Update Enhancement List

* Indicates an issue that was reported by a Revit user.

Improvements made in Update Release 15 (2015.0.15 and 2015.1.15 Security Fix)

- Revit 2015 build: 20190507 1515
- Revit 2015 R2 build: 20190508 0715

To align with industry best practices for security and data integrity, Autodesk Identity Services and Revit Cloud Models Services, will move to Transport Layer Security (TLS) 1.2 and stop supporting TLS 1.0 and TLS 1.1 on August 3, 2019. Action may be required to update your software to maintain access to certain product functionality or features. To maintain connectivity, follow the instructions below. If your software is affected and is not updated, connectivity issues may occur as of August 3, 2019.

This version requires an update to the Autodesk License Manager components. Please see the <u>Autodesk Licensing</u> <u>Manager Hotfix</u> for additional information.

The update to allow the following feature functionality to be utilized is available in this Security Fix and **Collaboration for Revit 2015.1.15 Security Fix**.

- Revit Cloud Worksharing (Collaboration for Revit)
- Personal Accelerator (PAC) for Revit Cloud Worksharing
- Communicator
- Energy Analysis

Improvements made in Update Release 14

- Revit 2015 build: 20160512 1515
- Revit 2015 R2 build: 20160512 0715

Autodesk® Revit® Platform 2015 Updates

- Improves stability during Sync with Central>Reload Latest when project utilizes Revit Server.*
- Corrects an issue which prevented the replacement of an existing project within Revit Server.*
- Improves stability when reloading links within work shared projects.*

Autodesk® Revit® Architecture 2015 Updates

Improves stability during creation of a stair by component when the stair path text type becomes invalid.*

Improvements made in Update Release 13

- Revit 2015 build: 20160220 1515
- Revit 2015 R2 build: 20160220_0715

- Corrects an issue with dwf export orientation being incorrect when sheets have different orientation.*
- Improves model data integrity when syncing with Collaboration for Revit and Internet connectivity is weak.*



Improvements made in Update Release 12

- Revit 2015 build: 20160119 1515
- Revit 2015 R2 build: 20160120 0715

Autodesk® Revit® Platform 2015 Updates

- Improves consistency of UI behavior on high resolution monitors with high DPI settings (for example: 200% DPI on 4k monitor).*
- Corrects an issue introduced in Update Release 11 which caused models within Revit Server to be not available.*
- Improves stability when checking the model's worksharing status during a Sync with Central operation.*
- Improves performance when reloading links that are checked out by others in a workshared model, especially for slow networks.*

Improvements made in Update Release 11

- Revit 2015 build: 20151207_1515
- Revit 2015 R2 build: 20151208 0715

Autodesk® Revit® Platform 2015 Updates

- Improves stability after editing a dimension witness line and then moving the mouse outside of the Properties palette.*
- Improves stability when creating dimensions.*
- Improves stability when working within a worksharing model with central files on an unstable network environment.*
- Improves stability when modifying a schedule's appearance when the schedule does not contain table contents and headers.*

Autodesk® Revit® API 2015 Updates

Improves stability when encountering conflicting non-unique extensible storage schemas.*

Improvements made in Update Release 10

- Revit 2015 build: 20151007_1515
- Revit 2015 R2 build: 20151008 0715

- Improves the Audit command for scenarios when a model has been corrupted.*
- Fixes an issue with the Transfer Project Standards tool in which the model could become corrupted.*
- Fixes an issue that caused duplicate project parameters to be created when reloading a family after project standards were transferred from a project document to the family.*



 Fixes an issue where a Revit Server or Collaboration for Revit central model larger than 2GB would not open.*

Autodesk® Revit® MEP 2015 Updates

- Improves the display of scope boxes in MEP discipline views.*
- Improves stability when using flex duct.*

Autodesk® Revit® API 2015 Updates

Improves the Unplaced Elements function to avoid corruption to a model.*

Improvements made in Update Release 9

- Revit 2015 build: 20150702 1515
- Revit 2015 R2 build: 20150704_0715

Autodesk® Revit® Platform 2015 Updates

- Improves stability when deleting an element which contained an invalid partition ID.*
- Improves visual fidelity when exporting to DWF.*
- Improves data consistency between a schedule view and a schedule instance on a sheet.*
- Improves stability while upgrading Revit 2012 projects.*
- Improves stability while editing families.*
- Improves stability when using the Options dialog to log into A360 from a workshared central file.*

Autodesk® Revit® MEP 2015 Updates

Improves stability when upgrading a project that contains user-created pipe types.*

Autodesk® Revit® Structure 2015 Updates

- Improves stability while when placing a slanted column or a beam based on a Generic Model Line based family.*
- Improves stability when reloading an annotation symbol family used as a symbolic representation of brace elements on plan views.*

Autodesk® Revit® API 2015 Updates

Improves stability while when editing families which use external resources for keynotes.*

Improvements made in Update Release 8

- Revit 2015 build: 20150512_1015
- Revit 2015 R2 build: 20150511_0715

- Improves stability while reloading point cloud file if the point cloud file root path was changed in the Options
 dialog.*
- Improves stability when placing spot elevations.*



- Improves stability when moving a spot elevation and zooming in and out of a view.*
- Improves stability when exporting schedules.*
- Improves stability when exporting views to DWG.*

Autodesk® Revit® MEP 2015 Updates

- Fixes an issue that could cause lighting fixtures in copies of a group to disappear when the group is modified.*
- Improves stability when modeling from connectors in MEP families.*

Autodesk® Revit® Structure 2015 Updates

• Corrects an issue with the analytical floor horizontal alignment for a sloped floor.*

<u>Improvements made in Update Release 7</u>

- Revit 2015 build: 20150303_1515
- Revit 2015 R2 build: 20150303_0715

Autodesk® Revit® Platform 2015 Updates

- Improves stability with Sync With Central during Reload Latest.*
- Improves stability with Analytical Walls which contains invalid data.*
- Supports improvements within Autodesk A360 Collaboration for Revit 2015 version 2015.4.

Autodesk® Revit® Structure 2015 Updates

- Improves memory usage during rebar modeling.*
- Improves stability when changing the structural family category while within worksharing mode.*

Improvements made in Update Release 6

- Revit 2015 build: 20150127_1515
- Revit 2015 R2 build: 20150127_0715

Autodesk® Revit® Architecture 2015 Updates

- Corrects the behavior that caused view templates to apply incorrectly for some views, if a temporary view template was also applied to the view.*
- Improves stability when editing a families.*
- Improves loading and editing families which contain extensible storage.*
- Allows type parameters in upgraded families to swap from one type to another.*
- Improves stability when upgrading a project which contains corrupt families.*
- Improves notification reliability when closing a workset in which a rvt file link has been placed.*



Improves stability while opening the Material Dialog.

Autodesk® Revit® MEP 2015 Updates

Improves highlighting of circuits in the plan view from a panel schedule or System Browser.*

Autodesk® Revit® API 2015 Updates

Improves querying of point cloud on RCS files using the Revit pointcloud API.*

<u>Improvements made in Update Release 5</u>

- Revit 2015 build: 20151119_1515
- Revit 2015 R2 build: 20141119_0715

Autodesk® Revit® Architecture 2015 Updates

- Improves resolving of the Revit Server saved paths.*
- Corrects the behavior of placing families in a project when the family type selector is expanded.
- Improves stability when loading families that contain data created by add-ins.
- Improves stability when ungroup a group.
- Improved stability when filter a schedule.
- Improved stability when opening projects with bad dimensions.
- Improves stability when making edits in the Sun Settings dialog.
- Improves stability when deleting parts while modifying division.
- Improves stability when canceling new label creation in family environment.
- Improves stability when editing materials in families in a workshared environment.
- Improves stability when clicking the Macro Manager tool in the Family Editor.
- Improves stability when multiple users load families and undo their actions in a workshared file.
- Improves stability when two users loaded families of the same name.
- Corrects an issue with ceiling-hosted lights that caused the lights to be deleted when the ceiling was moved
 or copied.*
- Corrected an issue related to placement of face-based families on certain part elements.*

Autodesk® Revit® MEP 2015 Updates

• Improves stability when editing a conduit temporary dimension in an elevation view.

Autodesk® Revit® Structure 2015 Updates

- Improves stability when exporting multi-rebar annotation into DWG format.*
- Corrects an issue with incorrect warning and error messages for groups in design options with a group containing structural framing elements or columns.*
- Fixed an issue with the generation of the analytical surface for a vertical floor and slab.

Autodesk® Revit® API 2015 Updates

Allows the ability to offset the end of a wire when it is connected to other elements.

Improvements made in Update Release 4



- Revit 2015 build: 20140903_1530
- Revit 2015 R2 build: 20140905 0730

Autodesk® Revit® Architecture 2015 Updates

- Updates graphics certification file.
- Improves visual display of filled regions, loss of color and pattern, when view is set to Realistic display style.*
- Improves export of fill patterns on transparent faces.*
- Improves stability when family-related corruption is encountered.*
- Improves transmitting models with multiple external linked files stored on Revit Server when using eTransmit.*
- Improves stability while tab-selecting into an element to add detail lines using the Pick Lines option.
- Improves stability when using names longer than 128 characters in the Family Types dialog.
- Improves stability when deleting an element that is in an invalid state.
- Improves stability when clicking the door type preview button in some upgraded models.
- Improves visual fidelity with surface types which contain singularities.
- Improves stability when using file upgrade operations.*
- Ensures the file name is populated within the upgrade dialog box.*
- Improves stability when splitting a wall with an edited elevation profile.
- Improves stability when iterating different wall join configurations.
- Improves stability when splitting a wall.
- Improves data integrity with Multi-Category schedules which include elements from a linked file.*
- Improves stability when trying to rotate a view during the placement of the view on a sheet.
- Improves stability when trying to Tag All in a view of a workshared model that is owned by another user.*
- Improves stability when a user edited a wall structure with the preview window open.
- Improves stability when placing a wall in files upgraded to Revit 2015.
- Improves stability when multiple users try to modify the same family in a workshared environment.
- Corrects the abundance of standard materials being created when repeatedly loading a family.
- Improves stability when editing wall joins.
- Improves stability when cancelling an IFC Link during the insertion of new IFC links.*
- Corrects the behavior of placing families in a project when the family type selector is expanded.
- Improves stability when adding a family to a design option set when the family type selector is expanded.
- Improves the visual fidelity of point clouds sections which have Far Clipping set to "Clip with Line."*
- Corrects the placement of an image or any element containing an image (such as a schedule) on a sheet when Autodesk Revit is installed on Windows 8.1.
- Improves stability when exporting to IFC with the second level space boundaries option enabled.*
- Improves visual fidelity of level head symbol within a legend view after file upgrade.*
- Improves stability when pressing Ctrl+Tab in the Material dialog.
- Improves stability when loading the layer export setting from a file.*
- Improves stability if the model was missing its revisions settings data.*
- Improves data integrity after saving a workshared model in Revit LT.*
- Improves visual fidelity of Space Tags placed on linked files after reopening a model.*
- Improves stability when reloading a circular nested family.
- Improves stability for WARP device.
- Improves visual fidelity of point clouds.*
- Improves exports with include images.
- Improves stability when modifying wall type layers of large thickness.
- Improves data integrity during worksharing Reload Latest when one user places the first instance of a family and another user renames the family.



Autodesk® Revit® MEP 2015 Updates

- Improves stability when running Heating Cooling Loads.
- Improves printing and exporting electrical families when the project base point is covered.*
- Improves visual fidelity for flex duct and flex pipe when rotating the view true north.*
- Improves data integrity for Duct Radius Elbow/Taps velocity parameter in Properties Palette and within Tags.*
- Corrects the length value of a beveled tap when it is calculated by a formula.*
- Improves MEP fitting sizing when based upon content settings.*
- Improves stability when changing system types.
- Improves display of selected electrical equipment families within the type selector.*

Autodesk® Revit® Structure 2015 Updates

- Improves stability when upgrading a project with the structural setting Check for Member Supports enabled.*
- Improves stability when creating an automatic beam system which results in short Joist elements.*
- Improves data integrity of column families location when a Revit model is inserted as a group.
- Improves stability when editing the base offset of a column.
- Improves stability when placing a structural column using improper family parameters.
- Improves stability when changing a variable floor layer to use the function 'Structural Deck'.

Autodesk® Revit® API 2015 Updates

- Improves reliability of retrieving the current selection in an API Dockable Pane.*
- Restricts the deletion of the drafting solid fill pattern from a model by any method, including the API.*
- Improves API behavior to reflect the user interface by enabling the API user to 1) open a local model when
 ignorable worksharing exceptions occur, such as a central model missing; and 2) open a host model (local
 or central) when ignorable worksharing exceptions occur on loading the linked model, such as a linked
 model missing.*
- Improves stability when errors are posted during calling API Document.SynchronizeWithCentral by addons.*
- Corrects the API by changing the exception from SEHException to OperationCanceledException for API Selection.PickBox.*
- Improves stability when the Pick Points API was invoked from within a Dockable Frame.*

<u>Improvements made in Update Release 3 build (20140606_1530):</u>

Autodesk® Revit® Architecture 2015 Updates

- Improves performance when placing a large number of adaptive components.
- Updates graphics certification file.
- Improves multi-reference annotation tag grouping when tags contains more than one label.
- Improves preview image retention when families are saved in Project Browser.
- Improves stability of Revit user interface.
- Improves stability when opening Revit project by double-clicking RVT files in Windows Explorer.
- Enables display of project names containing apostrophes in Energy Simulation dialog.
- Improves stability of Energy Simulation when project includes sandwiched Revit elements.*
- Improves stability of rendering in the cloud when the selected view is missing light group data.
- Improves stability of Suite Workflows after double-clicking Workflow Manager.
- Improves rendering results when adaptive components are rendered in the cloud.



- Improves stability when upgrading legacy Revit projects.*
- Improves data integrity when copying or reloading groups that contain shared nested families between projects.
- Improves stability when loading a family while adding a Family Type parameter.
- Improves stability when editing a filter that is owned by another user.
- Improves performance when saving new central file to Revit Server.
- Improves data integrity in projects that contain large elements, such as ImageHolders.*
- Improves stability while opening IFC files.*
- Improves performance when editing masses with applied divided surfaces.
- Improves stability when exporting to SAT format with projects that contain linked files.
- Improves stability during use of the Paste command.
- Improves stability when opening IFC files and modifying Phasing settings.*
- Improves data integrity when swept surfaces are exported to SAT format.*
- Improves stability while exporting to ODBC database when project is missing assembly code settings.
- Improves data integrity in projects created from UK templates.
- Improves stability when canceling out of worksharing permission error while in Design Options.
- Improves stability when closing the Rendering dialog.
- Improves data integrity when closing a local file without synchronizing with central.
- Improves stability when creating material takeoff and then adding parameters.
- Improves stability when exiting Revit.
- Allows proper display of schedules on sheets when fields are sorted or grouped.*
- Allows proper display of selected elements when shadows are enabled in view.
- Improves stability when opening projects that include corrupt families.
- Improves data integrity when copying elements between projects.
- Improves stability when deleting family types from Project Browser.
- Improves stability when working with workshared files.
- Improves results when angular equality constraint
- Improves data integrity when default material for a host that is used by families is deleted.
- Improves stability when importing DWG files.
- Improves stability when exiting Revit while Ray Trace visual style is active.
- Improves stability when working with point clouds.
- Improves stability when loading nested families while in Family Editor.
- Improves stability when editing groups.
- Improves regeneration of families that include a reporting parameter.

Autodesk® Revit® MEP 2015 Updates

- Improves calculated airflow results when using a combination of imperial and metric units.
- Improves performance when working with mechanical and piping systems.
- Allows ducts to retain proper alignment after elevation of levels is modified.*
- Improves data integrity when using the Pipe Sizing tool.
- Improves consistency of undo/redo commands while editing a panel schedule template.
- Improves stability when generating pipe layouts.
- Improves data integrity of piping systems when calculation level is set to volume only.
- Allows proper updating of circuit numbers after circuits are moved in panel schedule.
- Allows proper assigning of ASHRAE tables to duct fittings.
- Allows proper display of 3-pole circuits in panel schedules.
- Allows proper retention of circuit loads after assigning a space circuit in a panel schedule.*
- Allows proper retention of circuit assignment after synchronizing with central.*



- Allows taps to remain connected to main duct when taps and ducts reside on different levels and then levels
 are modified.
- Allows proper updating of electrical fixture parameters when dependent on volts/poles instance parameters.
- Allows duct transitions to remain connected after changing the duct size.*
- Improves stability when dragging cable tray and/or conduit.
- Allows proper connection between circuit and panels to be retained when editing circuit information and panel schedules.
- Improves stability when creating in-place masses while System Browser is open.

Autodesk® Revit® Structure 2015 Updates

- Improves retention of beam annotation settings in projects that were not created from a template.*
- Improves results when mirroring rotated beams and columns.*
- Improves appearance of intersections between concrete beams and walls.*
- Improves stability when editing slanted columns.
- Improves stability when moving shape handles on bar joists while in a section view after disallowing joining.
- Improves stability when using the beam Change Reference tool.
- Improves results when modifying the cross-section rotation of vertical braces.

Autodesk® Revit® API 2015 Updates

- Improves retention of device connections when using Wire. Create to create new wire connecting to a
 device
- Improves display of wire connection points when using Wire.ConnectTo and Connector.Connect.
- Enable changes to MEPSystemType.CalculationLevel via public API.
- Level parameter correctly set when elements are placed via NewFamilyInstance().
- Improves retention of parameters in line boundary condition objects.
- Improves stability when using CompoundStructure.SetLayers.*
- Allows proper assignment of a Phase Created value when using DirectShapes.
- Improves alignment of text created via API.
- Improves stability when the API is in Automatic TransactionMode.

<u>Improvements made in Security Release build (20140323_1530):</u>

Addresses Heartbleed vulnerability - a security bug in the open-source OpenSSL cryptography library.
 Heartbleed is registered in the Common Vulnerabilities and Exposures system as CVE-2014-0160.
 For more information, please visit the CVE dictionary at http://cve.mitre.org

Improvements made in Update Release 1 build (20140322 1515):

- Improves data integrity when editing nested families.
- Improves stability when editing nested families.



Autodesk® Revit® 2015 Update Enhancement List

- Improves stability when editing when expanding schedule columns.
- Improves upgrade of projects which contain rebar elements.
- Removes format constraints for assembly codes.
- Improves data collection when Customer Involvement Program is enabled.

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