2020 BIM 360 Design Workflow for Revit, Robot, Advance Steel & Dynamo

Lina El-Khoury

Design Applications Manager

Hung Nguyen

Technical Consultant

About the speakers

JAMES KM CHENG | ARCHITECTS

Lina El-Khoury

Lina El Khoury is the Design Applications Manager at James K.M. Cheng Architects in Vancouver BC. With over 25 years of experience in Architecture, Building Systems, Interior Architecture and Building Manufacturing, she now specializes in BIM technologies. She has been the National BIM Lead for GEVINAR (WSP) and worked at Perkins + Will locally and firm wide – always raising the bar for better BIM collaboration, deliverables and efficiency. Equipped with CAD knowledge and BIM expertise in multidisciplinary platforms, combined with 10 years of Building Manufacturing experience, Lina has trained and coached many teams in multiple design and subcontracting AEC firms. Her passion, dedication, contributions to the BIM development and implementation have been very valuable and appreciated by many firms which she's worked.

About the speakers

SolidCAD
A Cansel Company

Hung Nguyen

Hung Nguyen has 26+ years of experience in Autodesk Products. He has a strong background in Architectural and Manufacturing fields. His is a BIM & Manufacturing Technical Consultant. Hung also has extensive experience in a diverse range of CAD-related software such as: Revit, Inventor, Fusion 360, Alias, and Simulation to name a few. He have presented multiple times at Revit Technology Conference (RTC), Canadian Festival of Architecture, CanBIM, and Autodesk University from 2013 to 2017.

Introduction

BIM 360 is Autodesk's AEC cloud brand & project delivery platform.

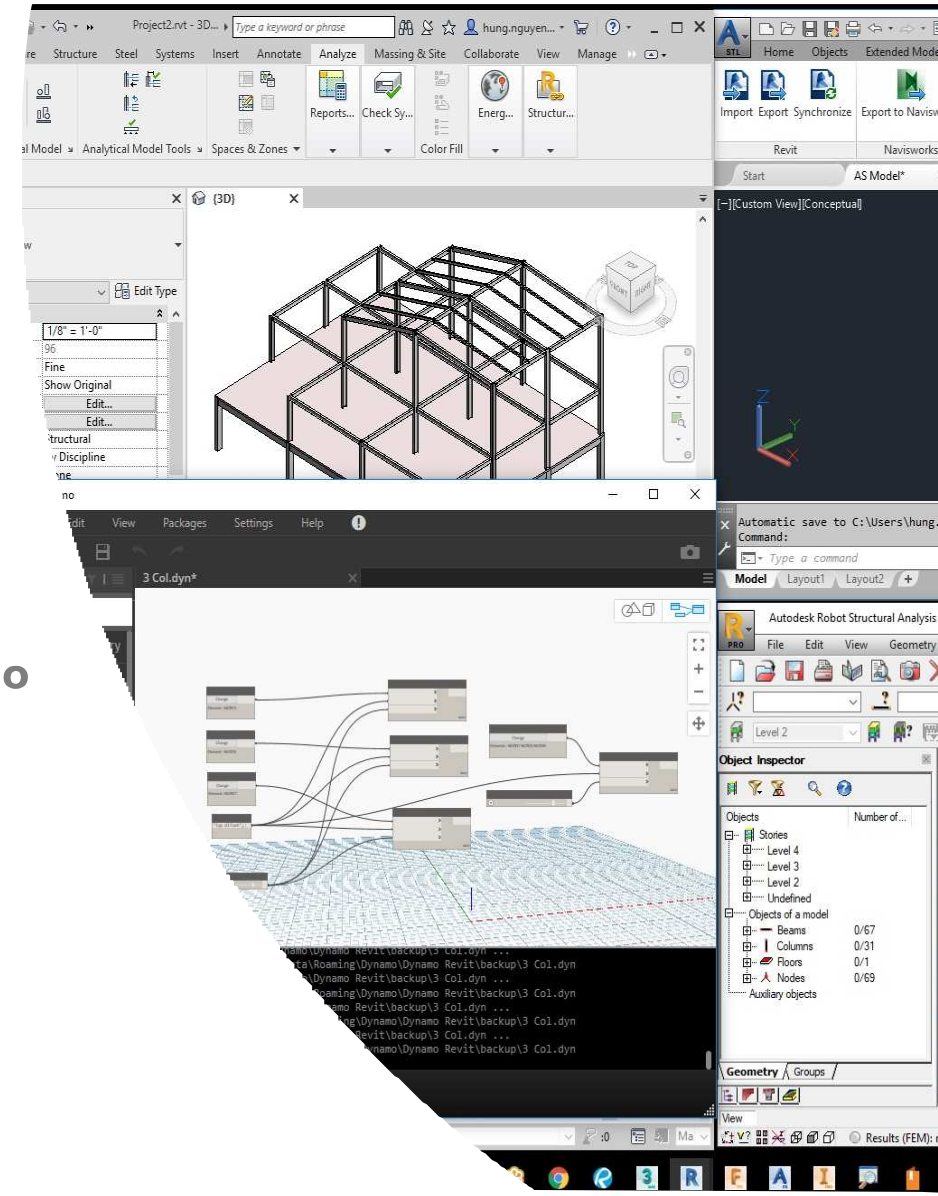
BIM 360 solution aggregates the data and provides transparency to project stakeholders making everyone more accountable and improving visibility in real time.

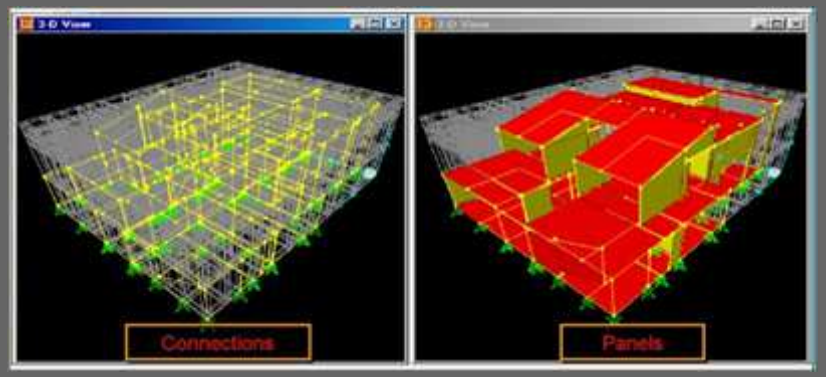
Together with Dynamo, BIM 360 tremendously helps the life cycle of structural data exchange between Revit, Robot and Advance Steel.

This session is an introduction to the Workflow of BIM 360, Revit, Robot Analysis, Advance Steel and Dynamo for beginner.

Objectives

- 20 Year Old Workflow vs BIM 360
- Revit-RSA-Advance Steel – Dynamo Workflow Demo
- Best Practice
- Q&A





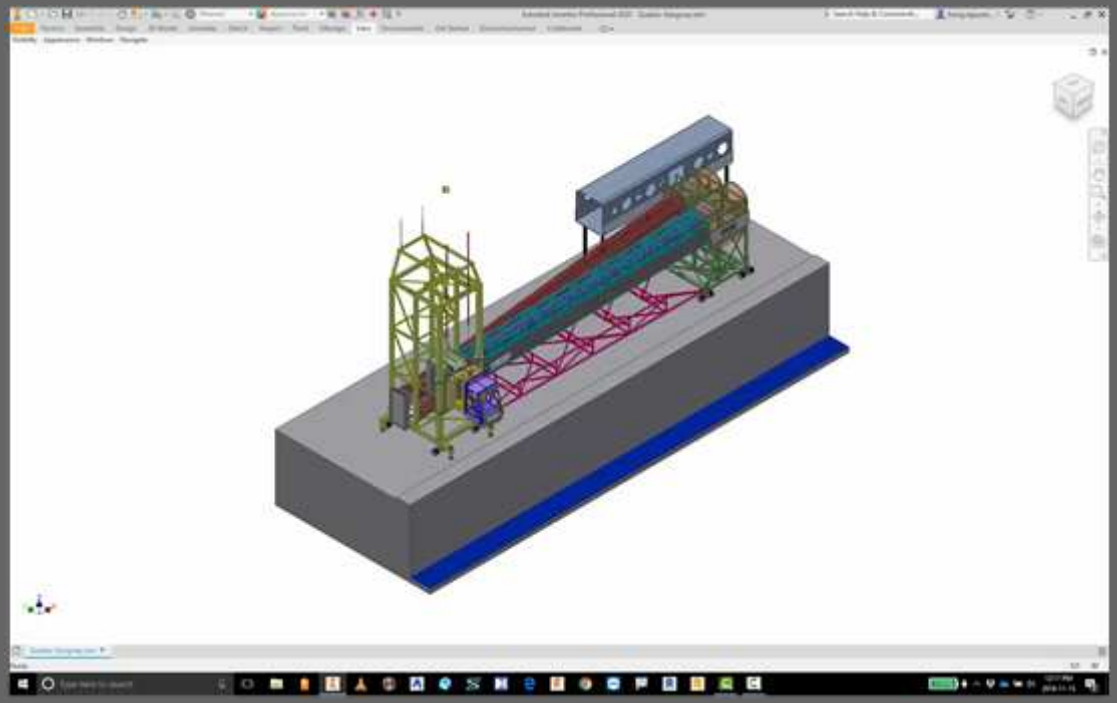
Autodesk Architecture Desktop

ETABS

Autodesk Mechanical Desktop

The Past Workflow…20 years ago

Video extracted from YouTube link:
https://www.youtube.com/watch?v=PhkMeC_DOeU&feature=youtu.be



Autodesk AutoCAD 2000

SAP2000

Autodesk Inventor R5

The Past Workflow…20 years ago

Quebec Port Authority – Built in 2002 using AutoCAD 2000, Inventor R5 and SAP2000

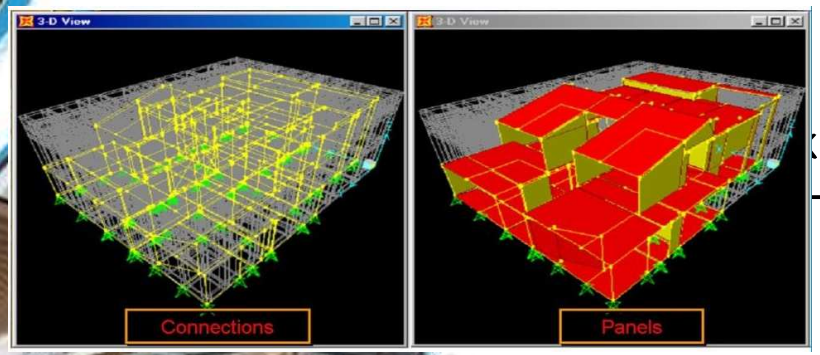
Images & Video courtesy of iDesign CAD Consultant ltd.

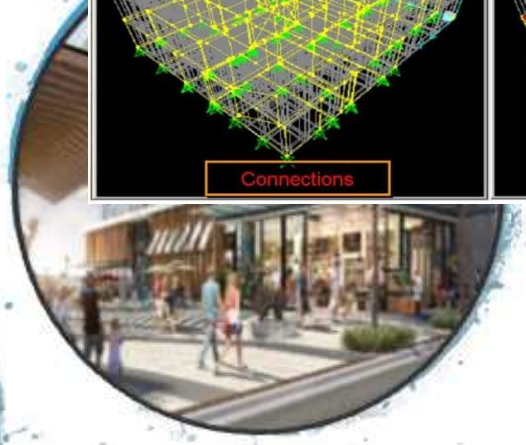
The Today Workflow

JAMES KM CHENG | ARCHITECTS

Developed by Grosvenor . Architectural design by James Cheng Architects. Interior design by James Cheng Architects & Mitchell Freedland Design

BIM 360 Design Workflow Sample





at BIM 360 Next Gen
TECTS Project

INTEGRAL GROUP

rjc Creative Thinking Practical Results

Smith + Andersen

The Today Workflow

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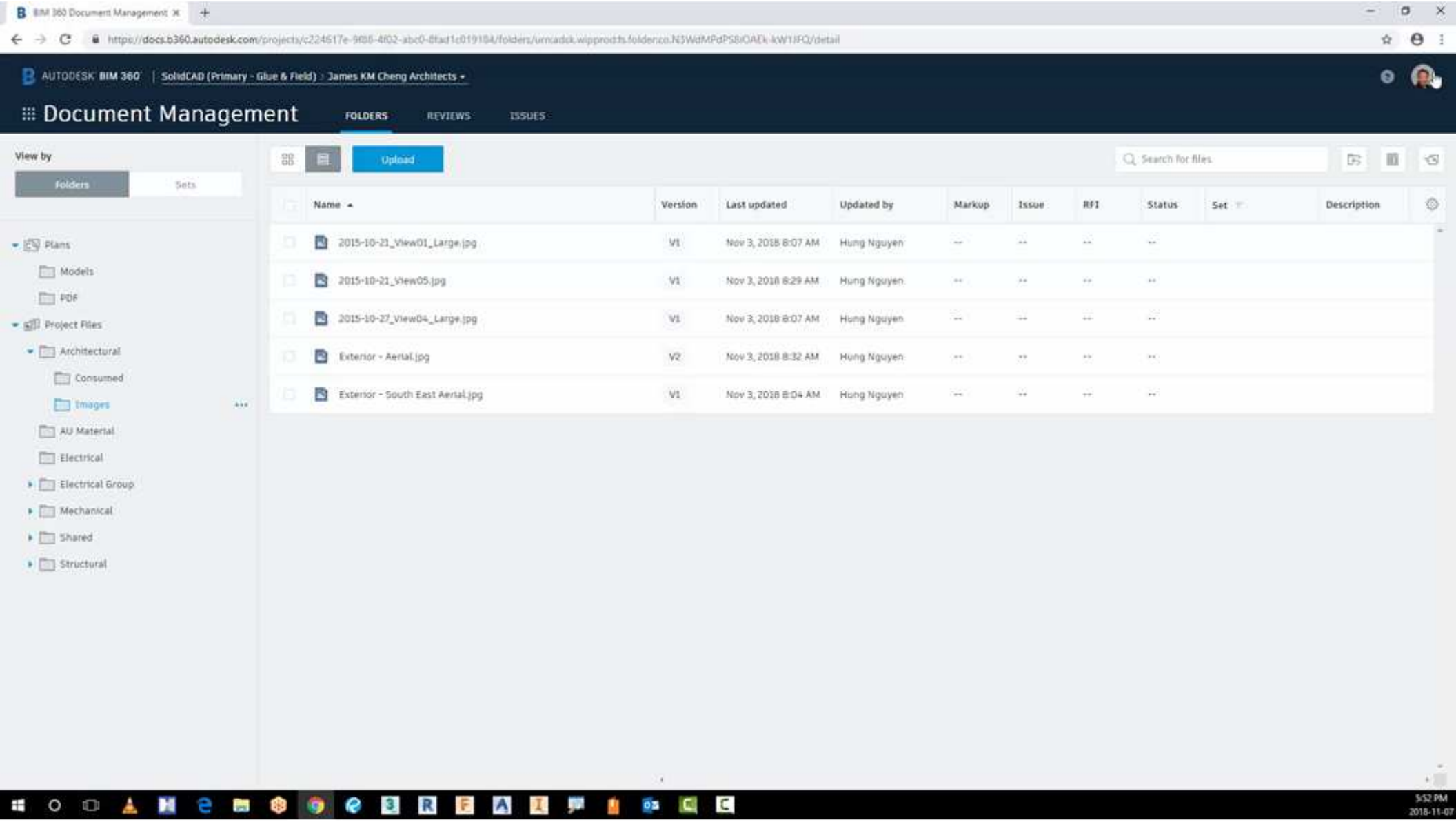
BIM 360 Document Management
AUTODESK BIM 360 | SolidCAD (Primary - Glue & Field) › James KM Cheng Architects
Document Management
FOLDERS
REVIEWS
ISSUES
View by
Folders
Sets
Upload
Search for files
Plans
Models
PDF
Project Files
Architectural
Consumed
Images
AU Material
Electrical
Electrical Group
Mechanical
Shared
Structural
Name
Version
Last updated
Updated by
Markup
Issue
RFI
Status
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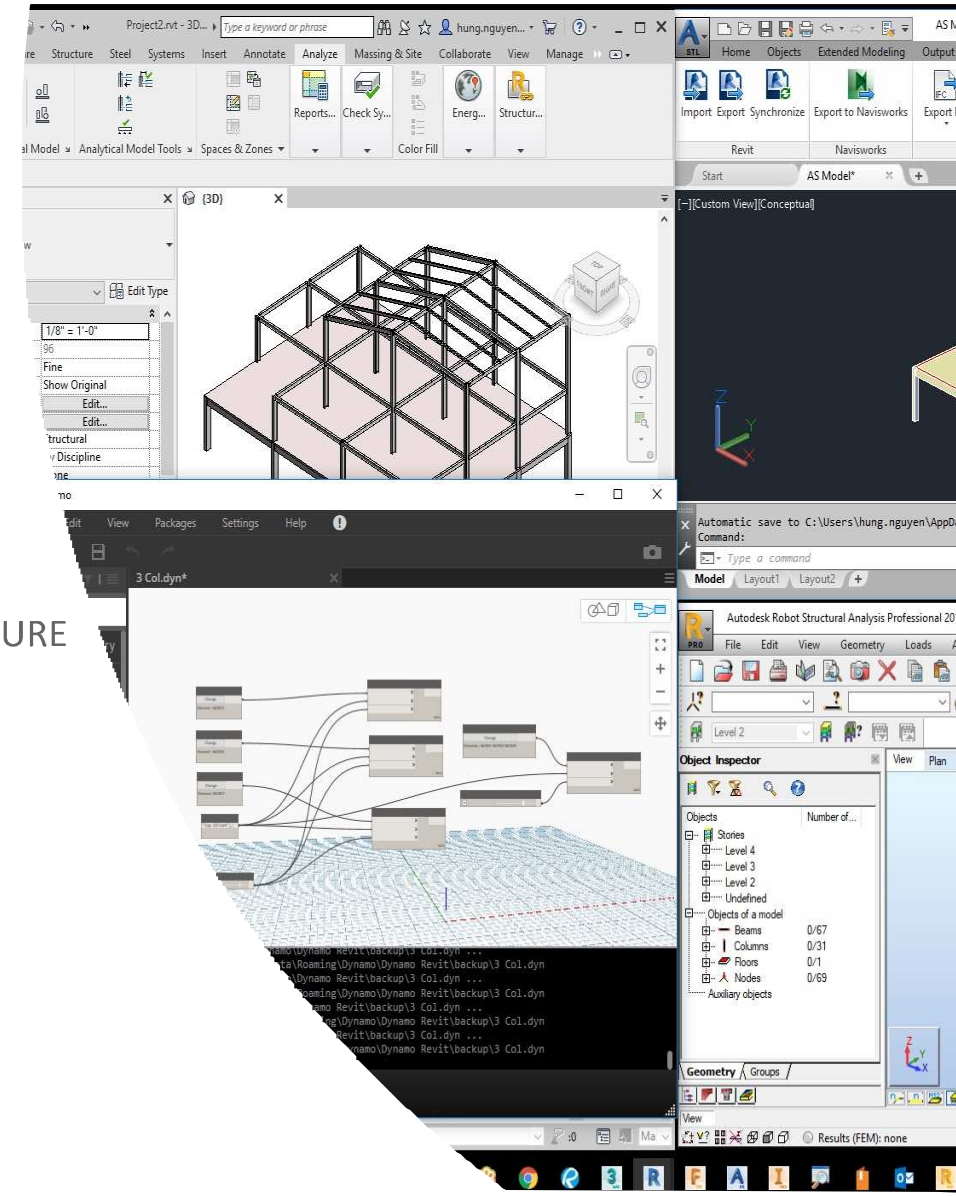
Description
2015-10-21_View01_Large.jpg V1 Nov 3, 2018 8:07 AM Hung Nguyen
2015-10-21_View05.jpg V1 Nov 3, 2018 8:29 AM Hung Nguyen
2015-10-27_View04_Large.jpg V1 Nov 3, 2018 8:07 AM Hung Nguyen
Exterior - Aerial.jpg V2 Nov 3, 2018 8:32 AM Hung Nguyen
Exterior - South East Aerial.jpg V1 Nov 3, 2018 8:04 AM Hung Nguyen

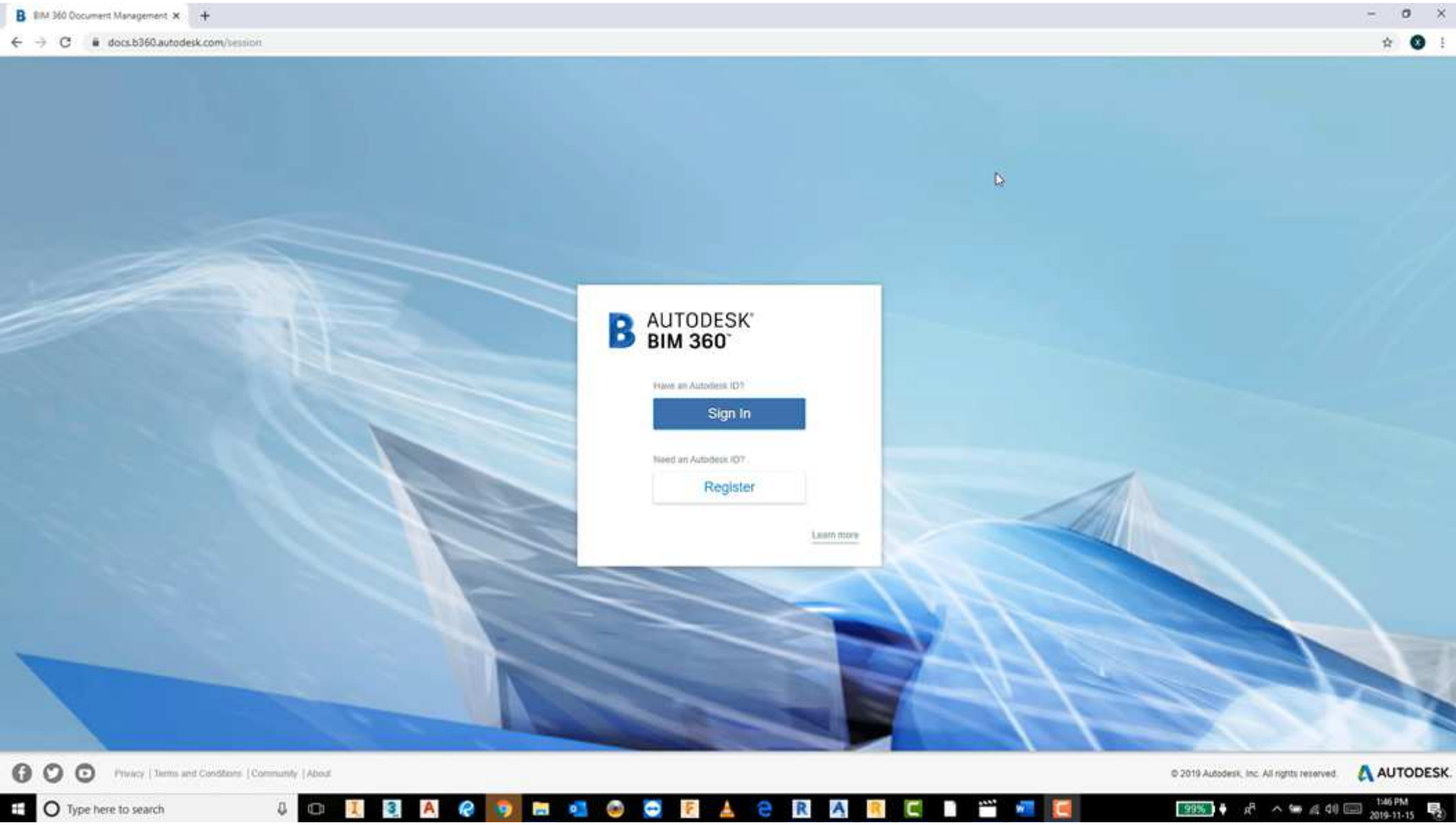
DEMO FEATURES

A QUICK OVERVIEW OF REVIT – ROBOT – ADVANCE STEEL – DYNAMO – BIM 360 DESIGN



- LINKS REVIT STRUCTURE MODEL TO RSA AND AVANCE STEEL
- REGIONAL CODE CHECK & OPTIMIZATION WITH ROBOT STRUCTURE ANALYSIS
- ADVANCE STEEL FOR CONNECTION DESIGN & DETAILING
- DYNAMO USAGE
- BIM 360 DESIGN PLATFORM - ***SINGLE SOURCE OF TRUTH***

Revit – RSA - Advance Steel – Dynamo Workflow Demo


BIM 360 Document Management
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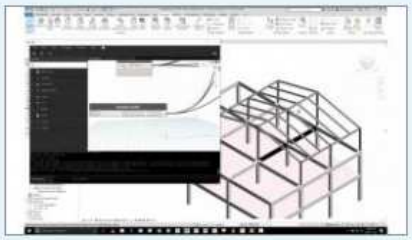
Best Practices – From our AU 2018 session



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BIM 360 Design Workflow for Revit, Robot Structural Analysis, and Advance Steel

INSTRUCTIONAL DEMO · LAS VEGAS · 2018

This class will cover how to setup and use Autodesk's BIM 360 Design for sharing Revit/Robot/Advance Steel models, and curate, coordinate, and manage...

Hung Nguyen, David Naylor and more

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- PROJECT NAME
- MODEL PLACEHOLDER
- AUTODESK DESKTOP CONNECTOR (ADC)
- MEMBERSHIP ROLES
- REMOVE THE BAD LINKING HABITS
- BIM 360 TEAM COMMUNICATOR (NOT SUPPORTED)
- WHERE HAS ALL MY HARD DRIVE SPACE GONE?
- DATA IN THE MODEL IS CORRUPT
- IS THE BIM 360 DOWN?
- BIM 360 DOCUMENT MANAGEMENT FOR INTERNAL TEAMS

BIM 360 LEARNING RESOURCES

Learning BIM 360 Design

https://www.linkedin.com/learning/learning-bim-360-design

Autodesk Knowledge on **using BIM 360 (Autodesk Videos):**

https://knowledge.autodesk.com/support/bim-360/learn-explore/caas/video/youtube/watch-v-gpadNDInppg.html

Autodesk Free Webinar:

https://learnbim360.autodesk.com/

SolidCAD
A Cansel Company

https://www.solidcad.ca/services/training/

RECOMMENDED PAST AND CURRENT AU SESSIONS

FOR MORE IN-DEPTH RSA, ADVANCE STEEL, BIM 360 DESIGN, CHECK OUT THESE SESSIONS :

- **Integration Robot Structural Analysis Professional with Advance Steel AU 2015** – By Artur Kosakowski
- **Producing Accurate Fabrication Documents for Miscellaneous Steel Using Advance Steel (2014)** – By David Naylor
- **Up and Running with Advance Steel** – By Deepak Maini
- **BES219753-L - More Dynamo for Structure** – By Marcello Sgambelluri - Masha Pekurovsky - John Pierson - Mercedes Carriquiry
- **ENR227371 - Owner Feedback in the Clouds** – By Patrick Flora

Questions