

Autodesk University
inspireeritud lühikoolitused 2021

Pilvepõhine projekteerimise ühiskoostöö Revit platvormil

28.01.2021 (14:00-15:30)

INSTRUKTOR

Hendrik Park

LÜHIKOOIITUS

Autodesk University inspireeritud lühikoolitused 2021

Usesofti koolituskeskuse ehitus-, tootmis- ning infravaldkonna lahenduste tasuta veebikursused

Vaata kava

usesoft.ee/autodesk-university-inspireeritud-luhikoolitused-2021/



26. – 29.01.2021



Veebikursused



+372 6 305 105



kontakt@usesoft.ee



Tasuta



➤ **Konsultatsioon ja tarkvarad:**

➤ **CAD/BIM ja äritarkvara:**

✓ Koolitused, konsultatsioon ja müük;

✓ ehituse- ning tootmise andmete juhtimine ja visualiseerimine;

➤ **IT-tugiteenused**

➤ **Tarkvaraarendus**

➤ **20 spetsialisti ning konsultanti;**

➤ **Asutatud 1991a.**



Specialization
Architecture, Engineering &
Visualization

Value Added Services
Authorized Training Center
Authorized Certification
Center

Töölane kogemus:



**Digitaalehituse
konsultant**
2018 -

Erialane organisatoorne tegevus:



EVS/TK 50
Ehitusinformatsiooni
modelleerimine (BIM)



**Digitaalehituse
Klaster**

Haridus:



**Infosüsteemide analüüs
ja kavandamine (MSc)**
2019 - ...



**IT-arenduse
tootejuht**
2018 - 2020



**Projekteerimise
projektijuht**
2017 - 2018



**Objektijuht /
Projektijuht**
2013 - 2017



Maaehitus (MSc)
(Diplomeeritud ehitusinseneri
esmane kutse üldehituses, tase 7)
... - 2018

AU2020 INSPIRATION

usesoft.ee/autodesk-university-2020



Linkedin artiklina:

[Kokkuvõte üritusest \(EST\)](#)

- [AS463284 - Seamless Revit Collaboration \(and More!\) with BIM 360 Design \(Instructural Demo\)](#)
- [AS469283 - Going Digital on Large Projects: BIM360 Design Coordination \(Instructural Talk\)](#)
- [BES473681 - Break Down the Barriers Between Design and Construction with BIM 360 \(Instructural Demo\)](#)

LÜHIKOOITUSE EESMÄRK

Anda sissejuhatav ülevaade Revit platvormil projekteerimisel ühiskoostöö tegemisest, kasutades:

Autodesk Construction Cloud (BIM 360 Design).

1. Revit Cloud Worksharing
2. Document Management
3. Design Collaboration

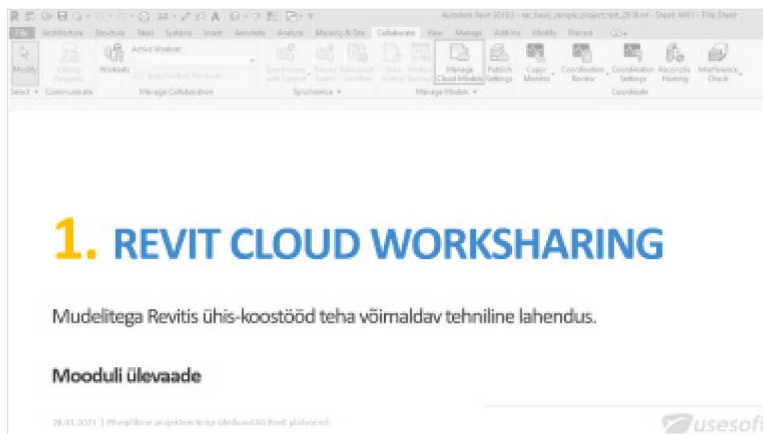


SISUKORD

BIM 360 DESIGN

Sissejuhatav ülevaade

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil



1. REVIT CLOUD WORKSHARING

Mudelitega Revitis ühis-koostööd teha võimaldav tehniline lahendus.

Mooduli ülevaade

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil

Lahenduse projektipank, ühtne infokeskkond (CDE).

Mooduli ülevaade



2. DOCUMENT MANAGEMENT

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil



3. DESIGN COLLABORATION

„Projekteerimise ühis-koostöö korralduslik moodul“

Mooduli ülevaade

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil

LISAVÕIMALUSED

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil



KOKKUVÕTE

28.01.2021 | Pilvepõhine projekteerimise ühiskoostöö Revit platvormil



BIM 360 DESIGN

Sissejuhatav ülevaade

TÄNASED ÄRILISED VAJADUSED

Töötamine
kustiganes

Võimekus ja
kiirus

Andmepõhised
otsused

KOOSTÖÖKORRALDUSE VAJADUSED

Vahetu koostöö

Distsipliinide
ülesus

Võimekad
lahendused

EHK SIIS MUUHULGAS

- Üheaegse koostöö tegemise vajadus (osamudelites / koondmudelid) ja distsipliinide üleselt.
- Disantsilt töö võimekus (ettevõtte siseselt / väliselt).
- Koostöö parem koordineerimine :
 - Projekteerimise meeskonnas tervikuna
 - Distsipliinis / ettevõttes
 - Suhtluses tellijaga
 - Suhtluses ehitajaga

BIM 360 DESIGN KASUD



Vahetum koostöö

- Hallatav Revit Cloud Worksharing terves meeskonna
- Kiirem ja efektiivsem koostöö
- Projekteerimismeeskonnas kvaliteedi kontroll



Hallatud andmed

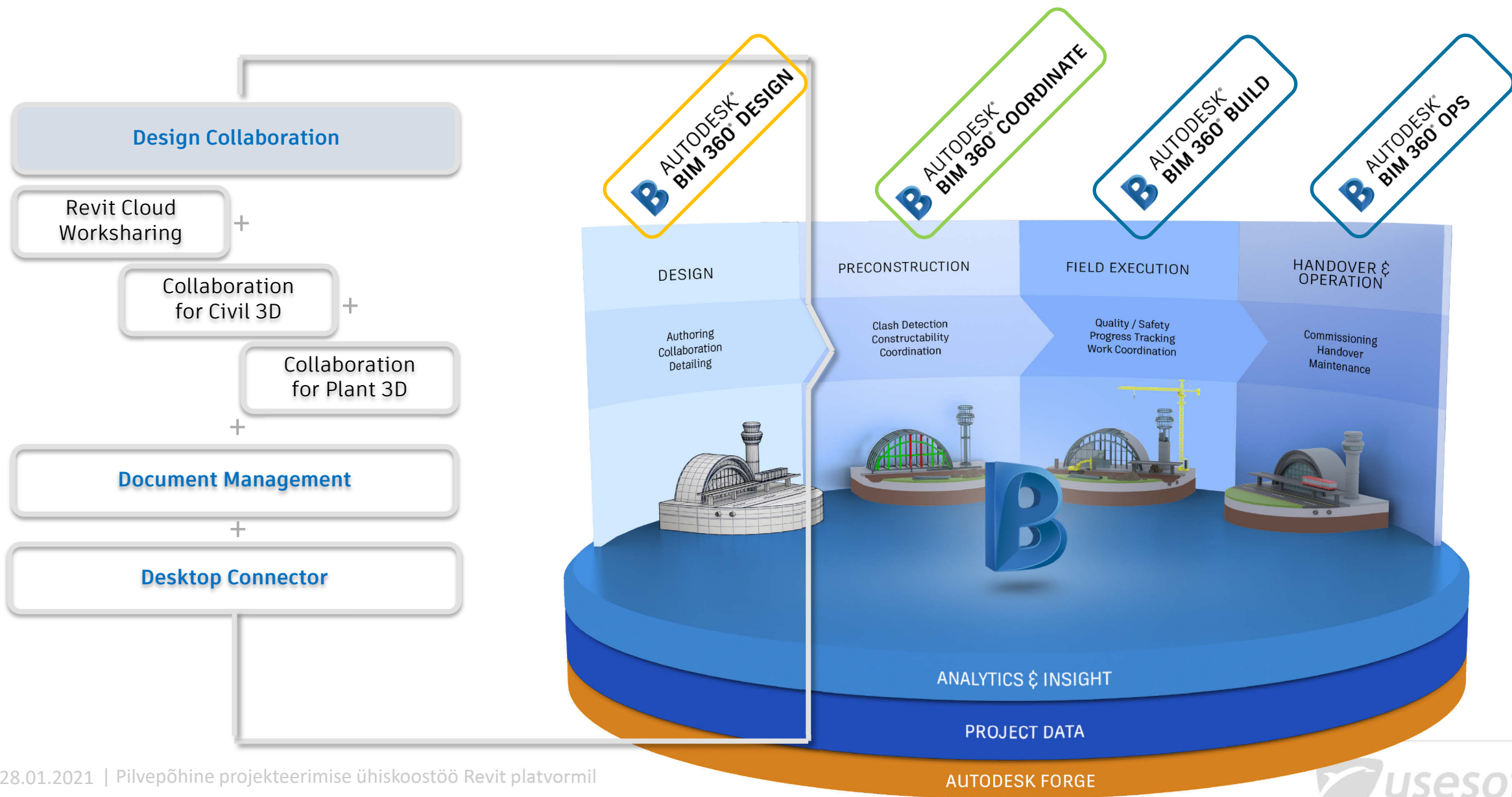
- Keskne pilvepõhine andmete majandamine - projektipank / CDE
- Vähenev vajadus ettevõtte siseselt hallatava riist- ja tarkvara järgi
- Piiramatu andmemaht
- Ligipääs kõikjalt



Parem koordineatsioon

- Tehtava töö tulemite süsteemne koostööks jagamine
- Projekti tegevuste logi ja ka andmete versioonihaldus
- Koostöömärkmed jne

BIM 360 PLATVORM



BIM 360 DESIGN - Põhikomponendid

1. Revit Cloud Worksharing & Collaboration for Civil 3D & Collaboration for AutoCAD Plant 3D



Revit Cloud Worksharing

- Kontrollitud Cloud Worksharing
- Koos töötamine
- Reaalajas koostöö ka hajutatud meeskondade vahel

Collaboration for Civil 3D

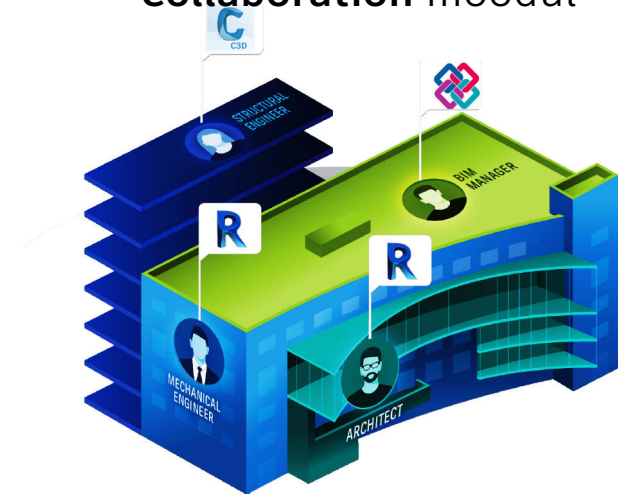
Collaboration for AutoCAD Plant 3D

2. BIM 360 Document Management (Docs) moodul



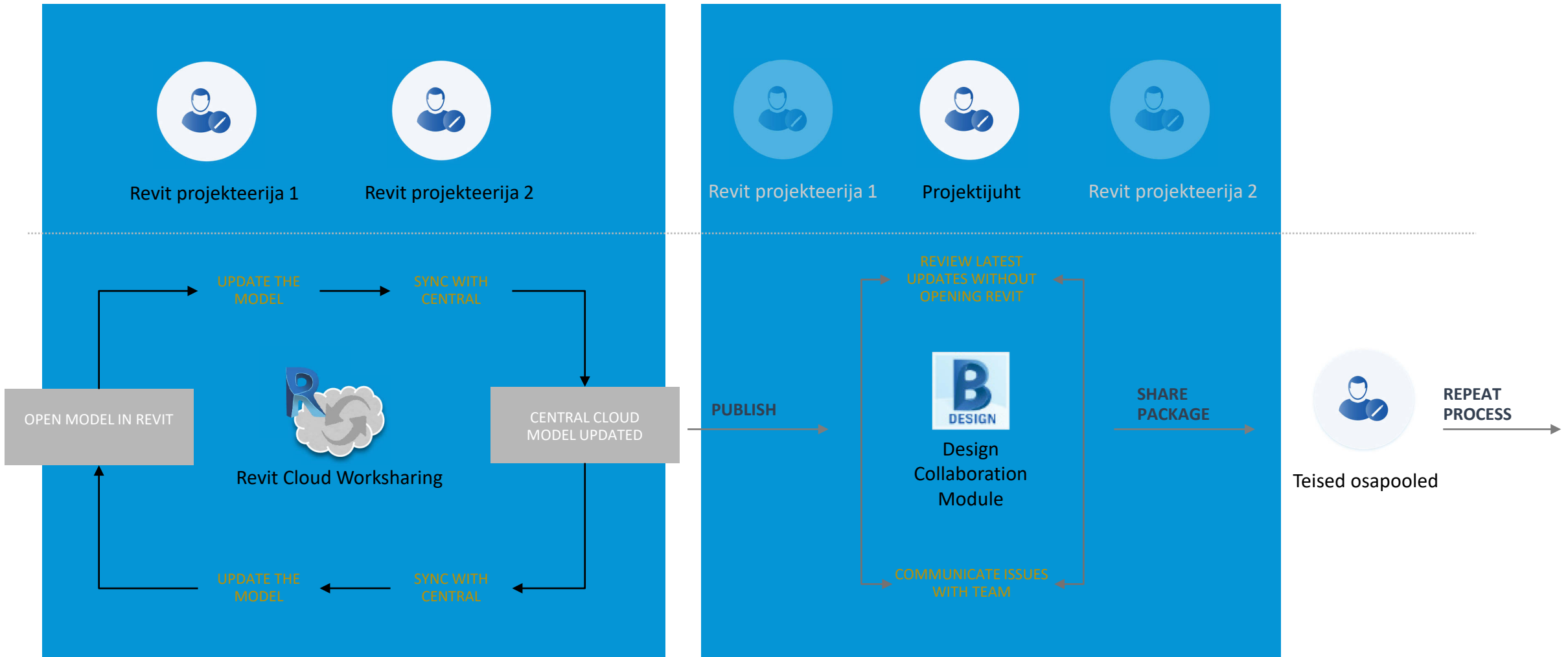
- Projekti ühtne infokeskkond ehk projektipank.
- Põhjalik õiguste haldus
- Markupid, veateated jne
- *Links ja reference* tugi.

3. BIM 360 Design Collaboration moodul



- Jälgi, koordineeri ja juhi infovahetust sh ühiskoostöök jagatavat (*Publishing, Packages*)
- Mitme distsipliini ühiskoostöö
- Visuaalne versioonihaldus / Muudatuste analüüs
- Parem nähtavus ja läbipaistvus
- Erinevate mudelite tugi (mh ka IFC, Civil 3D)

TERVE MEESKONNA TÖÖVOOG MOODULITES



Recent Files | [Learn](#) ▾

MODELS

Open ...

New ...

FAMILIES

Open ...

New ...

Recent Files

B | [MTS_AEC Site](#) ▾

001 BIM 360 Design-Re...

002 Revit 2020 demo2

003 Revit 2021-B3D-De...

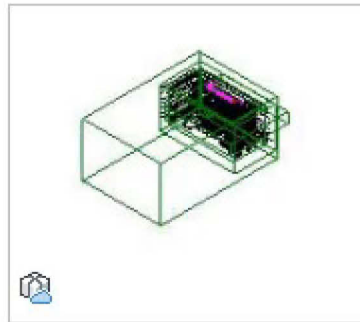
BC

Demo Accel 3-Revit 2020

Hospital Example 2020

Refresh

MODELS



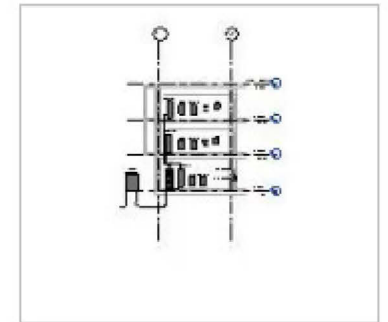
ADSK_Arch2



Sample Architecture Proj...

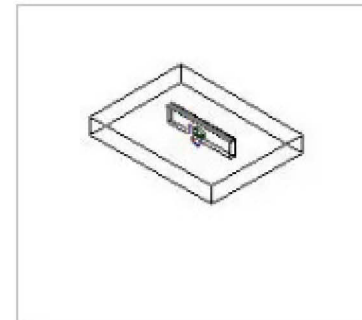
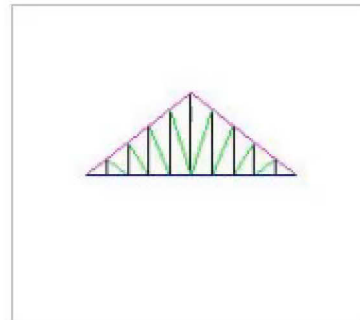
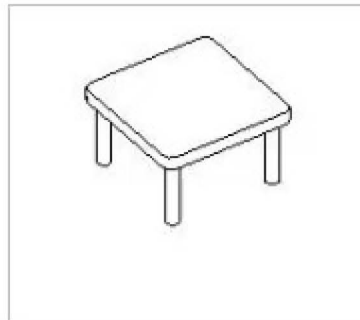


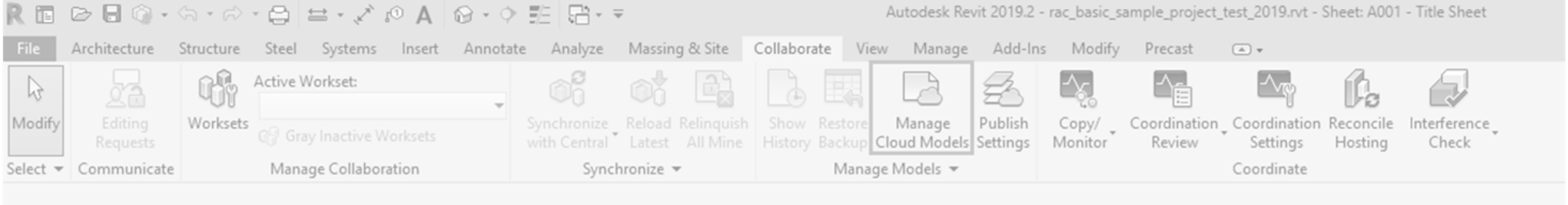
Sample Structure Project



Sample Systems Project

FAMILIES





1. REVIT CLOUD WORKSHARING

Mudelitega Revitis ühis-koostööd teha võimaldav tehniline lahendus.

Mooduli ülevaade

Evolutsioon projekteerimise koostöö korralduses

Meeskond
Üks füüsiline asukoht
Tulemüüritud

- Piiratud koostöö
- Igapäevane BIM haldus
- Tegevuste logi puudumine

Lokaliseeritud keskne mudel

Kasut. 1

Kasut. 2

Kasut. 3

Ettevõtte
Mitmed asukohad
Tulemüüritud

- Üks firma
- Kallis riistvara
- Aeglane andmevahetus

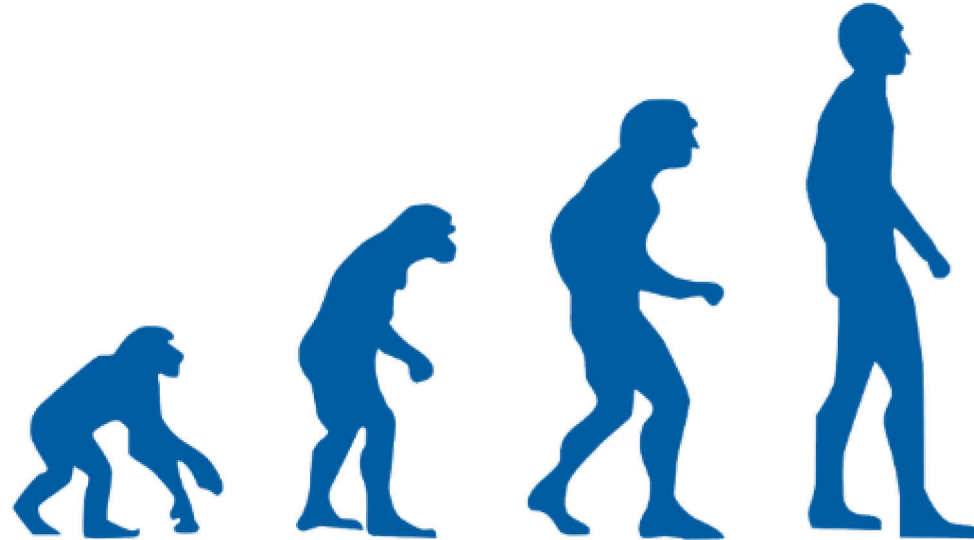


Projekt
Mitmed ettevõtte
Mitmed asukohad
Hallatud ligipääsud





EVOLUTION OF WORKSHARING IN REVIT



Local worksharing

- Limiteeritud sisevõrku

Revit Server

- Ligipääs mitmest võrgust.
- Ettevõtte tule müüri taga.

Collaboration for Revit

- Cloud worksharing
- „Kõrge usaldusega keskkond“

BIM 360 Design Collaboration

- Täna sed kaasaegsed võimalused.

Tänased teised lahendused

Mis aga pole mõeldud ehitussektori vajadusi arvestavaks...



FTP

- Kallis ja keeruline seadistada.
- Raske leida ja hallata sisalduvat infot.



Network Drives

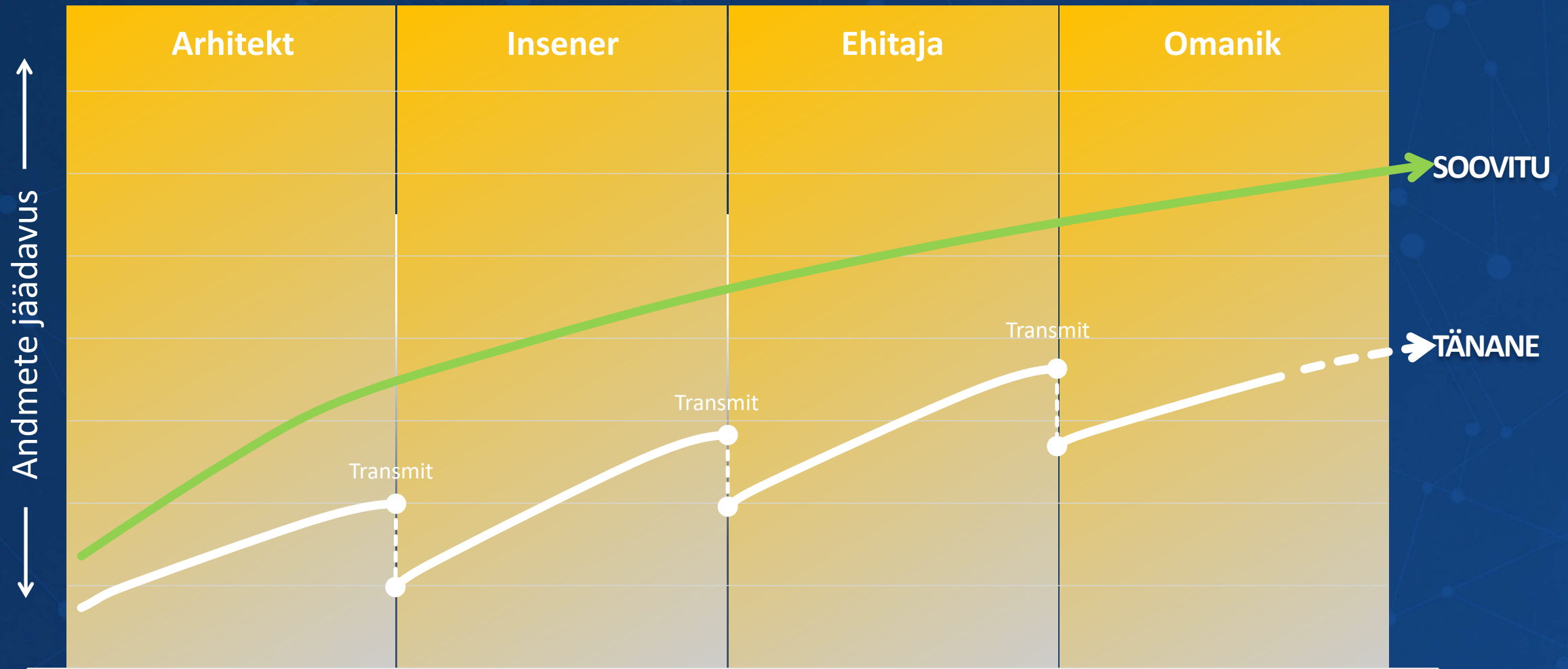
- Keeruline jagada/kättesaadavus väljaspoolt võrku
- Kallis
- Raske organiseerida failide versioone.



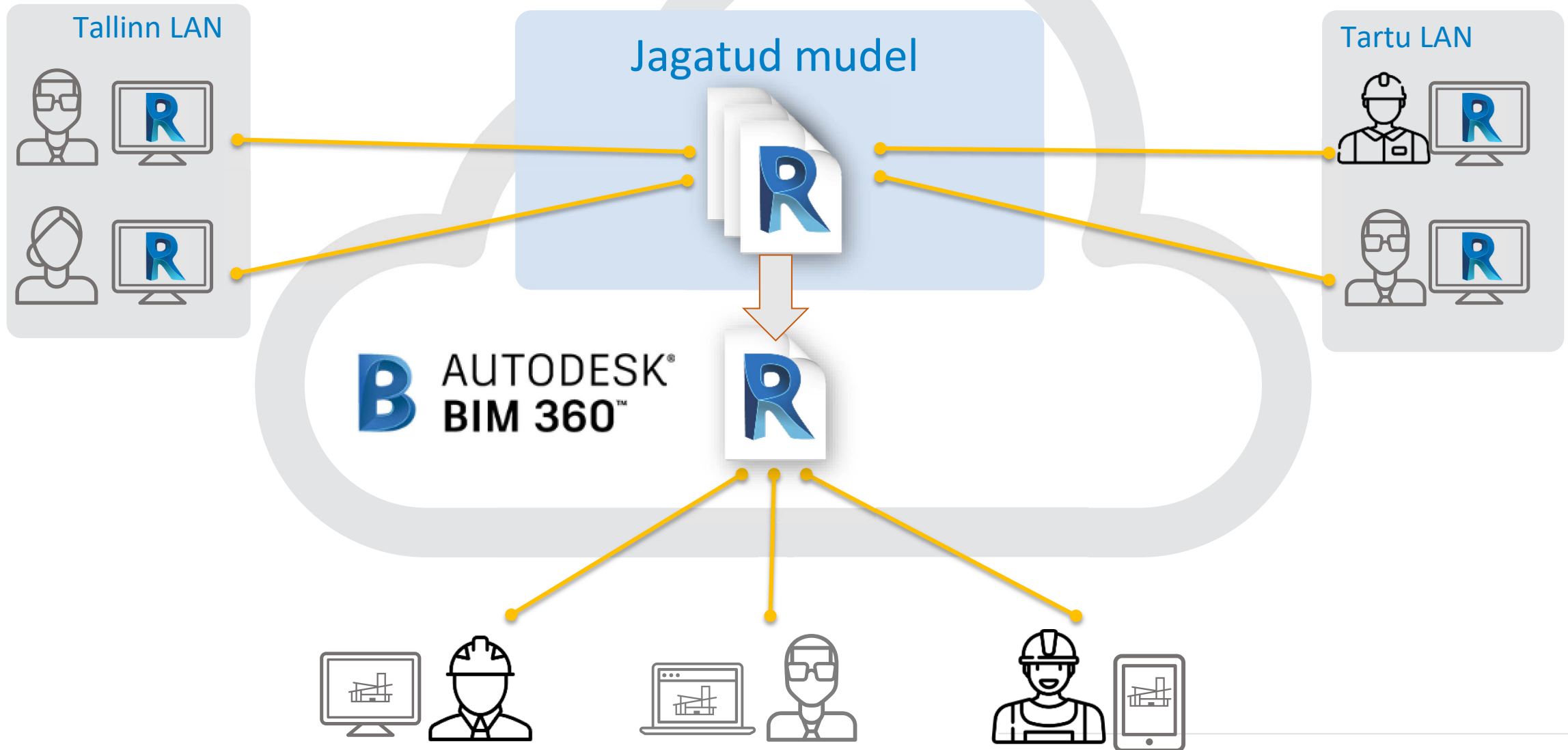
Cloud Storage

- Ei ole ehitussektori vajadusi arvestav
- nt ei ole integreeritud mudeli / jooniste vaaturit ja loomise tarkvarasid.
- nt valdkonnaspetsiifilist kvaliteedikontrolli

Andmed projekti elukaarel



REVIT CLOUD WORKSHARING



SEADISTAMINE



View by

Folders Sets

- Plans
 - 1. Owner
 - 2. Architect
 - 3. BIM Coordination
 - 5. Subcontractor
 - 6. Resource
- Project Files
 - 1. Specifications
 - 2. Photos
 - 3. Design
 - Architectural

Architectural

Piping

Structural

Projekti kohane ja õigustega hallatud kaustapuu.

Teams Manage Models

Add Team Manage team members Schedule pu

The default location for newly added teams is /Project Files

| Team | Path |
|---|----------------------|
| <input checked="" type="checkbox"/> Architectural | /Project Files/3. De |
| <input type="checkbox"/> HVAC | /Project Files/3. De |
| <input type="checkbox"/> Structural | /Project Files/3. De |

Projekteerimisega seotud meeskondade defineerimine ja kaustadega sidumine.

Autodesk Revit 2020 - BIM_Projekt_Golden_Nugget-Archite

örpermodell & Grundstück Zusammenarbeit Ansicht Verwalten Zus

Mit Zentraldatei synchronisieren Letzte neu laden Alle eigenen freigeben Änderungsprotokoll anzeigen

Synchronisieren

Zusammenarbeit in der Cloud

Sie sind im Begriff, die Zusammenarbeit im Modell über die Cloud zu starten. Ihr Modell wird in das Projekt hochgeladen, das Sie auswählen.

Aktuelles Revit-Modell Projekt

Aktuelles Revit-Modell

BIM_Projekt_Golden_Nugget-Architektur_und_Ingenieurbau.rvt

Projektposition

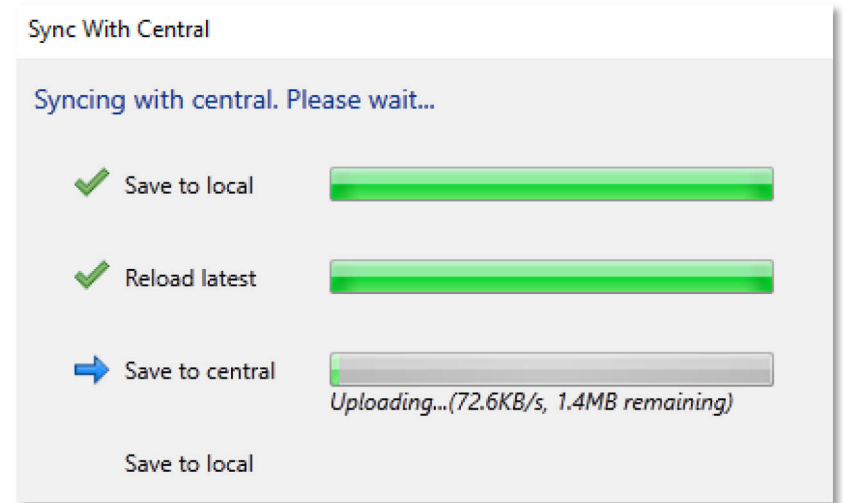
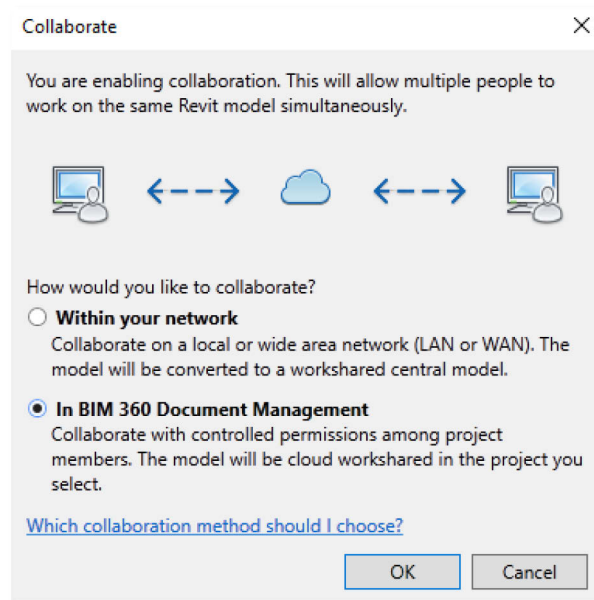
3. Design

Lokaalse faili avamine Revitis ja selle pilve tsentraalfailiks andmine.

REVIT CLOUD WORKSHARING

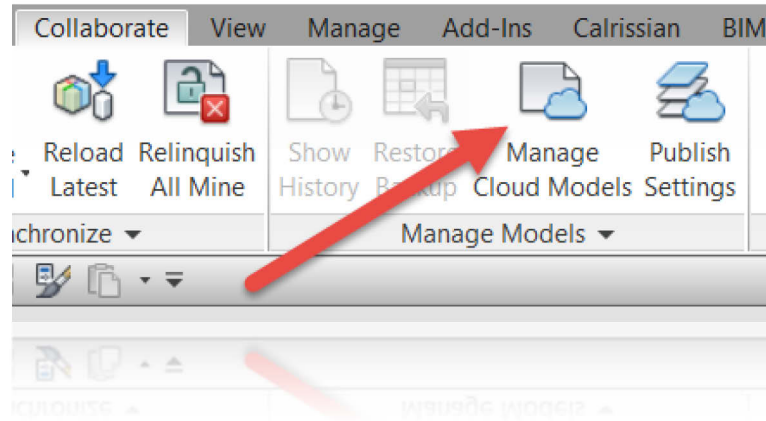
Syncing and Initiation

- Worksharing tänasest lihtsam ülesseadmine.
- Manuaalne või ajastatud mudelite „Publish“.



MUDELITE PROJEKTIPANKA „PUBLISH“

3_project_Central.rvt - Sheet: A001 - Title Sheet



The screenshot shows the 'Manage Cloud Models' web interface. The title bar reads 'Manage Cloud Models'. The breadcrumb navigation is 'Projects > 001 BIM 360 Design-Revit 2020 Demo'. The main heading is '001 BIM 360 Design-Revit 2020 Demo'. Below the heading, there is a note: 'Only cloud models in this project are listed below. To access all files within this project, go to 001 BIM 360 Design-Revit 2020 Demo.' The section 'Current Project (7)' contains a table of models.

| Model Name | Updated By | Last Updated Time |
|----------------------|---------------------|--------------------|
| ADSK_Arch2.rvt | martinTstewart_Adsk | 2020-03-31 03:17PM |
| ADSK_Elec.rvt | martinTstewart_Adsk | 2019-12-12 08:57AM |
| ADSK_FP.rvt | | 2019-12-12 09:01AM |
| ADSK_Mech.rvt | | 2019-12-16 04:13PM |
| ADSK_Plumb.rvt | | 2019-12-12 09:12AM |
| ADSK_Struct.rvt | martinTstewart_Adsk | 2020-01-02 01:29PM |
| TYLINN-DEMO-0109.rvt | martinTstewart_Adsk | 2020-01-09 10:36AM |

An 'Actions' dropdown menu is open over the 'ADSK_Elec.rvt' row, showing 'Relinquish' and 'View Versions' options.

File Architecture Structure Steel Precast Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify

Modify Select

Wall Door

Window Component Column

Roof Ceiling Floor

Curtain System Curtain Grid Mullion

Railing Ramp Stair

Model Text Model Line Model Group

Room Room Separator Tag Room

Area Area Boundary Tag Area

By Face Shaft

Wall Vertical Dormer

Level Grid

Show Ref Plane Viewer

Datum Work Plane

Properties {3D - martinTstewart_Adsk}

3D View
3D View - New Construction

3D View: {3D - martin} Edit Type

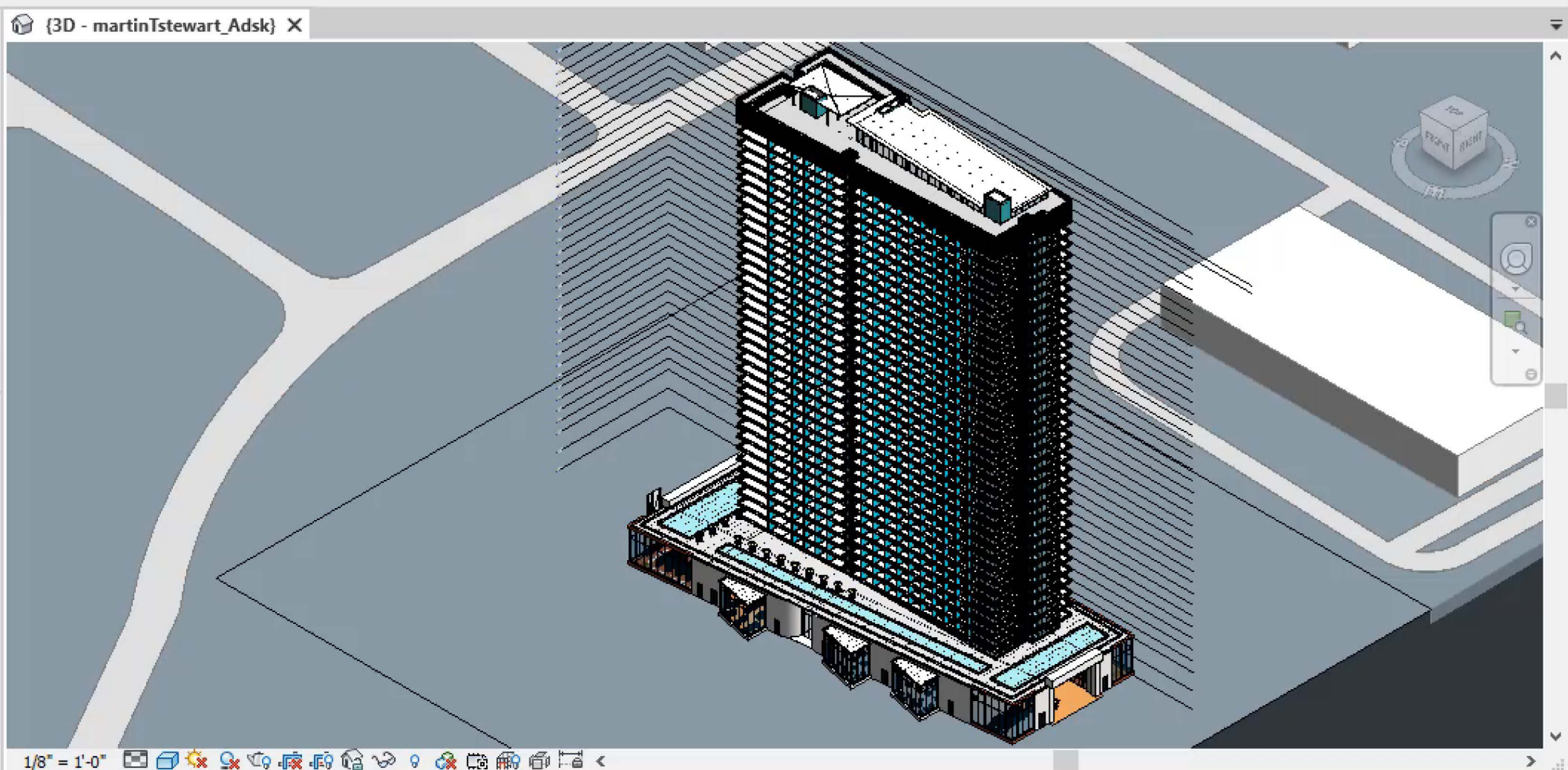
Graphics

| | |
|---------------------|---------------|
| View Scale | 1/8" = 1'-0" |
| Scale Value | 1: 96 |
| Detail Level | Medium |
| Parts Visibility | Show Original |
| Visibility/Grapp... | Edit... |

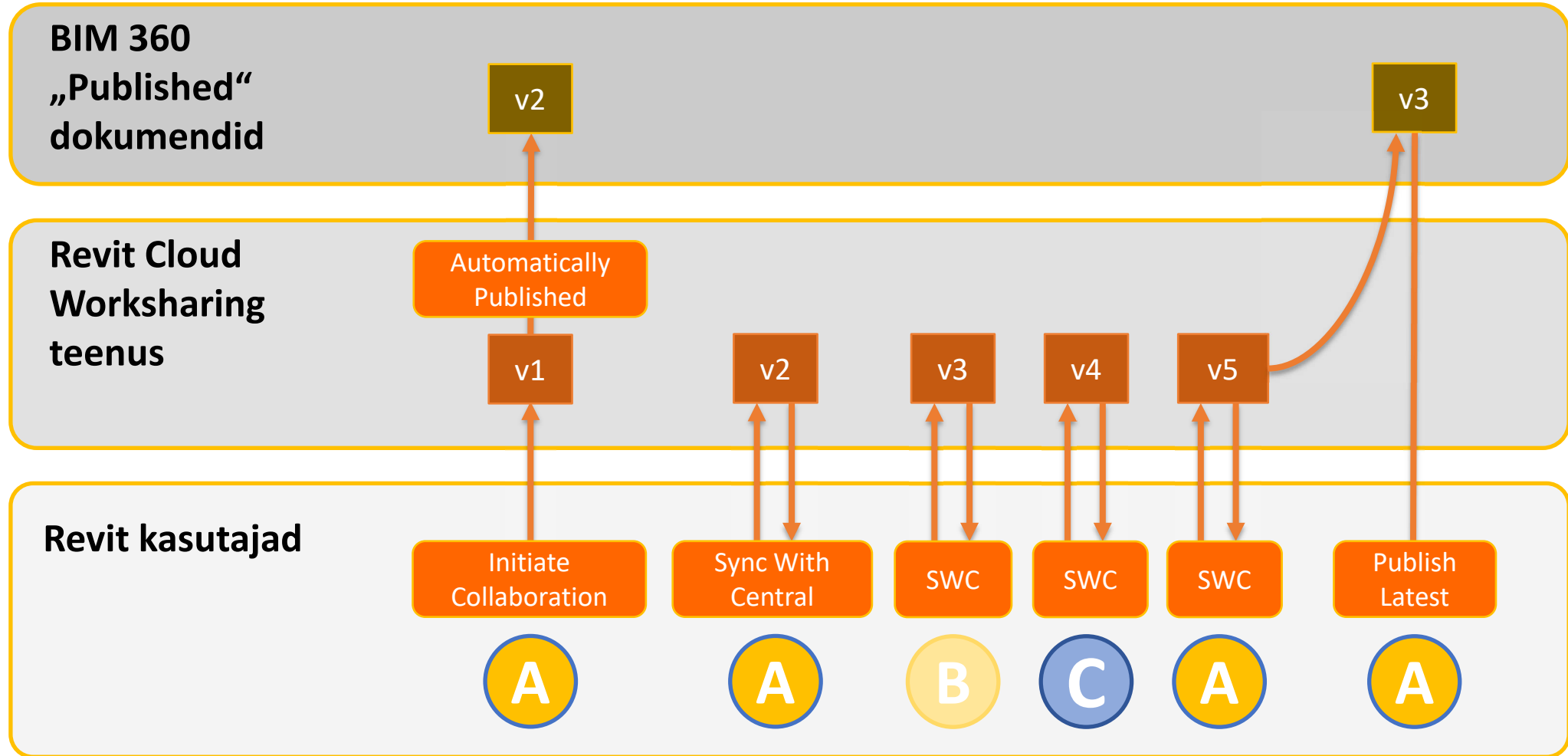
Properties help Apply

Project Browser - 2019_05_07_Hote...

- Views (all)
- Legends
- Schedules/Quantities (all)
- Sheets (all)
- Families
- Groups
- Revit Links



REVIT CLOUD WORKSHARING - Publishing Overview



Time

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins CTC Software Modify

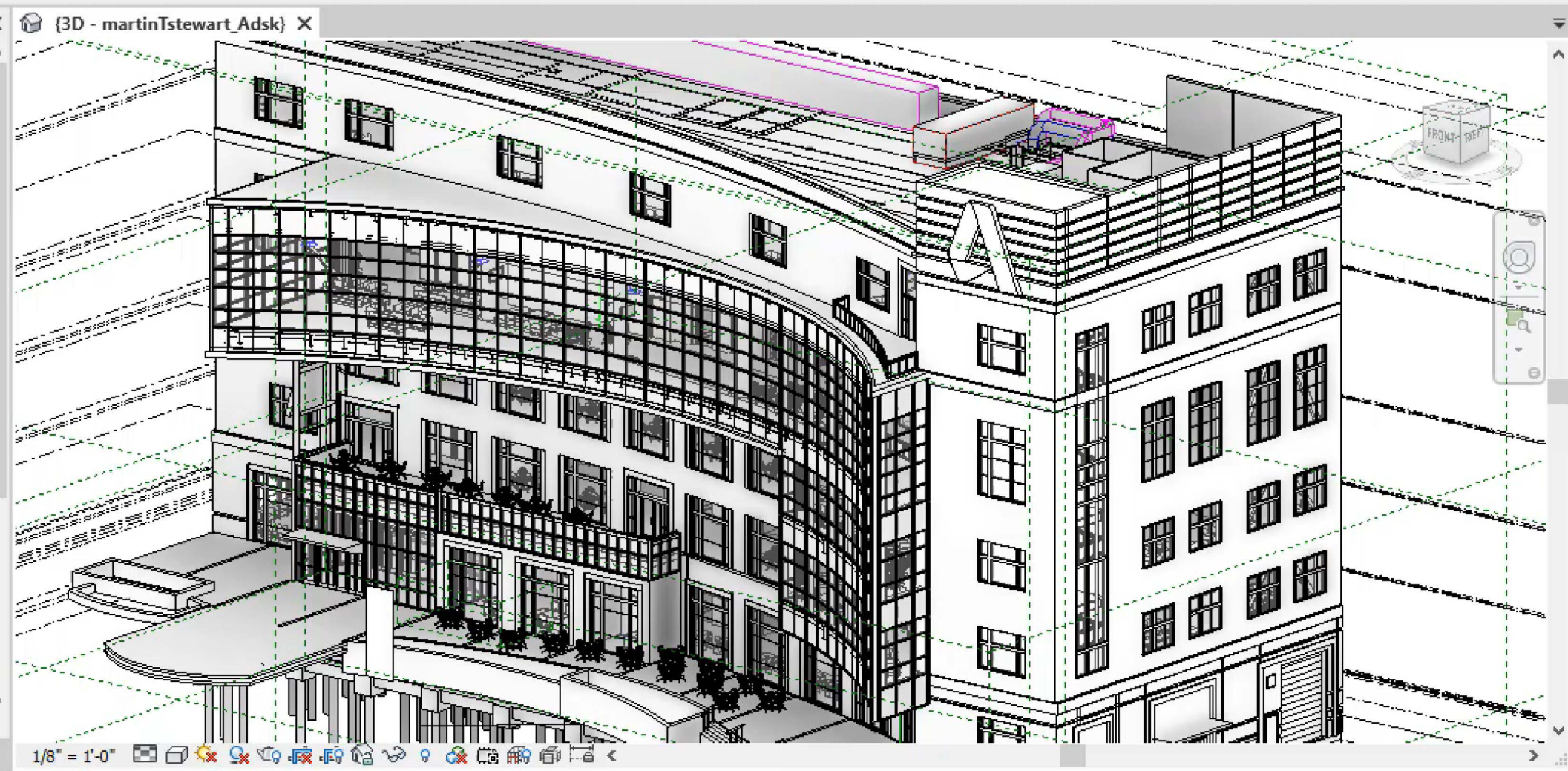
Modify Editing Requests Worksets Active Workset: Interiors (Not Editable) Gray Inactive Worksets Synchronize with Central Reload Latest Relinquish All Mine Show History Restore Backup Manage Cloud Models Publish Settings Copy/Monitor Coordination Review Coordination Settings Reconcile Hosting Interference Check

Select Communicate Manage Collaboration Synchronize Manage Models Coordinate

Project Browser - ADSK_Arch2.rvt

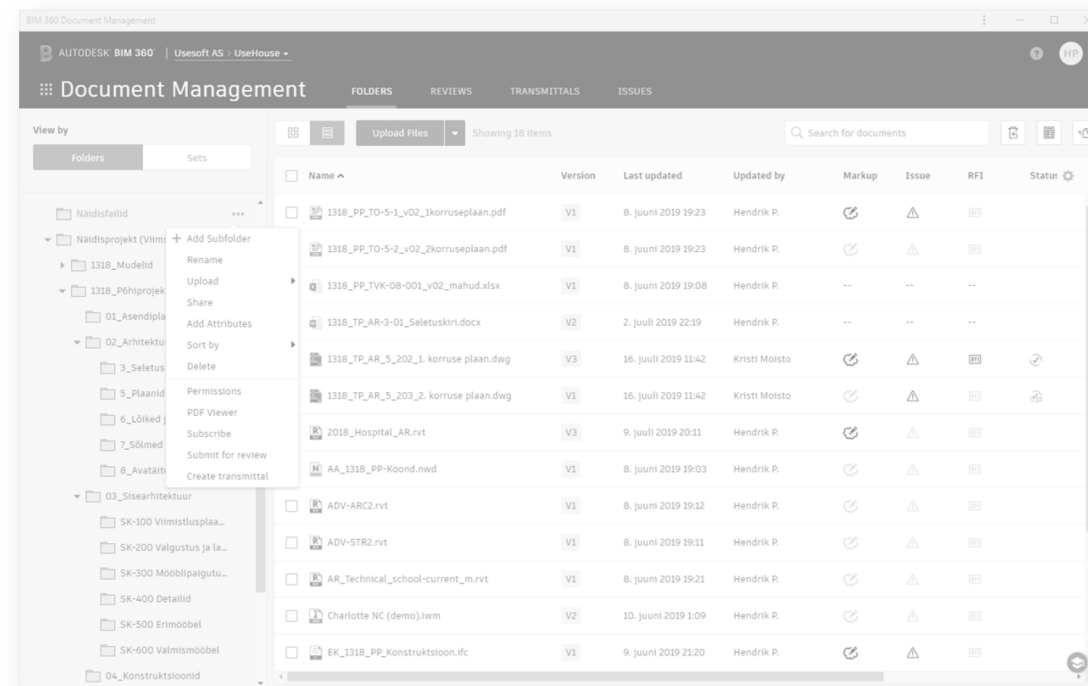
- Views (Scale)
 - 3D View
 - Building Elevation
 - Building Section
 - Ceiling Plan
 - Ceiling Plan (Structure)
 - Detail
 - Finish Plan
 - Floor Plan
 - 1/16" = 1'-0"
 - 1/8" = 1'-0"
 - Floor Plan: Basement L...
 - Floor Plan: First Floor P...
 - Floor Plan: First Floor P...
 - Floor Plan: Second Floo...
 - Floor Plan: Second Floo...
 - Floor Plan: Third Floor I...
 - Floor Plan: Third Floor I...
 - Floor Plan: Fourth Floor...
 - Floor Plan: Fourth Floor...
 - Floor Plan: Fifth Floor P...
 - Floor Plan: Fifth Floor P...
 - Floor Plan: Roof Edge o...
 - Floor Plan: Roof Level F...
 - Furniture Plan

Project Browser ... Properties



Lahenduse projektipank, ühtne infokeskkond (CDE).

Mooduli ülevaade



2. DOCUMENT MANAGEMENT

AUTODESK® BIM 360® DOCS KESKNE INFOKESKKOND FAILIDELE / ANDMETELE

The screenshot displays the Autodesk BIM 360 Docs interface. The main window is titled "Document Management" and shows a list of files with columns for Name, Version, Last updated, and Updated by. A context menu is open over the file list, showing options like "Add Subfolder", "Rename", "Upload", "Share", "Add Attributes", "Sort by", "Delete", "Permissions", "PDF Viewer", "Subscribe", "Submit for review", and "Create transmittal".

Overlaid on the main window are several other panels:

- Version History:** A panel titled "A100.1 - BASEMENT FLOOR PLAN - NORTH BAR" showing a list of versions (V1 to V6) with their upload dates and users. The current version is V6, uploaded by Bill Kagan on Jun 10, 2018.
- Changes:** A panel showing a summary of changes: 51 Added, 73 Removed, and 193 Modified. It also lists disciplines affected and a search filter.
- Set:** A panel showing a search set with "Current set" selected, and a list of addendums (Addendum 8 and Addendum 7).

On the left side, there are several smaller panels including "Quality Risk" (Risk Today: High), "My Issues" (listing issues like "Flashing at joints"), and "Subcontractor Risk Today".

Project Home



Customize

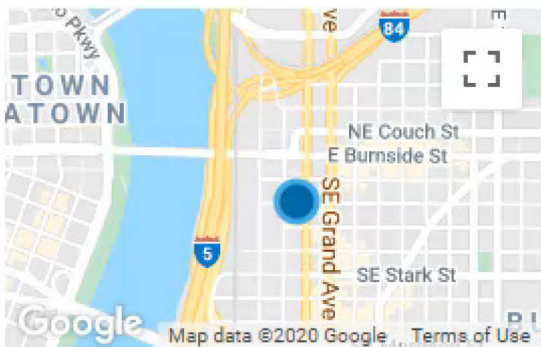


MTS_AEC Site

001 BIM 360 Design-Revit 2020 Demo

Project Dates: Mon Jan 06 2020 - Mon Nov 15 2021

Project Address



221 SE Ankeny Street
Portland, OR 97214

Weather

62°

Overcast

Mon 63° Tue 63° Wed 71° Thu 76°

Powered by Dark Sky

Design Review Risk Factors

| | | | | |
|-----------------|---------------------|--------------------------|----------------|-----------------|
| 0 | 0 | 2 | 5 | 1 |
| CODE COMPLIANCE | CRITICAL COMPONENTS | DOCUMENTATION INCOMPLETE | OVERDUE ISSUES | OVERDUE REVIEWS |

Construction IQ - PREVIEW

Project Issues

| ID | Title | Type | Due Date |
|----|-------|------|----------|
|----|-------|------|----------|

Project Design Issues

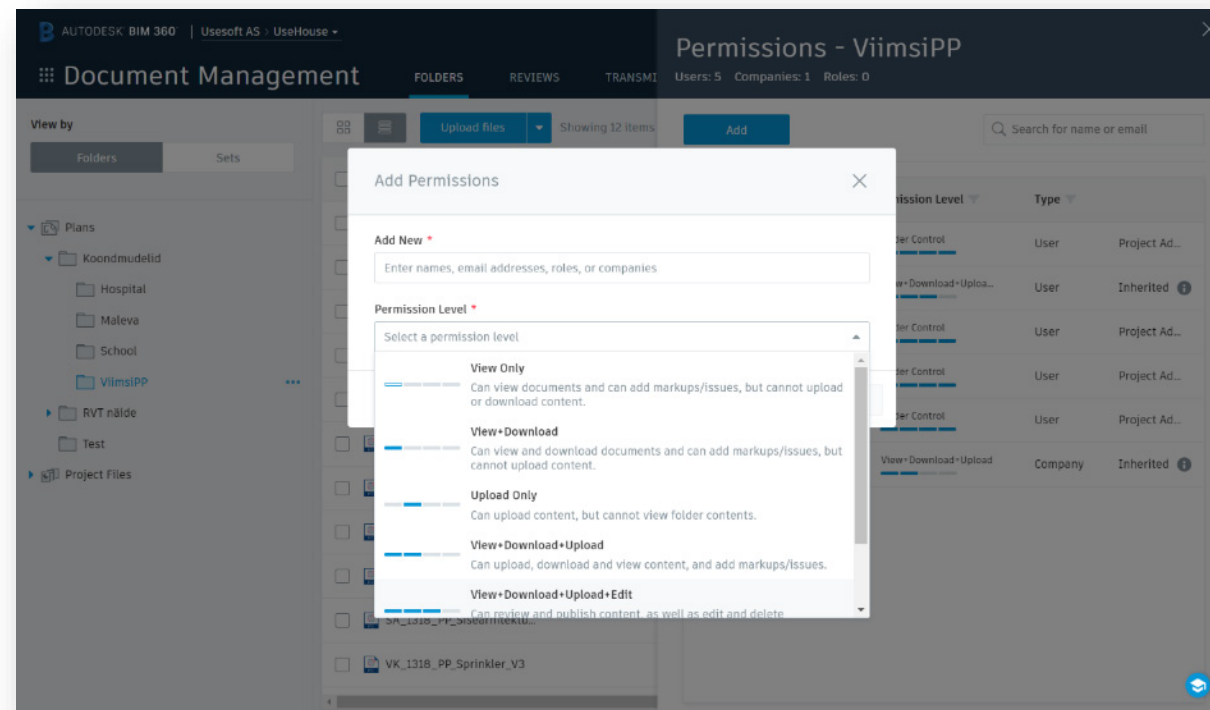
| ID | Title | Due Date |
|----|-------|----------|
|----|-------|----------|

Projektipanga õiguste jagamine



- [Organisatsiooni](#), [Projekti](#), [kausta](#) ja [faili](#) tasemel õigused;
- Kasutajati nende rolli, ettevõtte ja ka nimepõhiselt õiguste jagamine;
- 6 õiguste taset

Lisaks projekterijate tiimides tööks täiendavate õiguste võimalused (BIM 360 Design)



Permissions: Administration

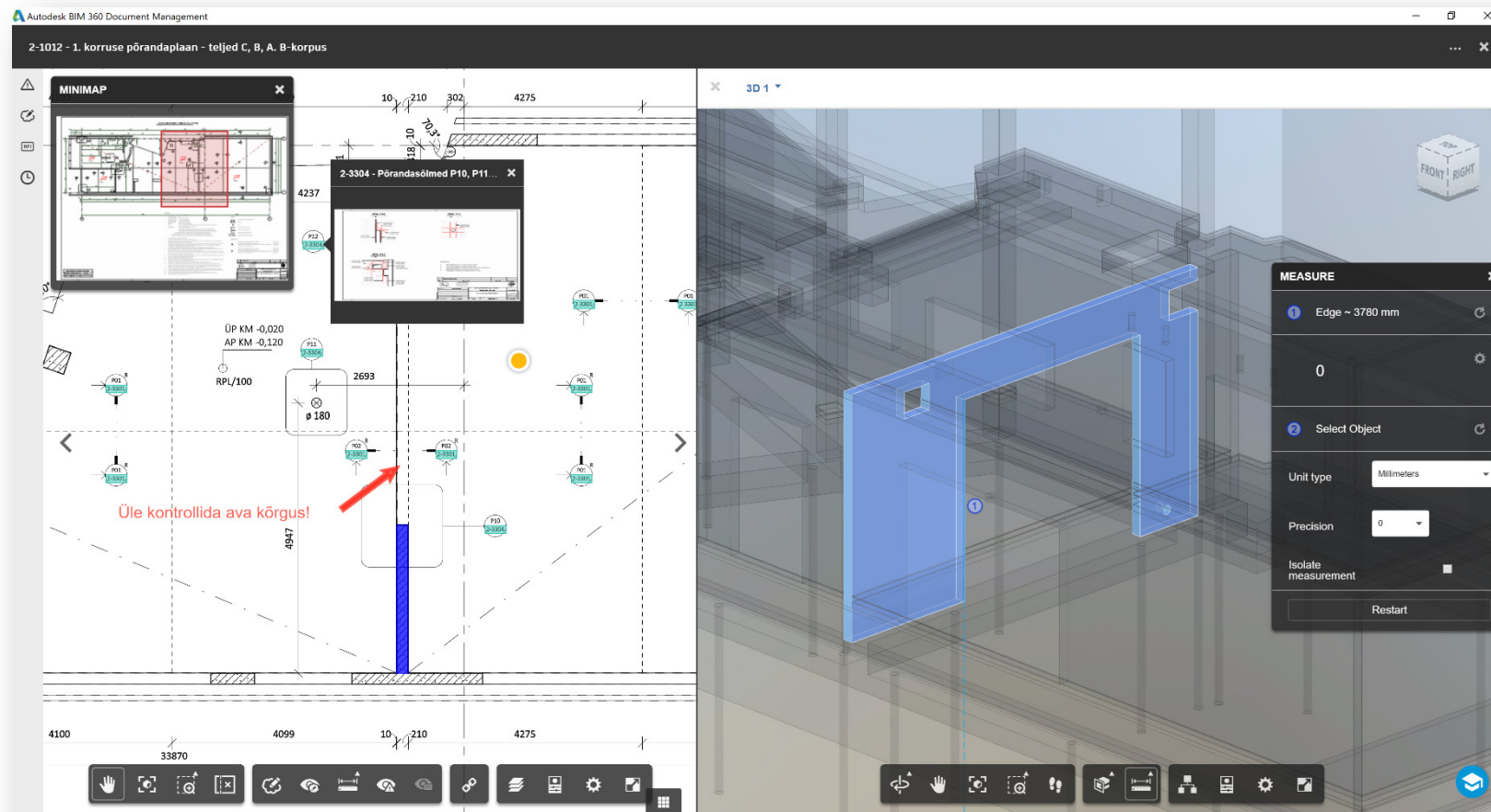
TÄPSEM INFO

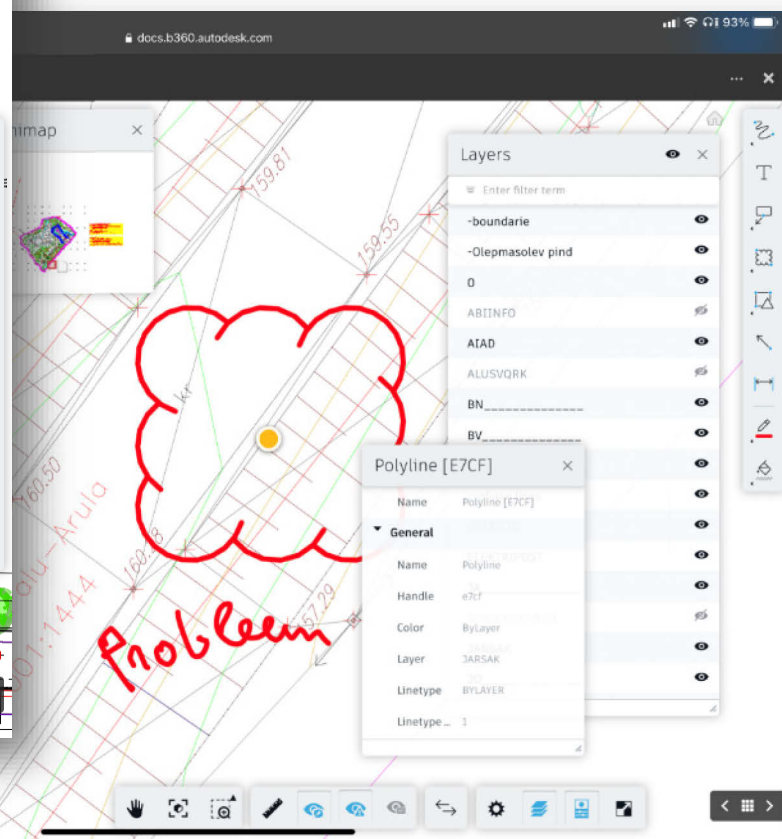
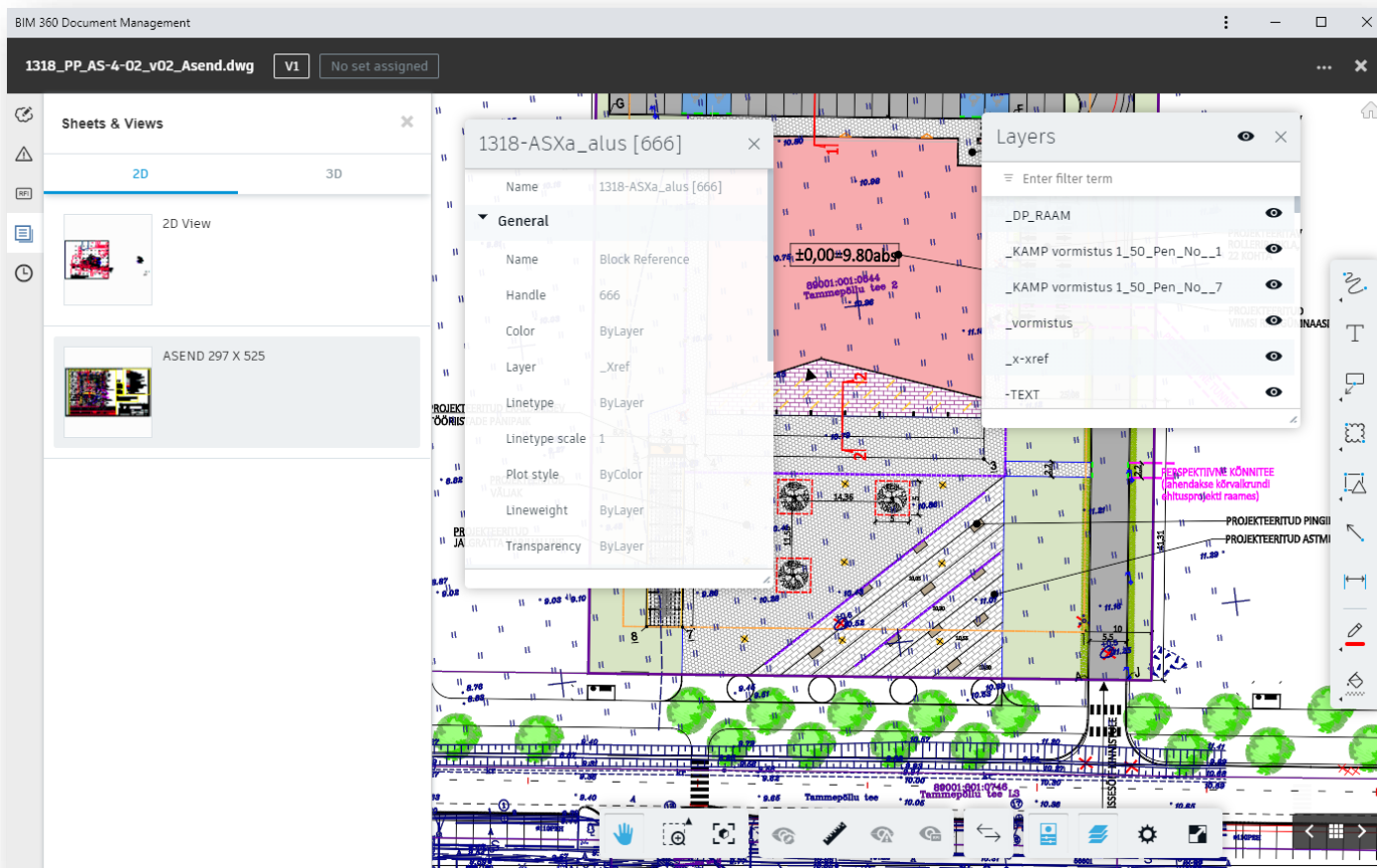
- [Manage Project Members](#)
 - [Folder Permissions](#)
 - [File Permissions](#)

Näide: Autodesk Revit fail (.rvt)



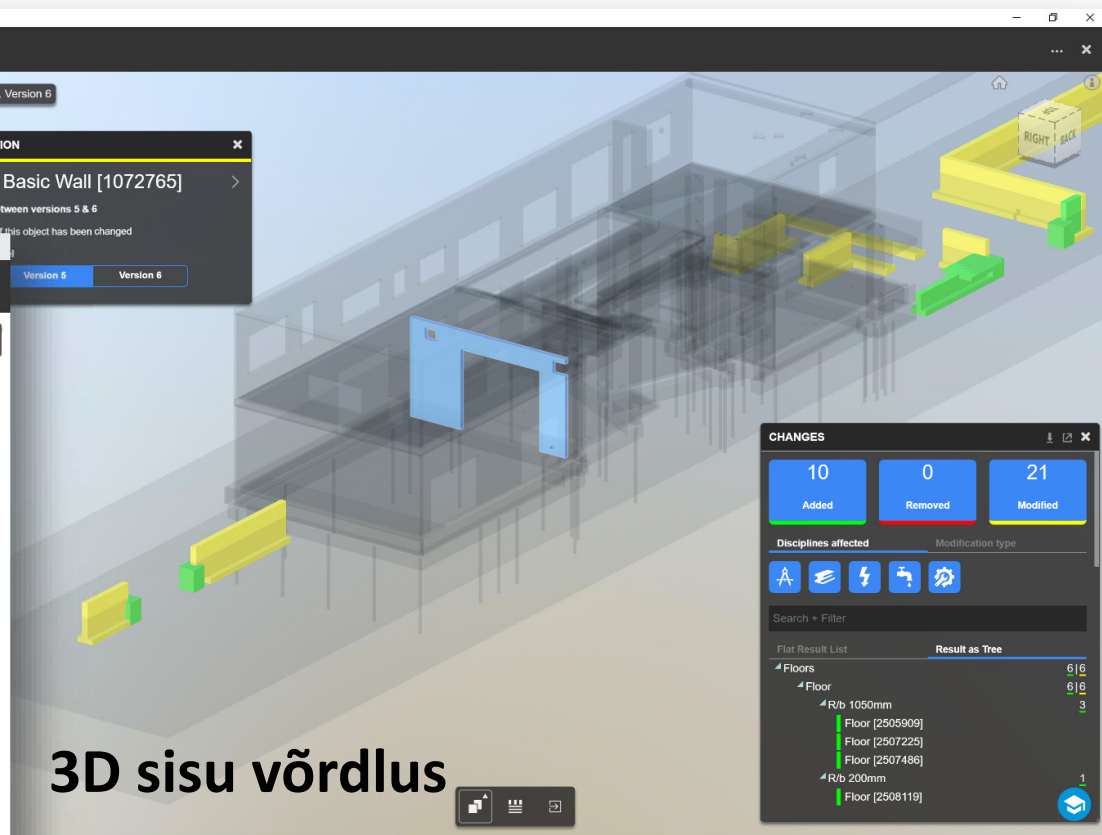
**2D ja 3D sisu otse-
integratsioon**





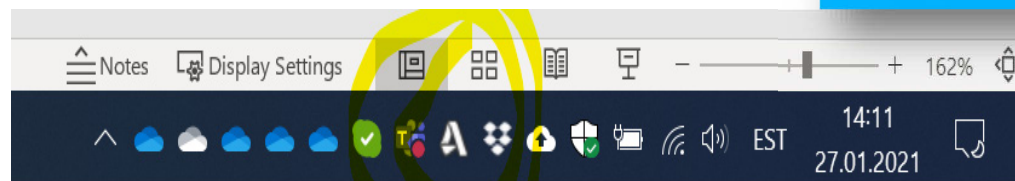
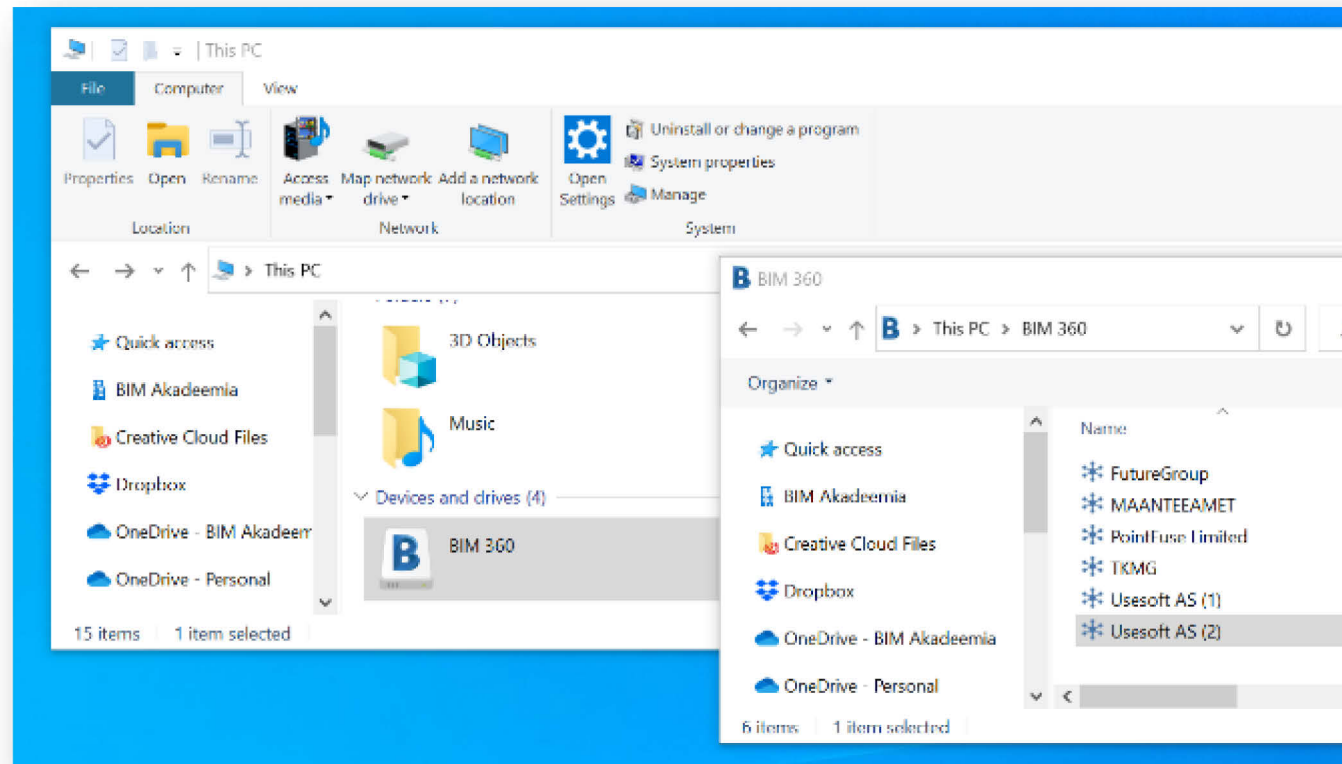
Näide: Autodesk AutoCAD fail

Versioonihaldus

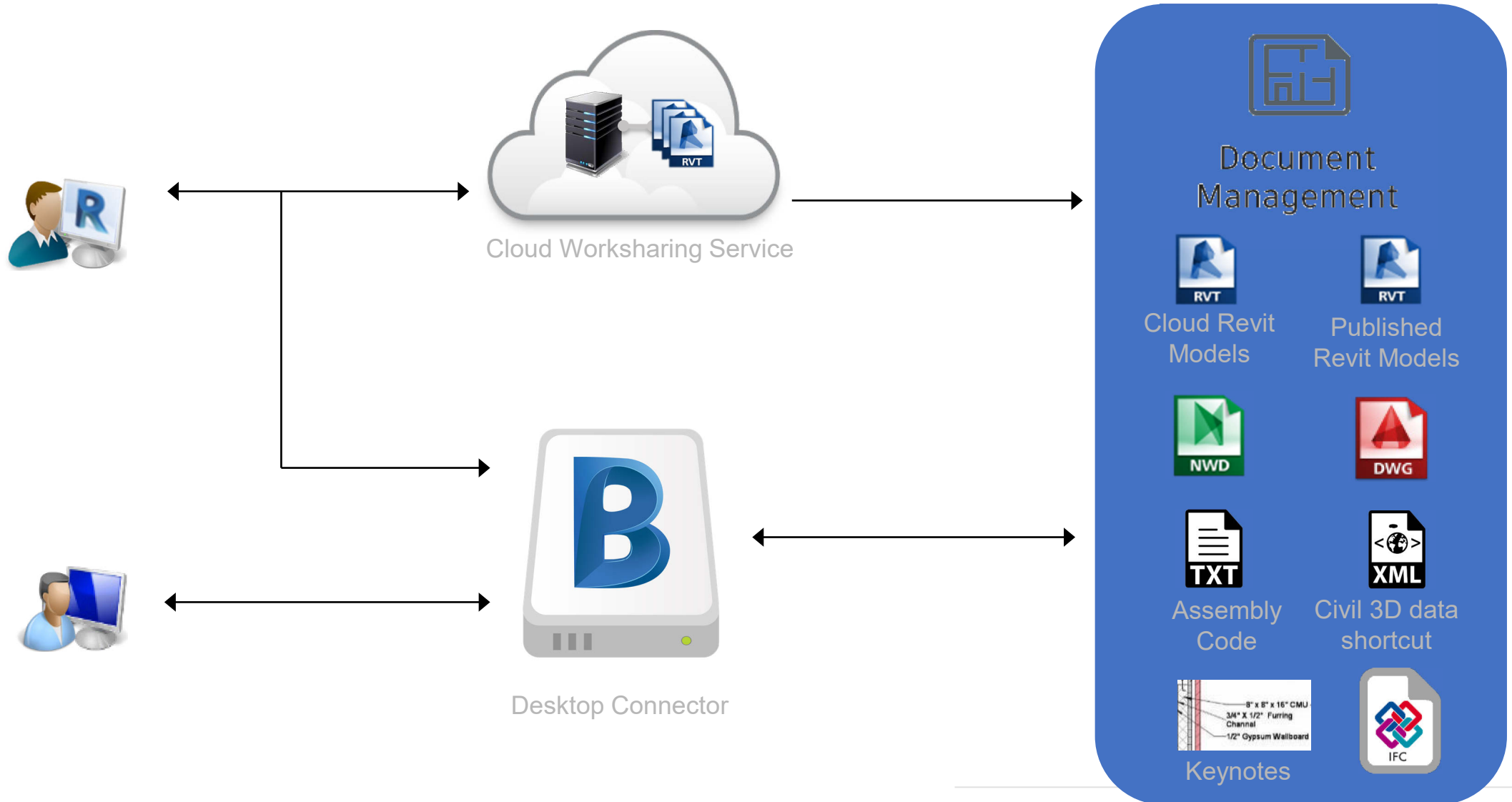


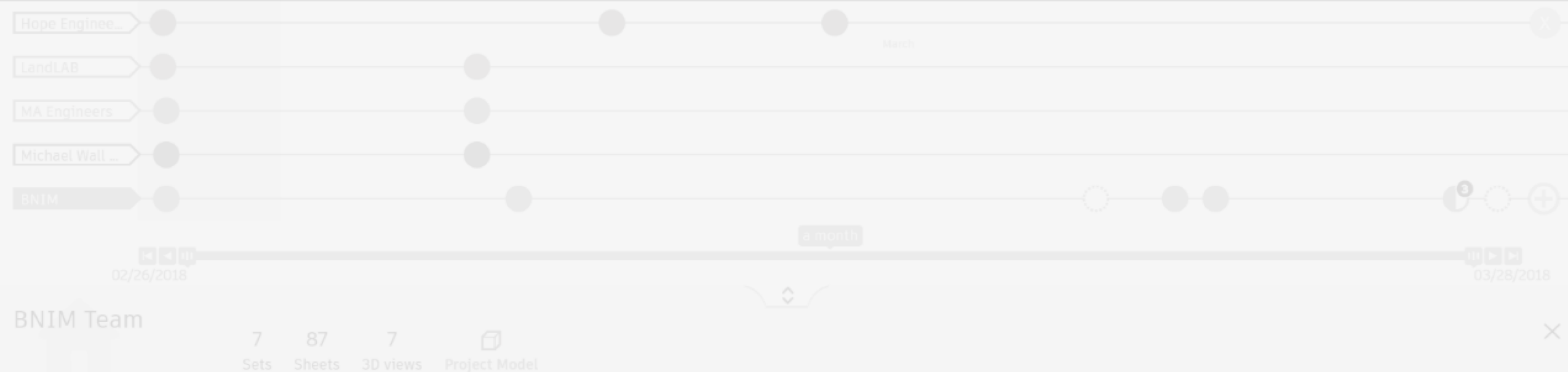
DESKTOP CONNECTOR

- Töölaualt otse pilve ligipääsuks.
- Failide kaasamiseks pilve



DESKTOP CONNECTOR





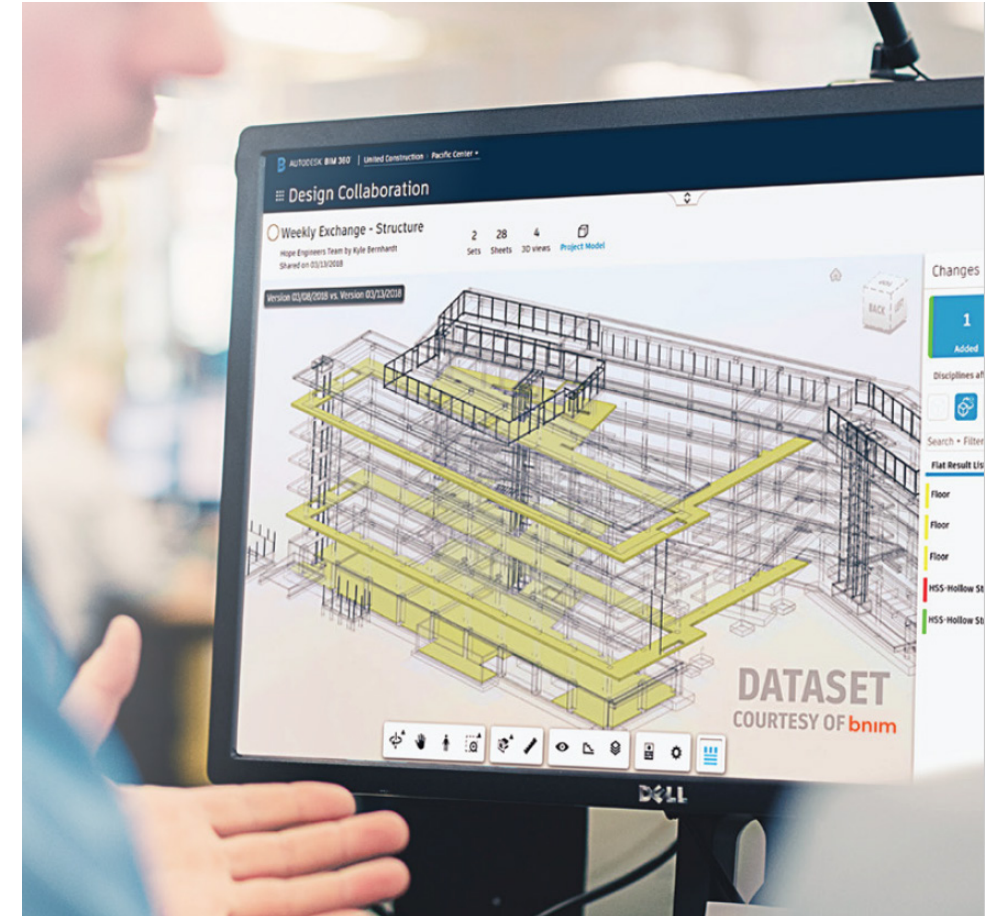
3. DESIGN COLLABORATION

„Projekteerimise ühis-koostöö korralduslik moodul“

Mooduli ülevaade

KASUTUSKOHTADEST

- **Revit baasilt koostöö korralduseks** välistes, aga ka sisestes mitme distsipliini meeskondades.
- Täiendava sisu (RVT, IFC, DOCX, etc) süsteemne jagamine „**Packages**“ abil.
- Võimekas **veebis koondmudeli vaatamine**
- Loo & kontrolli projekteerimise **veateateid**
- Projekti ja meeskondade **koostöö ja soorituse jälgimine ja kontroll**.
- Põhjalik ja turvaline **õiguste jagamine**.
- **Muudatuste visualiseerimine**.



DESIGN COLLABORATION

Projekteerimis-meeskonnas
koostöö korraldus

Design Collaboration

Hope Engin...
LandLAB
MA Engineers
Michael Wall...
BNIM

02/26/2018

BNIM Team

7 Sets 87 Sheets 7 3D views Project Model

Version 03/08/2018 vs. Version 03/13/2018

2 Sets 28 Sheets 4 3D views Project Model

Changes

1 Added 1 Removed 3 of 31 Modified

Disciplines affected Modification type

Search + Filter

Flat Result List Result as Tree

Floor
Floor
Floor
HSS-Hollow Structural Section-Column
HSS-Hollow Structural Section-Column

Muutuste jälgimine WIP sisu ülevõtmisel

DATASET COURTESY OF BNIM

Architecture (2)
Architecture Team by Tomasz Fudala
Shared on 04/05/2018

2 Sets 2 Sheets 5 3D views

Search

Sets

Set 1 - 3D Views (4)

{3D}
Camera looking up at Lobby Ceiling
Camera looking up at reception ceiling
Lobby Section

Set 3 - Ground Floor (3)

A101 - GROUND FLOOR
Ground Floor
GROUND FLOOR

Kontrollitud vormis andmete jagamine

Revit
Worksharing

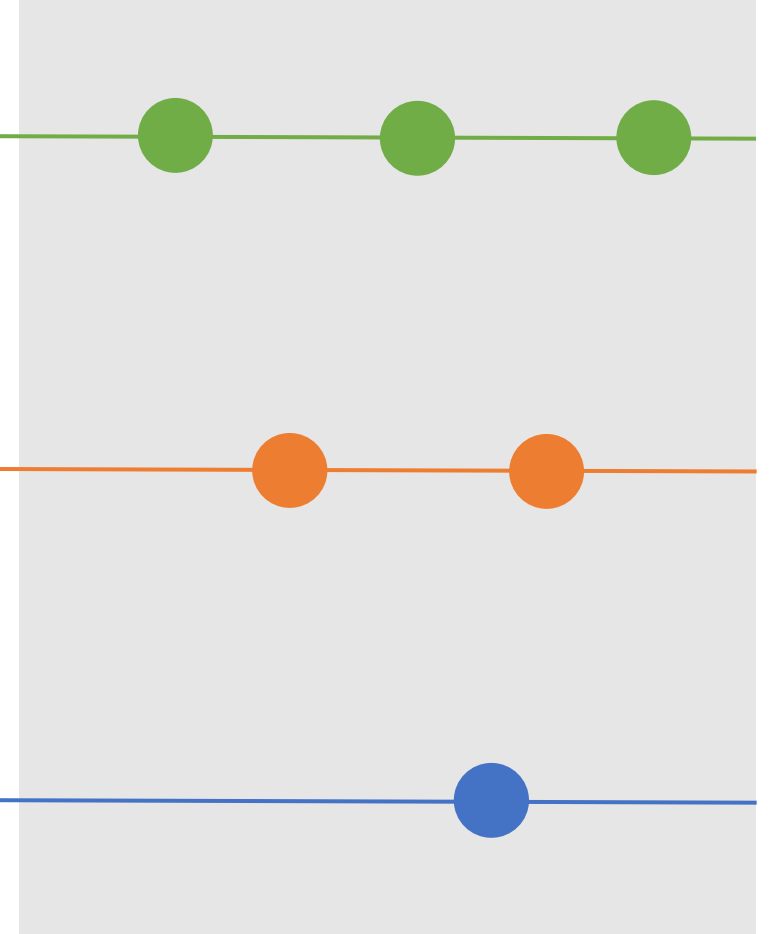
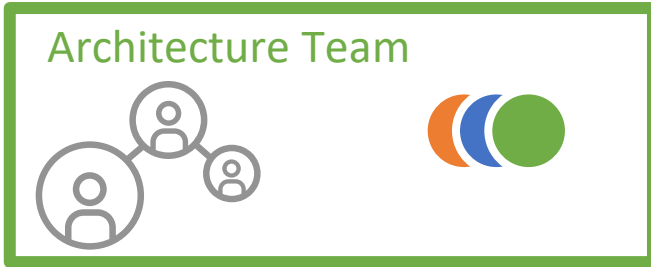


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Design
Collaboration

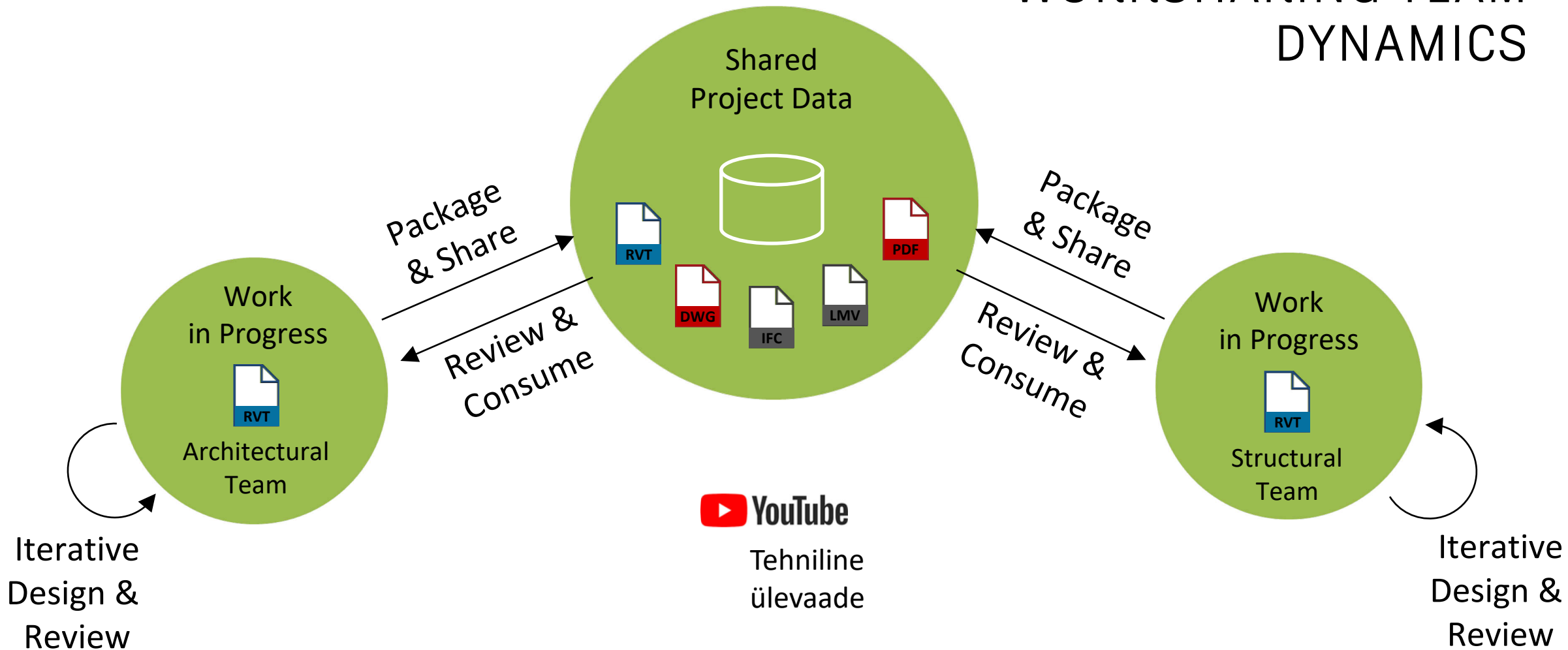


WIP Model

Published Model

Shared Model

CONTROLLED CLOUD WORKSHARING TEAM DYNAMICS



PUBLISHING FROM REVIT

Autodesk Revit 2019.2 - rac_basic_sample_project_test_2019.rvt - Sheet: A001 - Title Sheet

File Architecture Structure Steel Systems Insert Annotate Analyze Massing & Site Collaborate View Manage Add-Ins Modify Precast

Modify Editing Requests Worksets Active Workset: Gray Inactive Worksets Synchronize with Central Reload Latest Relinquish All Mine Show History Restore Backup Manage Cloud Models Publish Settings Copy/Monitor Coordination Review Coordination Settings Reconcile Hosting Interference Check

Properties Sheet

Sheet: Title Sheet Graphics Visibility/Graphics Overrides Scale Identity Data Dependency Referencing Sheet

Manage Cloud Models

Projects

hub sales demo PSS_APAC_R19_Sandbox_01

Manage Cloud Models

Projects > Sample

Sample

Only cloud models in this project are listed below. To access all files within this project, go to [Sample](#).

Current Project (7)

| Model Name | Updated By | Last Updated Time |
|--|--------------|--------------------|
| Autodesk_Hospital_Imperial_Architectural.rvt | Chris.Aquino | 2019-03-19 04:43PM |
| Autodesk_Hospital_Imperial_Electrical.rvt | Chris.Aquino | 2019-01-22 10:59AM |
| Autodesk_Hospital_Imperial_FireAlarm.rvt | Chris.Aquino | 2019-03-19 04:50PM |
| Autodesk_Hospital_Imperial_HVAC.rvt | Chris.Aquino | 2019-01-22 11:36AM |
| Autodesk_Hospital_Imperial_Plumbing.rvt | Chris.Aquino | 2019-01-22 01:01PM |
| Autodesk_Hospital_Imperial_Sprinkler.rvt | Chris.Aquino | 2018-10-16 03:19PM |
| Autodesk_Hospital_Imperial_Structural.rvt | Chris.Aquino | 2018-10-10 08:18AM |

Publish Latest

PUBLISHING, SHARING, JA CONSUMING

The screenshot displays the Autodesk BIM 360 Design Collaboration interface for the 'United Construction - Pacific Center Campus' project. The top navigation bar includes the Autodesk logo, 'AUTODESK BIM 360', and the project name. Below this, the 'Design Collaboration' section features a list of team members: Hope Engineers, LandLAB, MA Engineers, Michael Wall Engineers, and BNIM. A central timeline visualization shows activity for each team from February 26, 2018, to April 13, 2020, with colored circles and numbers indicating specific actions. A 'Filter' button and a '2 years' duration indicator are also present.

Below the timeline, the interface shows a 3D model view of the building project. The 'BNIM' user profile is active, with statistics for 13 Sets, 144 Sheets, and 11 3D views. A 'Project Model' tab is selected, and a 'Show changes' button is visible. On the left, a 'Content Browser' panel lists various project elements such as 'A 100 series (54)', 'A 101 Floor Plans (5)', 'A 250 Sections (3)', 'A200 series (26)', 'AZ - A100's (8)', 'AZ - A200 (10)', 'VS - VS00 (10)', and 'VS - VS100.2 (8)'. The 3D model view includes a toolbar with navigation and editing tools, and a 'TOP FRONT RIGHT' orientation indicator.

PUBLISHING

The screenshot displays the Autodesk BIM 360 Design Collaboration interface. At the top, the navigation bar shows 'AUTODESK BIM 360' and the user 'Autodesk - Chris Aquino'. The main header is 'Design Collaboration'. On the left, a sidebar lists project categories: Architecture, MEP, Site, Structure, and Fire Safety. The central area features a timeline from May to March with colored circles indicating activity. Below the timeline, the 'Fire Safety' section is active, showing 2 Sets, 0 Sheets, and 2 3D views. A table lists project items with their update dates. A 'Schedule publish' dialog box is overlaid on the right, allowing users to set a regular publishing schedule for their team's data.

Fire Safety

2 Sets 0 Sheets 2 3D views Project Model

Search Update to latest Schedule publish All my team's issues

| Sets | Sheets | 3D views | Update date |
|--|--------|----------|----------------------|
| Autodesk_Hospital_Imperial_FireAlarm.rvt | 0 | 1 | Mar 19, 2019 5:18 PM |
| Autodesk_Hospital_Imperial_Sprinkler.rvt | 0 | 1 | Oct 16, 2018 3:51 PM |

Schedule publish

Schedule regular publishing of your team's data

Weekly Day Time

Close

Project Files

Arhitektid AS

Projektipank

Põllud UÜ

Consumed

Shared

Arhitektid AS

Põllud UÜ

Torud OÜ

Torud OÜ

Consumed

LINKIMISE ERINEVAD MEETOID

Plussid

- Live Linking
 - Kindlus, et kõik on alati uusima lähteinfoga.
 - Kiiremad muutused.
- Shared Linking
 - Kindlus, et ei töötata veel pooliku sisu pealt.
- Consumed Linking
 - Võimaldav vastu võtval poolel oma töö järgi vastuvõtmist ajatada.

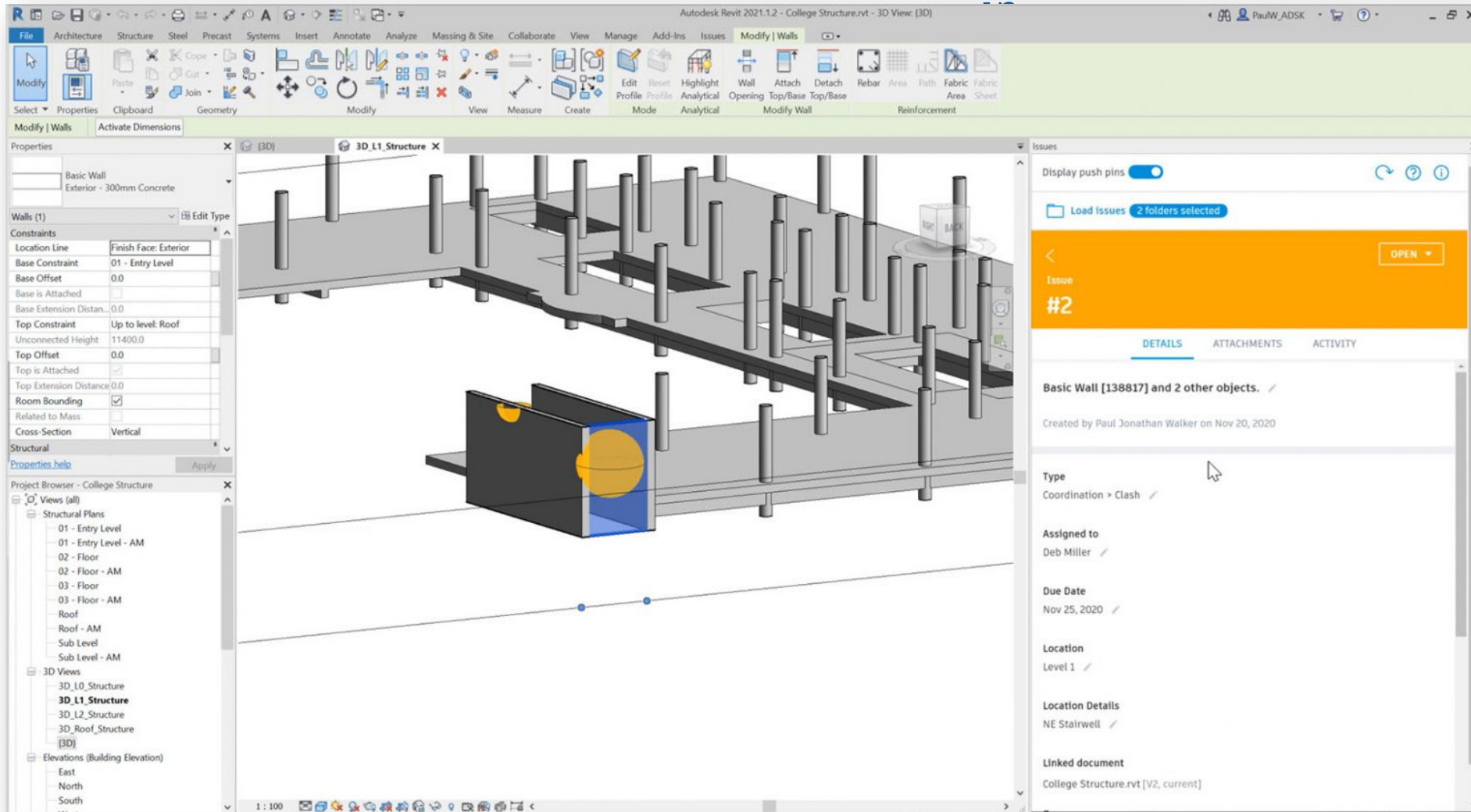
Miinused

- Live Linking
 - Suurem andmemaht ajas
 - Teiste muudatused võivad segada sinu tööd.
- Shared Linking
 - Väiksem hulk saabuval muudatusi.
 - Teiste meeskondade tehtud muudatused võivad teie tööd takistada.
- Consumed Linking
 - Uuenduste saabumise aeglasem tempo.

LISAVÕIMALUSED

REVIT ISSUES ADDIN

Using the Revit Issues Add-



B AUTODESK® BIM 360® COORDINATE

Viewing 2 models

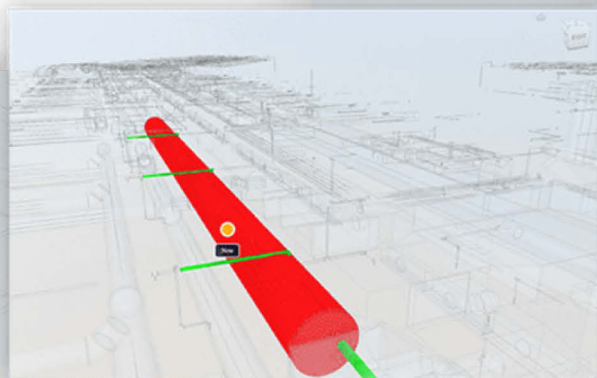
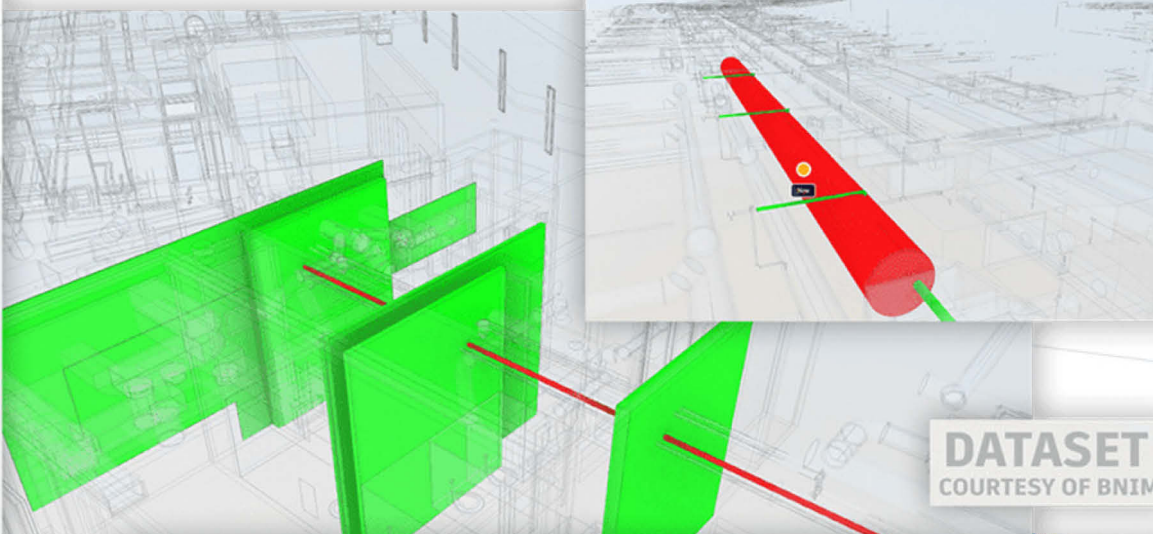
Clashes

Group By
3D Level 4_PacificCenter_AY_Mech.rvt (1026)

1292 CLASHES (11)

- Pipe Types [3006226] 11 clashes with 1 other model
- Pipe Insulation [4549030] 11 clashes with 1 other model
- Pipe Insulation [4549046] 11 clashes with 1 other model
- Pipe Types [3006230] 7 clashes with 1 other model
- Pipe Types [2996331] 5 clashes with 1 other model
- Pipe Types [2996341] 5 clashes with 1 other model
- Pipe Insulation [4547983] 5 clashes with 1 other model
- Pipe Insulation [4547988] 5 clashes with 1 other model
- RA BOOT [4427549] 4 clashes with 1 other model
- Duct Insulation [4524366] 4 clashes with 1 other model
- Rectangular Duct [3457132] 4 clashes with 1 other model
- Duct Insulation [4498938] 4 clashes with 1 other model
- Rectangular Duct [3832266]

NOT an issue Issue



DATASET
COURTESY OF BNIM

| | 3D - Level 2_PacificCenter_AY_Elec.rvt | 3D - Level 2_PacificCenter_AY_Mech.rvt | 3D - Level 2_PacificCenter_AY_Struct.rvt | 3D - Level 2_PacificCenter_AY_Mech.rvt | 3D - Level 2_PacificCenter_AY_Struct.rvt | 3D - Level 2_PacificCenter_AY_Elec.rvt |
|--|--|--|--|--|--|--|
| 3D - Level 2_PacificCenter_AY_Elec.rvt 113 clash groups | | | 6 | 8 | | 227 |
| 3D - Level 2_PacificCenter_AY_Mech.rvt 814 clash groups | | 13 | 451 | 208 | | 303 |
| 3D - Level 2_PacificCenter_AY_Struct.rvt 652 clash groups | 15 | 8 | | 218 | 37 | 484 |
| 3D Level 2_PacificCenter_AY_Mech.rvt 1487 clash groups | 9 | 143 | 149 | | 119 | 101 |
| 3D Level 2_PacificCenter_AY_Struct.rvt 236 clash groups | | 72 | 6 | 15 | | 129 |
| CR - Level 2_Aaa_PacificCenter_AY_Arch.rvt 402 clash groups | 82 | 154 | 90 | 135 | 167 | |

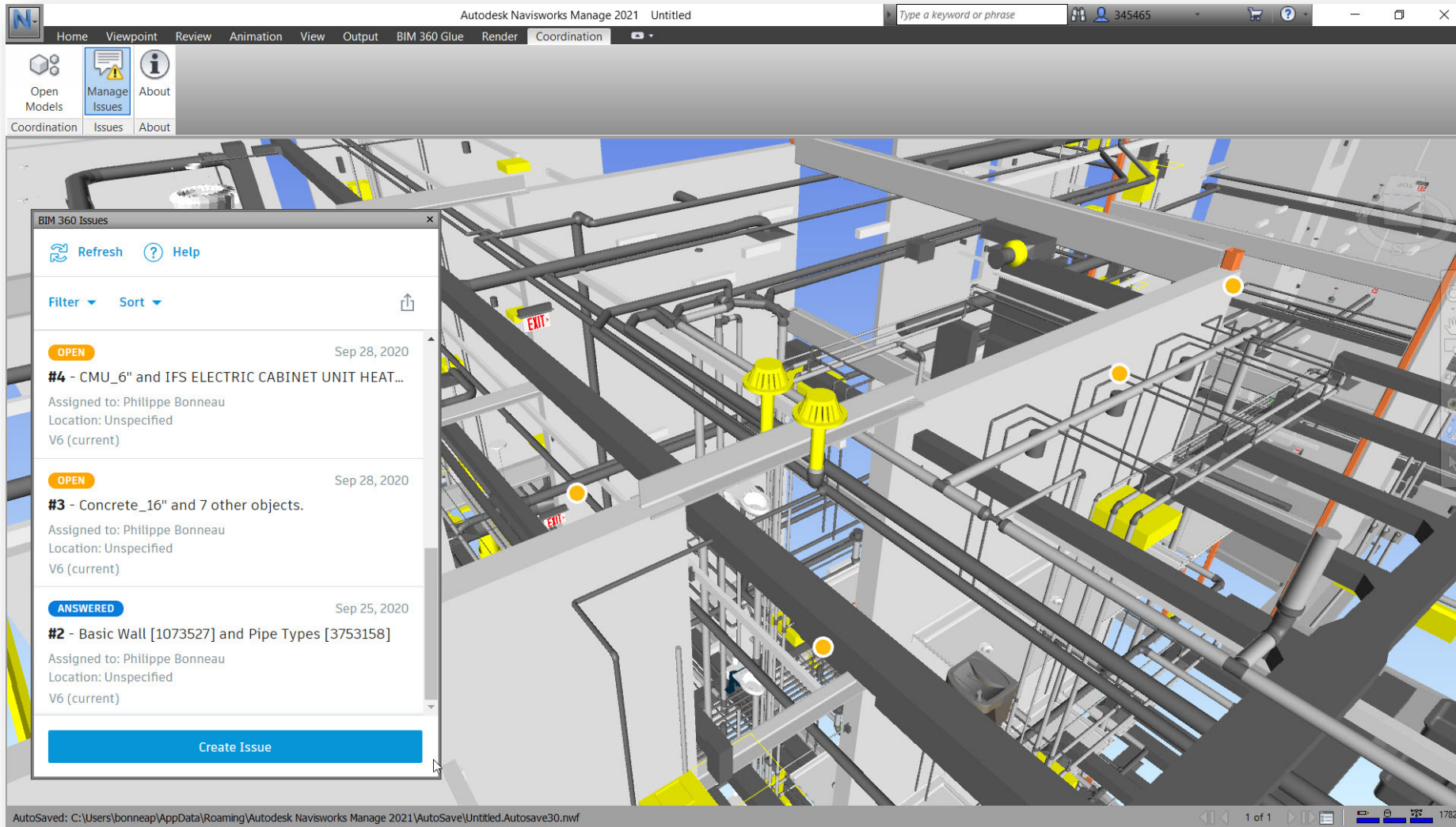
| | 3D - Level 0_PacificCenter_AY_Elec.rvt | 3D - Level 0_PacificCenter_AY_Mech.rvt | 3D - Level 1_PacificCenter_AY_Elec.rvt | 3D - Level 1_PacificCenter_AY_Mech.rvt | 3D - Level 1_PacificCenter_AY_Struct.rvt |
|--|--|--|--|--|--|
| 3D Level 0_PacificCenter_AY_Struct.rvt 56 clash groups | | | | | |
| 3D Level 1_PacificCenter_AY_Mech.rvt 1300 clash groups | | | | | |
| 3D Level 1_PacificCenter_AY_Struct.rvt 191 clash groups | | | 3 | 604 | |
| 3D Level 2_PacificCenter_AY_Mech.rvt 1497 clash groups | 5 | 39 | | 3 | |
| 3D Level 2_PacificCenter_AY_Struct.rvt 219 clash groups | | | | | 25 |

Properties

- Constraints
 - Level: AY Level 3
 - Host: Level: AY Level 3
 - Offset: 11.11458333333335'
- Text
 - FAN TYPE
- Electrical Engineering
 - VOLTAGE: volt
- Electrical - Loads
 - Panel
 - Circuit Num...
- Mechanical
 - System Class: Supply Air_Return, Air_Hydraulic, Supply_Hydraulic, Return_Hydraulic, Mechanical Supply Air, 487_Mechanical Return Air
 - System Name: 68_Hydraulic Supply, 59_Hydraulic Return, 53_Hydraulic Supply 59
 - Classification
 - INLET: degF
 - OUTLET: degF
 - Mechanical - Flow
 - CFM: 0 ft³/minute
 - MIN. OA CFM: ft³/minute
 - SUPPLY FAN ...: ft³/minute
 - FLOW: 2400 ft³/minute

- RVT ja IFC ja 3D DWG.
- Native NWD ja issues tugi. BCF* export.
- Navisworks integration.

NAVISWORKS ADD-IN



KOKKUVÕTE

KASULIKUD VIITED

- [Autodesk BIM 360 Design FAQ](#)
- [BIM 360 Getting Started Guide](#)
- [BIM 360 Help](#)
- [BIM 360 Product Page](#)
- [BIM 360 Release Notes - Blog](#)
- [Revit 2021 Help](#)
- [Health Dashboard](#)
- [Autodesk Free Online Viewer](#)

- [Revit Server vs BIM 360 Design](#)
- [3rd party Integrations w/ BIM 360](#)



KOOLITUSTEST

usesoft

Koolitused Tarkvara Tugiteenused Hea teada!

Koolituskalender

Autodesk ametliku koolituskeskuse kursused 2021

Vaata kava

Jäta teade

VEEBRUAR 2021

| | | |
|----------------------------------|--|-----------------------|
| AutoCAD algkursus | 4. ja 5. veebruar | Reaalajas veebikursus |
| AutoCAD 3D kursus | 4. ja 11. ja 18. veebruar | Reaalajas veebikursus |
| Mahuarvutused Civil 3D tarkvaras | 15. veebruar | Reaalajas veebikursus |
| AutoCAD 2D põhikursus | 17. ja 18. ja 19. veebruar | Reaalajas veebikursus |
| Inventor baaskursus | 17. ja 18. ning 22. veebruar | Tallinnas * |
| Civil 3D baaskursus | 17. ja 18. ja 19. ja 25. ja 26. veebruar | Reaalajas veebikursus |

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