

PT16479 - Bring Structure into Your Data with AutoCAD Plant Report Creator

Carsten Beinecke

Product Manager
CAD STUDIO ABCOM

www.cadstudio.com

Booth #1465



Class summary

AutoCAD P&ID and AutoCAD Plant 3D create a whole lot of data while you are drawing. We show how you start with a simple report and then start grouping and ordering it in the way you need. We show you how to define the classes you want to use for your report and what how you layout your report. We explain the user interface of Report Designer of DevExpress so you know how to work with the different palettes.

Key learning objectives

At the end of this class, you will be able to:

- Define the query of your report
- Use the wizard of DevExpress
- Understand the user interface of Report Designer
- Structuring with Grouping, Sorting, Filtering your report

Think first

Think first

What you should check before you get started:

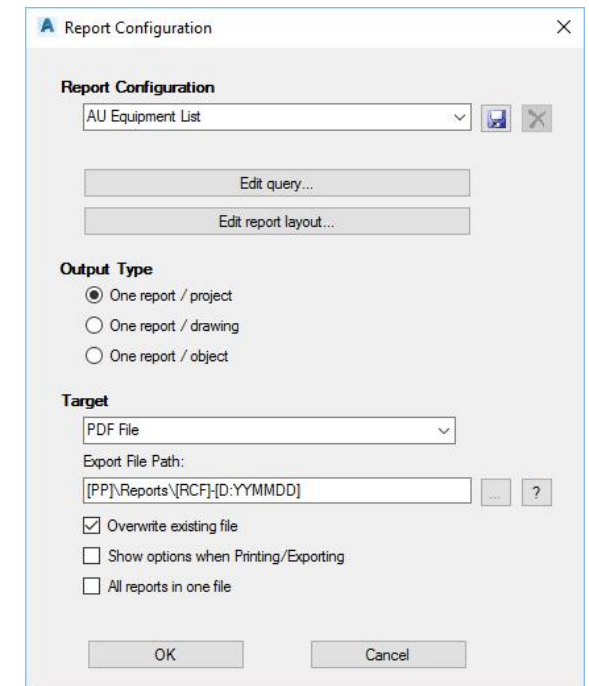
- Sample Documents
- Existing Report
- Classes & Properties
- Structure (Group, Sort, Filter)
- Calculation & Scripting
- Layout
- Output Type & Format (PDF, XLS)

User Interface

User Interface

Step by Step:

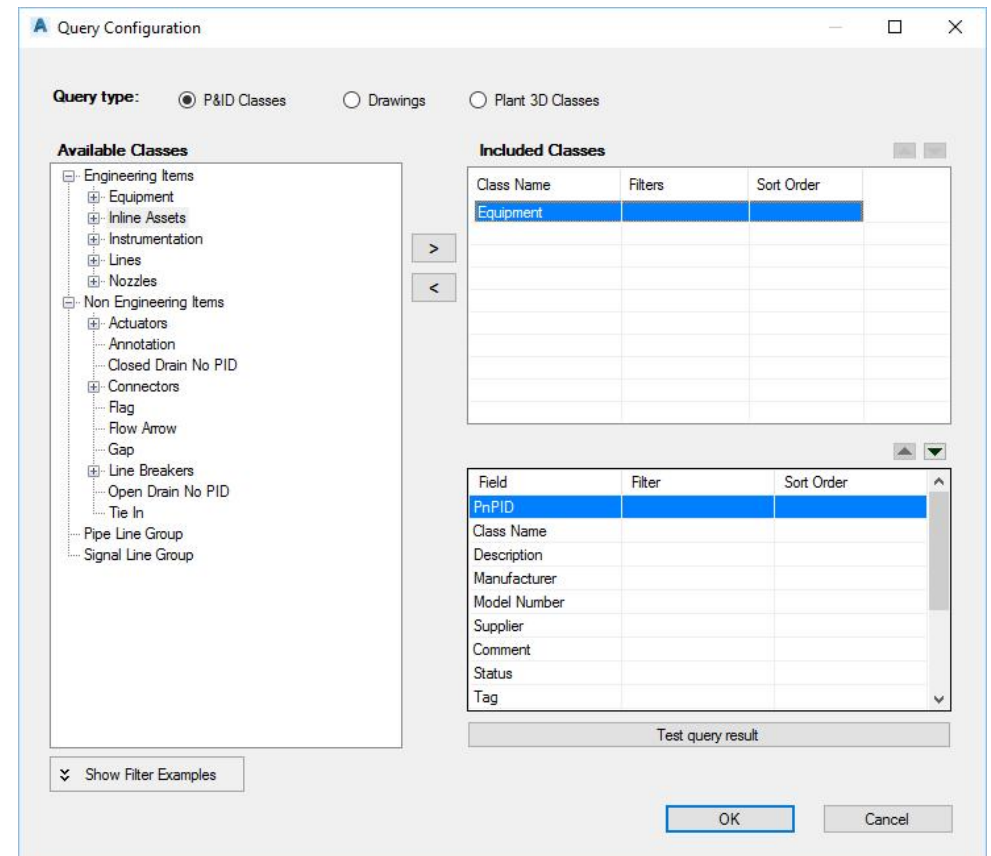
- Query
- Layout
- Output Type
- Filetype
- Path & Filename
- Options



Defining Query

Defining Query

- P&ID or 3D
- Classes
- Properties
- Filtering & Ordering
- Test Query



Wizard

Wizard

- Fields/Properties
- Grouping
- Layout
- Style
- Header

Report Wizard

Choose columns to display in your report
Your report can display any of the columns available in the dataset.

Which columns do you want to display in your report?

Available fields:

- Engineering Items_Comment
- Engineering Items_Status
- Equipment_Type
- Equipment_Equipment Spec
- Equipment_Number
- Equipment_Area
- Drawings_PnPID
- Drawings_DWG ID
- Drawings_PnPParentGuid
- Drawings_PnPTime

Fields to display in a report:

- Equipment_Tag
- Engineering Items_Description
- Engineering Items_Manufacturer
- Engineering Items_Model Number
- Equipment_Weight
- Equipment_Material of Construction

Cancel < Back Next > Finish

Report Wizard

Do you want to add any grouping levels?
You can have several groups, each with a single field value, or specify several fields in the same group.

Equipment_Tag

Equipment_Tag, Engineering Items_Description, Engineering Items_Manufacturer, Engineering Items_Model Number, Equipment_Weight, Equipment_Material of Construction

Cancel < Back Next > Finish

Report Wizard

How would you like to lay out your report?
The report's layout specifies the way in which the selected data fields are arranged on report's pages.

Layout

- Columnar
- Tabular
- Justified

Orientation

- Portrait
- Landscape

Adjust the field width so all fields fit on page

Cancel < Back Next > Finish

Report Wizard

What style would you like?
The report's style specifies the appearance of your report.

Title
Caption
data

Bold
Casual
Compact
Corporate
Formal

Cancel < Back Next > Finish

Report Wizard

What title do you want for your report?

Equipment List

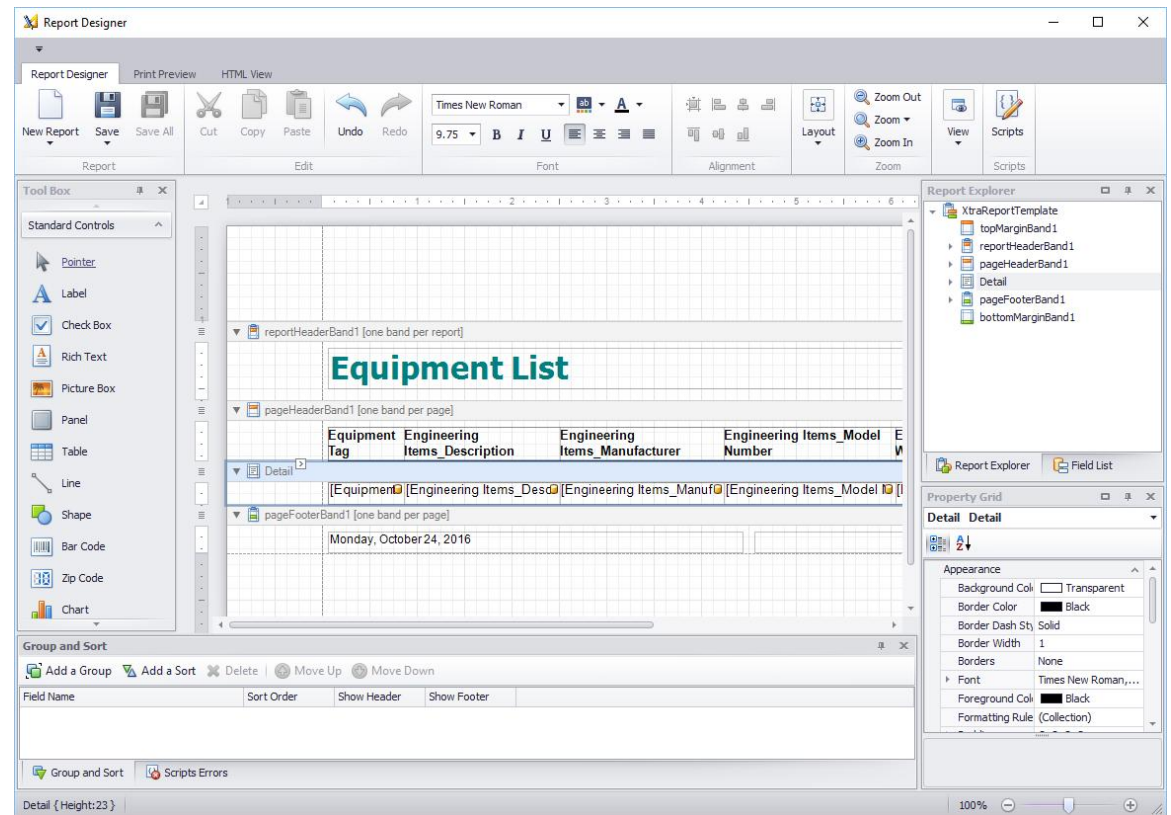
That's all the information the wizard needs to create your report.

Cancel < Back Next > Finish

User Interface DevExpress

User Interface DevExpress

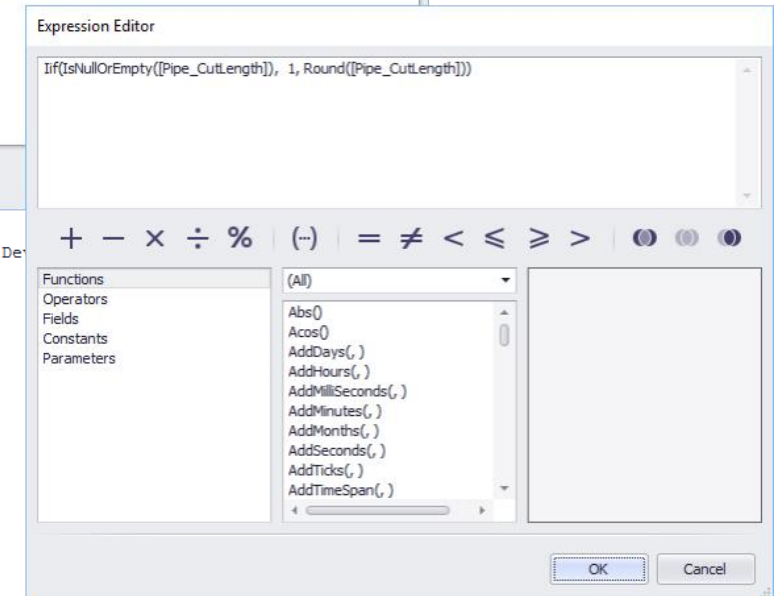
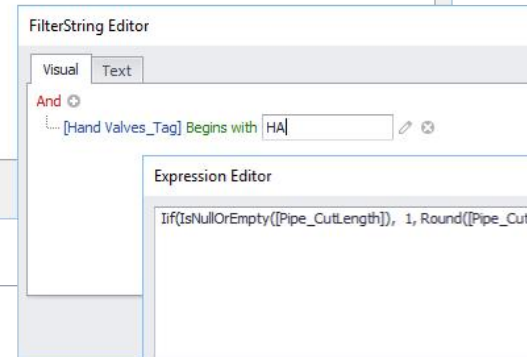
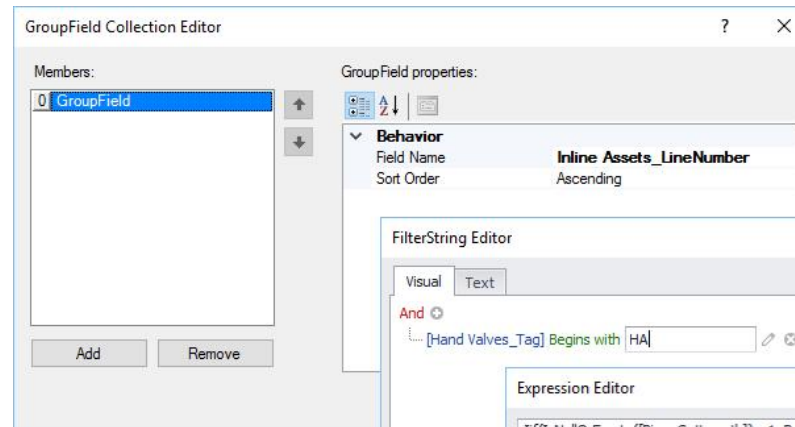
- Ribbon
- Tool Box
- Report Explorer
- Field List
- Properties
- Group and Sort



Structuring

Structuring

- Group
- Sort
- Filter
- Calculation
- Scripting



```
1 using System.Collections.Generic;
2
3 List<int> sizesList = new List<int>();
4 List<string> DWGTitleList = new List<string>();
5
6 private void AllSizesLabel_SummaryGetResult(object sender, De
7 {
8     sizesList.Sort();
9     string str = "";
10    for (int i = sizesList.Count - 1; i >= 0; i--)
11    {
12        if (i < sizesList.Count - 1)
13        {
14            str += ",";
15        }
16        str += sizesList[i];
17    }
18
19    e.Result = str;
20    e.Handled = true;
21 }
--
```



Demo

Demo Use Cases

- Equipment List
- Pumps & Blowers List
- Valve List by Line# and Description + Spec + Size
- BOM from 3D Piping

Video Link: <http://autode.sk/2dcco0D>

Autodesk® AppStore → PlantReporter

AKN P&ID Forum: <http://forums.autodesk.com/t5/autocad-p-id-forum/bd-p/245>

AKN Plant 3D Forum: <http://forums.autodesk.com/t5/autocad-plant-3d-forum/bd-p/371>

PlantReporter

PlantReporter

Additional Features:

- No need for AutoCAD® P&ID/Plant 3D
- Versions/Revisions and Differences
- Multiple AutoCAD® P&ID/Plant 3D projects
- Other data sources

Visit us at Booth #1465

How did I do?

- Your class feedback is critical. Fill out a [class survey](#) now.
- Use the AU mobile app or fill out a class survey online.
- Give feedback after each session.
- AU speakers will get feedback in real-time.
- Your feedback results in better classes and a better AU experience.





Autodesk is a registered trademark of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. © 2016 Autodesk, Inc. All rights reserved.

© 2016 Autodesk. All rights reserved.

