Configuring Asianux for the Installation of Oracle Database 10g

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Purpose

This document describes how to configure Asianux and prepare for the installation of Oracle Database 10g. In this document user prepares the Linux operating system for the installation of Oracle Database 10g.

Prerequisites

In order for this lesson to work successfully, you will need to have performed the following:

Install an Oracle Database 10g certified version of Linux onto Asianux. To see the latest certification information of Asianux use Metalink and select Certify & Availability or use OTN.

Check the Hardware Requirements

The following list contains the hardware requirements for the system that you install Asianux on.

- 512 MB of physical random access memory (RAM)
- 1 GB of swap space (or twice the size of RAM)
  - On systems with 2 GB or more of RAM, the swap space can be between one and two times the size of RAM
- 400 MB of disk space in the /tmp directory
- 2.1 GB of disk space for the Oracle software and Sample Schema

Database

Configure the kernal and create the oracle user

To configure the system, follow these steps:

1. Open a terminal window and login as the **root** user.

2. The following local UNIX groups and user must exist on the system:

The **oinstall, dba** group
The **oracle** user

Optionally the **oper** group can be created.

The **oper** group

We will be creating the optional **oper** group.

Create the groups **oinstall**, **dba**, and **oper**.

/usr/sbin/groupadd oinstall
/usr/sbin/groupadd dba
/usr/sbin/groupadd oper

3. Create the operating system user oracle:

/usr/sbin/useradd -g oinstall -G dba,oper oracle

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

/usr/bin/passwd oracle

5. With an editor of your choosing, **/home/oracle/.bash_profile** If you are using another shell please add the entries to the appropriate file.

umask 022

PATH=/bin:/usr/bin:/usr/local/bin:/usr/X11R6/bin
LD_LIBRARY_PATH=/usr/lib:/usr/X11R6/lib

ORACLE_BASE=/u01/app/oracle
ORACLE_HOME=$ORACLE_BASE/product/10.1.0/db_1
ORACLE_SID=orcl
PATH=$ORACLE_HOME/bin:$PATH

export PATH LD_LIBRARY_PATH
export ORACLE_BASE ORACLE_HOME ORACLE_SID

6. Create the directory for the software installation and assign ownership to **oracle:oinstall**. In the example you will use /u01/app/oracle.

mkdir -p /u01/app/oracle
chown -R oracle:oinstall /u01/app
chmod -R 775 /u01/app

7. Confirm required kernel parameters.

Below kernel parameters need to be setup before Oracle 10g database installation.

Parameter	Value
kernel.semmsl	250
kernel.semmns	3200

kernel.semopm	100
kernel.semmni	128
kernel.shmall	2097152
kernel.shmmax	2147483648
kernel.shmmni	4096
fs.file-max	65536
net.ipv4.ip_local_port_range	1024 65000

Open the **/etc/sysctl.conf** file in any text editor and check lines similar to the following:

kernel.sem = 250 32000 100 128
kernel.shmall = 2097152
kernel.shmmax = 2147483648
kernel.shmmni = 4096
fs.file-max = 65536
net.ipv4.ip_local_port_range = 1024 65000

By specifying values for these parameters in the **/etc/sysctl.conf** file, these values persist when you reboot the system.

8. The kernel changes made previously take affect with each reboot.

Issue this command to set the kernel parameters:

/sbin/sysctl -p

9. Login as operating system user oracle. 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.

10. (Optional) Asianux provides a tool named “oranavi”, which is a GUI tool

leading users go through the linux setup process. Users can use it to replace all the steps above.