

Attached you can find the materials for the database link. Note that, the slides provided here is made for a virtual machine as a site. If you follow the lab carefully, you should be able to do it for actual computers.

However, steps that I have followed in the lab is also mentioned below.

Steps:

1. At site:

- 1.1. Turn off the **firewall**.
- 1.2. Get the **IPv4** address (XXX.XX.XX.XXX). Note it down.

2. At server: Ping the site from **RUN**. If you get a successful reply, then everything is perfect.

3. At site:

- 3.1. Go to
`C:\oracle\app\oracle\product\10.2.0\server\NETWORK\ADMIN\`
- 3.2. Find **listener.ora** file.
- 3.3. Open **listener.ora** using **NOTEPAD++** and do the following changes.
- 3.4. Add the following commands to provide additional **SID_LIST** under the **SID_LIST_LISTENER** section (see slide - 6):

```
(SID_DESC =  
  (SID_NAME = XE  
    (ORACLE_HOME = C:\oracle\app\oracle\product\10.2.0\server)  
  )  
)
```

- 3.5. Add the following commands to provide additional **DESCRIPTION_LIST** under the **LISTENER** section (see slide - 6):

```
(ADDRESS = (PROTOCOL = TCP) (HOST = XXX.XX.XX.XXX) (PORT = 1521))
```

- 3.6. Save the changes.
- 3.7. Run **CMD** with the administrative mode.
- 3.8. In **CMD**, run the command `lsnrctl stop`. If you get a successful message then ok (see slide - 7), if error, that means `lsnrctl` was already stopped before, so we have to start it, go to step 3.9.
- 3.9. Again in **CMD**, run the command `lsnrctl start`. If you get a successful message then ok (see slide - 7).

4. At server:

- 4.1. Run your **sqlplus** and log in. Execute the following codes (also provided as conn.sql) to generate a database link with the site:

```
drop database link site_link;  
  
create database link site_link  
connect to username identified by "password" --[[password =  
sqlplus password]]  
using ' (DESCRIPTION =  
  (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP) (HOST  
= XXX.XX.XX.XXX) (PORT = 1521)))  
  (CONNECT_DATA = (SID = XE))  
)' ;
```

- 4.2. Now, **select/ insert/ delete** any data of the site from server using **@site_link**. For example:

```
select * from student@site_link;
```