



How to connect to Oracle running on Unix or Linux Operating System

## On Unix or Linux:

### 1) Find Oracle SID and ORACLE\_HOME:

logon to Unix or Linux OS and issue this:

```
ps -aef | grep smon
```

This should display something like this:

```
oratest 183 1 0 Aug 19 ? 3:30 ora_smon_TEST
oraprod 11561 1 0 Aug 20 ? 4:17 ora_smon_PROD
```

→ This tells you that there are two Oracle instances running on this Unix/Linux machine.

One SID is TEST and one SID is PROD.

Now let's say we want to connect to TEST.

```
ps -aef | grep -i TEST | grep -i tns
```

```
oratest 2024 1 7 May 18 ? 1:33 /u11/app/testdb/10.2.0/bin/tnslsnr TEST -inherit
```

→ This tells you that ORACLE\_HOME for instance TEST is /u11/app/testdb/10.2.0  
tnslsnr being the process for Oracle database listener.

### 2) Find Oracle listener name and port:

Your logon should belong to dba group; otherwise will not be able to logon to Oracle from Unix; at least this was the case in environment I have seen without readjusting permissions on ORACLE\_HOME which is not recommended (see step 5 of this document).

To see if your logon belongs to dba group use Unix command id:

```
id
```

→ This would display something like this:

```
uid=110(scott) gid=25(users)
```

→ This tells you that user scott does NOT belong to dba group.

```
uid=110(scott) gid=107(dba)
```

→ This tells you that user scott does belong to dba group.

If you get the following errors, it would mean that your OS account does not belong to dba group or oraenv does not have execute permissions:

```
sh: ./oraenv: Execute permission denied.
```

If you get the following errors, it would mean that your OS account does not belong to dba group:

```
/usr/lib/pa20_64/dld.sl: Unable to find library 'libsqlplus.sl'.
```

```
Killed
```

Or this one:

```
/usr/lib/pa20_64/dld.sl: Unable to find library 'libsqlplus.sl'.
```

```
Killed
```

SP2-0750: You may need to set ORACLE\_HOME to your Oracle software directory

So once you are assured that your logon belongs to dba group, run this from Unix or Linux:

First must know your ORACLE\_HOME and SID which we found from step 1 on this document.

```
export ORACLE_HOME=/u11/app/testdb/10.2.0
```

```
export PATH=$PATH:$ORACLE_HOME/bin
```

```
export ORACLE_SID=TEST
```

```
. oraenv
```

→This would prompt you with the following

```
ORACLE_SID = [TEST] ?
```

And just type in the Oracle instance SID you would like to connect to, meaning the SID you have discovered from step 1, uppercase lower case does matter.

If system cannot find it then navigate to /usr/local/bin

```
cd /usr/local/bin
```

```
or cd $ORACLE_HOME/ bin/oraenv
```

```
./oraenv
```

Then do this:

```
cd $TNS_ADMIN
```

```
cat listener.ora
```

This should display something like this:

```
TEST =
```

```
(ADDRESS_LIST =
```

```
(ADDRESS= (PROTOCOL= TCP)(Host= GLX2500 )(Port= 1526))
```

```
)
```

→This reading tells you that Oracle instance SID TEST listener runs on port 1526 and the listener name is TEST, on server GLX2500.

It could also look like this:

```
LISTENER =
```

```
(ADDRESS_LIST =
```

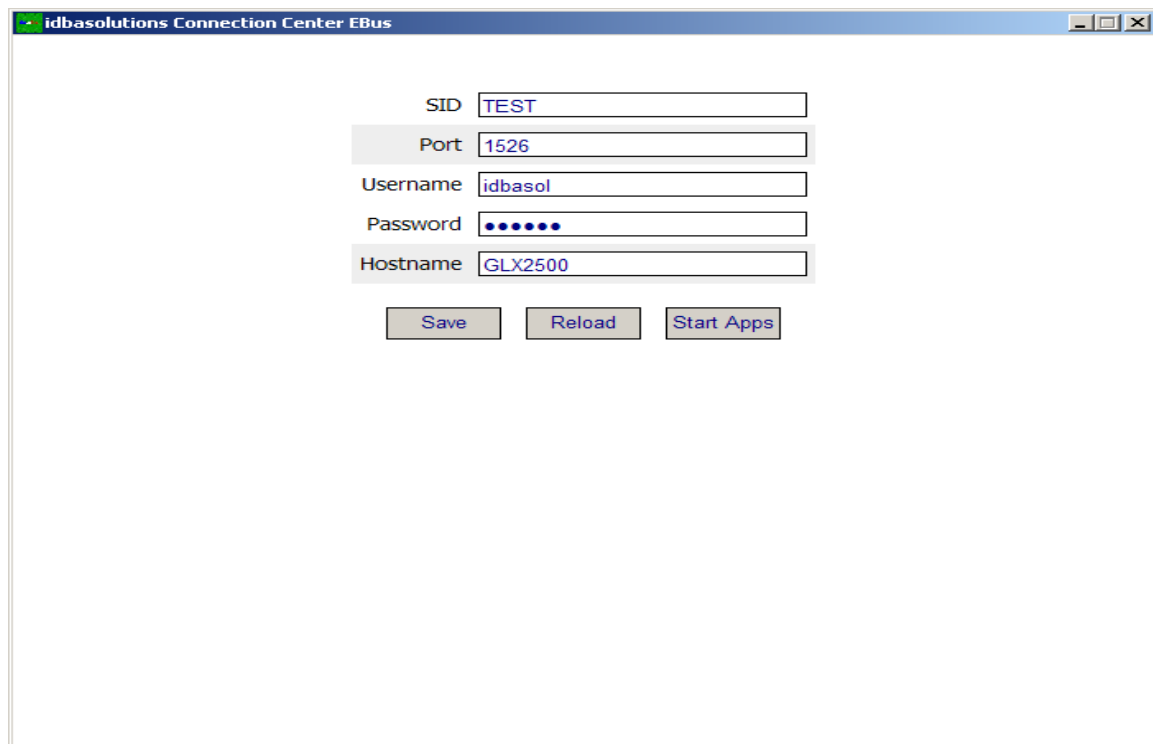
```
(ADDRESS= (PROTOCOL= TCP)(Host= GLX2500 )(Port= 1526))
```

```
)
```

→This reading tells you that Oracle instance SID TEST listener runs on port 1526 and the listener name is LISTENER, which is the default name, on server GLX2500.

### 3) Logon to Oracle using idbasolutions:

Now that you know SID and Listener port number and host name, use them as seen in the following sample to logon to the Oracle instance TEST, TNS port 1526 Server GLX2500.



#### 4) Start a sqlplus session:

Using ORACLE\_HOME and SID from step 1 start a sqlplus session into TEST:

```
export ORACLE_HOME=/u11/app/testdb/10.2.0
```

```
export PATH=$PATH:$ORACLE_HOME/bin
```

```
export ORACLE_SID=TEST
```

```
. oraenv
```

```
sqlplus /nolog
```

```
SQL> connect /as sysdba
```

Or connect as whatever database account you have access to.

Please remember our logon should belong to dba group; otherwise will not be able to logon to Oracle from Unix.

#### 5) connect /as sysdba connections:

Your OS account must be either the database owner or at least must belong to dba group. Otherwise you might get the following error among others:

```
SQL> connect /as sysdba
```

```
ERROR:
```

```
ORA-09925: Unable to create audit trail file
```

```
HP-UX Error: 13: Permission denied
```

```
Additional information: 9925
```

```
ORA-01031: insufficient privileges
```

Fix:

Ask your Unix admin to set your OS account to belong to dba group.

#### 6) If your user does not belong to dba group:

If you get the following errors, it would mean that your OS account does not belong to dba group:

```
/usr/lib/pa20_64/dld.sl: Unable to find library 'libsqlplus.sl'.
```

```
Killed
```

Or this one:

```
/usr/lib/pa20_64/dld.sl: Unable to find library 'libsqlplus.sl'.
```

```
Killed
```

```
SP2-0750: You may need to set ORACLE_HOME to your Oracle software directory
```

Workaround:

This workaround is not recommended since you will expose your Oracle home and make it unsecure. The best way is to ask your Unix admin to set your OS account to belong to dba group. As a temporary work around set permissions:

```
chmod 755 $ORACLE_HOME/bin/sqlplus
```

```
chmod 755 $ORACLE_HOME/lib/libsqlplus.sl
```

Then once you are done, reset them back to 750:

```
chmod 750 $ORACLE_HOME/bin/sqlplus
```

```
chmod 750 $ORACLE_HOME/lib/libsqlplus.sl
```