

OpenAccess and Oracle Generic Connectivity Using OLE DB

Oracle's Generic connectivity is intended for data integration solutions requiring the ad hoc query capability to connect from Oracle8i to non-Oracle database systems. Generic connectivity is enabled by Oracle Heterogeneous Services, allowing you to connect to non-Oracle systems with improved performance and throughput

This article provides a step-by-step guide for setting up and troubleshooting generic connectivity using OLE DB, also called Heterogeneous Services, of Oracle 8.1.6 running on Windows NT 4.0 to access a Database files using the OpenAccess OLE DB Provider.

- 1) Install the data dictionary tables and views for Heterogeneous Services.

Login as SYS or INTERNAL and run caths.sql. This script is located in \$ORACLE_HOME/rdbms/admin.

- 2) Install and test the OpenAccess OLE DB Provider.
- 3) Create a Microsoft Data Link (.udl) file and configure to connect to the target datasource. Test the UDL to verify connectivity to the target datasource
- 4) configure tnsnames.ora. This file is in ORACLE_HOME\NETWORK\ADMIN. Add the following lines to the file:

```
hsoledb =
(DESCRIPTION=
  (ADDRESS=(PROTOCOL=tcp)
    (HOST=<HOSTNAME>)      |<- adjust hostname
    (PORT=1521))          |<- adjust port
  (CONNECT_DATA=(SID=hsoledb))
  (HS=OK)
)
```

Note, a sample file is located in ORACLE_HOME\HS\ADMIN.

- 5) Configuring listener.ora this file is in ORACLE_HOME\NETWORK\ADMIN. Add the following line to the SID_List of the listener.ora and restart the listener afterwards. (After the restart a service handler for hsoledb should exist).

```
(SID_DESC=
  (SID_NAME=hsoledb)
  (ORACLE_HOME=e:\ora816) |<- adjust Oracle_Home directory
  (PROGRAM=hsolefs)
)
```

OR

```
(SID_DESC=
  (SID_NAME=hsoledb)
  (ORACLE_HOME=e:\ora816) |<- adjust Oracle_Home directory
  (PROGRAM=hsolesql)
)
```

Note, a sample file is located in ORACLE_HOME\HS\ADMIN.

- 6) Adjust the configuration file of the gateway. It is located in ORACLE_HOME\HS\ADMIN. The name depends on the SID you use for the Heterogeneous Service. In our sample the listener SID is hsoledb and so the configuration file is inithsoledb.ora.
HS init parameters:

HS_FDS_CONNECT_INFO = "UDLFILE=C:\\temp\\XXX.udl" |<- Data Link location

HS_FDS_TRACE_LEVEL = 0 |<- trace levels are from 0 to 4 (4 is maximum)

HS_FDS_TRACE_FILE_NAME = |<- Name of the trace file.

- 7) Testing the connectivity between Oracle database and the OpenAccess OLE DB Provider. Create a database link to access target database. Be sure to use the appropriate quotes as noted below.

```
SQL>create database link hsoledb connect to "UID" identified by "PWD" using 'hsoledb';
```

OR

```
SQL>create database link hsoledb using 'hsoledb';
```

- 8) To test, run a simple query of a known table on the target database.

```
SQL>select * from emp@hsoledb;
```