# **IM10418-R-Planning the Future of ACE**

Randy Brunette

AutoCAD Electrical Evangelist





# **About your instructor**



# Randy Brunette AutoCAD Electrical Evangelist

AutoCAD since 1984

**AUTODESK UNIVERSITY 2015** 

- AutoCAD Electrical since 1996
- 16<sup>th</sup> Year Teaching @ Autodesk University
- Fly radio control airplanes, helicopters, and quad copters



## **Discussion Topics**

- Introductions
- Project data and collaboration
- Interface and Training
- ElectroMechanical (2D/3D) design
- Simulation
- Analysis
- Outside the Electrical Design Team



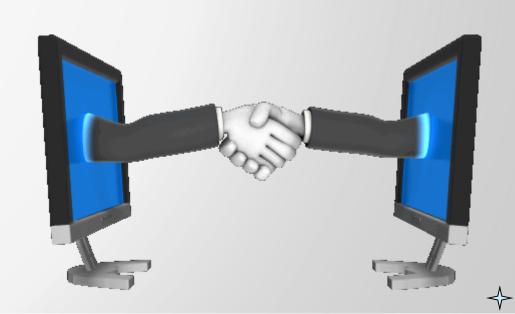


### **About You??**

How many: (Raise hands)

- ✓ Currently use AutoCAD Electrical 2016?
- ✓ Currently use AutoCAD Electrical 2015?
- ✓ Currently use AutoCAD Electrical 2014 or older?
- ✓ Currently use Autodesk Inventor (any)?
- ✓ Currently use Vault?







# **Electrical Design Environment**

- Size and length of projects? How many people?
  - Small to large (10-1300 dwgs per project)
- Do people work on same project? How many? In same design area?
  - People stepping on each other while trying to work within the same project
  - Sub-projects within major projects
- What are challenges? What did, and what didn't work?
  - Challenging to find all of the required files/paths
  - Would like a Wizard to assist in setting up the environment for ACADE for Multiple Users
    - Include Migration tools in the wizard (for management of existing custom content during software upgrades)
  - More training resources are needed
  - Needs to be easier to adopt/ More flexible adoption options (especially for the variety of industries using ACADE)
- Revision management?
  - Need drawing level revision management
  - Avoidance of wanting engineers to Rev in Vault





# **Interface and Training**

- Have you had training? If not, why not?
  - Very few people have had formal training
  - Lack of access to in-depth training
- What improvements are needed?
  - Want it to be "black&white" in ease of use
  - Ways to share content across offices
- How should interface be improved?
  - Should be multiple ways to do things but have specific workflows that could allow people to choose what they need (User-based controls)





# ElectroMechanical (2D/3D) Design

- Do you use Electromechanical features? Why or Why not?
  - Small amount of people feel that these features are important to them
  - Some would just have one person doing both, but most would have multiple people using the diff platforms
  - Some feel the 3D in ACADE is easier to use with all of the ACADE tools/features and there is no need for the Inventor side
  - Vault doesn't support the ElectroMechanical workflow and needs to
- When would it be important?
  - Major reasons to use it: interference/collision checks
- What features would be needed to make it a great solution?
  - Need more parts content on the 3D side for Inventor (with intelligent constraints built in)
  - Need training that can be done cohesively across both ACADE & Inventor
  - Inventor would need the Reporting tools and spreadsheet update capabilities



### Simulation

### Examples:

- Short circuit test?
- Control operation?

- Is circuit simulation needed? Why or Why not?
  - "It would be AWESOME"
  - Especially for Education/New Users/
  - 10 on a scale of 1-10 of desire to have
- What types of simulation are needed?

What features would be needed to make it a good solution?

# **Analysis**

- Is circuit analysis needed? Why or Why not?
  - 10+ (even more desired than Sim)
  - People willing to buy as an addin

- What types of analysis are needed?
  - Load Calcs
  - Engineering tools

- What features would be needed to make it a good solution?

### Examples:

- Power loading?
- Voltage drop?
- Voltage ratings?
- Component ampacity?

### **Outside Influences**

- What other software is used?
  - Promis-E (users think that they can get more reports out of it than in ACADE)
- How do you work with your customers?



# Wrapup Feedback







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