SALOME 6.3.1

Maintenance release announcement

July 2011



GENERAL INFORMATION

CEA/DEN, EDF R&D and OPEN CASCADE are pleased to announce SALOME version 6.3.1. It is a maintenance release that contains the results of planned bug fixes against SALOME version 6.3.0 released in May 2011.

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NEW FEATURES AND IMPROVEMENTS

PREREQUISITES CHANGES

The changes of the 3rd-party pre-requisite products, made in SALOME 6.3.1 comparing with SALOME 6.3.0, are listed in the table below.

Product	SALOME 6.3.0	SALOME 6.3.1
Open CASCADE Technology	6.3.0 service pack 12	6.3.0 service pack 13
libBatch	1.3.0	1.3.1
Distene Blsurf	3.0	3.0.8 ¹

For additional information about pre-requisite products and SALOME modules dependencies refer to the paragraph "Supported Linux distributions and pre-requisites" below.

LICENSE RESTRICTIONS

 Hereby we explicitly declare that PyQt 4 toolkit (Riverbank Computing Ltd) is distributed under the terms of GPL license.

IMPROVEMENTS

SALOME version 6.3.1 does not include any new improvements and features comparing with SALOME 6.3.0.

¹ Several bugs in BLSurf 3.0 detected by SALOME application have been fixed by Distene company. These bug fixes are included into updated version of BLSurf meshing library.



BUG CORRECTIONS

GUI MODULE (IAPP)

	Summary: [CEA 477] SALOME 6 font problem
21279	Documentation on the SALOME GUI Theme usage has been improved.
	Summary: EDF 1892 GEOM: salome.sg.FitAll() command doesn't work in OCC viewer
21299	Fixed regression in SALOMEGUI_Swig Python interface of SALOME GUI module: FitAll() command operates well now in both OCC and VTK viewers.
	Summary:EDF 1896 : TUI DumpView command causes Salome to crash
21306	Fixed SIGSEGV in dumpView() functionality of OCC viewer, caused by bad dispatching of dump function to the OCC view sub-windows.

KERNEL MODULE

	Summary: Fix a bug which prevented to load any module when the variable
N/A	USER_CATALOG_RESOURCES_FILE was set on a non-existing file.

GEOM MODULE

	Summary: [CEA 480] Bad performance of glue function in 6.3.0
21291	Fixed a hang up of GlueFaces function.
	Summary:[CEA 484] Bug when deleting objects
21295	Fixed a problem of incorrect objects cashing in GEOM_Client.
	Summary: TC6.2.0: Creation of group with restriction "Only Sub-Shapes of the Second Shape" doesn't work
IPAL22183	Fixed regression in "Create Group" dialog box, related to the selection of the sub-shapes belonging to the shape different from the main shape.
	Summary: TC6.3.0: main shape disappears after Explode with Select Sub Shapes option
IPAL22456	The main shape is automatically redisplayed in the viewer after closing "Explode" dialog box.
	Summary: TC6.3.0: Incorrect study storage if study contains shape modified with YACS
IPAL22461	Problem of the GEOM_I_Superv engine, related to the publishing of the results in the study, has been fixed.
	Summary: Misprints in the Curve Construction dialog
IPAL22604	
/	Fixed several misprints in the Curve construction dialog box and related documentation.

IPAL22619	Summary: Create Group - impossible to select already selected faces not satisfying to Selection restriction
	Fixed problem of selection handling in the "Create Group" dialog box.

SMESH MODULE

	Summary: EDF 1291 SMESH : Create 2D Mesh from 3D improvement
	Junimary. LDF 1291 SiviESH . Greate 2D iviesh from 3D improvement
	"Create boundary elements" function behavior has been modified:
	 Allow groups as input type for "2D from 3D". In the GUI, group together the "1D from 2D" and "1D from 2D groups"
	functionality to keep only the "1D from 2D" radio button but allow groups as input
20749	type there.
	 The "new mesh" and "copy source mesh" options are disabled when the input is a group.
	Sub-meshes are no more allowed as input.
	 For the "2D from 3D" case, 1D elements linked to the 2D skin elements in the source mesh are added to the "new mesh" as well.
	Source mesh are added to the new mesh as well.
	Summary: EDF 1870 SMESH: ExtrusionAlongPathObjX + Merge nodes remove 3D
21270	elements
	In Mesh module, bugs of MergeNodes() and ExtrusionAlongPathObjX() have been fixed.
	Summary: EDF 1872 SMESH: Save in hdf files loses 0D elements in a group
21274	
21217	A bug that groups of 0D elements are not stored in the study has been fixed.
	Summary: EDF SMESH: SMESH script crashes Salome
21288	SALOME crash at reading a structured cartesian mesh from a med file by MESH module
21200	has been fixed.
	Summary:EDF 1887: Not conformal mesh between 2 boxes with viscous layer
	Summary.Edi 1007. Not comormal mesh between 2 boxes with viscous layer
21293	A bug that not symmetrical mesh is generated by "Viscous layers" hypothesis on a
	symmetrical face has been fixed.
	Summary: EDF 1890 : Problem with groups on geometry when dealing with split into
0.155	tetrahedral
21294	A bug of association of tetrahedra with shapes during "Split into Tetrahedra" operation
	has been fixed.
	Summary: EDF SMESH: Smoothing by selecting elements IDs seems not effective
21300	A bug of "Smoothing" operation has been fixed.
	Summary: [CEA] V6.3.1rc2 - problem with med file
21322	Fixed regression - SIGSEGV on the SMESH object highlighting in the VTK viewer.
0.1555	Summary: [CEA] V6.3.1rc2 - problem with volumic group creation
21323	Fixed regression - SIGSEGV on the SMESH object highlighting in the VTK viewer.

IPAL22173	Summary: TC6.2.0: "Netgen1D-2D" algorithm doesn't work on "flight_solid.brep" Fixed regression in NETGEN 1D-2D algorithm (patch for netgen 4.9.13 has been
	created).
	Summary: Max Element Area does not influence on resulting mesh for Triangle Mefisto
IPAL21957	Fixed regression in Mefisto 2D algorithm.
	Summary: Segmentation violation during Merge Nodes
IPAL22624	A bug of "Merge Nodes" operation has been fixed.

VISU MODULE

	Summary: EDF 1865 VISU: Scalar map + use only groups + values labelling
21277	An additional filter is used to generate points for the value labels. This filter removes the unnecessary points (that don't belong to any cell, including VTK_VERTEX cells), if the field data is defined on nodes.
	Summary: TC6.3.0: Post-Pro Preferences - Values Labeling, Inside Cursor, Outside Cursor are not documented
IPAL22508	Inside and Outside Cursor functionality are not used in the Post-Pro module at the moment as it is obsolete functionality, therefore "Inside Cursor" and "Outside Cursor" pages have been removed from Post-Pro preferences. Missing "Values Labeling" page has been added to the documentation.
	Summary: TC6.3.0: Post-Pro preferences - Gauss Points: Range valuefor min and Magnification values are decreased by application
IPAL22511	Fixed problem with rounding of floating point values.
	Summary: TC6.3.0: Post-Pro Preferences - Picking: Used Information Window Transparency value is less than in preferences one
IPAL22513	Fixed problem with rounding of floating point values.

MED MODULIE

	Summary: TC6.3.0: Application crashes during import poly3D_corr.med	1
IPAL22473	Fixed problem of MED wrapper	

PARAVIS MODULE

Г	21280	Summary: [CEA 478] Saving trace	
	21200	Bug connected with displaying text in the "Message Window" was fixed.	

	Summary: [CEA] SIGSEGV Error when clicking on OnPoint
21281	Fixed exception in case creation OnPoint presentation.
	Summary: [CEA] Help file is missing
21282	Incorrect warning message shown to the user if Paraview documentation is not found was corrected. The path to the Paraview documentation has been corrected.
	Summary: EDF PARAVIS: Mismatch in buttons and windows when switching from a component to PARAVIS and back
21307	The problem of the bad storing/restoring of the dockable windows and toolbar position and visibility state in PARAVIS module has been solved.
	Summary: EDF 1902 PARAVIS: Crash when importing a file med 2.3 in PARAVIS
21310	Fixed bug of the VtkReader plug-in.

BLSURFPLUGIN MODULE

	Summary:EDF 1686 GEOM: Bad triangle in a BLSURF + GHS3D mesh after converting to quadratic
21086	Fixed regressions of the convert to quadratic function for meshes generated by BLSurf plug-in.
	Summary: EDF 1876 BLSURFPLUGIN: Intersecting elements are created using BISurf as algo
21286	Fixed problem of processing internal edges by BLSurf meshing algorithm (patch has been created by Distene).

YACS MODULE

21261	Summary: SIGSEGV in trying to cancel a close of SALOME whith an unsaved schema
21315	Summary: SIGSEGV when cancel a save schema on exit

JOBMANAGER MODULE

Summary: Print correct status when job status changes

INSTALLATION PROCEDURE

	Summary: [CEA 483] InstallWizard does not generate csh shell properly
21301	Fixed regression in environment files generation procedure causing bad csh env files creation.

OTHER BUG FIXES

	Summary:EDF OTHER: Impossible to go back to gui documentation after going to tui one
21240	For TUI pages of the Geometry, Mesh and Post-Pro modules user documentation a n additional "Home" link has been added allowing the user to get back to the main page.
	Summary: TC6.3.0: Names from med are partially lost
IPAL22509	The fra.med sample file has been re-converted to the med 3.0 format.

PROCESSED AND ANSWERED QUERIES

21287	Summary EDF GEOM: Build face crashes salome on a non smooth wire
21296	Summary: [CEA] Problem with filter

CASCADE 6.3 SERVICE PACK 13 CONTENTS

This chapter lists all the bug corrections and improvements included to the Open CASCADE Technology 6.3.0 service pack 13.

	Summary: The algorithm BRepSweep_MakeRevol produce non-licit toroidal based face.
OCC22296	The fix solves the problem detected by SALOME non-regression test case geom/partition_EDF/B9
00022230	The creation of pure toroidal surface from the surface of revolution is brought in correspondence with the definition of toroidal surface done in Geom_ToroidalSurface.cdl.
	Summary: Boolean operation common fails.
OCC22310	Referenced by issue 0021128 EDF 1732 GEOM: MakeCommon fails.
	The treatment of intersection between two faces is changed by taking into account the existence of "stick" vertices, obtained from the interferences of lower class.
	Summary: The result of fuse is not valid for two straight edges.
OCC22356	The fix solves the problem detected by SALOME non-regression test case geom/partition_CEA/A8.
	Summary: Incorrect result of BRepOffsetAPI_MakePipeShell algorithm: it tries to build conical surface between two non-coaxial circles
OCC22361	Referenced by issue 0021067: EDF 1625 GEOM: Extrusion of a 2d object with a scale factor.
	New field "myTrsfs" was added to classes BRepFill_NSections and GeomFill_NSections to keep information about original disposition of sections.

	Summary: Boolean operation cut fails.
OCC22409	Referenced by issue 0019957: EDF 785 SMESH: Convert Quadratic and Group on GEOM
	Summary: The bug is appendix to the Salome test case: PARTITION / B7
OCC22421	The fix solves the problem detected by SALOME non-regression test case geom/partition/B7.
	Summary: The shape is valid on Linux but non-valid on Windows
OCC22428	The fix solves the problem detected by SALOME non-regression test case geom/partition/S2.
	The fix is to prevent the sacrifice of accuracy of floating-point arithmetic (provided by ANSI/IEEE Std 754-1985) for ellipse and cone.
OCC22436	Summary: Extra compound is created when importing non-manifold topology from STEP file
00022430	Referenced by issue 0020442: EDF 1087 GEOM: IGES format
00000400	Summary: BRepClass3d_SolidClassifier::PerformInfinitePoint() gives wrong result on the given solid.
OCC22489	Referenced by issue 0021085: EDF 1491 GEOM: Badly shaped solid.
	Summary: Scaled sphere (Solid with BSplineSurface) is wrongly exported in STEP.
OCC22492	Referenced by issue 0021260: [CEA 470] Problem of Export STEP.
00022492	Processing of VERTEX_LOOP STEP entity modified to be applicable not only for spherical surfaces but for b-spline surfaces as well.

■ SUPPORTED LINUX DISTRIBUTIONS AND PRE-REQUISITES

SALOME 6.3.1 supports Linux Debian 4.0 Etch 32bit and 64bit, Debian 5.0 Lenny 64bit, Debian Squeeze 6.0 64bit, Mandriva 2008 32bit and 64bit, Mandriva 2010 32bit and 64bit, Red Hat Enterprise 4.0 64bit and Scientific Linux 5.1 64bit. SALOME 6.3.1 version has been mainly tested with the following pre-requisite list on Mandriva 2010 32bit and Debian 4.0 Etch 64bit platforms.

SALOME 6.3.1 comes with the same prerequisites versions on all supported platforms (with some exceptions). The table below lists the versions of the products used by SALOME platform. Other versions of the products can also work but it is not guaranteed.

	1	1		_			1		l	1		l			1	l	
	Version	GUI (IAPP)	KERNEL	GEOM	SMESH	VISU	MED	YACS	PARAVIS	HOMARD	HEXABLOCK	NETGENPLUGIN	GHS3DPLUGIN	GHS3DPRLPLUGIN	BLSURFPLUGIN	HexoticPLUGIN	HEXABLOCKPLUGIN
gcc*	4.2**	Х	Х	Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Χ
automake*	1.9**	Χ	Х	Х	Х	Х	Χ	Χ		Х	Х	Х	Х				Χ
autoconf*	2.59**	Χ	Χ	Χ	Χ	Χ	Х	Χ		Х	Χ	Х	Χ	Χ	Х	Х	Χ
libtool*	1.5.6**	Х	Χ	Χ	Χ	Χ	Х	Χ		Х	Χ	Х	Х	Χ	Х	Х	Χ
GNU make*	3.80**	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ
cmake	2.8.4								Х								
Python	2.6.6	Х	Х	Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Χ
Qt	4.6.3	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ
Sip	4.10.2	Х			Х												
PyQt	4.7.3	Х			Х												
Boost	1.46.1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ
Swig	1.3.40	Х	Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х	Х	Х
OCCT	6.3 sp13	X		X	X	X	X	X	Х	X	Х	X	X	X	X	X	X
Qwt	5.2.1	Х			Х												
QScintilla	2.4.3							Χ									
OmniORB	4.1.5																
OmniORBpy omniNotify	3.5 2.1	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х
Hdf5	1.8.4	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Х		Х	Χ	Χ	Χ	Χ	Χ
Med	3.0.3				Χ	Χ	Х		Х	Х		Х		Χ			
Vtk	5.8.0	Χ		Х	Х	Х	Χ		Х		Х	Х	Х	Х	Х	Х	Χ
numpy	1.5.1		Χ														
lapack	3.3.0		Χ														
graphviz	2.26.3	Х	Χ	Χ	Χ	Χ	Х	Χ				Х	Х	Χ	Х	Х	
Doxygen	1.7.3	Х	Х	Х	Х	Х	Х	Χ				Х	Х	Х	Х	Х	Χ
NETGEN	4.9.13											Х					
docutils	0.7.0	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	
metis	4.0						Х										
scotch	5.1.11						Х										
libxml2	2.7.8	Χ	Х				Χ	Χ									
blsurf	3.0.8														Χ		
TetMesh-GHS3D	4.1 + 4.2												Χ	Χ			
tcl/tk	8.4.14***																
sphinx	1.0.7		Х	Х	Х			X		Х	Х						
expat	2.0.1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					Χ									
libBatch	1.3.1		Х														
jinja	2.5.5*** 1.4***																
pygments Setuptools	0.6c11***																
ParaView	3.10.1								Х								
Homard	10.1																
	10.1	1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	l		1	l	<u> </u>	l	1	<u> </u>			

		I														
	Version	RANDOMIZER	SIERPINSKY	PYCALCULATOR	COMPONENT	CALCULATOR	HELLO	PYHELLO	LIGHT	РҮШGНТ	ATOMIC	ATOMGEN	ATOMSOLV	HXX2SALOME	YACSGEN	× JOBMANAGER
gcc*	4.2**	X	X	X	X	X	X	X	X	X	X	X	X	X		X
automake*	1.9**	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
autoconf*	2.59**	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
libtool*	1.5.6**	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
GNU make*	3.80**	X	X	X	X	X	X	X	X	X	X	X	X	X		X
cmake	2.8.4															
		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х
Python	2.6.6	^	X		X	X	X	X	X	^	X	X	X	Х	^	X
Qt Sim	4.6.3		_^		X		^	^	^		^	X	^	_^		
Sip	4.10.2				X					V		X				
PyQt	4.7.3				۸					Х		Λ				
Boost	1.46.1		X			X	Х						Х			Х
Swig	1.3.40		X		Х	X	.,		.,				.,			
OCCT	6.3 sp13		Х		X	Х	Х		Х		Х		Х			
Qwt	5.2.1				Х											
QScintilla	2.4.3															
OmniORB OmniORBpy omniNotify	4.1.5 3.5 2.1	Х	Х	Х	Х	Х	Х	Х				Х	Х			Х
Hdf5	1.8.4		Χ		Χ	Χ			Χ		Х					
Med	3.0.3		Χ	Χ	Χ	Χ										
Vtk	5.8.0		Χ		Χ				Χ	Х	Х		Х			
numpy	1.5.1															
lapack	3.3.0															
graphviz	2.26.3	Х	Х	Х	Х		Х	Х			Х					
Doxygen	1.7.3	Χ	Х	Х	Х		Х	Х			Х					
NETGEN	4.9.13															
docutils	0.7.0															
metis	4.0															
scotch	5.1.11															
libxml2	2.7.8															
blsurf	3.0.8															
TetMesh-GHS3D	4.1 + 4.2															
tcl/tk	8.4.14***															
sphinx	1.0.7															Χ
expat	2.0.1															
libBatch	1.3.1															
jinja	2.5.5***															
pygments	1.4***															
Setuptools	0.6c11***															
ParaView	3.10.1															
Homard	10.1						l	l		l	l		l		l	

Not included into SALOME Installation procedure

*) Not included into Sale...

**) Minimal required version

***) Required to build other pre-requisite(s) only NOTE: For some platforms SALOME uses prerequisites with patches like in RPM and defines specific keys. If you compile products without the Install Wizard we strongly recommend you to check compilation keys using shell files located in config_files folder of the Installation Procedure.

SALOME 6.3.1 depends on a number of products for run time execution, others are necessary only for compilation or generation of development documentation (like doxygen for example). Below there is a list of mandatory and optional products.

Software Requirements

	Compilation Developmen		Execution		Remarks				
	Mandatory	Optional	Mandatory	Optional					
gcc	Х		Х						
Automake	Х								
Autoconf	Х								
libtool	Х								
GNU make	Х								
cmake	Х				for PARAVIS and LIBBATCH only				
Tcl/tk					for OCCT compilation from source files only				
Python	Х		Х						
Qt	Х		Х						
sip	Х								
PyQt	Х		Х						
Boost	Х		Х						
Swig	Х								
OCCT	Х		Х						
Qwt	Х		Х						
QScintilla		Х		Х					
OmniORB	Х		Х						
Hdf	Х		Х						
Med	Х		Х						
Vtk	Х		Х						
numpy/lapack		Х							
graphviz	Х								
Doxygen	Х								
NETGEN	X		Х		for NETGENPLUGIN mesh plug-in only				
docutils		Х			for KERNEL and YACS documentation only				
cppunit		Х							
mpi		Х		X	required only if used at compilation step				
openpbs		Х		X	required only if used at compilation step				
Lsf		Х		X	required only if used at compilation step				
metis		Χ		Х	required only if used at compilation step				
scotch		Х		X	required only if used at compilation step				
libxml2	Х		Х						
blsurf	X		Х		for BLSURFPLUGIN mesh plug-in only				
TetMesh-GHS3D	Х		X		for GHS3DPLUGIN mesh plug-in only				
sphinx		Х							
expat	Х		Х		For YACS only				
libBatch		Х		Х	required only if used at compilation step				
jinja					to build Sphinx only				
pygments					to build Sphinx only				
setuptools					to build Sphinx only				
ParaView	Х		Х		for PARAVIS module only				
Homard		Х	Х		for HOMARD module only				



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 or build.sh script delivered with the Installation Wizard. Call "build.sh -h" to see available options of this script.



SALOME SYSTEM REQUIREMENTS

Minimal Configuration:

- Processor: Pentium IV.
- 512 Mb RAM.
- Hard Drive Space: 1.5 Gb.
- Video card 64mb.
- CD/DVD

Optimal Configuration:

- Processor: Dual Core.
- 2 Gb RAM.
- Hard Drive Space: 5Gb.
- 2Gb Swap.
- Video card 128mb.
- CD/DVD



HOW TO GET THE VERSION AND PRE-REQUISITES

SALOME 6.3.1 pre-compiled binaries for Linux Mandriva 2008 (32bit and 64bit), Mandriva 2010 (32bit and 64bit), Debian 4.0 Etch (32bit and 64bit), Debian 5.0 Lenny 64bit, Debian 6.0 Squeeze 64bit, Red Hat Enterprise 4.0 64bit and Scientific Linux 5.1 64bit can be retrieved from the ftp://ftp.opencascade.com repository or from the SALOME web site http://www.salome-platform.org.

The SALOME Installation procedure includes SALOME modules sources, and it is possible to build sources from scratch using build.sch or build.sch script coming with installation procedure.

SALOME Installation procedure includes a patch for NETGEN which is placed inside NETGENPLUGIN modules sources. This patch is used for all platforms to fix several bugs of NETGEN. During the compilation on NETGEN from sources by the SALOME Installation Wizard, the patch is applied automatically to the standard NETGEN distribution. You can download NETGEN 4.9.13 from its official site using the following link: http://www.hpfem.jku.at/netgen.

All other pre-requisites can be obtained either from your Linux distribution (please be sure to use a compatible version) or from the distributors of these pre-requisites (for example, http://qt.nokia.com for Qt). Note, that for some of pre-requisite products SALOME Installation procedure also includes patches that fix the problems detected by SALOME.



KNOWN PROBLEMS AND LIMITATIONS

- The following modules have not been migrated to Qt series 4 and thus are not included into SALOME 6.3.1 release: FILTER, SUPERV, MULTIPR. These modules are considered obsolete and not supported anymore.
- Application crash might occur on the data publication in the study if both data server and CPP container are running in the standalone mode.
- On some platforms default font settings used in SALOME might cause the bad application look-n-feel. This problem can be solved by changing of the font settings using the qtconfig utility included into the distribution of Qt 4.
- The following limitations refer to BLSURF plug-in:
 - Mesh contains inverted elements, if it is based on a shape, consisting of more than one face (box, cone, torus...) and if the option "Allow Quadrangles (Test)" has been checked before computation.
 - SIGFPE exception is raised after trying to compute a mesh based on a box with "Patch independent" option checked.
 - It has been found out that BLSURF algorithm can't be used as a local algorithm (on submeshes) and as a provider of low-level mesh for some 3D algorithms because BLSURF mesher (and, consequently, the plug-in) does not provide information on node parameters on edges (U) and faces (U, V). For example, the following combinations are impossible:
 - global MEFISTO or Quadrangle(mapping) + local BLSURF;
 - BLSUFR + Projection 2D from faces meshed by BLSURF;
 - local BLSURF + Extrusion 3D.
- Sometimes regression test bases give unstable results; in this case the testing should be restarted.
- A native VTK can be used only after manual recompilation with the GL2PS component.
- NETGEN 1D-2D and 1D-2D-3D algorithm do not require definition of 2D and 1D algorithms and hypotheses for both mesh and sub-mesh. 2D and 1D algorithms and hypotheses defined with NETGEN 1D-2D or 1D-2D-3D algorithm will be ignored during calculation.
- SALOME supports reading of documents from earlier versions but the documents created in the new version may not open in earlier ones.
- If SALOME modules are not installed in a single folder, SALOME may not work in the CSH shell since the environment variables are too long by default. In this case, it is suggested to use SH or to install all modules in the same folder.
- During the compilation of OCT 6.x by Makefiles on a station with NVIDIA video card you can 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 failure (See /usr/X11R6/lib/libGLU.la). We suggest making symbolic links in that case using the following commands:

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

- VISU module does not support timestamps defined on the same field but on different meshes
- Stream lines presentation can not be built on some MED fields due to limitations in VTK.
- MEFISTO algorithm sometimes produces different results on different platforms.
- In some cases the number of triangles generated by MEFISTO may be different at each attempt of building the mesh.

- For the current moment, because of architecture limitations of the ParaView application, the PARAVIS module has the following known limitations:
 - PARAVIS is a "singleton" module: that means that it can be used within one study only. As soon as the user activates the PARAVIS in some study, this module becomes unavailable in other studies.
 - PARAVIS module works unstably using the remote connection; when SALOME is running on remote computer, activation of PARAVIS module can sometimes lead to the application hang-up.