REVIT® MEP 2009

Web Update Enhancement List
Revit MEP 2009

<u>Improvements made in the current Web Update 3 build (20081118_1045):</u>

Revit® MEP 2009 Enhancements

- Corrects issue where gaps in link file cannot be controlled by mechanical settings.
- Corrects issue when routing duct from rotated equipment where it caused risers to end up at odd orthogonal angles.
- Pipe runs are now always visible in section view.
- No gap existed when printed when a round duct or pipe with fittings crosses duct. The hidden gaps will now be present from within Revit and when the user prints.
- Side outlet pipe fittings with different connectors are now able replace each other.
- Corrects issue where routing duct from equipment as a riser connects from the wrong side.
- Improves stability when clicking on "Settings" button in "Layout" mode.
- Improves stability when selecting the drag end control after splitting 3D duct in the middle.
- Deleting an air terminal in a space now updates the actual flow and load values.
- Non-alphanumeric characters in a Revit MEP HVAC Zone are now properly translated to gbXML.
- The graphical representation of the flexible duct as seen in two different floor plan scaled views is now correct. The tick mark representation on flex duct has been changed to correctly reflect the view scale. This may cause existing projects to display flex duct differently, both on screen and when printing.
- Duct elbows no longer disappear and then reappear when hidden, both on screen and when printed. Instead, they will be displayed as hidden lines.

Revit® Platform Enhancements

- Slab Edges when joined to their hosting Floor will now be able to cut the floor when the user manually remakes the join.
- Improves visibility of Color Fills for certain interior wall conditions.
- Improves IFC Export for Walls and MEP elements.
- Improves stability when using the Split tool.
- Improves stability when using Temporary Hide/Isolate functionality in 3D view.
- Improves stability when binding a linked Revit file into a project.
- Improves stability when switching between views.
- Improves stability when selecting any of the column headers on the CAD Formats tab of the Manage Links dialog.

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Improvements made in the current Web Update 2 build (20080915_2100):

Revit® MEP 2009 Enhancements

- Improves performance when modifying customer visibility settings for linked files, when many volumes exist that are bound by the linked file.
- Improves stability when modifying Panel Schedule Columns on Sheets.
- Improves stability when using the Convert to Flex tool.
- Space Elements with a Condition Type defined are now updated after Heating and Cooling Loads are calculated.
- Roof Elements that exist below the defined Ground Level now export to gbXML as UndergroundCeiling Surface Types.
- Improved performance when placing a Space that already exists within the Revit project.
- Improved stability when exporting to gbXML.
- Improved stability when modeling Ductwork in a Section or Elevation View.
- The version of the gbXML schema utilized when exporting is now included in the gbXML output.
- Heating and Cooling Loads results imported via gbXML now report accurate Calculated Heating Load and Calculated Cooling Load values on HVAC Zones.

Revit® Platform Enhancements

- Improves the ability to link markups made in a DWFx file.
- Improves the ability to view thumbnail previews in Microsoft® Windows® XP x64.
- Decal bump image map will now import at correct scale for cut-out.
- Floors containing multiple slopes and walls will now export to IFC correctly.
- Improves the display of colors in shaded views to be more consistent with the Revit® 2008 product line.
- Export to DXF/DWG will now export the Material's color_map texture.
- Mass Floors no longer disappear when adding text to Mass Element comments.
- Improves stability of worksharing when saving to central.
- Improves visibility of common edges when joining in-place family.
- Improves stability when accessing Pantone dialog.
- Improves stability when upgrading project or family from the 2008 version of a Revit product line.
- Improves stability when selecting elements in a 3D view.
- Moving a model pattern with a face-based family constrained to it no longer causes a constraint error.
- Improves stability when switching between views.
- Improves stability when importing DWG files.
- Improves performance when adding or editing walls in models with rooms.
- Improves stability when creating a section.
- When exporting to DWG, the ceiling pattern will now export correctly.
- After a project is upgraded to the 2009 version of a Revit product, the linework will now display as set in previous version.

API Enhancements

- By following a modified install procedure, VSTA can now run with non-administrative user permissions. Please see the Revit VSTA User Manual in the Revit SDK package for complete details.
- MEP Elements now properly return the Space they are located in via the API.

Improvements made in Web Update 1 build (20080602_1900):

MEP/Platform Enhancements

- Improves performance when modifying customer visibility settings for linked files, when many volumes exist that are bound by the linked file.
- Improves stability when exporting complex views to AutoCAD DWG format, when the hidden lines in those views have a large gap width.
- United Kingdom content is now included in the English installer.
- Improves stability when editing a family in the System Editor.
- Improves stability when upgrading previous release files that contain certain schedule configurations.
- IES light fixture information exported to the IES <Virtual Environment> now contains correct direction information.
- Improves performance when opening views with multiple unconnected systems.
- 1 and 2 pole panels can now be assigned to 3 Phase Distribution Systems.
- Wires in a view no longer impact the display of color fills.
- Wires are no longer trimmed according to the extents of the light source geometry.
- Light fixture preview images do not include the light source geometry.
- Improves the plotting consistency of certain components that are placed over hatched elements in coordination and architectural discipline views.
- Improves consistency of panel schedule column sizes when panel name is changed.
- Duct and pipe accessories can now change types without disconnecting from duct and pipe segments.
- Rooms will now export Revit internal parameters for IFC.
- When rendering, the progress bar reports correct percent complete.
- "Intensity" on Decal Types dialog was changed to "Brightness" to match Help documentation.
- Spot elevation with Display Elevation = Top & Bottom Elevation will now report the correct bottom elevation for sloped elements.
- In plan view with medium or fine detail level, spot elevations now report the correct top or bottom elevation of a beam that is joined to a column.
- Improves stability when changing the visibility of a link in a view template.
- "Downlight – Spot" light family no longer has duplicate Tilt Angle parameter.
- Lights that were in a light group that was deleted are no longer controlled by the deleted light group; instead they are controlled by the Ungrouped Lights status.
- Improves the ability to enter custom DPI value in the Render dialog.
- Improves stability when exporting to CAD formats.
- Improves stability when closing SteeringWheels.
- Improves stability when adding elements to a group.
- Families that contain arrayed voids will now function properly in the project.
- Improves stability for users with non-English operating systems when using the Open/Save dialog.
- Notes created in Revit for a DWF markup object will now propagate to the DWF after selecting publish.
- Enabling daylight portals will now affect the rendered appearance.
- Spotting on interior renderings with many internal light sources no longer occurs.
- Improves appearance of decals using cut-outs.
- Corrects "Unable to Start" error when starting the application.
- Model lines now remain in the correct design option when split.
- For sweeps on an arc wall, you now have the option to change sweep returns.
- Improves the fidelity of printing and exporting of hidden lines shown in structural and MEP views.

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API Enhancements

- Parameter binding performance has been improved. [API]
- The JoinType method has been implemented for the LocationCurve of structural members [API]
- Mullion LocationCurves are now accessible through the API. [API]
- External programs may now suppress VSTA startup warning messages. [API]
- The built-in parameter MATERIAL_PARAM_TRANSPARENCY now returns the correct set value. [API]