Plant 3D User Community Virtual Meet Up
10th March 2020

David Manning & Vinod Balasubramanian
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 at:
https://customersuccess.autodesk.com/webinars
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

- 6 years Steam Plant Design
- 12 Years Piping Design (Oil & Gas)
- 3 Years Autodesk Specialist
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.
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Agenda

- Overview
- Plant 3D News: General Updates and News
- This Month's theme: Maintaining associations between catalogues, specs and Plant 3D models will allow powerful workflows for managing change.
- Follow up Questions from last month
- Open Discussion and Q&A
Overview

Objective:

- Understand how spec items are linked to their source catalog
- Understand how AutoCAD Plant 3D model components are linked to their spec items
- Understand workflows for updating piping specs while maintaining relationships with catalogs and 3D models

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.
AutoCAD Plant 3D Rogue Beta – Closing in 8 Days!

- We are glad to announce AutoCAD Plant 3D Rogue Beta officially GO LIVE. It’s available on AutoCAD Customer Council now.

For future involvement in the beta program email Plant3D.Beta.Team@autodesk.com to request access.
Maintaining Catalogue → Spec → Plant 3D Model Associations
What data is used to keep the connections?
What causes disconnects?
How do you avoid these issues?
How does PLANTSPECUPDATECHECK work?
What data is used to keep the connections?

GUIDs and PnPIDs

Connections are maintained between 3D models, specs and catalogues using unique IDs:

- Each part in a model, spec and catalog has a unique ID
- Sometimes IDs are in GUID format:
  - (Example: 21EC2020-3AEA-4069-A2DD-08002B30309D)
- Sometimes IDs are unique sequential numbers (ex: PnPID):
  - (Example: 121) – *these are only unique within the same project*

All of these IDs are typically hidden from the user!
What data is used to keep the connections?

IDs are stored in the drawing, spec and catalogue databases.
Updating Specs with Catalog Changes

This process is manual – no update notifications are “pushed” to you.

The settings for what properties are compared and subsequently synchronized are located in the AutoCAD Plant 3D Spec Editor pull-down menu “Specs > Update Specs from Catalog Settings” command.
# What data is used to keep the connections?

New IDs are generated for components…

<table>
<thead>
<tr>
<th>Where</th>
<th>When</th>
<th>Which Creates</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the Catalog</td>
<td>A new part is created in a catalogue either manually or by importing from another source</td>
<td>No connections</td>
</tr>
<tr>
<td>In the Spec</td>
<td>A new part is added to the spec from a catalogue</td>
<td>A connection between the spec part and the source catalogue</td>
</tr>
<tr>
<td>In the 3D model</td>
<td>A new part is placed in the model (i.e. from Spec Palette, Spec Viewer, Pipe Router, AutoCAD Copy, etc.)</td>
<td>A connection between the model part and the source spec part</td>
</tr>
</tbody>
</table>
What causes disconnects?

Plant 3D Model, Spec and Catalogue disconnect

- **Plant 3D Models ↔ Specs**
  - Renaming/Moving Specs
  - Change Project Spec Path
  - Deleting Part Families from Specs
  - Removing parts from Spec Families and re-adding them

- **Specs ↔ Catalogues**
  - Renaming/Moving Catalogues
  - Deleting Parts from Catalogues
How do you avoid these issues?
Establish good procedures – communicate them to your teams!

Workflow Example: Updating Catalog Parts

Modify Catalog → Save → Update Spec from Catalog → Save → Notify Users of Spec Change

Admin:
Modify Catalog

Users:
Review Graphical Changes

Verify All Model Parts Updated

Update Model from Spec

Copy Updated Spec to Project

Data Manager
How do you avoid these issues?

Establish good procedures – communicate them to your teams!

- If you have established a spec-building procedure that uses the *Property Overrides* in the Spec Editor to add Material, Material Code or Schedule to your catalog items as they are inserted into a spec, you will want to be sure to **deselect** those properties from the Update Specs from Catalog Settings.

- Always use “Save As” to create new versions or copies of your specs and catalogs.

- Don’t delete items from specs or models if possible – use the substitute grips to replace obsolete/incorrect parts with new parts (see next slide)…
How do you avoid these issues? - Example

One procedure for updating a model with new spec items
How does PLANTSPECUPDATECHECK work?

System variables/command related to spec updates within the model:

- **PLANTSPECNOTIFY** – This variable is stored in the registry and can be set to either 1 or 0. If it is set to 1, AutoCAD Plant 3D will check for spec file updates (by essentially running the PLANTSPECUPDATECHECK command) when the drawing loads, and on the time interval specified by the PLANTSPECNOTIFYTIME system variable. Default=1.

- **PLANTSPECNOTIFYTIME** – This variable is also stored in the registry and can be set to an integer value of 0 through 4. The value indicates the time interval (in hours) that spec files are checked for updates. The first check will always be made when the drawing is loaded, regardless of the value. Default=2.

- **PLANTSPECUPDATECHECK** – This command will force an immediate check for changes to a pipe spec that is used in the 3D model that is currently being edited. If changes are discovered, you can update the model.
How does PLANTSPECUPDATECHECK work?
How does PLANTSPECUPDATECHECK work?

Project Setup Settings define what properties update within the model:

1. Create list of specs referenced in Plant 3D Model
2. Are spec files newer?
   - YES: Do the model IDs match the spec IDs?
     - YES: Update the part properties defined in Project Setup
     - NO: No Updates Available
   - NO: No Updates Available

Legend:
- Create list of specs referenced in Plant 3D Model
- Are spec files newer?
- Do the model IDs match the spec IDs?
- Update the part properties defined in Project Setup
How does PLANTSPECUPDATECHECK work?

Project Setup Settings define what properties update within the model:
Additional Resources

- Autodesk University 2015 Class
  - AutoCAD Plant 3D Specs and Catalogs: How to Create "Unbreakable" Project Workflows

- In the Pipes Blog
  - Maintaining connectivity between AutoCAD Plant 3D catalogs, specs and models
Question Follow up
Question Follow up

From February 11th 2020 (AMER)

Q: When we first started with Plant3D we were told not to use the Autosave command because of conflicts with writing to SQL database is that not an issue? 
A: Autosave should not be an issue with newer releases of Plant 3D (2018 or later)

Q: Is the autosave backup best to save to the C default location? Have you seen any issues saving through a company intranet network folder location where files became corrupt? 
A: It is recommended that this be located on your fastest local drive.

Q: How will that DWG Open/Save Process change with Cloud Collaboration? 
A: Plant 3D communicates with the local SQLite project in your collaboration cache. Synchronization between the cache and the cloud-based SQL project database is done in the background by a separate process.

Questions and Answers from previous sessions are collated and published to the Plant 3D Virtual Community Meetup Resource Store website
Raise your hand to ask your questions or add them to the Q&A panel.
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

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.

November 6th, 2018

APAC Session

Agenda:
- Overview
- Plant 3D News
- Follow up on Last month’s Questions
- Update 2019.1
- Open Discussion and Q&A

EMEA Session

Agenda:
- Overview
- Plant 3D News
- Follow up on Last month’s Questions
- Update 2019.1
- Open Discussion and Q&A

AMER Session

Agenda:
- Overview
- Plant 3D News
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- Update 2019.1
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More detailed agendas to be published in advance in 2019.

Presentation PDF Link

Presentation PDF Link
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/
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.