实验指导 – Ubuntu 下安装 Oracle XE

一、实验目的

1. 在 Linux 操作系统中安装 Oracle Express Edition 10g

二、实验环境

1. 操作系统：Ubuntu 9.10 或其它版本

三、操作步骤

1. 修改 /etc/apt/sources.list，在文件中添加一行：

```
deb http://oss.oracle.com/debian unstable main non-free
```

2. 下载公钥

```
$ wget http://oss.oracle.com/el4/RPM-GPG-KEY-oracle
```

3．将公钥添加到密钥库中

```
$ sudo apt-key add RPM-GPG-KEY-oracle
```

4. 更新 apt 源

```
$ sudo apt-get update
```

5. 安装 Oracle XE

```
$ sudo apt-get install oracle-xe-universal
```

6. 安装后配置数据库

```
$ sudo /etc/init.d/oracle-xe configure

[sudo] password for kwarph:

Oracle Database 10g Express Edition Configuration
-------------------------------------------------
This will configure on-boot properties of Oracle Database 10g Express
Edition.  The following questions will determine whether the database
should be starting upon system boot, the ports it will use, and the
```

```
passwords that will be used for database accounts.  Press <Enter> to
accept the defaults.
Ctrl-C will abort.

Specify the HTTP port that will be used for Oracle Application
Express [8080]:8186

Specify a port that will be used for the database listener [1521]:
```
用默认的 1521 端口
```
Specify a password to be used for database accounts.  Note that the
same password will be used for SYS and SYSTEM.  Oracle recommends the
use of different passwords for each database account.  This can be
done after initial configuration:        # 这里输入数据库用户密码
Confirm the password:                     # 重复输入密码

Do you want Oracle Database 10g Express Edition to be started on boot
(y/n) [y]:y

Starting Oracle Net Listener...Done
Configuring Database...Done
Starting Oracle Database 10g Express Edition Instance...Done
Installation Completed Successfully.
To access the Database Home Page go to "http://127.0.0.1:8186/apex"
```

7. 打开 sqlplus

8. 连接到数据库实例

```
SQL*Plus: Release 10.2.0.1.0 - Production on Sun Mar 21 01:33:11 2010

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

SQL> select sysdate from dual;
SP2-0640: Not connected
SQL> conn sys as sysdba;
Enter password:
Connected.
SQL> select sysdate from dual;

SYSDATE
------------------
21-MAR-10

SQL>
```

9. 如果没有启动数据库，则需先执行启动数据库的命令：

```
SQL> conn sys as sysdba;
Enter password:
Connected to an idle instance.    #数据库没有开启
SQL> select sysdate from dual;
select sysdate from dual
*
ERROR at line 1:
ORA-01034: ORACLE not available

SQL> startup      #启动数据库
ORACLE instance started.

Total System Global Area  285212672 bytes
Fixed Size           1258464 bytes
Variable Size      125832224 bytes
Database Buffers   155189248 bytes
Redo Buffers         2932736 bytes
Database mounted.
Database opened.
SQL> select sysdate from dual;

SYSDATE
------------------
27-MAR-10
```

10. 通过 web 页面管理数据库

可以通过网址：http://127.0.0.1:8186/apex/ 打开数据库管理页面。（注意：8186 是在第 6 步设置的端口号）

11. 设置环境变量，将下面的环境变量添加到 ~/.bashrc 文件中：

```
export ORACLE_SID=XE
export ORACLE_HOME=/usr/lib/oracle/xe/app/oracle/product/10.2.0/server
export PATH=$ORACLE_HOME/bin:$PATH
```

12. 添加数据库用户

由于在安装过程中，自动创建了 sys 和 system 2 个 dba 用户，在实际应用过程中还需创建一般用户：

```
xuanyuan-soft02$ sqlplus sys as sysdba    # 以 sys 用户登录

SQL*Plus: Release 10.2.0.1.0 - Production on Wed Apr 7 21:39:56 2010

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

Enter password:

Connected to:
Oracle Database 10g Express Edition Release 10.2.0.1.0 — Production

SQL> create user dbdev identified by "q1w2e3";   # 创建用户，给定密码

User created.

SQL> grant connect, resource, dba to dbdev;  # 赋予权限

Grant succeeded.

SQL>
```

13. 一般用户连接数据库：

```
xuanyuan-soft02$ sqlplus dbdev

SQL*Plus: Release 10.2.0.1.0 - Production on Wed Apr 7 21:50:12 2010

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

Enter password:
```

```
Connected to:
Oracle Database 10g Express Edition Release 10.2.0.1.0 - Production

SQL>
```

注意：如果没有启动 Oracle 数据库，连接会失败，则需第 9 步所讲的步骤启动数据库。