Creating depository databases of archive database on Oracle platform

The PL/SQL script Arc2Trezor.sql (located in the installation directory - the **Templates\Oracle** subdirectory) allows the creation of depository databases of archive databases on Oracle platforms.
This manual assumes at least basic knowledge of Oracle management (creating tablespaces, working with **SqlPlus**).
Depository databases can be created with an optional period that may differ from the parameter TrezorPeriod. The script ***Arc2Trezor.sql*** can be run in the **SqlPlus** tool on Windows or Linux platforms. It supports creating depository databases in archive databases or different databases (see the configuration parameter TNS_Service_Name_Trezor). The procedure to use the script ***Arc2Trezor.sql*** is following:

1. Editing the script ***Arc2Trezor.sql*** and definition of parameters.
2. Running the script in **SqlPlus** and starting the saved procedure that will generate the file ***Arc2Trezor_out.sql***.
3. If depository databases are being created in archive database or in different database:
    - execution of the file ***Arc2Trezor_out.sql*** in **SqlPlus** (depository in archive database),
    - execution of the file ***Arc2Trezor_out.sql*** in **SqlPlus**, creation and starting batch file (depository databases in different database).

1. Editing the script Arc2Trezor.sql and definition of parameters

a. Save the script Arc2Trezor.sql on a disk.
b. Modify the following parameters in the script header:

Parameter	Description
TrezorId	The number of depository database that is to be created. Positive integer (1,2,3,...) - later depository means a higher number.
AppName	Application name. The names of depository database tablespaces are to be composed of the application name and the number of depository databases.
TrezorPath	Directory to store datafiles of depository database tablespace (see the configuration parameter TrezorPath). You must also enter the slash at the end. Example: • *C:\ora920\oradata\d2000* (Windows) • */opt/ora9/oradata/D2000/* (Linux)
TrezorCountDatafiles	Number of datafiles in tablespace (see the configuration parameter TrezorCountDatafiles).
TrezorStartDatafileSize	Initial size of datafile (see the configuration parameter TrezorStartDatafileSize).
TrezorMaxDatafileSize	Maximum size of the data file (see the configuration parameter TrezorMaxDatafileSize).
TrezorDatafileSizeStep	Size of datafile increment (see the configuration parameter TrezorDatafileSizeStep).
StartDateUTC, EndDateUTC	Time interval of data exported to the depository database (in UTC time). *Note:* Values in depository database are saved in UTC time, values in Oracle archive usually in UTC + 2 hrs.

If the depository database is in a different database, you must also define the following parameters:

Parameters	Description
TrezorsInArchiveDatabase	Its value must be TRUE.
ArchivDBLogonInfo	Name, password and TNS for logon to archive (*aplikacia_archiv/swx@D2000*, by default).
TrezorDBLogonInfo	Name, password and TNS for logon to the database that will contain depository databases. The database must contain the archive tablespace that is available for the user *aplikacia_archiv* with the password *swx*. That tablespace must contain at least one empty table *Tabver* that belongs to the user *aplikacia*_archiv.
OSTypeIsWindows	TRUE if **SqlPlus** will be run on Windows or FALSE if on Linux. The database may be on an optional platform.

ParallelLoading	The value of TRUE causes the data export from the archive table will be executed in parallel with the import of archive data from a previous archive table. This setting speeds up the export and the import in case the archive and the depository database are on different servers and data export/import is executed on the workstation that is speed enough (mostly yes - the workstation can handle export as well as an import).

2. Running the script in SqlPlus and starting the saved procedure that will generate the file Arc2Trezor_out.sql

1. In the directory where the script *Arc2Trezor.sql* is placed, run **SqlPlus** and log on as the user *application*_archiv:
   sqlplus *aplikacia*_archiv/swx@D2000
2. Run the SQL script that creates the saved procedure *Arc2Trezor*:
   @Arc2Trezor;
3. Set the **SqlPlus** output formatting properties and redirect the output to the file:
   SET SERVEROUTPUT ON
   SET LINE 260
   SPOOL .\Arc2Trezor_out.sql
   Note: For Linux platforms, the last line is **SPOOL ./Arc2Trezor_out.sql**.
4. Run the procedure *Arc2Trezor*:
   EXEC Arc2Trezor;
5. Disable the redirecting of the output to the file:
   SPOOL OFF

3.A. If depository databases are in archive database: execution of the file Arc2Trezor_out.sql in SqlPlus

1. Using a text editor, remove the last line in the file *Arc2Trezor_out.sql:*
   SQL> EXEC Arc2Trezor;
2. In the file *Arc2Trezor_out.sql* remove the last three lines:
   PL/SQL procedure successfully completed.

   SQL> SPOOL OFF
3. Run creating the archive:
   @Arc2Trezor_out;
4. Exit **SqlPlus**:
   exit

3.B: If depository databases are in a different database: execution of part of file, creation and running batch file

1. In the file *Arc2Trezor_out.sql* select the part that begins
   REM / Start of CreateTrezor.sql */*
   and ends
   REM / End of CreateTrezor.sql */*
   and copy it to the file *CreateTrezor.sql*
2. Run **SqlPlus** and log on as the user *application_archiv@depository_database_TNS*:
   sqlplus *aplication*_archiv/swx@*depository_database_TNS*
3. By running the script ***CreateTrezor.sql*** in **SqlPlus** create depository database tablespace and basic depository database tables:
   @CreateTrezor;
4. Exit **SqlPlus**:
   exit
5. In the file *Arc2Trezor_out.sql* select the part that begins
   REM / Start of Exp.bat */*
   and ends
   REM / End of Exp.bat */*
   and copy it to the file*Exp.bat* in the working directory
6. Copy the file d2expdt.sql (located in the installation directory - the **Templates\Oracle** subdirectory) to the work directory.
7. Run
   Exp.bat
   to export data from the archive database into text files on your computer.
   Note: If you do not have enough free space on your disk, enabling the compression of the directory, where the file *Exp.bat* is stored, reduces the required space (text files will be compressed).
   Note: If the parameter *ParallelLoading=TRUE*, the file *Exp.bat* executes export along with import and leaves out the following two steps.
8. In the file, *Arc2Trezor_out.sql* select the part that begins
   REM / Start of Imp.bat */*

and ends
REM / End of Imp.bat */*
and copy it to the file *Imp.bat* in the working directory.

9. Run
Imp.bat
to import the data from the text files into the depository database.
10. Run **SqlPlus** and log on as the user *application*_archiv@*depository_database_TNS*:
sqlplus *aplikacia*_archiv/swx@*depository_database_TNS*
11. Perform two commands ALTER TABLESPACE ... placed at the end of the file *Arc2Trezor_out.sql* below the line
REM / End of Imp.bat */*
and exit **SqlPlus**
exit

The procedure, described above, must be used for each new depository database. If you first want to reconfigure the archive to create a depository database automatically and then create depository databases according to the method described above, it is necessary for the D2000 Archiv process to start creating depository databases not from the number of 1 but from e.g. 13 (if you want to create depository databases 1...12 manually according to the method above). To do that, insert the line containing the number of the last depository database you want to create manually into the table TREZORS in the database that will contain the depository databases:
*INSERT INTO TREZORS(ID,TIME_FROM,TIME_TO,STATUS,DATAFILES) VALUES(**12**,SYSDATE,SYSDATE,40,1)*
After the process **D2000 Archiv** is started, it begins to create the depository databases numbered from 13.
After you create the depository databases 1...12 manually, you must delete the inserted line to avoid creating lines with duplicate ID.

Related pages:

Depository databases