Plant 3D User Community Virtual Meet Up
February 11th 2020

Jason Drew
Designated Support Specialist

Joel Harris
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
Jason Drew
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
- Inventor
- 3DS Max
- Navisworks
- Fusion 360
- Vault

- 10 years IT Support
- 3 years P&ID Design (Oil & Gas)
- 8 years Autodesk Specialist
Joel Harris
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
- Vault
- BIM 360 tools
- 23 years process piping designer
- 6 years AutoCAD developer/partner
- 5 years Autodesk Specialist
Agenda

- Overview
- Plant 3D News: General Updates and News
- This Month's theme: Plant 3D leverages a database to provide users with significant advantages and value. This month we will discuss Project database integrity, avoiding or fixing common issues and maintaining the project database.
- Follow up Questions from last month
- Open Discussion and Q&A
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 an associated tools and workflows.

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.

- Autodesk assumes no obligation to update these forward-looking statements to reflect events that occur or circumstances that exist or change after the date on which they were made. If this presentation is reviewed after 12 February 2020 these statements may no longer contain current or accurate information.

- This presentation also contains information, opinions and data supplied by third parties and Autodesk assumes no responsibility for the accuracy or completeness of such information, opinions or data, and shall not be liable for any decisions made based upon reliance on any such information, opinions or data.

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

Can’t find the AutoCAD Customer Council?

Email Plant3D.Beta.Team@autodesk.com to request access.

Now Closes March 18th
AutoCAD Plant 3D Rogue Beta

Feedback Requested

- Plant product team is collecting customer feedback on AutoCAD beta forums
- Collaboration project backup and upload procedure to Docs for testing
Plant 3D with the Experts

A global webinar series from your Autodesk Product Support Team.
AutoCAD Plant 3D Community Virtual Meet-ups 2020

Share on social media with your colleagues

**January session**
Tuesday, January 14, 2020 | 11:00 am US Eastern | 10:00 am London
- [SELECT](#)

**February session**
Tuesday, February 11, 2020 | 11:00 am US Eastern | 10:00 am London
- [SELECT](#)

**January session**
Tuesday, January 14, 2020 | 2:00 pm US Eastern | 11:00 am Singapore
- [SELECT](#)

**February session**
Tuesday, February 11, 2020 | 2:00 pm US Eastern | 11:00 am Singapore
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Did you miss any of the previous months meet-ups?

Don’t miss the November recording to see Misha Belilovskiy present on:

**Plant 3D Past, Current and the Future**

*Agenda (for all sessions):*

- Introduction
- AutoCAD Plant 3D Past, Current and the Future (Misha Belilovskiy)
- Collaboration for Plant 3D with BIM 360 Docs Beta – What to expect (David Manning)
- Hot Tips from the Product Support (Vinod Balasubramanian)
- Q&A
- Onsite Community Conversations

*Resources for all sessions:*

- Presentation
- Recording

*Plant 3D User Community Virtual Meet Up - Nov 2019 - AMER*

This month we participate virtually in the live session from Autodesk University in Las Vegas with:

- David Manning, Designated Support Specialist (Host)
- Misha Belilovskiy, Director AutoCAD Product Line Group
- Vinod Balasubramanian, Senior Product Support Specialist
- Nabil Nougha, Technical Specialist AEC / Plant
- Carston Beinecke, Product Manager PlantTools
Autodesk Group Network

Find other groups in your area and online

https://knowledge.autodesk.com/community/groups
Project Data Integrity for Plant 3D
What type of issues can occur?
What causes issues?
How do you avoid these issues?
How do you recover / restore data?
What type of issues can occur?

**DWGs, Databases, and Project Files**

- **Drawing files**
  - Missing data (lost Plant 3D object properties)
  - Corrupted DWG – will not open
  - Missing geometry (but data is this still there)
- **Project Database Records**
  - Missing or out of sync with drawings
  - Registered tags that cannot be assigned
- **Project Files**
  - Configuration (XML files) with incorrect file / folder paths
Drawing Files

Missing Data Properties Example
How to fix
Missing data (lost Plant 3D object properties)

- Only thing you can try for fixing it is removing drawing from project manager and adding it back again
- If this doesn’t help use the latest, fully functional backup
- How to detect broken parts?
  - Create copy of the file
  - Use PLANTAUDIT command, this will delete the broken parts from the drawing
  - Use AutoCAD COMPARE function (command) or BIM 360 Docs compare to see where the parts are now missing and reinsert the parts there
How to fix
Corrupted DWG – will not open

- Drawing cannot be recovered, get the latest working backup
- If there is no backup or the work loss is high, you can import the geometry without properties in order so quickly re-pipe the drawing:
  - Set variable PNPDWGDATABASEBLOBMERGE in the command line to “0”
  - Open the drawing (it now opens without error)
  - Set variable PNPDWGDATABASEBLOBMERGE back to “1” (don’t forget this to avoid big problems)
  - You can now use the existing geometry for re-piping
How to fix
Missing geometry (but data is this still there in the data manager)

- If suddenly e.g. fittings are missing, first check if CONSOLIDATIONMODE is set to “0” and then do “regen” and “regen3”

- If they are still missing, open the connection of the fitting to the pipe, so you can see the drop, try selecting the drop by crossing it. If you can inspect the properties of the elbow now, then the following can be done to recover:
  - Create a copy of the spec files and add them to the project
  - Select the affected part (or pipe) and change the spec in the properties to the copy, then change back to get the right spec name
How to fix

Missing data or out of sync with drawings

- Opening all drawing files of a project and saving them will let them sync with the database.
How to fix
Registered tags that cannot be assigned

▪ All user leave the project, then do AUDITPROJECT

▪ If still not working, open the piping database and look for that tag in the PnPTagRegistry (Tag field) and delete that record row

🔗▪ Unable to assign a line number tag via property palette in AutoCAD Plant 3D
What causes issues?

Hardware, Software, Network Infrastructure

- **Hardware**
  - Hard disk failure / bad sectors
  - Memory failure

- **Software**
  - Third-party add-ons for AutoCAD (not intended for Plant objects)
  - DWG clean-up (old templates, extra regapps, etc.)

- **Network Infrastructure**
  - Faulty network routers or switches
  - Failure during save of DWG or data going into SQL Server
What causes issues?

DWG Open / Save Process
What causes issues?

DWG Open / Save Process

Save Drawing Process

Save Drawing

SQL Queries for Updates

Update LDG

Update Drawing Blob

NO

Connected to SQL?

YES

Update DRAWING Blob from memroy

DWO is saved
What causes issues?

SQL Server Disconnect

Warning / dialog box with no SQL Server connection

One or more items have caused an error.

Error

Cannot create part record in the project database.
What causes issues?
Collaboration Server Disconnect

New warning / dialog box in Plant 2020
What causes issues?

Hardware, Software, Network Infrastructure

- Using SQLite on network / multi-user projects
  - Autodesk AKN - SQLite versus SQL Server for AutoCAD Plant 3D
How do you avoid these issues?

Project Audits, SQL Maintenance, Data Backups

- Audit projects on a regular basis (AUDITPROJECT command)
  - `C:\Program Files\Autodesk\AutoCAD 2020\PLNT3D\PnPLocalDataCachePurger.exe`
- SQL Server maintenance (shrink databases)
- Maintain regular project drawing and SQL backups
- Install the latest version + Updates / Hotfixes
- Don’t use Wi-fi connections to servers
- Don’t close the lid on laptops (sleep mode before saving / closing)
How do you recover from these issues?

Data Restoration

- **Restore from a recent backup**
  - Autosave files (remove existing DWG, copy autosave to the project)

- **PLANTAUDIT command**
  - Removes objects in DWGs that have no corresponding DB record
    - Compare before / after with e.g. Bim 360 Docs, so you will see where objects are missing after the command
  - Plant 2019.2 and 2020

*PLANTAUDIT command can now correct corrupted piping geometries*
Question Follow up
Q&A Follow-up (AMER)

*Does Autodesk have any plans to add additional functionality to Plant 3D to better support mining, minerals processing, or bulk material handling industries?*
Open Discussion and Q&A

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:
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November 6th 2018

APAC Session

Agenda:
- Overview
- Plant 3D News
- Follow up on last months Questions
- Update 2019.1
- Open Discussion and Q&A

EMEA Session

Agenda:
- Overview
- Plant 3D News
- Follow up on last months Questions
- Update 2019.1
- Open Discussion and Q&A

AMER Session

Agenda:
- Overview
- Plant 3D News
- Follow up on last months Questions
- Update 2019.1
- Open Discussion and Q&A

More detailed agendas to be published in advance in 2019
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
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.