SALOME 3.2.5

Maintenance release announcement

February 2007

SALOME Platform

General information

OPEN CASCADE is pleased to announce SALOME version 3.2.5. It is a maintenance release that contains the results of planned major and minor improvements and bug fixes against SALOME 3.2.4 version released in December 2006.

New features and general changes

Prerequisites changes

o   Salome 3.2.5 is based on the new Open CASCADE version 6.1.2sp1, which includes a debug of some bugs that came from SALOME plus a debug of Boolean algorithms necessary for partition.

o   The MEFISTO algorithm has been changed in SMESH. This resulted in automatic fixes of some bugs.

Installation procedure

o   SALOME Installation Wizard now allows automatic building of SALOME modules from sources. The GUI provides an additional check box: "*Build SALOME sources*". If this check box is turned on, the selected SALOME module(s) will be built from sources during the installation. In this case the installation of the corresponding SALOME binaries is disabled (to avoid conflicts).

Note: this operation requires much more free disk space than for just unpacking the SALOME modules sources packages.

To enable this feature the build.sh script has been introduced. It implements the same functionality and supports the same set of options as build.csh script but it is targeted to the bash shell.

It is also possible now to install all the products from sources - special check box "Install all products from sources" has been added.

In batch mode this functionality is available via the --all-from-sources (-a) option.

This operation can be used to install SALOME on the Linux platform which is not officially supported.
Note: the installation of all products from sources is a very time consuming operation (it may require more than 24 hours depending on the computer).

o   The Installation Procedure documentation has been updated.

Improvements

o The "Automatic renumbering" option has been added to the SMESH preferences menu. This option lets the user choose if the mesh has to be automatically renumbered before being exported (available for MED/DAT/UNV exports).

o X, Y and Z labels have been aligned to the right in the following dialogs: "Move Node", "Add Node", "Rotation ", "Revolution", "Translation", "Symmetry" and "Extrusion Along a Path".

o Two new fields have been added to the Geometry preference menu :

   - type of the marker used to represent vertices.

   - size of the marker.

o A new filter predicate "BelongToGenSurface" has been added to SMESH module. It allows finding nodes and elements lying on a geometrical surface of any kind within a given tolerance. It works in a way similar to "BelongToPlane" and "BelongToCylinder" predicates but without a limitation on the surface kind.

o The detection of close nodes was performed using an O(n²) algorithm, this algorithm has been substituted by a new Octree-like one. This Octree is an O(n) algorithm :

   - With 28 586 nodes : 1min16sec vs 2sec for the Octree.

   - With 141 245 nodes : 31min46sec vs 8sec for the Octree.

   - With 1 476 528 nodes : 57h48min26sec vs 1min56 for the Octree.

o The procedure of Container set-up in Supervision has been improved. The Container name for a new Factory node is now taken from the last node made by user for this component or from the last node of such component saved in an XML file if we modify imported dataflow.

   Moreover some modifications have been done in the GUI part. Now the user can specify the Container name and other custom parameters during node creation. For this purpose the new button "Add Node and Customize Parameters" has been added into the "Add Node" dialog for Factory nodes. Parameters customization may be done with help of the "Set Custom Parameters" dialog.

Changes

o Documentation: OCC and VTK viewer documentation has been moved to GUI documentation

SALOME Platform

🖼 **Bug corrections**

Kernel

14451	*Summary*: Implement type of components not handled in IDLparser.py **Improvement :** The IDLparser.py python script has been improved - component implementation type attribute (integer) is now supported. The command line parameter impltype=<implementation_type> has been added, where <implementation_type> can be: 0 - for Python implementation type; 1 - for C++ implementation type.
14829	*Summary*: removing some traces (again) **Improvement :** All messages in KERNEL module have been revised and unnecessary have been removed
14833	*Summary*: Permission denied when launching a Container **Improvement :** SALOME_ResourcesManager.cxx has been modified in order to provide a correct name for log file for containers.

GUI module (IAPP)

14147	*Summary*: Remove a lot of trace at launching **Changes :** A lot of trace at Salome launching has been removed. The following modifications have been implemented: 1) The trace in python was recovered by defining a variable SALOME_VERBOSE to 1. 2) Some INFOS were replaced by MESSAGE in KERNEL, GUI, GEOM, MED, SMESH, SUPERV and VISU modules. 3) The INFOS_COMPILATION display something only in debug mode now.
14830	*Summary*: removing some traces (again) **Changes :** The following trace in OCCViewer_ViewPort.cxx cout << "Choosing cmap for vID = " << vi->visualid << endl; was commented (both for debug and optimize modes).
14675	*Summary*: Processing of status of activation for Python modules **Improvement :** After the corresponding modifications the status of python module after trying the activation is returned correctly. If the module returns nothing then the status equals True. It is necessarily for compatibility with the old Py-modules.

GEOM module

S A L O M E   P l a t f o r m

14616	*Summary*: compatibility gcc4.1 **Improvement :** GEOM_SRC/src/GEOMImpl/GEOMImpl_IShapesOperations.hxx have been made compilable with gcc4.1
13456	*Summary*: GEOM : PAL EDF 294 Sketcher : improve the visibility of a point **New Features :** Add two fields in the Geometry preference menu : - the type of the marker used to represent vertices. - marker size. **Improvement :** Enlarged line width for sketcher preview (1 pixel before, 2 now).
13114	*Summary*: EDF247 : GEOM bug : Selection of Shapes **Changes :** For now if something is selected in the OCC viewer with the shift button pressed, nothing is deselected in the ObjectBrowser. Consequence of this bug is: if something undisplayed is selected in the object browser and the user selects with something displayed in OCC viewer with the shift button pressed then actions accessible for the single-selected object are not allowed: there are 2 selected objects anyway!
13381	*Summary*: EDF PAL 277 GEOM : "extrusion along a path" is not working **Improvement :** The bug has been fixed by correction of OCC13395 Open CASCADE bug.
13573	*Summary*: iges file can't be displayed **Improvement :** The bug has been fixed by correction of OCC13627 Open CASCADE bug
14678	*Summary*: getShape function has a regressive behavior. **Improvement :** Method GEOM_Object::getShape() has been improved for correct work on 64-bits platforms. Now it returns CORBA::LongLong instead of CORBA::Long, because on 64-bits platforms address occupies 64 bits.
13991	*Summary*: CEA:3.2.4 Problems with new partition **Improvement :** Significant work has been done in order to improve the partition algorithm. Corresponding debug has been realized in OCT. The improved version of partition based on OCT 6.1.2 sp1 works faster and more robust.
14828	*Summary*: Impossible to load a study created in batch mode **Improvement :** Improved saving/loading in Multifile mode to/from a file in a current directory (there was a problem with empty directory path during OCAF(GEOM) document saving/loading and a problem with empty directory path in SALOMEDS_Builder::LoadWith())

MESH module

13503	*Summary:* Mandriva64 porting: an incorrect mesh is created after import of "SMESH_mechanic.py" **Changes :** This bug is fixed due to the 13657 Open CASCADE bug fix: the problem is reproduced only on 64bit platforms.
13624	*Summary:* Mandriva64: submesh computed, via NETGEN2D differs from the submesh, created by the same way on Mandrake, Mandriva versions. **Changes :** This bug is fixed due to the 13657 Open CASCADE bug fix: the problem is reproduced only on 64bit platforms.
14172	*Summary:* EDF 7 SMESH : Option to force renumbering nodes in the preferences menu **Improvement :** The option "Automatic renumbering" has been added in the SMESH preferences menu. This option lets the user choose if the mesh has to be automatically renumbered before being exported (available for MED/DAT/UNV exports).
14419	*Summary:* IMP: a filter predicate to find nodes/elements lying on any kind of geom surface needed. **New Features :** A new filter predicate "BelongToGenSurface" added to SMESH module. It allows finding nodes and elements lying on a geometrical surface of any kind within the given tolerance. It works similar to "BelongToPlane" and "BelongToCylinder" predicates but without a limit on surface kind.
14335	*Summary:* EDF 344 SMESH : "ERROR : Iterator not implemented " when loading a script. **Improvement :** SMDS_MeshVolume::edgesIterator() and facesIterator() have been implemented.
14478	*Summary:* GHS3D memory. **Improvement :** GHS3D mesher no longerails because of inability to allocate memory passed via "-m" option
13260	*Summary:* EDF254 Regression SMESH: bad mesh in 3_2_1 **Changes :** The bug has been fixed with a new version of MEFISTO.
13900	*Summary:* SMESH : "Move_Node" ergonomy **Improvement :** The X, Y and Z labels have been aligned to the right in the following dialogs: "Move Node", "Add Node", "Rotation ", "Revolution", "Translation", "Symmetry" and "Extrusion Along a Path".
6266	*Summary:* Batchmode test smesh/002/A8 is hanging in libMEFISTO2D.so **Changes :**

SALOME Platform

	The bug is fixed with a new version of MEFISTO.
14158	*Summary*: EDF 164 SMESH : Merge Node , abnormal long computation time **Improvement :** The detection of close nodes was using an O(n²) algorithm, we have substituted this algorithm by a new Octree-like one. This Octree is an O(n) algorithm : With 28 586 nodes : 1min16sec vs 2sec for the Octree. With 141 245 nodes : 31min46sec vs 8sec for the Octree. With 1 476 528 nodes : 57h48min26sec vs 1min56 for the Octree.
14831	*Summary*: removing some traces (again) **Changes :** Some traces in SMESH module have been removed (replace INFOS by MESSAGE).
14695	*Summary*: EDF 352 SMESH : Définition d'un SubMesh avec une subshape d'une subshape **Changes :** In method SMESHGUI_MeshOp::IsSubshapeOk() a new variant of searching the main object has been implemented.

MED module

14357	*Summary*: Persistance: field on all elements is not restored if it's support had a non default name. **Improvement :** Now the IORs of all med objects published under MED component are successfully restored along with the study even if their name differ from default ones generated by med_object.addInStudy()
13247	*Summary:* Mandriva porting: SIGSEGV or CRASH after trying to "paste" mesh in MED. **Changes :** Changed the size of char array used as a sprintf's buffer. Its size is not enough to take a converted string.
14192	*Summary:* MED class bug on addDriver. **Improvement :** Now, the med file can be read using read(driver) of MEDMEM::MED, just after driver addition by addDriver(type,file), without calling readFileStruct(driver). **Changes :** Method readFileStruct() for MEDMEM_Med has been added to libMEDMEM_Swig.i
13414	*Summary:* Group of the edges is lost after reading of mesh via MED component **Improvement :** When reading a 3D mesh from a med file into memory, nodal connectivity of edges present in the file is kept.
14482	*Summary:* MEDMED GRID **Improvement :**

SALOME Platform

	A structured mesh created using MEDMEM::GRID(xyz_array,coord_name,coord_unit, type) can be stored in a med file.
14485	*Summary:* Problems of writing of files "MED" **Improvement :** A structured mesh created using MEDMEM::GRID(xyz_array,coord_name,coord_unit, type) can be stored in a med file.
14592	*Summary:* The test "test_MEDMEM_MeshingFlica" in "MED_3.2.4/bin/salome" doesn't work on Mandriva 64 bits **Improvement :** Improved saving of MED files, containing polygonal and polyhedral elements, on 64-bits platforms.
14604	*Summary*: MED standalone does not compile on 64bit **Improvement :** Improvement of the check for the python devel files during compile MED module in standalone mode on 64-bit platform. Modifications were done in /MED_SRC/adm_local_without_kernel/unix/config_files/python.m4 file and the python devel files are found now in /usr/lib64/... if we use native Python on 64-bit platform.

VISU module

13246	*Summary*: Mandriva, Debian porting: SIGSEGV during execution of "visu_view3d.py" from TUI. **Changes :** In order to synchronize the execution of GUI functions wrapped by SALOME_Event the following methods: VISU_ScalarMap_i: SetRange VISU_ColoredPrs3d_i: SetNbColors VISU_CutPlanes_i: SetNbPlanes, SetOrienation VISU_IsoSurfaces_i: SetNbSurfaces VISU_CutLines_i: SetOrientation,SetOrientation2 VISU_Gen_i: CreateTable
12688	*Summary*: Method ShowPart () does not work with argument VIEWER: **Changes :** IsPartShown method was not implemented for VISU viewers. Now it returns the state of the first viewer.
14483	*Summary*: EDF 347 : ScalarMApOn Deformed Shape on a cell field. **Changes :** The precision of the scale was changed in the dialog boxes of the DeformedShape and ScalarMapOnDeformedShape from 1e-5 to 1e-38 for more visibility of the scale value.

SUPERVISOR module

14522	*Summary*: Null objects(IORs) from modules, not yet loaded from an opened study

	Improvement : Automatic loading of modules, whose data is selected in the object browser for initialization of input ports of nodes in Supervision.
13947	*Summary*: Improvment of the Container Set-up in Supervision **New Features :** The procedure of Container set-up in Supervision was improved. The Container name for a new Factory node is taken now from the last node made by user for this component or from the last node of such component saved in the XML file if we modify imported dataflow. Moreover, some modifications were done in GUI part. Now the user can specify the Container name and other custom parameters during node creation. For this purpose the new button "Add Node and Customize Parameters" was added into the "Add Node" dialog for Factory nodes. Parameters customization may be done with the help of "Set Custom Parameters" dialog.
12575	*Summary*: Superv: GNode - unexpected abort **New Features :** According to modifications IsValid() method now checks the validity of GoTo nodes too as it done for Loop and Switch nodes. So, if we run a graph with incorrect GoTo <-> CoupledNode connection in GUI we'll have an error message like this: "Dataflow Not Valid : <error message string>". **Improvement :** The crash at execution of dataflow with GoTo node after deletion of to/from links of GoTo node and deletion of GoTo node itself is fixed.
14700	*Summary*: GraphMacroNodes1 from SAMPLES hangup. **Improvement :** The debug has been done in V3.2.0_maintainance after the check of the graph 2stringBlocks from PAL12455 and of the graph GraphMacroNodes1 from SAMPLES.
14793	*Summary*: Export from python of a graph with a switch **Improvement :** If the user exports a graph with SwitchNode from python without a link between Default ports, and imports the result, links between Default ports are added.

Environment

14484	*Summary:* SALOME installation procedure bug: problem with importing of Python vtk modules. **Improvement :** The bug has been reproduced on Linux Mandriva 64-bit. It is fixed by crating the patch for VTK-4.2.6 sources patch which is applied automatically by the Installation Wizard when installing VTK. The VTK-4.2.6 binary packages for the Linux Mandriva 64-bit have been patched also to avoid this problem.

Other

14294	*Summary:* Installation from sources in Install Wizard **New Features :** SALOME Installation Wizard now allows automatic building of SALOME modules from sources. The GUI provides an additional check box: "Build SALOME sources". If this check box is turned on, the selected SALOME module(s) will be built from sources during the installation. In this case the installation of the corresponding SALOME binaries is disabled (to avoid conflicts). *Note*: this operation requires much more free disk space than just unpacking of the SALOME modules sources packages. To enable this feature the build.sh script has been introduced. It implements the same functionality and supports the same set of options as build.csh script but it is targeted to the bash shell. It is also possible now to install all the products from sources - special check box "Install all products from sources" has been added. In batch mode this functionality is available via --all-from-sources (-a) option. This operation can be used to install SALOME on the Linux platform which is not officially supported. *Note*: the installation of all products from sources is a very time-consuming operation (it may require more than 24 hours depending on the computer).

🖳 Processed and answered queries

14424	Summary: EDF 216 GEOM : A GetInPlace without building history (Following PAL 12875 Platform 2006)
14760	*Summary*: EDF GEOM : Regression MakeCompound
14790	*Summary*: Pb when creating a 2D MESH in 3D space **Improvement :** MEDMEM mesh driver additionally writes a space dimension if it differs from a mesh dimension.
14464	*Summary*: Problem with "LocalTraceCollector.hxx"

![] Supported Linux distributions and pre-requisites

SALOME 3.2.5 supports Mandrake 10.1, Debian Sarge, Mandriva 2006, RedHat 8.0, 9.0, RedHat Enterprise 4, Scientific Linux 4.2 , Scientific Linux 4.3 and Mandriva 64 bit.
SALOME 3.2.5 version has been mainly tested with the following pre-requisite list on Mandrake 10.1 platform.
The following prerequisites are valid for SALOME 3.2.5 version. Please note that we try to use as much as possible of native products.

	Mandriva 2006 32bit	Mandriva 2006 64bit	Debian Sarge	Mandrake 10.1	RedHat Enterprise 4 32bit	RedHat 8	RedHat 9	RedHat Scientific 4.2 32bit	RedHat Scientific 4.3 32bit
gcc	4.0.1	4.0.1	3.3.5	3.4.1	3.4.1	3.2	3.2	3.4.4	3.4.4
Tcltk	8.4.5	8.4.5	8.4.5	8.4.5	8.4.5	8.0	8.0	8.4.5	8.4.7
Python	2.4.1	2.4.1	2.3.5	2.3.4	2.3.4	2.3.4	2.3.4	2.3.4	2.3.4
Qt&msg2qm	3.3.4	3.3.4	3.3.4	3.3.3	3.3.3	3.3.3	3.3.3	3.3.3	3.3.3
Sip	4.2.1	4.2.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
PyQt	3.14.1	3.14.1	3.13	3.13	3.13	3.13	3.13	3.13	3.13
Boost	1.32.0	1.32.0	1.32.0	1.31.0	1.31.0	1.31.0	1.31.0	1.31.0	1.31.0
Swig	1.3.24	1.3.24	1.3.24	1.3.24	1.3.24	1.3.24	1.3.24	1.3.24	1.3.24
OpenCASCADE Technology	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1	6.1.2sp1
Qwt	4.2.0	4.2.0	4.2.0	4.2.0	4.2.0	0.4.1	0.4.1	4.2.0	4.2.0
OmniORB	4.0.7	4.0.7	4.0.7	4.0.5	4.0.5	4.0.5	4.0.5	4.0.7	4.0.7
Hdf	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4	5-1.6.4
Med	2.2.3	2.2.3	2.2.3	2.2.3	2.2.3	2.2.3	2.2.3	2.2.3	2.2.3
Vtk	4.2.6	4.2.6	4.2.6	4.2.6	4.2.6	4.2.2	4.2.2	4.2.6	4.2.6
Numeric	23.7	23.7	23.7	23.7	23.7	22.0	22.0	23.7	23.7
Graphviz	2.2.1	2.2.1	2.2.1	2.2.1	2.2.1	1.9	1.9	2.2.1	2.2.1
Doxygen	1.4.6	1.4.6	1.4.6	1.4.6	1.4.6	1.4.6	1.4.6	1.4.6	1.4.6
NETGEN	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
docutils	0.3.7	0.3.7	0.3.7	0.3.7	0.3.7	0.3.7	0.3.7	0.3.7	0.3.7

☐ - Permanently tested platforms

☐ - Platforms we do not test but know that Salome can be run on

In addition, other versions of pre-requisites may also work.

SALOME Platform

How to install and build SALOME

- Please follow README file from Installation Wizard for processing correctly installation of SALOME and all prerequisites
- If you would like to compile SALOME from scratch, please use build.csh script delivered with Installation Wizard. Call "build.csh –h" to see all parameters of this script.
  - *Important remark*: on RedHat 8 with the native automake-autoconf tools, sources of KERNEL from CVS can not be compiled. As a workaround there is specially prepared sources of KERNEL in Installation Wizard (after "make dist" step from Mandrake 10.1). They can be compiled with old prerequisites, but user must not call "build_configure" step. To compile he must call "configure", "make", "make install" as usual. Because of this please don't use "build.csh" with "–b" option for KERNEL, because this option forces build_configure step. Call of "build.csh –i –o" process compilation and installation on RedHat8 correctly.

How to get the version and pre-requisites

The SALOME 3.2.5 pre-compiled binaries for Mandrake 10.1, Debian Sarge, Mandriva 2006, Mandriva64 and RedHat 8.0 can be retrieved from the PAL/SALOME FTP site (ftp://www.opencascade.com).
There are sources of modules inside, and user can build sources from scratch using "build.sh" script coming with installation procedure.
Alternatively, SALOME modules can be downloaded from the following CVS repositories:

- KERNEL module: :pserver:<username>@cvs.opencascade.com:/home/server/cvs/KERNEL
- GUI module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/GUI
- GEOM module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/GEOM
- MESH module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/SMESH
- SUPERVISOR module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/SUPERV
- VISU module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/VISU
- MED module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/MED
- NETGEN plugin module: pserver:<username>@cvs.opencascade.com:/home/server/cvs/NETGENPLUGIN
- SAMPLES: pserver:<username>@cvs.opencascade.com:/home/server/cvs/EXAMPLES

IMPORTANT! Source files for version 3.2.5 are available in CVS via tag **V3_2_5**

There are two patches on NETGEN which are placed inside NETGENPLUGIN sources. One path for all 32 bit platforms, other one is addition to first and should be applied only for Mandriva 64.
During the compilation on NETGEN from sources by Install Wizard, the patches are applied automatically to the standard NETGEN installation. You can download NETGEN 4.5 from CVS of their official site http://www.hpfem.jku.at/netgen/

All other pre-requisites shall be obtained either from your Linux distribution (*please be sure to use a compatible version*) or from the distributors of these pre-requisites (*www.trolltech.com for QT for example*).

Known problems and limitations

- Several animation cases in NR test bases do not pass on certain configurations of Mandrake 10.1 platform but pass elsewhere.

- Sometimes the NR test bases might give unstable results and have to be re-launched twice.

- Compilation on 64 bit when the videocard driver is not installed in standard location may fail and as a solution the prerequisites have to be recompiled.

- Netgen 1D-2D and 1D-2D-3D algorithm does not need definition of 2D and 1D algorithms and hypotheses both for mesh and sub-mesh. If you have defined 2D and 1D algorithms and hypotheses together with Netgen 1D-2D or 1D-2D-3D algorithm they will be ignored during calculation.

- SALOME supports reading of documents from the previous version, but documents created in the new version may not be opened in older ones.

- During the compilation of OCT 6.1.x by makefiles on a station with NVIDIA video card you may experience problems because the installation procedure of NVIDIA video driver removes library libGL.so included in package libMesaGL from directory /usr/X11R6/lib and places this library libGL.so in directory /usr/lib. However, libtool expects to find the library in directory /usr/X11R6/lib, which causes compilation crash (See /usr/X11R6/lib/libGLU.la). We suggest making links:

    "ln -s /usr/lib/libGL.so /usr/X11R6/lib/libGL.so ln -s /usr/lib/libGL.la /usr/X11R6/lib/libGL.la"

- Due to a bug with changes of tolerance in OCT 6.1, GUI test scenario PROD 04 can not be played in TUI mode without a workaround. The workaround is to call the same Boolean operation cut twice

- VISU module does not support timestamps defined on the same field but on different meshes

- In the current implementation of "Save VISU" state operation the parameters of Gauss view Partition mode are not stored. If a window has been partitioned and saved, it will be restored as non-partitioned. The same concerns the background color.

- Fails of display of some presentation on quadratic elements in VISU (cannot create animation for IsoLines, CutPlanes etc.) is inside of the VTK. Currently used version of the VTK library (4.2.6) can not properly process the quadratic mesh elements (only ScalarMap and DeformedShape can be created only) that is presented in the MED file. Unfortunately it is impossible to replace or overload the VTK functionality outside of the library. This problem will be fixed automatically when we port the SALOME platform on the VTK 5.0 or higher version). This concerns Gauss viewer on quadratic elements. On some files with quadratic elements it is impossible to build gauss presentation.

- Step-by-step execution in SUPERVISOR on some graphs fails. This functionality is only a prototype and has not been finished completely

- Due to VTK 4.4 limitation, display of numbers of nodes in SMESH module has problems (some numbers disappear from the viewer)

- VTK presentation in GEOM was not completely finished and has problems with performance and memory usage. It desirable to use OCT viewer in GEOM module.

- MEFISTO algorithm sometimes produces different results on different platforms

- On some cases the number of triangles generated by MEFISTO may change from each attempt of building the mesh

- Due to some known opened bugs, some non regression TUI tests fail or have different results on different OS:

SALOME Platform

- **Component**:
  - unstable work of "PrintPorts()" method
    /AddComponent/A1
    /TypesCheck/A0-A4
    /united/A1

- **Geometry:**
  - /boolean_operations/C0 – the result of the operation "common" of two shells connected by faces is a compound containing two faces (instead of 1 face)

  - /dump_study/G5 - unstable behavior of the "MakeFillet()" functionality

- **Kernel:**
  - /kernel/SWIG_scripts/A0 - unstable work of the "PrintPorts()" method

- **Med:**
  - "omniORB.CORBA.COMM_FAILURE" is raised after trying to read "Mistrat_import22.med" file
    /med/readStructFileWithFieldType/A3

    Note: this problem is reproduced only on Mandriva.2006 and not reproduced on Mandriva.2006.64 version

  - "Segmentation fault" is raised during "testMedMemGeneral.py" execution.
    /med/MEDMEM_tests/A4
    Note: this problem is reproduced only on Mandriva.2006 and on Mandriva.2006.64 versions

  - /med/MEDMEM_tests/A3 - incorrect values were returned for the fields, created by "test_MEDMEM_Meshing" test

    Note: this problem is reproduced only on Mandriva.2006.64 version and not reproduced on Mandriva.2006 version

  - /med/MEDMEM_tests/A1,A3 - mesh, created during execution of "test_MEDMEM_MeshingFlica" C++ test, doesn't contain groups

  - /med/MEDMEM_tests/A3 – "Segmentation fault" is raised after trying to get the description of the field component

- **Mesh:**
  - /smesh/mesh_Quadratic/A6 - "RotationSweep()" of the quadratic face around its edge is not implemented yet

  - /smesh/elements_edition/A6 - "ClearLog()" method is not implemented yet

  - /smesh/3D_mesh_NETGEN/A5,B5,B7 - mesh, based on the sphere is not computed via NETGEN
    Note: this problem is not reproduced on Mandriva.2006.64 version but is reproduced on Mandriva.2006

  - /smesh/bugs/B7 – computation of the mesh via Triangle(Mefisto) failed

  - /smesh/2D_mesh_MaxElementArea/C5 – computation of the mesh via Triangle(Mefisto) failed

  - /smesh/2D_mesh_MaxElementArea/E4 – "SALOME_Exception" is raised during mesh computation

- /smesh/2D_mesh_MaxElementArea/E5 – application hangs up during mesh computation via Triangle(Mefisto)

  Note: this is reproduced only on Mandriva.2006.64

- /smesh/2D_mesh_NETGEN/A5 – computation of the mesh with "NETGEN_2D" hypothesis failed

  Note: this is reproduced only on RedHat, Debian

- /smesh/2D_submesh/A3 - submesh, computed via NETGEN2D differs from the one, computed the same way on Mandrake, Mandriva, RedHat, Debian versions

  Note: this is reproduced only on Mandriva.2006.64

- /mesh/bugs/A0,A1 - Triangle (Mefisto) produces a wrong number of the triangles

  Note: this is reproduced only on Mandriva.2006.64

- **Study:**

  - /std/persistence_323/D2,D4,D7-D9 - Triangle (Mefisto) produces a wrong number of the triangles (or doesn't produce)

  - *Note*: this is reproduced only on Mandriva 64 bit

- **Supervisor:**

  - unstable behavior of the "SuperV.CNode.PrintPorts()" method
    /spv/GNode/A1
    /spv/INode/A0
    /spv/LNode/A0
    /spv/SAMPLES_python/A2-A4

  - /spv/united/A0 - "omniORB.CORBA.COMM_FAILURE" is raised after start dataflow execution

    Note: this happens only on Mandriva.2006.64, RedHat, Debian

- **Visu:**

  - /visu/Plot3D/F8,F9,G0 - SIGSEGV during creation of Plot3D presentation, because of VTK 4.2 limitation

  - /visu/dump_study/A6, /visu/bugs/B5 - "Min", "Max" range values are not taken into account after setting them for the "Scalar Map On Deformed Shape" presentation

- End user documentation for Supervisor module has been updated only in part of screenshots.

- Results of some TUI non-regression testing are different on slow and fast computers. This is due to using in some test cases the functionality of GEOM from Supervisor in parallel nodes. Due to the fact that Open CASCADE Technology (OCCT) does not thread safe in some geometry operations, in some hardware configurations there is parallel conflict access to some data and such supervisor graphs fail. This problem will be fixed in future. At this moment the workaround is usage of GEOM nodes subsequently.