

Never Crash Again

Jim Byrne

Technical Marketing Manager

About the Speaker

- 3 Years - Specialty Machine Design
- 1 Year – Manufacturing Drawings for Jet Engine Airfoils
- 15 Years - Selling and Supporting CAD Technology
 - 5 Years – Focusing on Finite Element Analysis
- 5 Months – Technical Marketing Manager for Autodesk
 - Factory Design Suite
 - Configurator 360
 - Sim 360 Pro



Class summary

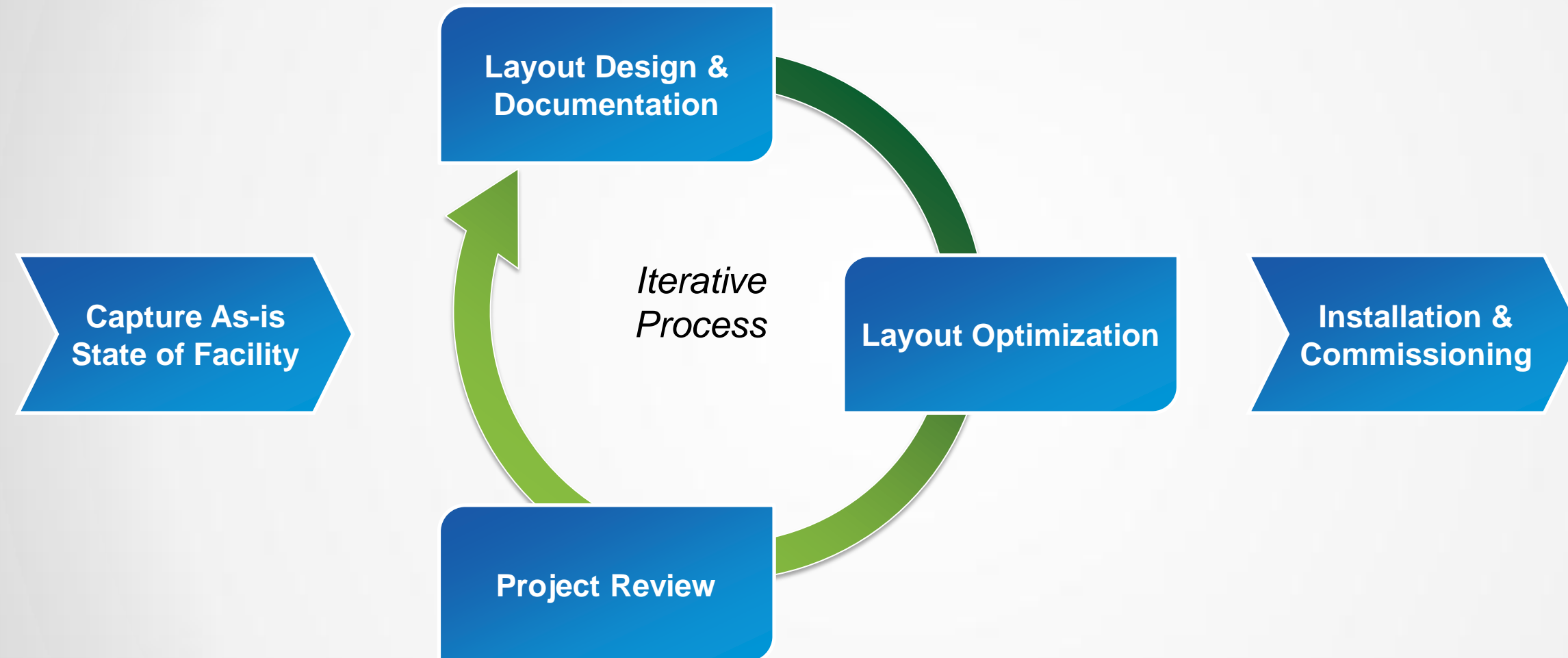
Collisions are expensive in manufacturing projects. Your best insurance is to use the best available reference data to find and fix collisions during the design phase or, better yet, prevent them altogether! This class covers the basics of using point clouds and data formatted in Autodesk® Revit®-based software with Autodesk® Factory Design Suite projects. You learn workflows for importing and manipulating data and get experience using real-world, industry-specific scenarios.

Key learning objectives

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

- Use Autodesk Recap to edit point cloud data for your factory design
- Work with the modified point cloud in Inventor and AutoCAD
- Merge point cloud data in NavisWorks
- Perform clash detections in NavisWorks

Production Layout Process



Working with Autodesk ReCap

- Import Several Scans
- Millions of points
- Analyze the data
- Units
- Limit Box
- Regions
- Save RCS
- Register (ReCap Professional)
- Index (ReCap Professional)



ReCap / Live Demonstration

ReCap System Requirements

Recommended system specifications

Operating Systems:

- Microsoft® Windows 8 (64-bit)
- Microsoft® Windows 7 Enterprise (64-bit)
- Microsoft® Windows 7 Ultimate (64-bit)
- Microsoft® Windows 7 Professional (64-bit)

2.0 gigahertz (GHz) or faster 64-bit (x64) processor

8 GB or more RAM

1600x1050 or higher True color

OpenGL 3.3 capable workstation class graphics card with 1 GB or greater graphics memory

Minimum system specifications

Operating Systems:

- Microsoft® Windows 8 (64-bit)
- Microsoft® Windows 7 Enterprise (64-bit)
- Microsoft® Windows 7 Ultimate (64-bit)
- Microsoft® Windows 7 Professional (64-bit)

2.0 gigahertz (GHz) or faster 64-bit (x64) processor

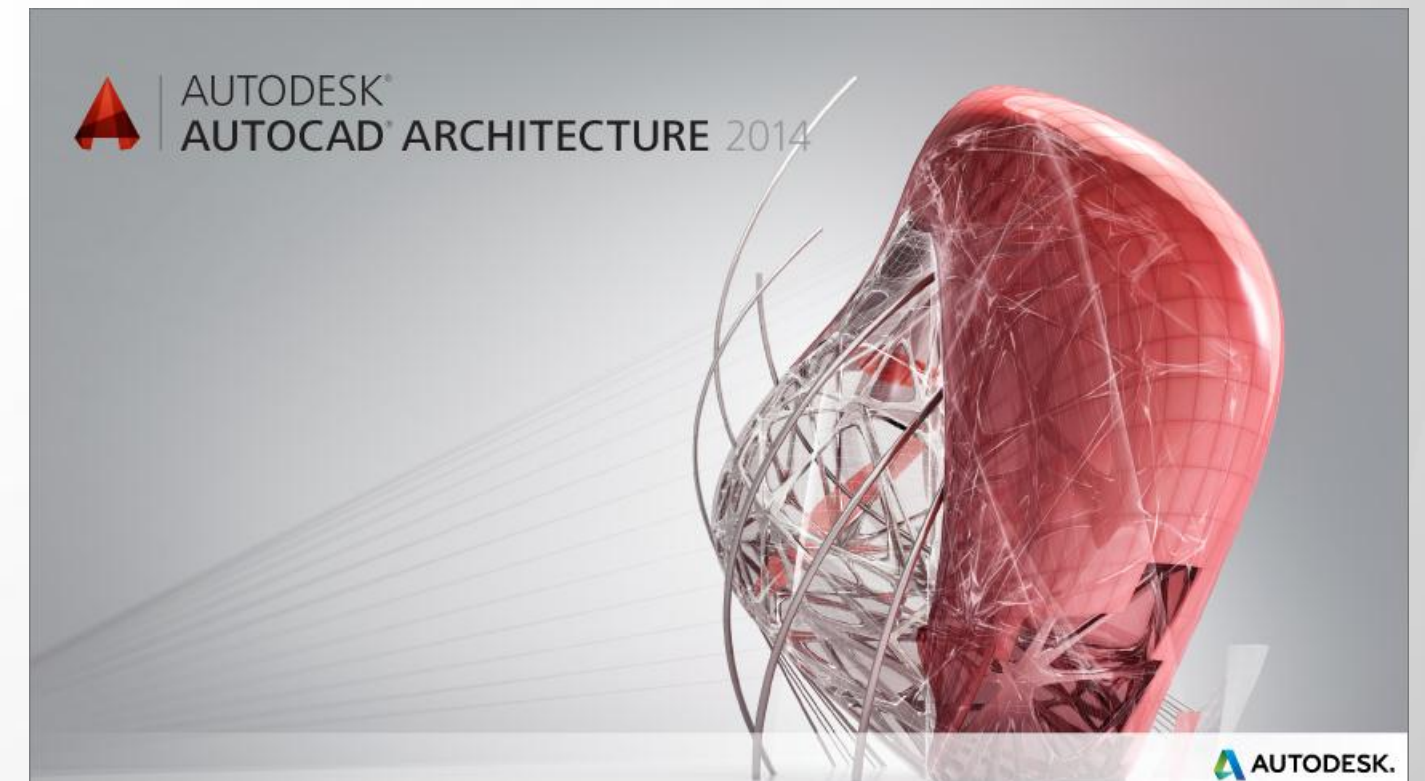
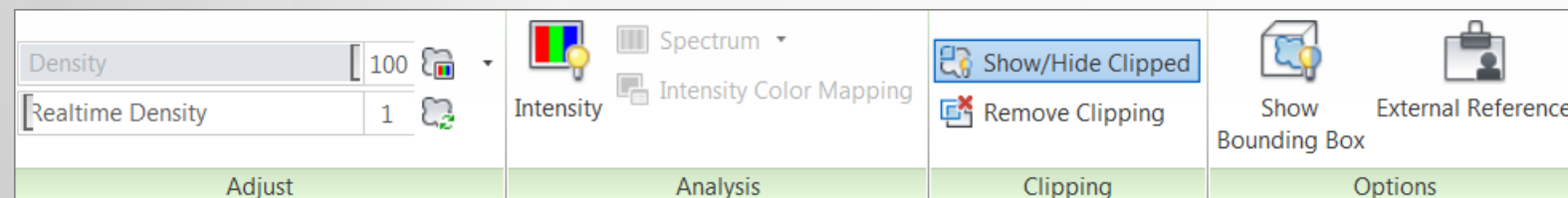
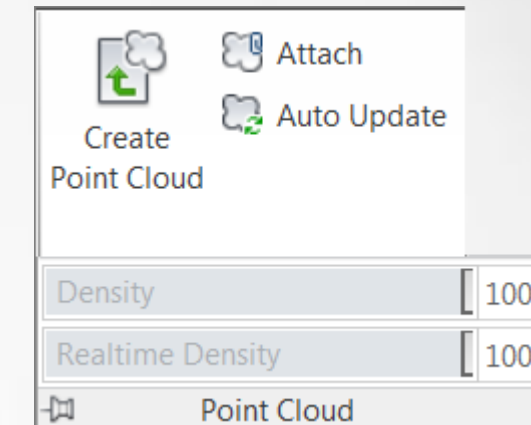
4 GB or more RAM

1280x1024 with True Color

OpenGL 3.3 capable graphics device with 256 MB graphics memory

Working with Point Cloud in AutoCAD

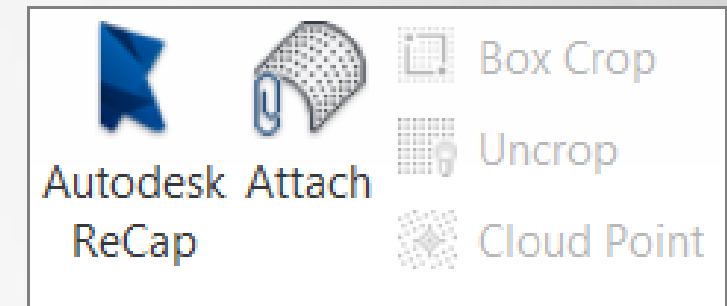
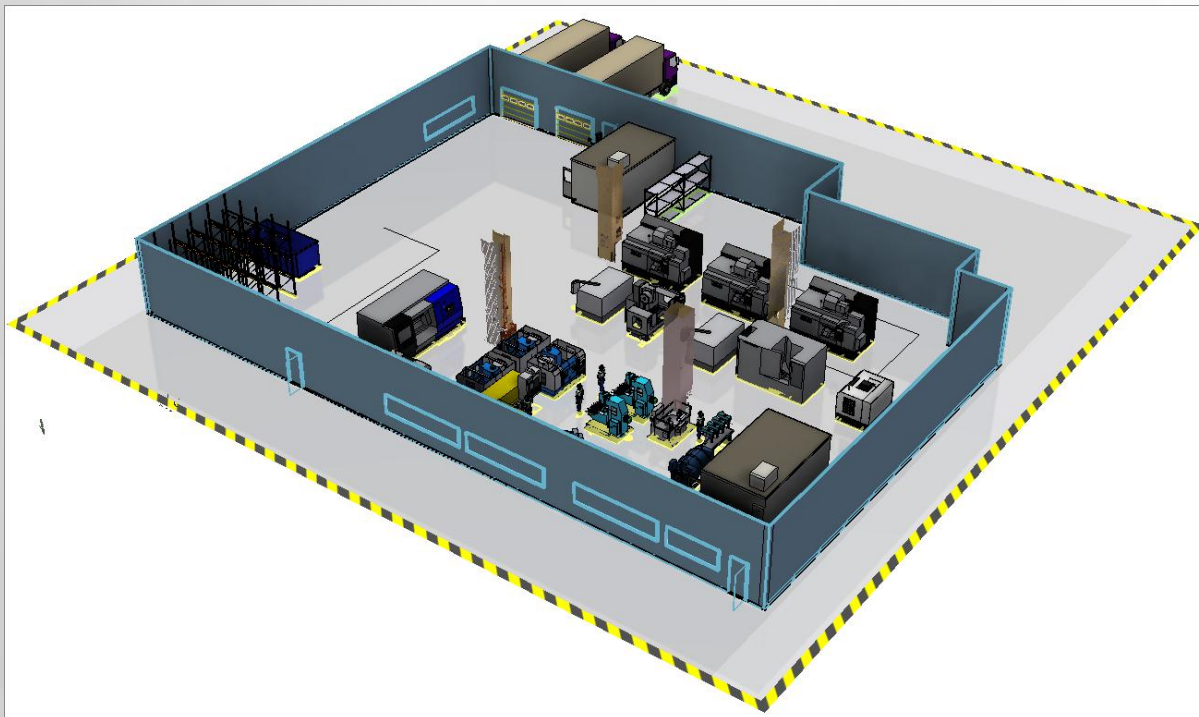
- External References / Details
- Hardware Acceleration
- Control Point Density
- Create Point Cloud
- Point Cloud Intensity
- Change Color
- Clipping



AutoCAD / Live Demonstration

Working with Point Cloud in Inventor

- Measure
- Crop
- Enhancements
- Mate to Point Clouds
- ReCap Photo for Asset Creation



Inventor / Live Demonstration

Working with Point Cloud in Navisworks

- Append / Merge
- Selection Manager
- Clash Detection
 - Grouping
 - Report Generation
- Timeliner
 - Installation Sequencing
- Animator
 - Animate Equipment Installation
- Navisworks Freedom



Navisworks / Live Demonstration

Questions?

Jim Byrne

Technical Marketing Manager



Thank You!

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