

Generating Scilab Help Files

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Abstract

This document demonstrates how to generate Scilab help files from *.sci* files. This method works for *.sci* files only.

1 Procedure

1. Develop the source code following Scilab coding conventions. Save the file in *.sci* format.
2. Place appropriate head comments in the code. The head comments should include the following:
 - Calling Sequence
 - Parameters
 - Description
 - Examples
 - See also
 - Authors
 - Bibliography

Note: The letter case matters in the head comments. An item with wrong letter case will not generate the corresponding section in the help file.

The head comments in *.sci* file should look similar to the comments in this code

```
function b=fact(a)
    //This function calculates the factorial.
    //Calling Sequence
    //b=fact(a)
    //Parameters
    //a:int
    //Examples
    //a=5;
    //b=fact(a)
    //See also
    //factorial
    //Authors
    //Shamika
    b=factorial(a);
endfunction
```

For more formatting rules, please refer to `help_from_sci`

3. Place all the *.sci* files in one folder. Let us call this folder **Macros**. Create another empty folder in **Macros** folder in which the xml files will be generated. Let us call this folder **toolboxHelp**.
4. Type on Scilab console the following

```
->help_from_sci("../path_to_Macros_folder","../path_to_toolboxHelp_folder")
```

Replace the arguments with appropriate paths to the folders. This will generate the help xml files in **toolboxHelp** folder.

5. Copy the following code and save it as **build_help.sce**. Save it in **toolboxHelp** folder and **Macros** folder.

```
help_lang_dir = get_absolute_file_path("build_help.sce");
TOOLBOX_TITLE = "Toolbox Name"
tbx_build_help(TOOLBOX_TITLE, help_lang_dir);
ok =
    add_help_chapter("Demo",get_absolute_file_path("build_help.sce"));
clear help_lang_dir;
```

Edit **TOOLBOX_TITLE** with appropriate toolbox name.

6. Change the current directory to **toolboxHelp** folder on Scilab console. Type on Scilab console the following

```
exec build_help.sce
```

If the code execution was succesful, you will get the following output

```
exec build_help.sce
-->help_lang_dir = get_absolute_file_path("build_help.sce");

-->TOOLBOX_TITLE = "Another test"
TOOLBOX_TITLE =

Another test

-->tbx_build_help(TOOLBOX_TITLE, help_lang_dir);

Building the master document:
/home/fossee/sci_help/Toolbox_help

Building the manual file [javaHelp] in
/home/fossee/sci_help/Toolbox_help.

-->ok =
    add_help_chapter("Demo",get_absolute_file_path("build_help.sce"));

-->clear help_lang_dir;
```

7. To view the help file, type on Scilab console

```
help 'Name of function'
```

The help window will appear with the function documentation.

2 Points to remember

- Use \LaTeX to generate formulae/equations
- Remember to cite all your sources