AUTOCAD®
P&ID
2010

AutoCAD P&ID 2010 Frequently Asked Questions

1. Can P&IDs created in vanilla AutoCAD be converted to AutoCAD P&ID format?

At this time there is a manual utility, called Convert to P&ID Object, for migrating legacy drawing geometry to the data rich format of AutoCAD P&ID. A more automated method is something we have considered very seriously, and we continue to research it. We encourage anyone interested in converting drawings to offer us feedback on how the utility would be used, how often, etc.

Creating P&ID drawings with AutoCAD P&ID is much faster and easier than with vanilla AutoCAD. Until there is an automated utility for converting drawings you may find that it is more cost effective to simply make changes to your P&ID drawings in AutoCAD P&ID (which can be done in any drawing created in vanilla AutoCAD). For many of our customers, the benefit of converting legacy drawings would be in making changes to existing systems. Making those changes in AutoCAD P&ID will capture all of the data required for the change, allowing you to generate all necessary reports and lists for the new lines, valves, equipment and instrumentation. As more changes are required, more rich data and intelligent geometry are captured in the drawing when the changes are made. This could prove to be fast and easy enough to satisfy your need for conversion.

2. Can AutoCAD P&ID data be linked with a database?

Yes. Links with external databases can be made through application programming in the API for AutoCAD P&ID 2010. The AutoCAD P&ID Developer API is a superset of the AutoCAD API. P&ID-specific features are available as extensions to ObjectARX and the ObjectARX managed wrappers for .NET. Both of these require Microsoft Visual Studio. Linking with an

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external database would typically be done as a services engagement with Autodesk Consulting, but the tools to do it are available to everyone as part of the SDK.

3. **Does P&ID instrumentation/equipment support I/O information? If it does can this info be made into lists?**

   Yes. There are standard reports in AutoCAD P&ID, including line, valve, equipment and instrument lists. Also, AutoCAD P&ID supports the output of project data to Excel which, not only allows for formatting and reporting, but also allows non-CAD users to add data to lines, valves, equipment and instrumentation without interrupting ongoing design.

4. **Is it possible to export from any of the programs databases to word? Could this be used in conjunction with data sheets for automatic generation?**

   There is no direct export to Microsoft Word at this time. This type of export would be done directly to Microsoft Excel. From Microsoft Excel, data can be moved to Microsoft Word.

5. **What kind of support/training is offered with any/all of the products?**

   There are web-based training modules available on the Subscription Center and as with most of our products, a full complement of classes will be offered by our resellers, as necessary. Support is handled through your reseller and escalated to Autodesk, as necessary.

6. **Can I give AutoCAD P&ID drawings to my colleagues that only have AutoCAD?**

   Yes. There are two ways. First, AutoCAD P&ID has a feature called Export to AutoCAD. The visual fidelity of the P&ID drawing is maintained when you view or plot it in AutoCAD. Use this program to export the drawing to AutoCAD. When you export a P&ID drawing to AutoCAD, the program converts all the components and annotations in the P&ID drawing to AutoCAD blocks. All schematic lines (slines) are converted to lines. These exported drawings can be edited by anyone using AutoCAD, as if they were created in vanilla AutoCAD. All non-graphic data stored in the P&ID Drawing will be lost. Second, the drawings can be opened, as is, with AutoCAD. The drawings cannot be changed, but they can be viewed, marked up, or plotted. The advantage of this method is that the data in the drawing is maintained.

7. What can be done in AutoCAD LT or in vanilla AutoCAD with a document created in AutoCAD P&ID?

We've considered two common workflows for working with plain AutoCAD, Review/Print/Markup and a Publish to plain AutoCAD:

- **Review/Print/Markup**

  User A works for an EPC and draws P&IDs using AutoCAD P&ID. He stores his P&IDs on a network drive. The piping designers, managers, etc open his P&ID in AutoCAD as a read only file to view and plot it. Typically, markups are done on paper, but a reviewer could also open the drawing in AutoCAD to add clouds, additional text, etc. The user would not change the P&ID graphics themselves, only add mark ups.

  The Review/Print/Markup workflow can be accomplished today with AutoCAD P&ID 2010. When a saved P&ID is opened in vanilla AutoCAD, the P&ID geometry is displayed but is not editable.

- **Publish to Client**

  In the publish scenario, an Engineering, Procurement, Construction (EPC) company uses AutoCAD P&ID to create P&IDs. The ultimate consumer, the Owner-Operator (OO), uses vanilla AutoCAD for all their P&IDs. The OO doesn't care what application is used to create the drawings as long as they can maintain them in the future. During the project, the EPC saves the P&IDs in native AutoCAD P&ID format. When the time comes to hand over the P&IDs to the customer, they export the drawings to a native AutoCAD format. There is no expectation that the drawings will be returned to the EPC with the intelligence maintained.

  The Publish to Client workflow is supported in AutoCAD 2010. See details on Export to AutoCAD in FAQ #6.