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

Martin Buss
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: What's new in Plant 3D 2021? Introduction to Plant 3D Collaboration in version 2021, and we'll introduce Autodesk Exchange, and where to find add-ins for Plant 3D.
- Follow up Questions from last month
- Open Discussion and Q&A
Poll 1
Have you used Collaboration for Plant 3D before today?
Overview

Objective:

- Understand what new features are included in Plant 3D 2021
- Understand how Collaboration for Plant 3D works in version 2021 and how to get started with your first Project.
- Understand What Autodesk Exchange is and how to access Apps.

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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AutoCAD Plant 3D Rogue Beta – Closed!

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

AutoCAD Plant 3D 2021 Now Available
Autodesk App Store

https://apps.autodesk.com/en/Public/FAQ

- **What is Autodesk App Store?**
  Autodesk App Store is a web service provided by Autodesk that makes it easy to find and acquire plugin extensions, other companion applications, content and learning materials to customize and extend many Autodesk design products.

- **Who creates the Apps in Autodesk App Store?**
  Apps found in Autodesk App Store have been created by 3<sup>rd</sup> party developer with Autodesk software development expertise, as well as Autodesk. Many 3<sup>rd</sup> party developers are members of the Autodesk Developer Network.

- **Does Autodesk guarantee Apps offered on Autodesk App Store?**
  While Autodesk App Store team tests every submitted app before publishing it to the store, we cannot guarantee that every app will function error free in all circumstances. Please contact the publisher for an app if you would like more information on their development and testing procedures, or what data the app may manipulate on your computer. For more information please refer to Autodesk App Store Terms of Use.
Accessing Autodesk App Store

- **How do I access Autodesk App Store?**
Accessing Autodesk App Store

Safe, Easy. Powerful.
Easily extend the power of Autodesk software using apps created for the end user community.

Featured Apps

- AutoSave (Paid)
- CSI link
- DIN 11884 Tube Fittings
- Opennings - ALCADS APPS
- CTC CIM Project Suite
- Cloudster
- BodyBuilding

Most Popular Apps
- AutoCAD Mechanical
- AutoCAD Electrical
- AutoCAD Plant 3D
- Administration
- Calculation And Analysis
- Catalogs & Specs
- Data Access And Reporting
- Import/Export
- Model Conversion
- P&ID Tools
- Productivity
- Reality Capture

Link
AutoCAD Plant 3D 2021 New Features
Isometrics: PCF per DWG

Old behavior:
- One line number, one PCF-file
- If the line number can be created for several Iso drawings, all the split points information will be in the same one PCF-file

New behavior:
- One line number can have multiple PCF files
- Each PCF file represents one sheet
- i.e. - there're 3 Iso drawings for one line number, then there will be 3 PCF-files
- Setting is controlled from Output section in IsoConfig.xml
  - EnablePCFPerDrawing="true"
  - EnablePCFPerDrawing="false"

Video: Plant 3D with the Experts: New features in Plant 3D 2021 PCF per DWG
Insulation Update

New Behavior:

- Transparent Insulation in 3D model
- Insulation can be displayed with pipe objects in orthographic drawings.
  - User can choose:
    - No insulation will be shown
    - Insulation will be shown but pipes are hidden
    - Insulation will be shown together with the pipes
- Existing Ortho drawing: Use Insulation Tool to place insulation symbol

Video: Plant 3D with the Experts: New features in Plant 3D 2021 PCF per DWG
Collaboration for Plant 3D 2021 with BIM 360 Design
Why you should use Collaboration for AutoCAD Plant 3D
Why use Collaboration for AutoCAD Plant 3D?

Benefits of Collaboration for Plant 3D:

- Allows secure multi-office collaboration across the internet.
- No file or database server requirements.
- File locking and versioning through check-in/check-out.
- Performance increase due to working in local collaboration cache (SQLite).
- Minimal change required to existing user workflows in Plant 3D.
- Ability to check-out and modify Plant 3D project settings while others are working.
- Highly configurable BIM 360 Permission control.
How does Collaboration for AutoCAD Plant 3D work?
How does Collaboration for AutoCAD Plant 3D work?

A typical non-collaboration SQL project configuration:
How does Collaboration for AutoCAD Plant 3D work?

Collaboration for Plant 3D synchronizes the local project files with the cloud project:

BIM 360 Docs

User A

New User B

Local Collaboration Cache

Check-In

Refresh from Project

Check-In

Refresh from Project

Local Collaboration Cache
BIM 360 Docs and the Collaboration Cache

C4P synchronizes the collaboration cache with the BIM 360 project:

BIM 360 Docs Project

Collaboration Cache
Plant 3D 2021 Requirements

- Check your system requirements
- Install AutoCAD Plant 3D version 2021
- Check that you have BIM 360 Design access
- Configure the BIM 360 Project
  - Roles
  - Folders
- Upskill your team
Versions Overview
Versions and Platforms

- No migration required between versions 2018 to 2021
- No file format change 2018 to 2021

(Files stored on BIM 360 Docs)
Check Your System Requirements
Installing Plant 3D 2021
Installing Plant 3D 2021

https://manage.autodesk.com/
Check That You Have BIM 360 Design Access
Single User BIM 360 Design

https://manage.autodesk.com/

BIM 360 Design is a cloud worksharing and design collaboration product built for teams. Collaborate on Revit models, coordinate deliverable exchange, and centrally manage data across the project lifecycle.
Multi-User BIM 360 Design

Enabling “Collaboration for AutoCAD Plant 3D” in Autodesk Account for Software Coordinators.
Configure the BIM 360 Project
Configure the BIM 360 Project

Project Roles

1. Field Management
2. Account Admin

Define a set of roles for the account and configure default module access for each role.
Note: The changes made here don't affect module access permissions of existing project members. Learn more

<table>
<thead>
<tr>
<th>Name</th>
<th>Project Admin</th>
<th>...)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant 3D BIM 360 Docs Admin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant 3D Model Editor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant 3D P&amp;ID Editor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant 3D Project Admin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Configure the BIM 360 Project

- As a project administrator, you can restrict project member access to certain folders or limit access according to role or company.

- Sub-folders automatically inherit the permission level of the parent folder, but can be changed later. If changed, sub-folder permissions must match the access level of the parent folder or else have a greater (less restricted) access level than the parent folder.

- For more details on Folder Permissions see here: [Folder Permissions](#)

Note: Roles are managed by BIM 360 Account administrators
Configure the BIM 360 Project

Example of a highly controlled (Low Trust) permissions settings

- **Plant Project Folder**
- **P&ID DWG Folder**
- **3D Models Folder**

<table>
<thead>
<tr>
<th>Permissions - SampleProject</th>
<th>Permissions - PID_DWG</th>
<th>Permissions - Plant_3D_Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users: 7</td>
<td>Users: 7</td>
<td>Users: 7</td>
</tr>
<tr>
<td>Companies: 0</td>
<td>Companies: 0</td>
<td>Companies: 0</td>
</tr>
<tr>
<td>Roles: 0</td>
<td>Roles: 0</td>
<td>Roles: 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Permission Level</th>
<th>Type</th>
<th>View/Download/Upload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docs Project Admin</td>
<td>Folder Control</td>
<td>User</td>
<td>Project Admin</td>
</tr>
<tr>
<td>Plant Project Admin</td>
<td>View/Download</td>
<td>Role</td>
<td>Remove</td>
</tr>
<tr>
<td>Plant 3D Editor</td>
<td>View/Download</td>
<td>Role</td>
<td>Remove</td>
</tr>
<tr>
<td>P&amp;ID Editor</td>
<td>View/Download</td>
<td>Role</td>
<td>Remove</td>
</tr>
</tbody>
</table>

- Also consider permissions for folders like: Isometrics, Orthos, Project Recycle Bin, etc.
- For more details on Folder Permissions see here: [Folder Permissions](#)
Configure the BIM 360 Project

**Project Admin / Members**

- Project Administrator should select the members tab in the Project Admin module.
User Invitation email and Joining the Project

**Step 1:** In the email you’ll receive from the Admin, access the project by clicking on “Go to your Project”.

**Step 2:** Sign in to BIM 360 with your Autodesk ID and open your project.
Now your ready set-up, what next?
Learn BIM 360

https://learnbim360.autodesk.com/

Learn BIM 360

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

The Hub: A Place to Learn, Connect, and Share Expertise.

- 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
Plant 3D Virtual Community

Monthly Virtual meetings in three time zones

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

- **Registration:**
Plant 3D with the Experts 2021 Videos

https://www.youtube.com/playlist?list=PLXEyem_18syPZPb68zSgiLQHwuwRJraLW
Collaboration for Plant 3D 2021
Project Administrator Workflows
Share a Plant 3D Project for Collaboration

- A Plant 3D collaboration project starts with an existing non collaboration project.

- Open the project in Plant 3D.

- Open any drawing, preferably a non-project drawing (e.g. QNEW (1)). This activates the ribbon, then select the “Collaborate” Tab (2), then select the “Share Project” button.

- Following the check window, the share project window opens.

1. Choose the BIM 360 Account
2. Select the BIM 360 Project
3. Click
Back-up a Plant 3D Collaboration Project

Caution!
Any other method of copying the project will not result in a fully functional copy of the project.
How to Convert a Teams Project to BIM 360 Docs

1. Backup BIM 360 Teams Project
2. Open in Plant 3D 2021
3. Share to BIM 360 Docs
Editing Project Set-up for Collaboration Projects

- Collaboration for Plant 3D introduces Check-out and Check-in functionality to Project workflows. This has the advantage of being able to edit project set-up while users are in the project. The settings will copy to their workspace.

- Now when opening project setup you will now be asked if you want to check it out.

- If you open it read only you can check out later without exiting setup.

- Apply saves the settings locally only.

- OK checks project setup back in.
User Workflows – What’s different
Opening a project is different!

Step 1: After accepting the BIM 360 project invitation you can open it from Project Manager.

Step 2: Select the BIM 360 Account, the BIM 360 Project and finally the Plant 3D project.

Step 3: Wait for the files to download.
**What is different about Collaboration for Plant 3D?**

**Project Manager looks different:**

- File status icons appear next to files:

<table>
<thead>
<tr>
<th>Icon</th>
<th>File Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO Icon</td>
<td>No local file</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>File is on your local workstation, read-only, but you don’t have it checked out. File is available for checkout.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Checked out to you.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Checked out to you and modified.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>File has been updated in the Collaboration Project. “Refresh from Project” to update.</td>
<td></td>
</tr>
<tr>
<td>Grey file name</td>
<td>Checked out to another user.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Status can’t be established.</td>
<td></td>
</tr>
</tbody>
</table>
Project File Actions:

- Default behavior for opening and saving of files is set in the Project Collaboration “Options” right-click context menu:
Before you attempt to edit a piping spec, be sure that a copy of the spec file exists in the local collaboration cache. One indication that there may not be a local copy is the presence of this icon next to the spec name:

- In Project Manager, right-click and select “Edit Spec” on the spec name. The spec is automatically checked out to you.

- Perform edits, save and close the Specs and Catalog Editor.

- In Project Manager, right-click and select “Check In” on the spec name. The spec is then checked back in to the cloud project for others to use.
General Considerations for Shared Content

- When working on a Collaboration for Plant 3D project, Plant 3D manages most files but not all of them that may be necessary in a collaborative user environment.

- System Administrators need to think about what resources or content may be need to be accessed by those not on the local network, or other standard corporate file share systems. Some example of these are: AutoCAD profiles, tool palettes, Catalogues and template files.

- Another thing to consider is how this content is best shared with all Plant 3D users.
  - Would existing corporate systems suffice?
  - What is the most appropriate file sharing platform for shared content? BIM 360 Teams will store almost any file type, however Plant 3D is limited in the file types this can be managed by the project and only DWGs can be managed as project Source files, Orthographics or Isometrics.
  - How will access and rights be managed?

- Reference article: Using Desktop Connector for Plant 3D Shared Content Folder
Plant 3D Collaboration project Administrator Tips, Tricks, Do’s and Don’ts
Plant 3D Do’s and Don’ts

Do’s:

- Manage all Project files from within the Plant 3D Project Manager.
- Regularly Check-in files (minimum daily)
- Open files read-only if you don’t intend to edit them now.
- Xref (Attach) Plant Drawings only from the same project using the PLANTATTACH command, not AutoCAD XREF
- Use BIM 360 web interface to view and comment on files only
- If in doubt, ask your administrator or subject matter expert
Plant 3D Do’s and Don’ts

Don’ts:

- Do not use BIM 360 web to manage a project or the files and folders
- Do not use File Explorers to change locally stored files or folders
- Do not assume that an action “Should be OK” just because it works in AutoCAD or regular Plant 3D
- Do not work in “Offline Mode” if possible
- Do not Xref files that are not part of the same Plant 3D Collaboration project
Collaboration Project Do’s and Don’ts

The Do’s for Project Administrators

- Manage all project files from within the Plant Project Manager. There are some exceptions to this. It is important to understand how Plant 3D handles project files and test to be sure.

- Check-in routinely. Regularly checking in ensures that all files are copied to the project online and available to other users. It also updates the database so regular check-ins can reduce the chances of duplicated tags and long upload times, and possible errors.

- Open files read only if you don’t intend to edit them now

- Xref drawings only from the same Plant project, not the BIM 360 Project. User must use the Plant 3D project manager to add Xref files. The AutoCAD Xref function will still complete the task but the Xref files will not be available to any other users.

- Refer to the Autodesk Knowledge Network for the latest information and Help files

- Use BIM 360 to manage user permissions and Project members
Collaboration Project Do’s and Don’ts

The Don’ts for Project Administrators

- Do not use BIM 360 web browser to work with plant projects. Except for certain administrative tasks, use the Project Manager to manage plant projects folders and files.

- Do not use File explorers to change project files or folders in the collaboration cache

- Do not assume that an action “Should be OK” (risk of drawing or project corruption)

- Do not work in “Offline Mode” in AutoCAD Plant 3D Collaboration projects. In cases this occurs unintentionally, on reconnecting the project should sync, but this has some risk.

- Do not Xref files that are not part of the same collaboration project

- Do not move or delete files without using Project manager
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

<table>
<thead>
<tr>
<th>Cloud Services</th>
<th>Status</th>
<th>Note</th>
<th>Upcoming Maintenance (AEST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A360</td>
<td>✔</td>
<td>Currently working as expected.</td>
<td>No scheduled maintenance</td>
</tr>
<tr>
<td>A360 Mobile</td>
<td>✔</td>
<td>Currently working as expected.</td>
<td>No scheduled maintenance</td>
</tr>
<tr>
<td>AutoCAD Online Services</td>
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<td>No scheduled maintenance</td>
</tr>
<tr>
<td>AutoCAD Web</td>
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<td>No scheduled maintenance</td>
</tr>
<tr>
<td>AutoCAD Drive</td>
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<td>No scheduled maintenance</td>
</tr>
<tr>
<td>Autodesk Revit Live</td>
<td>✔</td>
<td>Currently working as expected.</td>
<td>No scheduled maintenance</td>
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</tbody>
</table>
Poll 2

Are you planning to use Collaboration for Plant 3D sometime in the next 6 months?
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:
- 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

Presentation

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
- Follow up on Last month’s Questions
- Update 2019.1
- Open Discussion

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.

美洲会话
欧洲会话
亚太会话

查看所有即将举行的客户成功活动
查看所有过去的客户成功活动
“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.