AUTODESK® REVIT® STRUCTURE 2012

Update Enhancement List

Improvements made in Update 2 build (20110916_2132):

Autodesk® Revit® Structure 2012 Enhancements

- Sets the level Underlay to NONE, instead of below level, when creating a new level.
- Maintains graphical display of Rebar when upgrading a project to Revit Structure 2012. Rebar which was displayed using Medium level of detail in Revit Structure 2011 will updates to use Coarse level of detail with the project is upgraded.
- Improves stability when adjusting rebar settings which cause the number of rebars in a set to exceed 1000.
- Restores display cutting of Slanted Columns in plan view when Course level of detail is used.
- Removes ½" cutback on wood framing members when using medium or fine level of detail.
- Maintains the alignment method parameter on manually adjusted walls when a Revit Structure 2011 project is upgraded to a Revit Structure 2012 project.
- Hides analytical nodes that are connected to hidden elements when in Analytical Model edit mode.
- Improves analytical node display when isolating by either Element or Category.
- Improves use of analytical model Rigid Link when overlapping beam and column are moved away from each other.
- Adds Analytical Reset to the right-click menu for an analytical model.
- Improves stability when setting Alignment Method on an analytical model element, such as a structural wall.
- Maintains the visibility of analytical models in linked files when upgrading a Revit Structure 2011 project to Revit Structure 2012.
- Improves floor analytical model shape when boundary line references a curved beam.

Autodesk® Revit® Platform 2012 Enhancements

- Improves stability when switching the visibility setting of linked file from By Linked View to By Host View.
- Corrects Ambient Shadow on objects which are contained within a mirrored linked file.
- Improves the import of IFC files which contain overlapping walls.
- Improves stability when exporting a project to DXF which contains a dimension style that is referenced more than 255 times within the project.
- Corrects the resolution of the background image when calculating offset and scale.
- Corrects duplicate column creation when using Create columns by Grid when some columns are already created on the grid.
- Improves stability when setting a view to Realistic display mode.
- Improves stability when navigating in 3D view after canceling a Print operation.
- Corrects silhouette display for perspective views in projects with linked files.
- Corrects the angle of Photometric Web based light sources when exported to FBX.
- Retains the original IES files when exporting to FBX.

- Reduces the scenarios where element IDs may become remapped or removed when Synchronizing to Central.
- Improves stability when removing layers from floors, roofs and walls.
- Corrects gbXML export of curtain walls where window openings were classified as air opening when using simple complexity mode.
- Improves stability when accessing Help.
- Corrects mapping of Cable Tray, Cable Tray Fittings, Conduit and Conduit Fittings when exported to IFC.
- Improves the consistency of beams being unique objects when exported to IFC.
- Improves the placement of slabs when exported to IFC.
- Improves the creation of beams, such as length, when imported from IFC.
- Disables switching to 3D view if current view only is set when exporting to IFC.
- Enables the export of filled regions to IFC.
- Enables mass based curtain panels and mullions to be individual elements when exported to IFC.
- Enables Structural Columns to be exported to IFC.
- Allows elements hidden by category to be ignored when project is exported to IFC.
- Enables Unicode support for both Import and Export of families.
- Changes setting for "Export views on sheets and links as external references" to be enabled when exporting to DGN.
- Allows exporting to DWFx if the view is blank.
- Improves stability when exporting to DWG.
- Improves the export of custom wall hatch patterns to DWG.
- Improves stability after displaying a warning message.
- Enables the use of Family Parameter when using the Material Browser Paint tool.
- Improves stability when modifying part assemblies.
- Improves stability when working within the Phases dialog.
- Improves placement of linked point clouds based upon their origin.
- Improves stability when printing to PDF in batch mode.
- Improves stability when saving a family into the same folder as the type catalog.
- Improves stability when upgrading projects.
- Improves stability when setting a workset from Editable to non-Editable.

Autodesk® Revit® 2012 API Enhancements

- Corrects the sheet size calculation when exporting to one sheet to DWFx.
- Improves stability during Reload Latest/Sync to Central when the document is not allowed to be modified.
- Retains schemas during Sync to Central and allows central file to remain correct.
- Reduces file corruption introduced by extensible storage.

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<u>Improvements made in Update 1 build (20110622_0930):</u>

Autodesk® Revit® Structure 2012 Enhancements

- Improves visibility of Analytical Model Cut Lines after editing in-place family.
- Disallows the Analytical Model parameters for beams and braces under a locked truss condition.
- Improves the removal of rigid link of a beam when Disable Analytical command is used.
- Enables the use of Analytical Reset command outside of edit mode.
- Enables Analytical Reset for analytical slab and floor.
- Enables the use of Wall Foundation analytical model line as host for a Line Boundary Condition.
- Allows the use of Structural Column Analytical Model in Plan View as host for LineLoads & Boundary Conditions.
- Improves which projection parameters are available during the creation of analytical models.

Autodesk® Revit® Platform 2012 Enhancements

- Enables visibility of hidden elements from linked files when project is upgraded.
- Improves stability when using Create Similar to add a new railing.
- Improves stability when editing dimension location.
- Corrects the elevation value on Spot Elevations through linked files.
- Improves spacing consistency between the dimension text and leader line.
- Improves performance when working with perspective views.
- Improves hatch pattern display in split section or callout views.
- Improves the visibility of decals in Realistic Materials view mode and Renderings.
- Correctly updates door and window frame when the size of a window or door is modified.
- Improves stability when changing Phase while using the Trim/Extend Multiple Elements tool.
- Improves stability when loading a mass family into a blank project.
- Improves stability when saving project.
- Improves consistency of filters (Views, Layers, etc.) after synchronizing with Central file.
- Improves stability when exporting view to Image when "create browsable web site ...." option is utilized.
- Improves consistency of Arc Length dimensions when exported to DWG format.
- Improves placement of view geometry within exported DWG to limit overlapping geometry.
- Improves stability when exporting a family to SAT format.
- Improves consistency of family parameter behavior for In-place Families.
- Improves stability when creating mass floors from hemisphere shaped mass.
- Ensures that only unused materials will be deleted by the command "purge unused".
- Improves stability while working within the Materials dialog.
- Improves placement of multiple Point Clouds into a single project.
- Improves color assignment to point clouds when imported into a project.
- Improves stability while using Print Preview.
- Improves stability when renaming sheets within the Project Browser.
- Improves performance when regenerating walls.
- Improves consistency of the model view regeneration after changing settings in the Render dialog.
- Improves stability when editing a Topo Surface.
- Improves stability when opening the preview pane while editing a building pad.

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- Improves stability when creating a duplicate view.
- Improves performance when changing location of stacked walls.
- Improves accuracy of parts scheduled in multi-category material takeoffs.

Autodesk® Revit® 2012 API Enhancements

- Corrects an issue where Revit file corruption occurs if Extensible Storage is added to the model and a second schema is instantiated.
- Corrects an issue where extensible storage added to an element type prevented that item from being transferred via Transfer Project Standards.
- Corrects an issue where Analysis Visualization Framework entities attached to structural analytical model element references didn't properly display.
- Enables overload for AnalysisDisplayColorSettings.GetIntermediateColors() which returns the desired color settings.
- Enables the method Document.Import(string, string, DWGImportOptions) to work for DXF files as well.
- Corrects an issue where parameters added to families via the API would not accept negative values.
- Corrects an issue where NewRoom(Room, PlanCircuit) failed due to inproper validation.
- Corrects instability where access to geometry objects would sometimes fail due to memory errors. For certain operations where a top-level GeometryElement was returned to an application, which extracted geometry from it, the top-level GeometryElement could be garbage collected prematurely while the application was still using some of the extracted geometry. The fix ensures that the garbage collector knows of the relationship among the different geometry objects.
- Corrects instability caused by invocation of the DocumentOpened event when worksets were accessed in the central file. The fix prevents the events from being raised in these situations, which are not true instances of documents being opened in the local session of Revit.
- Corrects documentation for FamilyInstance.FromRoom and ToRoom. These properties access the values similar to what is seen in schedules, and may be modified at will by the user. The previous documentation implied that the values were a result of geometric analysis of the rooms the doors or windows are adjacent to.

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