Plant 3D User Community Virtual Meet Up
14th July 2020

David Manning
Designated Support Specialist
Before we begin

Keep your line muted to reduce background noise, until you ask a question.

Have a question? Use the Questions box or raise your hand.

This webinar is recorded. The recording will be available on this YouTube Playlist
David Manning  
Designated Support Specialist  
Providing technical support to enterprise customers and the Autodesk communities in the following products and associated workflows:
- Plant 3D and P&ID
- AutoCAD
- ReCap
- Recap Photo
- Navisworks
- Fusion 360
- Vault
- BIM 360 tools
- With Autodesk since 2015
- My industry Experience:
  - 6 years Steam Plant Design
  - 12 Years Piping Design (Oil & Gas).
- Also interested in Mechanical Design, Additive and Generative manufacturing.
Vinod Balasubramanian
Senior Product Support Specialist

Vinod is currently a senior technical lead for AutoCAD toolsets software and a regular speaker at Autodesk University. He is responsible for handling business escalations on support issues, preparing partners for new releases, creating high-quality knowledge content, and helping to improve total experience of product for customers.
Agenda

- Overview
- Plant 3D News: General Updates and News
- This Month's theme:
  "Deeper dive" into the interoperability between Revit and Plant 3D
- Follow up Questions from last month
- Open Discussion and Q&A
Overview

Objective:
- Review Revit's P&ID Modeler.
- Understand how to use CAD Link in Revit to reference Plant 3D models
- Understand how to efficiently share Revit models to Plant 3D
- Understand how to use BIM 360 Model Coordination “Coordination Spaces”

Scope:
- Each session is intended to be a casual engagement, with a small portion for news and information followed by a more general discussion around the products and workflows. The discussion is hopefully driven from the users attending.
Safe Harbor Statement

- We may make statements regarding planned or future development efforts for our existing or new products and services. These statements are not intended to be a promise or guarantee of business results, future availability of products, services or features but merely reflect our current plans and are based on factors currently known to us. These planned and future development efforts may change without notice. Purchasing and investment decisions should not be made based upon reliance on these statements.

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Plant 3D News
C4Plant / Server location

Europe or US servers

<table>
<thead>
<tr>
<th>Server Location</th>
<th>Modules Supported</th>
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<tbody>
<tr>
<td>US</td>
<td>Document Management</td>
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<td></td>
<td>Project Management</td>
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<tr>
<td></td>
<td>Field Management</td>
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<td>Project Home</td>
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<td>Insight</td>
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<td></td>
<td>Design Collaboration</td>
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<td></td>
<td>Model Coordination</td>
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<td></td>
<td>Account Admin</td>
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<td></td>
<td>Project Admin</td>
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<td></td>
<td>BIM 360 app iOS/Android</td>
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<tr>
<td>Europe</td>
<td>Document Management</td>
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<tr>
<td></td>
<td>Project Management</td>
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<td></td>
<td>Field Management</td>
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<tr>
<td></td>
<td>Project Home</td>
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<tr>
<td></td>
<td>Insight (Dashboards, not Construction IQ)</td>
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<td></td>
<td>Design Collaboration</td>
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<td></td>
<td>Model Coordination</td>
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<td>Project Admin</td>
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<tr>
<td></td>
<td>BIM 360 app iOS/Android</td>
</tr>
</tbody>
</table>

Europe Data Center FAQs
Revit P&ID Modeler
P&ID Modeler for Revit
Revit since 2018.3 and P3D since 2021

Cloud-based collaboration directly between AutoCAD Plant 3D and BIM 360 Design

Support for AutoCAD Plant 3D users to share design models with other AutoCAD Plant 3D users is maintained.

AutoCAD Plant 3D users can share P&IDs with Revit users, enabling Revit users to complete their work with a view of the overall plant design and enhance design processes.
Autodesk Revit P&ID Modeler Resources:

Autodesk University Class: Taking Your Data into the Cloud: Introducing the Revit P&ID Modeler: Class by David Butts includes video and great 57-page handout.

Revit Help: P&ID Modeler for Revit: Contains help with instructional videos for setting up mappings and sharing P&IDs with Revit.

Autodesk Revit Blog from our development team introduces the functionality with links to additional information.

Revit Recess Blog has a comprehensive overview of the P&ID Modeler for Revit with commentary.
Exporting from Plant 3D to Revit – Method #1

- Export geometry from Plant 3D at scheduled intervals (can be scripted – export file location can be in script)
- Usually Revit can handle large Plant 3D models and complex geometry without issue
- Use Revit’s “Link CAD” command instead of “Import CAD”
- Use Revit’s “Manage Links” command to reload updated DWG

AutoCAD Plant 3D Model

Command: ExportToAutoCAD

Copy DWG file to shared location

Command: Link CAD

Revit
Exporting from Plant 3D to Revit – Method #2

- Export geometry from Plant 3D at scheduled intervals (can be scripted – export file location can be in script)
- Create a new empty Revit Family and then use “Import CAD” command to import the DWG. Save the family.
- Open the main Revit model and use the “Load Family” button on the “Insert” ribbon to load the new family.

AutoCAD Plant 3D Model

Command: ExportToAutoCAD

Copy DWG file to shared location

Create a new empty Revit Family (use Generic Model.rft)

Load family into Revit
Exporting from Revit into Plant 3D
Exporting from Revit To Plant 3D – Method #1

- Use the AutoCAD XREF “Attach Coordination Model” option to reference a Navisworks model into AutoCAD Plant 3D (2016 or later).
- Limitation: the XREF will not display on ortho drawings.

Navisworks

Open Revit Model and save NWD

Open Plant 3D

Command: XREF
Exporting from Revit To Plant 3D – Method #2

- Export DWG (or SAT for equipment) from Revit using *Export > CAD Formats > DWG*
- Control the visibility of objects in your Revit 3D view to minimize unnecessary details being exported to Plant 3D.
- Graphic performance in AutoCAD Plant 3D is highly dependent upon the size of the Revit model.

### Revit

**Command:**

*Export > CAD Formats > DWG*

### Modify Export Settings to be ACIS Solids

### Export DWG file

### XREF the DWG into a Plant 3D model
BIM 360 Design - Coordination Spaces
BIM 360 Coordinate – Coordination Spaces

Project Coordination and Clash Detection in the Cloud

Coordination spaces are configured against selected folders in Document Management, which contain the models you want to review and coordinate. Clashes are detected automatically when you add models to the folder in a space. Set up a new coordination space or activate one of the spaces below. If required, you can create multiple spaces to represent separate areas of a project or separate teams.

1. Ensure your project members have at least View permissions for the selected folder in Document Management. Learn more >

Create

<table>
<thead>
<tr>
<th>Name</th>
<th>Folder path</th>
<th>Date created</th>
<th>Added by</th>
<th>Change status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: Engineering Clash</td>
<td>Project files/5.0 Model Coordination</td>
<td>Today at 14:08</td>
<td>Stephan Gumpert</td>
<td>Deactivate</td>
</tr>
</tbody>
</table>
Structured Document Approvals

Passing the Analysis from person to person

- Customizable Per Project
  - Single Step Reviews
  - Group Reviews
- File Stamping
- Post Process File Copy

Update documents with approval status when review is complete.

- Also copy approved documents to:
  - Project Files/Z_Doc Control/3_Issued Ready
- Allow initiator to change copy location

Copy to folder when:
- All documents in the review have been approved

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Coordination Space – Typical Example
Open Discussion and Q&A

Raise your hand to ask your questions or add them to the Q&A panel.
Upskill Your Team
Plant 3D with the Experts 2021 Videos

https://www.youtube.com/playlist?list=PLXEyem_18syPZPb68zSgiLQHwuwRJraLW
Revit Tutorials, Courses and AU Classes

Access resources that can help you learn how to use the software

Autodesk University (AU) Online Resources

- **Online Classes**: Search for classes presented at previous Autodesk University sessions. Recorded videos, data sets, slide decks, and hand-outs are available for many classes.

Autodesk Design Academy

- **Watch & Learn**: The Autodesk Revit resources of the Design Academy offer a getting started guide and videos to help educate students and educators.

Additional Videos

- **YouTube channel** for Autodesk Revit provides access to more videos created by Autodesk for our customers.

- **Autodesk Screencast** is a free service that allows anyone to capture, share, and learn from software workflows. Visit the Autodesk Screencast website to see interactive video tutorials created by industry experts.
Learn BIM 360

https://learnbim360.autodesk.com/

Learn how to use BIM 360 to accelerate delivery, coordinate effectively, and reduce risk on your construction projects.

**Document Management**
Manage your projects in one digital library, at your desk or on your mobile.

**FREE**

**Approvals Workflow**
Facilitate, control, and automate the review, distribution, and approval of project drawings, models, and other documents.

**FREE**

**Quality Management**
Learn how to standardize your quality inspections.

**FREE**

**Coordination**
Display a single, unified view of your latest coordination models, and review clashes that are automatically located in those models.

**FREE**
The Customer Success Learning Hub

▪ Access to articles, product updates, tips and tricks, and more
▪ View previous webcasts
▪ Browse upcoming webcasts and live events
▪ Share expertise with industry peers and product teams

https://enterprisehub.autodesk.com

The Hub:
A Place to Learn, Connect, and Share Expertise.
Plant 3D Virtual Community

Monthly Virtual meetings in three time zones

- Resources Page: Plant 3D Virtual Community Meetup Resource Store

- Registration:
  https://www.autodesk.com/customer-success/plant-3d
Subscribe to the Health Dashboard to stay informed of maintenance or outages
Autodesk Health Dashboard
https://health.autodesk.com/

Sign In

Click Here

2021 + File Storage

2018 - 2020 File Storage

Services
Thank you...

for getting involved
Reference Materials and Links

- Autodesk Knowledge Network
- Autodesk University
- Autodesk YouTube
  - Plant search Link
  - Autodesk AutoCAD Plant 3D
- Autodesk ANZ
  - AEC Collection –Let’s make a project
- In The Pipes
Plant 3D Virtual Community Meetup resources

by Customer Success Team • on November 21, 2018

Overview

Objective:
- To provide a routine engagement with the Plant Design Community in the local region.
- To foster a collaborative user community while increasing the understanding and knowledge of Plant 3D and associated tools and workflows.
Other Virtual Meetups

Share with your co-workers

Monthly Virtual Meetup

- **Virtual Meetup** is a monthly webinar and an ongoing forum engagement, supplemented by in-person meetings at AU Las Vegas and Regional AUs. Flavors of the main agenda:
  - **Connect with Experts** – best practices and live discussions with subject matter experts
  - **Open mic** – customers presenting their stories or workflows
  - **Updates from product teams** – a product team comes to share what’s new in the release and what’s coming next

[https://customersuccess.autodesk.com/](https://customersuccess.autodesk.com/)
Plant 3D with the Experts
Information page with links

Plant 3D with the Experts - Video Blog Series
by Product Support Team • on August 16, 2019

Do you want to know more about Plant 3D?
Do you want to know a how to get started?
Are you an Plant 3D user or administrator with questions?

If you answered yes to any of these questions then this webinar series may be just the thing you need.

The Autodesk Product Support Team has planned a long list of short videos to help...
AutoCAD Plant 3D Community Virtual Meet-up

Share on social media with your colleagues

Webinar

AutoCAD Plant 3D Community Virtual MeetUp

Tuesday, October 8, 2019

Register now

AMERICAS
11:00 AM US Pacific
2:00 PM US Eastern

EUROPE
10:00 AM London
11:00 AM Central Europe

ASIA/PACIFIC
12:00 PM (noon) Singapore
2:00 PM Sydney

Jason Drew  Joel Harris  Nabil Nougha  Martin Buss  Daniel Manning  Vinod Balasubramanian
New registration page, now online: https://www.autodesk.com/customer-success/plant-3d

AutoCAD Plant 3D Community MeetUp Webinars

Autodesk is proud to present our monthly AutoCAD Plant 3D Community MeetUp webinar series. In this space we will hear news and information on AutoCAD Plant 3D design solutions, participate in live Q&As with Autodesk specialists, and have the opportunity to connect with diverse members throughout the worldwide AutoCAD Plant 3D community.

The webinars are scheduled for 30 minutes, though we will always extend beyond the initial half hour whenever a lively discussion happens to take a life of its own.

Americas Session
Europe Session
Asia/Pacific Session

View all upcoming Customer Success events
View all past Customer Success events
“In the Pipes” has Moved

- As another step as Autodesk’s ongoing process to improve our customers experiences has moved the “In the Pipes” blog to a new home.

https://blogs.autodesk.com/in-the-pipes/
Transport Layer Security (TLS): Updates Required to Maintain Software Access

- **Issue:**
  Transport Layer Security (TLS) 1.0/1.1 is vulnerable to man-in-the-middle (MITM) attack that can compromise data exchanges. This applies to *single-user subscribers* using the software versions listed below; customers using software or versions not listed and customers using perpetual or multi-user (network) licenses will not be affected.

- **Environment:**
  This issue affects a selection of Autodesk software used on Windows, Mac, and Linux versions 2014, 2015, 2016 and/or 2017.

  For most 2018, 2019, or 2020 software versions, your software and account are not affected.