



# Presentation Eye Tracker Extension

## for Tobii Eye Trackers

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### DOCUMENT-HISTORY

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# 1 Prerequisites

For the installation of the extension to work you will need the tet.dll and ttime.dll from the Tobii Software Development Kit (SDK). Both files are distributed with the extension.

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

## 2 Installation

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

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

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\Tobii
```

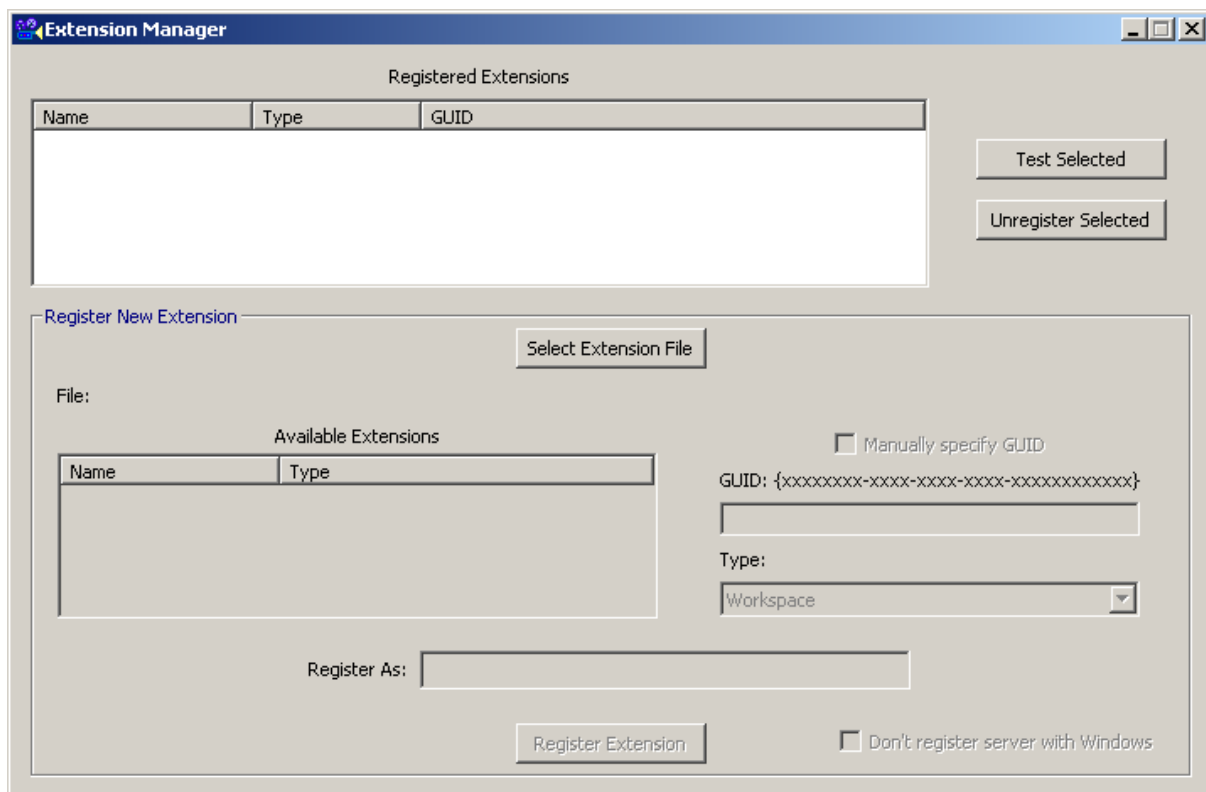
Registration of the extension is done by the following command:

```
regsvr32 /s /c TobiiExtension.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:



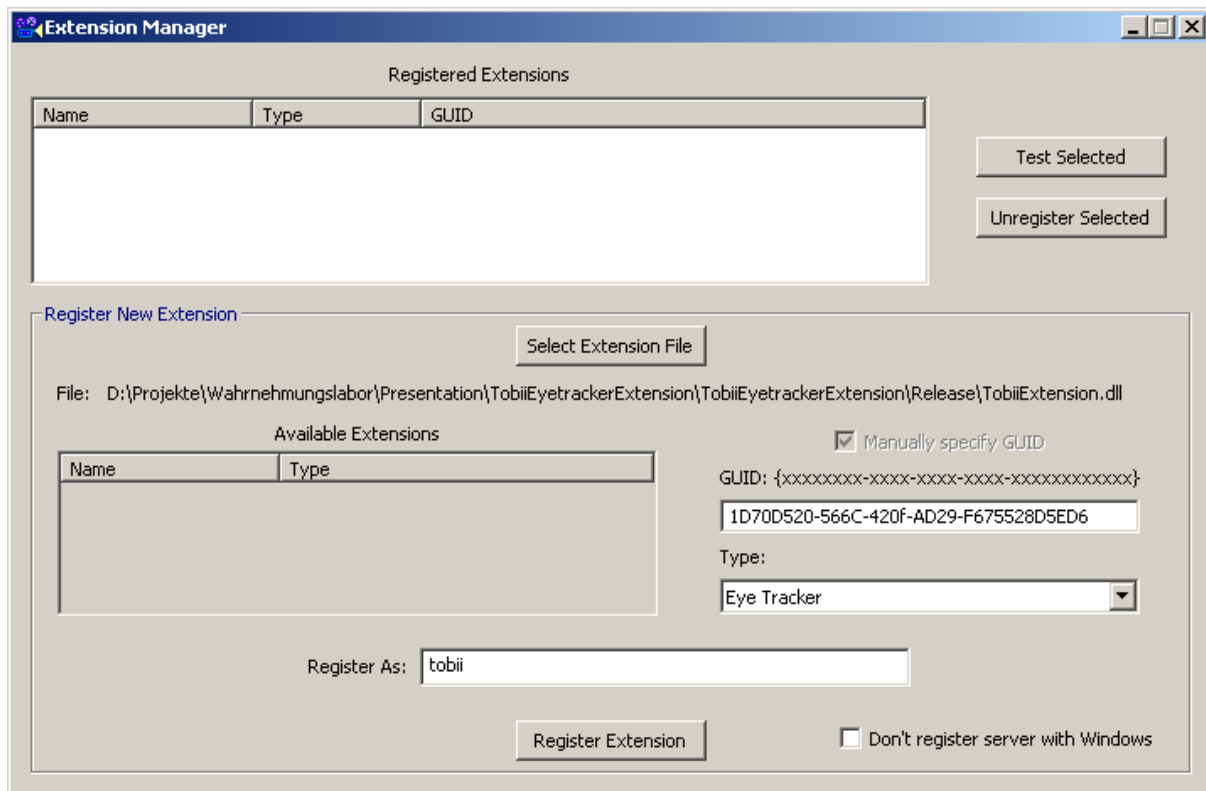
First you have to select the Extension File by clicking *Select Extension File*. A file dialog will appear. Browse to the directory you chose and select the file *TobiiExtension.dll*. Presentation will show the following warning:



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

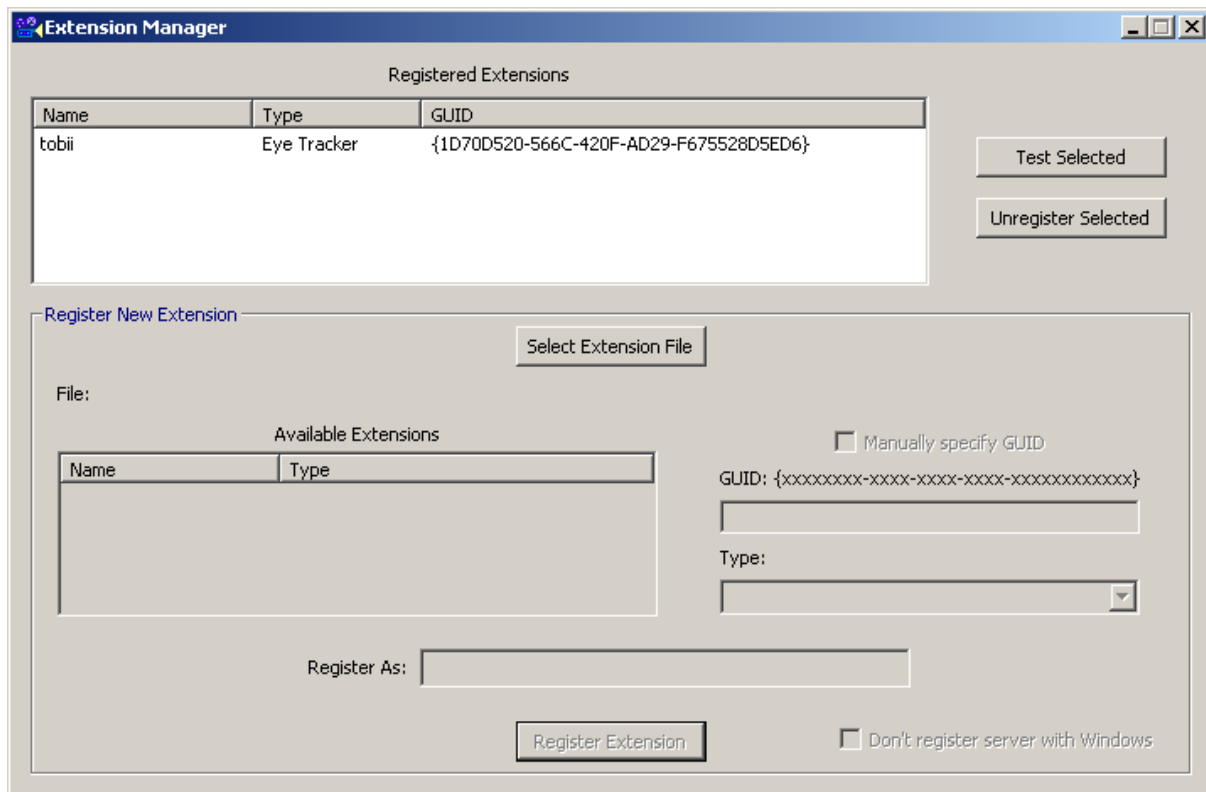
**GUID:**

1D70D520-566C-420f-AD29-F675528D5ED6



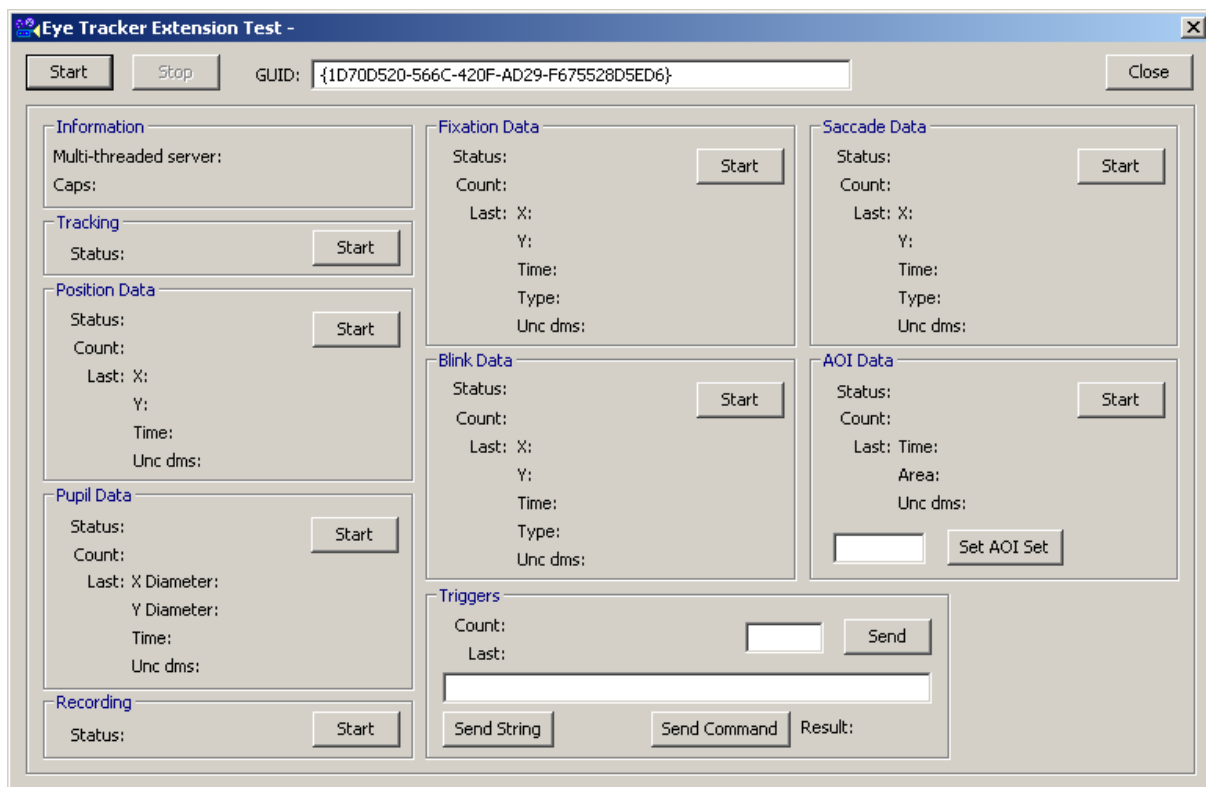
Leave the *Don't register server with Windows* option unchecked.

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:



If you want to test the Tobii extension the first steps after starting the extension (*Start* button in the upper left corner) is to set the IP address and port number used by the computer the Tobii eye tracker is connected to (default IP: localhost; default port: 4455). This is done by sending the following commands:

```
host <ipaddress> (e.g. host 127.0.0.1)
```

```
port <portnumber> (e.g. port 1234)
```

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

**Attention: The extension only reports valid gaze points. Invalid gaze points will be dropped!!**

## 4 Using the Extension within Presentation Experiments

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

### 4.1 Commands supported by the Extension

The eye tracker extension supports the following commands:

Command	Parameter	Description
host	<ipaddress>	IP address of the computer that the Tobii eye tracker is connected to, i.e. the tetserver is running on.  <b>Default: localhost (127.0.0.1)</b>
port	<portnumber>	Port number of the port the tetserver process is sending its data to.  <b>Default: 4455</b>
width	<screenwidth>	Screen resolution width of the Tobii eye tracker monitor. This is needed for a proper gaze point calculation within the extension.  <b>Default: Screen resolution width set by the operating system</b>
height	<screenheight> >	Screen resolution height of the Tobii eye tracker monitor. This is needed for a proper gaze point calculation within the extension.  <b>Default: Screen resolution height set by the operating system</b>

The commands are sent to the extension using the `send_command("<Command>")` function. It is important to send the proper commands before starting the eye tracking. See the samples for more details.



## 5 Changes

### Version 1.1:

- Timestamps are now set correctly

### Version 1.0:

- Initial version