# **SALOME 3.2.1**

### Maintenance release announcement

### July 2006

## General information

OPEN CASCADE is pleased to announce SALOME version 3.2.1. It is a maintenance release that contains the results of planned major and minor improvements and bug fixes against SALOME 3.2.0 version released in June 2006.

### Bug corrections

### **Environment**

|          | Summary: PYTHONPATH in SALOME is too long.  |
|----------|---|
| PAL10465 | <b>Improvement:</b><br>New location of the resource files avoids file name conflicts when installing to one single directory.   |
|          | <b>Changes:</b><br>Resource files of all components are placed to share/salome/resources/ <component>/<br/>subdirectory of "build" and "installation" directories. Such location of the resource files avoids<br/>conflicts of file names when installing to one single directory.</component>  |
| PAL12897 | Summary: EDF221 CAS CAS-6.0.tgz Build and Installation problems (for Salome).<br>Improvement:<br>README file has been put to Open CASCADE archive of Salome distributive with a detailed<br>description of steps that need to be taken in order to compile OCC successfully without the<br>installation procedure.<br>Besides, env_DRAW.sh has been added to Open CASCADE archive in order to start<br>DRAWEXE. |

### <u>Kernel</u>

|          | Summary: EDF199 - KERNEL - Crash of the Session.   |
|----------|--|
| PAL12797 | <b>Improvement</b><br>Writing in stl containers is not thread safe, this process was protected with mutex locks. |

### GUI module (IAPP)

|          | Summary: context-sensitive help in most dialogs  |
|----------|--|
| PAL10496 | <b>New Features:</b><br>F1 keystroke in a dialog is equivalent to Help button pressing and opens a corresponding help file.  |
|          | Summary: EDF: Crash on a bi-processor machine.   |
| PAL12651 | <b>Changes:</b><br>Salome desktop is now frozen (keyboard and mouse events disabled) during a command execution in embedded python console.  |
|          | Summary: Problem with the launching of Salome3.2.0 on account of the library "libGL.so.1".   |
| PAL12718 | <b>Improvement:</b><br>Environment file "salome.sh" was updated to have a path to X11R6 in LD_LIBRARY_PATH.<br>This allows correct running of SALOME on platforms where libGL.so is placed in X11R6<br>directory |
|          | Summary: EDF220 TUI Copy from an editor and Paste in the TUI do not run.   |
| PAL12896 | <b>Improvement:</b><br>TUI Copy from an editor and Paste in the python console can be performed with the middle mouse button.  |

### **GEOM module**

|          | Summary: on Debian Sarge, abort on check geometry.   |
|----------|--|
| PAL10324 | <b>Improvement:</b><br>Now Partition and Fillet functionalities work without exception with OCT in debug mode.   |
|          | Summary: Partition problems.   |
| PAL10424 | Improvement:<br>Now Partition functionality works without exceptions with OCT in debug mode.   |
|          | Summary: BR_3_1_0deb: Clicking on a reference doesn't highlight the referred shape.  |
| PAL11028 | <b>Improvement:</b><br>A shape, selected in the Object Browser in GEOM module, will be highlighted in the OCC viewer.  |
| PAL11259 | Summary: "MakePartition" raises an error during<br>"GEOM_TestOthers.TestOtherOperations()" calling.  |
|          | Summary: Create an extrusion with two given points.  |
| PAL11539 | <b>New feature:</b><br>Creation of extrusion using two given points is implemented. New versions of all modified files are integrated to branch V3_2_0_maintainance. |
|          | Summary: Impossible to add a Sketcher Result in a Wire.  |
| PAL12520 | <b>Improvement:</b><br>Fixed a regression of "Create a wire" functionality. Now it is possible to build a wire from a set  |

form

|          | of edges and wires, not only edges.   |
|----------|---|
|          | Summary: Tooltip of Pipe Generation.  |
| PAL12525 | <b>Improvement:</b><br>"Create a pipe" menu item and tooltip renamed to "Extrusion along a path". Status bar description of this operation has been changed from "Create a pipe" on "Create a shape by Extrusion along a path".   |
|          | Summary: Add a possibility to check geometry of a shape in Geometry GUI and python.   |
| PAL12608 | <ul> <li>New features:</li> <li>Added a possibility to check geometry of shapes: <ul> <li>New idl method CheckShapeWithGeometry added to check both topology and geometry of a shape.</li> <li>Python function geompy.CheckShape() now has additional parameter theIsCheckGeom, defaulting to 0, that means do not check geometry, so, by default it provides old behavior.</li> <li>"Check shape informations" dialog in Geometry GUI now has an additional check-box</li> </ul> </li> </ul> |
|          | "Check also geometry", not checked by default.  |
|          | Summary: Multi-Selection of the same object.  |
| PAL12611 | <b>Improvement:</b><br>Selection in Object Browser has been corrected to avoid situations, when selection of an object together with some references on it is considered as Multiple.   |
|          | Summary: Enabling FPE signal in GEOM leads to Salome crash with some video card drivers.  |
| PAL12628 | <b>Change:</b><br>Now FPE signal in Geometry module is activated only in debug mode and only if DISABLE_FPE environment variable is not set to 1. This allows to avoid crashes of VTK viewer, that occur with some video card drivers. This corresponds to FPE activation conditions, set on general level (see PAL12004 for more).   |
|          | Summary: Instable behavior after import of "salome_test.py" on various stations.  |
| PAL12662 | Changes:<br>Modified method<br>void SMESH_Swig::Init(int theStudyID)  |
|          | QApplication is forced to process all events at the end of this method. This allows to avoid simultaneous execution of code, using Standard_ErrorHandler class, which is not thread-safe.   |
|          | Summary: EDF : Loading with splash Screen.  |
| PAL12691 | <b>Improvmement:</b><br>Time delays have been decreased between servers check requests which are performed by the splash screen window. After applying this fix the time of SALOME loading is approximately the same with both splash and without splash.   |
|          | Summary: MakeShell must done always a shell   |
| PAL12722 | Improvement:<br>If we want create shell from one face - we can do it now.   |
| PAL12789 | Summary: EDF197 GEOM Coordinates of points  |

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|          | Improvement:<br>Now range of coordinate values that the user can specify when creating a point etc. in GEOM<br>module and a node in MESH module is [-1e+15, +1e+15] In MESH module, allowed values of<br>hypothesis of different dimension are in range<br>1D: [1e-15, 1e+15]<br>2D: [1e-30, 1e+30]<br>3D: [1e-45, 1e+45] |
|----------|---|
| PAL12813 | Summary: EDF 203 GEOM: the display shading mode is wrong for a "coque" whith a face not planear. New Features:  |
|          | Repair operation "Change orientation" has been implemented.   |
|          | Summary: EDF208 - GEOM extrusion is impossible on the result of a partition.  |
| PAL12838 | Improvement:<br>Now compound object can be used in extrusion operation as input.  |
|          | Summary: EDF209 VISU It is not possible to change the color of a point in the OCC View.   |
| PAL12857 | Improvement:<br>The color changing functionality now works for points.  |
|          | Summary: EDF214 GEOM DifferenceList does not remove the elements of the list in the geometry.   |
| PAL12867 | <b>Improvement:</b><br>DifferenceList and UnionList methods debugged to correctly remove/add shapes, which are sub-shapes of groups.  |
|          | Summary: EDF : GEOM. Add a function createAndDisplayGO() without "automatic update"   |
| PAL12900 | <b>New Features:</b><br>The optional boolean parameter isUpdated was added to createAndDisplayGO() method of GEOM_Swig class. So, now user can choose if update objects browser and viewer or not. This parameter is optional and equal to "true" by default.   |
|          | <b>Changes:</b><br>void createAndDisplayGO(const char* Entry) looks now like:<br>void createAndDisplayGO(const char* Entry, bool isUpdated =true)   |

### MESH module

| PAL11898 | Summary: ExtrusionAlongPathObject  |
|----------|--|
|          | <b>Improvement:</b><br>"Extrusion along a path" dialog box corrected to say, that only edges are possible as Shape for<br>Path.  |
|          | <b>Changes:</b><br>Mesh module online documentation updated for "Extrusion along a path" topic.  |
| PAL12417 | Summary: Readme of NETGENPLUGIN.   |
|          | <b>Improvement:</b><br>Text file ReadMeForNgUsers, containing instructions for NETGEN for Salome<br>compilation, has been improved. Now it also informs about the necessity to set CASROOT |

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| PAL12652 | Summary: EDF: number of treated meshes.<br>Improvement:<br>Creation of meshes for few GeomEntry has been implemented.<br>Method ::createMesh() in SMESHGUI_MeshOp.cxx has been changed.<br>At present for each GeomEntry we create an individual mesh, but all created meshes have one<br>name.   |
|          | Summary: EDF: no aspect ratio values for quadratic tetras.  |
| PAL12653 | Improvement:<br>Calculation of AspectRatio for quadratic elements has been implemented.   |
|          | Summary: SMESH sigsev when trying to see a mesh in a med file.  |
|          | <b>Changes:</b><br>GUI_SRC/VTKViewer/VTKViewer_ConvexTools.cxx<br>Method VTKViewer_DelaunayTriangulator::InitPoints() was improved:   |
| PAL12711 | Added calls to<br>myPoints->Modified();<br>myUnstructuredGrid->Modified();<br>after modification of myPoints.   |
|          | It is necessary, because many filters rely on the modification time to determine if they need to recompute their data.  |
|          | Summary: EDF207 SMESH and VISU: Visualization of groups on nodes and cells of a standard grid.  |
| PAL12820 | Changes:<br>MED_SRC/src/MEDWrapper/Base:<br>MED_Algorithm.hxx:<br>Added methods:<br>1. GetEntityByFamilyId - gets entity by family id (for GRILLE)<br>2. GetFamilyID2NbCells - gets map of families ids and corresponding number<br>of cells.<br>MED_Algorithm.cxx:<br>Implementation of previus methods.<br>MED_Structures.hxx:<br>Comment correction.<br>MED_Structures.cxx:<br>Implementation of TGrilleInfo::GetFamNum() and<br>TGrilleInfo::SetFamNum() methods.<br>MED_TStructures.hxx<br>To copy constructor of TTGrilleInfo structure added copy of myFamNum field.<br>MED_Wrapper.cxx:<br>Added only debug information.<br>MED_SRC/src/MEDWrapper/V2_2:<br>MED_V2_2_Wrapper.cxx:<br>Added reading of families on cells for TGrilleInfo structure into method |
|          | TVWrapper::GetGrilleInfo().<br>SMESH_SRC/src/DriverMED:<br>DriverMED_R_SMESHDS_Mesh.cxx   |
|          | Added reading families numeration to method   |

|            | DriverMED_R_SMESHDS_Mesh::buildMeshGrille()                                      |
|------------|--|
|            | VISU_SRC/src/CONVERTOR:  |
|            | VISU_MedConvertor.cxx:   |
|            | Modifed method BuildMeshGrilleOnEntityMap():                                     |
|            | Initializing of family id to cells size map.                                     |
|            | New method BuildGrilleFamilyMap():   |
|            | Initialize of family map for GRILLE  |
|            | Modified method VISU_MedConvertor::BuildGroups():                                |
|            | Separate calling of methods BuildFamilyMap and BuildGrilleFamilyMap              |
|            | for corresponding mesh type (STRUCTURE or NON STRUCTURE).                        |
|            | Modified method VISU_MedConvertor::LoadPointsOnFamily()                          |
|            | Correction of families on points for STRUCTURED mesh type.                       |
|            | Modified method VISU_MedConvertor::LoadCellsOnFamily()                           |
|            | Correction of families on cells for STRUCTURED mesh type.                        |
|            | VISU_SRC/src/VISU_I:   |
|            | VISU_Mesh_i.cc,VISU_Result_i.cc:   |
|            | Fix for bug in fill of QString by method sprintf(incorrect value of string       |
|            | after using of this method, example: Families names have france locale symbols). |
|            | Summary: To update "Dump()" in accordance to changes in structure in mesh info.  |
| PAI 12026  | Improvement:   |
| I AL 12320 | Now SMESH_Mesh::Dump() additionally shows info on quadratic and poly elements.   |
|            |  |

### MED module

| PAL10348 | Summary: "getMeshDimension()" returns defferent dimension of the same mesh in development and maintainance versions. Improvement: "getMeshDimension()" now returns equal dimensions of the same mesh in versions 3.2.x and 2.2.x  |
|----------|---|
| PAL12632 | Summary:Exceptionwhensupportsubstructionresultisemptyandmesh.getNumberOfTypes()>1Improvement:Now there is no exception when the result of support substruction result is empty in the casewhere a mesh has more than one geometric type of elements of the entity the support is of.  |
| PAL12731 | Summary: MED persistence does not work.         Improvement:         Now objects placed in SALOME study by MED component using "Explore MED file"         functionality can be reused after study storage and restoration.         The principle of MED persistence has been changed: now all objects are written in one med         file in order to cope with the problem of reading a field from file where the mesh it refers to is         absent, namely field support is wrong in this case as it is updated using missing mesh data.         Driver files were modified in order to make RDWR drivers able to both read and write. For this,         int getMedAccessMode(MED_EN::med_mode_acces mode,         MED_EN::medFileVersion medVersion)         was added in MEDMEM_MedVersion.hxx, that returns the right file access mode depending         on driver access mode and med file version. |

| PAL12737 | Summary: pb when running script<br>\$MED_ROOT_DIR/bin/salome/test_profil_MedFieldDriver.py                                       |
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|          |  |
|          |  |
|          | Summary: EDF200 Visualization on Gauss points and on nodes gives an error.   |
| PAL12815 | <b>Changes:</b><br>TGaussInfo::TLess() operator has been improved : added checking for TGaussInfo<br>consistency.                |
|          | Summary: DEVELOPMENT: Persistence in MED.  |
| PAL6948  | <b>Improvement:</b><br>Persistance in MED module has been restored. Now it is possible to save-restore MED data in SALOME study. |

### VISU module

|          | Summary: VISU Sweep Preferences does not work.   |
|----------|--|
| PAL12524 | <b>Improvement:</b> Now Sweep functionality of Post-Pro module behaves in accordance with values, set in preferences ("Number of steps" from "Sweeping preferences" now is correctly taken into account).  |
|          | Summary: SIGSEGV 'segmentation violation' detected.  |
| PAL12638 | <b>Changes:</b><br>In sources of dialogs VisuGUI_ScalarBarDlg.cxx, VisuGUI_Plot3DDlg.cxx,<br>VisuGUI_CutPlanesDlg.cxx:<br>Added checking of window in delete preview methods.  |
|          | In tool source VisuGUI_Prs3dTools.h:<br>Update aViewWindow variable in the method CreatePrs3d(VisuGUI*<br>theModule,_PTR(SObject) theTimeStamp,const Handle(SALOME_InteractiveObject)&<br>theIO) because it is used after runAndWait method, which can modify the window pointer.  |
| PAL12675 | Summary: SALOME installation procedure: problem with PyQt library.   |
|          | <b>Improvement:</b><br>Binary distributives of qt3.3.3 for Mandrake and qt3.3.4 for Mandriva of the installation procedure have been rebuilt to be more native-qt-like.<br>Binary distributives of pyqt3.14.1 for Mandriva and pyqt3.13 for Mandrake of the installation procedure have been rebuilt with qt versions specified above. |
|          | Summary: REGR: Created ScalarMap is not visible if there is onCells presentation in VTK.   |
| PAL12676 | <b>Improvement:</b><br>Last displayed presentation is now displayed in VTK viewer. It is not necessary to make<br>"Display only" or erase the onCells presentation.  |
|          | Summary: EDF : VISU : ScalarMap on Deformed Shape doesn't work.  |
| PAL12693 | <b>Improvement:</b><br>Now it is possible to build "ScalarMap of Deformed Shape" presentation on fields defined on different entities. If one of the fields is defined on cell entity approximation is applied to transfer results on nodes entity.  |

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|          | Summary: Visu sigsev when reading a med file.  |  |  |  |  |  |
|----------|--|--|--|--|--|--|
|          | <b>Changes:</b><br>GUI_SRC/VTKViewer/VTKViewer_ConvexTools.cxx<br>Method VTKViewer_DelaunayTriangulator::InitPoints() has been improved: |  |  |  |  |  |
| PAL12710 | Added calls to<br>myPoints->Modified();<br>myUnstructuredGrid->Modified();<br>after modification of myPoints.                            |  |  |  |  |  |
|          | It is necessary, because many filters rely on the modification time to determine if they need to recompute their data.                   |  |  |  |  |  |

### SUPERVISOR module

|          | Summary: Static objects in Geometry GUI libraries.  |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| PAL12607 | <b>Improvement:</b><br>Eliminated usage of private static fields in classes, representing dynamically loaded GUI libraries of Geometry module. This fix prevents possible incorrect cross-study interactions. |  |  |  |  |  |
|          | Summary: EDF211 SUPERV Incorrect execution of a correct graph correct under a context.  |  |  |  |  |  |
| PAL12854 | Changes:<br>Information about errors in InlineNodes now passes to SUPERVISOR.   |  |  |  |  |  |
|          | Summary: EDF212 SUPERV SuperV.py is not up to date (versus idl).  |  |  |  |  |  |
| PAL12865 | Improvement:<br>SuperV.py script updated to correspond to SUPERV.idl  |  |  |  |  |  |
|          | Summary: EDF213 SUPERV Error messages at execution time of graphs are not displayed by  |  |  |  |  |  |
| PAL12866 | the GUI.  |  |  |  |  |  |
|          | <b>Improvement:</b><br>If graphs' execution finished with Aborted status, message box with detail error description is<br>shown and this detail description is dublicated in message console.                 |  |  |  |  |  |
| _        | Summary: EDF218 SUPERV Problem with "Embedded Python-2.3.4" ??? V3.2.0  |  |  |  |  |  |
| PAL12895 | Improvement:<br>Bug is fixed. Attached graph now runs correctly.  |  |  |  |  |  |
|          | Summary: Python exception not correctly reported.   |  |  |  |  |  |
| PAL12901 | Python exception is reported exactly immediately after an error is catched during graph execution.  |  |  |  |  |  |
|          | Summary: Incorrect error reporting  |  |  |  |  |  |
| PAL12902 | Improvement:<br>Error message from Supervision engine is appended to the message "DataFlow Bad Execute :".  |  |  |  |  |  |

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## Processed and answered queries

### **Environment**

| PAL12911 | Summary: configure does not work |
|----------|----------------------------------|

### **KERNEL** improvements

| PAL11546 | Summary: Salome crashes if an action is done while a python script is loaded                       |
|----------|--|
| PAL12728 | Summary: For Salome3.2.0, the compilation of KERNEL with "build.csh" under Red Hat 8 does not work |

### <u>GUI module</u>

| PAL12432 | Summary: The main SObject is not selected                               |
|----------|---|
| PAL12903 | Summary: MED file incompatibility between SALOME V3.2 and SALOME V2.2.6 |

### **GEOM** module

| PAL12232 | Summary: Cut a volume with a plane : how to model a crack                          |
|----------|--|
| PAL12484 | Summary: Can't find the intersection between two lines                             |
| PAL12489 | Summary: TUI: can't create a sketch given existing points.                         |
| PAL12490 | Summary: Cut problems on curved shapes   |
| PAL12814 | Summary: On the half-cylinder, RemoveExtraEdges does not remove the unused segment |
| PAL12875 | Summary: EDF216 GEOM GetSharedShapes does not find common faces.                   |

### **MESH module**

| PAL11412 | Summary: Can't generate (quite) simple mesh                        |
|----------|--|
| PAL12650 | Summary: EDF bug: attached file is not displayed in SMESH and VISU |
| PAL12720 | Summary: EDF : SMESH Imp, stop compute                             |

### VISU module

PAL12284

Summary: False Visualization

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### Supported Linux distributions and pre-requisites

SALOME 3.2.1 supports Mandrake 10.1, Debian Sarge, Mandriva 2006, RedHat 8.0, 9.0, RedHat Enterprise 4, Saintific Linux 3.1 and Mandriva 64 bit. Please note that SALOME is not certified on this latter OS.

SALOME 3.2.1 version has been mainly tested with the following pre-requisite list on Mandrake 10.1 platform.

Following prerequisites are valid for SALOME 3.2.1 version. Please note that we try to use as much as possible of native products.

|                           | Mandriva<br>2006 | Debian<br>Sarge | Mandrake<br>10.1 | RedHat<br>Enterprise 4 | RedHat<br>8 | RedHat<br>9 | RedHat<br>Scientific<br>3.0.5 |
|---------------------------|------------------|-----------------|------------------|------------------------|-------------|-------------|-------------------------------|
| gcc                       | 4.0.1            | 3.3.5           | 3.4.1            | 3.4.1                  | 3.2         | 3.2         | 3.2                           |
| tcltk                     | 8.4.5            | 8.4.5           | 8.4.5            | 8.4.5                  | 8.0         | 8.0         | 8.0                           |
| Python                    | 2.4.1            | 2.3.5           | 2.3.4            | 2.3.4                  | 2.3.4       | 2.3.4       | 2.3.4                         |
| Qt&msg2qm                 | 3.3.4            | 3.3.4           | 3.3.3            | 3.3.3                  | 3.3.3       | 3.3.3       | 3.3.3                         |
| Sip                       | 4.2.1            | 4.1             | 4.1              | 4.1                    | 4.1         | 4.1         | 4.1                           |
| PyQt                      | 3.14.1           | 3.13            | 3.13             | 3.13                   | 3.13        | 3.13        | 3.13                          |
| Boost                     | 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                        |
| OpenCascade<br>Technology | 6.1              | 6.1             | 6.1              | 6.1                    | 6.1         | 6.1         | 6.1                           |
| Qwt                       | 4.2.0            | 4.2.0           | 4.2.0            | 4.2.0                  | 0.4.1       | 0.4.1       | 0.4.1                         |
| OmniORB                   | 4.0.6            | 4.0.5           | 4.0.5            | 4.0.5                  | 4.0.5       | 4.0.5       | 4.0.5                         |
| Hdf                       | 5-1.6.4          | 5-1.6.3         | 5-1.6.3          | 5-1.6.3                | 5-1.6.3     | 5-1.6.3     | 5-1.6.3                       |
| Med                       | 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                  | 4.2.2       | 4.2.2       | 4.2.2                         |
| Numeric                   | 23.7             | 23.7            | 23.7             | 23.7                   | 22.0        | 22.0        | 22.0                          |
| Graphviz                  | 2.2.1            | 2.2.1           | 2.2.1            | 2.2.1                  | 1.9         | 1.9         | 1.9                           |
| Doxygen                   | 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                           |
| docutils                  | 0.3.7            | 0.3.7           | 0.3.7            | 0.3.7                  | 0.3.7       | 0.3.7       | 0.3.7                         |

However, other versions of pre-requisites may also work.

### 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 3.2.1 pre-compiled binaries for Mandrake 10.1, Debian Sarge, Mandriva 2006 and RedHat 8.0 can be retrieved from the PAL/SALOME FTP site (<u>ftp://www.opencascade.com</u>). 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 3.2.0 are available in CVS via tag V3\_2\_1

The patch on NETGEN is placed inside NETGENPLUGIN sources. During the compilation of a plug-in, the patch is 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

- NETGEN has not been ported on Mandriva 64 yet
- OCC viewer in SALOME sometimes crashes on ATI RADEON cards (fix will be in new OCT release 6.2)
- On Mandriva 2006 salome\_test fails due to a bug in omniOrb 4.0.5. The bug concerns precision of conversion of double from python to C++ stubs. This bug is fixed in omni 4.0.7.
- 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
- During the compilation of OCT 6.1 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:

"In -s /usr/lib/libGL.so /usr/X11R6/lib/libGL.so In -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
- 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.

- Problem of TestVisu20.xml failure in Supervisor still exists in version 3.2.0
- 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 fails on some cases
- Due to some opened bugs, some non regression TUI tests fail:
  - MED component
  - SMESH module
  - GEOM module, partition problems
- End user documentation for Supervisor module was 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 (OCT) does not thread safe, 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.