

Open CASCADE 5.0.2 Maintenance release

Release Notes

Overview

Open CASCADE 5.0.2 is a maintenance release, which includes bug fixes over major release 5.0 and maintenance release 5.0.1.

In particular, 5.0.2 corrects most crucial limitations of building scripts (MS Visual Studio and autoconf / automake) available in 5.0 and 5.0.1.

Version 5.0.2 is binary incompatible with maintenance release 5.0.1, while source compatibility is almost fully retained (see [Changes](#)). Due to this binary incompatibility all applications linked against 5.0.1 must be recompiled to run with 5.0.2.

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Changes

- Concerning the API level this maintenance release is not fully source-compatible with its predecessors (OpenCASCADE 5.0 and maintenance release 5.0.1). In particular, the name of the function in the `Standard_Failure` class returning the message string has been changed. The old name `GetMessage()` has been replaced with `GetMessageString()` in order to eliminate the conflict with a macro definition that occurs in MS Windows.
- **Rebuilding Modules**
Libraries (`.dll`, `.dld`, `.lib` and `.libd`) and executable (`.exe`) files built by MS Visual Studio projects on Windows platform, are now placed to the `ros/win32` folder and replace their corresponding original libraries and executable files.

Bug Fixes



- Open CASCADE 5.0.2 incorporates **56** bug fixes. For details, refer to [Appendix](#).



Appendix: Open CASCADE 5.0.2 Bug Fixes

- [Application Framework](#)
- [Data Exchange](#)
- [Foundation Classes](#)
- [Modeling Algorithms](#)
- [Modeling Data](#)
- [Shape Healing](#)
- [Visualization](#)
- [WOK](#)

Application Framework, 7 corrected bugs	
ID	Summary
1023	Impossible to run DFBrowse command in DRAW
2793	BinOcaf: low performance when saving documents with large attributes
2852	Impossible to determine that a document file is garbage in the current persistence
2932	Create Attribute Delta depending on the actual change of the attribute
3144	Improved performance on the allocation of TDF_LabelNode
Data Exchange, 7 corrected bugs	
ID	Summary
51	Exception when reading an IGES file after having read a STEP file
131	Problems when reading IGES
396	Bad result after applying ShapeFix_Shape on attached shape
2368	Invalid result after reading a STEP file
2386	Improvement of NbIntervals and Intervals of Adaptors
2941	Regression on reading a file with external references
2969	Error while reading lexically disordered entities in a STEP file
Foundation Classes, 1 corrected bug	
ID	Summary
2978	Warning/Error message appears when compiling instantiations of NCollection_Vector
Modeling Algorithms, 22 corrected bugs	
ID	Summary
36	Sewing takes too long
239	Incorrect result of topological operations "bopcommon" and "boptuc" with attached shapes.
240	Topological operations "bopcommon" and "boptuc" with attached shapes returns an empty result.
241	Topological operations "bopcommon" and "boptuc" with attached shapes returns an empty result.
242	Topological operations "bopcommon" and "boptuc" with attached shapes returns an empty result.
243	Topological operations "bopcommon" and "boptuc" with attached shapes returns an incorrect result.
244	Wrong amount of vertexes in the resulting shape (13 instead of 12) after using the "bopcommon" topological operations with attached shapes.
245	Incorrect result of topological operations "bopcommon" and "boptuc" with attached shapes.
246	Wrong amount of vertexes in the resulting shape after using the "bopcommon" topological





	operation with attached shapes.
247	Function "bop" with attached shapes calls exception.
474	Impossible to build a fillet
615	Wrong result of BLEND operation
616	Function MKOFFSET gives an exception for an attached face
2085	Slow work of DRAW command "project" in dev
2442	Error in BRepClass3d_SolidClassifier
2500	BRepAlgoAPI_Section has a problem with calculation
2503	Method IntCurvesFace_ShapeIntersector::IsDone(void) missing
2569	If it is impossible to create a bezier curve, it throws an exception.
2784	"Common" and "cut" operations for two faces give an invalid result
2785	"Cut" and "fuse" operations for two faces that share the same domain give an invalid result
2986	Cut and fuse operations. for 2 toroidal faces, sharing the same domain give an invalid result
2991	BRepMesh_IncrementalMesh takes forever to mesh some faces
Modeling Data, 3 corrected bugs	
ID	Summary
354	Neither chamfer nor blend is built in the similar situation
623	Incorrect data in PCurve
2974	Bug in parametric definition of conical surface
Shape Healing, 1 corrected bug	
ID	Summary
2822	Incorrect work of FixClosed in ShapeFix_Wire
Visualization, 8 corrected bugs	
ID	Summary
627	2D view keeps many copies of the same object after Display()-Erase()-Display() combinations.
1629	Viewer is always updated on closing local contexts
2862	V3d_View::Dump produces an incorrect result.
3021	In the animation mode, it is impossible to suppress the text display
3022	Setting the degeneration ratio to 1.0 has no impact on primitive arrays
3192	Access violation in OpenGL library
3298	Some viewer functions are not available on Windows NT
WOK, 7 corrected bugs	
ID	Summary
576	Missing automake files
577	Automake building fails
666	XSDRAWEXE configuration
667	libtool max_cmd_len
781	Compil on Solaris 2.6 with CC4.2
2994	License problem
3302	Undefined alloc symbol with compilation by *.comp scripts