

# RedHat ES4 + Oracle 9i (9.2.0.4) 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 Shared Memory

```
[root@soma]# cat /proc/sys/kernel/shmmax
33554432
[root@soma]# echo `expr 1024 * 1024 * 1024` > /proc/sys/kernel/shmmax
[root@soma]# cat /proc/sys/kernel/shmmax
1073741824
```

Oracle 9i(9.2.0)	Redhat	maximum shared memory size	.	shared memory
	가	.		

ORA-27123: unable to attach to shared memory segment.

## Checking /tmp space

/tmp

400 M

```
[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 Packages ( RPMs )

```
[root@soma]# rpm -q make
```

compat-db

compat-gcc-32

compat-gcc-32-c++

compat-oracle-rhel4

compat-libcwait

compat-libgcc-296

compat-libstdc++-296

compat-libstdc++-33

gcc

gcc-c++  
gnome-libs  
gnome-libs-devel  
libaio-devel  
libaio  
openmotif21  
xorg-x11-deprecated-libs-devel  
xorg-x11-deprecated-libs

make-3.80-5

compat-db-4.1.25-9

package compat-gcc-32 is not installed

package compat-gcc-32-c++ is not installed

package compat-oracle-rhel4 is not installed ->

[\(p4198954\\_21\\_LINUX.zip\)](#)

package compat-libcwait is not installed ->

[\(p4198954\\_21\\_LINUX.zip\)](#)

compat-libgcc-296-2.96-132.7.2

compat-libstdc++-296-2.96-132.7.2

compat-libstdc++-33-3.2.3-47.3

gcc-3.4.4-2

gcc-c++-3.4.4-2

gnome-libs-1.4.1.2.90-44.1

package gnome-libs-devel is not installed

package libaio-devel is not installed

libaio-0.3.103-3

make-3.80-5

openmotif21-2.1.30-11.RHEL4.4

xorg-x11-deprecated-libs-devel-6.8.2-1.EL.13.20

xorg-x11-deprecated-libs-6.8.2-1.EL.13.20

RPM Package

install ins\_precomp.mk 가 .

## Sizing Disk Space For Oracle 9i

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 LD_ASSUME_KERNEL=2.4.19
export ORACLE_BASE=/oracle
export ORACLE_SID=ora
export ORACLE_HOME=$ORACLE_BASE/product/9.2.0.4
export PATH=$PATH:$ORACLE_HOME/bin
export NLS_LANG=AMERICAN;
export ORA_NLS33=$ORACLE_HOME/ocommon/nls/admin/data
LD_LIBRARY_PATH=$ORACLE_HOME/lib:/lib:/usr/lib
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/lib
export LD_LIBRARY_PATH
```

## Patch

```
[root@soma]# unzip p3006854_9204_LINUX.zip
Archive:  p3006854_9204_LINUX.zip
creating: 3006854/
inflating: 3006854/rhel3_pre_install.sh
inflating: 3006854/README.txt

[root@soma]# cd 3006854
[root@soma]# sh rhel3_pre_install.sh
Applying patch...
Patch successfully applied
```

runinstaller

가

Error occurred during initialization of VM

Unable to load native library: /tmp/OralInstall2003-10-25\_03-14-57PM/jre/lib/i386/libjava.so:  
symbol \_\_libc\_wait, version GLIBC\_2.0 not defined in file libc.so.6 with link time reference

## Runninstaller

```
[oracle@soma]# gunzip lnx_920_disk1.cpio.gz
[oracle@soma]# gunzip lnx_920_disk2.cpio.gz
[oracle@soma]# gunzip lnx_920_disk3.cpio.gz
[oracle@soma]# cpio -idmv < lnx_920_disk1.cpio
[oracle@soma]# cpio -idmv < lnx_920_disk2.cpio
[oracle@soma]# cpio -idmv < lnx_920_disk3.cpio
```

Runninstaller

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

popup

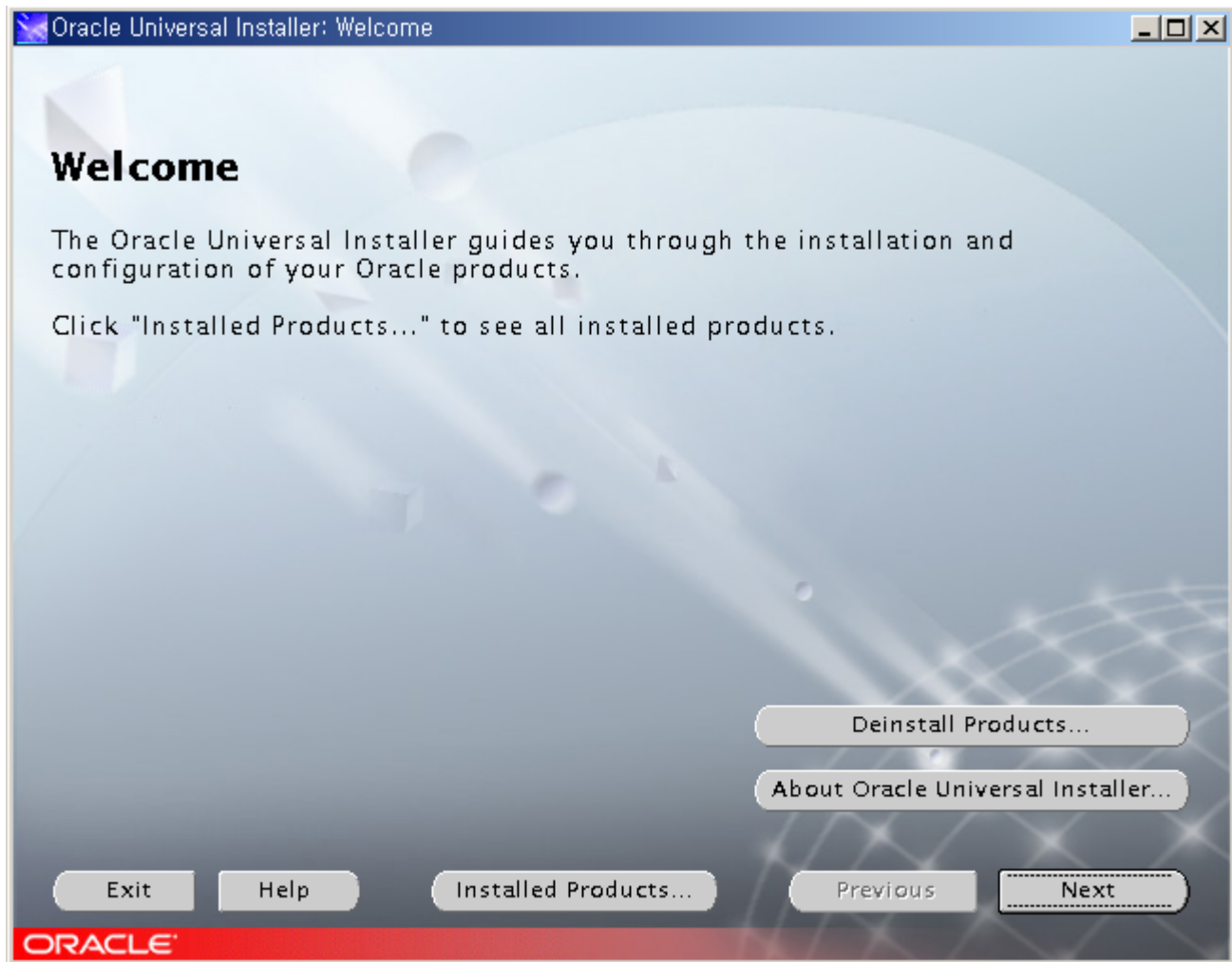
/etc/hosts

hostname IP

LOGOUT

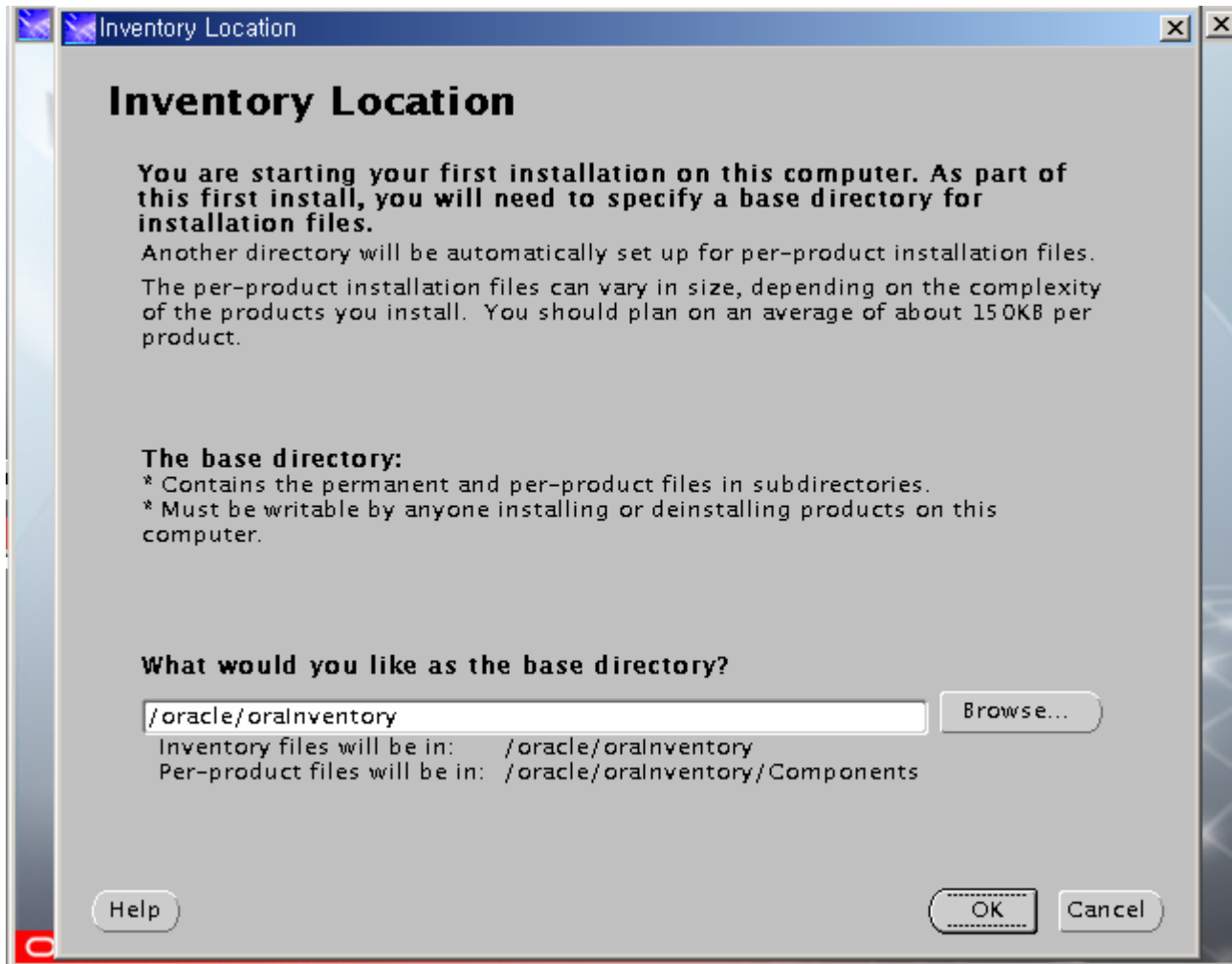
runinstaller

thrown when the IP address of a host cannot be determined...



Next



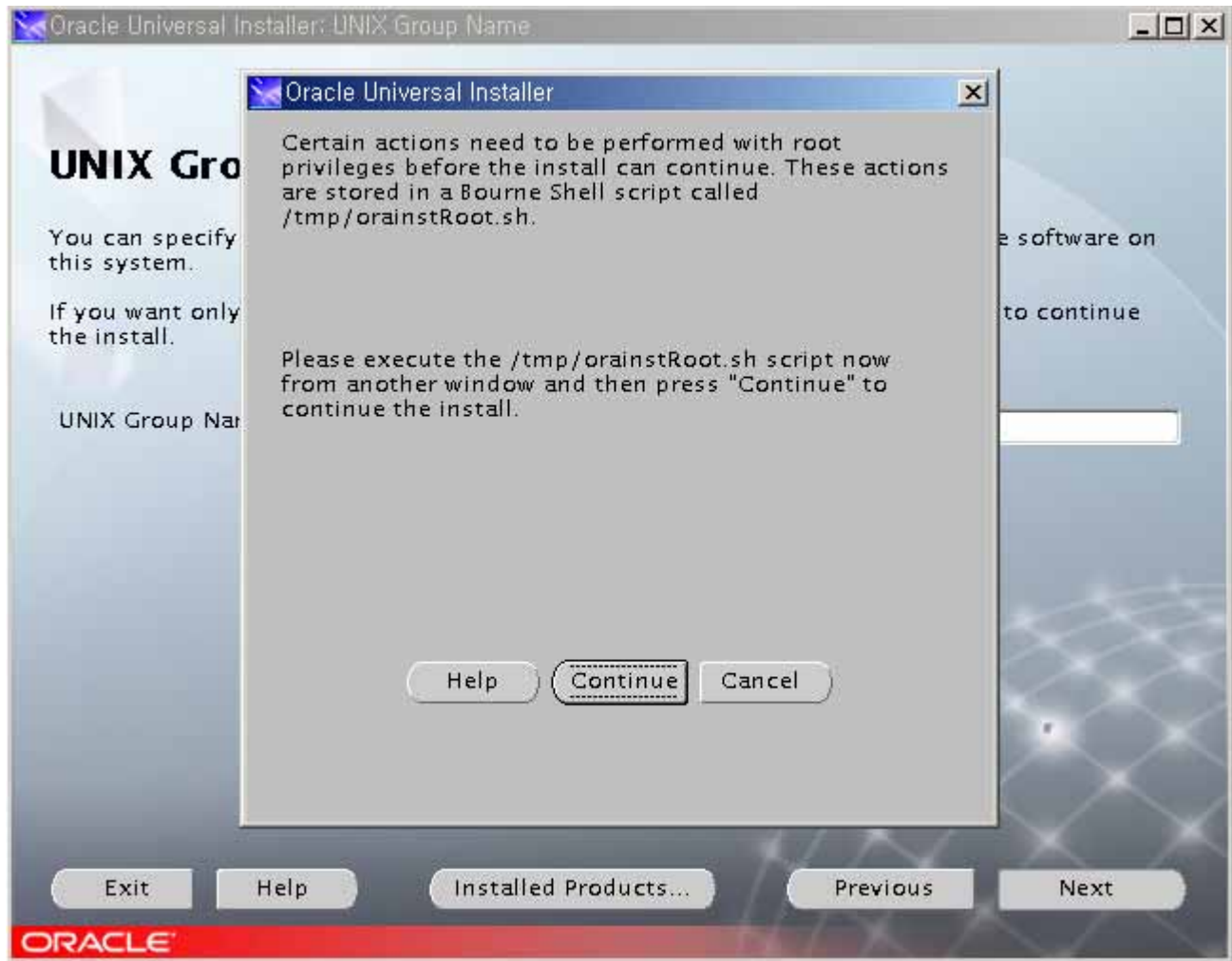


OK



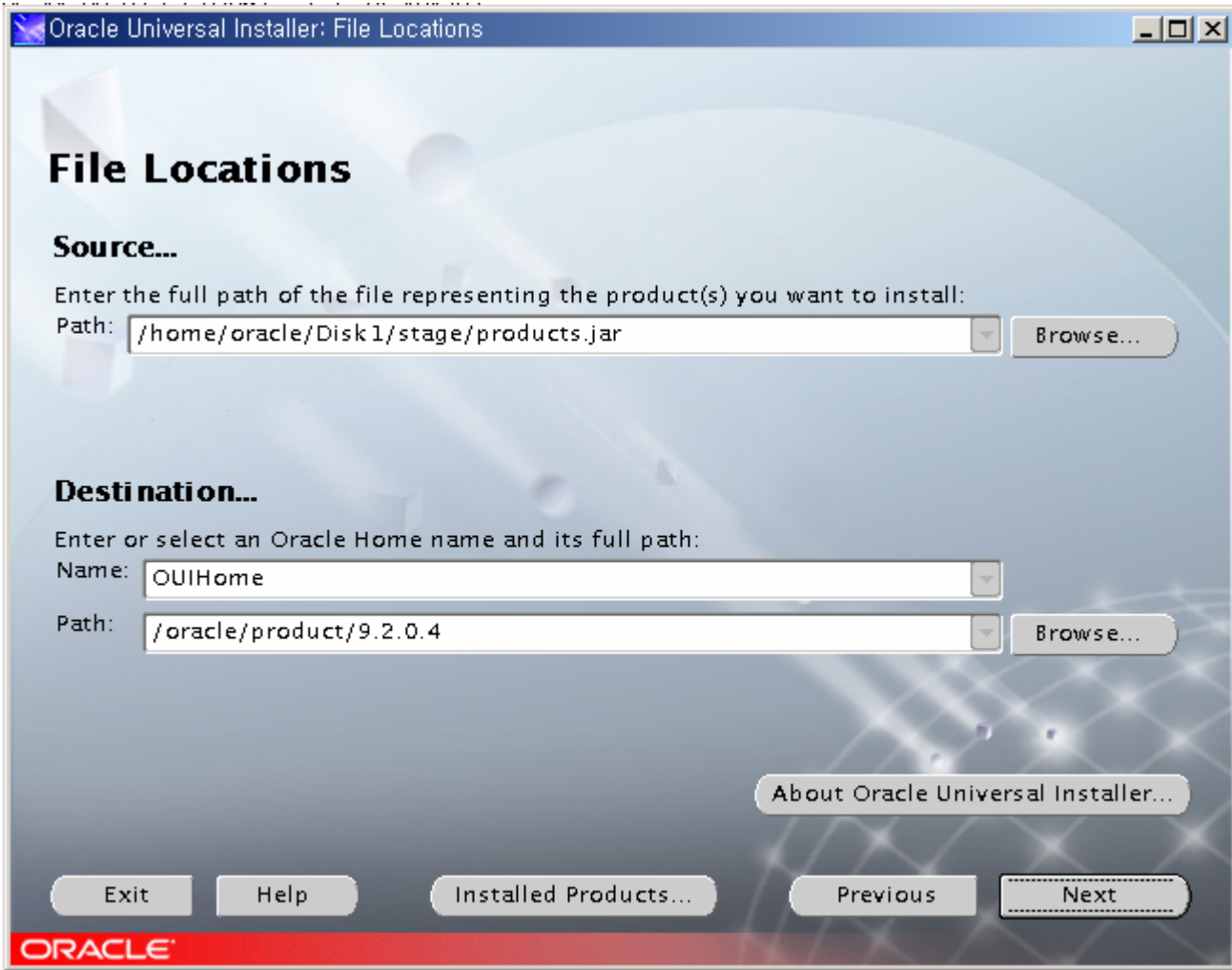
oinstall

Next

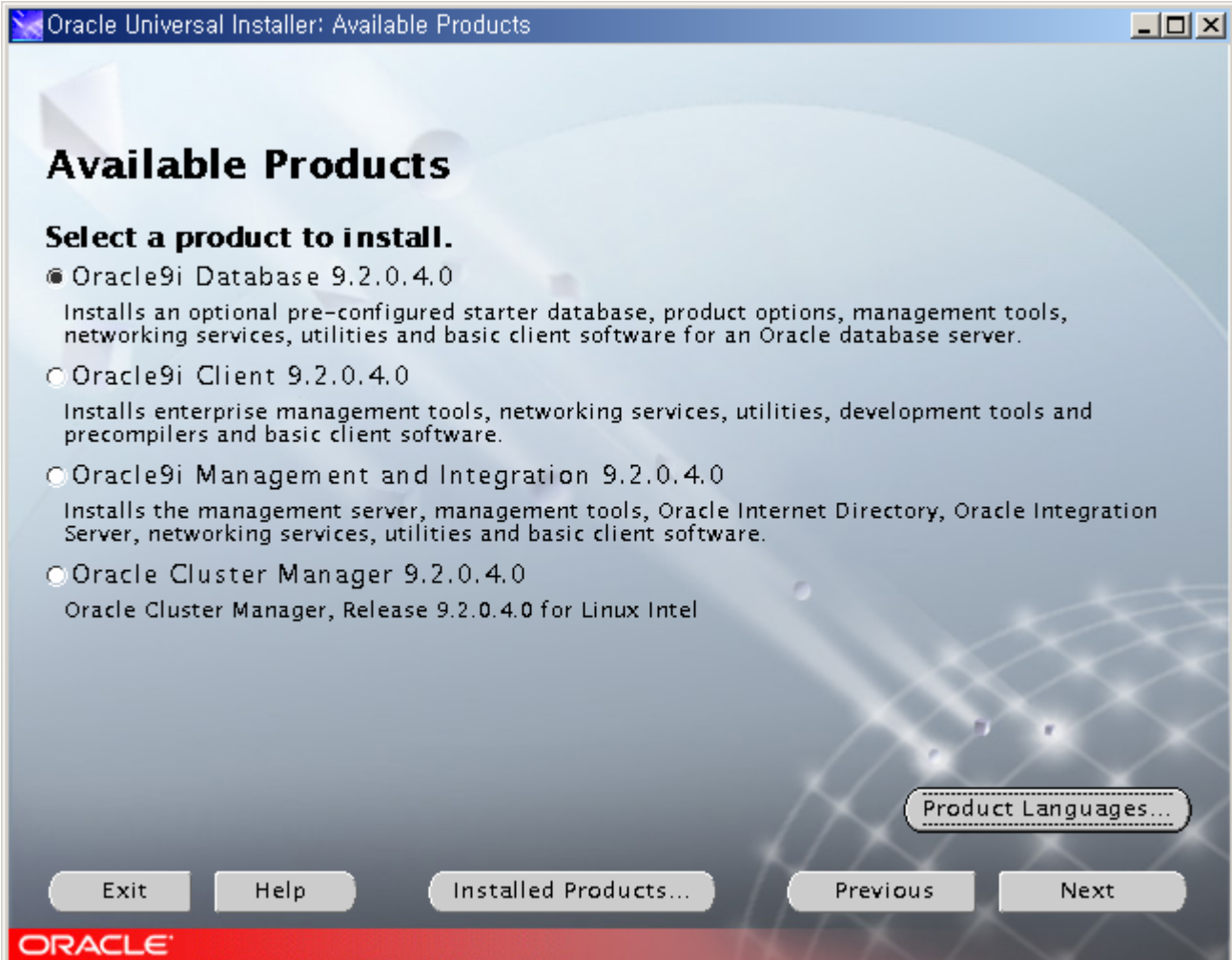


`/tmp/orainstRoot.sh`

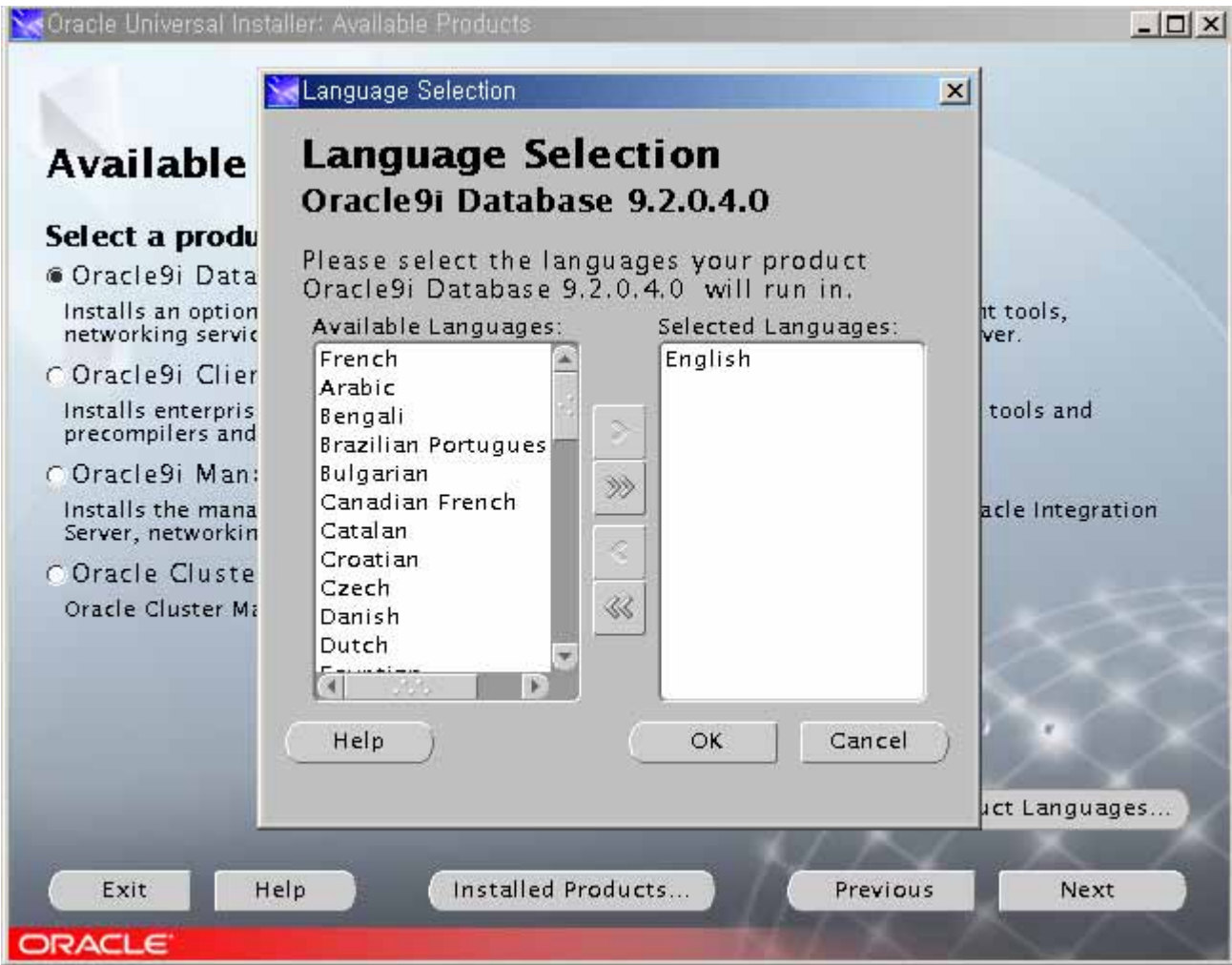
`continue`

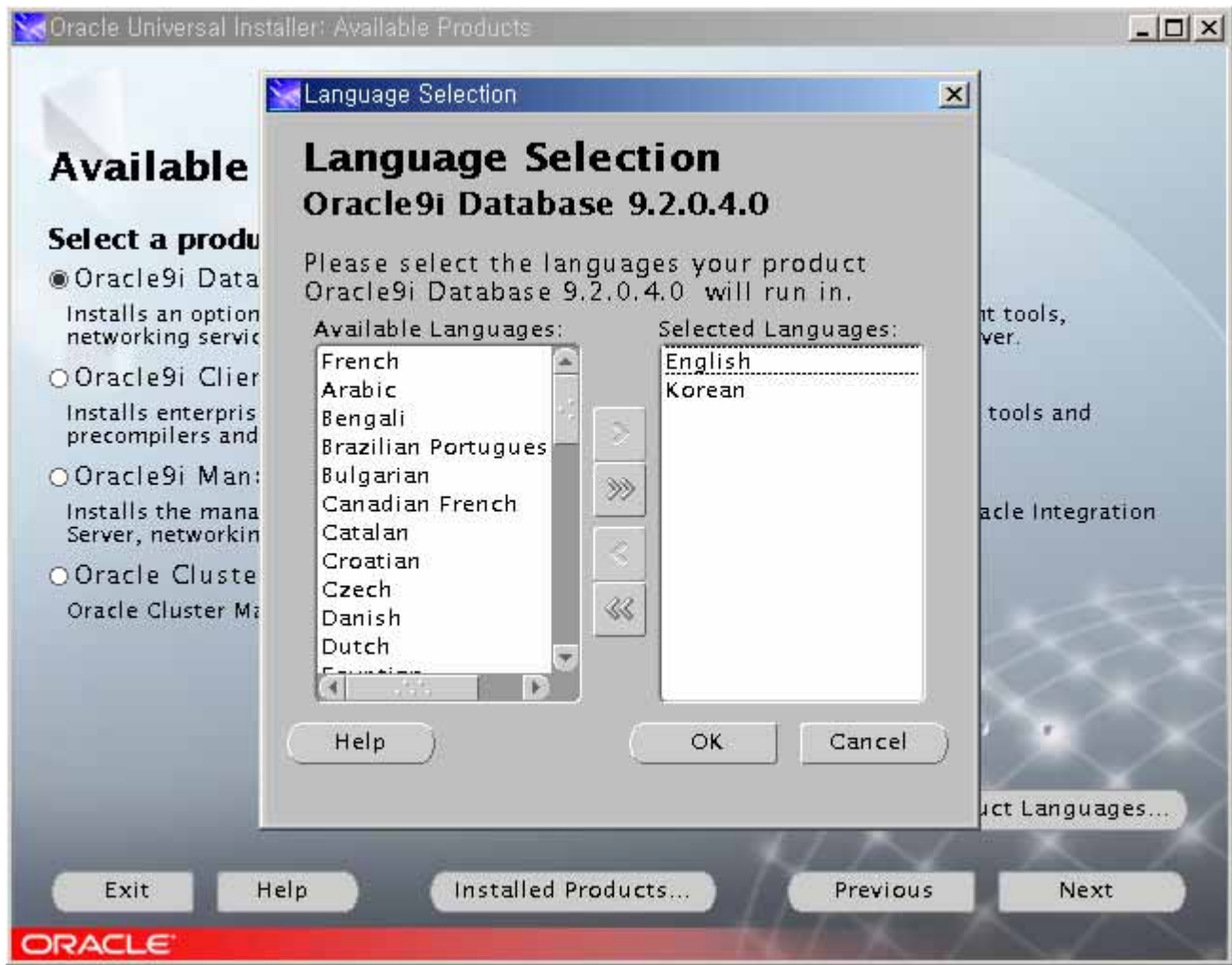


Next

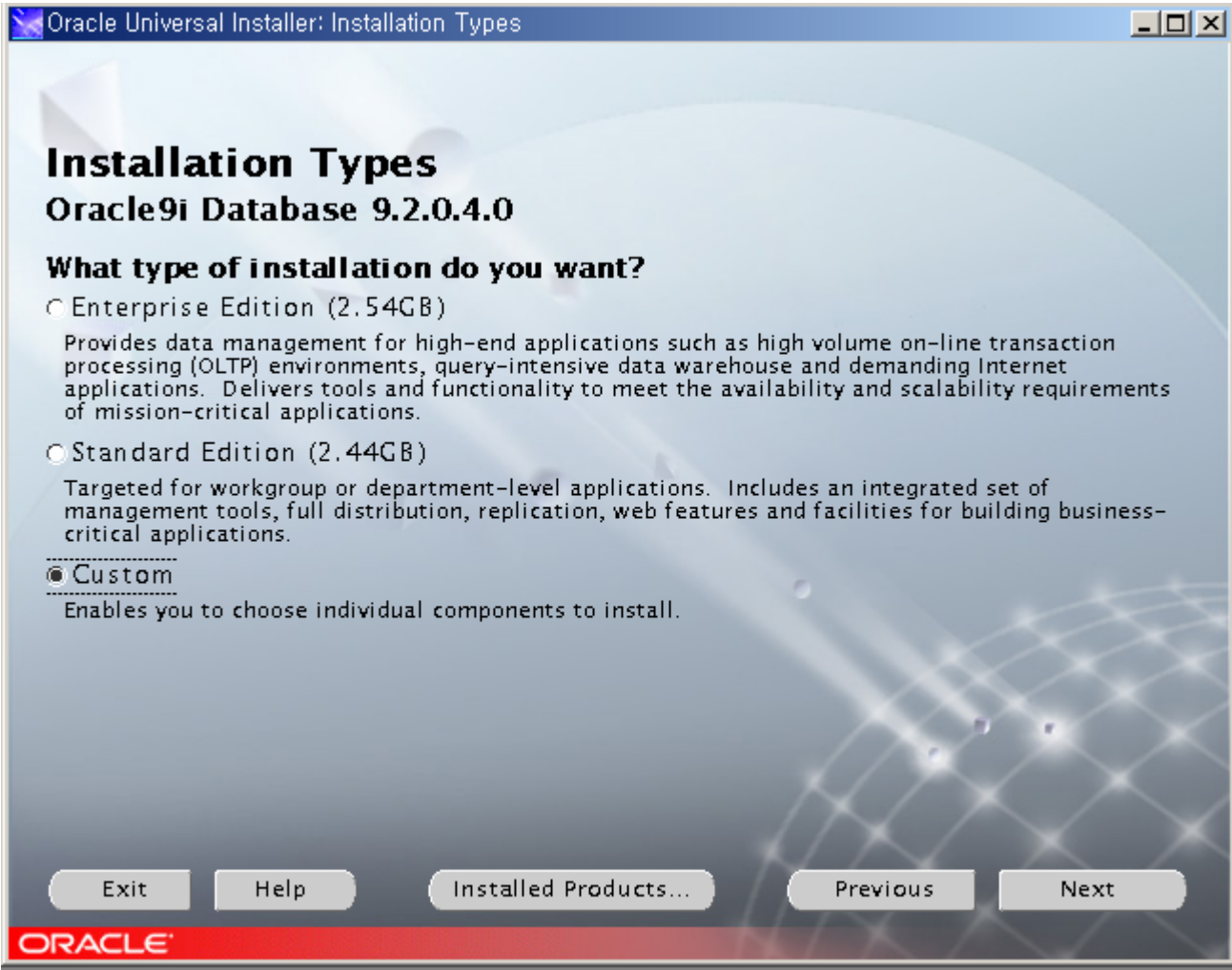


Product Language..





Korean 가 OK



Custom

Next



## Available Product Components

### Oracle9i Database

The following are components that you can install as part of Oracle9i Database. Which of these components do you want to install?

Components	Install Status
<input checked="" type="checkbox"/> Oracle Data Mining 9.2.0.4.0	New Install
<input checked="" type="checkbox"/> Oracle Net Services 9.2.0.1.0	New Install
<input type="checkbox"/> Oracle Enterprise Manager Products 9.2.0.1.0	Not Installed
<input checked="" type="checkbox"/> Oracle9i Development Kit 9.2.0.1.0	New Install
<input checked="" type="checkbox"/> Oracle C++ Call Interface 9.2.0.4.0	New Install
<input checked="" type="checkbox"/> Oracle Call Interface (OCI) 9.2.0.4.0	New Install
<input checked="" type="checkbox"/> Oracle Programmer 9.2.0.1.0	New Install
<input checked="" type="checkbox"/> Oracle XML Developer's Kit 9.2.0.4.0	New Install
<input checked="" type="checkbox"/> Oracle9i for UNIX Documentation 9.2.0.1.0	New Install
<input type="checkbox"/> Oracle HTTP Server 9.2.0.1.0	Not Installed
<input type="checkbox"/> iSQL*Plus 9.2.0.4.0	Not Installed
<input type="checkbox"/> Oracle JDBC/OCI Interfaces 9.2.0.1.0	Not Installed

Show all components including required dependencies.

Exit

Help

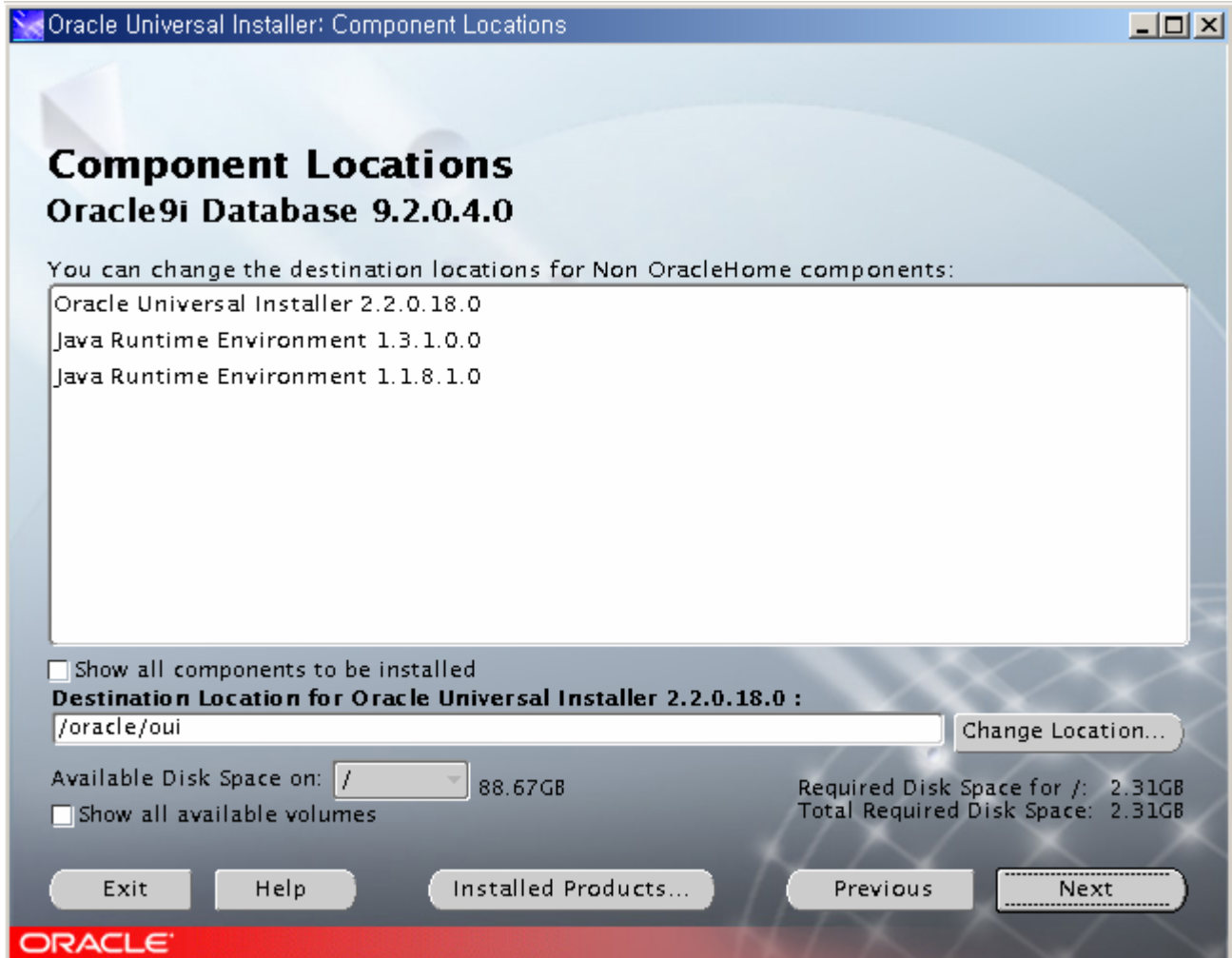
Installed Products...

Previous

Next



Next



Next

## Privileged Operating System Groups

SYSDBA and SYSOPER privileges are required to create a database using operating system (OS) authentication. These are granted through membership in the UNIX groups OSDBA and OSOPER, respectively, and the dba group is usually used for this purpose. If you would like another group used, enter the names of the UNIX groups of which you are a member, to be used for OSDBA and OSOPER.

Database Administrator (OSDBA) Group

Database Operator (OSOPER) Group

Exit

Help

Installed Products...

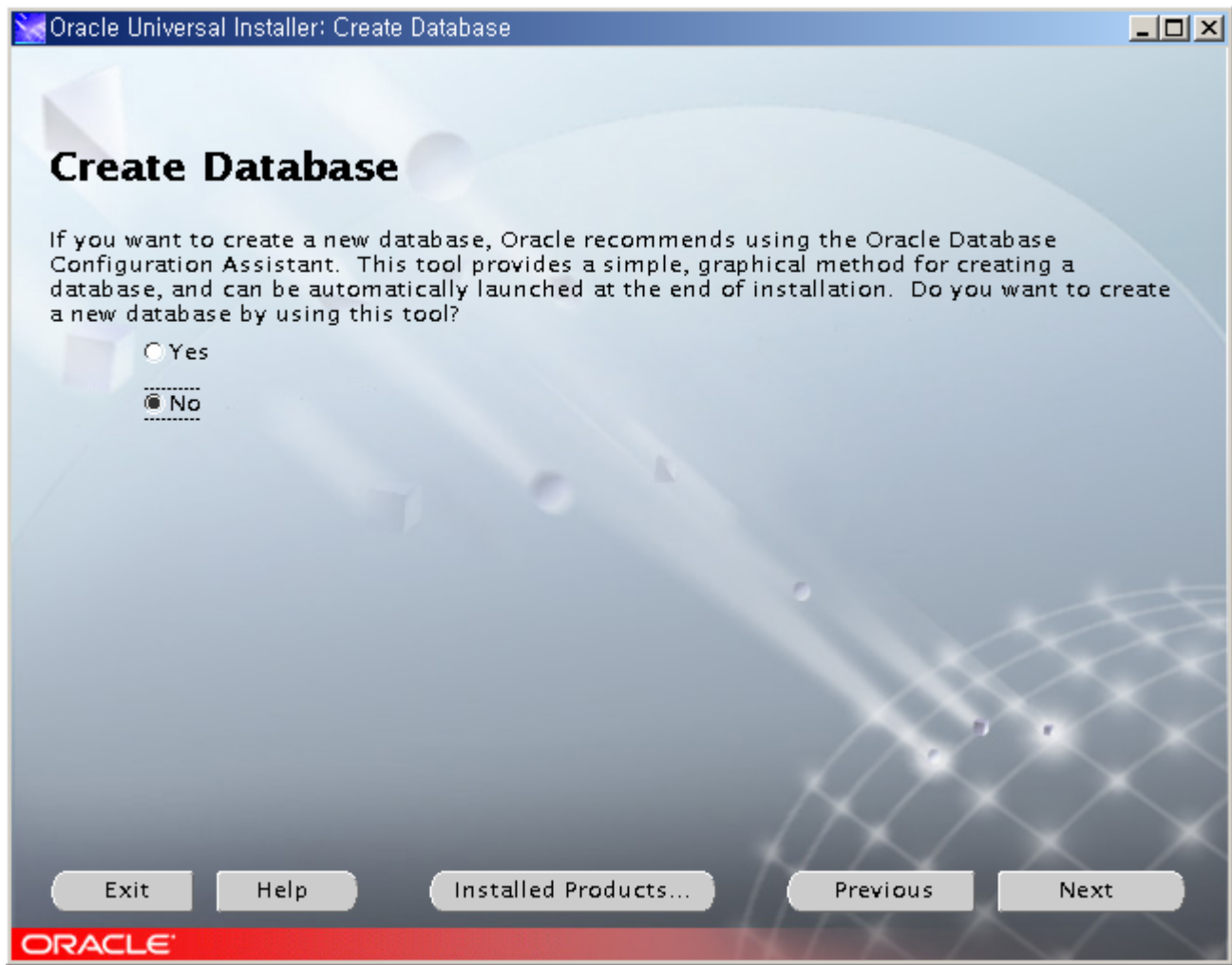
Previous

Next

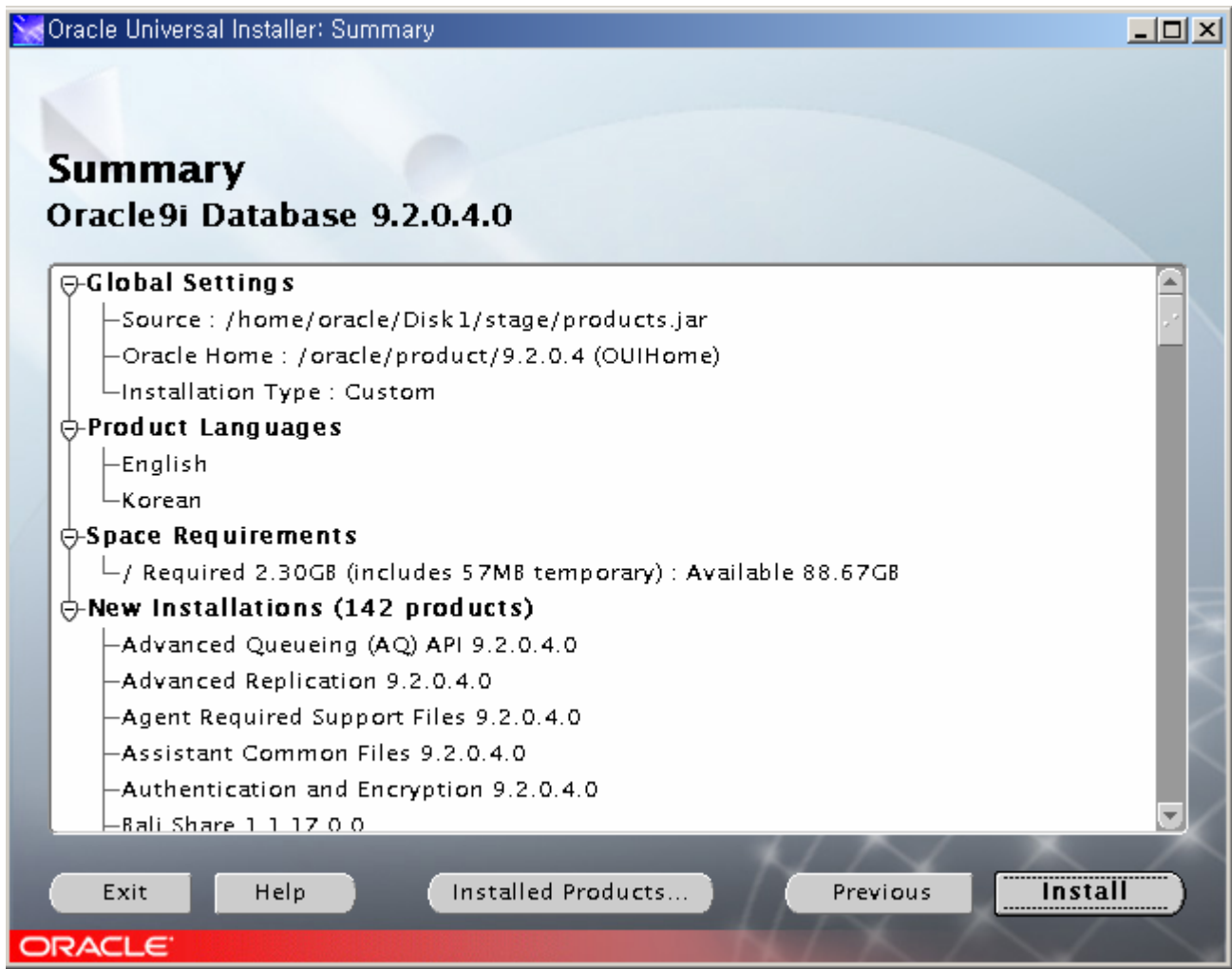


Group

Next



No Next



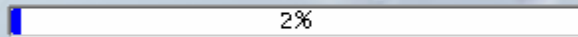
Install

# Install

**Installing RDBMS Required Support Files**  
9.2.0.4.0

Link pending...

Copying libclient9.a



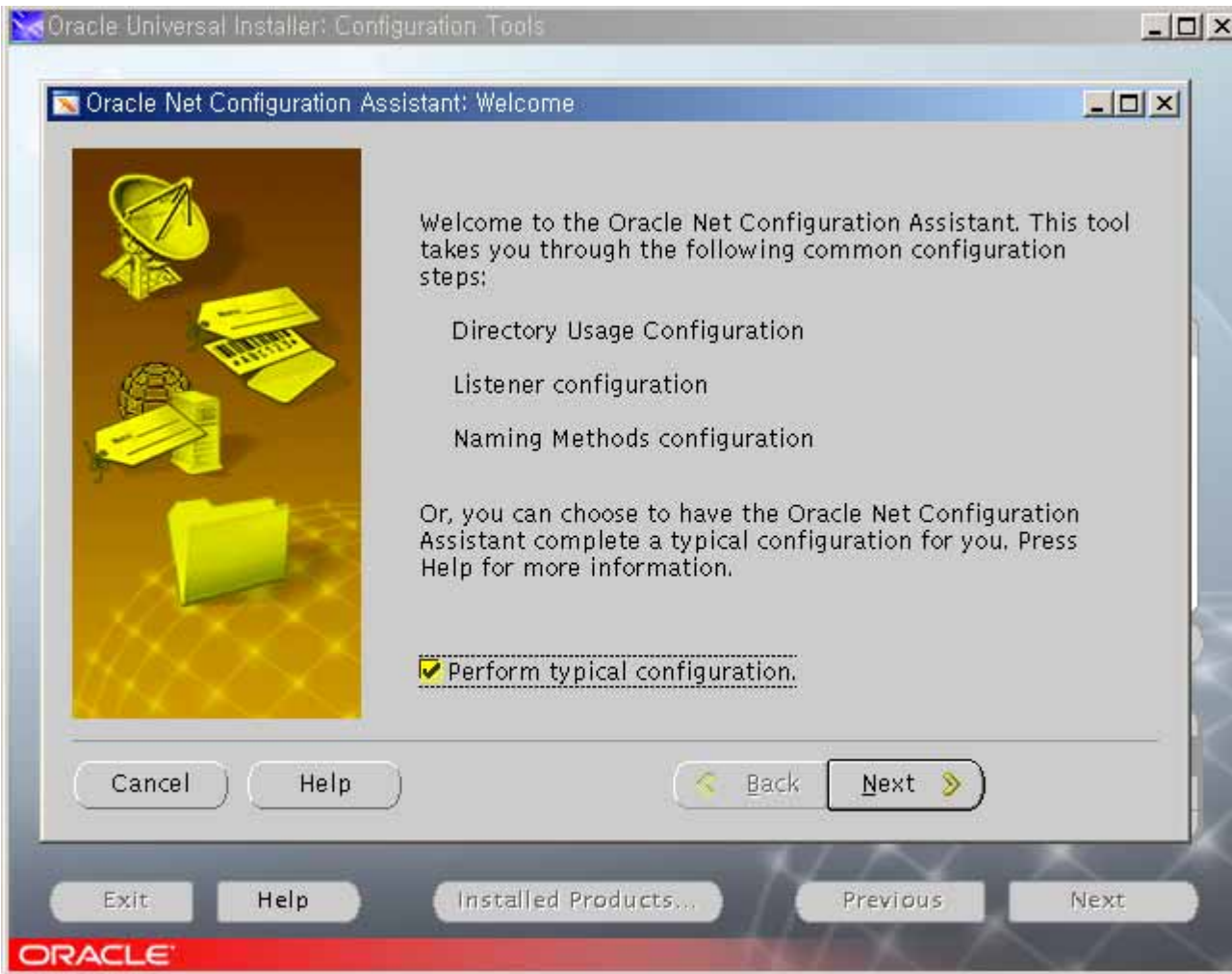
Cancel

You can find a log of this install session at:  
`/oracle/orainventory/logs/installActions2005-11-22_08-36-58PM.log`

Exit   Help   Installed Products...   Previous   Next



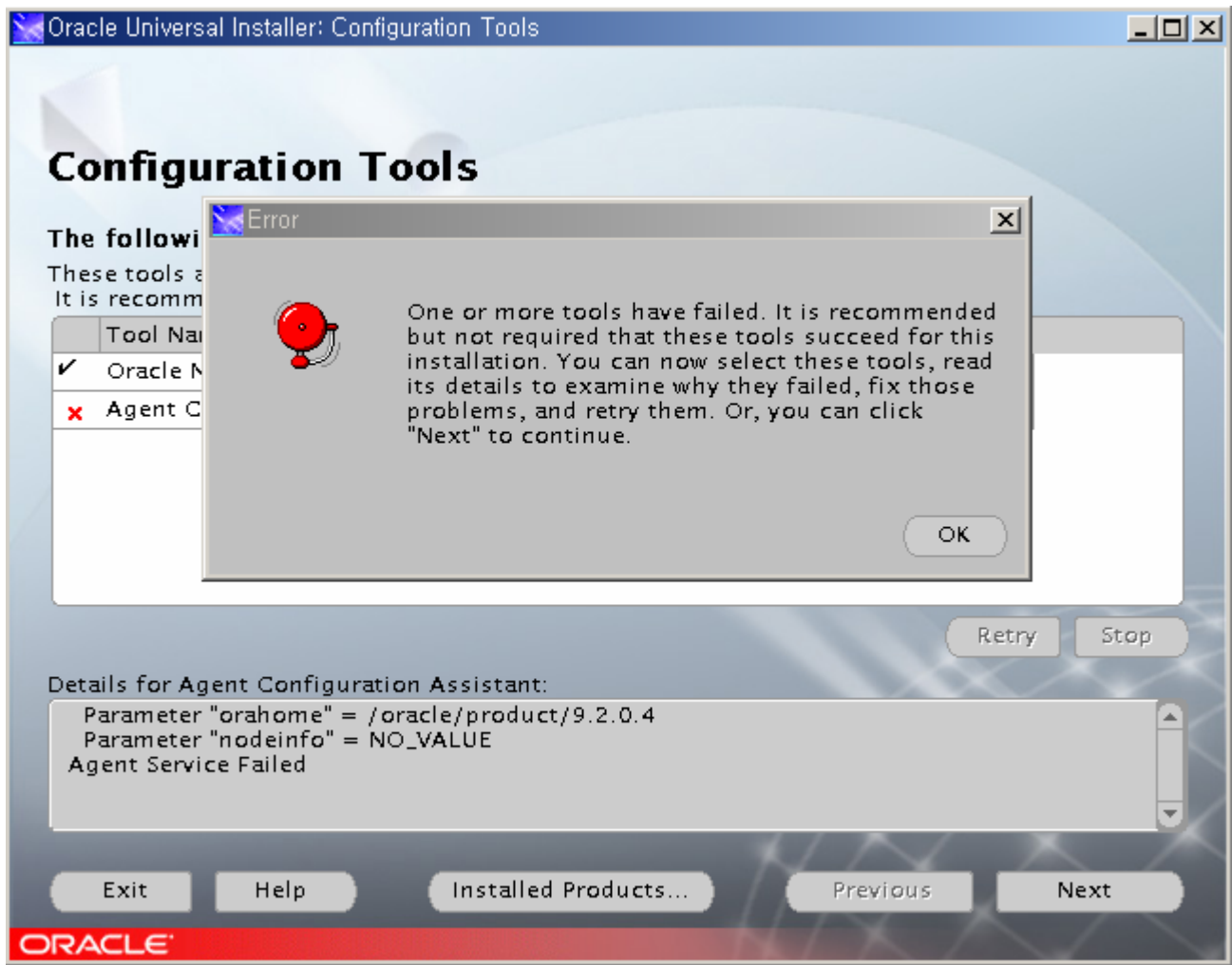
root.sh      Ok      Next



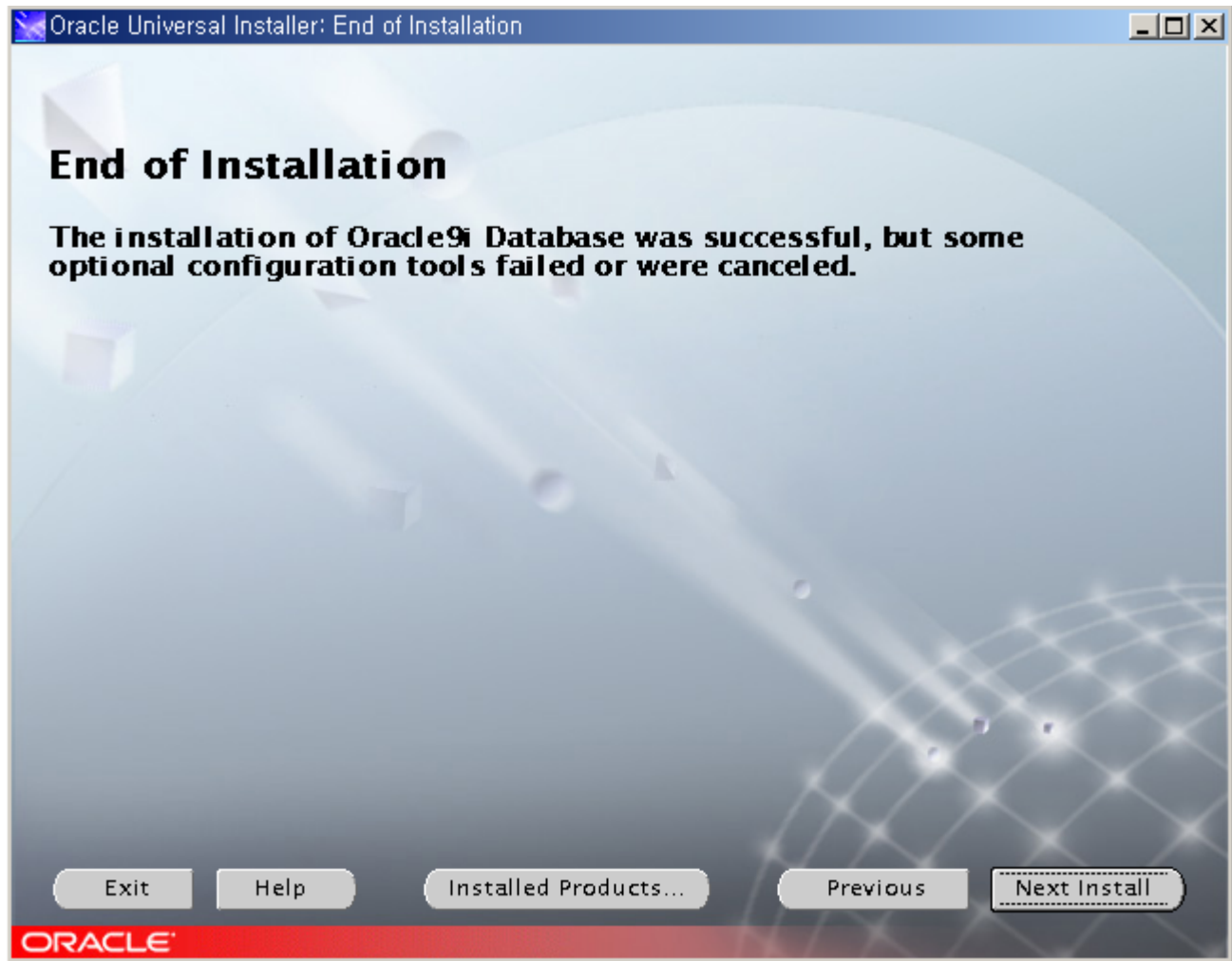
Check box

Next





OK      Next      ( agent      oem      .      )



Exit

Install

# DB

[oracle@soma]# dbca

Database Configuration Assistant : Welcome

Welcome to Database Configuration Assistant for Oracle database.  
The Database Configuration Assistant enables you to create a database, configure database options in an existing database, delete a database, and manage database templates.



Cancel

Help

< Back

Next >

Next

Select the operation you want to perform

- Create a database
- Configure database options in a database
- Delete a database
- Manage Templates



Cancel

Help

< Back

Next >

Create a database

Next

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



Select	Template Name	Includes Datafil...
<input checked="" type="radio"/>	New Database	No
<input type="radio"/>	General Purpose	Yes
<input type="radio"/>	Data Warehouse	Yes
<input type="radio"/>	Transaction Processing	Yes

Show Details...

Cancel Help

Back Next

New Database

Next

Specify the following database information.

An Oracle9i 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 Oracle9i instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID).

SID:



Cancel

Help

< Back

Next >

Finish

DBname,SID

Next

Database Features Custom Scripts

Select the features you want to configure for use in your database:

- Oracle Spatial
- Oracle Ultra Search
- Oracle Label Security
- Oracle Data Mining
- Oracle OLAP
- Example Schemas
  - Human Resources
  - Order Entry
  - Product Media
  - Sales History
  - Shipping

Standard database features...



Next



Select the mode in which you want your database to operate by default :



Dedicated Server Mode

For each client connection the database will allocate a resource dedicated to serving only that client. Use this mode when the number of total client connections is expected to be small or when clients will be making persistent, long-running requests to the database.

Shared Server Mode

Several client connections share a database-allocated pool of resources. Use this mode when more than a small number of users need to connect to the database simultaneously while efficiently utilizing system resources. The Oracle shared server feature will be enabled.

[Edit Shared Connections Parameters...](#)

Cancel

Help

< Back

Next >

Finish

Mode

Next



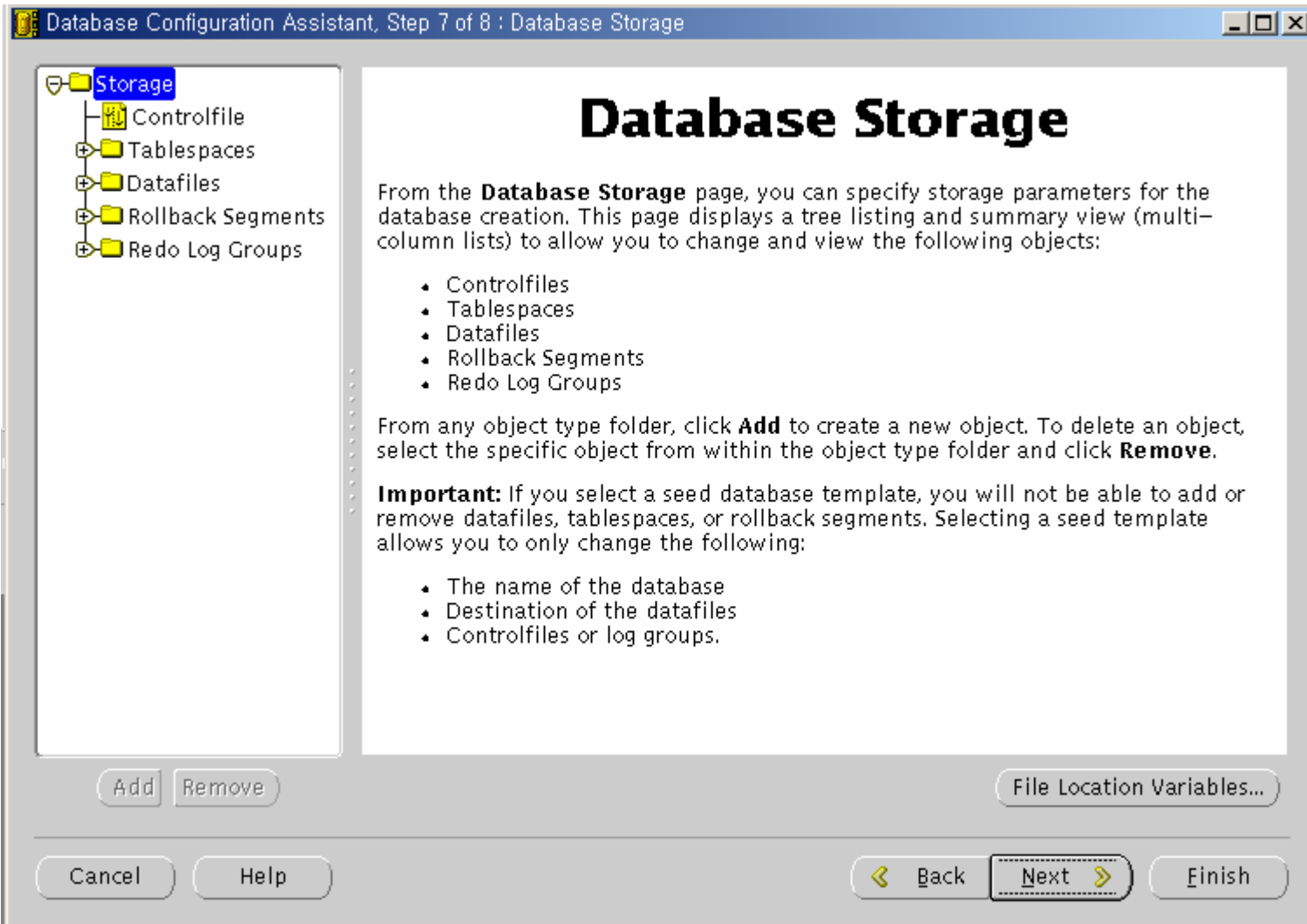
Database Character Set

- Use the default  
The default character set for this database is based on the language setting of this operating system: WE8ISO8859P1.
- Use Unicode (AL32UTF8)  
Unicode (AL32UTF8) enables you to store multiple character sets
- KO16KSC5601

National Character Set: AL16UTF16

All Initialization Parameters... File Location Variables...

Character Sets K016KSC5601 Next



Next

Select the following database creation options:

Create Database

Save as a Database Template

Name:

Description:

Generate Database Creation Scripts

Destination  
Directory:

/oracle/admin/ora/scripts

Browse...



Cancel

Help

< Back

Next >

Finish

Summary

Following operation(s) will be performed:  
Creation of database with db name "ora".

Use this template to create a customized database.

## Common Options

Option Name	Selected
Example Schemas	false
Oracle Data Mining	true
Oracle Intermedia	true
Oracle JVM	true
Oracle Label Security	false
Oracle OLAP	true
Oracle Spatial	true
Oracle Text	true
Oracle Ultra Search	true
Oracle XML DB	true

## Initialization Parameters

Save as an HTML file...

OK

Cancel

Help

Select the following database creation options:



Database Configuration Assistant

- Creating and starting Oracle instance**
  - Creating database files
  - Creating data dictionary views
  - Adding Oracle JVM
  - Adding Oracle Intermedia
  - Adding Oracle Text
  - Adding Oracle XML DB
  - Adding Oracle Spatial
  - Adding Oracle Ultra Search
  - Adding Oracle Data Mining
  - Adding Oracle OLAP
  - Completing Database Creation

Database creation in progress...

2%

Stop

Browse...

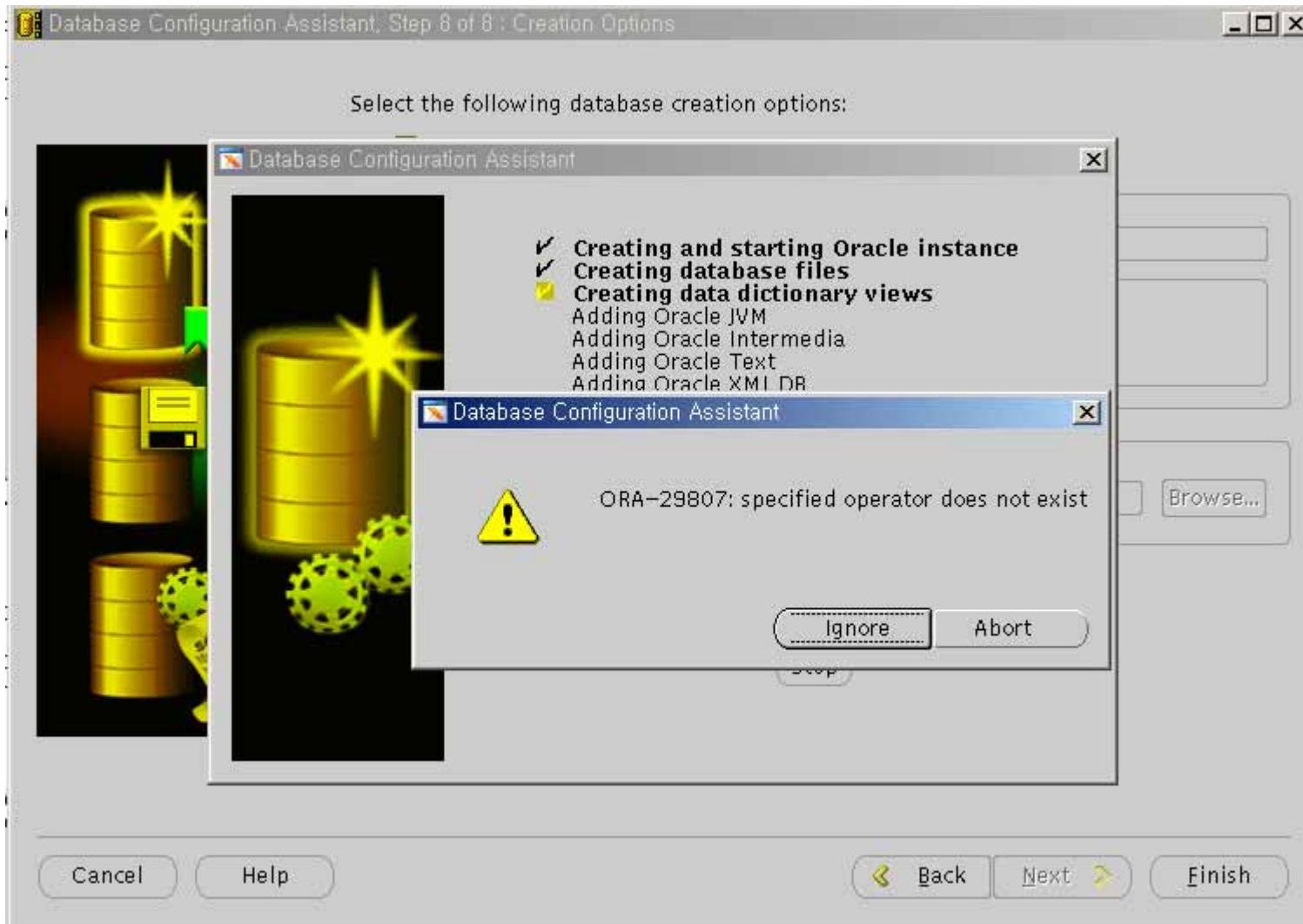
Cancel

Help

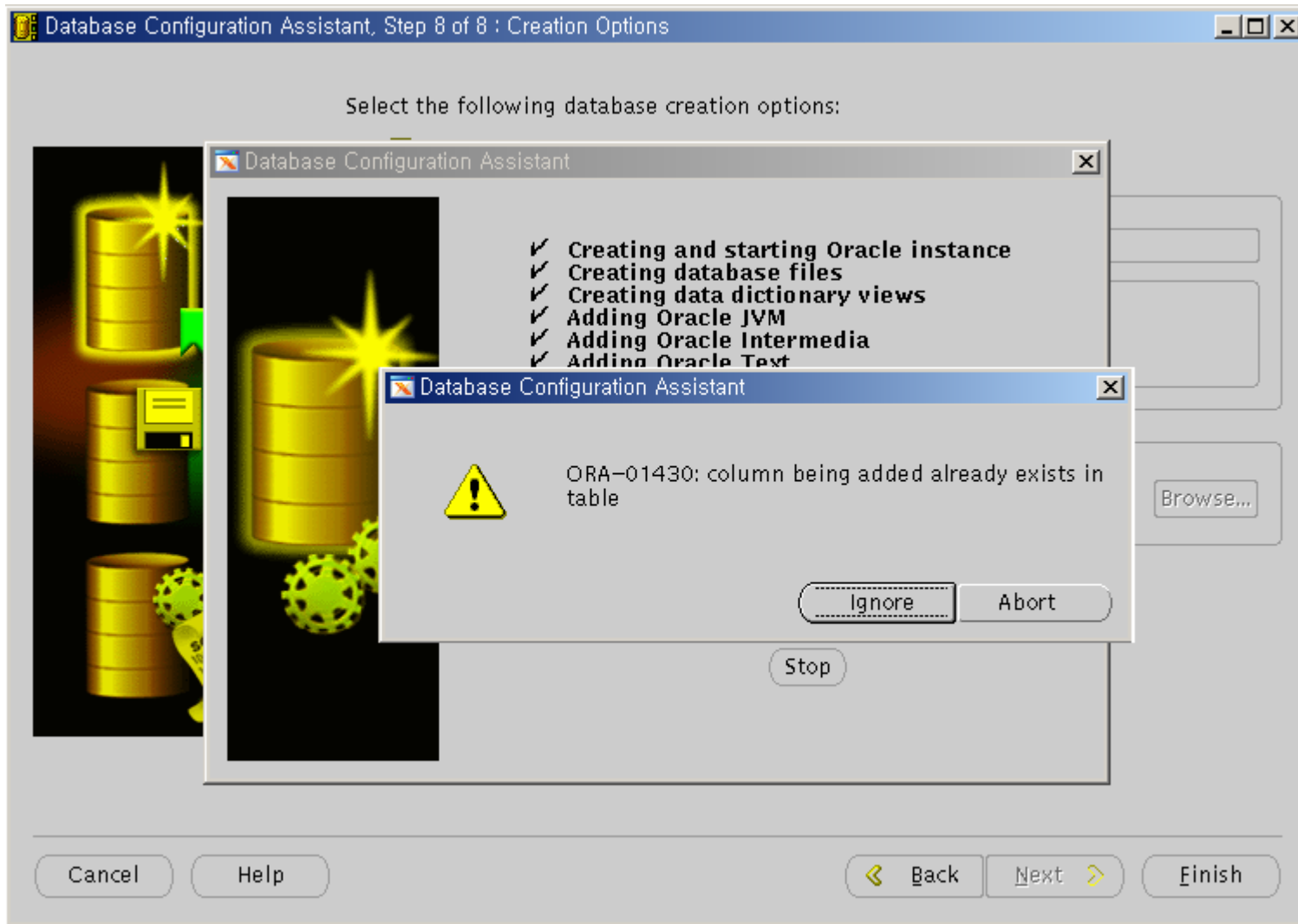
Back

Next

Finish

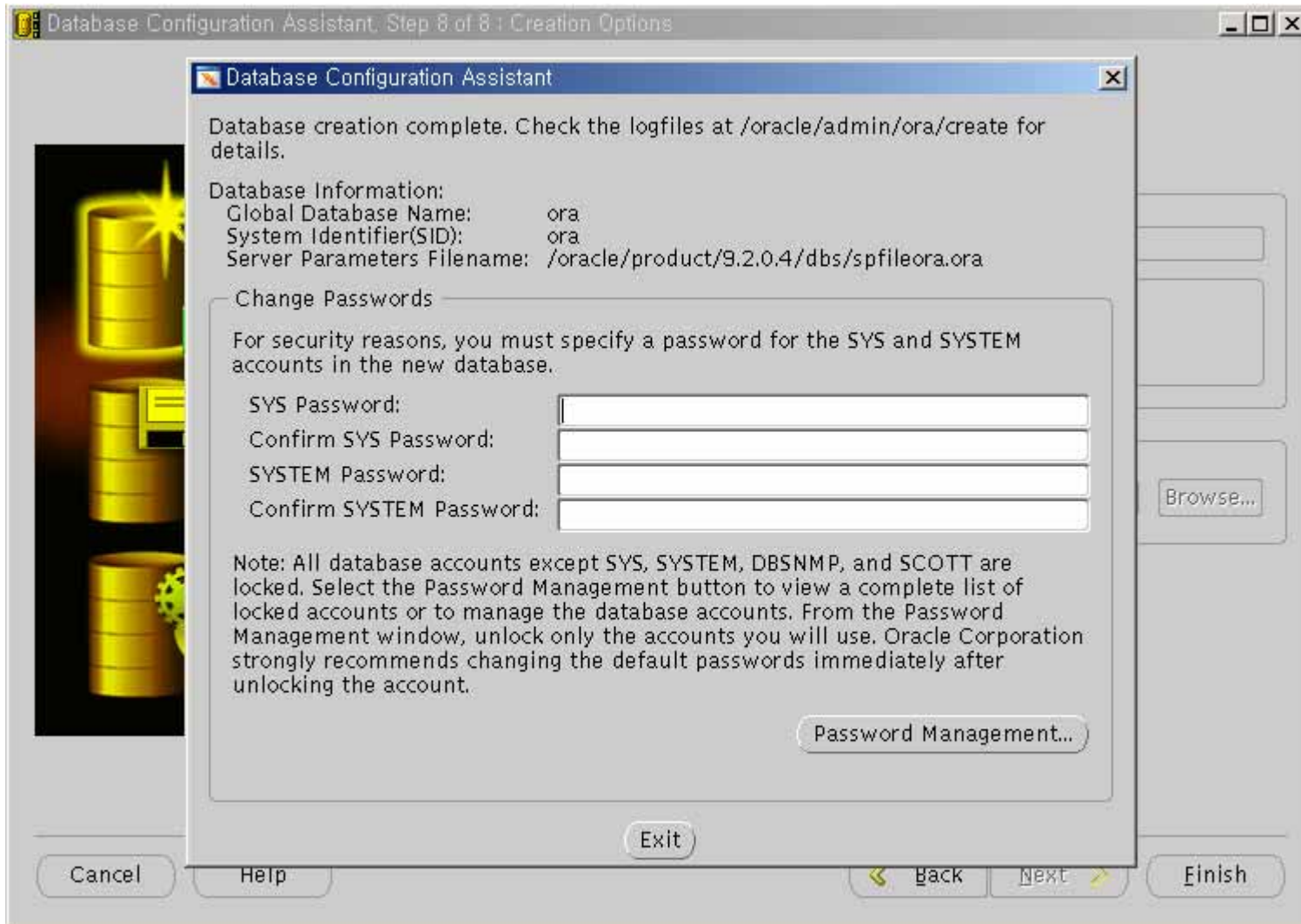


Ignore ( )

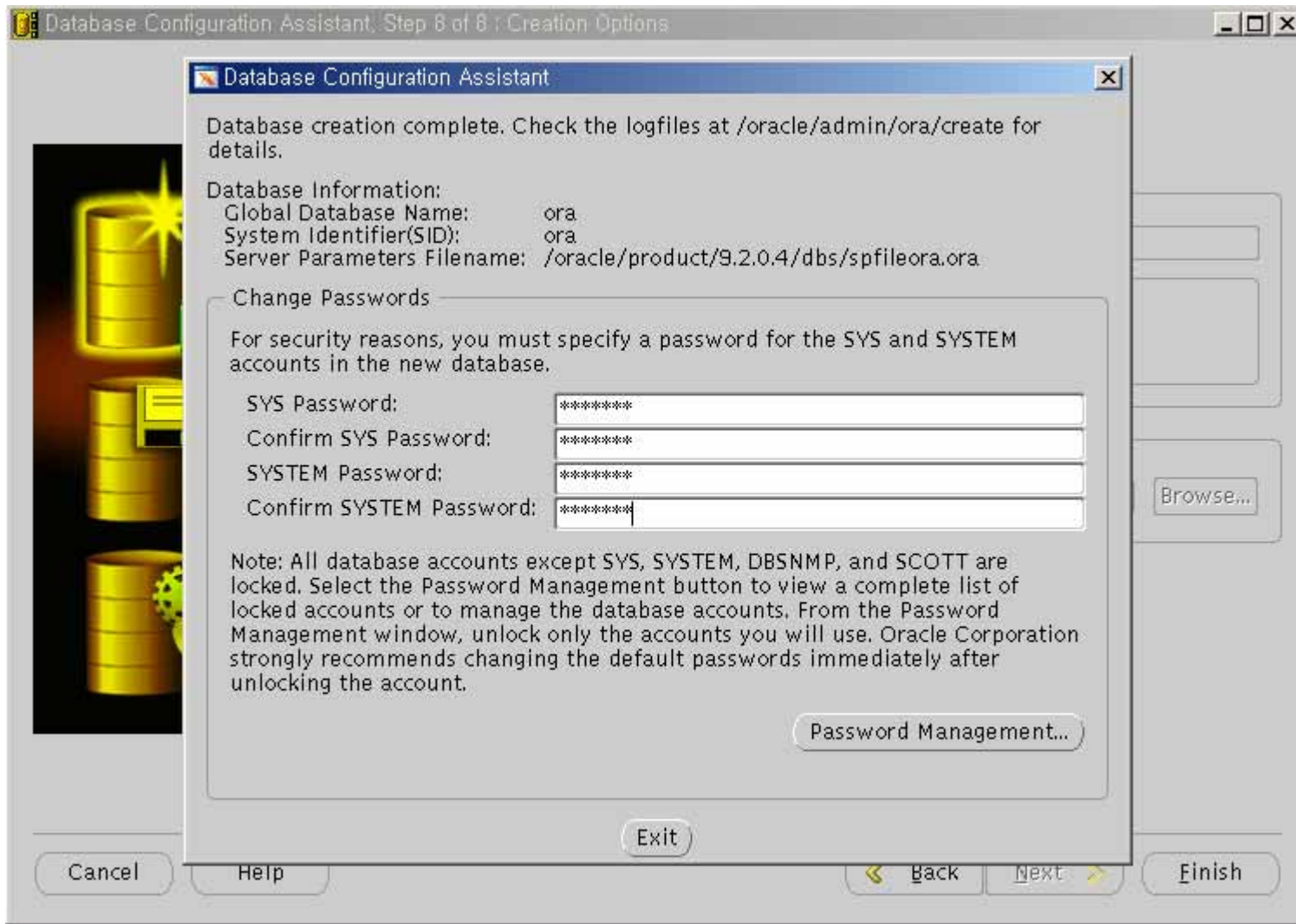


Ignore ( )





Sys,system



Sys,system

Exit

DB

!!

## Ignore

- ORA-29807

" " ORA-29807 가 .

drop operator XMLSequence

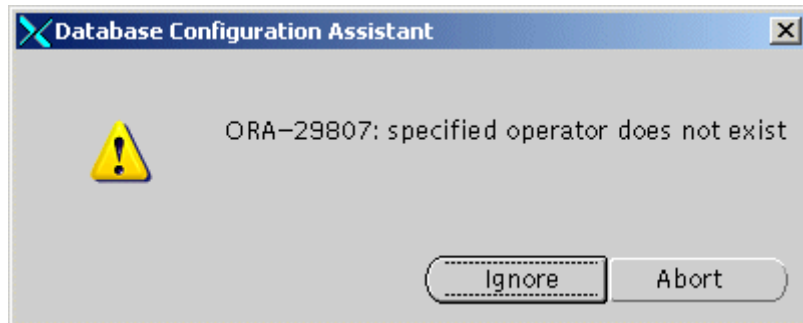
\*

ERROR at line 1:

ORA-29807: specified operator does not exist

(Bug: 2686156)

"Ignore"



- ORA-01430

"Oracle Spatial 가" ORA-01430 가 .

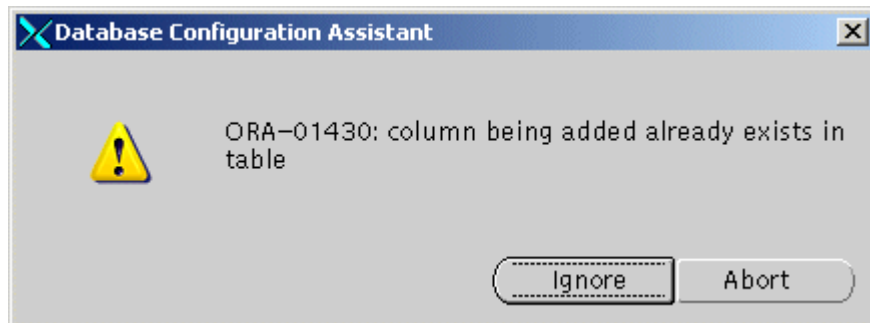
(SDO\_ROOT\_MBR mdsys.sdo\_geometry)

\*

ERROR at line 2:

ORA-01430: column being added already exists in table

"Ignore"



### Agentctl start

When you run "agentctl start" (Oracle 9.2.0.4), dbsnmp will crash:

```
$ su - oracle
```

```
$ agentctl start
```

```
DBSNMP for Linux: Version 9.2.0.4.0 - Production on 07-JAN-2004 19:11:14
```

```
Copyright (c) 2003 Oracle Corporation. All rights reserved.
```

```
Starting Oracle Intelligent Agent.../u01/app/oracle/product/9.2.0/bin/dbsnmpwd: line 156: 1855 Segmentation fault      nohup $ORACLE_HOME/bin/dbsnmp
```

```
$*
```

```
>>$DBSNMP_WDLOGFILE 2>&1
```

```
/u01/app/oracle/product/9.2.0/bin/dbsnmpwd: line 156: 1868 Segmentation fault      nohup $ORACLE_HOME/bin/dbsnmp $* >>$DBSNMP_WDLOGFILE 2>&1
```

```
/u01/app/oracle/product/9.2.0/bin/dbsnmpwd: line 156: 1880 Segmentation fault      nohup $ORACLE_HOME/bin/dbsnmp $* >>$DBSNMP_WDLOGFILE 2>&1
/u01/app/oracle/product/9.2.0/bin/dbsnmpwd: line 156: 1892 Segmentation fault      nohup $ORACLE_HOME/bin/dbsnmp $* >>$DBSNMP_WDLOGFILE 2>&1
```

To resolve this problem, apply the patch p3238244\_9204\_LINUX.zip from <http://metalink.oracle.com>. See bug/patch 3238244 for more information.

*Before you apply the patch, make sure the instance is down!*

Also make sure the opatch script appears in your \$PATH. See "[Patching Oracle9iR2 on Red Hat AS 3](#)" for information on getting and installing opatch. To verify if opatch is in your \$PATH, run the which command:

```
$ su - oracle
$ which opatch
/tmp/OPatch/opatch
$
```

To apply now the patch, run:

```
$ su - oracle
$ unzip p3238244_9204_LINUX.zip
$ cd 3238244
$ export PATH=$PATH:/sbin      # the patch needs "fuser" which is located in /sbin
$ opatch apply
```

Now you need to relink dbsnmp. This is the binary that crashed when running agentctl start. To find which makefile handles the linking of dbsnmp, you can run:

```
$ su - oracle
$ find $ORACLE_HOME -name "*.mk" | xargs grep -l dbsnmp
/u01/app/oracle/product/9.2.0/network/lib/ins_oemagent.mk
/u01/app/oracle/product/9.2.0/network/lib/env_oemagent.mk
```

```
$
```

I relinked dbsnmp and all associated executables which are maintained by the `ins_oemagent.mk` makefile:

```
$ su - oracle
```

```
$ cd $ORACLE_HOME/network/lib
```

```
$ make -f ins_oemagent.mk install
```

Now you should be able to start the agent:

```
$ su - oracle
```

```
$ agentctl start
```

NOTE: Don't forget to undo the changes (links) to `/usr/bin/gcc` and `/usr/bin/g++` if you don't need it any more. Also don't forget the `/etc/ld.so.preload` file.