

INTERNATIONALIZATION

Ukrainian localization added

Thanks to Yuri Chornoivan

Many English typos have been fixed

Thanks to Yuri Chornoivan

Xcos

Some checks on the loading of data files have been added.

Superblock masks can now be used.

A new window is created when a user wants to configure the variable settings.

Some performance improvements under Linux.

Update to jgraphx version 1.2.0.7 has been performed.

Non-applicable actions are now disabled and can not be performed anymore.

Refactoring:

- ▶ The port position algorithm has been reviewed in order to take into account default position and calculate placement according to its default associated side.
- ▶ The communication with Scilab interpreter is now easier to use and can be synchronous or asynchronous (with callback).
- ▶ The simulation function identifier is now mapped to an Enum to better follow Java semantics.
- ▶ Blocks instantiations are performed through a Factory and reference instances are shared.
- ▶ Java package (eg. namespace) has been added to reduce the number of classes per package and improve readability.
- ▶ org.scilab.modules.graph is independent from Xcos and can be safely used.
- ▶ The actions are now only instantiated per graph.
- ▶ A first check on checkstyle metrics on the code has been done.

Bug Fixes:

- ▶ **Bug #4206 fixed** - The CreateMask action did not generate a valid submatrix.
- ▶ **Bug #5095 fixed** - Menus were not disabled when actions were not possible.
- ▶ **Bug #5165 fixed** - The CreateMask/RemoveMask/CustomizeMask actions were not available.
- ▶ **Bug #5285 fixed** - Scicos could not simulate Modelica diagrams when filename contained space.
- ▶ **Bug #5434 fixed** - At Scicos files loading (cos and cosf files), some blocks were not updated to the latest Xcos/Scicos version.
- ▶ **Bug #5508 fixed** - When loading a Xcos project, hdf5 files used were stored into /tmp/ instead of TMPDIR.

- ▶ **Bug #5595 fixed** - In susp demo, DSUPER blocks were not SuperBlocks.
- ▶ **Bug #5625 fixed** - The Ground block port position was not right.
- ▶ **Bug #5626 fixed** - The VoltageSensor port positions were not right.
- ▶ **Bug #5627 fixed** - It was not possible to place a port in a non-conventional side.
- ▶ **Bug #5640 fixed** - At Xcos launching, toolbar and menubar did not appear before the focus was on Xcos window.
- ▶ **Bug #5660 fixed** - A Scicos block with negative simulation function type was not working (especially the ESELECT_f block).
- ▶ **Bug #5666 fixed** - The CLKGOTO block was not valid anymore after setting its parameters.
- ▶ **Bug #5667 fixed** - Simulation starts faster on Linux for huge diagram (hdf5 export issue).
- ▶ **Bug #5674 fixed** - The Signal.notify did not check if we were waiting for it (thus the next wait was blocked).
- ▶ **Bug #5683 fixed** - Xcos code updated to work with jgraphx >= 1.2.0.X
- ▶ **Bug #5701 fixed** - The "AFFICH_m" block did not simulate anymore.
- ▶ **Bug #6386 fixed** - The Quit operation did not work properly on SuperBlockDiagrams.
- ▶ **Bug #6414 fixed** - Old Xcos diagrams without rotation fields did not load.
- ▶ **Bug #6415 fixed** - The SAWTOOTH_f block did not allow parameters.
- ▶ **Bug #6463 fixed** - The jgraphx library has been updated to 1.2.0.7.
- ▶ **Bug #6474 fixed** - demo_watertank.xcos crashed when a block parameter dialog was closed a second time.
- ▶ **Bug #6490 fixed** - The multiple-point link did not work accordingly to the zoom level.
- ▶ **Bug #6540 fixed** - SuperBlock could not be opened due to jgraphx serializer limitation.
- ▶ **Bug #6551 fixed** - SaveAs action was not accessible.
- ▶ **Bug #6578 fixed** - The CONSTRAINT_f was not recognized as a valid block.

ATOMS

atomsSetConfig("offLine", "True"/"False") automatically calls atomsSystemUpdate() if its value has changed.

Under Windows platforms, the Internet connection is now based on the default browser configuration.

Various bugs when installing local packages have been fixed.

Bug Fixes:

- ▶ **Bug #6383 fixed** - A message displayed by atomsRemove() (when the module to remove is loaded) was not correct.

- **Bug #6389 fixed** - Atoms GUI: "Update" button just removed the selected module but did not update it.
- **Bug #6518 fixed** - atomsRepositoryAdd() did not accept local repositories.

TEXT RENDERING

Handles Greek, Cyrillic and complete unicode for latin alphabets characters when using LaTeX in the graphics and documentation.

See Bug #5525

Example: `xstring(0.5,0.5,"$\overbrace{\text{привет}\ \mu\mu\text{p}}{\underbrace{\text{γεια}\ \kappa\acute{o}\sigma\mu\text{o}}{\$}}")`

\textsuperscript LaTeX was not supported.

See Bug #6573

Bug Fixes:

- **Bug #5679 fixed** - LaTeX texts were not displayed (replaced by a black box) if Scilab was used in a terminal service session on Windows.
- **Bug #6603 fixed** - Lines were too long in the help browser.

TEXT EDITOR

Bug Fixes:

- **Bug #5649 fixed** - The Editor did not undo properly after a find/replace.
- **Bug #5650 fixed** - Replace all was not working in some cases.
- **Bug #5651 fixed** - Closing find/replace box was not removing highlights.
- **Bug #5707 fixed** - cmd-e executed the wrong editor file.

COMPILATION

Under GNU/Linux, Mac OS X & Unix, a m4 macro called `AC_JAVA_CHECK_VERSION_PACKAGE` has been added to check the version of Java packages used.

Check of the version of jgraphx added (Min: 1.2.0.7).

Improved detection of Fedora/Redhat packages.

Better detection of JOGL.

Better check of the lib math (libm).

When `--disable-build-help` was given to the configure, some mandatory libraries (batik, fop & avalon framework) used by the graphic export features were not checked. This was causing build failure.

In some cases with two versions of the same jar libraries, the system could not detect any of them.

Bug Fixes:

- **Bug #5496 fixed** - When the option `--disable-build-help` was enabled, the check/use of jeucid was disabled. It was causing build issue since jeucid is now necessary for graphics.
- **Bug #5503 fixed** - add `/usr/lib/*/` and `/usr/lib64/*/` in the search path when looking for Java libraries (Fedora 12 for example).
- **Bug #5665 fixed** - Under Linux, hdf5 module can now be compiled without Java.
- **Bug #6453 fixed** - ImplicitPointerConversions was triggered by some Debian/Ubuntu check tools.

SCILAB CLI

With the option `--texmacs`, the mode NWN1 was used. It has been changed to NW to allow the use of graphic features.

SCILAB EXTENSIONS

call_scilab

Complex examples had not been updated to use the new Scilab API.

API_Scilab

A page of presentation for this feature have been added.

PACKAGING

Scilab binaries are now shipped with Java JRE 1.6.0 b18.

MATLAB BINARY FILES I/O

Support for logical/boolean type added.

OBSOLETE FUNCTIONS

'scilab_demos' obsolete. Please use 'demo_gui' instead.

'with_gtk' obsolete. Please use 'getversion' instead.

BUG FIXES

- **Bug #4543 fixed** - Waitbar command seemed not to work properly with message defined by a string.
- **Bug #4941 fixed** - uigetdir & uigetfile lacked icons on top right when running on Windows 7.
- **Bug #4979 fixed** - Unzoom on an empty figure resulted to a warning message.
- **Bug #5035 fixed** - Demos --> tcl/tk --> Scroll Information printed on terminal was not displayed on Windows.
- **Bug #5140 fixed** - 'Load into Scilab' did not work as expected.
- **Bug #5413 fixed** - help_from_sci was replacing the `<` `>` in the examples by `>`; and `<`; causing issues in the build of documentation.

- ▶ **Bug #5436 fixed** - The export to svg did not work with bar graphs.
- ▶ **Bug #5513 fixed** - 'input' failed after Ctrl+C was typed.
- ▶ **Bug #5578 fixed** - Some Tree functions were not documented (iConcatTree, uiDeleteNode, uiEqualsTree, uiFindNode, uiGetChildrenNode, uiGetNodePosition, uiGetParentNode, uiInsertNode).
- ▶ **Bug #5659 fixed** - emptystr changed the value of an input variable.
- ▶ **Bug #5664 fixed** - Demo Simulation > Wheel simulation > Simulation with ode failed.
- ▶ **Bug #5668 fixed** - When using Scilab graphic with a LaTeX expression, the message "Jlaxmath: Could not access to createFont. Please update to java 6" was displayed.
- ▶ **Bug #5669 fixed** - fminsearch: optimsimplex_new has been improved for "randbounds".
- ▶ **Bug #5673 fixed** - Under Linux, dependency on GLIBC_2.7 removed.
- ▶ **Bug #5687 fixed** - When setting "figure_name" the window title was not set until the mouse came over it.
- ▶ **Bug #5688 fixed** - The xrpoly macro's rotation direction was inconsistent with that of xarc and related functions.
- ▶ **Bug #5691 fixed** - PDF/EPS exports with LaTeX/MathML failed.
- ▶ **Bug #5695 fixed** - 'uigetfile' failed when we used 'multiple selection'.
- ▶ **Bug #5696 semi / fixed** - There was a lack of feedback when SELinux was preventing Scilab to start under Fedora 12.
- ▶ **Bug #5699 fixed** - FreePtr() was declared as a macro but it was not exported on Windows.
- ▶ **Bug #5700 fixed** - Compilation under RHE4 was failing on term.h and termcap.h inclusion.
- ▶ **Bug #5702 fixed** - Calling legend disabled any previous call to drawlater.
- ▶ **Bug #5716 fixed** - Some links to the documentation about hypermatrices were missing.
- ▶ **Bug #5722 fixed** - tand returned an error when called with ieee(0) mode.
- ▶ **Bug #6387 fixed** - 'dos' failed to execute very long command line and returned "line too long" message error.
- ▶ **Bug #6388 fixed** - javasci: methods getNumberOfColsFromScilab and getNumberOfRowsFromScilab (SciAbstractArray) returned an error message on stderr previously (5.1) there was no message.
- ▶ **Bug #6399 fixed** - m2sci failed and returned error 240.
- ▶ **Bug #6400 fixed** - Msecs was not correctly handled in datevec/datenum functions.
- ▶ **Bug #6401 fixed** - chfact() had trouble factoring 3X3 identity matrix.
- ▶ **Bug #6412 fixed** - sp2adj function was not working.
- ▶ **Bug #6420 fixed** - It was not possible to use ax.x_ticks with LaTeX commands.
- ▶ **Bug #6436 fixed** - uigetfile(["*.bin"; "*.sce"; "*.cos"]); did not let the user select either of those file extensions.
- ▶ **Bug #6437 fixed** - fileext('plop') crashed Scilab on Linux.
- ▶ **Bug #6441 fixed** - Callback of uimenu with option "Checked" is now executed when the menu is clicked.
- ▶ **Bug #6456 fixed** - SCI & SCIHOME added in getdebuginfo list.
- ▶ **Bug #6461 fixed** - Scilab External function executed by scifunction could make Scilab crashed when they produced an error.
- ▶ **Bug #6471 fixed** - help about 'file' had some errors.
- ▶ **Bug #6480 fixed** - Added some info. about Calling convention used on Windows.
- ▶ **Bug #6488 fixed** - The API function 'createMatrixOfUnsignedInteger32' creates good Scilab type variable.
- ▶ **Bug #6489 fixed** - Wrong dependency on 'WININET.dll' (Windows) removed.
- ▶ **Bug #6491 fixed** - libinter.h was not installed under Linux (SEP #35 updated).
- ▶ **Bug #6521 fixed** - 'getmd5' crashed with a wrong second input argument.
- ▶ **Bug #6547 fixed** - 'uigetdir' crashed Scilab when returning some "root" path.
- ▶ **Bug #6558 fixed** - Infinite value was not plotted even if it was possible.
- ▶ **Bug #6586 fixed** - getmd5() crashed if the file (1st input argument) did not exist.
- ▶ **Bug #6613 fixed** - Example of 'schur' failed.
- ▶ **Bug #6619 fixed** - In demo Graphics/Misc Changing the colormap was drawing the 2 right subplot with a black box.