Plant 3D User Community Virtual Meet Up
9th July 2019

Joel Harris
Designated Support Specialist
GoTo Webinar Platform Attendee Operations

- Use your internet or a phone to connect audio

- Or ask a question
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

- Jason Drew

- Designated Support Specialist
  - Plant 3D and P&ID
  - AutoCAD
  - Inventor
  - 3DS Max
  - Navisworks
  - Fusion 360
  - Vault

- 10 years IT Support

- 3 years P&ID Design (Oil & Gas)

- 11 years Autodesk Specialist
Agenda

- Overview
- Plant 3D News
  - Follow up Questions from last month
  - Isometric Configuration Overview
- Open Discussion and Q&A
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.

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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Plant 3D News
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

New registration page, now online: https://www.autodesk.com/customer-success/plant-3d
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.

Follow up on Last months Questions

- Q: Why do flanges disappear when plotting the P&ID?
  A: Known issue, currently under investigation by the product team. Recommendations to avoid this: plot in the foreground, check layer colors (white vs. 255,255,255) try using Adobe PDF plotter or freeware PDF plot driver

- Q: In Plant 3D, we run our P&IDs in Metric for our standard with our sister company but need to use Imperial on the Plant 3D piping side of the software. Is there a way in the project setup to make the P&ID project units different than the Plant 3D project units?
  A: Yes. you can have P&IDs in Metric and Imperial Plant 3D. The PID system is really just numbers. You can set up the project as Imperial but configure the P&IDs with Metric sizes. The only issue is the Validation function; the sizes come up as an error.
Follow up on Last months Questions

- **Q:** When creating an ortho drawing from a model, the program will not create the 2D view because it cannot collect the geometry? How can I fix this? I don't use any external references (XRefs) but I do have a lot of custom parts which are very detailed. Do I need to make more simplified custom parts?

- **A:** Yes. Recommendation would be to use the Simplification / Shrink-wrap features of Inventor or Fusion 360 to reduce the amount of detail for the custom parts and equipment. This will improve overall 3D performance (orbit, pan, zoom) and also help reduce the time to generate 2D ortho views.

- **Also,** I do find when I copy the entire 3D model and start a completely new project and insert the model in, it seems to fix the problem. That’s the part I don't understand.

- If copying to a new drawing / project solves the issue, there could be some drawing corruption issues occurring. i.e. – drawing was not saved properly or an issue accessing the SQL database for the project. Visit with local IT group to verify there are no known issues with the network, run a project audit on a regular basis, and clear the local persistent data cache often.
Isometric Configuration Overview
Isometric Configuration

Isometric Styles define the appearance of the generated isometrics.

- Layers, colors, linetypes
- Dims and leaders
- Annotation types and fonts
- Border size & title block info
- Tables (BOM, welds, etc.)
- North Arrow direction
- Company logo
- File naming convention
- Field Fit Weld length
- Slope/Offset Piping style

If any of the above need to be modified on a permanent basis, you should create a new isometric style.
Isometric Configuration

Isometric Styles are typically subfolders of the Isometric project folder: 
(...[projectname]>Isometric>[Style name])
Adding/Removing an isometric style

For standard SQL and SQLite projects:

1. Typically create modify and test new styles on a test (non-production) project.
2. When satisfied with new style, copy folder into a template or working project.
3. Modify style-specific paths using Project Setup or manually (Not preferred: need to do it right and know where paths hide in files like ClientConfig.isf and IsoConfig.xml).
4. Remove the style folder and the style is no longer available in the project. 
   Note: if your isometric output folders are located under the style folder they will also be deleted from the project.
Adding/Removing an isometric style

For Vault projects:
1. To add an isometric style, check out the project settings with Project Setup.
2. Add your style just as you would with a standard SQL/SQLite project, noting that any manual file editing must be done by checking out/in the specific file (e.g. IsoConfig.xml) using the Autodesk Vault Client.
3. Apply the changes and close Project Setup to synchronize your changes to Vault.
4. Remove an isometric style by deleting the isometric style folder from within the Vault client and then removing the folder from the local Vault workspace. *Note: if your isometric output folders are located under the style folder they will also be deleted from the project.*

For BIM 360 Team projects:
1. To add an isometric style, check out the project settings with Project Setup.
2. Add your style just as you would with a standard SQL/SQLite project, noting that any manual file editing must be done on the local Collaboration workspace copy of the project.
3. Apply the changes and close Project Setup to synchronize your changes to BIM 360 Team.
4. Remove an isometric style by
   a) Deleting the isometric style folder from within the BIM 360 Team project, and then
   b) Using “Delete Forever” on the isometric style folder in the BIM 360 Team project Trash, and finally
   c) Removing the folder from the local Collaboration workspace. *Note: if your isometric output folders are located under the style folder they will also be deleted from the project.*
Common Isometric Problems

• Missing annotations
• Missing or duplicate dimensions
• Incorrect symbols
• Incorrect or missing information in bill of materials
• Incorrect dimensions
• Messy annotations (overlapping leaders, missing text, etc.)

Troubleshooting Tips:

• Test isometric output on an out-of-the-box style (ex: Final_ANSI-B) to verify that it is your style that is the culprit.
• Start new styles from an out-of-the-box style.
• Modify only one or two items at a time.
• Modify using Project Setup first, before modifying files manually.
• Keep a backup copy of your style folder prior to making modifications.
Isometric Themes – Understand how they work!

Multiple themes are possible for each isometric style:

<table>
<thead>
<tr>
<th>Theme Name</th>
<th>Dimensions?</th>
<th>Annotations?</th>
<th>On BOM?</th>
<th>Symbols</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default*</td>
<td>X</td>
<td>X</td>
<td></td>
<td>As config’d</td>
<td></td>
</tr>
<tr>
<td>Fitting to Fitting</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>No pipe</td>
</tr>
<tr>
<td>Small Bore Piping</td>
<td>X</td>
<td>X</td>
<td></td>
<td>2/3 size symbols</td>
<td>&lt;2” ND</td>
</tr>
<tr>
<td>Vent/Drain Piping</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>&lt;2” ND, &lt;7 components</td>
</tr>
<tr>
<td>Offline Instrument Connection</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>&lt;2” ND, &lt;7 components</td>
</tr>
<tr>
<td>Existing Piping</td>
<td></td>
<td></td>
<td></td>
<td>Dashed symbols</td>
<td>Existing = 'true'</td>
</tr>
<tr>
<td>Continuation/Connection Piping</td>
<td></td>
<td></td>
<td></td>
<td>Dashed symbols</td>
<td>Type LIKE 'END-**' OR Type = 'EndConnection'</td>
</tr>
</tbody>
</table>

*Default style gets used if none of the other themes’ conditions apply

Did you know you can create your own themes?
Best Practices and Other Resources

- Make one change at a time
- Test with a good sample model
- Verify the output isometric
- Make a backup of the isometric style folder
- Modify in an offline project

Autodesk University Classes:
https://www.autodesk.com/autodesk-university/au-online?query=isometric+configuration

Configuring AutoCAD Plant 3D Isometrics:
Open Discussion and Q&A

- Or ask a question

Ask your questions in the Q&A panel
In the Pipes
Tips and Tricks from the Autodesk Product Support Team

June 03, 2019

Vote for AU class proposals - Vote for your Plant Content

This year there are 37 classes that list Plant 3D and 9 that list Plant P&ID as related products. To help see classes important to you at AU Vote now. Don't forget, if you can't make it to AU Las Vegas 2019, most classes are recorded and available to you sometime after the conference. So you should vote as well, but we'd love to see you there.

http://www.autodesk.com/autodesk-university/conference/las-vegas/call-for-proposals/ndp表决

Vote for AU class proposals

Vote for the classes that matter to you. We will use the votes to determine what to focus on and how to promote your class to attendees. Please review this year's proposals and vote for those you wish to see at AU Las Vegas 2019.

http://autodesk.typepad.com/in_the_pipes/2019/06/vote-for-au-class-proposals-vote-for-your-plant-content.html
AutoCAD Plant 3D: Copy Isometric folder configuration to a different project

By: Autodesk Support
Sep 04 2017

Issue:
Can the isometric configuration be shared between projects by copy the entire Isometric folder to a different project?

Solution:
Yes, the entire Isometric folder can be shared between projects.

Note:
Always backup the original Isometric folder.

https://knowledge.autodesk.com/support/autocad-plant-3d
Thank you...

for getting involved
Don’t forget to send your feedback survey
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
Designated Support Specialist (DSS) | Martin Buss

- 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.
Introduction

- Name: David Manning

- Designated Support Specialist
  - 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)

- At Autodesk since 2015
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