

Jedox Database Files

Jedox databases consist of 4 different file types: .bin, .csv, .log, and .archive files. The .bin and .csv files contain the data last saved. Changes from the current session—that is, since the OLAP Server was last started—are registered in the log files, also called “journals”. When stopping Jedox OLAP Server, the database state is transferred from memory to the .bin and .csv files (a so-called “commit”). After that, the contents from the .log files are copied into the .archive files. In the case of an unexpected process kill or crash, the server will recover data from the .log files during startup. Please note that this recovery will usually take more time than committing the same data on shutdown would have taken.

If your database takes up a lot of hard-disk space on the server, you can delete the .archive files from the database directory after stopping the Jedox server. After restarting the Jedox server, the needed .archive files will be created anew.

Before deleting these files from your database directory, we recommend that you always complete a backup.

Comma Separated Values (CSV)

In the database.csv, the structure of the Jedox database is defined. In this file, cubes, dimensions, elements, and their properties are set.

Each cube that exists in database.csv (entries in section [CUBES]) has in turn its own CSV file, in which structure and cube values are

specified further. These files contain the currently saved Jedox values.

Each Jedox cube also has a unique CSV file that contains the description of the rules in the cube (if any).

Below is an excerpt from the Jedox Demo database with the following entries in the file database.csv in section [CUBES]:

```
0;"#_GROUP_CUBE_DATA";0;1;1;0;0;
1;"#_Months";3;2;3;0;0;
2;"#_GROUP_DIMENSION_DATA_Months";0;2;1;0;0;
3;"#_Years";5;4;3;0;0;
4;"#_GROUP_DIMENSION_DATA_Years";0;4;1;0;0;
5;"#_Regions";7;6;3;0;0;
6;"#_GROUP_DIMENSION_DATA_Regions";0;6;1;0;0;
7;"#_Datatypes";9;8;3;0;0;
8;"#_GROUP_DIMENSION_DATA_Datatypes";0;8;1;0;0;
9;"#_Measures";11;10;3;0;0;
10;"#_GROUP_DIMENSION_DATA_Measures";0;10;1;0;0;
11;"#_Products";13;12;3;0;0;
12;"#_GROUP_DIMENSION_DATA_Products";0;12;1;0;0;
13;"Sales";12;6;2;4;8;10;2;1;1;
14;"#_#_CUBE_";14;1;3;0;0;
```

There is another csv file for each entry. The individual cubes are described briefly below:

Cube

Description

0;"#_GROUP_CUBE_DATA";0;1;1;0;0;	Contains the dimension cubes and groups, and the rights of the groups to the cubes.
1;"#_Months";3;2;3;0;0; 3;"#_Years";5;4;3;0;0; 5;"#_Regions";7;6;3;0;0; 7;"#_Datatypes";9;8;3;0;0; 9;"#_Measures";11;10;3;0;0; 11;"#_Products";13;12;3;0;0;	These six cubes contain the attribute cube for each dimension.
2;"#_GROUP_DIMENSION_DATA_Months";0;2;1;0;0; 4;"#_GROUP_DIMENSION_DATA_Years";0;4;1;0;0; 6;"#_GROUP_DIMENSION_DATA_Regions";0;6;1;0;0; 8;"#_GROUP_DIMENSION_DATA_Datatypes";0;8;1;0;0; 10;"#_GROUP_DIMENSION_DATA_Measures";0;10;1;0;0; 12;"#_GROUP_DIMENSION_DATA_Products";0;12;1;0;0;	These cubes contain the user group and the dimensions. The rights for each element for each group are registered here.
13;"Sales";12;6;2;4;8;10;2;1;1;	Contains the data for the cube "Sales".
14;"#_#_CUBE_";14;1;3;0;0;	This cube contains the data for the attribute cube for each cube dimension.

Binary files (BIN)

Each cube has a BIN file that contains the same data as the corresponding CSV file. However, the information is not stored as text but as binary data. Consequently, BIN files are usually smaller in size. More importantly, loading and saving is much faster than for the

CSV files.

Note: the BIN files will completely replace the CSV files for cubes. At the moment, CSV files are still kept for easier data recovery and backward compatibility with earlier versions. If you do not wish to use CSV files for cubes (e.g. to reduce space on disk and server shutdown time), add the line “no-csv-save” to your palo.ini file. **The option “no-csv-save” should not be used in production environments!**

Log files

A log file is created for each cube defined in Jedox. All values entered in the Jedox OLAP Server are protocolled in this file. If the database is saved, the values stored here are copied to the respective .archive file. If the OLAP Server wasn't shutdown properly, the .log files are used for data recovery as described above. Note that log files contain OLAP Server version information, and the OLAP Server will only process log files of the same version. If version of a log file is significantly lower than the current OLAP Server version, it's possible that the database can't be loaded. To avoid that, it's recommended to either save all databases explicitly with the OLAP Server API command or, alternatively, restart the OLAP Server once before applying any Jedox updates.

Archive files

All changes are written into the .archive files. Both value changes as well as structural changes are logged together with the name of the



user. However, if a database becomes corrupted, there is no generic possibility to recover a database exclusively from .archive files. The files can only be used for tracing changes.

Archive files may be deleted regularly (after a backup) to keep the data quantity in the server system low. A restart of JedoxSuiteMolapService will create these files anew.
