

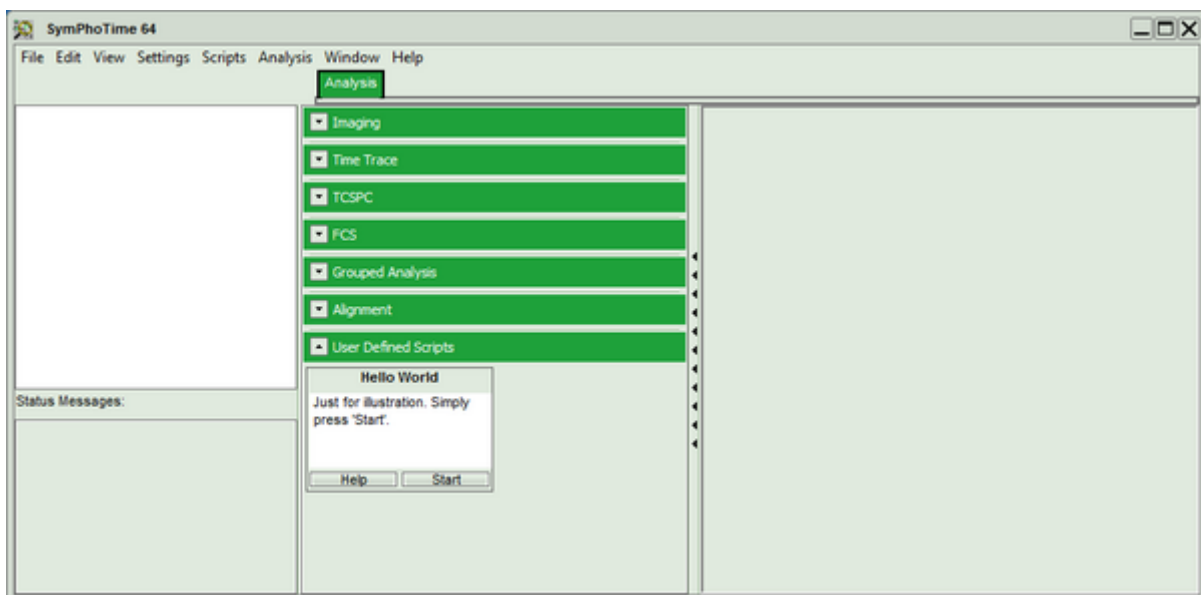
## Registering New Scripts in the SymPhoTime 64

### Summary

This tutorial shows step-by-step, how a new script can be generated and registered in the SymPhoTime 64 software. Therefore, a present SymPhoTime 64 demo script “Hello World” is modified and registered as an additional new script.

### Step-by-Step Tutorial

- Start [SymPhoTime 64](#) software.
- Go to the “Analysis” tab.
- Start the script “Hello World” by clicking “Start”.



**Note:** Any script can be used as a basis to be modified. The “Hello World” script is just chosen for demonstration purposes.

**Response:** A window is generated.



- Place the mouse over the “Hello World Window”, right mouse click and select “Show source code”.

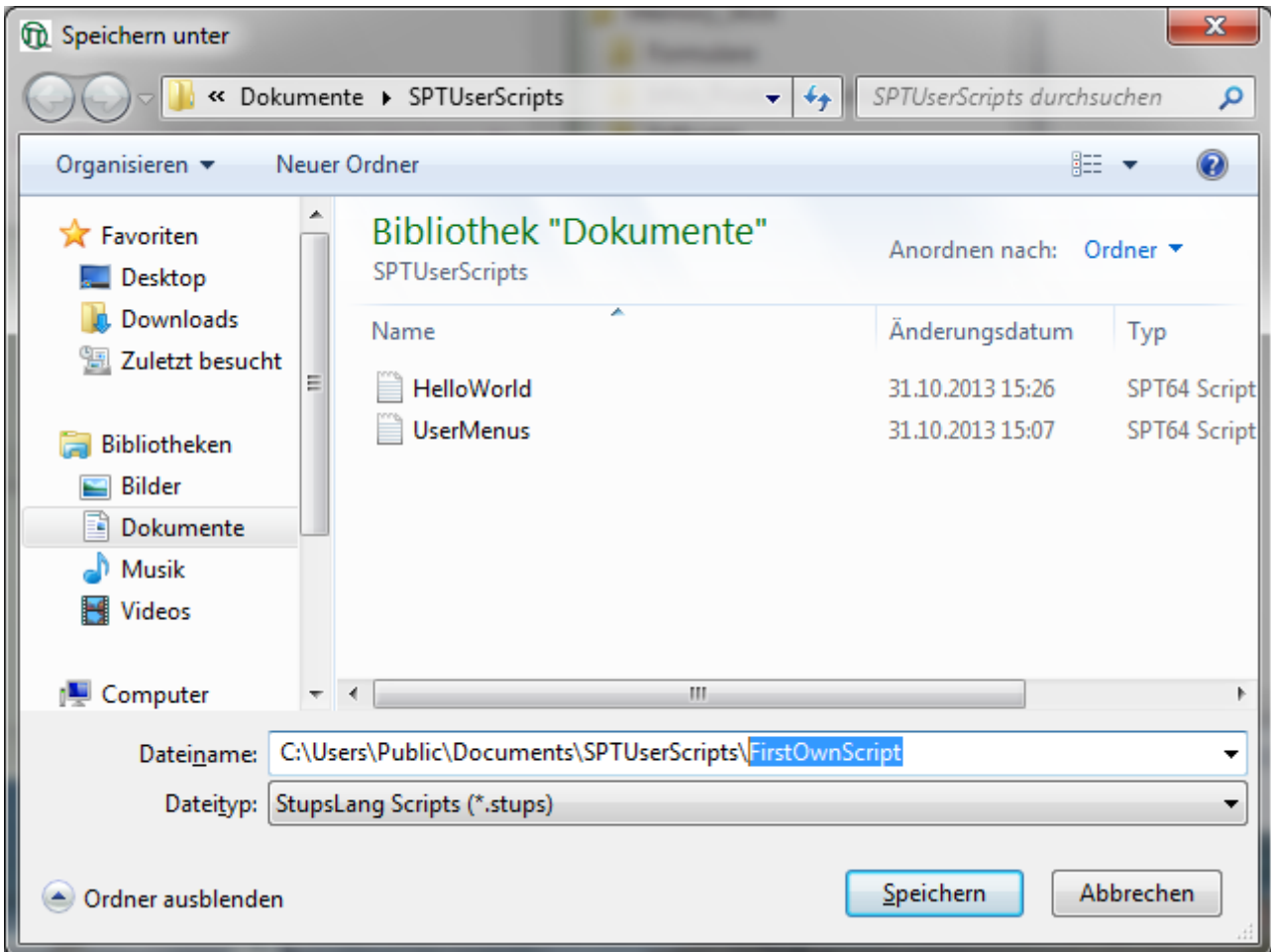
**Response:** Another window with the source code appears.

```

1 script HelloWorld;
2 application gaitype = Dialog;
3
4 HelloWorldWin: Dialog public;
5   Left = 120 Top = 10 Right = 160 Bottom = 15
6   Caption = "Hello World Window";
7
8   lblText: Label;
9     help "Shows the wellknown Text: ""Hello World!""
10    Parent = HelloWorldWin
11    Left = 15 Top = 1 Right = 25 Bottom = 2
12    Caption = "Hello World!";
13    ;
14
15   OKBtn: Button;
16     help "Closes dialog."
17     Parent = HelloWorldWin
18     Left = 15 Right = 25 Top = 3 Bottom = 4
19     Caption = "OK!";
20
21 eventhandlers
22
23   event OKBtn.OnClick;
24     HelloWorldWin.ModalResult = mrCancel;
25   end;
26
27 exec
28   HelloWorldWin.ShowModal();
29 end.
30 help "This script shows up a simple dialog with the text ""Hello World!"" and an <b>OK</b> button. Press <b>OK</b> to close the dialog.";

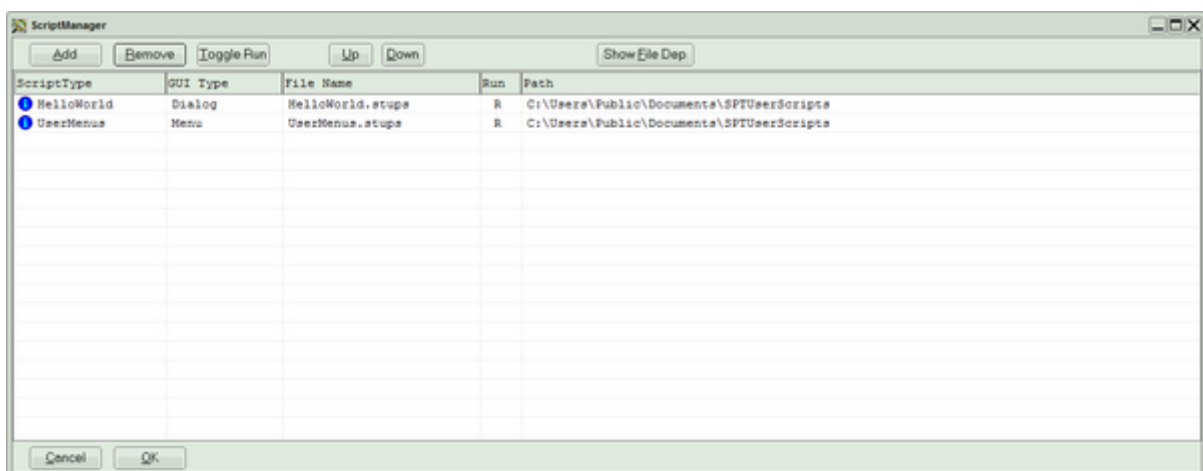
```

- Change the first line of the script from “script Hello World;” to “script FirstOwnScript;”
  - The first line defines the name of the script used in the SymPhoTime software.
- In the main menu of the window, select “File\Save as”.
- Save the script in the folder C:\Users\Public\Documents\SPTUserScripts\ and name it, in this case, enter “FirstOwnScript” and press “Save”.



- The script text is now saved under a different script name and file name. Physically, the file FirstOwnScript is generated.
- Close the script editor window.
- Close the “Hello World” Window.
- Select from the main menu: “Scripts\Manage Scripts”.

**Response:** The script manager window opens.



- Double click on the Line “UserMenus”.

**Response:** The STUPSLANG Script Editor window opens with the text of the script UserMenus.stups.

**Note:** This script controls the icons of the scripts in the “User Scripts”-tab.

- Copy the line *menu* “Analysis...” and paste it one line below.

The screenshot shows the STUPLANG Script Editor window titled "UserMenus.stups". The code is as follows:

```
1 script UserMenus:
2
3 application gtype = Menu:
4
5 eventhandlers
6
7 menu "Analysis\4User Defined Scripts\Hello World\Just for illustration. Simply press 'Start'.", Application.WorkspaceTree, HelloWorld:
8
9
10 exec
11 //
12 end.
13
```

The line 7 is highlighted in blue. The status bar at the bottom indicates "File Loaded".

- Replace the “Hello World” in the copied line against “FirstOwnScript”.

The screenshot shows the STUPLANG Script Editor window with the script modified. The code is as follows:

```
1 script UserMenus:
2
3 application gtype = Menu:
4
5 eventhandlers
6
7 menu "Analysis\4User Defined Scripts\Hello World\Just for illustration. Simply press 'Start'.", Application.WorkspaceTree, HelloWorld:
8 menu "Analysis\4User Defined Scripts\FirstOwnScript\Just for illustration. Simply press 'Start'.", Application.WorkspaceTree, FirstOwnScript:
9
10 exec
11 //
12 end.
13 |
```

The status bar at the bottom indicates "File Loaded".

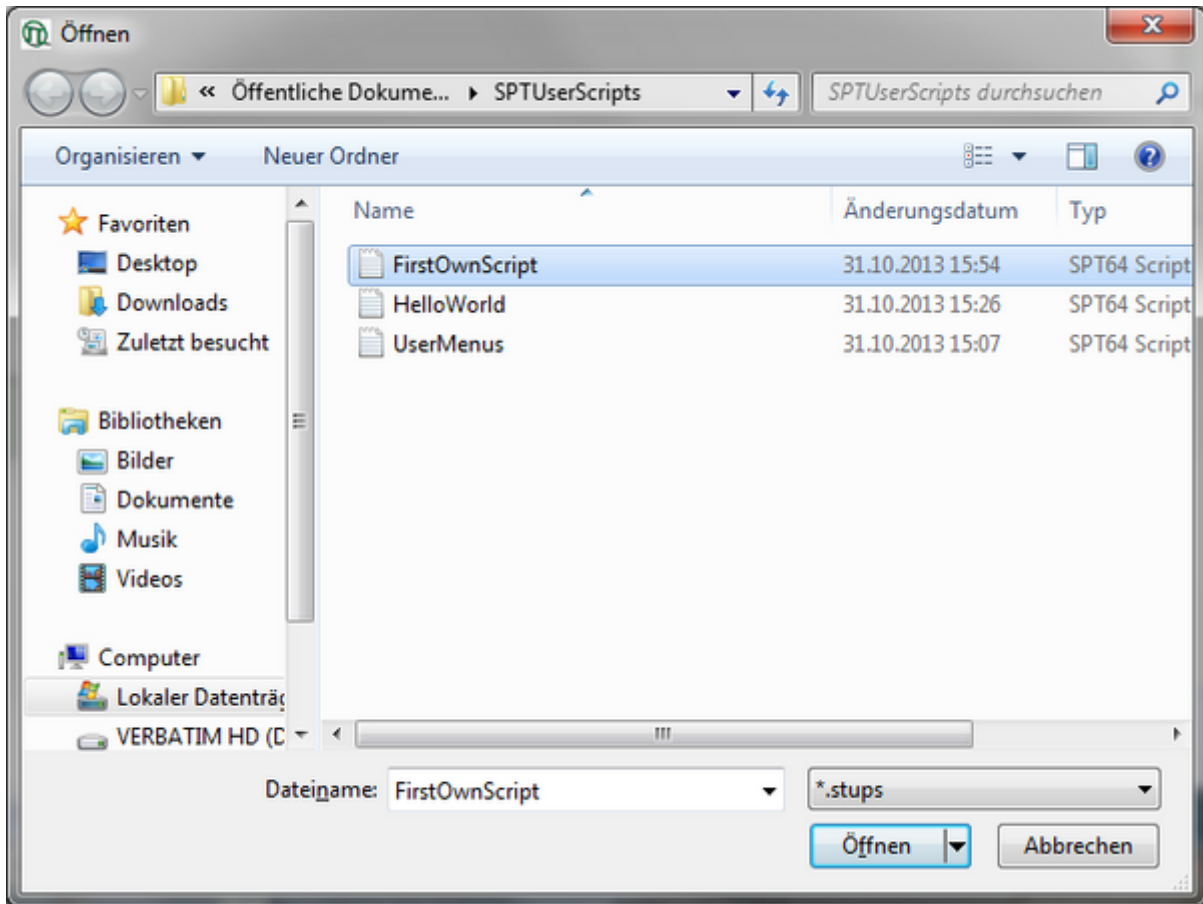
- Goto “File\Save” and save the modified script.
- Close the script editor window.
- Again, go to “Script\Manage Scripts” on the main menu.

**Response:** The Script manager opens again.

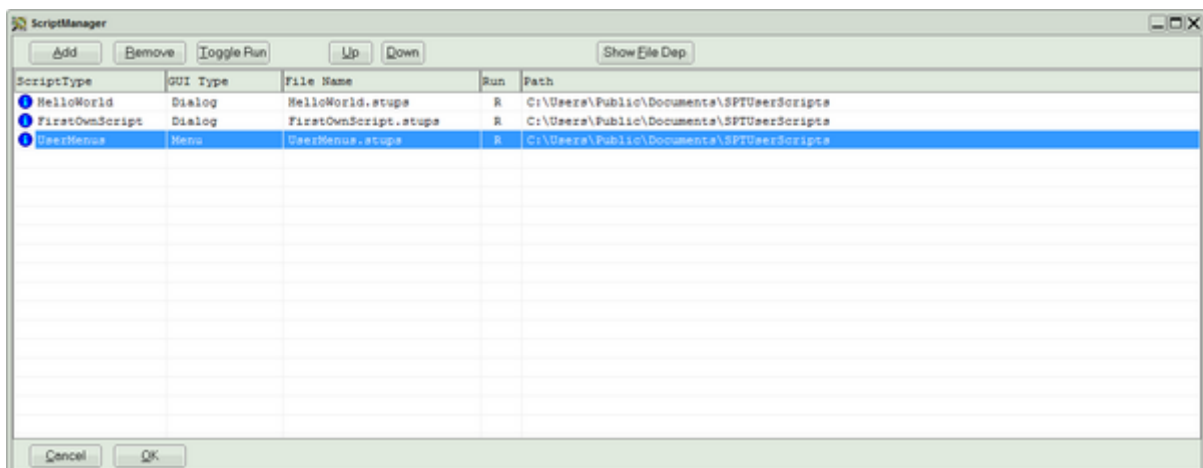
- To register the new script, press “Add”.

**Response:** A window opens.

- Select the file FirstOwnScript.



**Response:** The script appears in the Script Manager window.

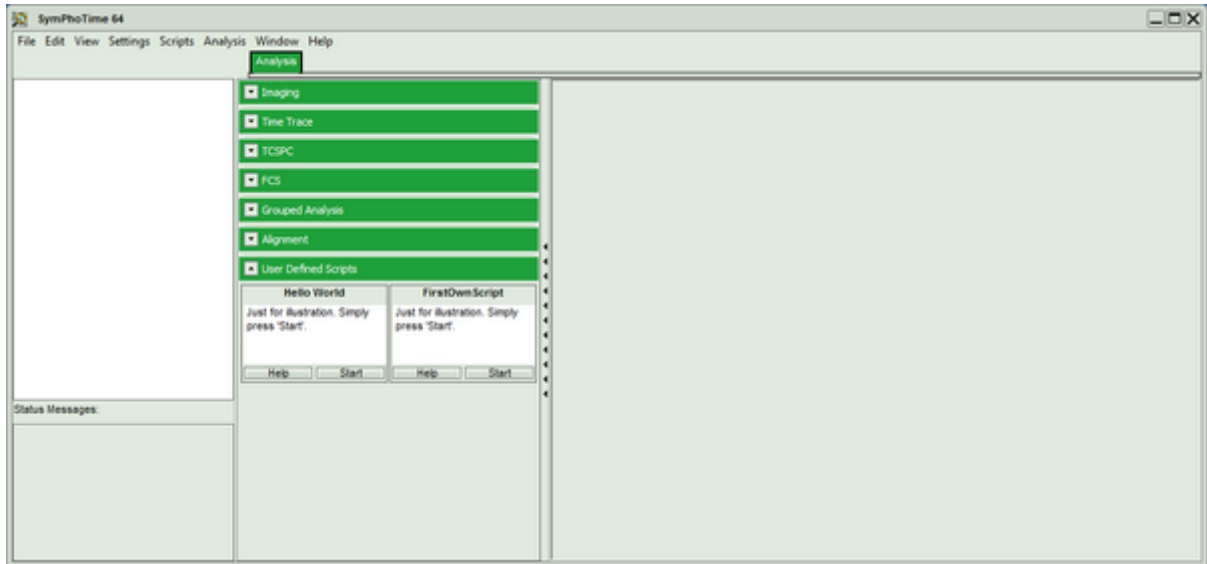


- Click “OK”.

**Response:** The script manager window closes and another window appears with the text “changes will take effect after restating the software”.

- Restart SymPhoTime 64.

**Response:** Under “User Defined Scripts”, now the newly generated script becomes visible and can be started.



**Note:** All user modified scripts should be stored where indicated in the tutorial, allowing full access to the scripts also for users without administrator rights.

Scripting also allows to edit the online help for the user configured scripts. Look at the script code for any examples.

A detailed description of the scripting commands can be found in the online help under "Help\Contents" from the main menu.

Help Browser - SymPhoTime64

Hide Backward Forward Home Print Options

Contents Index Search

- Contents
  - Help on Online-Help
  - Step by Step
  - Main Window
  - Measurement
  - Analysis
  - Fundamentals
  - Scripting
    - Scripting Types Overview**
    - Scripting Calls Overview
    - Symbolic Constants Overview
    - Factory and User Settings
    - Color Scales Overview
    - Scripting Calls
    - Basic Types
    - Scripted Classes
    - GUI Elements
    - Scripts (by Function)
    - Scripts (Alphabetically)
    - All Scripting Types (Alphabetically)
    - Example Scripts
  - Appendices
  - SymPhoTime Forum

## Overview

# Scripting Types Overview

[\[Related Topics\]](#)

This page shows all scripting types, that are currently defined in the STUPSLANG scripting system. Some of them are core defined types, but most of them are already scripts themselves.

**Notice:** You may only declare variables (i.e. create new instances) of public types in your own scripts. But you still can refer to private types as part of more complex classes that either incorporate these types (e.g. private type "SLM\_Module" is incorporated by public type "Sep1a2") or as legacy classes (a.k.a. parent classes), from which child classes inherit fields and/or methods (e.g. public class "Label" inherits from private class "GUIElement").

Some calls and methods also refer to private legacy types in their calling interface. You may call them with an instance of any public class derived from the legacy class. There are for instance methods that take numerical values as parameters. But since they are declared with the legacy type "Number" it is allowed to invoke them with values of types "Int" and "Float" as well.

[\[Private Scripting Types\]](#)

### Public Scripting Types:

Typename	Description
<a href="#">AdvPanel</a>	public
<a href="#">AnaFastLT</a>	public
<a href="#">AnaFCS</a>	public
<a href="#">AnaIntensity</a>	public
<a href="#">AnaMoments</a>	public
<a href="#">AnaICSPC</a>	public
<a href="#">AnisoImage</a>	public script
<a href="#">AnisoTimeTrace</a>	public script
<a href="#">Anisotropy_Eq</a>	public equation
<a href="#">Antibunching</a>	public script
<a href="#">ApplicationEvents</a>	public

Copyright of this document belongs to PicoQuant GmbH. No parts of it may be reproduced, translated or transferred to third parties without written permission of PicoQuant GmbH. All information given here is reliable to our best knowledge. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications and external appearances are subject to change without notice.



PicoQuant GmbH  
 Rudower Chaussee 29 (IGZ)  
 12489 Berlin  
 Germany

P +49-(0)30-1208820-89  
 F +49-(0)30-1208820-90  
 info@picoquant.com  
 www.picoquant.com