

Structural Design to Fabrication with AEC Collection — Part II

Deepak Maini

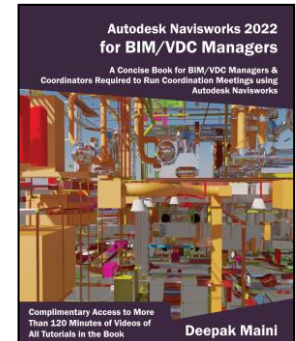
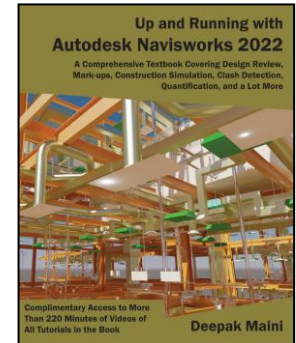
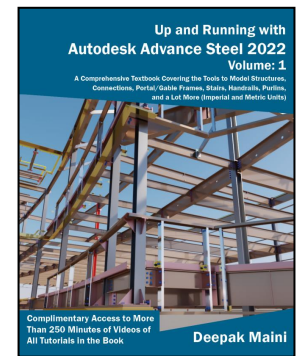
National Technical Manager – Named Accounts
Cadgroup Australia



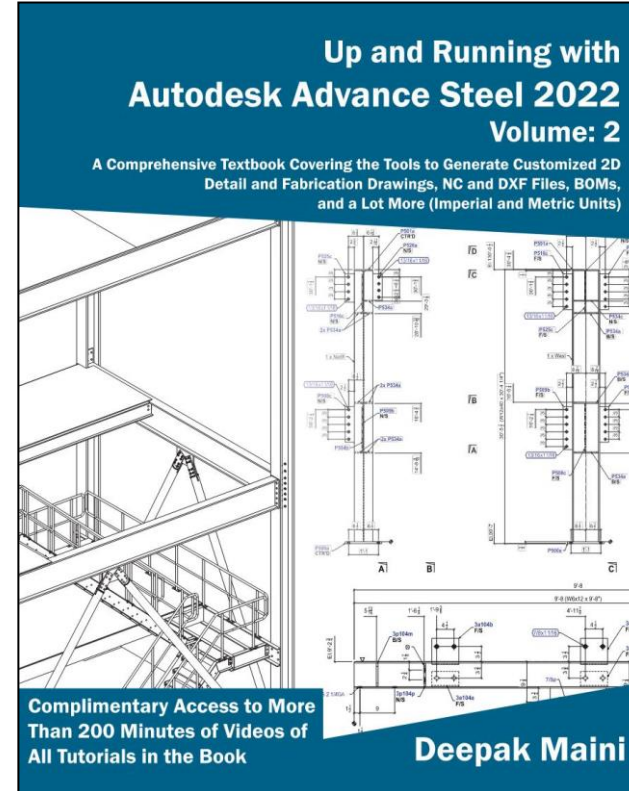
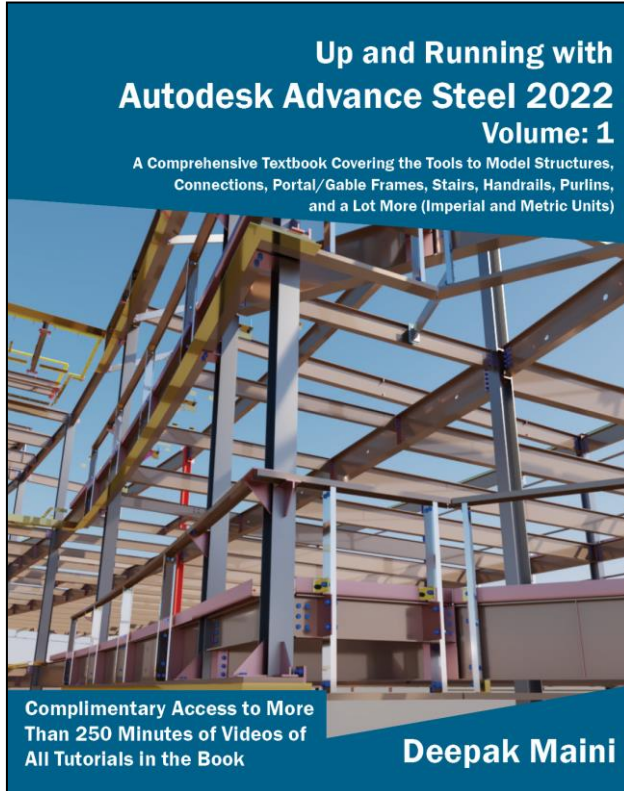
Welcome to AU 2021
The Digital Experience

Introduction

- National Technical Manager – Named Accounts, Cadgroup Australia
- Qualified Mechanical Engineer
- Over 22 years of experience in the industry
- Autodesk Expert Elite, Autodesk BIM 360 Certified Consultant, and Certified Trainer
- Awarded the “Best Autodesk University Speaker” two years in a row at AU2018 and AU2017 in Las Vegas
- Voted “Top Speaker” at the Bluebeam XCON 2019 in Washington DC
- Author of the Up and Running with Autodesk Navisworks, Autodesk Navisworks for BIM/VDC Managers, Up and Running with Autodesk Advance Steel , and Up and Running with Bluebeam Revu series of books
- Guest lecturer at the University of Technology Sydney (UTS) and University of New South Wales (UNSW), University of Salford UK, Virginia Tech University



My Aim: Have lots of fun as we learn



Acknowledgements

- Janice Miller-Kellerman and Adam Sopko from the AU Content Team
- Sidney Shaola and Lauren Ames from the AU Speaker Management Team
- Patricia Lundberg, Nicolas Martineau, and Autodesk Technical Crew

Learning Objectives

- Revisit the Advance Steel, Revit, and Robot Structural Analysis workflows for seamless structural design to fabrication
- Learn how to share structural BIM data and fabrication drawings with the field teams
- Learn how to create and manage site issues and notify design teams
- Compare different versions of structural BIM data and fabrication drawings



Revisit 2020 class



MOST Critical Part of Design

For Ensuring Safety of the Occupants



Taking the next step



**Sharing the design and drawings
with
the external teams**



This is where the challenge is

Unclear communication lines between teams

**Costs the construction industry over \$15
Billion a year in rework**

**55%
Claims are due to “inaccurate field data”**



Missing project data

62%
of construction professionals transfer field
data manually or via spreadsheets

30%
of data created during design and
construction is lost by project closeout



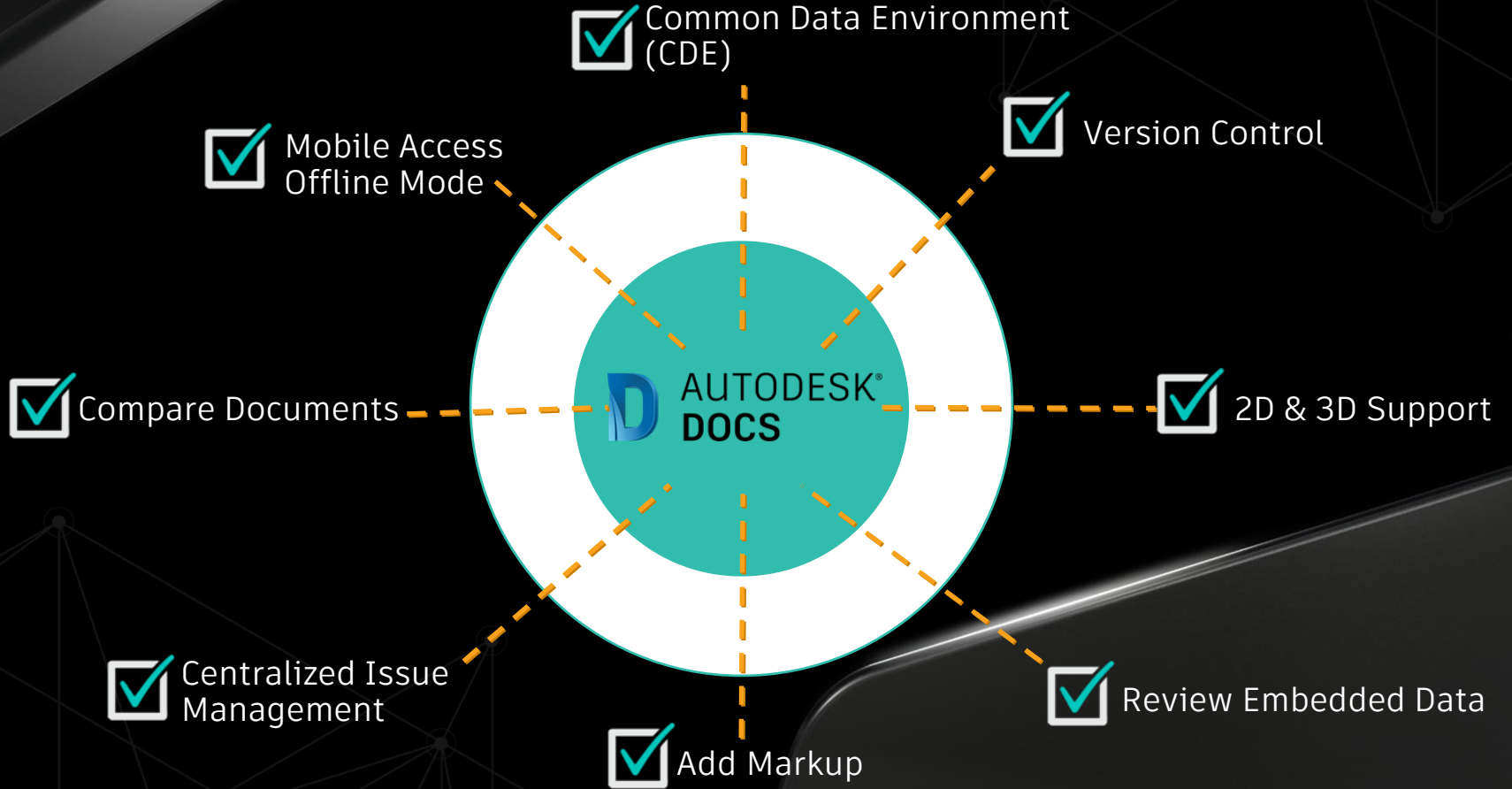






All this changes now...

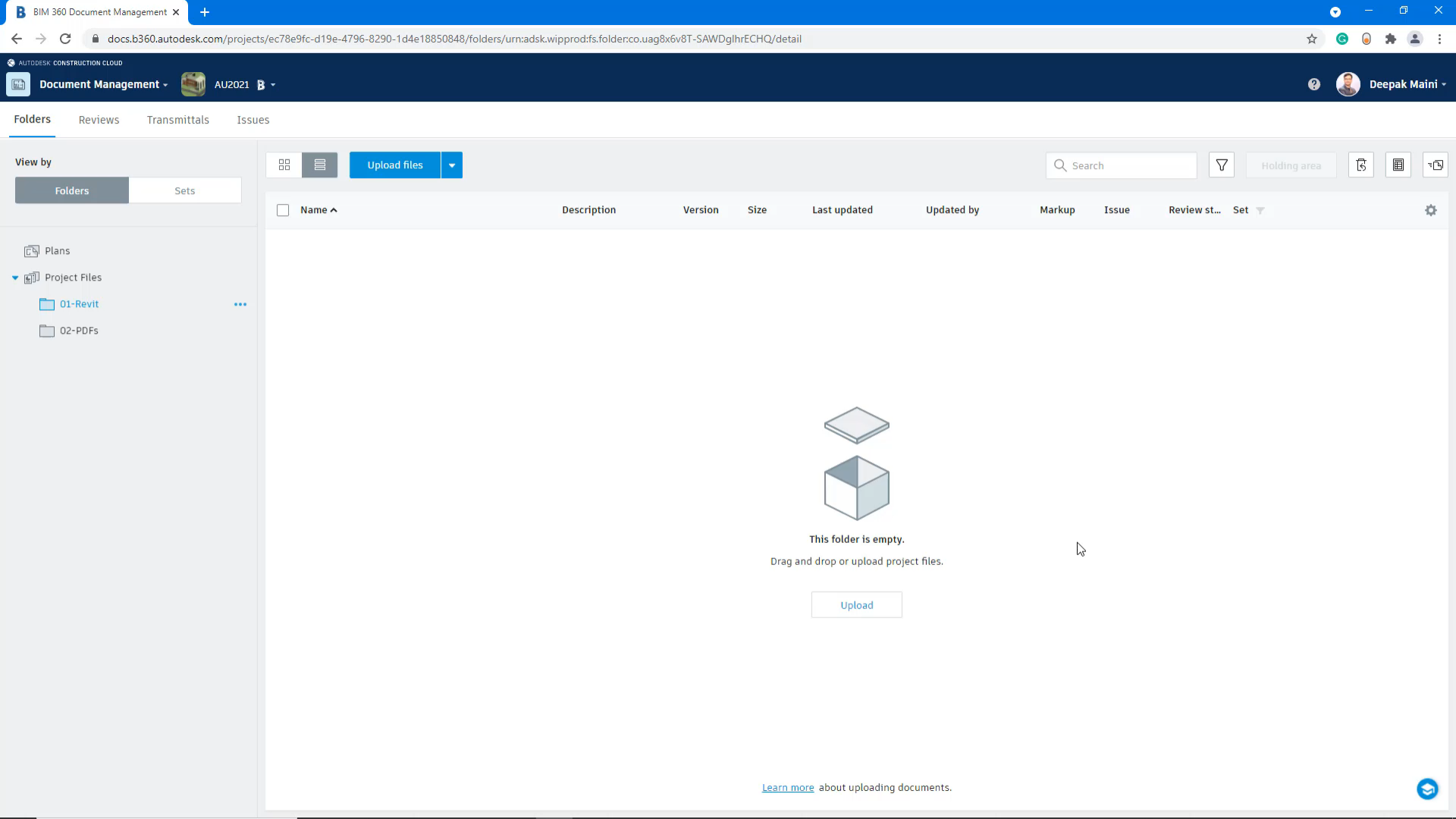
**AEC Collection now includes access
to Autodesk Docs
Yayyyyyy!!!**





Demo

Upload data to Autodesk Docs



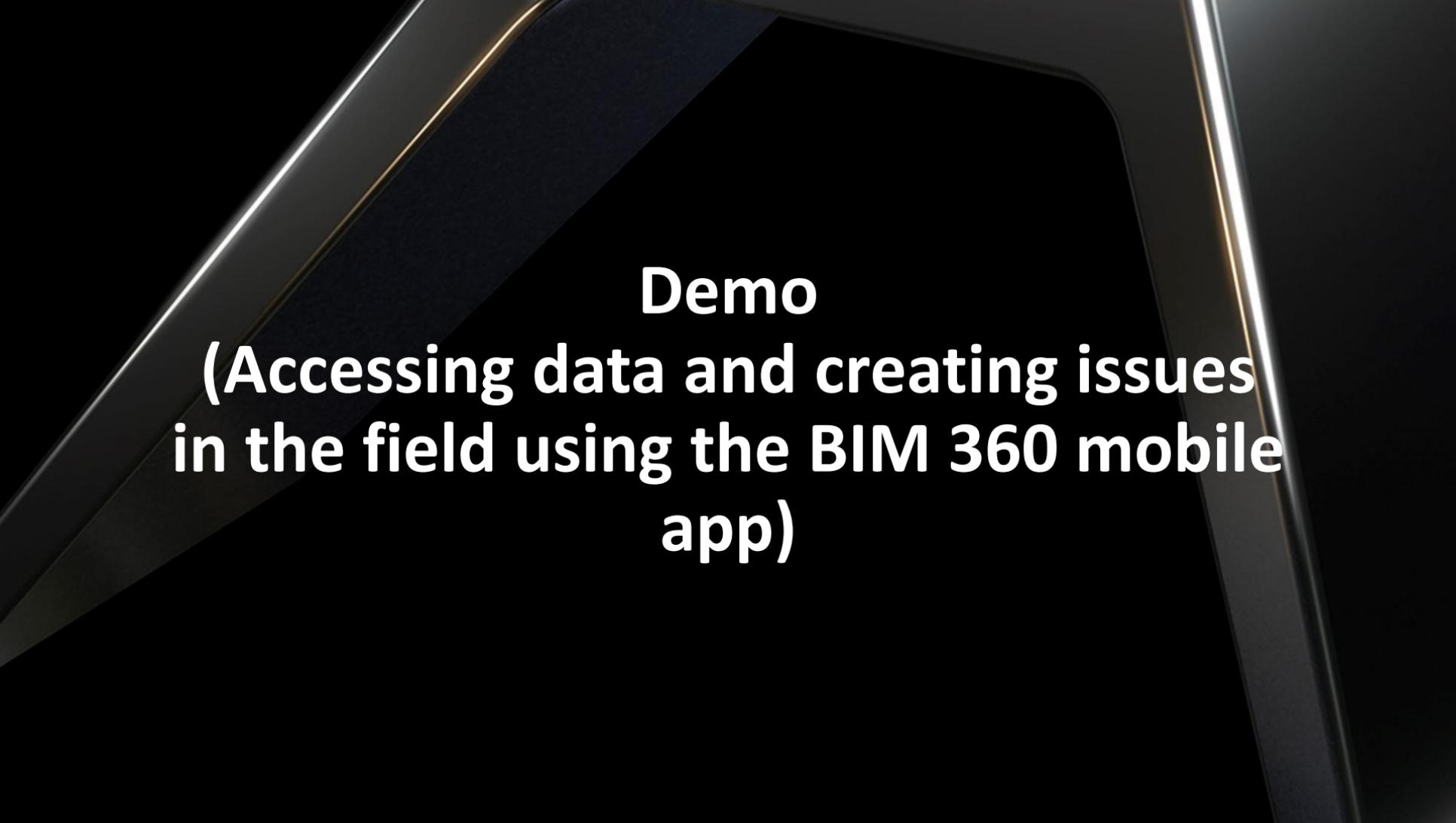
Demo

**Share data using Autodesk Docs
(Project members can use their Autodesk
Docs from AEC Coll subscription)**

File Explorer window showing the 'Script' folder. The address bar indicates the path: This PC > DATADRIIVE1 (D:) > Deepak > AU > 2021 > Classes > AS - FAB500002 > Dataset > Script. The left sidebar shows 'Quick access' and 'This PC' sections. The main area displays a table of files:

Name	Date modified	Type	Size
CG-BIM360-Add-Members.ps1	2/08/2021 12:49 PM	Windows PowerS...	4 KB
Members-PDF-Review.csv	7/08/2021 2:13 PM	Microsoft Excel C...	1 KB
Members-Revit-Review.csv	2/08/2021 12:48 PM	Microsoft Excel C...	1 KB

**Accessing and reviewing design in
the field
(All this included with AEC Coll)**



Demo
(Accessing data and creating issues
in the field using the BIM 360 mobile
app)



Documents

AU2021



Project Files

Folders

Sort by ▾



01-Revit



02-PDFs



Documents



Issues



Sync



Demo
(Creating design issue using the
Web browser)

BIM 360 Document Management

https://docs.b360.autodesk.com/projects/06e3ca56-b63e-4916-82ac-10c306843625/folders/urn:adsk.wipprod:fs.folder:co.tQbb-qyUQ0GMY9IWuVf6BA/detail

Search

AUTODESK CONSTRUCTION CLOUD

Document Management

AU2021

Field Engineer

Folders

Reviews

Transmittals

Issues

View by

Folders

Sets




Project Files

01-Revit

02-PDFs

Showing 1 item

Search

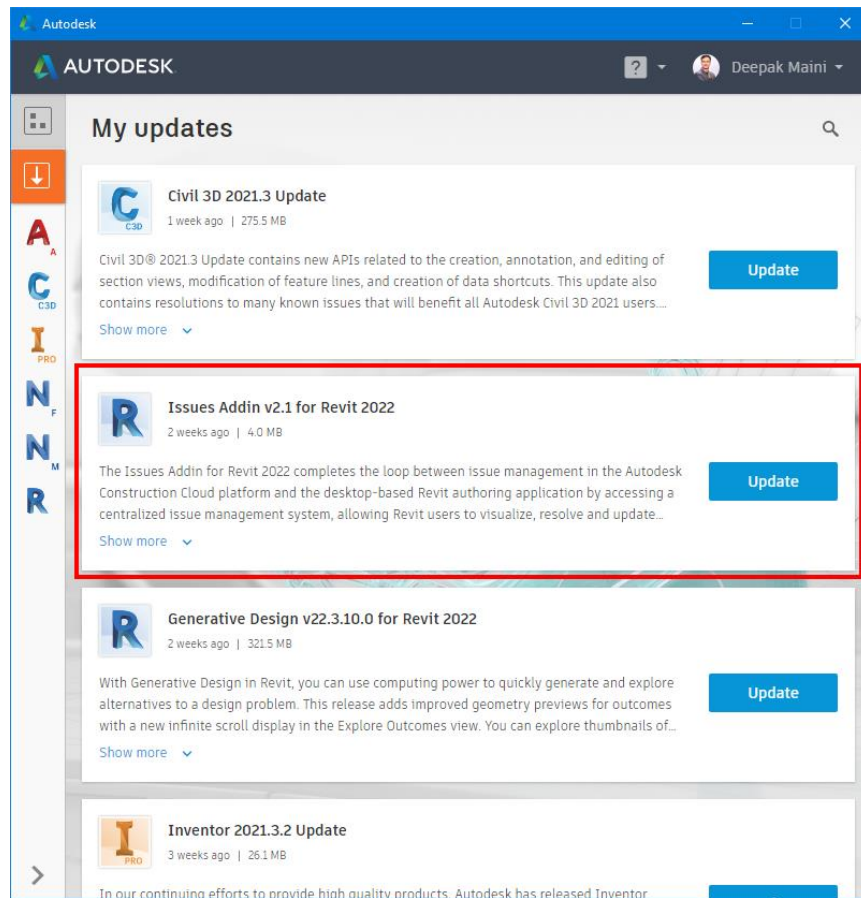
	Name ^	Description	Version	Size	Last updated	Updated by	Markup	Issue	Review st...	Set	
	 Hospital-Zone-A.rvt		V2	7.8 MB	Aug 28, 2021 12:56 PM	Deepak Maini					

**Downloading issues in Revit
(Needs Issues add-on)**

Download and install the Issues Add-on

Available for Revit 2022, 2021, 2020

- Available for existing subscription customers
- Available in the Desktop App
- Or from the Autodesk Account





Demo

(Downloading and actioning issues in Revit)



MODELS

Open ...

New ...

FAMILIES

Open ...

New ...

Recent Files

Autodesk Docs

What's new

Online help

Community forum

Customer support

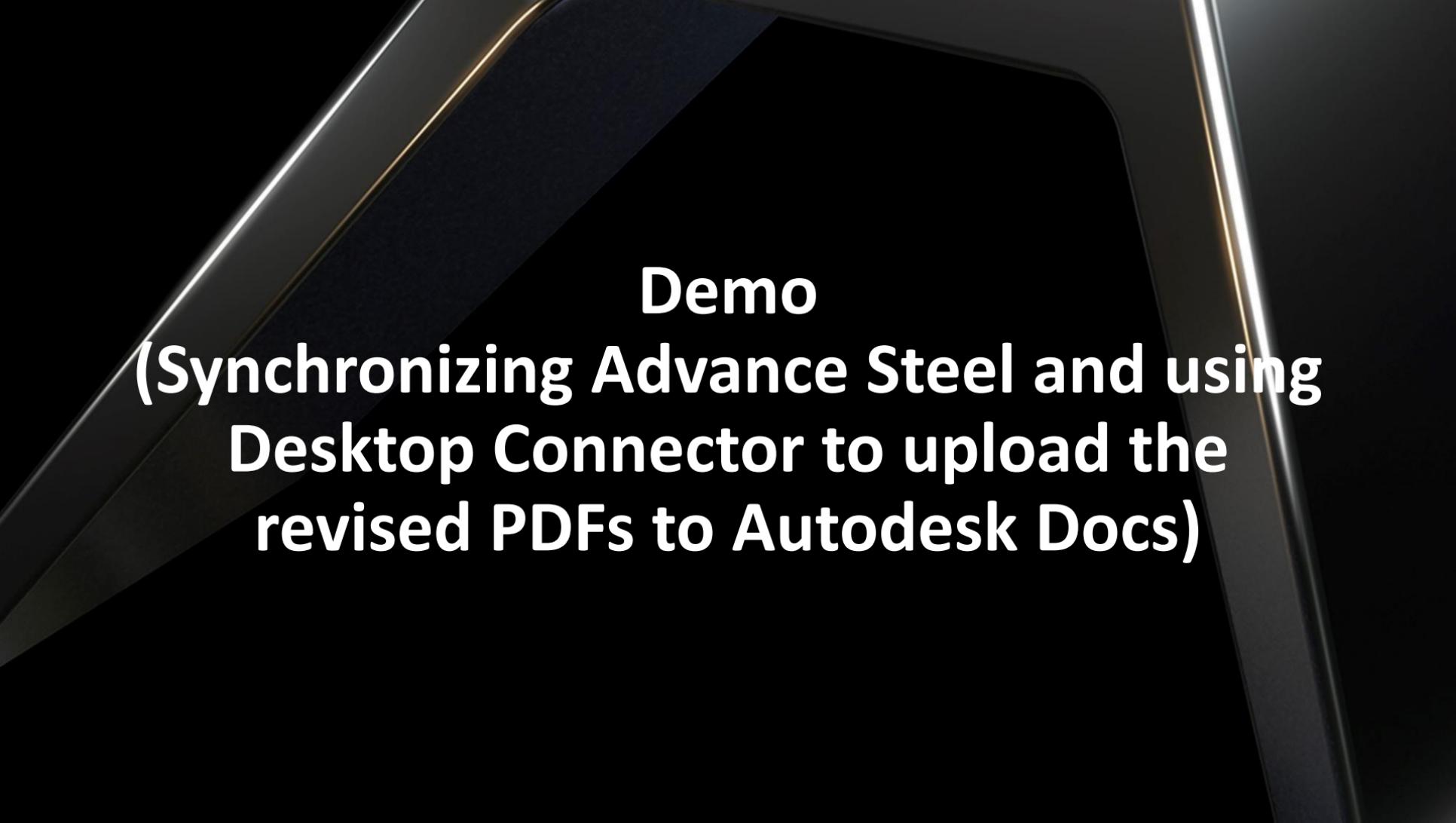
Switch Account > Project

Cadgroup AU > AU2021

AU2021 / Project Files / 01-Revit

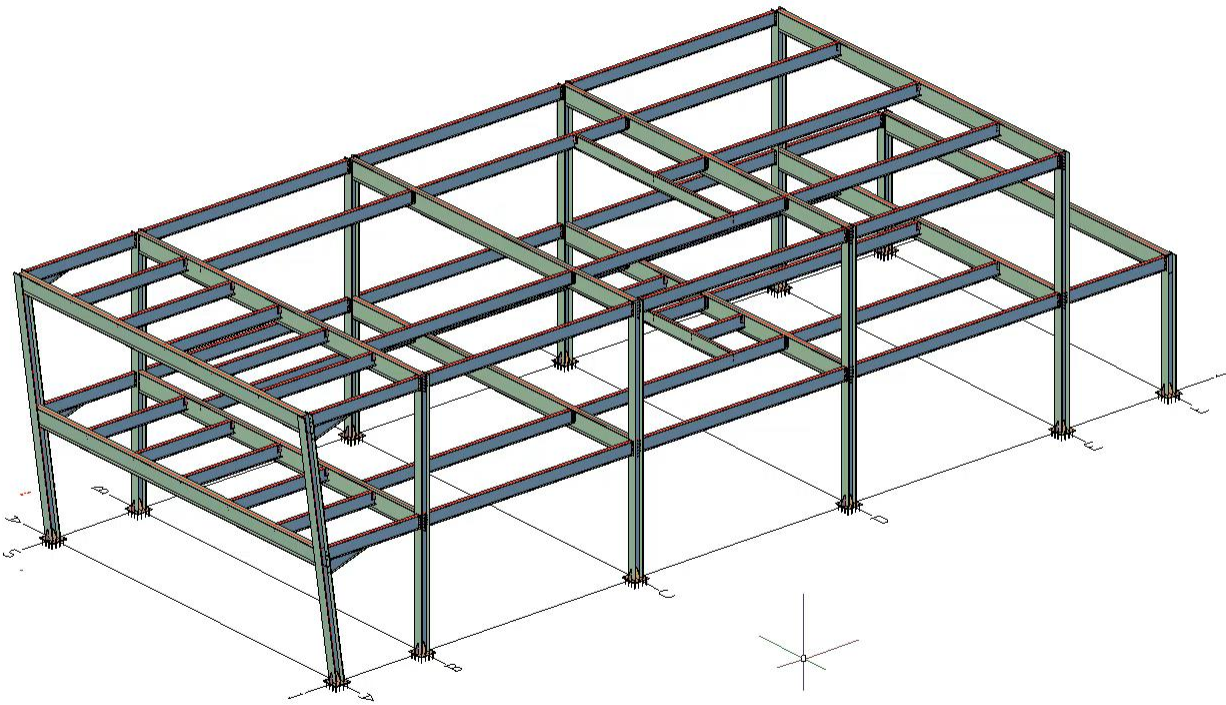
View Online

<input type="checkbox"/>	Name ^	Model Type	Modified Date	Modified By	Publish Status	Published Date	Published By	
<input type="checkbox"/>	Hospital-Zone-A	Cloud Model	28 August 2021 12:53	DeepakMaini	Latest Published	28 August 2021 12:53	Deepak Maini	...



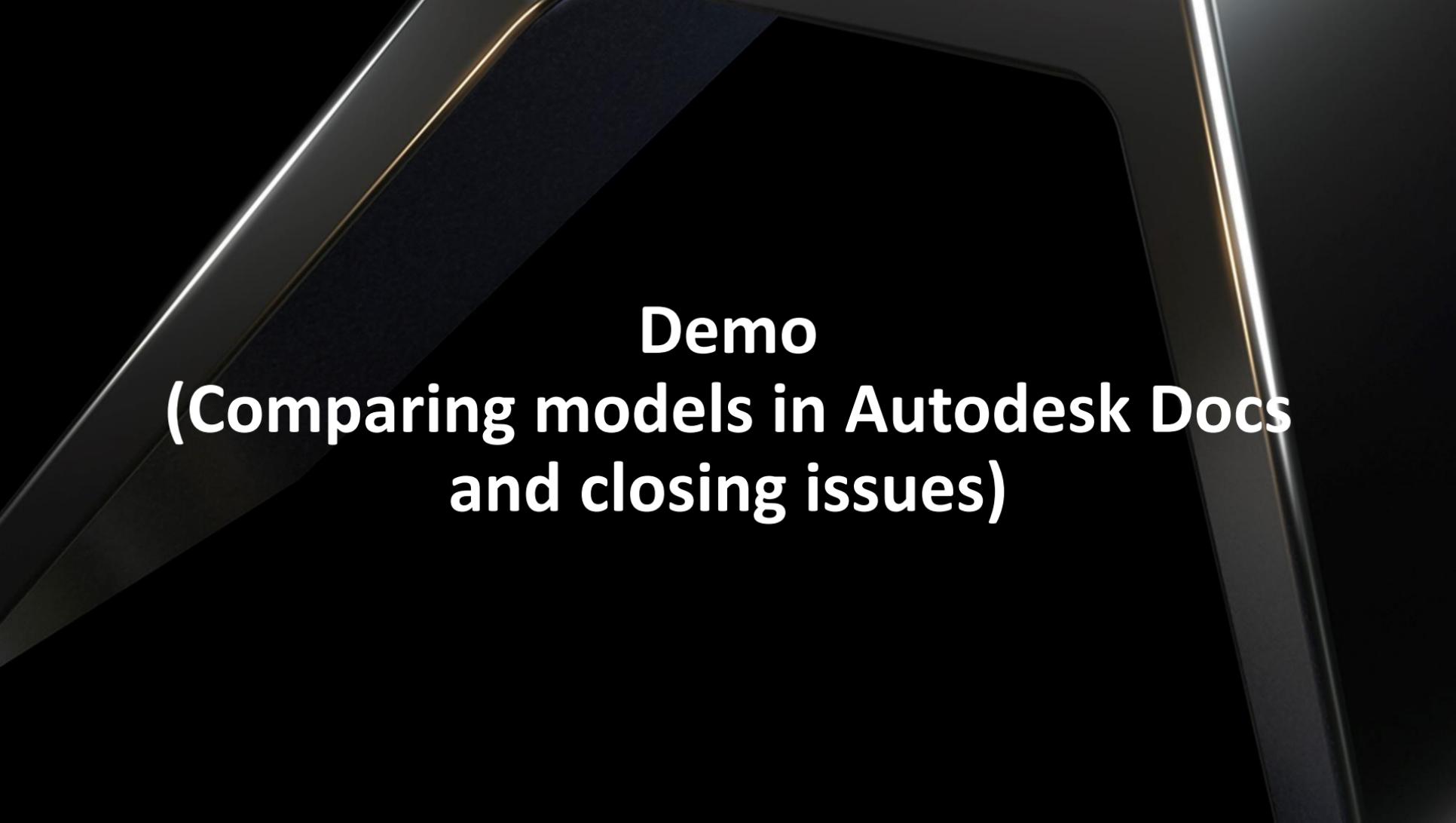
Demo
(Synchronizing Advance Steel and using
Desktop Connector to upload the
revised PDFs to Autodesk Docs)

Advance Tool Palette
Connection vault

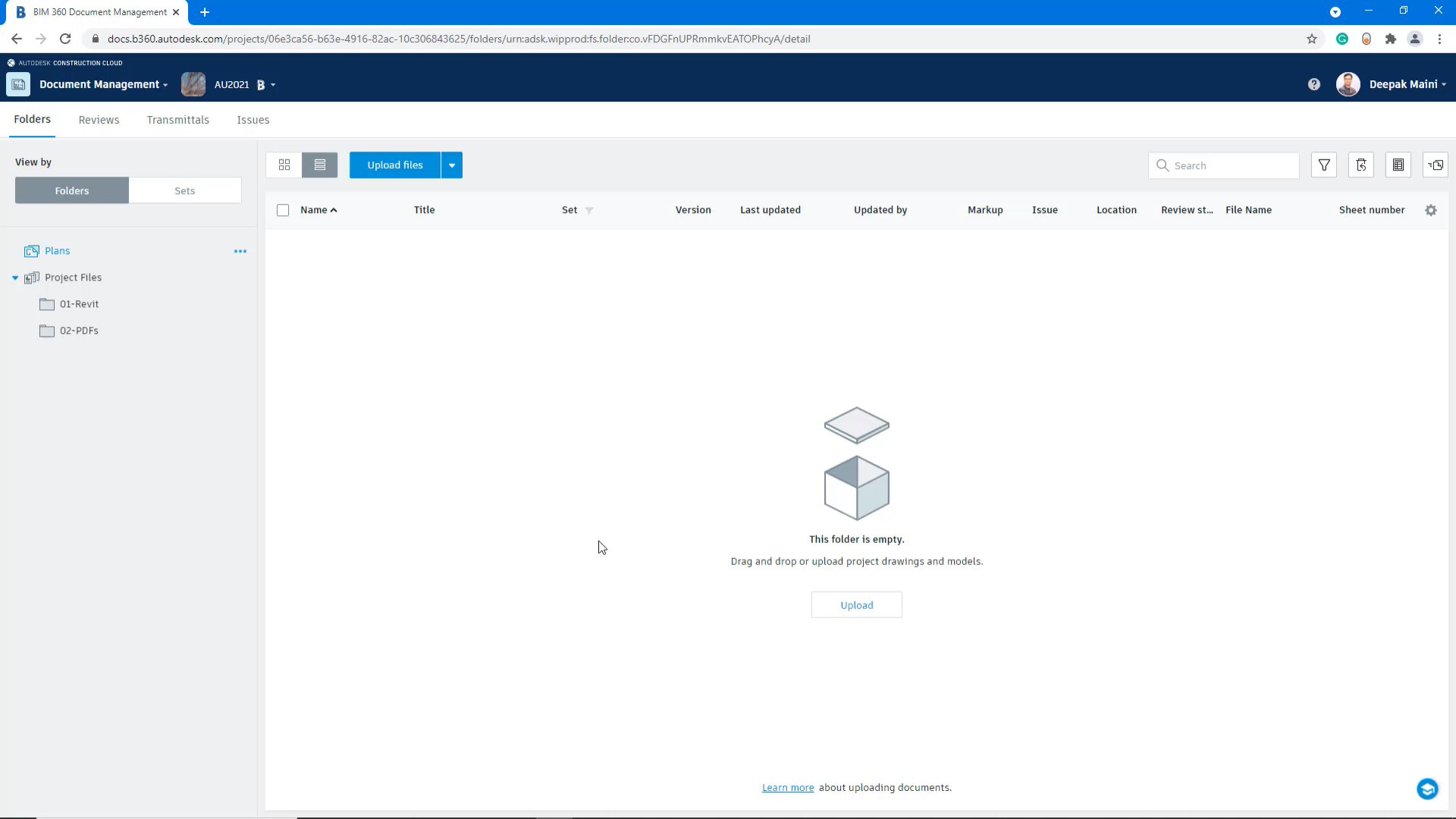


Updating "3D view"
The documents have been updated successfully
Type a command

Model Layout1 Layout2



Demo
(Comparing models in Autodesk Docs
and closing issues)





**Taking the next step is possible
now with Autodesk Docs...**

And secure...

**And comes with several design review
features...**

Three takeaways

- AEC Collection gives you access to Autodesk Docs (BYOS)
- Autodesk Docs is the CDE that can be used to share data with field and external teams
- Comes with a closed loop end-to-end issue management system supported by the user notification functionality

The background of the slide features four abstract, dark gray, three-dimensional geometric shapes in the corners. These shapes resemble stylized, faceted crystals or architectural elements, each with sharp edges and reflective surfaces that catch the light, creating bright highlights and deep shadows. They are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

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