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

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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 at: https://customersuccess.autodesk.com/webinars
Nabil Nougha

Technical Specialist AEC / Plant

Providing technical guidance and adoption to customers and the Autodesk communities in the following products and associated cross industry’s workflows:

- Plant 3D and P&ID
- AutoCAD
- Revit
- Recap
- Navisworks
- Inventor
- BIM 360

- 8 years at Autodesk, based in Dubai since 2014
- 10 Years Piping Designer & Superintendent positions
- Oil & Gas, Water, Petrochemical, Nuclear Industries
Martin Buss
Designated Support Specialist

- Premium Support Specialist at Autodesk since 2015.
- Mechanical engineer with experience in process engineering projects (power plant / pharma).
- Work experience with CAD piping applications like PDMS, PDS and Plant 3D.
- Supporting; Plant 3D, P&ID, BIM 360, Navisworks and AutoCAD.
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
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.
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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**

1. **Admin**: Modify Catalog → Save
2. **Users**: Update Spec from Catalog → Save
3. Notify Users of Spec Change → Copy Updated Spec to Project → Update Model from Spec
4. Review Graphical Changes → Verify All Model Parts Updated → 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 → 3. Do the model IDs match the spec IDs?
     - Yes → 4. Update the part properties defined in Project Setup
     - No → No Updates Available
   - No → No Updates Available
How does PLANTSPECUPDATECHECK work?

Project Setup Settings define what properties update within the model:
Boltset Length Table Update

**Boltset Length Table doesn’t update**

- Problem: you don’t want to loose connectivity of your boltsets with the boltsets in your active project, so you don’t want to delete the boltsets family from the spec, but you need to update the bolt length table setup.
- Open the specs’ pspc file using a SQLite database editor
- Delete database table „StandardBoltLength“
- Add a dummy boltset family into the spec, the „StandardBoltLength“ table will be newly created with the updated information in it
- Delete that dummy boltset, the updated „StandardBoltLength“ table will stay in the pspc spec database
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
Open Discussion and Q&A

Raise your hand to ask your questions or add them to the Q&A panel.
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.

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

Link
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.