Instructions for installing and configuring PxWin

This document describes how to install and configure PxWin.

Preparations

You can download PxWin from:

https://www.scb.se/en/services/statistical-programs-for-px-files/install-px-win/

What you get when downloading PxWin is a zip file.

Notice!

Some users have experienced problems with security issues after downloading the PxWin zip file, resulting in that they cannot run the PxWin application. To avoid this problem you should verify that the zip-file is not blocked before you unzip it.

You unblock the file by right-clicking the zip-file, select Properties and then click Unblock:



Installation

Unzip PxWin.zip to a folder on your computer or on an application server. After installing PxWin you can configure the software for your particular needs.



Configuration

There are a number of settings that can be configured for PxWin.

Settings can be made in the following files:

PxWin.exe.config

Settings for PxWin is edited in the PxWin.exe.config file

which is located in the folder where PxWin is installed.

The file contains the following settings:

Language- and aggregation files

The location of language- and aggregation files are edited in the following section:

```
<pcaxis>
    <paxiom>
          <localization filespath=".\Resources\Languages" basefile="pxlang"/>
          <grouping filespath=".\Resources\Aggregations"/>
     </paxiom>
</pcaxis>
```

- "localization filespath" is the folder where you have placed the PxWin language files (for example pxlang.xml)
- "grouping filespath" is the folder where you have placed your aggregation files (.vs and .agg)

Application settings

The application settings are located in the appSettings section of the file:

```
<appSettings>
</appSettings>
```

The following application settings are available:

dbconfigFile - Configuration file for CNMM databases If you want to open tables from CNMM databases in PxWin you

(SqlDb.config) in the dbconfigFile setting. For example:

need to specify the path to the CNMM database configuration file

```
<add key="dbconfigFile" value="\\program\PxWin\Resources\DbConfig\SqlDb.Config"/>
                    _____
                    databasesConfigFile - Configuration file for predefined databases
                    If you want to use predefined databases in PxWin you need to
                    specify the path to the configuration file for these databases in the
                    databasesConfigFile setting. For example:
<add key="databasesConfigFile" value="\\program\PxWin\Resources\DbConfig\databases.config"/>
                    For more information about predefined databases see section
                    databases.config below.
                    defaultLanguage - The default language in PxWin
                    This setting specifies which language that will be selected by default
                    when PxWin is started. If for example Swedish shall be the default
                    language:
                    <add key="defaultLanguage" value="sv"/>
                    batchApplicationPath - Path to the PX-Batch program
                    If you want to create .BAT files for use with the PX-Batch program
                    you need to specify the path to the PX-Batch program in the
                    batchApplicationPath setting. For example:
          <add key="batchApplicationPath" value="\\program\PCAxis\PCAxis.Batch.exe"/>
                    maxCells - Maximum number of cells
                    It is possible to limit the number of cells that can be selected for a
                    table in the maxCells setting. For example:
                    <add key="maxCells" value="10000000"/>
                    MaxCellsInMemory - Maximum number of cells to be held in memory
```

By default PxWin stores the table data in memory. If you make a very large selection for a table this can lead to that a lot of memory will be allocated on the computer to hold that table, which can be a problem.

It is possible to limit the number of cells that will be held for a table in memory in the *MaxCellsInMemory* setting. For example:

```
<add key="MaxCellsInMemory" value="2000000"/>
```

In the example the data table will be held in memory on the computer if the data table contains no more than 2000000 cells. If the table selection is larger than 2000000 cells the table data will be stored in a temporary file on computer instead.

If the MaxCellsInMemory setting is not defined, table data will always be stored in memory.

Note: Performance will be much lower when table data is stored in a temporary file compared to when it is stored in memory.

databaseMenuCacheEnabled - If database menus shall be cached or not

Instead of loading the database menu every time the database is accessed in PxWin it is possible to cache the database menus.

If database menu cache is switched on the data If database menu cache is switched on the database menus will be saved to cache files on the client machine under the user's profile.

To switch on database menu cache the databaseMenuCacheEnabled shall be set to True:

<add key="databaseMenuCacheEnabled" value="True"/>

To switch the cache off, set the value to False.

databaseMenuCacheRefreshInterval - Interval for automatic refresh of database menu cache files (in hours)

If database menu cache is switched on, this setting defines the interval for when a cache files shall be automatically refreshed. The interval is defined in number of hours from when the cache file was first created. For example:

<add key="databaseMenuCacheRefreshInterval" value="48"/>

globalFilter – Folder for shared filter files

In PxWin you can create filter files which makes it easier to select values for your variables. These filter files are private in that sense that they are stored locally on the computer under the user profile. With the globalFilter setting you may also define a folder for shared filters that may be used by anyone. For example:

```
<add key="globalFilter"</pre>
value="\\program\PxWin\Resources\sharedFilters"/>
```

strictAggregationCheck – If strict check shall be made for aggregations

This setting is the same setting that exists in PxWeb.

According to the documentation of aggregation files (.agg) these files are supposed to contain information about which valueset they belong to.

In detail this means that the [Aggreg] section of the aggregation file shall contain the following line:

Valueset = The name of the valueset it belongs to.

When aggregations are loaded in PxWin this condition is checked. If no valueset is specified in the aggregation file the aggregations within the file are not added to the system.

In older versions of PxWeb this condition was not checked and many users of PxWeb have created aggregation files that do not specify which valueset they belong to. For backward compatibility this setting has been introduced.

If this setting is set to Yes: The valueset check will be performed

If this setting is set to No: The valueset check will not be performed

```
<add key="strictAggregationCheck" value="True"/>
```

roundingRule – The rounding roule that should be used for data points in PxWin

Defines which type of rounding rule shall be used when displaying decimal values. There are two options:

- Bankers rounding When a number is halfway between two others, it is rounded toward the nearest even number
- Round up When a number is halfway between two others, it is rounded toward the nearest number that is away from zero

```
<add key="roundingRule" value="BankersRounding"/>
or
<add key="roundingRule" value="RoundUp"/>
```

Rounding examples:

Original number	Round up	Bankers rounding
3.5	4	4
2.8	3	3
2.5	3	2
2.1	2	2
-2.1	-2	-2
-2.5	-3	-2
-2.8	-3	-3
-3.5	-4	-4

Databases.config

It is possible to configure a number of predefined databases which will be displayed in the "Open table" dialog.

If you want to use predefined databases in PxWin do like this:

- Using a text editor (like Notepad) create a file called databases.config and save it on your computer or on a server
- 2. In the PxWin.exe.config file: Specify the path to databases.config in the databasesConfigFile setting
- 3. Edit the databases.config file with information about your databases (see instructions for this below)

This is an example of how the databases.config file might look like:

```
<?xml version="1.0" encoding="utf-8" ?>
<databases>
  <database id="mypxdb" type="PX" name="My PX database">
    <params>
      <path>\\scb\program\\PxWin\Resources\Databases\A Folkhalsodata</path>
   </params>
  </database>
  <database id="ssd" type="CNMM" name="SSD"></database>
  <database id="ssdprod" type="CNMM" name="SSD PROD">
    <params>
      <authorizationMethod> PX.Ssd.Security.SsdProductionWindowsAuthorization, PX.Ssd</authorizationMethod>
    </params>
  </database>
  <database id="fi_api" type="PXAPI" name="Finland API">
   <params>
      <baseUrl>http://pxnet2.stat.fi/PXWeb/api/v1/{0}/StatFin/baseUrl>
      <SupportedLanguages>fi,sv,en</SupportedLanguages>
    </params>
  </database>
</databases>
```

Note the xml-header in the file:

```
<?xml version="1.0" encoding="utf-8" ?>
```

If you have special characters in the names of your databases you may need to change the specified encoding in the header. If you for example have a database name containing the "a" character the xml header shall look like this:

<?xml version="1.0" encoding="ISO-8859-1" ?>

General

All databases must have:

- Unique id
- Type (PX, CNMM or PXAPI)
- Name

Predefined PX-file database

The path parameter holds the path to the database. The folder defined by the path parameter is supposed to contain the file Menu.xml that is created in the Administration tool of PxWeb.

Predefined CNMM database

The id of the database is supposed to be the same id that is defined for the database in the SqlDb.config file.

Database with access control

The *authorizationMethod* parameter defines the dll (PX.Ssd.dll in the example) and the class (PX.Ssd.Security.SsdProductionAuthorization in the example) within the dll that performs the access control. The class that performs the access control shall implement the PX. Security. IAuthorization interface.

Predefined PxApi database

PxApi databases need to have two parameters specified:

<u>baseUrl</u>

This is the root URL to the PxAPI database. The baseUrl parameter must contain a placeholder {0} for where the language-part of the URL is located. For example:

<baseUrl>http://pxnet2.stat.fi/PXWeb/api/v1/{0}/StatFin/baseUrl>

supportedLanguages

This is a comma-separated list of languages that are supported by the PxAPI database. For example if Finish, Swedish and English are supported: <SupportedLanguages>fi,sv,en</SupportedLanguages>

PCAxis.Batch.exe.config

This file contains configurations for the Batch program. The settings are very similar to the settings for PxWin. See the PxWin.exe.config section above for description of these settings.

Special considerations

The PCAxis.Batch.exe program has dependencies to PxWin and needs to be installed in the same folder as PxWin.exe.

Plugins

PxWin can be extended by the use of plugins. To use a plugin, copy the plugin dll:s to the plugins folder of PxWin. After the dll:s have been added the plugin functionality can be used from inside PxWin.

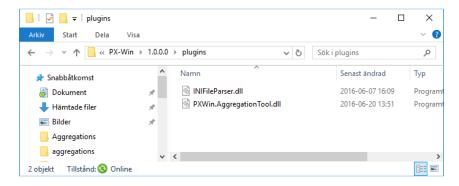
Aggregation tool

This is a plugin for PxWin which you can use to create and edit aggregation files (.vs and .agg).

The Aggregation tool consists of two files:

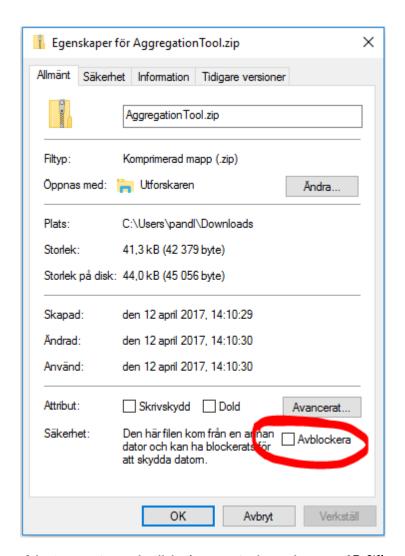
- PXWin.AggregationTool.dll
- INIFileParser.dll

If you would like to use the aggregation tool in PxWin copy the dll:s of the aggregation tool to the plugins folder of PxWin:



Notice!

Some users have experienced problems with the Aggregation tool don't appearing in the Tools menu of PxWin after they have downloaded the Aggregation tool zip-file from the PxWin web page. If you get this problem verify that the zip-file is not blocked before you unzip it. You unblock the file by right-clicking the zip-file, select Properties and then click Unblock:



If the Aggregation tool still don't appear in the Tools menu of PxWin and you run your PxWin program from a network share it might be a .Net security issue. If the network share is not fully trusted it will fail to load the Aggregation tool.

Api Client

With the the Api Client it possible to connect to any server running the PxApi. You can browse the databases, select variables and values, display data on screen and work with the data inside PxWin in the exact same way as you work with your local databases. The only difference is that everything is made though calls to the PxApi.

The Api Client consists of two files:

- PX.Api.Client.dll
- Newtonsoft.Json.dll

To make use of the API functionality, download these two files and copy them to the plugins folder of PxWin.