



Management and administration of Databases - PRACTICE 6

Remote objects access

Objectives of the practice:

- Learn to create alias of connections
- Learn to create linkage to remote databases
- Learn to combine consultations with local and remote information
-

Necessary theory:

- Theory, lesson 3
- Mini-video 3: TNS names, alias.

Number of meetings: 1

In this practice we are going to learn to gain access to objects that are in schemes different from ours, whether schemes are located in the same database or in different databases. This requires the next steps (it is advisable to watch mini-video 3 previously):

1. Create an alias that make easier the connection to the remote database
2. It is required that the local user was granted with the `CREATE DATABASE LINK` privilege (it is required to get access to outer schemes).
3. The local user must create a link to the remote scheme: use the alias created in step 1 together with the user and key of the scheme to which we want to get connected
4. Finally we will be able to query local and remote objects all together.

1. Login into your local Oracle account. Using the `net manager` create an alias named `alias_micerino` to get access to `micerino`.
 - a. Server: 192.168.37.98
 - b. Protocol TCP-IP
 - c. Port: 1521
 - d. Instance: xe

Check that `tnsnames.ora` now includes `alias_micerino`. Make sure that the alias is defined correctly. For example login into `alias_micerino` by using `SQL Developer`.

2. In your local `xxxxxx` Oracle account, create the script `database_link_micerino.sql`:
 - a. Verify that `xxxxx` has the privilege `CREATE DATABASE LINK` by consulting the `SESSION_PRIVS` table of the data dictionary. In negative case, use your local `dba_user` to grant to `xxxxx` the privilege of creation of links to databases.
 - b. Create a link named `micerino_link` to your remote scheme in `micerino`. You must use the DDL `CREATE DATABASE LINK` with the following configuration:
 - i. Database to get access: `alias_micerino`
 - ii. User and keyword: your user and keyword in `micerino`
 - c. Verify that the link is created correctly by consulting the content of some remote table. For example:

```
select * from CLIENT@micerino_link;
```

3. Finally, create the script `select_micerino.sql` in order to combine both local and remote schemes. For it, follow the next steps:
 - a. Create a table in your local scheme that represents a clients' list "ING_VIP_clients".

```
ING_VIP_CLIENTS
  DNI
  =====
  73505320Z
  73505320B
  43595301F
```

Make sure that these clients are saved in the `clients` table located in `micerino`.

- b. Finally, write a query in order to show the balance that each of these vip clients has in their ING accounts. Take into account that the vip clients' list is located in your local scheme, while the information of the accounts of these clients is located in `micerino`.

VIP_CLIENTS_BALANCE

ID_CARD	NAME	SURNAMES	ACCOUNTS	TOTAL_BALANCE
73505320Z	MARIA	JIMÉNEZ ROTA	2	151606
73505320B	SUSANA	LEDESMA TORRES	3	151035
43595301F	ANA	MARTÍNEZ SÁNCHEZ	1	3209