Plant 3D User Community Virtual Meet Up
9th June 2020

Joel Harris & Nabil Nougha
GoTo Webinar Platform Attendee Operations

- Use your internet or a phone to connect audio
- Or ask a question
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
Introduction

- Joel Harris

- Designated Support Specialist
  - 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
Introduction

- Nabil Nougha

- Designated Support Specialist for French and Middle Eastern Major Accounts
  - @ Autodesk since 2011
  - Supporting: Revit, AutoCAD, Navisworks, Plant 3D, P&ID, BIM 360 Family
  - Based in Dubai UAE
  - Piping Arrangement Engineer
  - Superintendent (10 Years)
  - Nabil.nougha@Autodesk.com
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Agenda

▪ Overview

▪ This Month's theme:
  ▪ New Ortho functions for Plant 3D 2021.
  ▪ Do’s & Don’ts while creating Ortho drawings.
  ▪ Handling Xrefs during Ortho generation.
  ▪ Using Advance Steel & Inventor models in Plant drawing for Ortho generation.

▪ Follow up Questions from last month
▪ Open Discussion and Q&A
Objective:

- Understand how Ortho template creation works & what are the do’s and don’ts while creating them.
- Understand how AutoCAD Plant 3D Xref Model is treated while generating Orthographic drawings.
- Understand how to work with models that include Inventor/Advance Steel objects while generating Ortho views.

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.
Plant 3D Ortho new feature for 2021
New Features in Plant 3D 2021

Insulation

▪ Transparent Insulation in 3D model

▪ Insulation can be displayed with pipe objects in orthographic drawings.
  ▪ No insulation
  ▪ Solid Line Insulation
  ▪ Hidden Line Insulation

▪ Existing Ortho drawing: Use Insulation Tool to place insulation symbol
Insulation

• Insulation in separate layer for different line number: layer 1001_Insulation.

• For unassigned insulated pipeline, 0_Insulation Layer will be used.

• Insulation of XREF DWG can be shown in master DWG.
Do’s & Don’ts while generating Ortho drawings

- Keep source drawings in the project under proper folder structures.
- Don’t move source drawings.
- Don’t rename source drawings.
- If source drawings or external references are over-written with newer versions.

(for example a structural drawing update), use the same exact file name (otherwise, breaks the link similar to above).
Do’s & Don’ts while generating Ortho drawings

• Don’t edit the completed orthographic drawing in model space (can break the link).

• Use one layout tab per orthographic drawing.

• Plant 3D model should be in Plant Coordinate System & close to 0,0 origin and the primary/majority of piping, structure and equipment orthogonal with the X and Y axis.

• How to work with actual coordinates in AutoCAD Plant 3D

• Use proper workflows and file formats when incorporating models and drawings from other Autodesk or non-Autodesk software products.
How to create a custom Ortho template

- **Under Home tab > Project panel > select Project Manager > click Project Setup.**

- **Under Ortho DWG Settings - Select Title Block and Display.**
  - Tool allows you to set **path** to default templates location.
  - **Ortho drawing output folder** specifies the location of drawings that are produced with the Ortho View tool.

- **Ortho generation** options include a tool that allows **hidden line piping** to be shown by default.

- Two options for displaying elbow **centerlines**.
  - Default: Create a perpendicular **corner**.
  - You can change this to be a **curved** line that follows the centerline of the fittings.
Things to configure for a custom Ortho template

Under **Ortho Settings > Configure** panel > **Ortho Generation Settings** dialog appears.

The **Layer** setup option allows you to define the layers for centerlines, equipment, pipe supports and more.

**Styles** for dimensions, multileader, and text can be set and edited.

**Two tabs in BOM setup:**
- First BOM setup – Simple, Grouped & Independent Columns.
- Tool places a **table** for the materials in the template, which will be populated automatically.
Creating Ortho models with X-ref drawings from Inventor

Shrink Wrap the assembly and minimize the model complexity in Inventor.

Bring this as an ADSK file from Inventor to Plant 3D.

When creating Ortho drawings, we have an equipment model we can select for inclusion.
Creating Ortho models with Advance Steel objects

Place original AS drawings in Plant 3D project directory as External reference file.

Install Advance Steel object enablers.

Use matching 0,0 origin and coordinate system as the Plant 3D project.

Objects display as “Standard display mode” in Orthographic drawing.

AutoCAD Plant 3D allows the export of structural elements (Command : ADVANVEDSTEELEEXPORT).
Best articles on Orthographic drawings


Question Follow up
Question Follow up

From May 12th 2020 (AMER)

Q: Can you link both (Revit and Plant) models inside BIM360? Mechanical model in Plant, Structural in Revit, they could not see each other.
A: This is possible using BIM 360 Coordinate.

Q: Our primary problem is Revit will not slice the Plant 3D models while working on plan views in Revit which makes viewing detailed equipment bolt locations impossible if your equipment spans multiple floors?
A: That’s correct, a workaround would be to include the Plant 3D model (exported using EXPORTTOAUTOCAD) as an in-place generic model and link it.

Q: How coordinate with IFC files, trough Revit?
A: You can link an IFC into Revit now (new feature) and you can also push these IFCs in BIM360 design as well.

Questions and Answers from previous sessions are collated and published to the Plant 3D Virtual Community Meetup Resource Store website
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.

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
- 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/](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.