



Presentation Workspace Extension

for Tobii Eye Trackers

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Abstract: Documentation for the usage of the Presentation workspace extension for Tobii eye trackers.

DOCUMENT-HISTORY

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1 Prerequisites

The extension uses the *ClearView Trigger Low Level API* to communicate with ClearView and to start and stop recordings and send log events and generic events. See the ClearView manual for more information.

For the installation of the extension to work you will need the cv.dll from the Tobii Software Development Kit (SDK). The file is distributed with the extension.

The extension was developed and tested using Presentation V11.1 Build 08.17.07 and ClearView 2.7.0. For earlier versions of Presentation the extension should work as well. The dialog for the extension manager looks a little bit different. For earlier, and probably later, versions of ClearView the extension should work as well.

2 Installation

Uncompress the files into the directory you want the extension to reside,

e.g. C:\Presentation\Extensions\TobiiWS

To use the eye tracker extension two registration steps are necessary. First you need to register the extension DLL in the Windows registry. As a second step you have to register the extension within Presentation using the Extension Manager.

2.1 Register Extension DLL

Open a command shell and change into the directory you chose in the first step, e.g.

```
cd C:\Presentation\Extension\TobiiWS
```

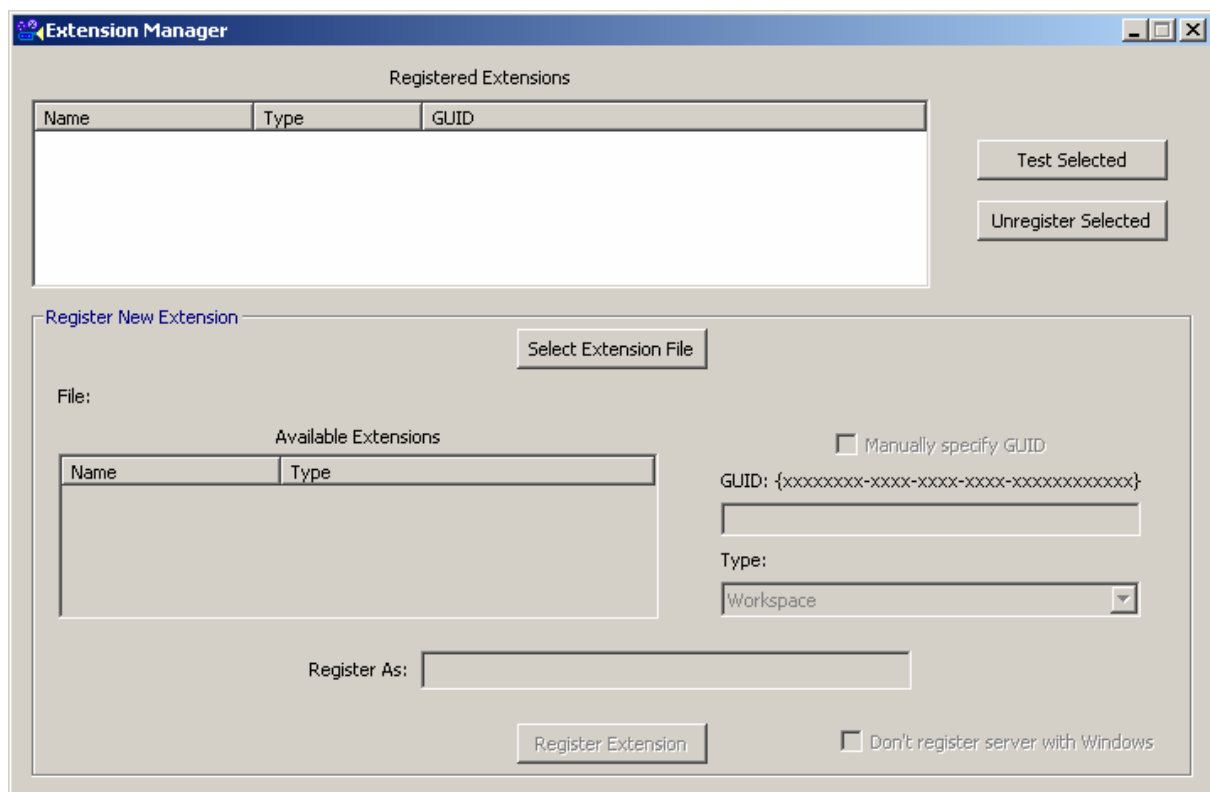
Registration of the extension is done by the following command:

```
regsvr32 /s /c TobiiWSExtension.dll
```

The option /s means “silent” (no dialog boxes are shown). The option /c means “console” and enables console output.

2.2 Register Extension within Presentation

Start Presentation and open the Extension Manager (Tools -> Extension Manager). The following dialog will appear:



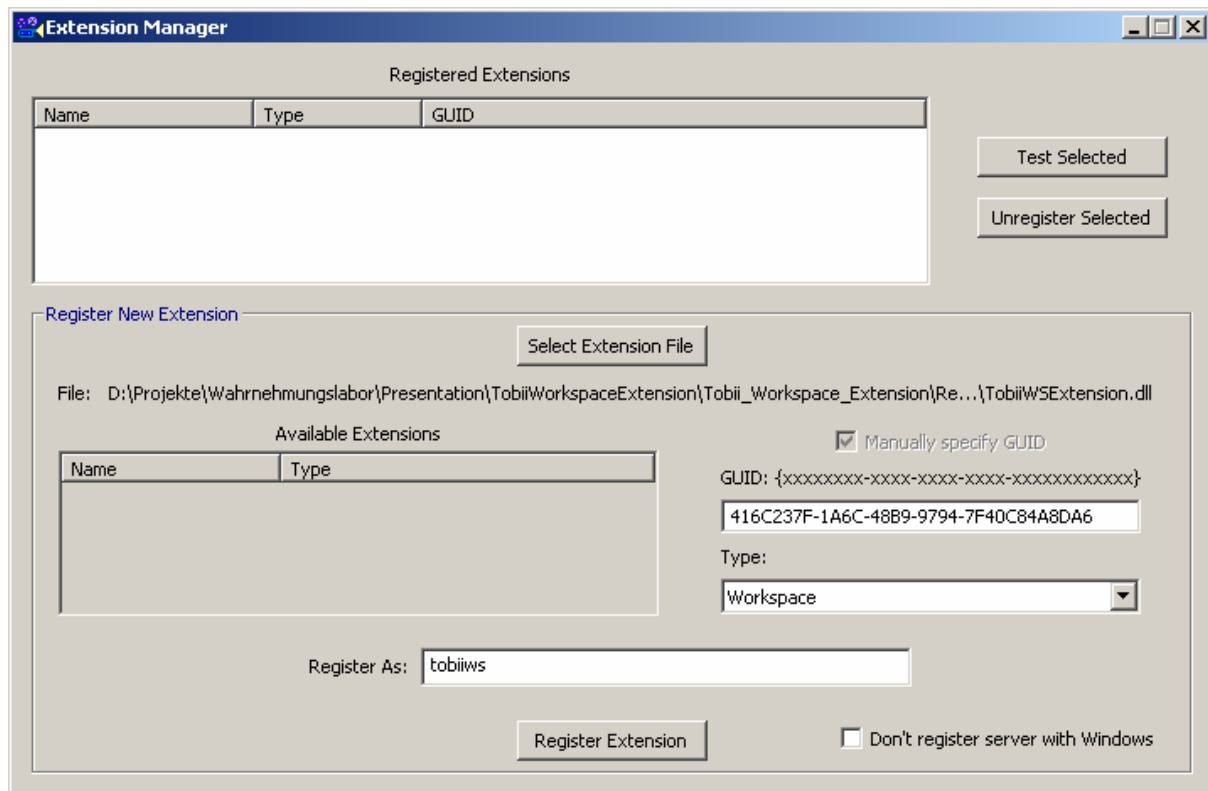
First you have to select the Extension File by clicking *Select Extension File*. A file dialog will appear. Browse to the directory you chose and select the file *TobiiExtension.dll*. Presentation will show the following warning:



Click OK. You now have to register the extension manually. This is done by entering a GUID, selecting Workspace as Type and choosing a name (Register As) for the extension that will be used within Presentation scripts.

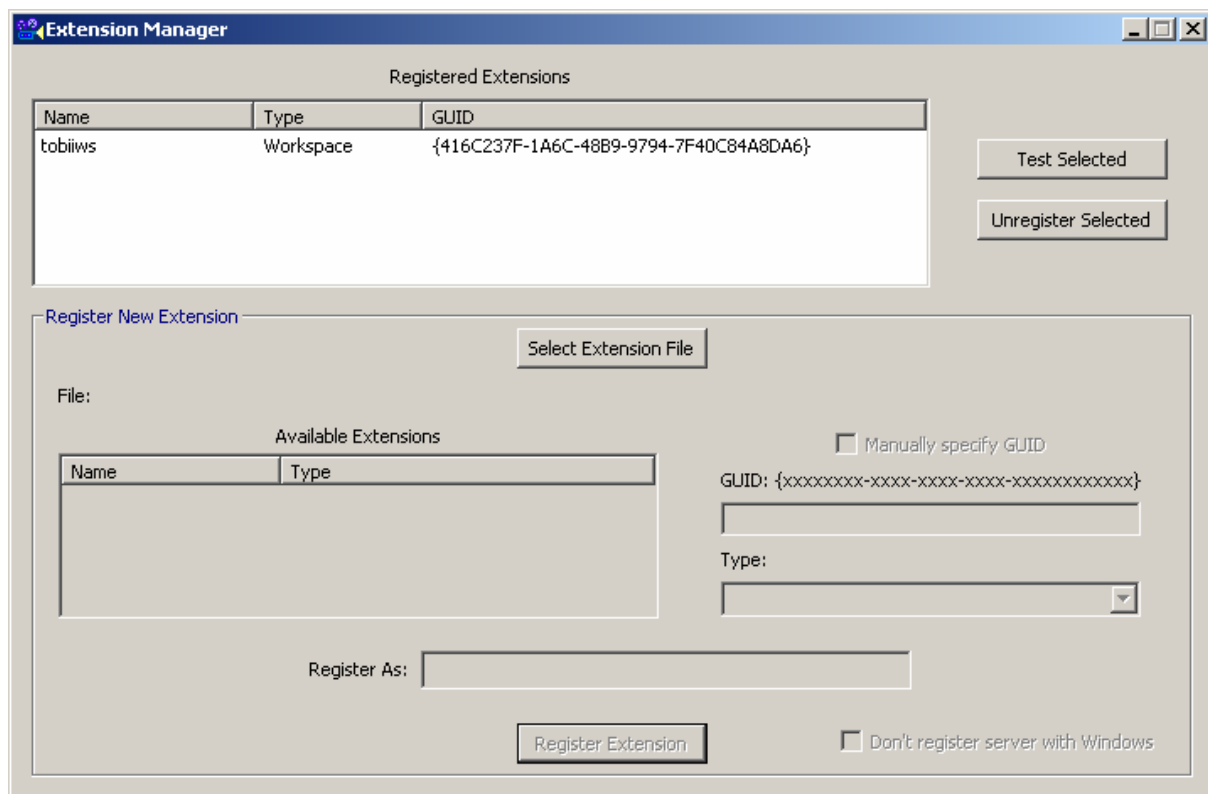
GUID:

416C237F-1A6C-48B9-9794-7F40C84A8DA6



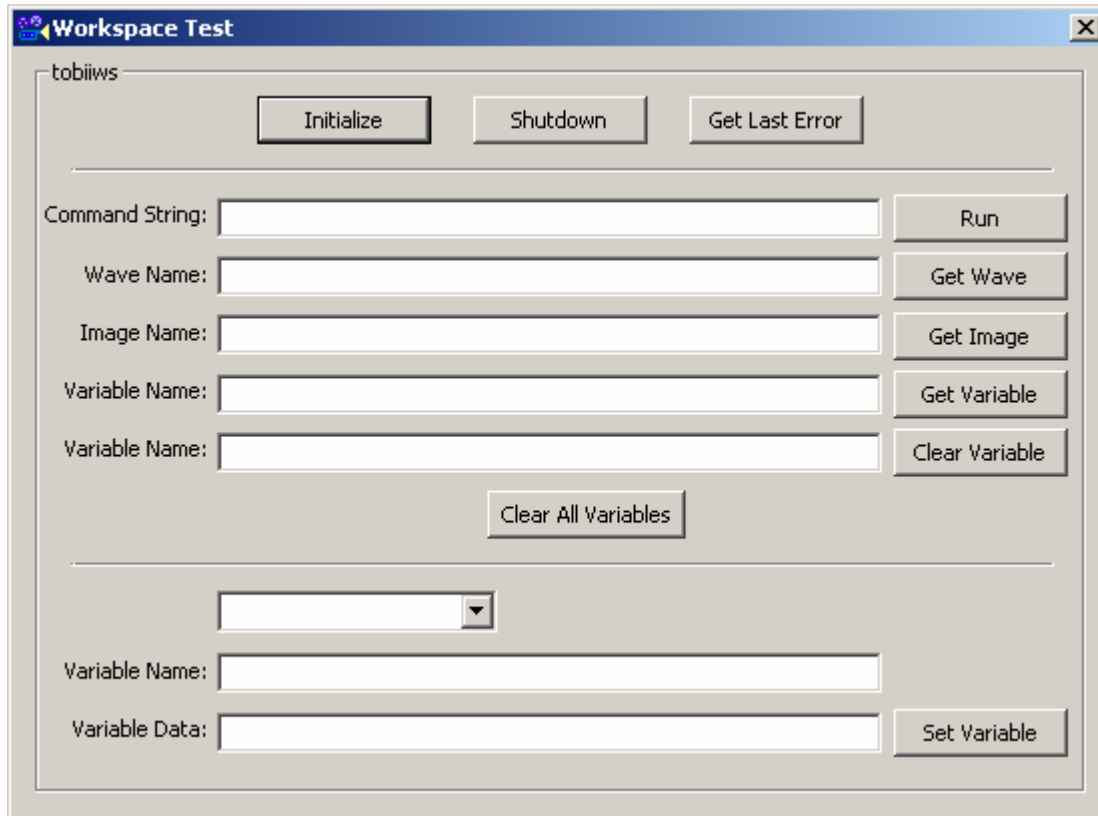
Leave the Don't register server with Windows option unchecked.

Clicking *Register Extension* will do the final steps. The extension is then registered and can be used within Presentation.



3 Testing the extension

Presentation offers the possibility to test the extension within the Extension Manager. This is done by selecting the extension and clicking Test Selected. The following dialog will be shown:



The screenshot shows a dialog box titled "Workspace Test" with a close button (X) in the top right corner. The dialog is for the "tobiiws" extension. It contains several buttons and input fields:

- Buttons: "Initialize", "Shutdown", "Get Last Error", "Run", "Get Wave", "Get Image", "Get Variable", "Clear Variable", "Clear All Variables", and "Set Variable".
- Input fields: "Command String:", "Wave Name:", "Image Name:", "Variable Name:" (two instances), and "Variable Data:". There is also a dropdown menu.

The Tobii workspace extension supports different commands that can be sent by using the Run Button. See chapter 4.1 for a list of supported commands.

Further information about testing eye tracker extension can be found in the documentation of Presentation.

4 Using the Extension within Presentation Experiments

Some samples that show how to use the extension within Presentation are provided with the extension.

4.1 Commands supported by the Extension

The workspace extension supports the following commands:

Command	Parameter	Description
connect	<ipaddress> The IP address or host name of the host where the ClearView application runs.	This method sets up a connection to ClearView and performs necessary internal initializations. Call disconnect for a proper disconnection and cleanup when done. Examples: connect 127.0.0.1, connect localhost
disconnect		Disconnect from ClearView and performs necessary internal cleanups.
start		Starts a ClearView recording. ClearView must be set up so that it is waiting for a recording command. See the ClearView manual for details.
startWithName	<recordingName> The name of the recording that is started, not including any file path. Only valid Windows file names are accepted.	Start a ClearView recording. It provides the same functionality as Start but the possibility to set the name of the recording too. The recording will be named according to the argument passed. Example: startWithName recording1
stop		Stops an ongoing recording. If the recording was started by Start, the recording subject will be prompted by ClearView to give the recording a name. See the ClearView manual for details.

Command	Parameter	Description
logEvent	<eventText> The text to log. Max 63 letters is allowed.	Send a text message for ClearView to log. When recording is stopped, the information can be exported, together with other recording data, to a text file. This is done from the ClearView user interface. See the ClearView manual for details.
sendGenericEvent		Sends a generic event, i.e. normally interpreted by ClearView as a key press controlling the ongoing recording. This can be used to change slide on a slide show stimuli for instance. See the ClearView manual for details.

The commands are sent to the extension using the `run("<Command>")` function. It is important to send the proper commands for the extension to work. See the samples for more details.