

Understanding BIM 360 Coordination clash detection and issue management workflow (CS322928)

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About the speaker

Anil R. Mistry

I joined Autodesk in February 2014. Currently I am working with the Autodesk BIM 360 support team as Premium Support Specialist, BIM and based out of Boston, MA office. I am Autodesk product user for more than 20 years. I received my Bachelor's degree in Civil Engineering from University of Massachusetts, Lowell, MA. I have 15 plus years of experience working in Civil/Construction industry and worked on several small to large sized projects. I was involved on many highway design projects (The Central Artery/Tunnel Project (BIG Dig), Manchester–Boston Regional Airport, NHFG, Broad Street Parkway, NH)) for Large and Small clients including DOT and municipal clients.

Teach “How to run Clash detection in BIM 360 Model Coordination using BIM 360 Design (CS225847)” class at AU 2018

Received “**Certificate of Excellence**” for outstanding performance and excellence while providing oversight on New Hampshire Department of Transportation Federally Funded construction project.

Model Coordination

Introduction:

Coordination is one of the keys to delivering a successful project! When you harness the power of the cloud, coordinating designers and trades no longer needs to be a drawn-out process. By automating coordination tasks, teams can quickly identify and resolve problems between disciplines, leading to increased efficiency, improved quality, and reduced risk. The following guide introduces the BIM 360 suggested coordination workflow and gives context to the different capabilities built into the product, including step-by-step starter guides.

BIM 360 improves the process of construction by supporting informed decision making throughout the project lifecycle. It does this by centralizing all project data in a single data repository and connecting project stakeholders and workflows from design to construction to operations, from the field to the office and back.

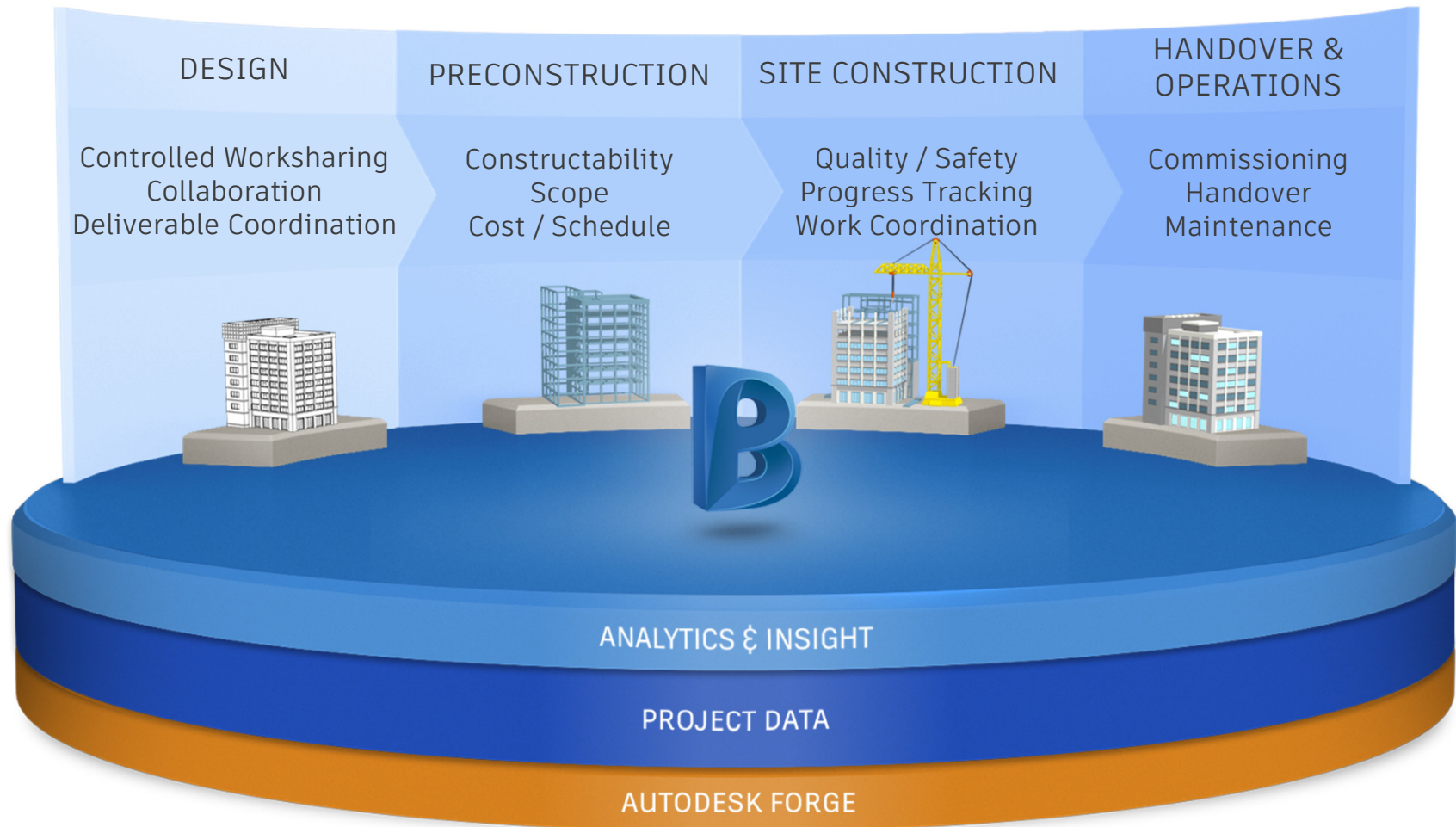
What is BIM 360?

BIM 360 is a unified platform that connects your project data in real-time from design through construction, supporting informed decision-making and leading to more predictable and profitable outcomes.

BIM 360 improves construction project delivery by supporting informed decision-making throughout the project lifecycle. From design collaboration, documentation and reviews, to pre-construction, and through quality and safety and operations, BIM 360 connects the people, data and workflows on your project, so you can see the big picture and keep your projects on track.

The Next-Gen BIM 360 line of applications is a cloud-based series of applications built upon Autodesk Forge platform (Classic BIM 360 applications such as BIM 360 Glue and BIM 360 Field are not on Forge platform).

BIM 360 PLATFORM



BIM 360 PRODUCT Packages



For all project stakeholders who need controlled access to information



For teams who need to collaborate in real-time on Revit models & track deliverables







For teams who need to coordinate multi-discipline designs across trades

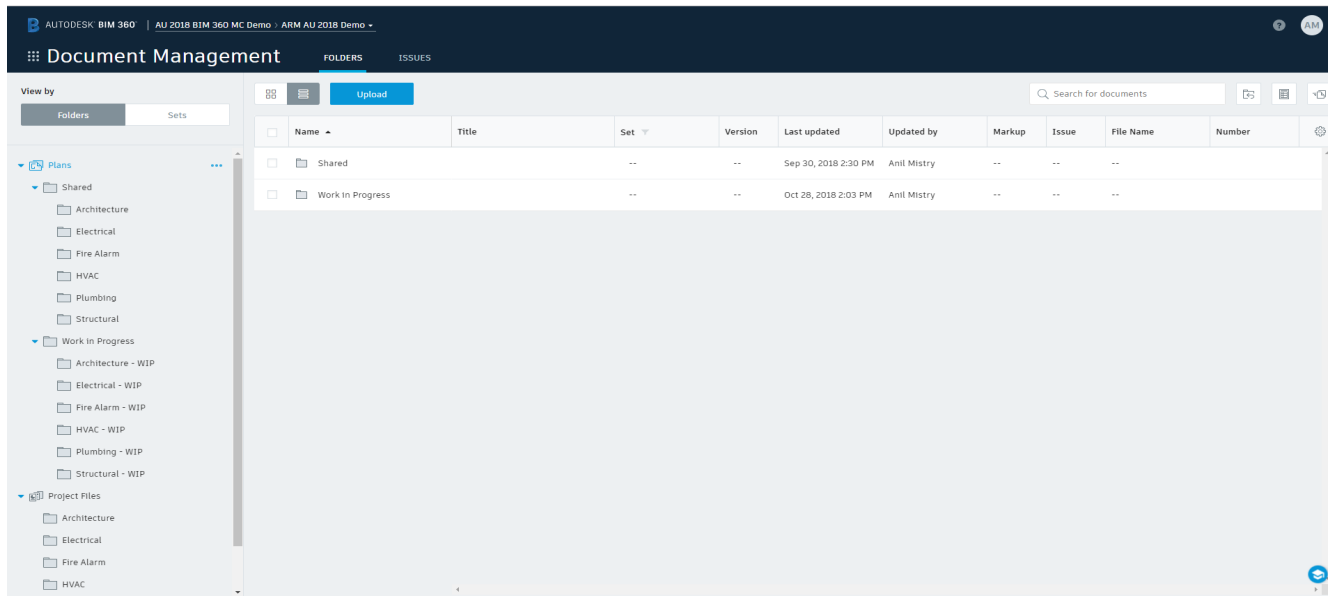


For teams who need to collaborate on work performed during construction

BIM 360 ENTITLEMENTS

		 <ul style="list-style-type: none"> • Design Collaboration • Revit Cloud Worksharing Classic Products <ul style="list-style-type: none"> • Collaboration for Revit • BIM 360 Team 	 <ul style="list-style-type: none"> • Model Coordination Classic Products <ul style="list-style-type: none"> • BIM 360 Glue • Navisworks • BIM 360 Layout 	 <ul style="list-style-type: none"> • Field Management • Project Management Classic Products <ul style="list-style-type: none"> • BIM 360 Field
				
Single Data Repository	<ul style="list-style-type: none"> • Document Management 	<ul style="list-style-type: none"> • Document Management 	<ul style="list-style-type: none"> • Document Management 	<ul style="list-style-type: none"> • Document Management
Dashboards & Analytics	<ul style="list-style-type: none"> • Project Home 	<ul style="list-style-type: none"> • Project Home 	<ul style="list-style-type: none"> • Project Home 	<ul style="list-style-type: none"> • Project Home • Insight
Administration	Centralized account-, project- and member administration (Project Administration / Account Administration)			

BIM 360 Document Management:



BIM 360 Document Management (Docs) is a cloud-based file repository and collaboration environment that allows teams to manage blueprints, 2D plans, 3D models, and other project documents. This streamlines the document management process and connects to Autodesk's other next generation SaaS products on the BIM 360 platform such as BIM 360 Model Coordination, BIM 360 Design (use with Revit), BIM 360 Build (aka Field Management), Design Collaboration (associated in with BIM 360 Design), Project Management, and Project Admin modules. BIM 360 Document Management serves of the focal point of the BIM 360 platform.

Model Coordination

What is Model Coordination Clashes Grid and how to get here:

BIM 360 Model Coordination

Autodesk, Inc. [US] | <https://model.b360.autodesk.com/projects/10dccb6f-7fa8-4bff-b710-71817cf416fe/clashes>

Work HP ePrintCenter | Pri OneDrive for Business Imported Agent Productivity D Applications - start.m

AUTODESK BIM 360 NextGen Testing > ARM - Test for MC

Model Coordination MODELS **CLASHES**

All models Search for models Last updated 13 Sep 2018 11:24

	{3D}_Hospital_L0_Structural.rvt	{3D}_Hospital_L1_Architectural.rvt	{3D}_Hospital_L1_Electrical.rvt	{3D}_Hospital_L1_FireAlarm.rvt	{3D}_Hospital_L1_HVAC.rvt	{3D}_Hospital_L1_Plumbing.rvt	{3D}_Hospital_L1_Structural.rvt	{3D}_Hospital_L2-5_Architectural_Curtain_Wall.rvt	{3D}_Hospital_L2_Architectural.rvt	{3D}_Hospital_L2_Electrical.rvt	{3D}_Hospital_L2_FireAlarm.rvt	{3D}_Hospital_L2_HVAC.rvt	{3D}_Hospital_L2_Plumbing.rvt	{3D}_Hospital_L2_Structural.rvt	{3D}_Hospital_L3_Architectural.rvt
221 clash groups															
{3D}_Hospital_L1_HVAC.rvt 470 clash groups		456	48	2			3		210			2		7	
{3D}_Hospital_L1_Plumbing.rvt 30 clash groups		30	1												
{3D}_Hospital_L1_Structural.rvt 385 clash groups					2			3	95	1				107	48
{3D}_Hospital_L2-5_Architectural_Curtain_Wall.rvt 482 clash groups							3		23					30	159
{3D}_Hospital_L2_Architectural.rvt 564 clash groups		58	94	103	99		263	3		97	81	170	52	280	21
{3D}_Hospital_L2_Electrical.rvt 306 clash groups							1		304		6	81		1	
{3D}_Hospital_L2_FireAlarm.rvt 160 clash groups		1							159	6					
{3D}_Hospital_L2_HVAC.rvt 450 clash groups					2				433	91				9	

Review 58 clash groups between {3D}_Hospital_L2_Architectural.rvt and {3D}_Hospital_L1_Architectural.rvt

BIM 360 Model Coordination:

BIM 360 Model Coordination provides a collaborative environment to publish, review, and run clashes on 3D BIM models. When models are uploaded to a centralized folder within BIM 360 Document Management (Plan Folder), the clash service within Model Coordination will automatically locate any clashes within those models. The module allows for viewing model data and filtering that data to facilitate easier inspection of clashes.

AUTODESK BIM 360

AU 2018 BIM 360 MC Demo

ARM AU 2018 Demo

Model Coordination

MODELS

CLASHES

Search for models

Last updated Yesterday at 06:38

<input type="checkbox"/> Models	Contributor	Updated date
<input type="checkbox"/> {3D}_Hospital_L4_Structural.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36
<input type="checkbox"/> {3D}_Hospital_L5_Structural.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36
<input type="checkbox"/> {3D}_Hospital_L6_Structural.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36
<input type="checkbox"/> {3D}_Hospital_L7_Structural.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36
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<input type="checkbox"/> {3D}_Hospital_L4_Plumbing.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36
<input type="checkbox"/> {3D}_Hospital_L5_Plumbing.rvt	Anil Mistry AU 2018 BIM 360 MC De...	28 Oct 2018 18:36

All models

My models

Clashes with my models

Filters

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Select...

Company

Select...

Date

Clear all

Model Coordination Workflow

Model Coordination Workflow

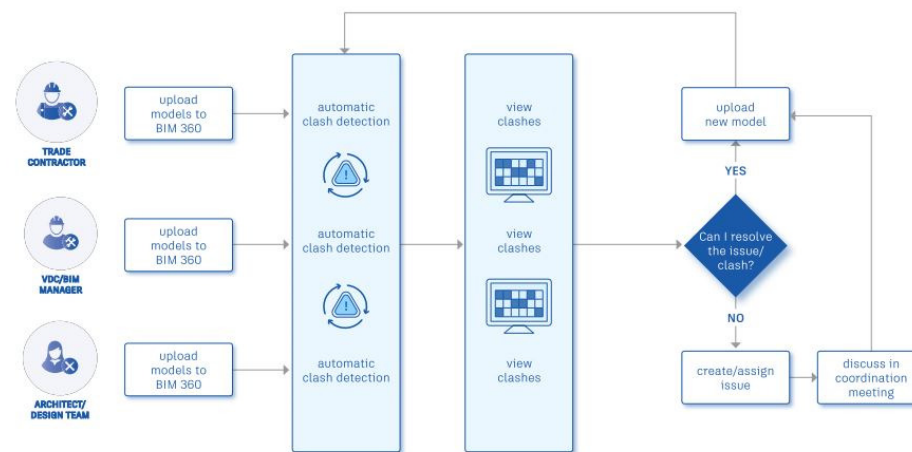
Simplify clash detection and view aggregated models using an automated workflow. The graphic below outlines the suggested model coordination workflow using BIM 360.

Why follow this workflow?

- Automate clash detections
- Easily sort and filter clashes
- View and share models across multiple disciplines

BIM 360 capabilities used

- Coordination spaces
- Automatic clash detection



Model Coordination Workflow (step-by-step)

- Setting up a New Project and Activate Services (Account Administration)
- Manage Project Members and Access (Project Admin)
- Create structured project folders (Document Management)
- Set up Model Coordination Folder in Document Management Plan Folder
- Set up Model Coordination Space in Project Admin
- Upload Models for Coordination
- View and Filter Models
- View and Filter Clashes
- Create Saved Views
- Create an Issues
- Create Not an Issue

Questions?

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