

5

Finding Information on Scilab

Learning a new language or software by yourself usually requires outside help. The Internet can provide you with that help in different ways. In this chapter, you will find several useful sites you can visit to find information on Scilab.

5.1. Documentation on the Scilab website

The Scilab website is your starting point. It contains a [Documentation](#) section in which you will find:

- all the Scilab help pages that describe each Scilab feature (these same pages are accessible from the software)
- a wiki with information on certain developmental procedures specific to Scilab (developing supplementary modules, using the Scilab API, porting MATLAB tools to Scilab)
- a MATLAB-Scilab dictionary
- tutorials, books and articles, etc.

The official Scilab website also houses a [page](#) dedicated to the user exchange of Scilab programs.

Figure 5.1 : Scilab File Exchange page

The screenshot shows the Scilab File Exchange homepage. At the top, there are navigation links: Scilab Home Page, Wiki, Bug Tracker, Forge, Mailing List Archives, Scilab Online Help, and ATOMS. Below this is the Scilab logo and the text 'File Exchange - Homepage'. A search bar is present with a 'Keywords' input field and a 'Search' button. A table of file listings is displayed with the following data:

Title	Last Update	Authors	Downloads	Summary	Rating
Intercorrelations analysis	29/02/2016	Lukas Malec	23	One of the pls methods studying relations between two groups	
Linear estimate of future process	29/02/2016	Lukas Malec	25	OLS based point and interval forecasts of the one-dimensional time series	
Mandelbrot set generator	26/02/2016	Jérôme LABATUT	40	This demo draws the Mandelbrot set for a list of usual mathematical	

5.2. Mailing Lists

For those who wish to get more personalized assistance, there exist numerous mailing lists dedicated to Scilab. They facilitate exchanges between Scilab users and developers. These [official lists](#) are located on the [scilab.org](#) website. You can find lists specifically made for users:

- a list for english-speakers users@lists.scilab.org
- a list for french-speakers users-fr@lists.scilab.org
- for questions pertaining to the educational use of Scilab, see enseignement@lists.scilab.org (exchanges in French)

and lists (only in English) dedicated to developers:

- the primary list dev@lists.scilab.org
- for issues related to the translation of the Scilab interface in different languages localization@lists.scilab.org
- for questions linked to the inclusion of Scilab in a distribution distributor@lists.scilab.org

There are also other mailing lists, such as [usenet](#), or forums, however these websites are not managed by the Scilab development team.

5.3. Keeping track of bugs with Bugzilla

The development and growth of the Scilab software is based on the continuous dialog between users and developers. To ensure the proper management of user requests, the Scilab team uses a bug tracking system called Bugzilla, which is accessible at <http://bugzilla.scilab.org/>.

When you discover an issue while using Scilab, it is generally advisable to report the incident on Bugzilla, unless the issue has already been identified. This helps the development team improve the software and increases the chances of getting the issue you found fixed. In order to do this, you need to create a user account on Bugzilla. Then, you need to fill out a form detailing the issue and, if possible, include an example of a way to reproduce the problem.

Figure 5.2 : Scilab's Bug Tracker

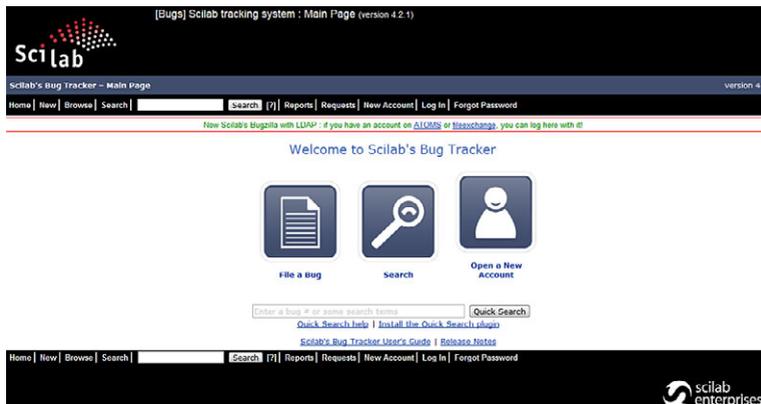


Figure 5.3 : Reporting a bug on Bugzilla

Before reporting a bug, please read the [bug writing guidelines](#), please look at the list of [most frequently reported bugs](#), and please [search](#) for the bug. [Show Advanced Fields](#) (* = Required Field)

Product: Scilab software **Reporter:** rouxph.22@gmail.com

Component: **Component Description:**

Version: **Severity:**

Hardware: **OS:**

Summary:

Possible Duplicates:

Bug ID	Summary	Status	
3107	The export all menu of the Scicos window makes Scilab crash (Scilab-5.0-beta2)	RESOLVED FIXED	Add Me to the CC List
3182	When STDIN is closed, running scilab in text mode (-nwn) causes scilab to crash	RESOLVED FIXED	Add Me to the CC List
5139	with the scilab-branches-5.2-1257101433 nightly build a xcoss start scilab crash	RESOLVED FIXED	Add Me to the CC List
6461	Scilab External function executed by scifunction may make Scilab crash when they	RESOLVED FIXED	Add Me to the CC List
6739	Completion may make Scilab crash, if a Scilab coded library function is redef	RESOLVED FIXED	Add Me to the CC List
11057	plot plot3d with scilab-master-1335368601-x86_64.dmg crash scilab	NEW	Add Me to the CC List
12378	sdf() in nightly build 'scilab-branch-5.4-1362773925' makes scilab crash	RESOLVED FIXED	Add Me to the CC List

Description:

BUG DESCRIPTION:

ERROR LOG:

HOW TO REPRODUCE THE BUG:

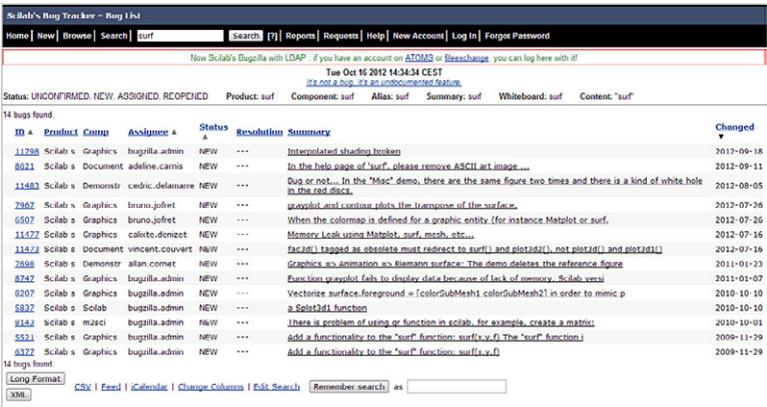
Attachment:

Excerpt from the book : Scilab from Theory to Practice - I. Fundamentals
 written by Philippe Roux, translated into English by Perrine Mathieu - © 2016 Editions D-Booker

Tip > Certain bugs may be linked to your operating system or the libraries used by your machine. In order to determine what the bug is linked to, provide information on the environment in which the bug was found. The command `ver` lets you easily retrieve this information in the Scilab console:

```
-->ver()
ans =
!Scilab Version:                5.5.2.1427793548      !
!                               !
!Operating System:             Windows 7 6.1          !
!                               !
!Java version:                 1.6.0_41             !
!                               !
!Java runtime information:     Java(TM) SE Runtime Environment (build 1.6.0_41-b02) !
!                               !
!Java Virtual Machine information: Java HotSpot(TM) 64-Bit Server VM (build 20.14-b01, mixed mode)!
!                               !
!Vendor specification:        Sun Microsystems Inc.    !
```

Caution > Before reporting a bug, make sure the bug is not already listed by searching the Bugzilla reports list. You can search the database straight from Bugzilla's main page by using keywords, as shown in the figure below (with the keyword surf).



5.4. Supplementary modules on Forge

As we previously mentioned in the chapter [The Graphical Interface](#), Scilab's capabilities can be enhanced by adding supplementary modules developed for specific applications. For example:

- Metanet to manage graphs and networks

Excerpt from the book : Scilab from Theory to Practice - I. Fundamentals
 written by Philippe Roux, translated into English by Perrine Mathieu - © 2016 Editions D-Booker

- SIVP for image processing
- Guimaker to create graphical interfaces
- Scimax for symbolic computation (via the software Maxima)

These modules are individual projects, however they are completely dependent on Scilab. There exist a lot of projects such as these (more than a hundred) that can all be found on the Scilab [Forge](#) (see [Figure 5.4](#)), which facilitates searches.

Figure 5.4 : Scilab Forge page for the Metanet supplementary module

Identifiez-vous ou créez votre compte | Liste des projets - | Aide

Page d'accueil Téléchargements Documentation Tickets Source Revue de code

Bienvenue | Dernières mises à jour | Connectez-vous ou créez votre compte pour soumettre des tickets ou ajouter des commentaires

Metanet

Metanet is a toolbox of Scilab for graphs and networks computations. A number of algorithms solving classical graph problems and minimal cost flow network are provided.

Équipe de développement

- Administrateurs
- Vincent Couvert
- Bruno Joflet
- Antoine Elias
- Michael Baudin
- Clément David
- Équipe sympa
- Sylvestre Ledru
- Serge Steer

Features

The following is a list of functions in this module.

- `add_edge` : adds an edge or an arc between two nodes
- `add_edge_data` : associates new data fields to the edges data structure of a graph
- `add_node` : adds disconnected nodes to a graph
- `add_node_data` : associates new data fields to the nodes data structure of a graph
- `adj_lists` : computes adjacency lists
- `arc_graph` : graph with nodes corresponding to arcs
- `arc_number` : number of arcs of a graph
- `articul` : finds one or more articulation points
- `bandw` : bandwidth reduction for a sparse matrix
- `best_match` : maximum matching of a graph
- `chain_struct` : chained structure from adjacency lists of a graph
- `check_graph` : checks a Scilab graph data structure
- `circuit` : finds a circuit or the rank function in a directed graph
- `con_nodes` : set of nodes of a connected component
- `connex` : connected components
- `contract_edge` : contracts edges between two nodes
- `convex_hull` : convex hull of a set of points in the plane
- `cycle_basis` : basis of cycle of a simple undirected graph
- `delete_arcs` : deletes all the arcs or edges between a set of nodes
- `delete_edges` : deletes all the arcs or edges between a set of nodes
- `delete_nodes` : deletes nodes
- `edge_number` : number of edges of a graph
- `edgedatafields` : returns the vector of edge data fields names
- `edges_data_structure` : description of the data structure representing the edges of a graph
- `edit_graph` : graph and network graphical editor
- `edit_graph_menus` : edit_graph_menus description
- `egraphic_data_structure` : data structure representing the graphic properties used for edges graphical display

Each supplementary module's page in Forge lets users access source codes as well as report bugs. You can install/uninstall these modules via the module manager ATOMS or by using the commands:

- `atomsInstall` to install a module (see [Figure 5.5](#))
- `atomsRemove` to uninstall a module

Figure 5.5 : Installing a supplementary module with `atomsInstall`


```

Scilab 5.5.2 Console
Startup execution:
  loading initial environment

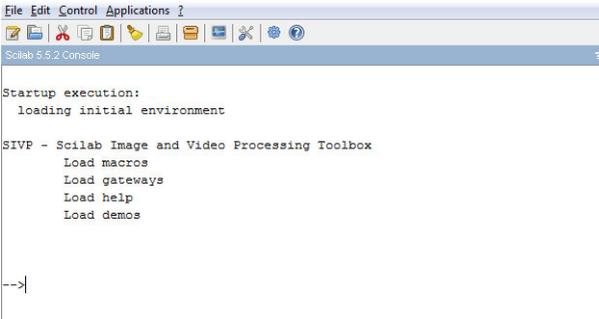
-->atomsInstall('SIVP')
ans =

!SIVP 0.5.3.2-1 allusers SCI\contrib\SIVP\0.5.3.2-1 I !

-->|

```

Once the module is installed, you need to restart Scilab to make it work. As the module loads, messages are displayed in the console (see [Figure 5.6](#)).

Figure 5.6 : Loading of the SIVP module as Scilab starts up


```

Scilab 5.5.2 Console
Startup execution:
  loading initial environment

SIVP - Scilab Image and Video Processing Toolbox
  Load macros
  Load gateways
  Load help
  Load demos

-->|

```

Tip > Certain external modules may need to be compiled during the installation process which may cause issues for Windows users. In this event, there are two solutions:

- Install a Microsoft Visual C++ redistributable version which you can download directly from the [Microsoft](#) site.
- Install the Scilab MinGW supplementary module which was created for this explicit purpose.

Caution > If you experience issues with a supplementary module, you can uninstall it manually by deleting its corresponding directory within the `SCI/contrib/` directory (see [Section 6.2, Installation](#)).