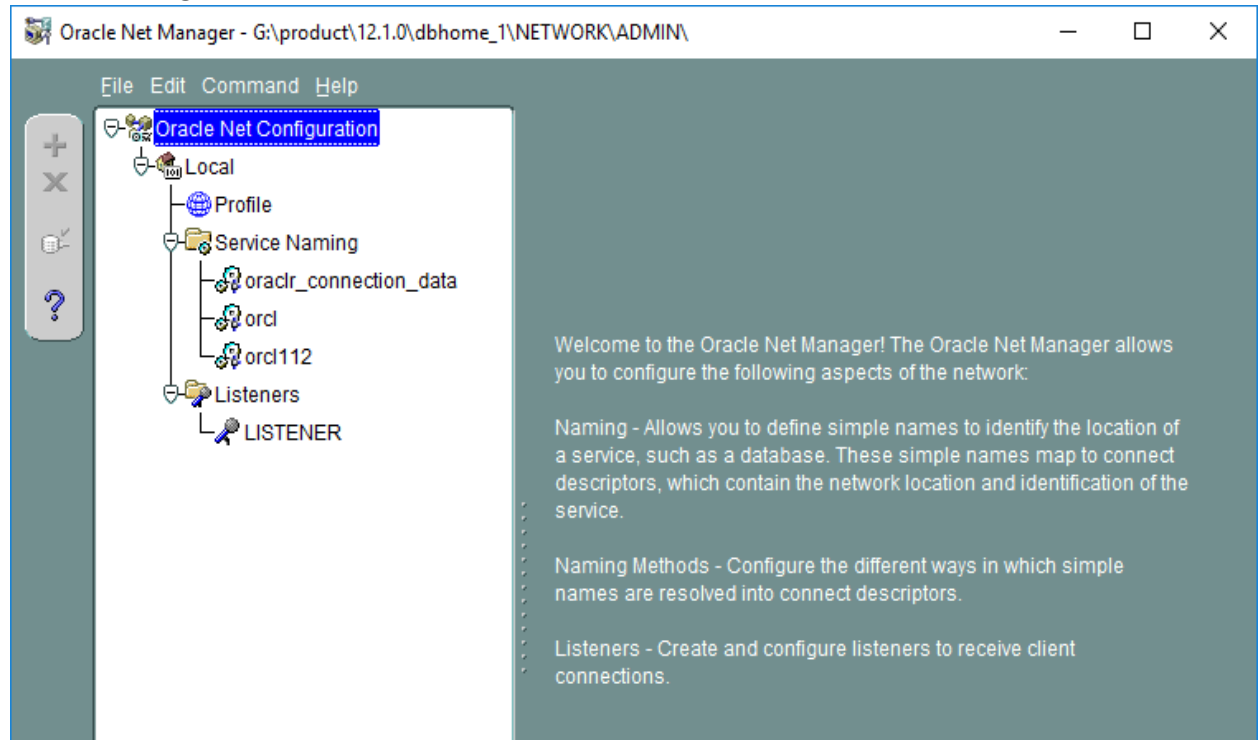


Modul IV

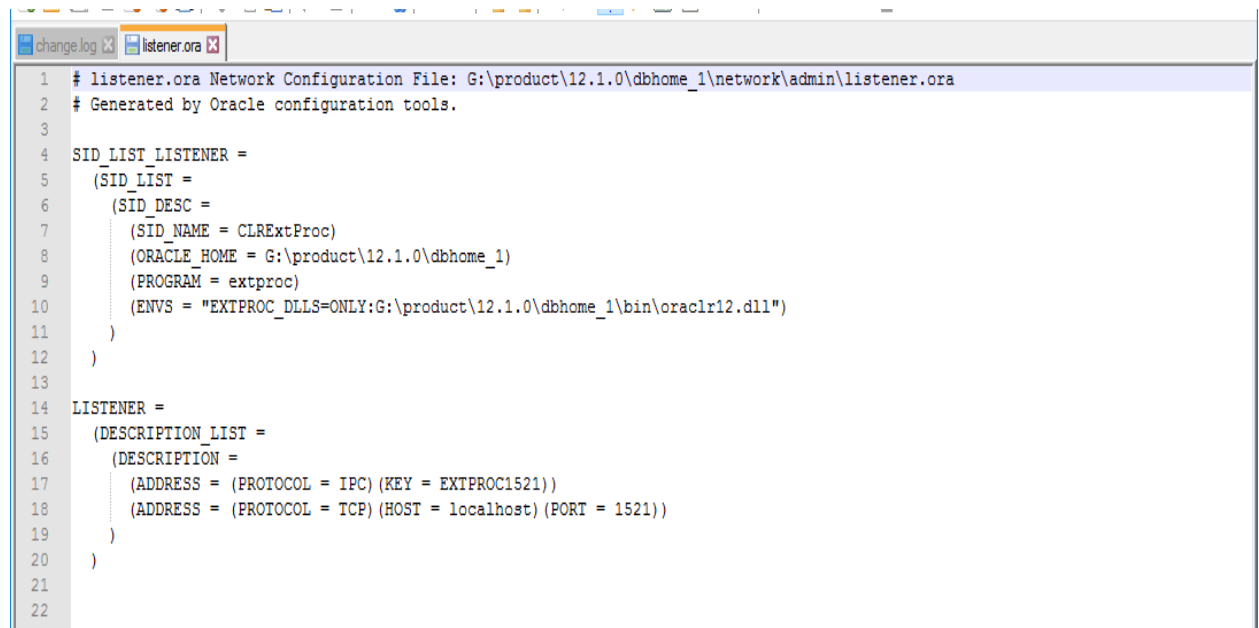
Configuring and Managing the Oracle Network

A. The Net Manager

1. Net Manager Interface



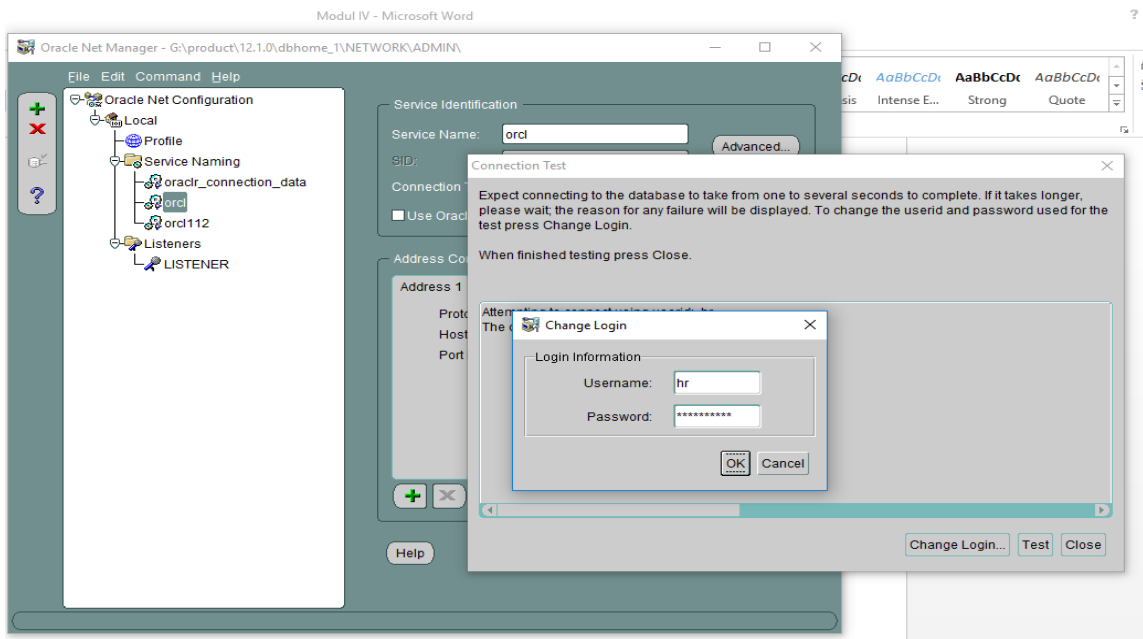
2. Listener.ora Configuration



3. Tnsnames.ora Configuration

```
1 # tnsnames.ora Network Configuration File: G:\product\12.1.0\dbhome_1\network\admin\tnsnames.ora
2 # Generated by Oracle configuration tools.
3
4 LISTENER_ORCL112 =
5   (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))
6
7
8 ORACLE_CONNECTION_DATA =
9   (DESCRIPTION =
10     (ADDRESS_LIST =
11       (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
12     )
13     (CONNECT_DATA =
14       (SID = CLRExtProc)
15       (PRESENTATION = RO)
16     )
17   )
18
19 LISTENER_ORCL =
20   (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))
21
22
23 ORCL =
24   (DESCRIPTION =
25     (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))
26     (CONNECT_DATA =
27       (SERVER = DEDICATED)
28       (SERVICE_NAME = orcl)
29     )
30   )
31
32 ORCL112 =
33   (DESCRIPTION =
34     (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))
35     (CONNECT_DATA =
36       (SERVER = DEDICATED)
37       (SERVICE_NAME = orcl112)
38     )
39   )
40
```

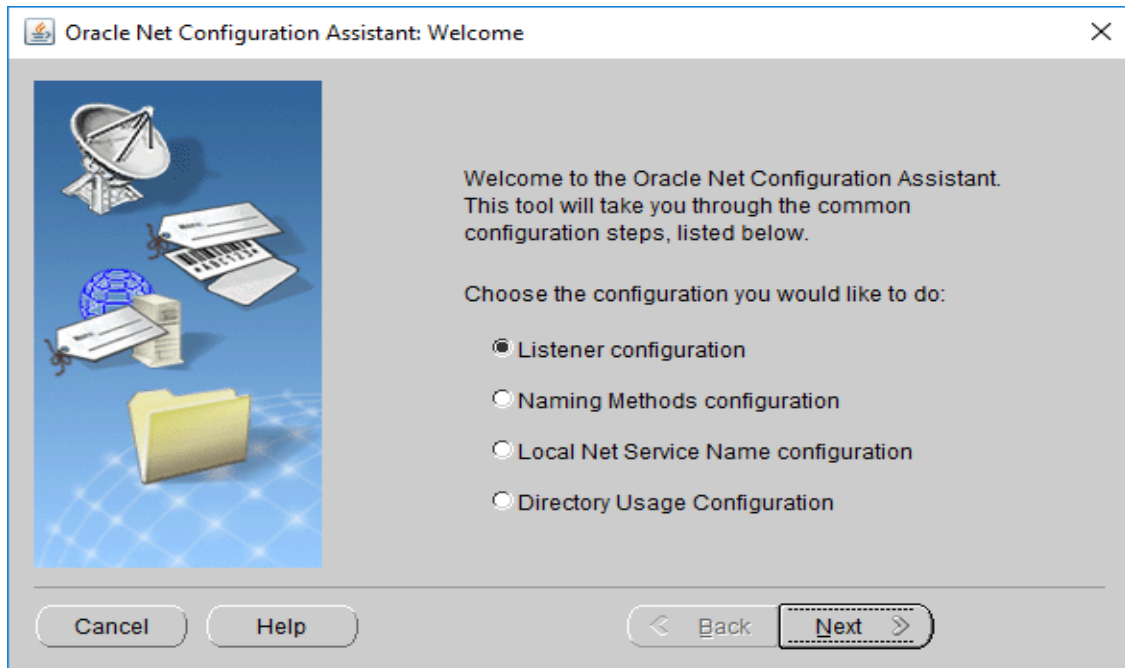
4. Connection Test



```
SQL> conn hr/amikom2017@localhost:1521/orcl;
Connected.
SQL> show user
USER is "HR"
SQL>
```

B. The Net Configuration Assistant

1. Net Configuration Assistant Interface



C. The Listener Control Utility

```
Administrator: Command Prompt - lsnrctl

C:\>lsnrctl

LSNRCTL for 64-bit Windows: Version 12.1.0.1.0 - Production on 09-MAR-2017 03:01:02

Copyright (c) 1991, 2013, Oracle. All rights reserved.

Welcome to LSNRCTL, type "help" for information.

LSNRCTL> status
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC1521)))
STATUS of the LISTENER
-----
Alias                     LISTENER
Version                   TNSLSNR for 64-bit Windows: Version 12.1.0.1.0 - Production
Start Date                06-MAR-2017 21:08:06
Uptime                    2 days 5 hr. 53 min. 2 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Listener Parameter File   G:\product\12.1.0\dbhome_1\network\admin\listener.ora
Listener Log File         G:\product\12.1.0\dbhome_1\log\diag\tnslnsr\Home-PC\listener\alert\log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(PIPENAME=\\.\pipe\EXTPROC1521ipc)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=127.0.0.1)(PORT=1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcps)(HOST=Home-PC)(PORT=5500))(Security=(my_wallet_directory=G:\admin\orcl\xdb_wallet))
(Presentation=HTTP)(Session=RAW))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcps)(HOST=Home-PC)(PORT=5501))(Security=(my_wallet_directory=G:\admin\orcl112\xdb_wallet))
(Presentation=HTTP)(Session=RAW))
Services Summary...
Service "CLRExtProc" has 1 instance(s).
  Instance "CLRExtProc", status UNKNOWN, has 1 handler(s) for this service...
Service "orcl" has 1 instance(s).
  Instance "orcl", status READY, has 1 handler(s) for this service...
Service "orcl112" has 1 instance(s).
  Instance "orcl112", status READY, has 1 handler(s) for this service...
Service "orcl112XDB" has 1 instance(s).
  Instance "orcl112", status READY, has 1 handler(s) for this service...
Service "orclXDB" has 1 instance(s).
```

D. Configure Client-Side Network

1. Easy Connect Name Resolution

```
SQL> conn hr/amikom2017@localhost:1521/orcl;  
Connected.
```

```
SQL> conn system/amikom2017@localhost:1521/orcl112;  
Connected.
```

2. Local Naming Name Resolution

```
# tnsnames.ora Network Configuration File:  
G:\product\12.1.0\dbhome_1\network\admin\tnsnames.ora  
# Generated by Oracle configuration tools.  
  
LISTENER_ORCL112 =  
  (ADDRESS = (PROTOCOL = TCP) (HOST = localhost) (PORT = 1521))  
  
ORACLR_CONNECTION_DATA =  
  (DESCRIPTION =  
    (ADDRESS_LIST =  
      (ADDRESS = (PROTOCOL = IPC) (KEY = EXTPROC1521))  
    )  
    (CONNECT_DATA =  
      (SID = CLRExtProc)  
      (PRESENTATION = RO)  
    )  
  )  
  
LISTENER_ORCL =  
  (ADDRESS = (PROTOCOL = TCP) (HOST = localhost) (PORT = 1521))  
  
ORCL =  
  (DESCRIPTION =  
    (ADDRESS = (PROTOCOL = TCP) (HOST = localhost) (PORT = 1521))  
    (CONNECT_DATA =  
      (SERVER = DEDICATED)  
      (SERVICE_NAME = orcl)  
    )  
  )  
  
ORCL112 =  
  (DESCRIPTION =  
    (ADDRESS = (PROTOCOL = TCP) (HOST = localhost) (PORT = 1521))  
    (CONNECT_DATA =  
      (SERVER = DEDICATED)  
      (SERVICE_NAME = orcl112)  
    )  
  )
```

3. Testing Oracle Net Connectivity

C:\>tnsping orcl

TNS Ping Utility for 64-bit Windows: Version 12.1.0.1.0 - Production on 09-MAR-2017 03:03:45

Copyright (c) 1997, 2013, Oracle. All rights reserved.

Used parameter files:

G:\product\12.1.0\dbhome_1\network\admin\sqlnet.ora

Used TNSNAMES adapter to resolve the alias

Attempting to contact (DESCRIPTION = (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521)) (CONNECT_DATA = (SERVER = DEDICATED) (SERVICE_NAME = orcl)))

OK (60 msec)

C:\>tnsping orcl112

TNS Ping Utility for 64-bit Windows: Version 12.1.0.1.0 - Production on 09-MAR-2017 03:04:19

Copyright (c) 1997, 2013, Oracle. All rights reserved.

Used parameter files:

G:\product\12.1.0\dbhome_1\network\admin\sqlnet.ora

Used TNSNAMES adapter to resolve the alias

Attempting to contact (DESCRIPTION = (ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521)) (CONNECT_DATA = (SERVER = DEDICATED) (SERVICE_NAME = orcl112)))

OK (10 msec)

4. Configure Communication Between Databases

SQL> create database link coba

2 connect to system identified by amikom using 'orcl';

Database link created.

SQL> select * from all_users@coba;

USERNAME

USER_ID CREATED COM O

SCOTT

110 20-FEB-17 NO N

OE

109 20-FEB-17 NO N

PM

106 20-FEB-17 NO N

USERNAME

USER_ID CREATED COM O

```
-----
SH
      105 20-FEB-17 NO  N

IX
      104 20-FEB-17 NO  N

HR
      102 20-FEB-17 NO  N
```

USERNAME

```
      USER_ID CREATED  COM O
-----
BI
      107 20-FEB-17 NO  N

DVF
      99 28-JUN-13 YES Y

APEX_040200
      98 28-JUN-13 YES Y
```

USERNAME

```
      USER_ID CREATED  COM O
-----
APEX_PUBLIC_USER
      95 28-JUN-13 YES Y
```

```

FLOWS_FILES
      94 28-JUN-13 YES Y
```

```

LBACSYS
      92 28-JUN-13 YES Y
```

USERNAME

```
      USER_ID CREATED  COM O
-----
SPATIAL_CSW_ADMIN_USR
      90 28-JUN-13 YES Y
```

```

SPATIAL_WFS_ADMIN_USR
      87 28-JUN-13 YES Y
```

```

MDDATA
      85 28-JUN-13 YES Y
```

USERNAME

```
      USER_ID CREATED  COM O
-----
OLAPSYS
      82 28-JUN-13 YES Y
```

```

DVSYS
      1279990 28-JUN-13 YES Y
```

```

SI_INFORMTN_SCHEMA
      78 28-JUN-13 YES Y
```

USERNAME

```
      USER_ID CREATED  COM O
-----
ORDPLUGINS
      77 28-JUN-13 YES Y
```

ORDDATA

```
76 28-JUN-13 YES Y
ORDSYS
75 28-JUN-13 YES Y
```

USERNAME

```
-----
USER_ID CREATED COM O
-----
CTXSYS
73 28-JUN-13 YES Y
OJMSYS
69 28-JUN-13 YES Y
WMSYS
61 28-JUN-13 YES Y
```

USERNAME

```
-----
USER_ID CREATED COM O
-----
GSMCATUSER
60 28-JUN-13 YES Y
MDSYS
79 28-JUN-13 YES Y
ANONYMOUS
50 28-JUN-13 YES Y
```

USERNAME

```
-----
USER_ID CREATED COM O
-----
XDB
49 28-JUN-13 YES Y
APPOSSYS
48 28-JUN-13 YES Y
DBSNMP
47 28-JUN-13 YES Y
```

USERNAME

```
-----
USER_ID CREATED COM O
-----
ORACLE_OCM
36 28-JUN-13 YES Y
DIP
23 28-JUN-13 YES Y
GSMUSER
22 28-JUN-13 YES Y
```

USERNAME

```
-----
USER_ID CREATED COM O
-----
GSMADMIN_INTERNAL
21 28-JUN-13 YES Y
XS$NULL
2147483638 28-JUN-13 YES Y
OUTLN
13 28-JUN-13 YES Y
```

USERNAME			

USER_ID	CREATED	COM	O

SYSKM			
2147483619	28-JUN-13	YES	Y
SYSDG			
2147483618	28-JUN-13	YES	Y
SYSBACKUP			
2147483617	28-JUN-13	YES	Y

USERNAME			

USER_ID	CREATED	COM	O

SYSTEM			
8	28-JUN-13	YES	Y
AUDSYS			
7	28-JUN-13	YES	Y
SYS			
0	28-JUN-13	YES	Y

42 rows selected.