

# **BIM360 for Design Collaboration, Review and Issues Management**

**Kalyana Sundara Annamalai L**

BIM-Digital Technology Lead



# About Me

- Overall 10+ years of experience in AEC
- Implemented Digital strategies
- Aware of the benefits of BIM and enjoys sharing those benefits with others.



BIM-Digital  
Technology Lead

**WME**

# **Learning Objectives**

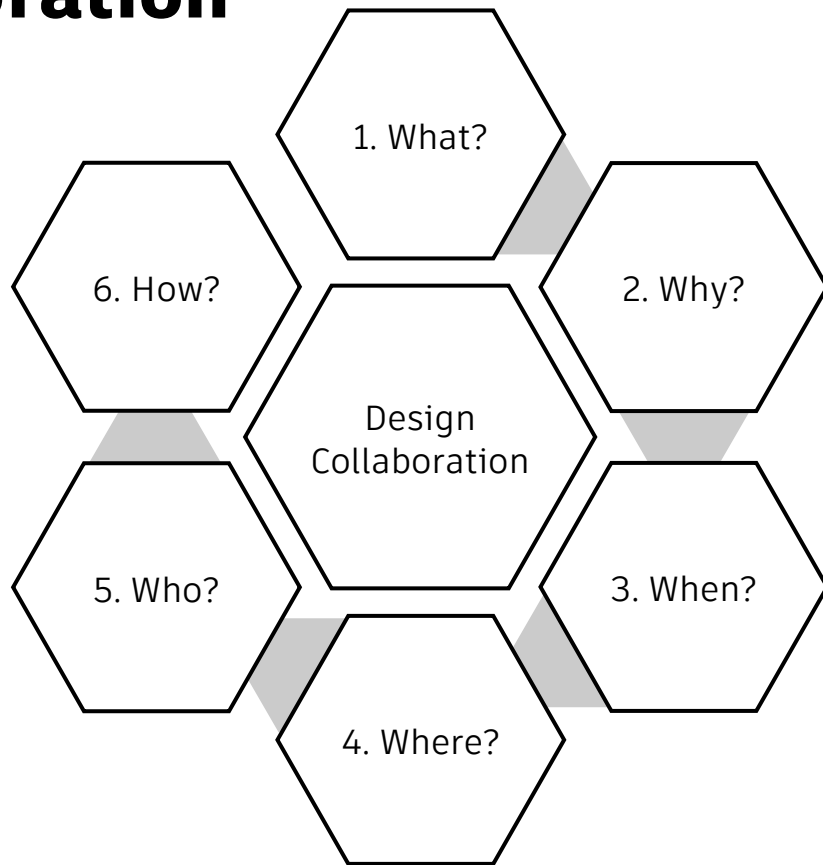
# Learning Objectives

- Object 1
  - Learn about Design Collaboration and its Workflows
- Object 2
  - Learn about Design Review and its Workflows
- Objective 3
  - Learn about Issues Management and its workflows
- Objective 4
  - Learn about Desktop Connector and Coordination Add-in for Navisworks & Working CAD files in BIM 360



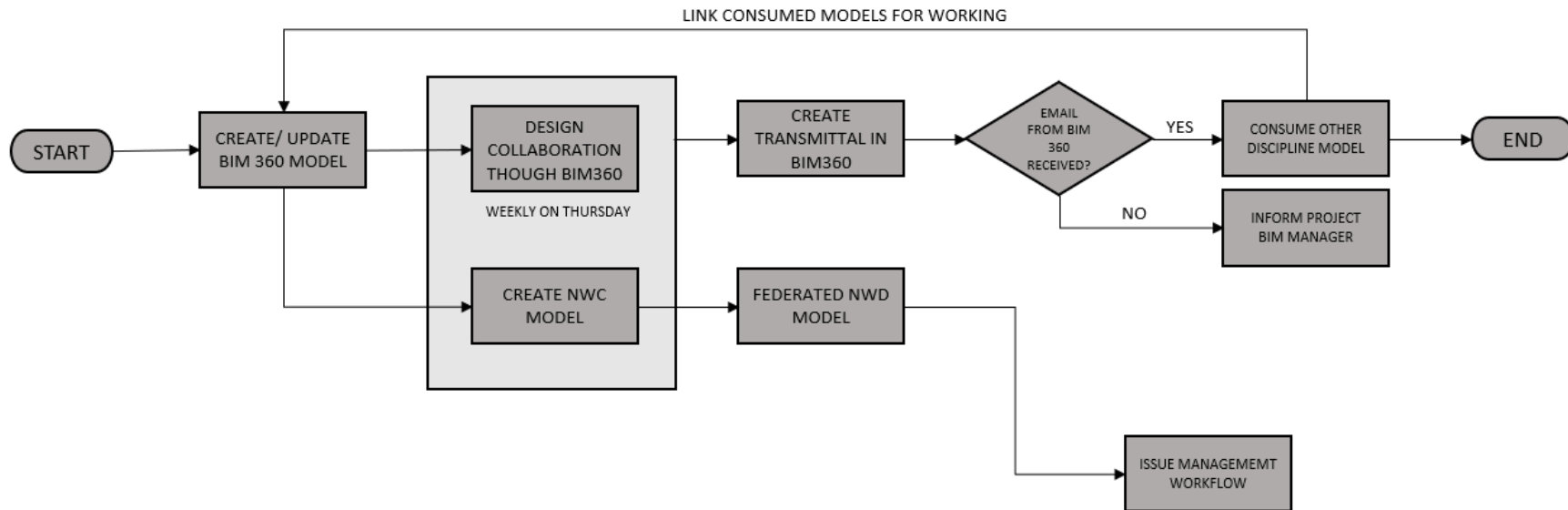
# **Design Collaboration**

# Design Collaboration

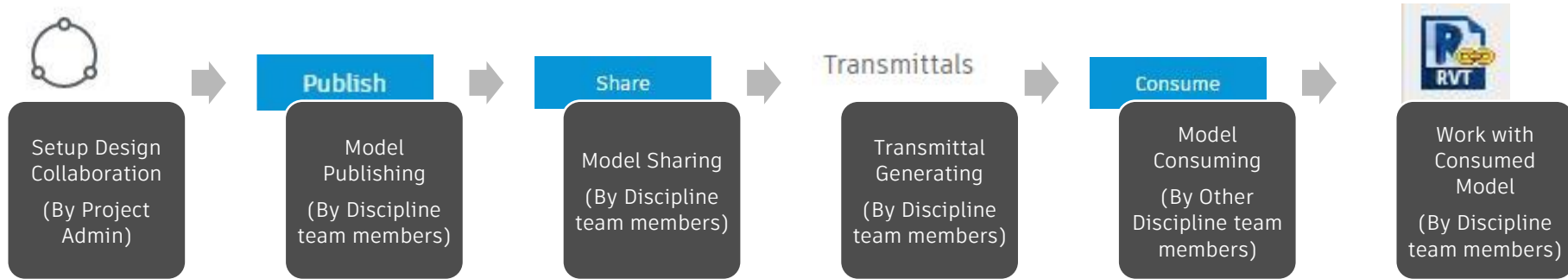


# Design Collaboration Workflow

DESIGN COLLABORATION WORKFLOW

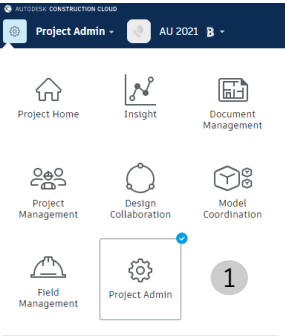


# Design Collaboration Steps



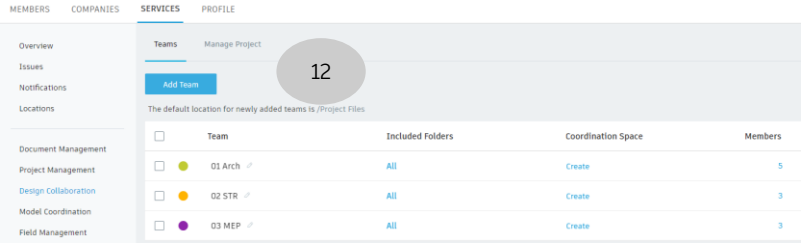
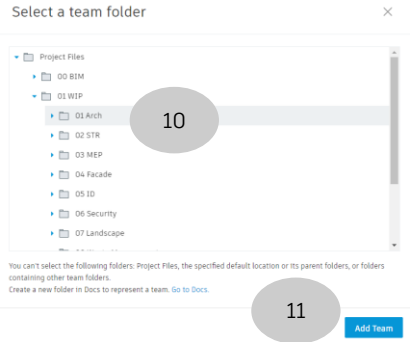
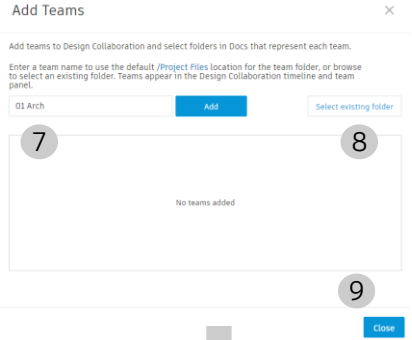
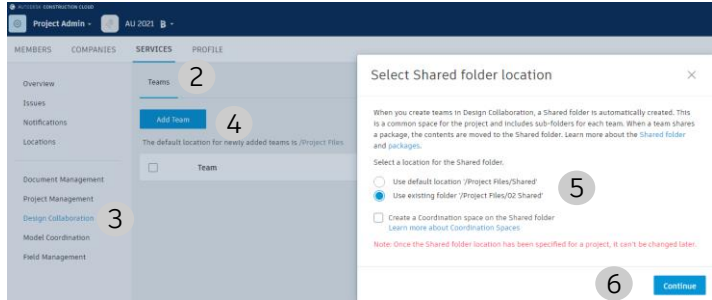


# Design Collaboration Setup

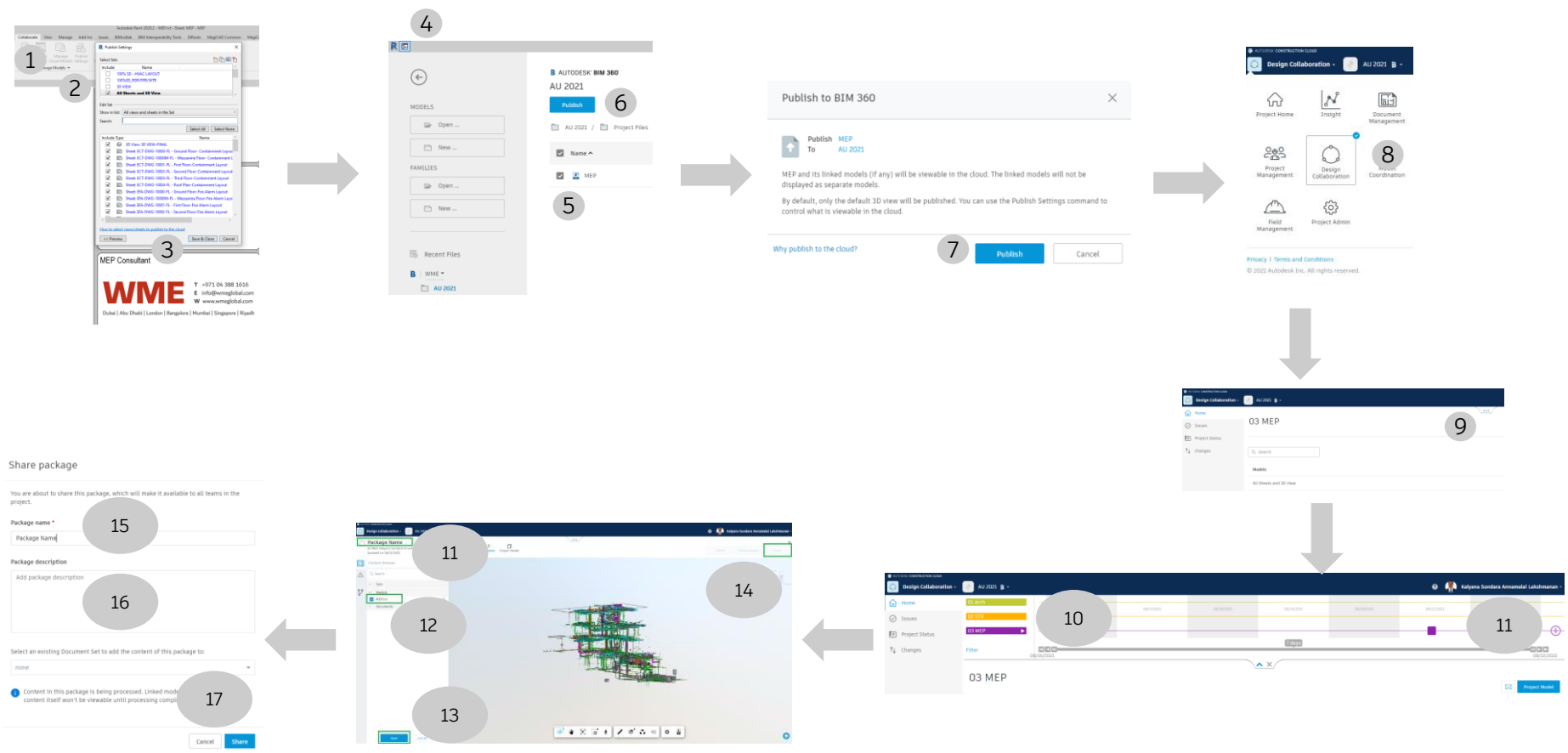


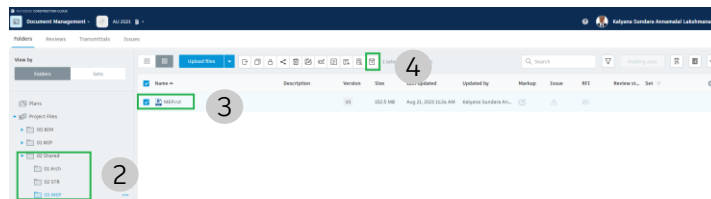
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# Design Collaboration Sharing






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Title \*

MEP

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 Kalyana Sundara A... X

5

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Total: 1 document


Project Files/02 Shared/03 ...

1 document

^



MEP.rvt  
V1



Message

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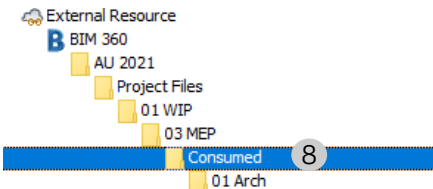
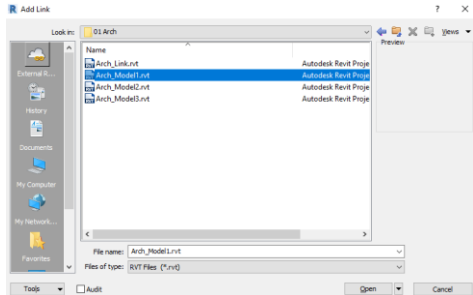
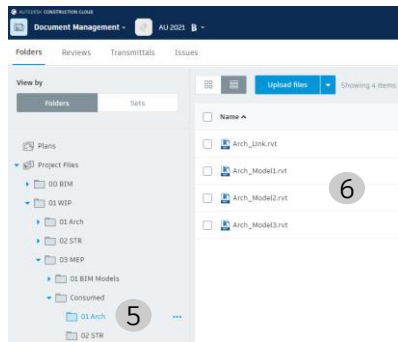
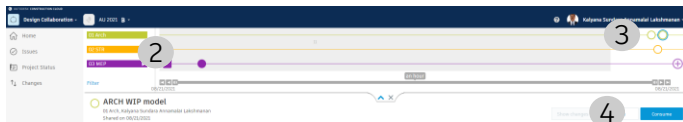
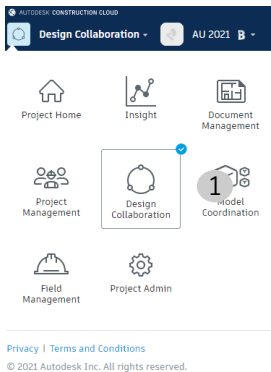
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# Design Collaboration Consuming



# Key Benefits

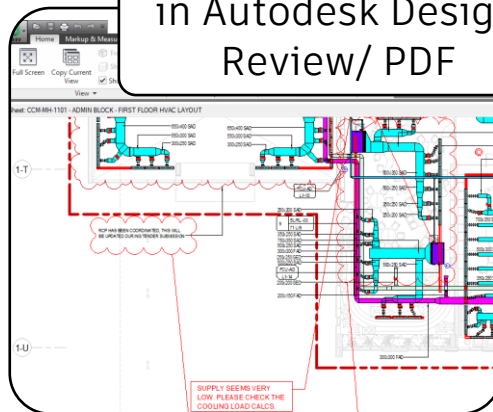
- Collaborative working with Multiple Stakeholders
- Control of the data
- Version Control
- Changes Comparison
- Minimize losses
- Total time savings in every week is about 27 Hours (Approx.)

# **Design Review**

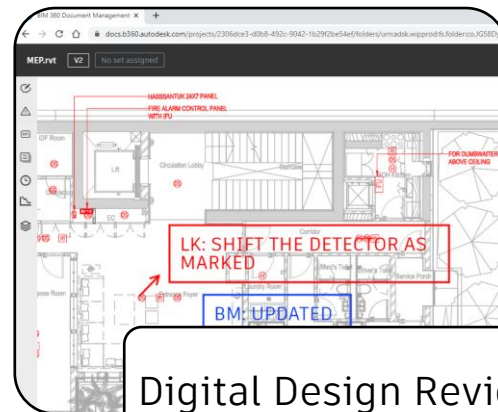
# Design Review Evolution



Design Review in  
Paper



Digital Design Review  
in Autodesk Design  
Review/ PDF



Digital Design Review  
in BIM360

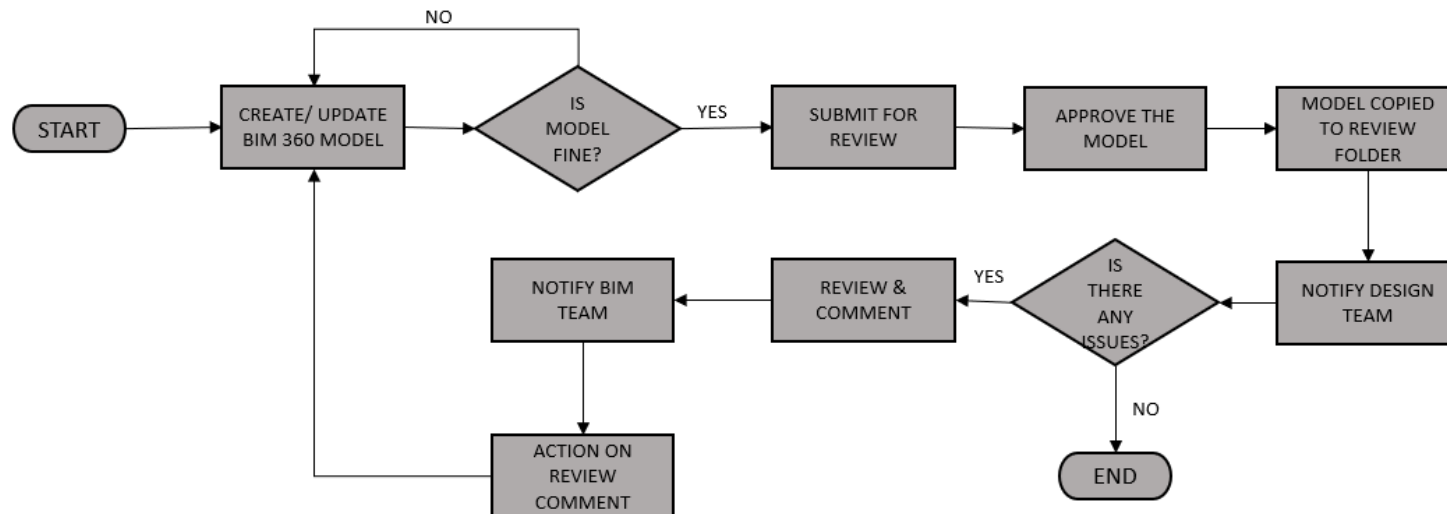
# Initial Process & Challenges

- Initial Process
  - LIVE model chosen for Design Review
  - Comments provided in LIVE
- Challenges
  - Publishing the model took long time and Review is not possible while publishing
  - Multiple reviews of the same Document became difficult
  - Overlap of previous comments
  - Achieving Previous comments
  - Only Reviewer/ Project Admin can Achieve the comments
  - Maintaining QA/QC record
- Solution
  - Reviews shall be done in separate folder

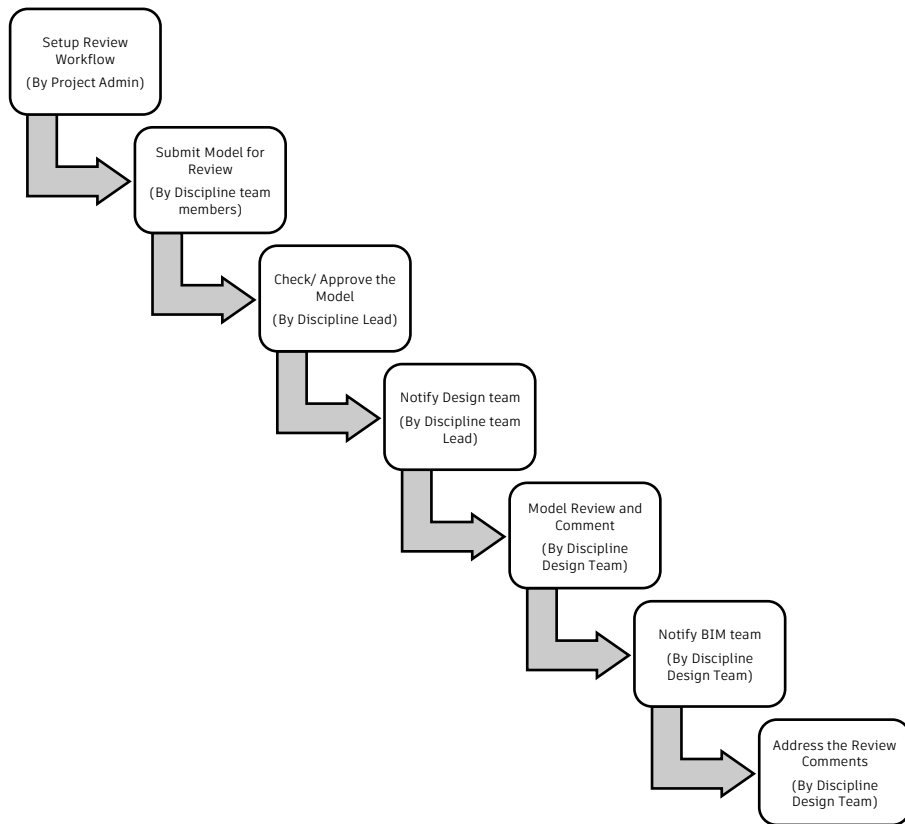


# Design Review Workflow

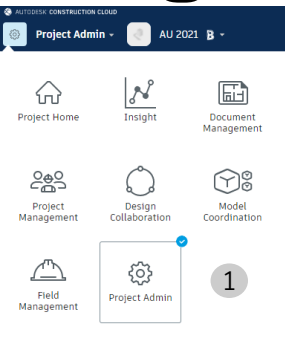
DESIGN REVIEW WORKFLOW



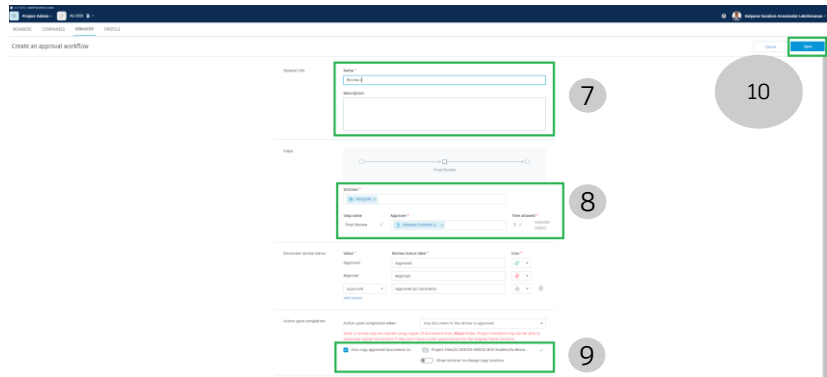
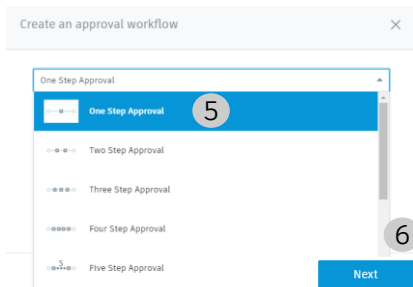
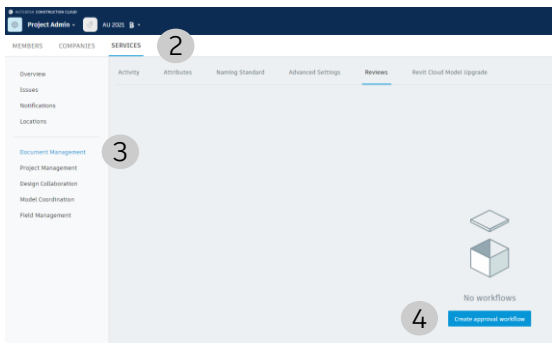
# Design Review Steps



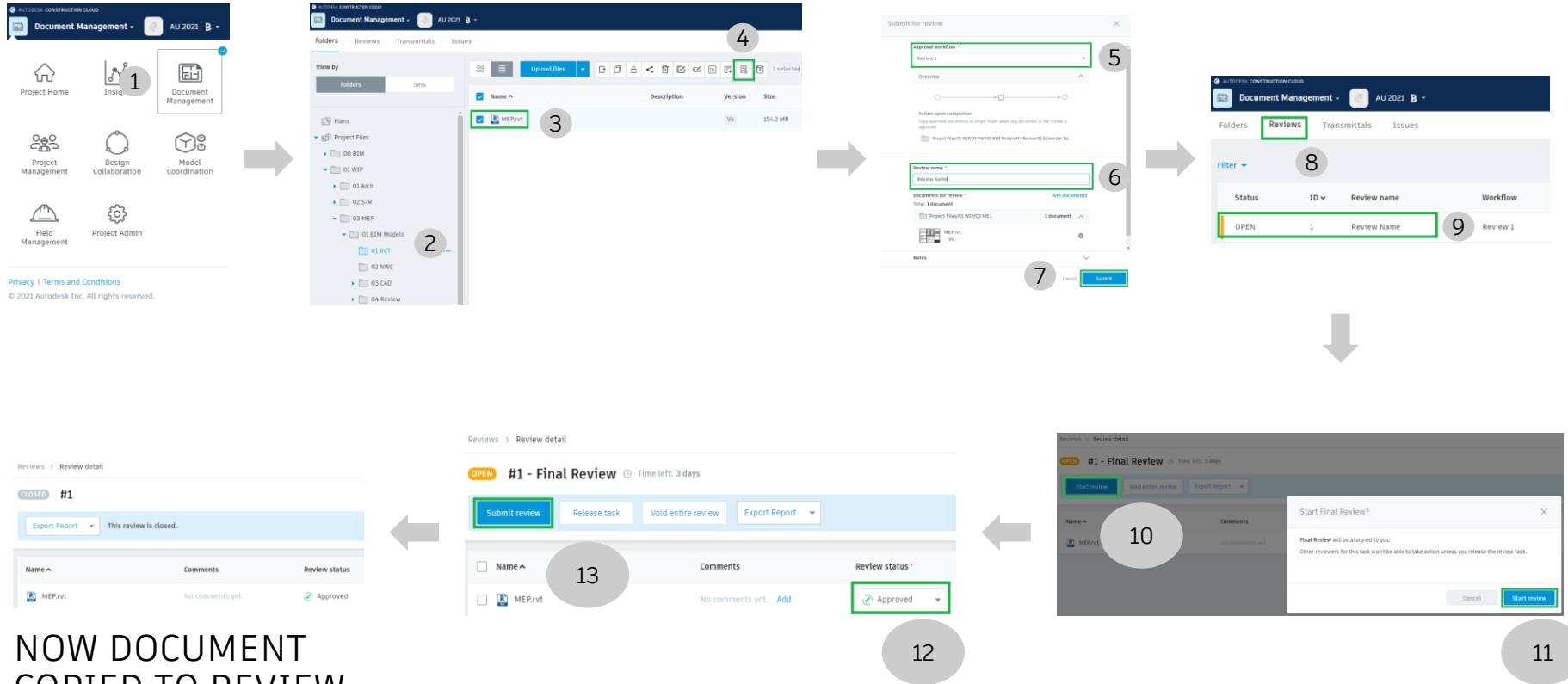
# Design Review Workflow Setup



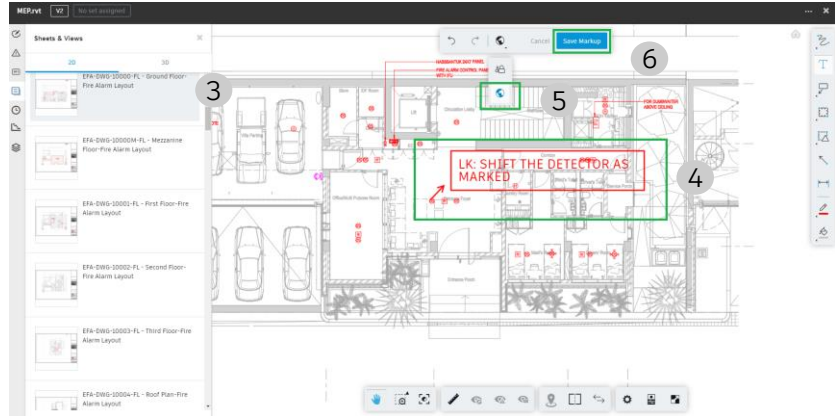
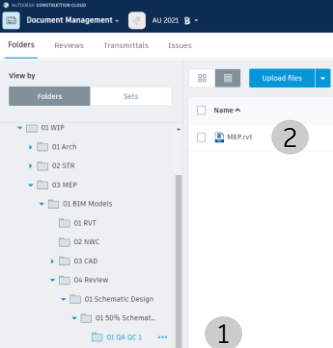
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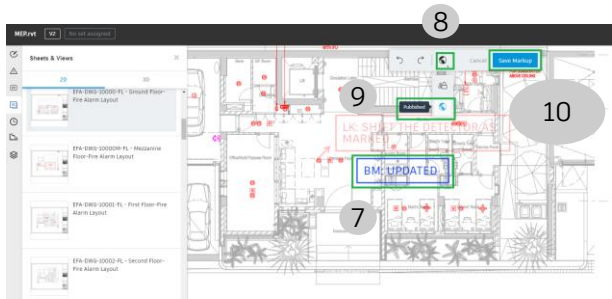
# Design Review Process



# Design Review Process



NOTIFY BIM TEAM

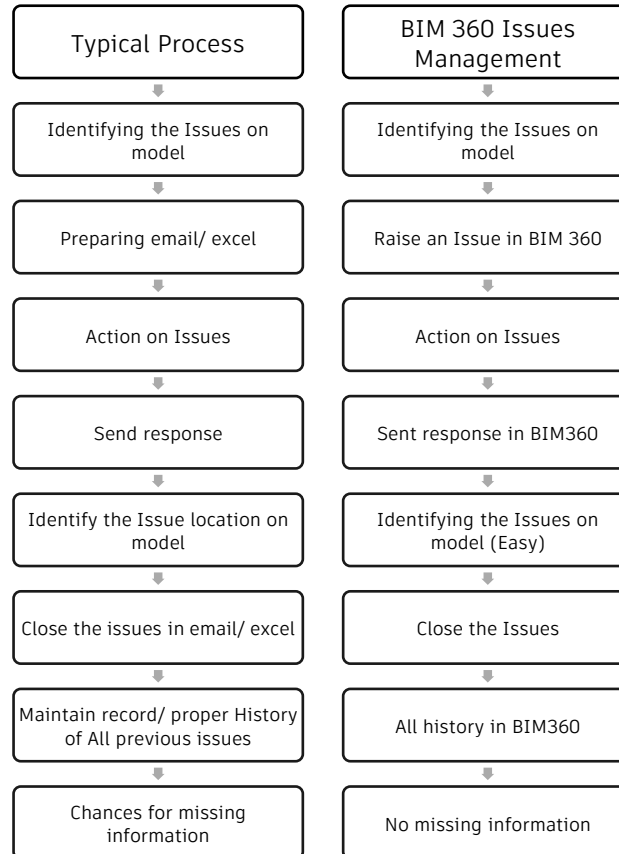


# Key Benefits

- Collaborative Design Review
- No need of Additional Software
- Proper QA/QC control
- Full record of project reviews under one location
- No need to achieve previous Mark-ups
- Minimize losses
- Total time savings for one project is about 100 Hours (Approx.)

# **Issues Management**

# Typical Process VS Issues Management

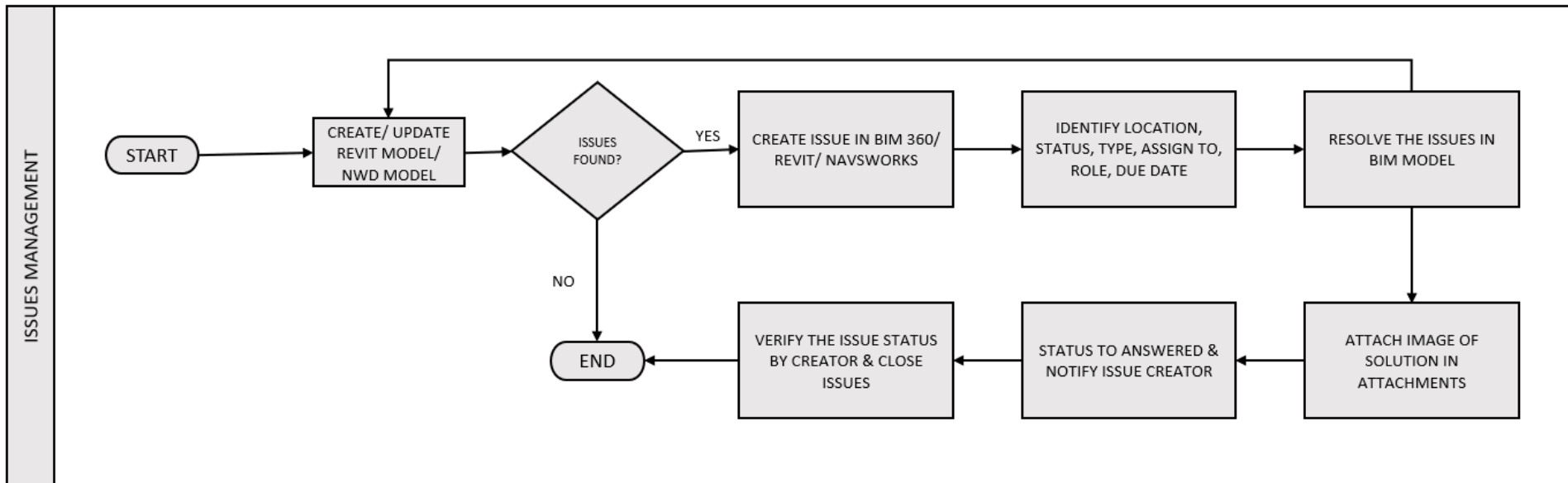




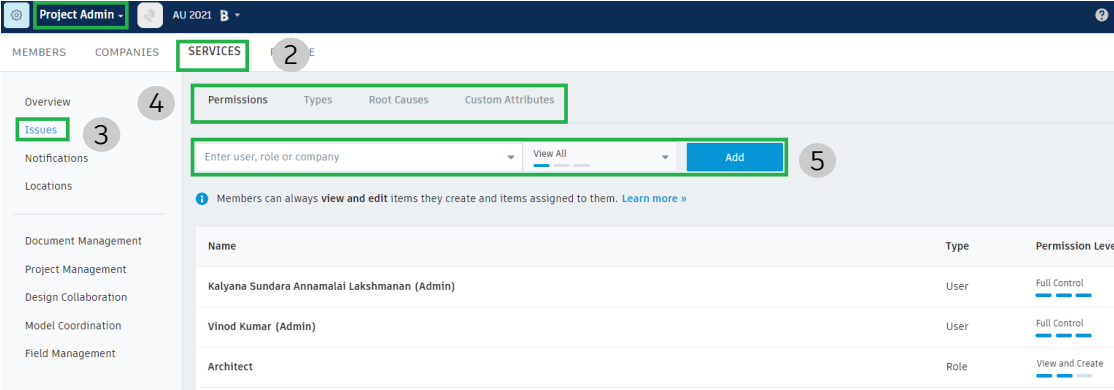
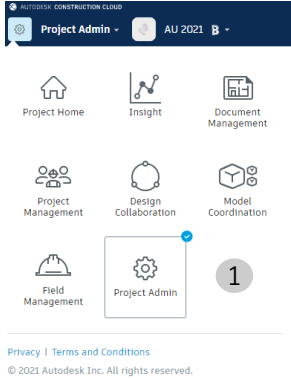
# Issues Management Types

- Two Types/ Approaches
  - BIM 360 Web Issues Creation & Update
  - Software based Issues Creation & Update
    - Navisworks
    - Revit (Issues Update only)

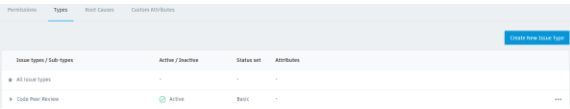
# Issues Management Workflow



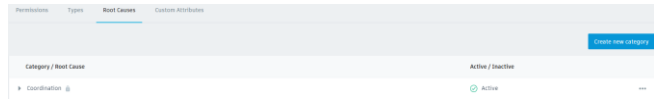
# Issues Management Setup



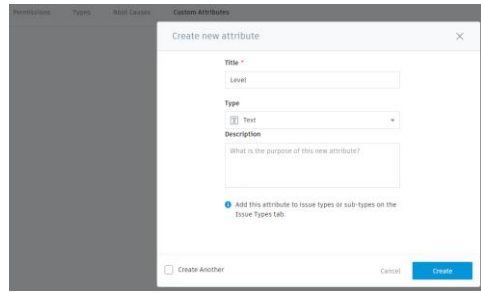
## 6 CREATE NEW ISSUE TYPES



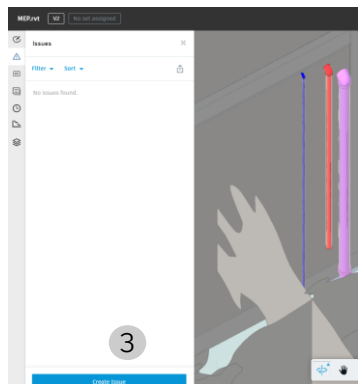
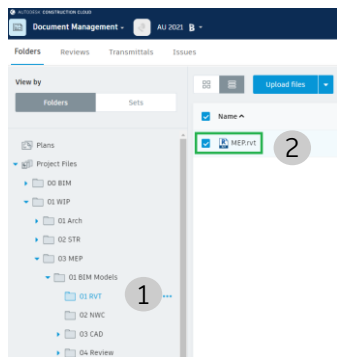
## 7 CREATE NEW ROOT CAUSES



## 8 CREATE CUSTOM ATTRIBUTES



# Issues Management BIM 360



MEP.rvt

V2

No set assigned

Issues

X

< New Issue

Type \*

Design4

Status \*

Open5

Title \*

Pipes exposed6

Assign To

Kalyana Sundara Annamalai Lakshmanan7

Due Date

Aug 228

Location

Enter Location

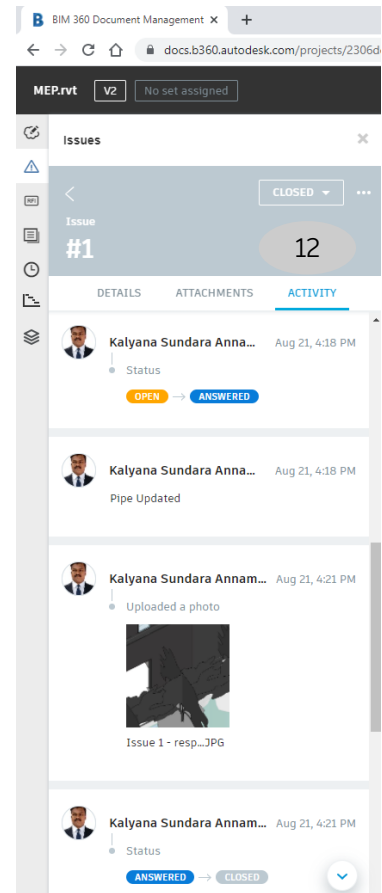
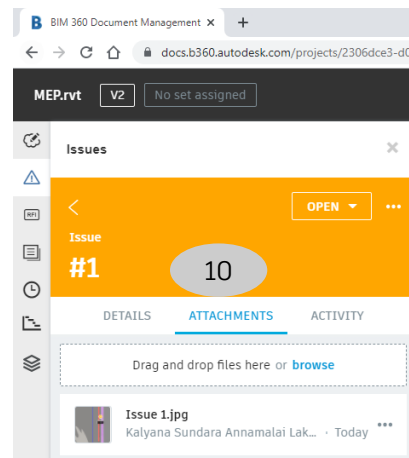
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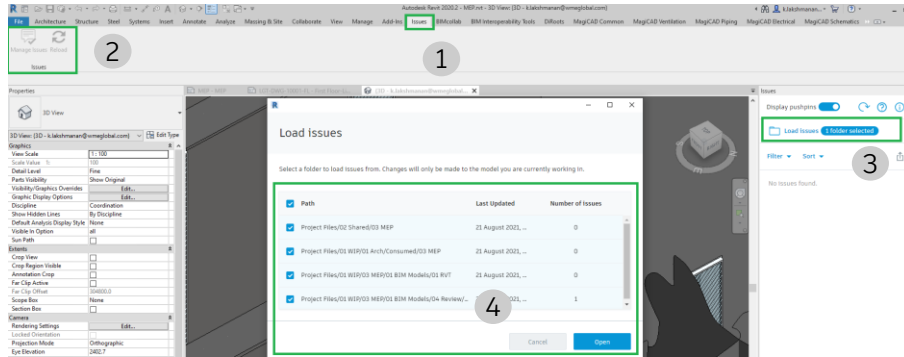
Owner

Kalyana Sundara Annamalai Lakshmanan9

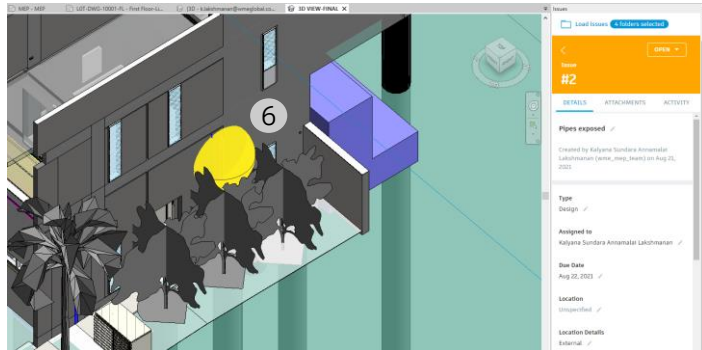
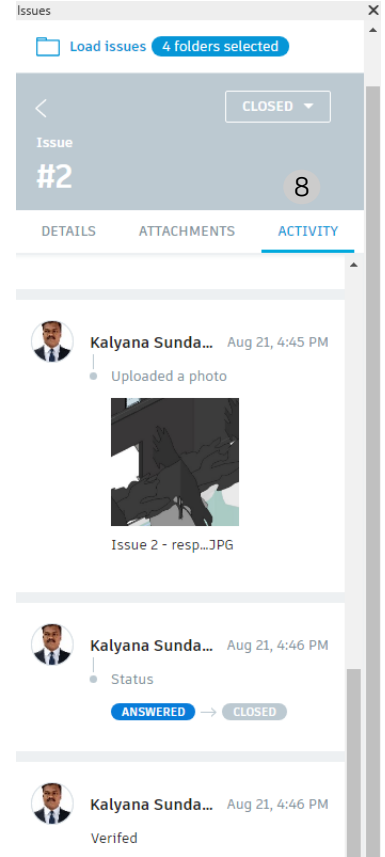
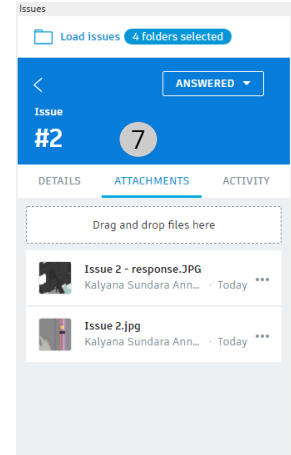
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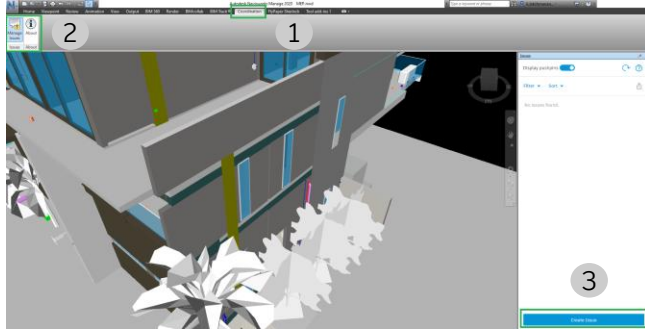
# Issues Management Revit (Issues Add-in)



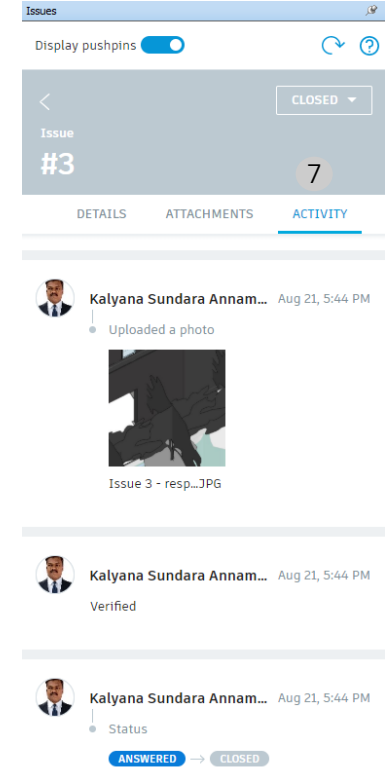
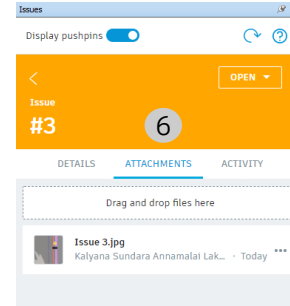
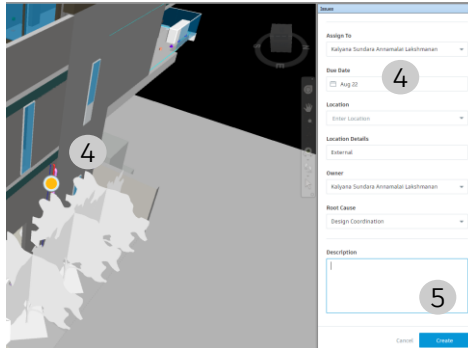
Note: Issues needs to be created in BIM360 on Revit model



# Issues Management Navisworks (Coordination Add-in)



Note: Issues shall be created in BIM360 and or NWD file



# Key Benefits

- Identify problem/ revalidate solution/ raise Issue is easy
- Great Interoperability between BIM360 and Revit/ Navisworks
- Full history of action for each issues
- Full record of project Issues under one location (From CD to Handover)
- No missing information / Minimize losses
- Easy to maintain and generate report
- Total time savings for one project is about 200 Hours (Approx.)

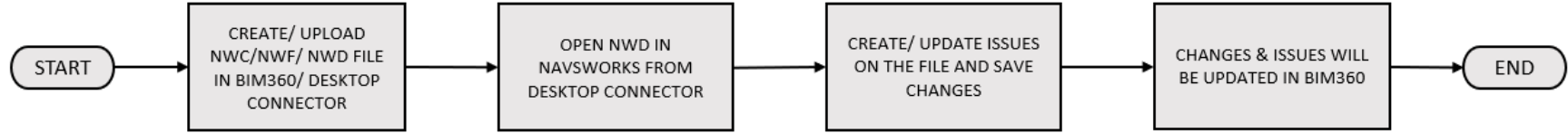


# **Desktop Connector Navisworks and AutoCAD**



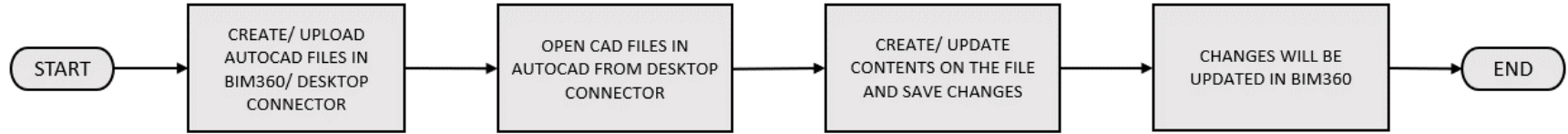
# Desktop Connector For Navisworks

NAVISWORKS IN DESKTOP CONNECTOR



# Desktop Connector For AutoCAD

AUTOCAD IN DESKTOP CONNECTOR

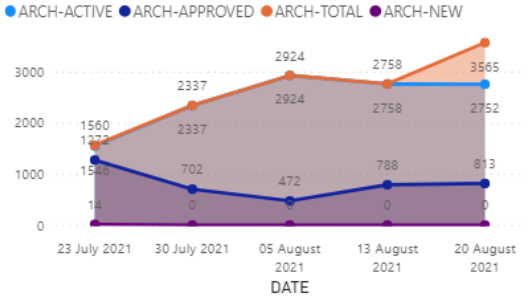


# Key Benefits

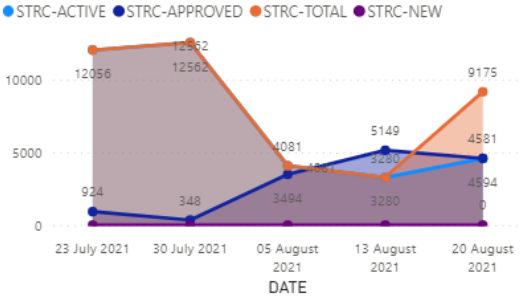
- It will act as Windows Explorer
- BIM360 files (CAD, NWD,NWF & NWC) can be opened/ updated from Desktop Connector
- Automatic Version backup for each time saving the file
- No need of VPN access due to remote working
- Faster than VPN access
- Total time savings for one project is about 150 Hours (Approx.)

# Bonus item

Architectural Clashes by Date



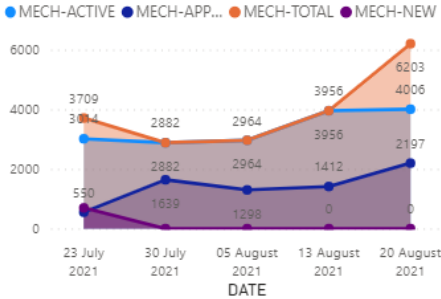
Structural Clashes by Date



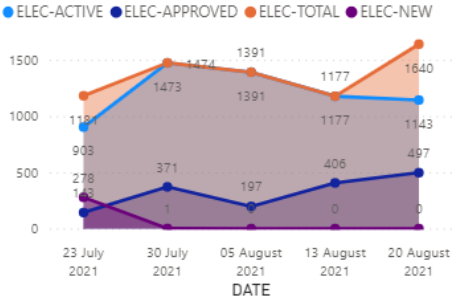
DATE

- 23 July 2021
- 30 July 2021
- 05 August 2021
- 13 August 2021
- 20 August 2021

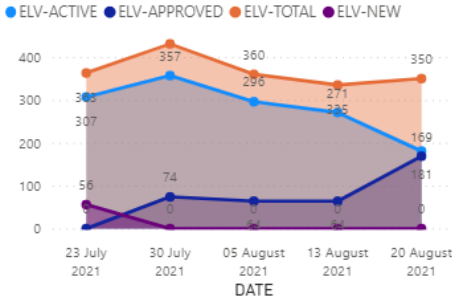
Mechanical Clashes by Date



Electrical Clashes by Date



ELV Clashes by Date



The background is black with four abstract, metallic-looking geometric shapes in the corners. These shapes are composed of flat, reflective surfaces that catch the light, creating bright highlights and dark shadows. They appear to be fragments of larger, complex structures, possibly architectural or mechanical in nature. The shapes are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

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