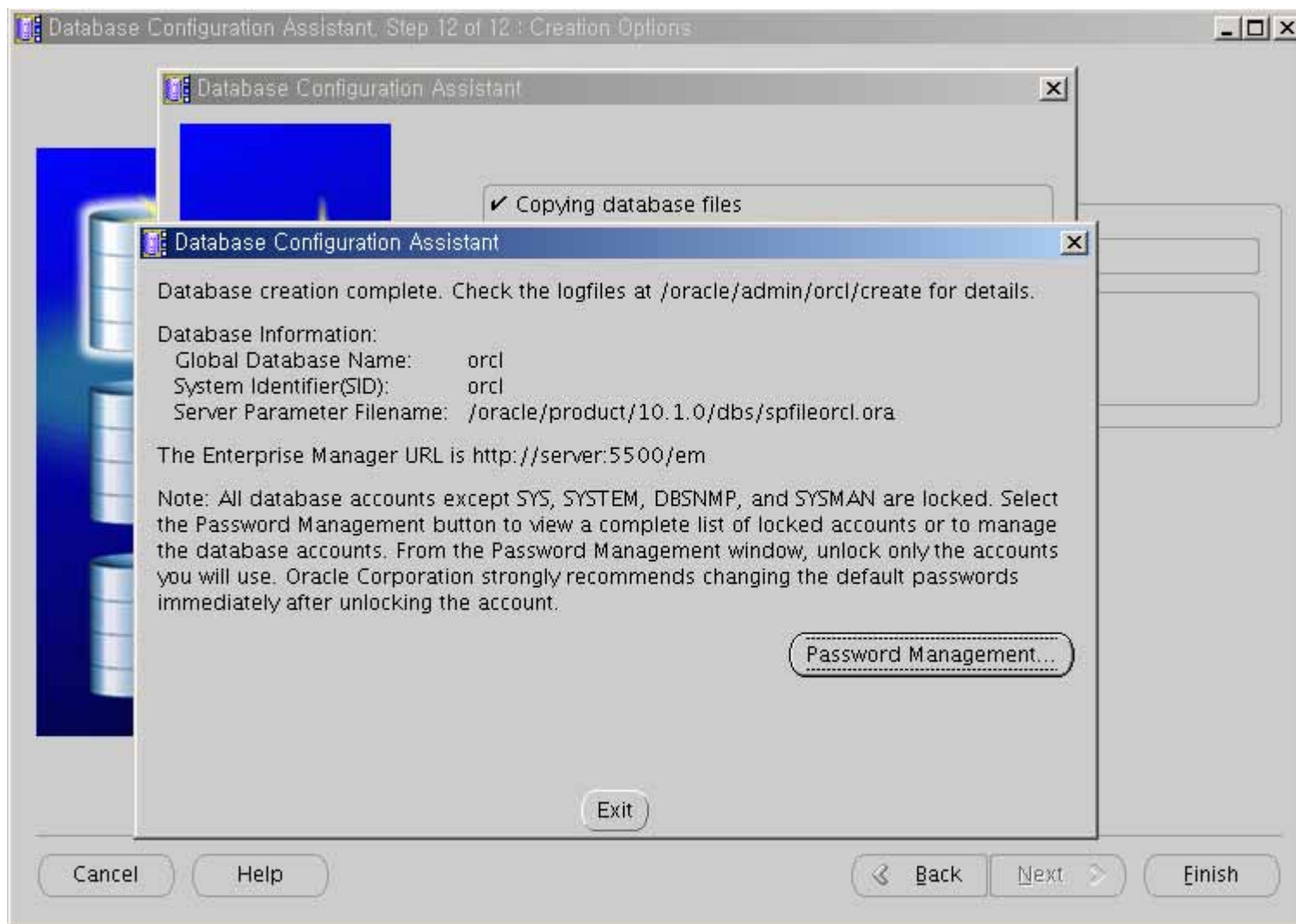


Password Management



SYSTEM/SYS

OK



Exit

DB !!

Oracle Post-Installation Tasks

DB

```
[oracle@soma]# sqlplus /nolog
SQL> connect / as sysdba
SQL> shutdown
```

```
[oracle@soma]# sqlplus /nolog
SQL> connect / as sysdba
SQL> startup
```

```
[oracle@soma]# lsnrctl start
[oracle@soma]# lsnrctl stop
```

```
[oracle@soma]$ emctl stop dbconsole
```

TZ set to ROK

Oracle Enterprise Manager 10g Database Control Release 10.1.0.3.0

Copyright (c) 1996, 2004 Oracle Corporation. All rights reserved.

<http://server:5500/em/console/aboutApplication>

Stopping Oracle Enterprise Manager 10g Database Control ...

... Stopped.

```
[oracle@soma]$ emctl stop agent
```

```
TZ set to ROK
```

```
Oracle Enterprise Manager 10g Database Control Release 10.1.0.3.0
```

```
Copyright (c) 1996, 2004 Oracle Corporation. All rights reserved.
```

```
Agent is not running.
```

```
[root@soma]# /etc/rc.d/init.d/init.cssd stop
```

```
Shutting down CRS daemon.
```

```
Shutting down EVM daemon.
```

```
Shutting down CSS daemon.
```

```
Shutdown request successfully issued.
```

```
[root@soma]# rm -f /etc/orainst.loc
```

```
[root@soma]# rm -rf /etc/oracle
```

```
[root@soma]# rm -f /etc/inittab.cssd
```

```
[root@soma]# rm -f /usr/bin/coraenv /usr/bin/dbhome /usr/bin/oraenv
```