

# Hey, Sparky—AutoCAD Electrical is a Better Way to Go

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Class ID: **IM10568**

# Introduction

## Todd Schmoock

- Autodesk Reseller – Synergis Technologies
- 30 years in the manufacturing industries
  - Technical Ceramics, Honeywell, OTIS Elevator, Specialty Gas
  - Draftsperson, Designer, CAD Manager
- 22 years using Autodesk software
  - AutoCAD, AutoCAD Electrical, Inventor, Factory Design Suite
- 12 years – Synergis Technologies
  - Sales, Training, Consulting



# Class summary

So you have hundreds, and maybe thousands, of standard AutoCAD software drawings that represent your electrical designs, and you are uncertain about moving to AutoCAD Electrical software because you think you will have to redraw all your electrical designs. Well, guess what? You don't have to. AutoCAD Electrical software ships with conversion tools that enable you to convert the standard AutoCAD entities into smart AutoCAD Electrical content. This class will show you how to use enough of the conversion tools to get you on the right circuit and energize those individual drawings into a project that recognizes all of the drawings that represent your product.

# Key learning objectives

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

- Learn how to convert regular AutoCAD lines into wires
- Learn how to convert AutoCAD blocks with AutoCAD Electrical components while keeping the attribute data
- Learn how to automatically update existing title blocks with project information
- Learn how to run a bill of material, wire connections, and other reports on the upgraded files

# Convert regular AutoCAD lines into wires



# Convert regular AutoCAD lines into wires

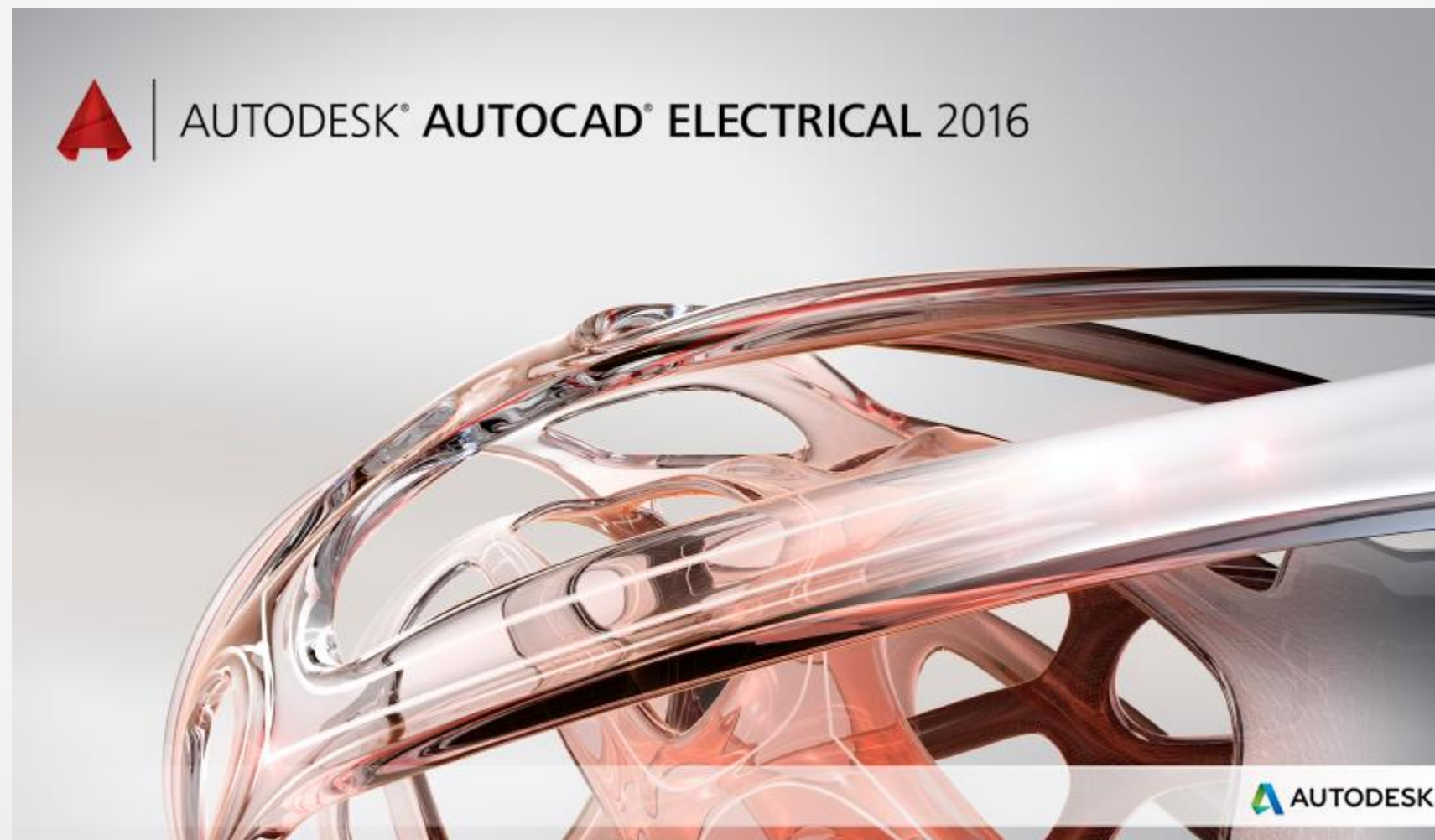
In AutoCAD you would:

- Use the Line command
- Pick first point then second, etc.
- Then, insert the connection blocks, loops, etc.

In AutoCAD Electrical you would:

- Use the Wire, Insert Ladder, Add Rung, or **Change/Convert Wire Types** commands
- Using the Wire command the connections, loops, etc. are place automatically
- Insert Ladder/Rung you click once, and the wires, connections, loops, etc. are place automatically. Or, use the **Convert Ladder** tool
- Change/Convert Wire Types moves lines/wires to selected layer

# Let's see how it works!



# Convert AutoCAD blocks with AutoCAD Electrical components while keeping the attribute data



# Converting blocks to electrical smart blocks

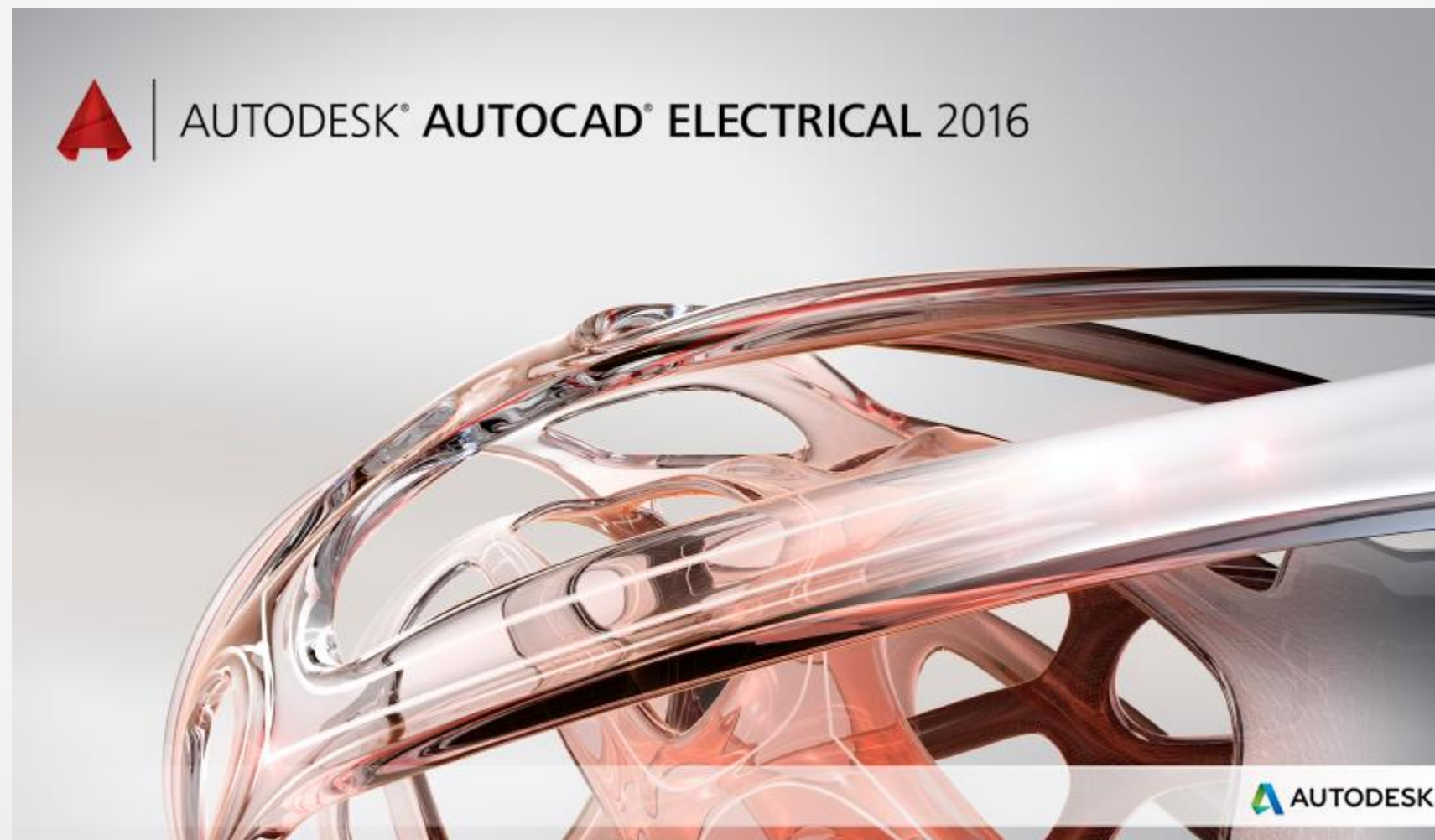
In AutoCAD you would:

- Create blocks with attributes
- Insert blocks with attributes onto lines
- Then, trim/extend as required

In AutoCAD Electrical you would:

- Create blocks with attributes, or convert AutoCAD blocks to electrical smart blocks using the **Convert to Schematic Component** tool
- Insert blocks with attributes onto wires using the Icon Menu tool
- Wires trim automatically
- Connections made automatically to electrical smart block

# Let's see how it works!



# Automatically update existing title blocks with project information

# Update existing title blocks with project information

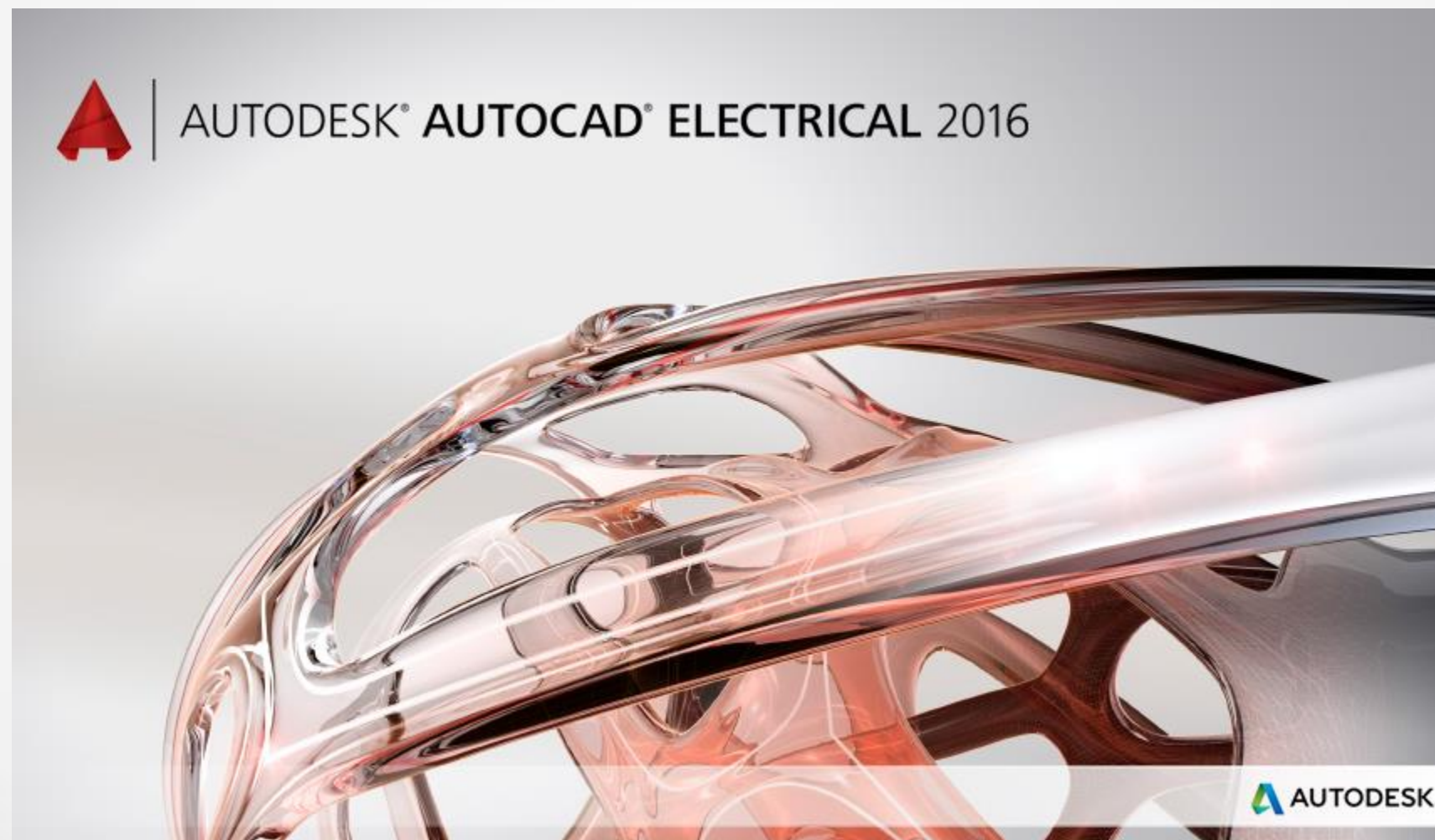
In AutoCAD you would:

- Double-click your AutoCAD title block with attributes, and edit them one at a time
- Something changes, you repeat the process

In AutoCAD Electrical you would:

- Add your drawings to an electrical project
- Run the Title Block Update... tool
- Attributes in the title blocks are automatically updated with the project and drawing information, and property data

# Let's see how it works!





**Run a bill of material, wire connections, and other reports on the upgraded files**

# Run reports on the upgraded files

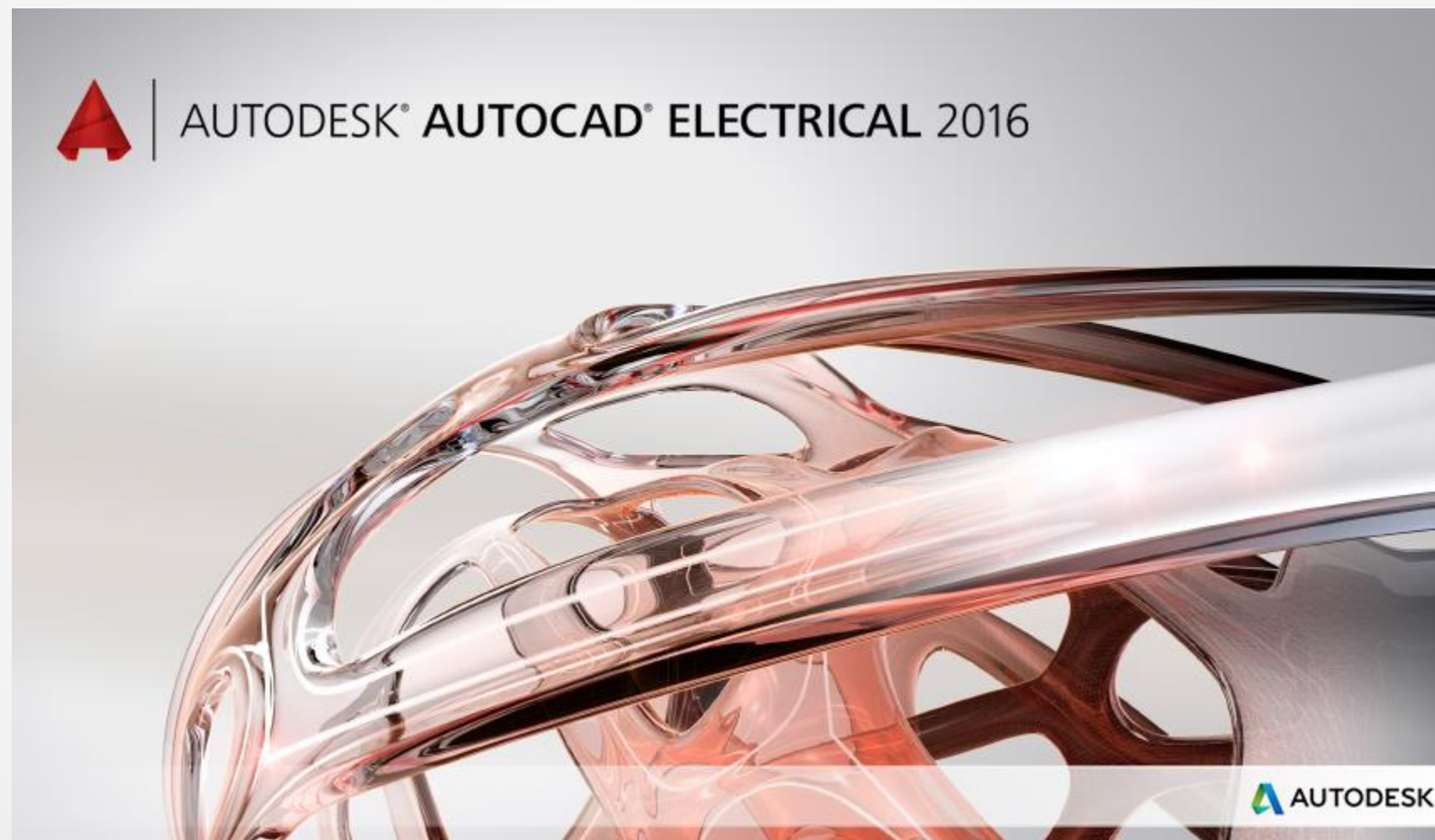
In AutoCAD you would:

- You would create a separate Excel file(s)
- Change the drawing(s), change/update the Excel file(s)

In AutoCAD Electrical you would:

- Run the Report tool on the project, or any of the drawings in the project
- If you change the drawing(s) just run the Report tool again
- Can save reports to other formats if required

# Let's see how it works!



# Session Feedback

- Via the Survey Stations, email, or mobile device
- AU 2016 passes awarded daily!
- Best to do it right after the session
- Instructors see results in real-time

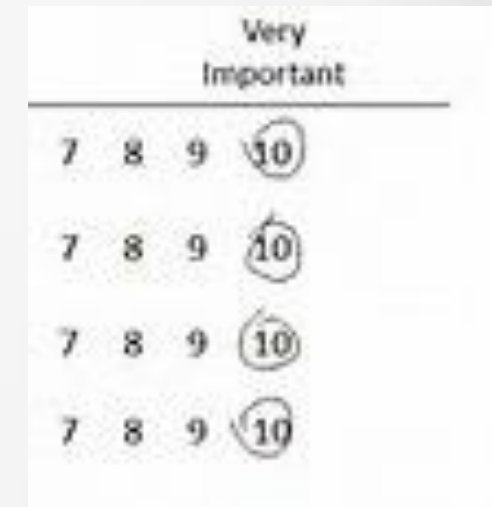
**Best responses are:**



**Or**



**Or**



**Best response may help you win the AU pass... I think!**

# Thank you!



Don't forget to fill  
out your eval  
for a chance to  
win a AU 2016 free  
pass.

IM10568  
Todd Schmooch

Remember the  
winning answer is:

Best Class at AU 2015!





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# More Questions? Visit the AU Answer Bar

- Seek answers to all of your technical product questions by visiting the **Answer Bar**.
- Open daily 8am-10am and Noon-6pm and located just outside of Hall C on Level 2.
- Staffed by Autodesk developers, QA, & support engineers ready to help you through your most challenging technical questions.

