

Walk-in Slide: AU 2014 Social Media Feed

1. Click on the link below, this will open your web browser

<http://aucache.autodesk.com/social/visualization.html>

2. Use “Extended Display” to project the website on screen if you plan to work on your computer. Use “Duplicate” to display same image on screen and computer.

A CAD Manager's Guide to AutoCAD Civil 3D

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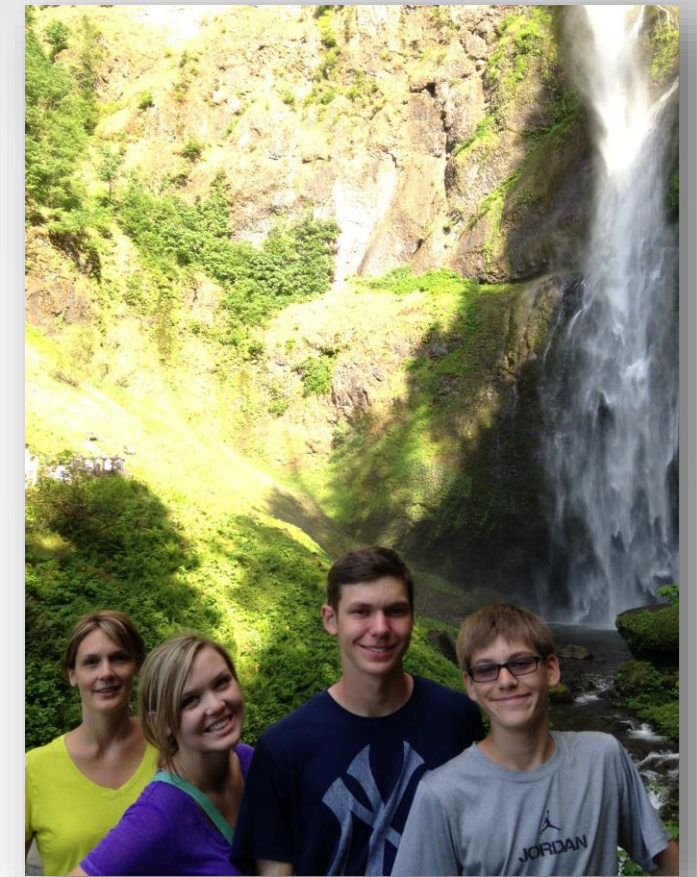
Key learning objectives

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

- Understand compatibility issues with other versions of AutoCAD Civil 3D software and work with data from other design packages
- Share data with project team members who are not using AutoCAD Civil 3D software
- Identify effective methods of training for both transitioning to AutoCAD Civil 3D software and increasing productivity of existing users
- Manage AutoCAD Civil 3D software templates, styles, and settings

Who am I...

- Rick Ellis
- Portland, Oregon
- Originally a CAD Manager and Civil Designer
- I've been teaching AutoCAD, Civil 3D, and AutoCAD Map since mid-90's
- Consultant
- Author
- 9th year teaching at AU
- Member of the national speaker team for AUGI CAD Camps



Who are you...

- How many times attending AU
- What is your background with Civil 3D

Session Feedback

- Via the Survey Stations, email or mobile device
- AU 2015 passes given out each day!
- Best to do it right after the session
- Instructors see results in real-time

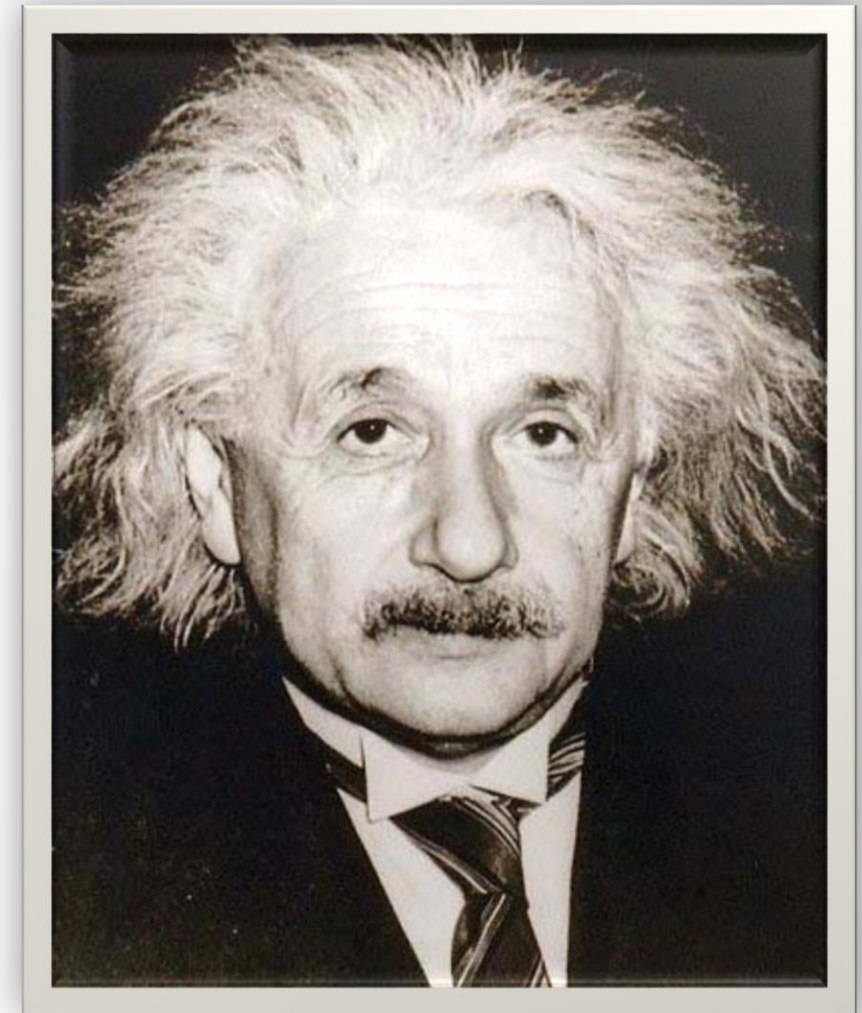


What about questions ???

- Short time for questions at the end of each topic
- Via email rick@cadapult-software.com



“If you can't explain it simply, you don't understand it well enough.”
- Albert Einstein



What is a CAD Manager?

- Were you trained to be a manager
- Was your boss trained to be a manager
- Some CAD Managers are:
 - From multidisciplinary firms
 - Full time
 - Have a title
 - Have authority
 - Only have responsibility
- Supports 5.7 unique pieces of software
- A diverse group



Understand compatibility issues

Compatibility within Civil 3D

Autodesk Product:

AutoCAD Civil 3D

AutoCAD Map 3D

AutoCAD

Tools work on:

Civil 3D Objects, (such as Alignments, Surfaces, Profiles, Parcels, etc.), plus everything below.

Map 3D Objects, (such as Object Data, Topologies, Connected Features, etc.), plus everything below.

Standard AutoCAD Objects, (such as Lines, Circles, Polygons and Blocks).

Other Versions of Civil 3D

- Not your everyday DWG
- What exactly are you being asked to provide?
- A Civil 3D Drawing can mean a number of things
 - Just a DWG
 - Are there certain objects that must be included
 - Does it matter how objects were created
 - Ex. Surfaces from Land XML



Other Versions of Civil 3D

- 2012 and older
 - Upward compatible only
 - LandXML for data
 - WBLOCK basic linework
- 2013 – 2015
 - Civil 3D objects are compatible



Other Design Software

- What exactly are you being asked to provide?
 - “The File” is not an adequate description
- What software will it be used in?
- Do they want data?
 - If so what?
- Do they just want graphics?



Other Design Software

- LandXML for data

- Point Groups
- Alignments
- Profiles
- Surfaces
- Parcels
- Pipe Networks
- Pressure Networks
- Corridors



- Drafting

- General linework
- Export to AutoCAD
- WBLOCK

Sharing data with project team members

Types of users

- Civil 3D Users
- Non-Civil 3D Users
 - AutoCAD
 - AutoCAD LT
 - Any other software that reads DWG files



Sharing data with project team members

- Civil 3D Users
 - Data Shortcuts
 - Vault



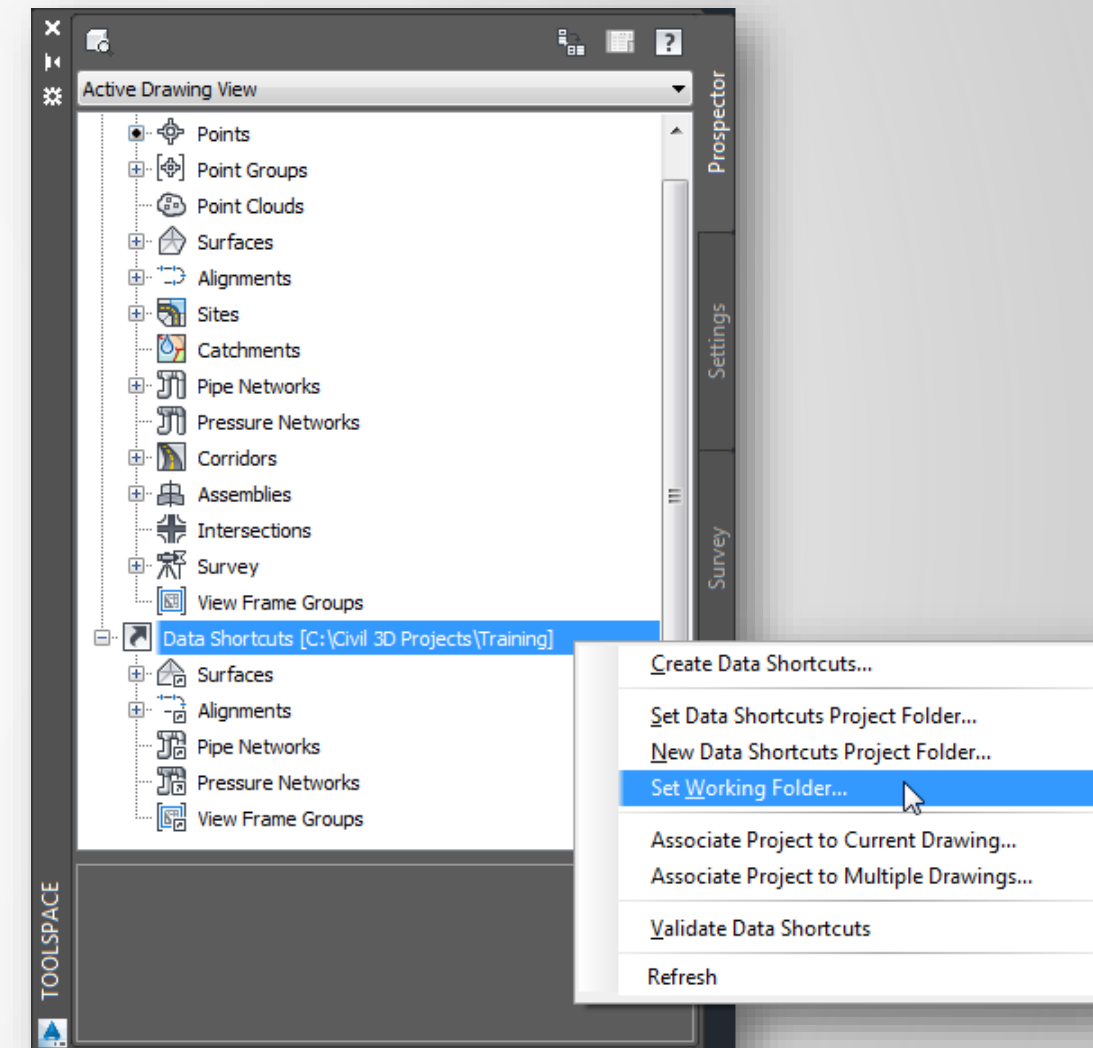
Data Shortcuts

- Share
 - Surfaces
 - Alignments
 - Profiles
 - Pipe networks
 - Pressure networks
 - View frame groups



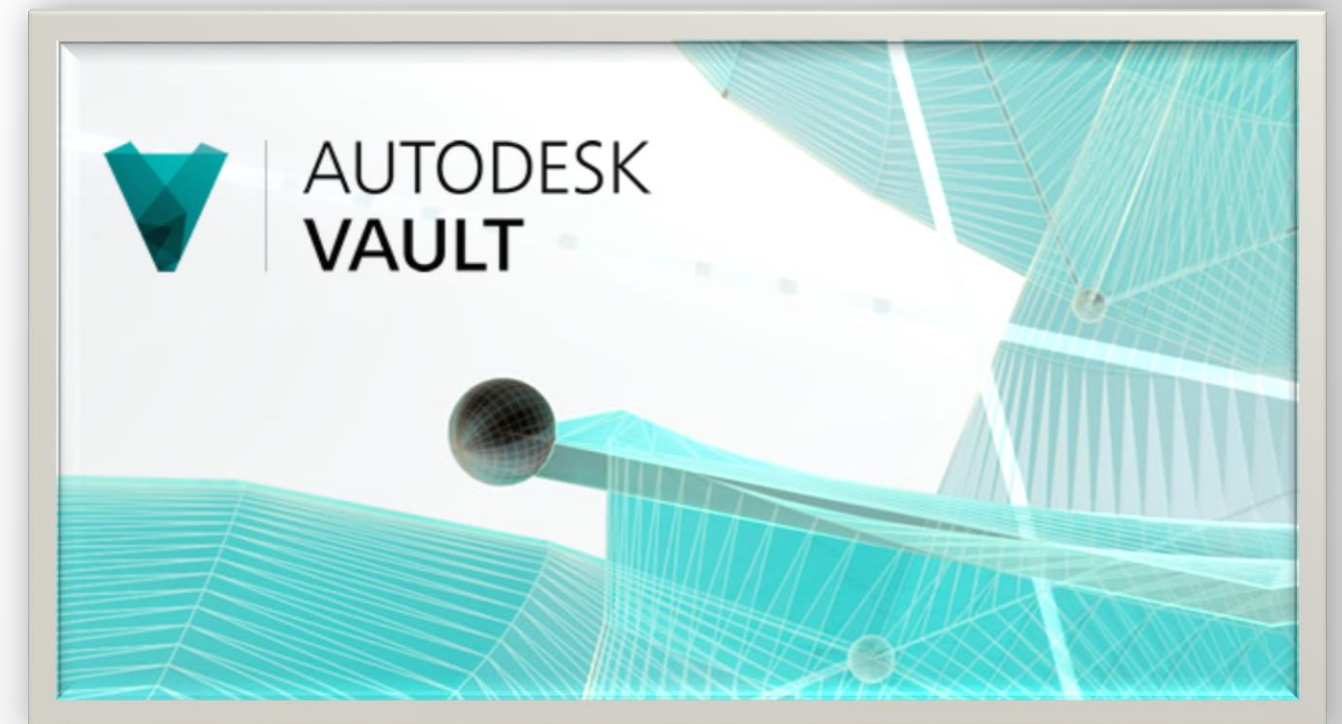
Data Shortcuts

- Flexible structure
 - You can add folders as needed
 - Standardize with a Project Template
 - _Shortcuts folder
- Working Folder
- Set up drawings for parallel workflow
- Use as needed



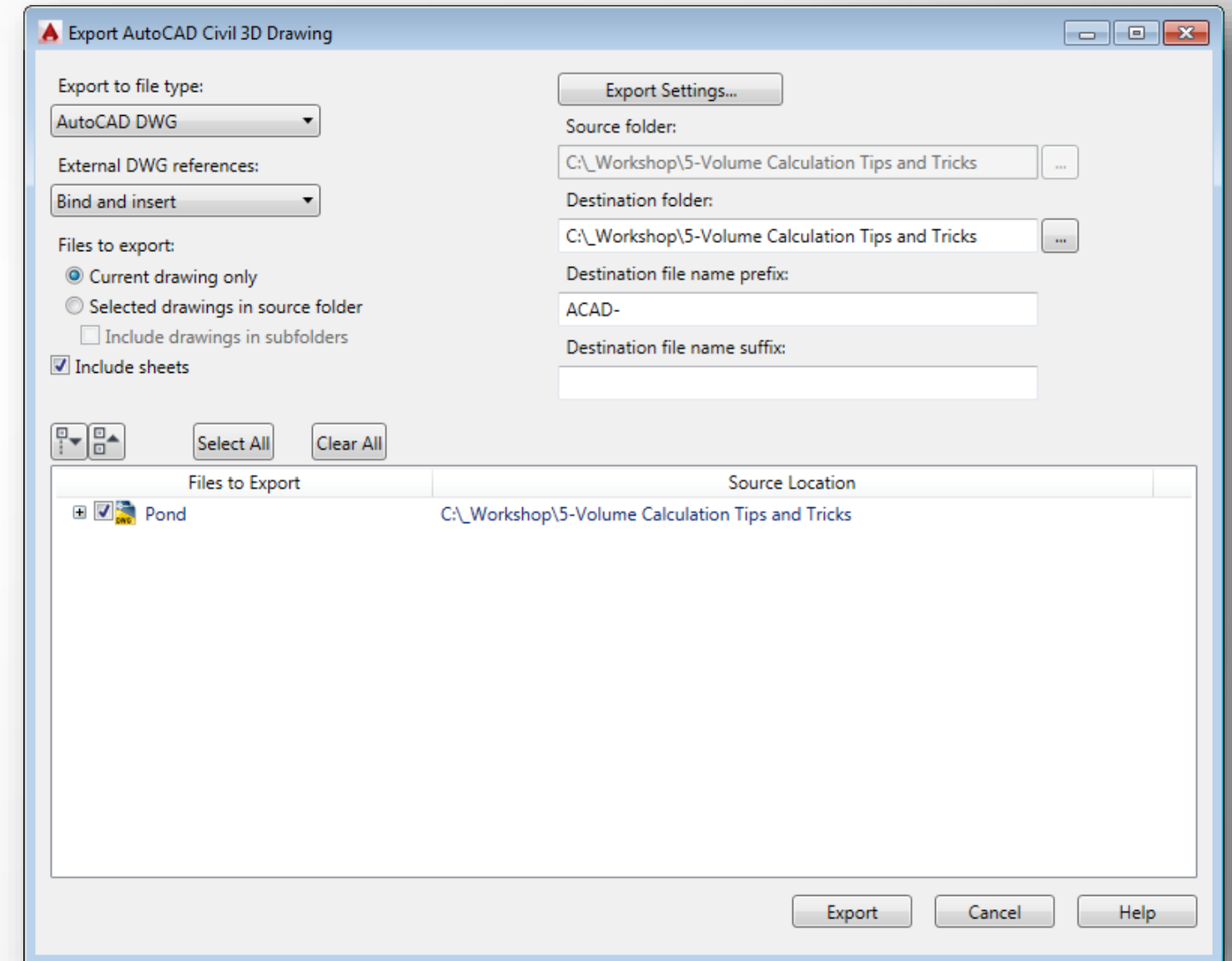
Vault

- Collaboration and data management software
- Requires a Vault Server and Administrator
- You need to commit to it
- It will change your workflow
- Check in check out
- Version tracking
- Share Civil 3D data



Sharing data with project team members

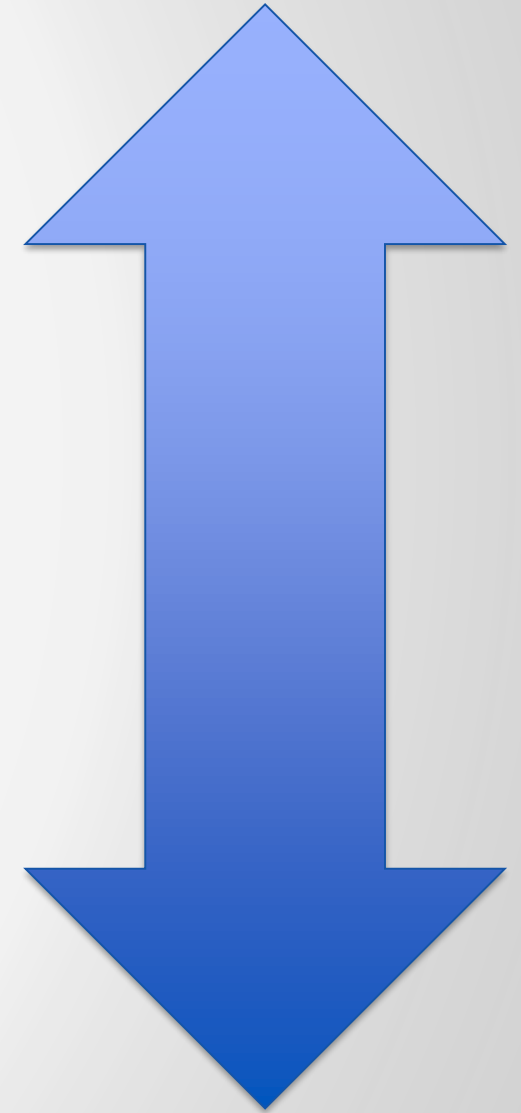
- Non-Civil 3D Users
 - Civil 3D Object Enabler
 - Export to AutoCAD



Training

Training

- Convince your boss
- Do your homework first
- Calculate the ROI
 - Include training costs as well as lost billable time
- Clearly define the training objectives
 - Evaluate
 - Users
 - Processes
 - Products



Types of users

- New to Civil 3D
 - Doesn't matter if they have used other Civil/Survey software
 - They need a fundamentals course
- New to your organization
 - Need to learn your workflows, procedures and standards
 - Need to know how to work with your template and settings
- Existing users learning new features
 - New versions of software
 - Continuing to learn more advanced features to increase productivity

Types of training

- Self-Paced
- In-House (short topic based)
- Instructor Led Classes

Self-Paced Training

- Books
- Videos
- Low Cost
- Does not interrupt billable work
- Can't ask questions
- No dedicated time, can get put off
- Good for experienced users
- Difficult to learn the entire program this way



In-House Training

- Lunch and Learns
- User groups
- Short topic based
- Moderate Cost
 - Speaker, Food, Your prep time
- Minimal interruption to billable work
- Opportunity to ask questions
- Scheduled, dedicated time
- You must prepare and present valuable material



Instructor Led Training

- On-Site or Off-Site
- Taught by internal staff or an outside consultant
- Higher cost
 - Instructor, course materials, time away from billable work
- Opportunity to ask questions
- Scheduled, dedicated time
- You still need to put in time
 - Class scope and training objectives
 - Selecting an instructor



Instructor Led Training

- Choose your instructor carefully
 - This can make or break a class
 - Consider all the costs
 - Industry experience
 - References
 - Discuss training objectives and background of students
 - Personality needs to be a fit
 - You want a long term partner
- Can be very cost effective



Types of Users Matched with Types of Training (recommendations)

- New to Civil 3D
 - Instructor Led Class
- New to your organization
 - In-House (short topic based)
- Existing users learning new features
 - Self-Paced
 - In-House (short topic based)
 - Instructor Led Class



Managing AutoCAD Civil 3D templates, styles, and settings

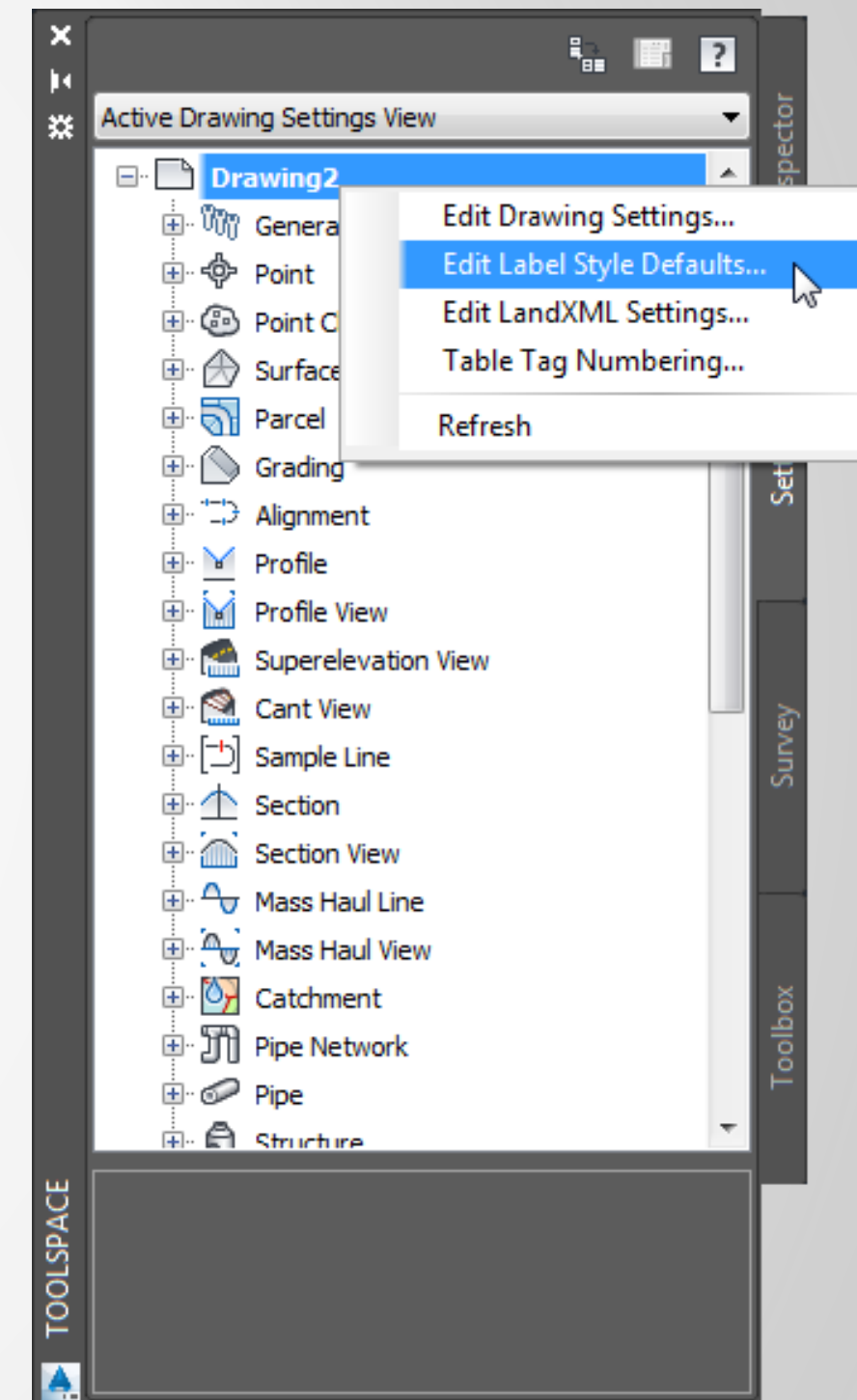
Templates and Styles

- Different Ways to Approach Styles
 - No Single “Right Way”
- Categories
 - Object Styles
 - Label Styles
 - Table Styles
 - Settings



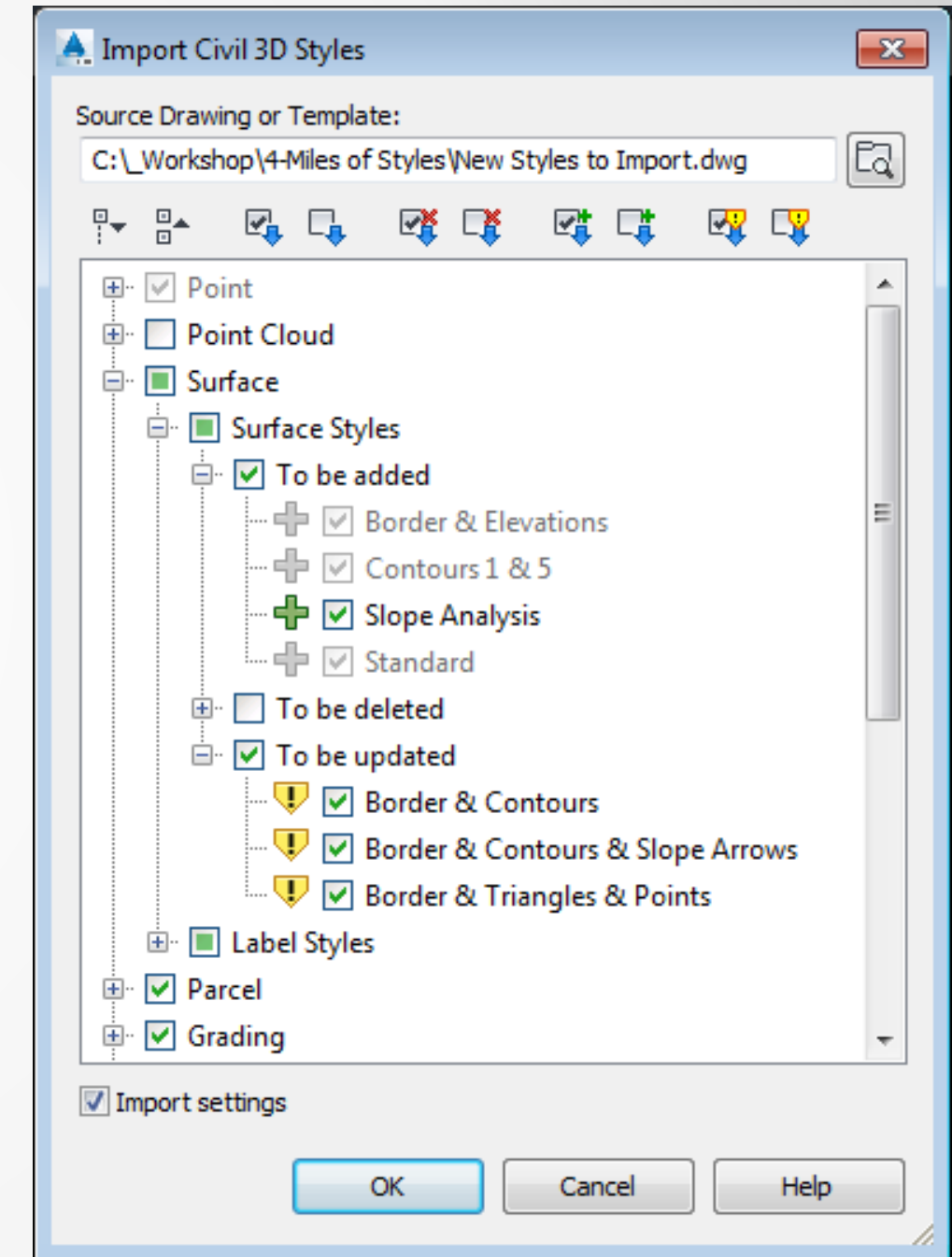
Templates and Styles

- Styles and Settings from the Top Down
- Layers:
 - For Objects
 - For Components within Styles
 - For Labels



Managing Styles

- Import Styles and Settings
- Purge Styles



Demo

Still have questions ???

- After the session
- Via email rick@cadapult-software.com



Thank you for your time and attention!

Rick Ellis

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