

Oracle Data Pump Export - Unloading Data From the Oracle Database

Summary: In this lab, you will learn how to use the Oracle Data Pump Export utility to unload data (and metadata) from the Oracle database.

Oracle Data Pump Export tool

Oracle Data Pump Export is a built-in utility program for unloading data and metadata into a set of dump files. The dump file set then can be imported by the [Data Pump Import] utility on the same or another Oracle Database system.

The dump file set contains table data, database object metadata, and control information that are written in an Oracle-proprietary, binary format.

The Data Pump Export works on the server only, therefore, it typically deals with directory object that maps to physical directories on the database server. The Export Data Pump tool does not write to the local file system on your client computer.

Notice that Oracle introduced the Data Pump Export utility starting in Oracle 10g. The Data pump Export is a replacement for the old Export utility.

According to Oracle, the new Data Pump Export can be up to 40 times faster. Here are some notable features of the Oracle Data Pump Export tool:

- Compression of output files
- Encryption
- Export via network link
- Parallelism
- Using a subquery to export partial data.
- Renaming tables/schemas/tablespaces

Calling Data Pump Export program

You invoke the Data Pump Export program using the `expdp` command. The behaviors of the program are determined by the parameters specified either on the command line or in a parameter file.

```
expdp
```

Oracle Data Pump Export example

First, create a new directory object `ot_external` that maps to the `c:\export` folder:

```
CREATE DIRECTORY ot_external AS 'C:\export';
```

Second, create a parameter file named `customer.par` with the following contents and place the file in the `C:\export` directory:

```
userid=ot@fenagodb1/Abcd1234
directory=ot_external
dumpfile=customer_exp%U.dmp
logfile=customer_exp.log
```

```
filesize=50K
tables=customers
```









In this parameter file:

- The first line specifies the user and password (`userid`) for connecting to the Oracle database.
- The second line indicates the directory object which maps to the output directory that stores the dump file set.
- The dump files will have names `customer_exp1.dmp` , `customer_exp2.dmp` , ... The sequence number is generated based on the `%U` wildcard.
- The log file will be `customer_exp.log` .
- Each dump file will have a maximum size of 40KB, just for demonstration purposes. If a dump file has a size exceeding 40K, the Data Pump Export tool will create the next dump file. The valid range of the dump files is from 40K to 16TB.
- The Data Pump Export will export only the `customers` table specified by the last line in the parameter file `tables=customers` .

Third, invoke the Data Pump Export program to export the `customers` table to the dump files:

```
expdp parfile=customer.par
```

Here is the dump file set:

Name	Type	Size
 customer.par	PAR File	1 KB
 customer_exp.log	Text Document	2 KB
 CUSTOMER_EXP01.DMP	Dump File	40 KB
 CUSTOMER_EXP02.DMP	Dump File	40 KB
 CUSTOMER_EXP03.DMP	Dump File	40 KB
 CUSTOMER_EXP04.DMP	Dump File	40 KB
 CUSTOMER_EXP05.DMP	Dump File	40 KB
 CUSTOMER_EXP06.DMP	Dump File	28 KB

Now, it is your turn to export all objects in the `OT` schema to the dump files by creating a new parameter file with the following contents:

```
userid=ot@fenagodb1/Abcd1234
directory=ot_external
dumpfile=ot_exp%U.dmp
logfile=ot_exp.log
filesize=50K
schemas=ot
```

Run this command:

```
expdp parfile=ot.par
```

In this lab, you've learned how to use the Oracle Data Pump Export utility program to unload data and metadata from the Oracle database.