Watchdog Documentation V1.0

Watchdog32

Watchdog is a single panel application that is used to load data from the Sony EX Data Acquisition System. The module monitors a user specified directory for the presence of XMR (Freq domain) and XMX(Time domain) data files. If new files are detected the user has the option to load the file automatically or to be prompted. The Monitoring interval, spectral types and max file load size can be configured by the user.

NOTE : XMX import is not implemented in this version.

The module dialog has the following elements:

Watchdog Run Status

The status of the Watchog will be indicated at the top of the panel by either a flashing green light or a static red light. The Watchdog can be started of stopped by clicking on the button at the bottom left of the panel. When the Watchdog is running the "Options" button will be disabled.

Watchdog Runtime information

The Watchdog will report any files it has processed in the large text area. This text area will present the last 100 messages.

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PROCESSING OPTIONS

Click on the "Options…" button to show the following dialog.
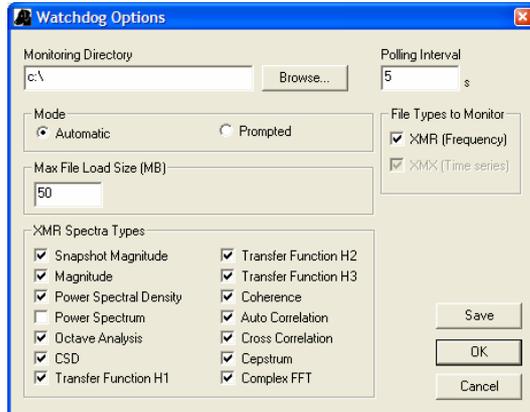
"**Monitoring Directory**" allows the user to set the directory where the Watchdog module will scan for XMR and XMX files. If the directory does not exist then the user will be prompted to create the directory:
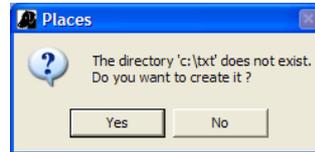
The user can also browse their PC for an existing directory by clicking on the "Browse" button.

"**Polling Interval**" allows the user to set the frequency of the watchdog. The time must be entered in seconds and must be greater than 1s.

"**Max File Load Size (MB)**" allows the user to set the maximum amount of data that will be loaded from one file. This limit can be any value above 1MB and should be set according to the resources available on your machine. The value relates to the data loaded into "PCScanIV Post" and will account for any spectral options selected and the events loaded by the Watchdog module.

"**XMR Spectral Types**" allows the user to set which spectral data will be extracted from the XMR file. This selection will be applied to either Automatic or Prompted modes.

"**File Types to Monitor**". Currently only XMR can be selected. XMX will be implemented in the next release.

Click on **"Save"** to store the settings so that they will be reused when the Watchdog is reloaded. Click on **OK** to only use the settings for the current session. Click on **"Cancel"** to abort your changes.

SONY EX AND PCSCANIV CONFIGURATION

In order for the Watchdog module to correctly identify completed files it is important that the XMR and XMX rename option in the PCScanIV software is **disabled**. All files should have the Sony EX data format eg

```
140605-121826_1.xmr
```

In prompted mode the user will be given the opportunity to rename the XMR, XMX file as part of the Watchdog load process.

EXAMPLE PROCESS USING PROMPTED MODE

1. Configure the Watchdog to monitor the "C:\sonyex" folder
2. Set the Mode to "Prompted"
3. Select all spectral types
4. Set the polling interval to 5s
5. Ensure the "XMR" options is checked.
6. Click on OK to confirm the options.
7. Start the Watchdog module
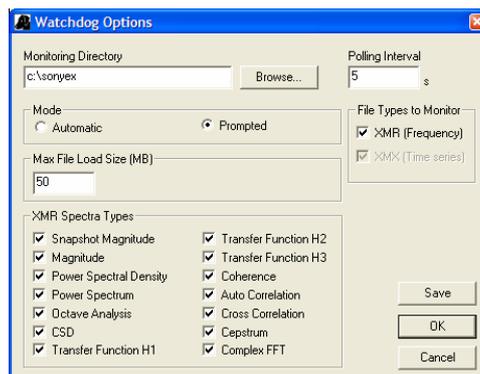
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The watchdog will now monitor the C:\SONYEX folder waiting for completed XMR files.

When a file is detected the load process will start:

1. In prompted mode the user will be asked if they wish to rename the source XMR file. The current name will be displayed by default and can be accepted by clicking on OK.

2. Once the name has been accepted the user will be asked to choose which events they wish to load. *This dialog will only be displayed if more than one event exists in the file.*
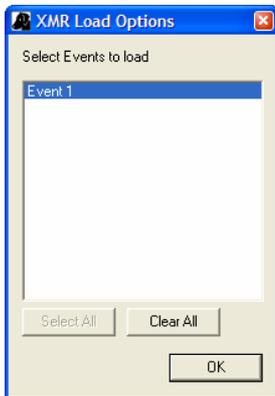
3. The data will now be loaded and a series of matrix objects will be created. The number of matrices created will depend upon the Spectral data types enabled in the options dialog and the number of events selected.
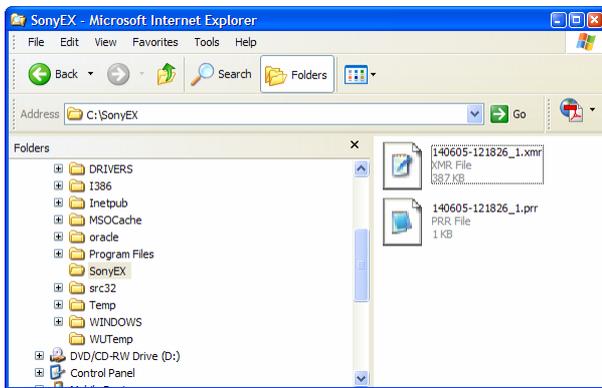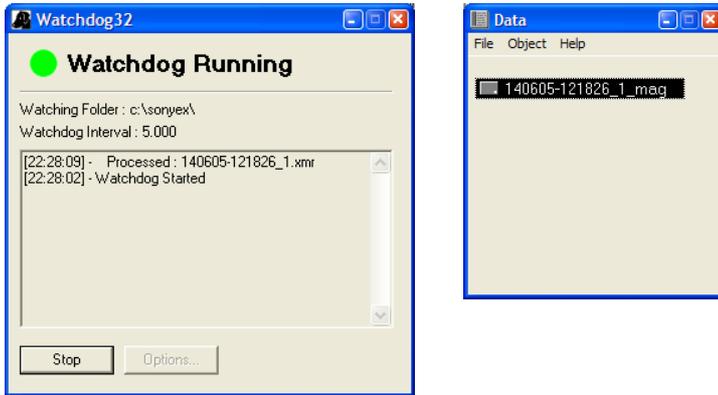
Creation of .prr and .prx files

When an XMR or XMX file is successfully processed the Watchdog module will create a new file in the watchdog directory that has the same name as the source XMR or XMX file. The extension will be either .prr or .prx. The presence of a PRR or PRX file is used to tell the Watchdog module that it has previously loaded the corresponding XMR or XMX file and that it should now be ignored.

In the above screen shot you can see that the XMR file has a corresponding PRR file.

```
140605-121826_1.xmr                    Source XMR file
140605-121826_1.prr                    Watchdog generated file
```

Deleting the .prr file relating the an XMR file will cause the corresponding XMR file to be processed by the Watchdog module at the next polling interval.

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