Management and administration of Databases - PRACTICE 7

Exportation of databases

Targets of the practice:

- Create Directory objects
- Exportation of objects with `Oracle datapump`
- Import of objects with `Oracle datapump`

Necessary theory:

- Beginning of lesson 7 of theory
- Mini-video 4
- Tutorial on copies of logical safety in Oracle 11g from AJPDsoft (http://www.ajpdsoft.com/modules.php?name=News&file=article&sid=560#copiaseguridadlogicaoracle)

Number of meetings: 1

In this practice we are going to import to our own local database db_xxxx from the scheme of ING that we created in micerino.xe. For it, we are going to use the Oracle datapump tool. This tool allows to create logical copies of several database objects such as a only table or a full copy of the database. Also, since it is a logical copy without any detail with regard to OS or physical storage on disk, it makes possible to export our data to other Oracle installations, whenever we get permissions properly. With all this, the steps that we must complete are summed up in the figure 1. All of them must be executed in our virtual machine.

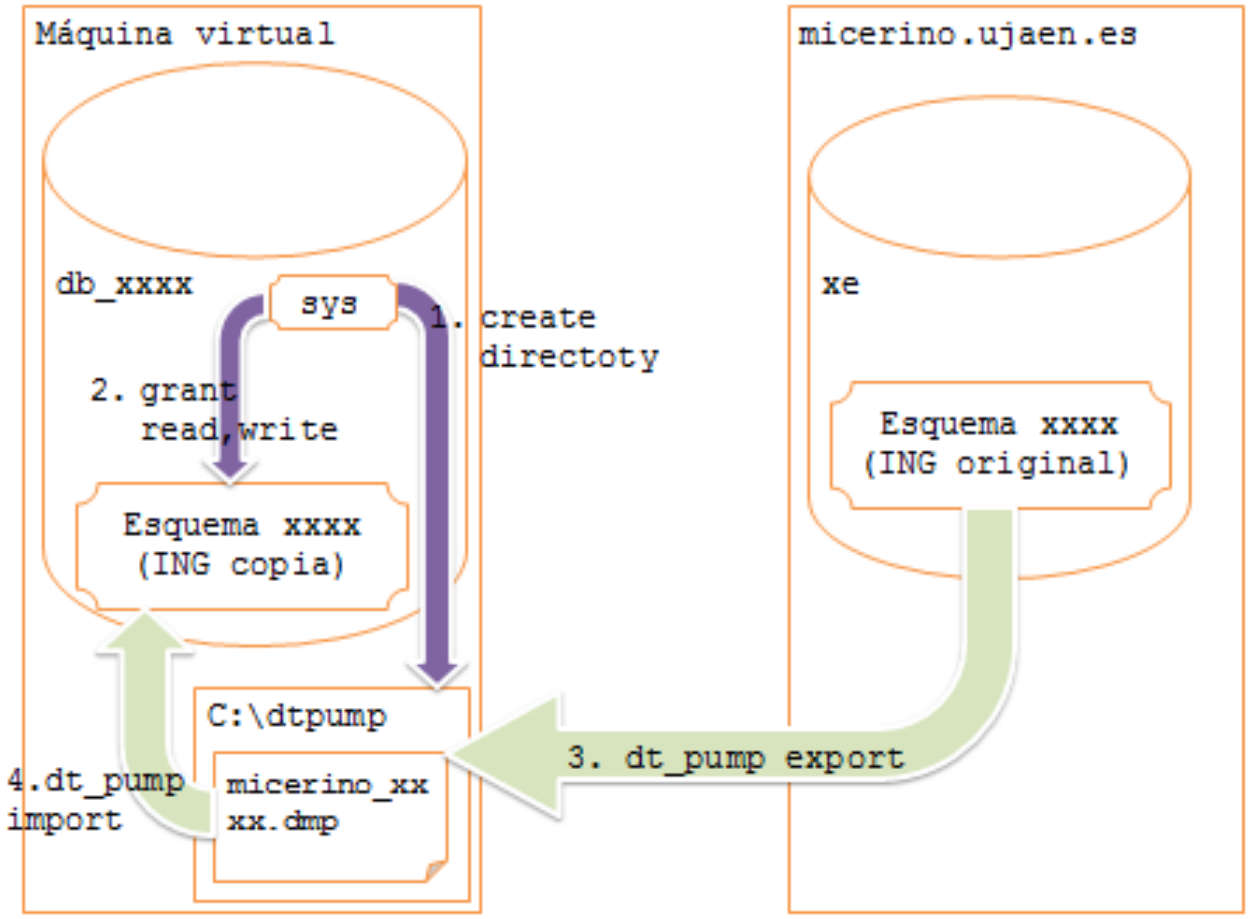

Figure 1 Scheme of the practice. The violet arrow pretends to be processes to be executed as sys. The green arrows are executed by the user gi_xxxx

1. Create a directory where we are going to store the copy. For example c:\dtpump
2. Open SQL Developer and get connected with a user who has privileges to create objects of type directory. For example, the user sys.
3. In the same session, create and execute the dtpump_dir.sql script:
   a. Creates a directory object named dtpump_dir for c:\dtpump.
   b. Provide permissions of reading and writing to gi_xxx on dtpump_dir.
4. Now, open a new session with the user xxxx. From the previous practice, you are supposed to have available the alias alias_micerino and the database link to xe micerino_link. Verify that both of them works. Also it is advisable to have a second alias to the local service from which the copy is going to be created(alias_local).
5. Open a MS-DOS window and execute the logical copy of the scheme xxxx located in xe in micerino by using dt_pump export. For this purpose, write a configuration file micerino_exp.txt

   - userid: gi_xxxx/pwd@alias_local
   - dumpfie: micerino_xxxx.dmp
   - logfile: micerino_xxx.dmp

```
- schemas: gi_xxxx
- directory: dtpump_dir
- network_link: micerino_link
```

6. As soon as the exportation is finisihed, use `dt_pump import` and restore the logical copy in your local `gi_xxxx` scheme. Save the import parameters into `micerino_imp.txt` (there will be the same that in step 5 but we do not need to execute any remote connection)
7. Come back to the the `gi_xxxx` local session in your local machine and verify that the data exportation is fine. For example, try listing the tables:

```
select table_name from user_tables
```