

CS462978

Connecting the Dots Between Office and Field Using BIM 360 Docs

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Learning Objectives

- Learn about how the latest construction documents are made available to the field consultants with BIM 360 Docs.
- Learn how you can use a tablet device to view the latest construction documents in the field.
- Learn how to access the construction documents in the offline mode on a tablet device.
- Learn how to review construction documents in the field and generate issues and RFIs.

Description

The construction industry worldwide loses hundreds of millions of dollars because of the rework caused by the lack of the latest information and construction documents available at the right time to the field executives. However, this changed with BIM 360 Docs software, which enables the flow of the latest accurate information from the office to the field executives without any delay. With BIM 360 Docs, the field executives can even view the documents offline. This class explains in detail how this process is performed and maintained throughout the construction process. We will be showcasing a project in Australia where BIM 360 Docs is helping users provide the latest construction documents to the field executives.

Deepak Maini

Deepak Maini (Sydney, Australia) is a qualified Mechanical Engineer with more than 21 years of experience working in the design industry. He is an Autodesk Certified Instructor and a Certified BIM 360 Consultant and has authored 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. He is currently working as the National Technical Manager - Named Accounts with Cadgroup Australia, an Autodesk Platinum Partner.



Deepak is a regular speaker at various conferences around the world and was awarded the “**Top Autodesk University Speaker**” two years in a row in **2018** and **2017** in the Instructional Demo category. He was also voted as the “**Top Speaker**” at the **Bluebeam XCON 2019** conference in Washington DC. Additionally, Deepak is also one of the “**Top Rated Speakers**” at various BILT conferences in ANZ and Asia.

Outside his full-time work, Deepak is a Guest Lecturer at the University of Technology Sydney (UTS) and the University of New South Wales (UNSW), two of the leading universities in Australia.

About this Handout

This handout is written to be used as a comprehensive document to set up a BIM 360 Docs project from scratch. It will be handy if you review the special Notes and Tips as they provide additional information about the topic being covered. The following are the topics that are covered in this handout:

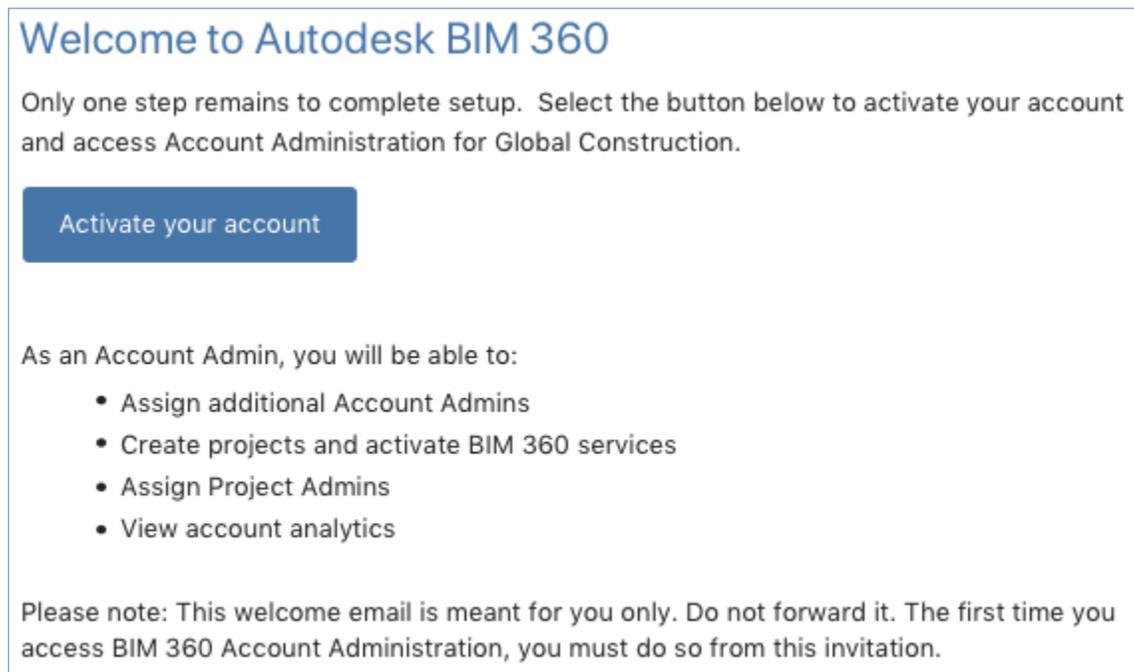
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Activating BIM 360 Account

When you subscribe to BIM 360 Docs, an Account Admin is nominated. This nominated Account Admin then receives an email from Autodesk that they can use to activate the BIM 360 Account. The following is the procedure for doing this:

1. Click on the Autodesk welcome email, which looks similar to the one shown below:

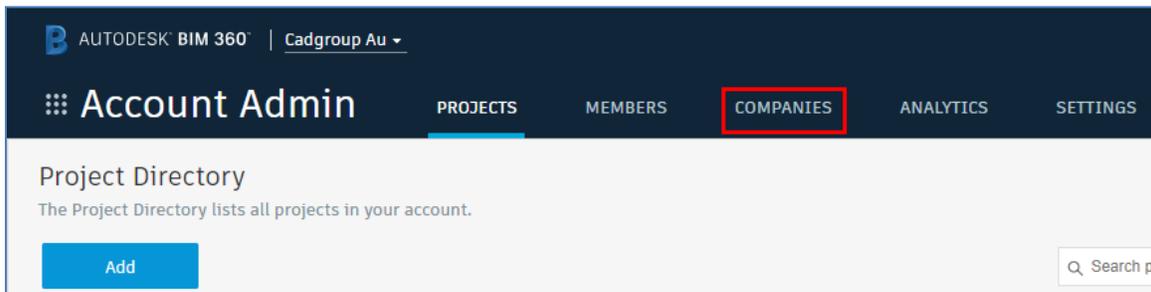


2. Click on **Activate your account** link in the email; you are taken to the <https://admin.b360.autodesk.com/login> page.
3. Log in using your Autodesk credentials and the BIM 360 Account is activated. You are now ready to add other users and create projects.

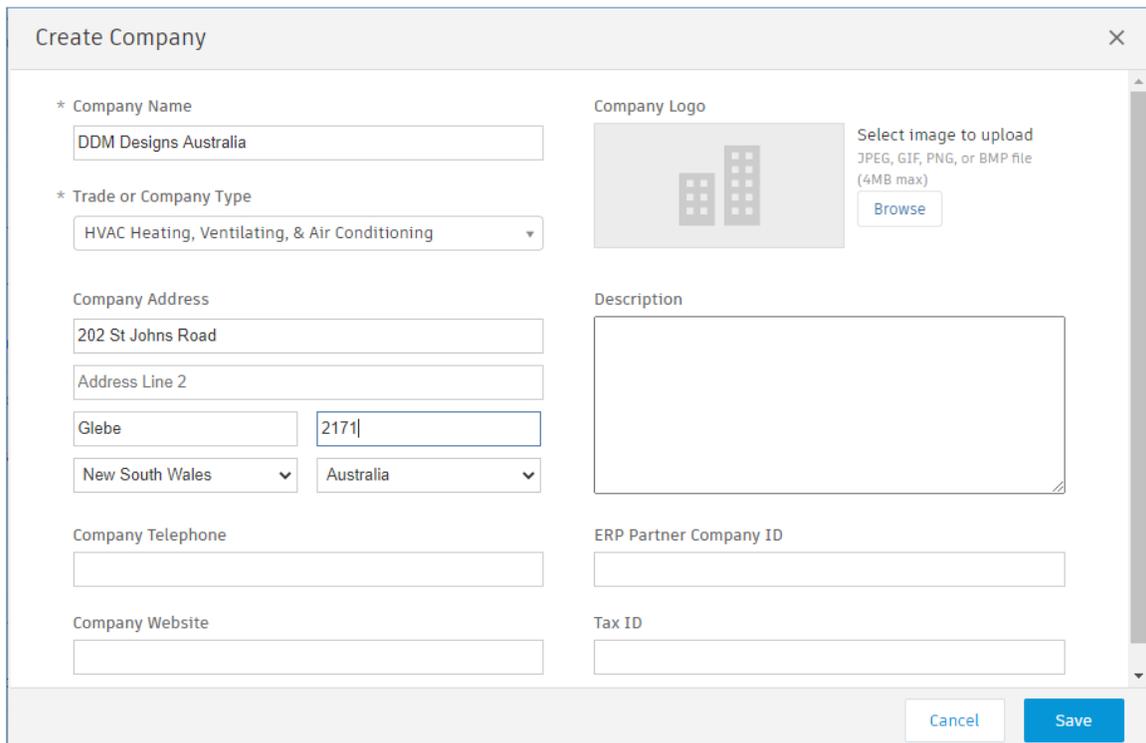
Adding Companies

Companies can be added to the BIM 360 Account either during the process of adding members or by themselves using the **COMPANIES** page. However, if you want to invite an Account Admin, at least one company needs to exist in the system for that to happen. The following is the procedure for adding companies to your account.

1. On the BIM 360 Account Admin page, click **COMPANIES**, as shown below:



2. On the **Company Directory** page, click **Add**; the **Create Company** window is displayed.
3. Enter all the details of the company you are creating, as shown in the image below.



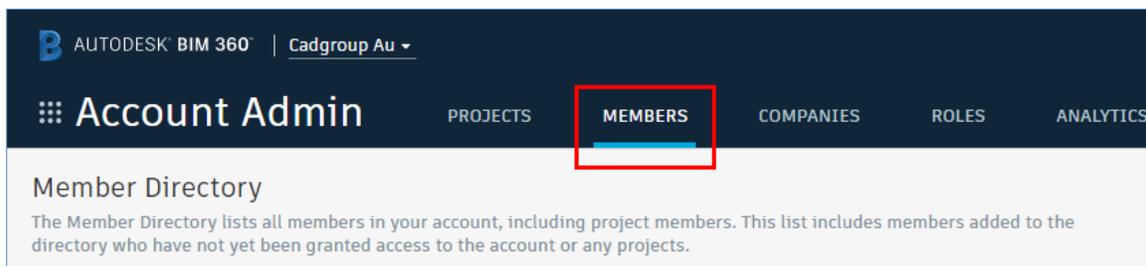
*Tip: All the fields with * are required. Any other field is optional.*

4. Click **Save**; the company is created and is listed in the **Company Directory** page.

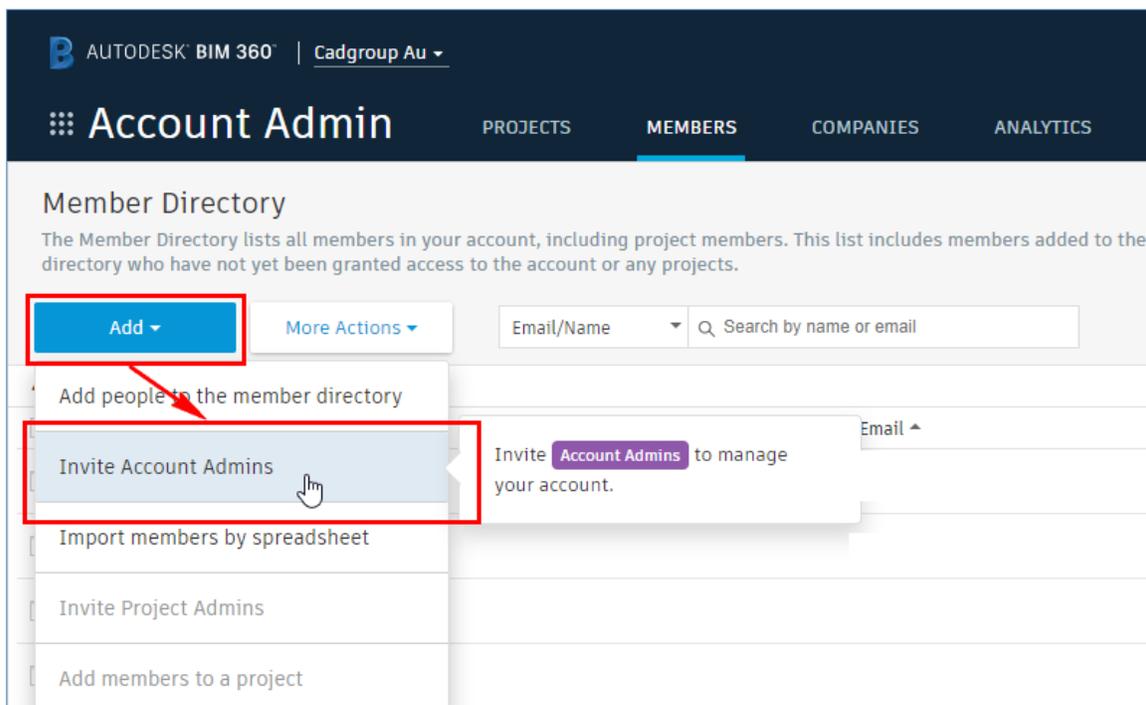
Adding Additional Account Admins (BIM Leads)

Generally, it is an IT Manager or an IT coordinator who is nominated as the Autodesk Software Account Admin. Therefore, they are the ones who get all the admin rights to the BIM 360 account. However, they may not necessarily be the one who would create BIM 360 Docs projects. Therefore, it is important that they add the BIM Team Leads of their company as the Account Admins so the BIM Team Leads can create and manage BIM 360 projects. The following is the procedure for adding additional account admins.

1. The original account admin needs to log on to the <https://admin.b360.autodesk.com/login> page using their Autodesk credentials.
2. On the Account Admin page, click on **MEMBERS**, as shown below:



3. Click **Add > Invite Account Admins**, as shown below:



4. In the Invite Account Admin window, enter the email address of all the account admin that you want to invite and then click Add.

5. Assign a default company and a default role to the new account admin. If the company does not exist, you can leave it blank.

Tip: The company and role of the users can be modified at any point in time, after adding them to the account.

6. Repeat steps 4 and 5 to add other users that need to be invited as the account admin.
7. Once all the users are added, click **Invite**, as shown below; the email invite is sent to the account admin users.

Invite Account Admin

To invite new Account Admins to manage your account, enter their email addresses, and select Account Admin in the Access Level dropdown. Account Admins will receive invitation emails with links to BIM 360 administration.

Invite Account Admins to manage your account.

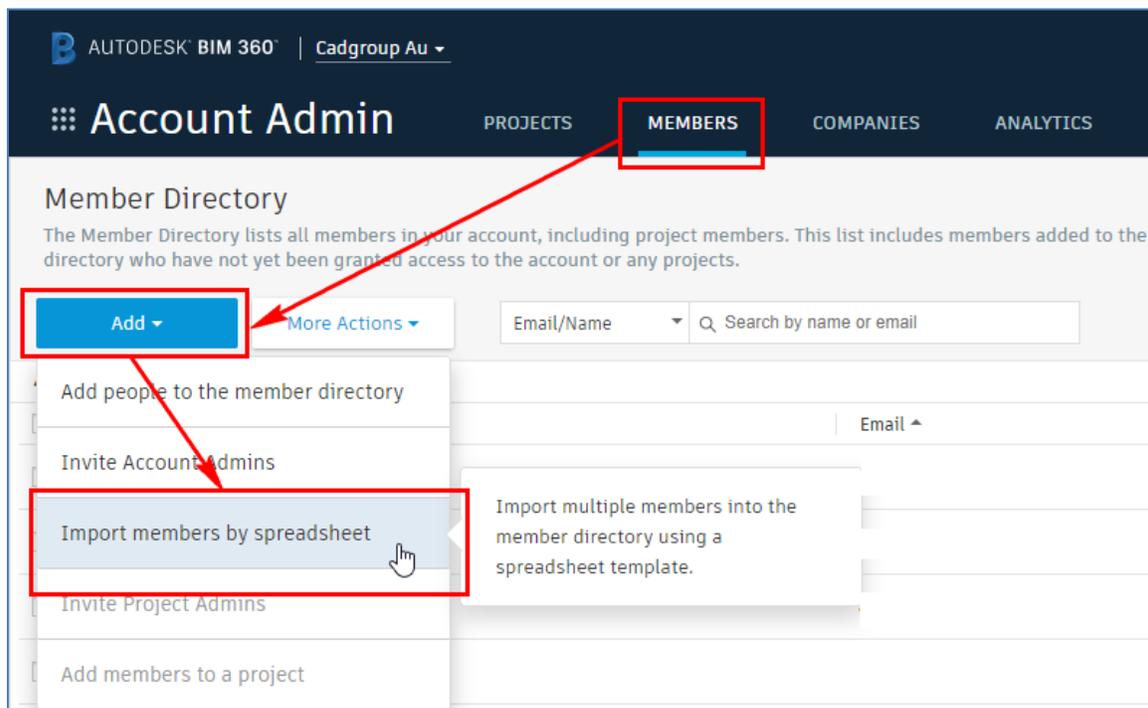
Email	*Default Company	Default Role	Access Level
dmaini@cadgroup.com.au	Cadgroup Aus	BIM Manager	Account Admin

Cancel
Invite

Adding Members to the Account Using Spreadsheet

BIM 360 allows the account admin to add members in bulk to your account using a spreadsheet. The following is the procedure for adding members using a spreadsheet.

1. On the **Account Admin** page, click **MEMBERS > Add > Import members by spreadsheet**, as shown below; the **Import Members** window is displayed.



2. In the **Import Members** window, click **Download the member list template**, as shown below; an Excel file is downloaded in the default **Downloads** folder of your machine.

Import Members

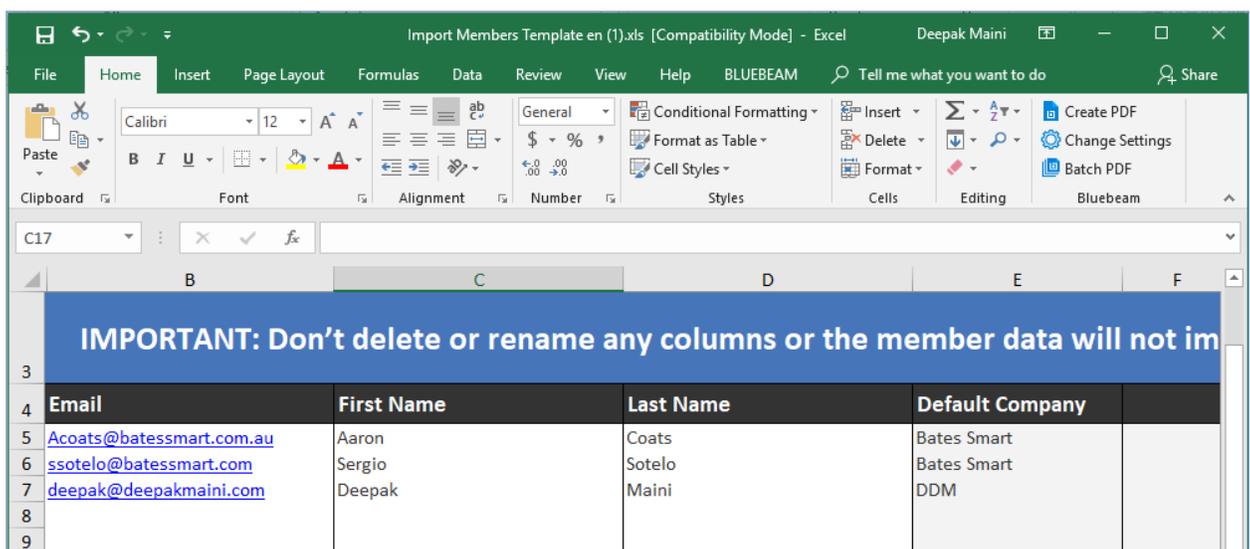
- 1 Create a member list in XLS format
Download the member list template and open it with Microsoft Excel.
 In the template, enter your member details, one member per row. Replace the example entries with your actual member details.
 Save the file as a XLS file.

- 2 Select a file to upload

3. Open the downloaded Excel spreadsheet.

It is important to note that you should not make any changes to any column in the spreadsheet. You only need to enter the email address, first name, last name, and the default company of the users.

4. Enter the details of the users to be added. The following figure shows the users and their details entered in the Excel spreadsheet.



IMPORTANT: Don't delete or rename any columns or the member data will not im				
Email	First Name	Last Name	Default Company	
Acoats@batesmart.com.au	Aaron	Coats	Bates Smart	
ssotelo@batesmart.com	Sergio	Sotelo	Bates Smart	
deepak@deepakmaini.com	Deepak	Maini	DDM	

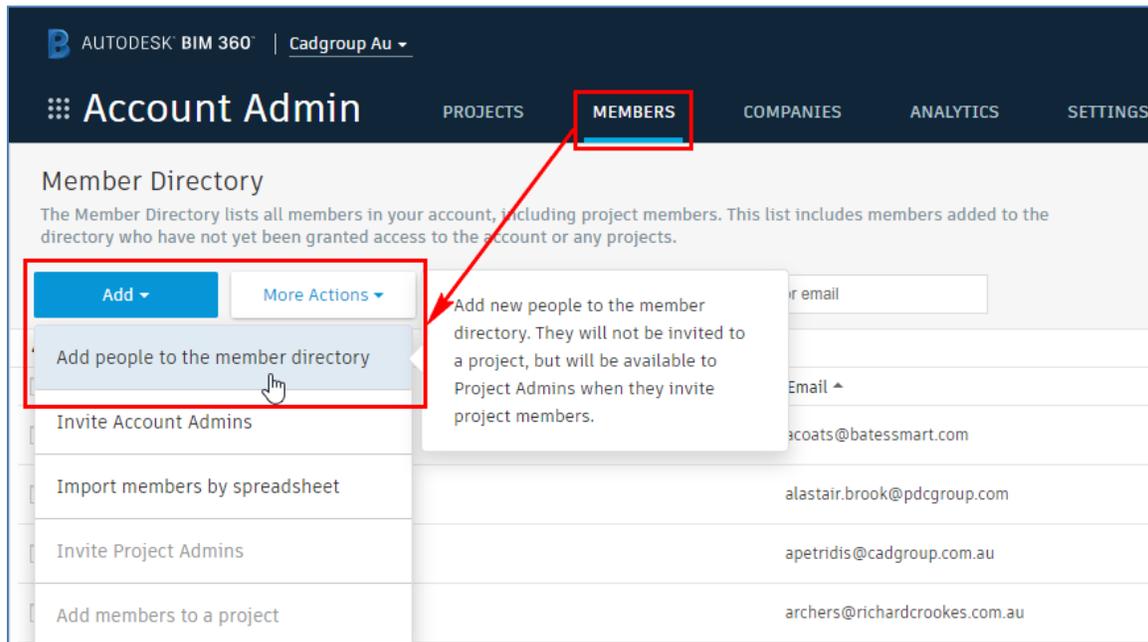
5. Save the spreadsheet.
6. Return to the **Import Members** window.
7. In this window, click on **Choose File** and then select the Excel spreadsheet in which you entered the user details.
8. Click **Start Import**; the process of importing the users will start. Once the users are imported, a message will be displayed in the **Import Members** window informing you about the number of members imported.
9. Click **Finish** in the window; all the added members are listed on the **Members Directory** page.

*Tip: You can click on any added member to go to that member profile page and then click **Edit** to edit the role, company, or access level of that user. Using the **Access level** area, you can also promote the user to the account admin role.*

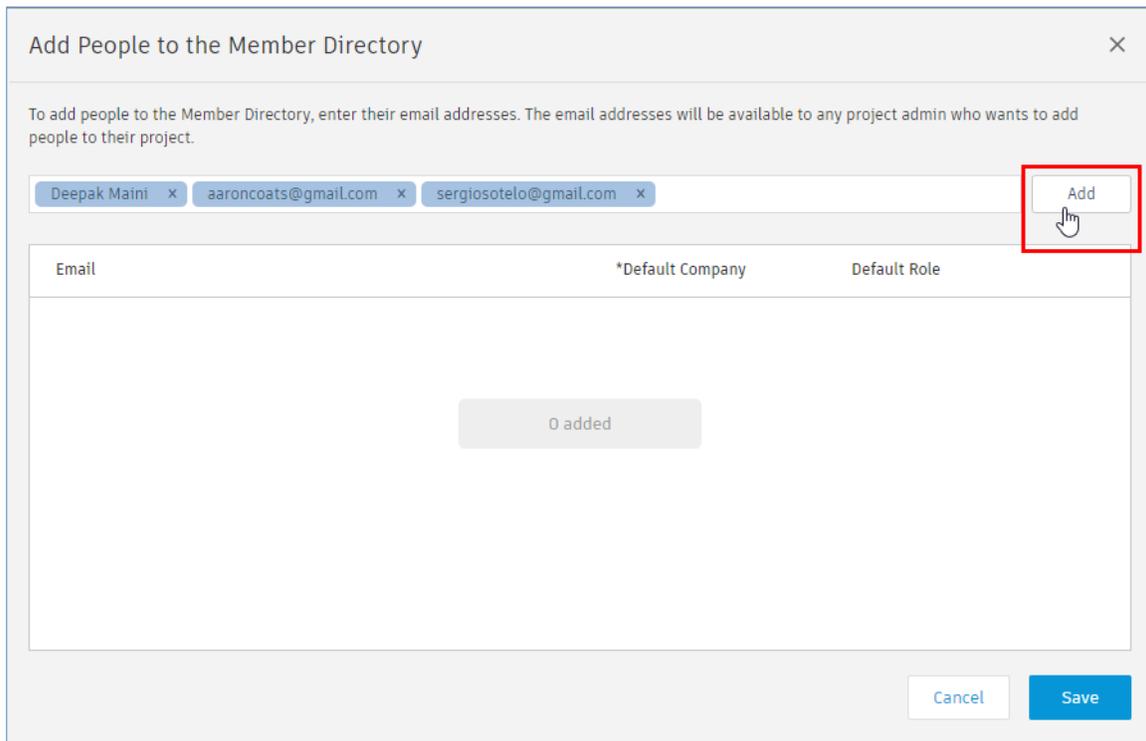
Manually Adding Members to the Account

The following is the procedure for manually adding members to the account.

1. On the **Account Admin** page, click **MEMBERS > Add > Add people to the member directory**, as shown below; the **Add People to the Member Directory** window is displayed.



2. Enter the email address of the member you want to add. You can add multiple email addresses separated by commas.
3. Once all the email addresses are entered, click **Add**, as shown below:



4. Assign the default company to all users. It is important to note that you will not be able to add users without a company assigned to them.

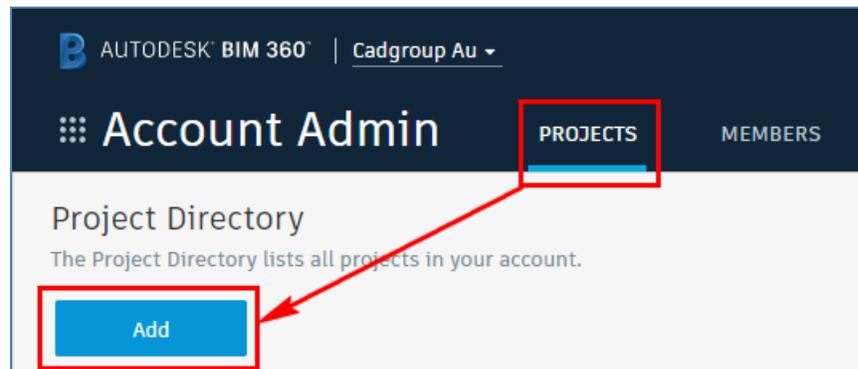
Tip: If the actual company of the user is not created yet, assign any existing company to the user. Once the user is added, add their company and then edit the user to change the company.

5. Define the default role for the users.
6. Click **Save** in the **Add People to the Member Directory** window; the new members are added and listed on the **Members Directory** page.

Adding a New BIM 360 Docs Project and Activating Services

As mentioned in the lecture, all admin activities for BIM 360 Docs projects are done through the unified account admin page. Once the project is added, you can activate the services to be used on that project. The following is the procedure for doing this:

1. From the **Account Admin > PROJECTS** page, click **Add**, as shown below; the **Create Project Profile** window is displayed.



2. Enter all the project related information in this window, as shown below. Note that the fields with * are mandatory.

Create Project Profile

* Project Name

 Project name is valid.

* Project Type

Construction Type

Project Value

 Project value is valid.

Contract Type

Project Start Date Project End Date

Project Job Number

Project Image

 JPEG, GIF, PNG, or BMP file (4MB max)

Project Address

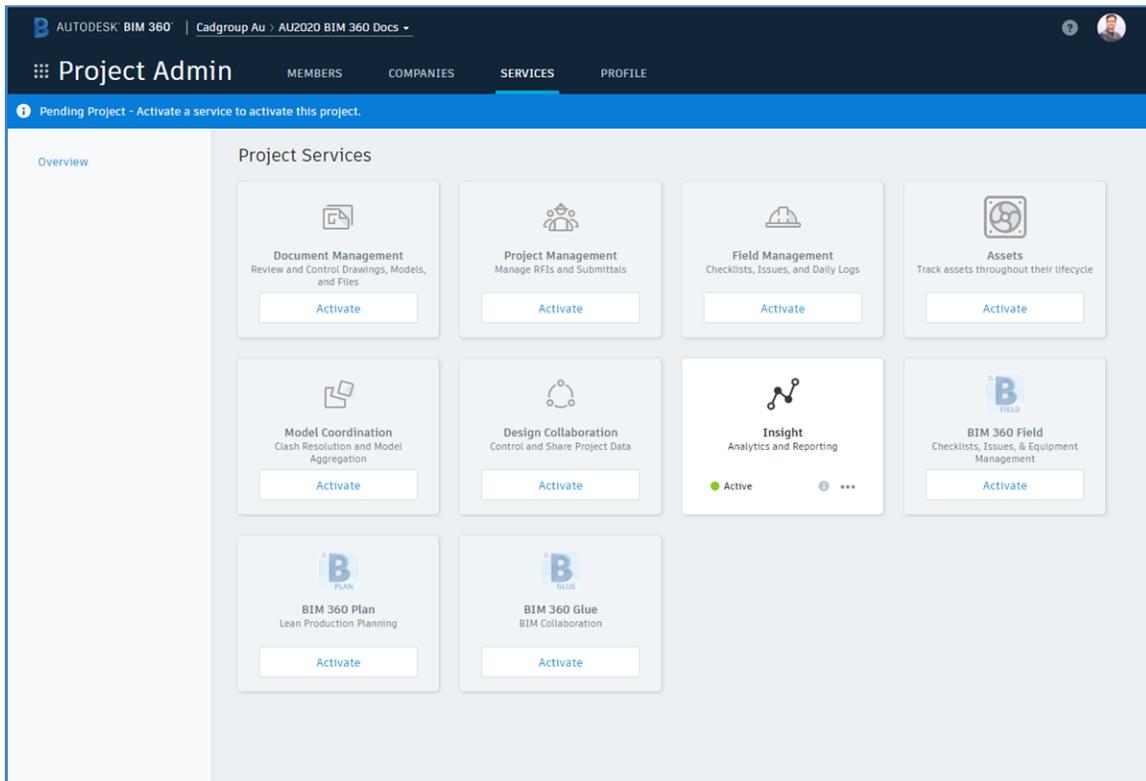
Project Time Zone

* BIM 360 Field Project Language

*Tip: If you enter the project address, the **Project Home** page will show the weather on the day at the project location.*

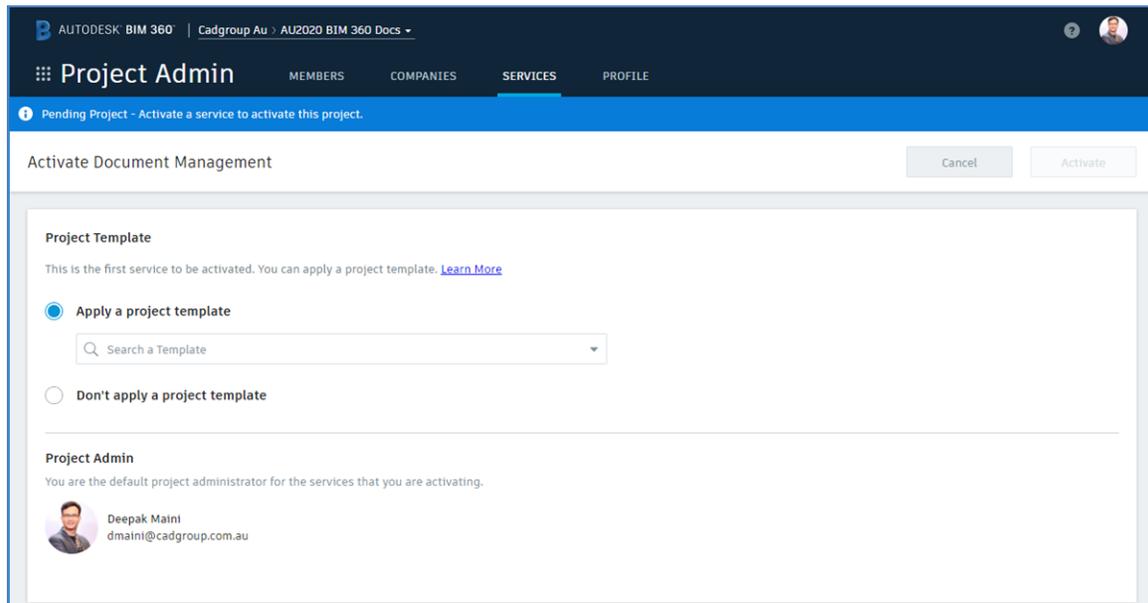
3. Scroll down in the **Create Project Profile** window and click **Save & continue**; the project profile is saved and you are taken to the **SERVICES** page, as shown below, where you can activate the services for this project.

*It is extremely important to note that the first service that needs to be activated on any BIM 360 project is the **Document Management** service.*



4. Click on **Activate** below the **Document Management** service; the **Activate Document Management** window is displayed.

*Tip: By default, the option to select a project template is selected while activating the **Document Management** service. If you use a project template, all the services from that project are automatically activated. However, if you don't have a project template, you can select the option to activate without a template and then manually activate the services.*



5. Select the **Don't apply a project template** option.
6. From the top right, click **Activate**; the **Activate without Template?** window is displayed prompting you to confirm that you want to activate the project without a template.
7. Click **Activate without a template** option; the process of activating the **Document Management** service starts. Also, the **Insight** service is automatically activated, as shown in the figure below.

*Tip: The user activating the **Document Management** service is automatically added as the **Project Admin**. In the following section, you will learn how to add additional members to the project.*

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Project Admin MEMBERS COMPANIES SERVICES PROFILE

Overview

Project Services

 Document Management Review and Control Drawings, Models, and Files ● Active ⓘ ... Activate	 Project Management Manage RFIs and Submittals Activate	 Field Management Checklists, Issues, and Daily Logs Activate	 Assets Track assets throughout their lifecycle Activate
 Model Coordination Clash Resolution and Model Aggregation Activate	 Design Collaboration Control and Share Project Data Activate	 Insight Analytics and Reporting ● Active ⓘ ... Activate	 BIM 360 Field Checklists, Issues, & Equipment Management Activate
 BIM 360 Plan Lean Production Planning Activate	 BIM 360 Glue BIM Collaboration Activate		

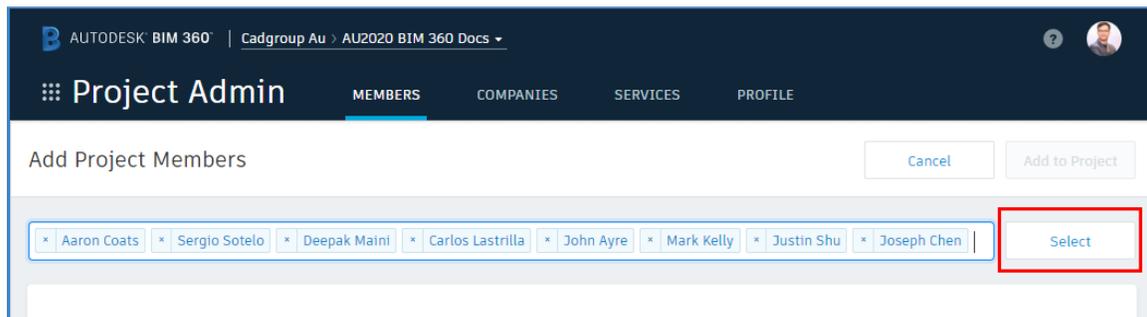
Adding Members to the Project

As mentioned earlier, the user activating the **Document Management** service is automatically added as the project admin. The following is the procedure for adding additional admins and non-admin members to the project.

1. From the **Project Admin > MEMBERS** page, click **Add**; the **Add Project Members** page is displayed.

*Tip: While adding the email addresses of the members, if they already exist in the account, you can select them from the list. However, if they do not exist in the account, you can type their complete email address and then press **ENTER** to add them.*

2. Add the emails of the member you want to add to the project.
3. Once all the members are listed, click **Select**, as shown below:



Once the members are added to the project, they will have their default companies assigned.

4. If required, change the companies of the user and then assign their role.

*Note: Most of the roles that have **Manager** in their name will automatically make the user project admin. You need to make sure you click on the Orange color **Project Admin** cogwheel to remove the project admin rights from the user.*

5. Click on the **Document Management** icon to give all the users access to this service, as shown in the figure below. Also, click on the **Project Admin** icon of any user who needs to be given admin rights, as shown in the figure below.

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Project Admin MEMBERS COMPANIES SERVICES PROFILE

Add Project Members Cancel Add to Project

Enter Names or Email Addresses Select

Name	Email	Company	Roles	Project Admin		
Aaron Coats	acoats@batesmart.com	Bates Smart	Architect			
Deepak Maini	deepak@deepakmaini...	Bates Smart	Construction Manager			
Carlos Lastrilla	clastrilla@cadgroup.co...	DDM Designs	Mechanical Engineer			
John Ayre	jayre@cadgroup.com.au	Cadgroup Au	HVAC Engineer			
Mark Kelly	mkelly@cadgroup.com...	Cadgroup Au	Electrical Engineer			
Justin Shu	jshu@cadgroup.com.au	Cadgroup Au	Architect			
Joseph Chen	jchen@cadgroup.com.au	Cadgroup Au	Civil Engineer			

- On the top right, click **Add to Project**; the selected members are added to the project and an email notification is sent to them.

On doing so, these members are displayed on the **MEMBERS** page of the project, as shown below. Also, the **Filters** area on the right side of the page shows the members by service.

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Project Admin MEMBERS COMPANIES SERVICES PROFILE

Project Members

Project Members lists all members of your project. This list includes pending members who have been invited to services but not yet activated their accounts as well as inactive members who were disabled by an account admin.

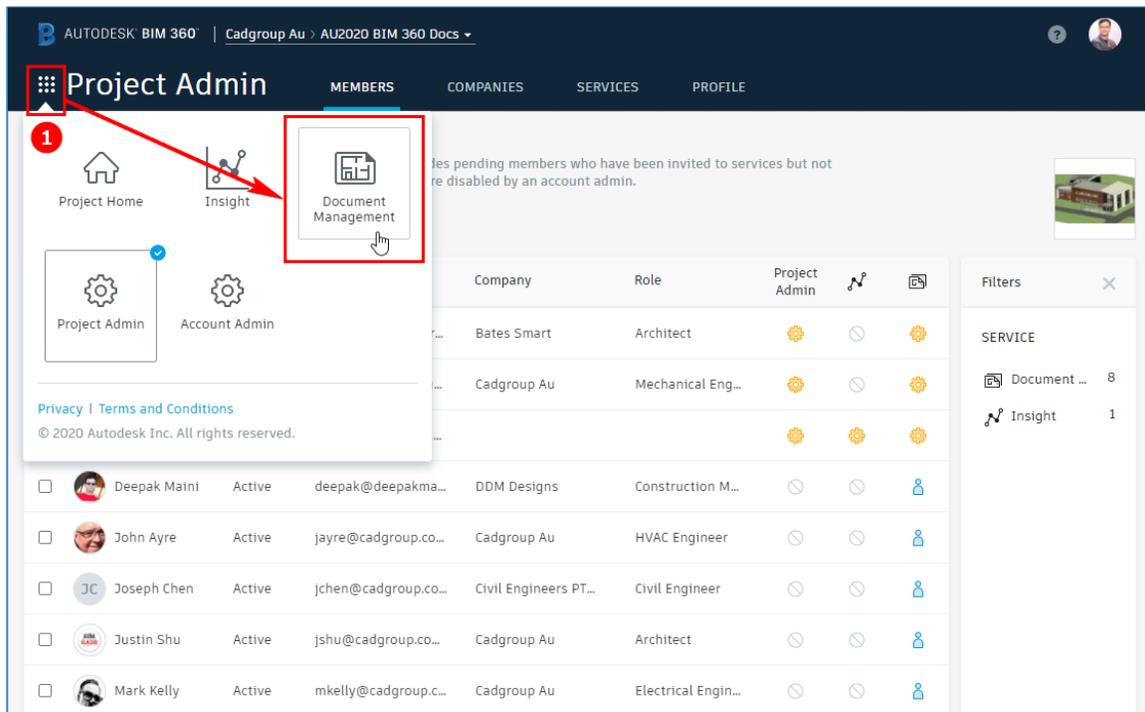
[Add](#) 

<input type="checkbox"/>	Name	Status	Email	Company	Role	Project Admin			Filters
<input type="checkbox"/>	 Aaron Coats	Active	acoats@batessmar...	Bates Smart	Architect				SERVICE
<input type="checkbox"/>	 Carlos Lastrilla	Active	clastrilla@cadgrou...	Cadgroup Au	Mechanical Eng...				 Document ... 8
<input type="checkbox"/>	 Deepak Maini	Active	dmaini@cadgroup...						 Insight 1
<input type="checkbox"/>	 Deepak Maini	Active	deepak@deepakma...	DDM Designs	Construction M...				
<input type="checkbox"/>	 John Ayre	Active	jayre@cadgroup.co...	Cadgroup Au	HVAC Engineer				
<input type="checkbox"/>	 JC Joseph Chen	Active	jchen@cadgroup.co...	Civil Engineers PT...	Civil Engineer				
<input type="checkbox"/>	 Justin Shu	Active	jshu@cadgroup.co...	Cadgroup Au	Architect				
<input type="checkbox"/>	 Mark Kelly	Active	mkelly@cadgroup.c...	Cadgroup Au	Electrical Engin...				

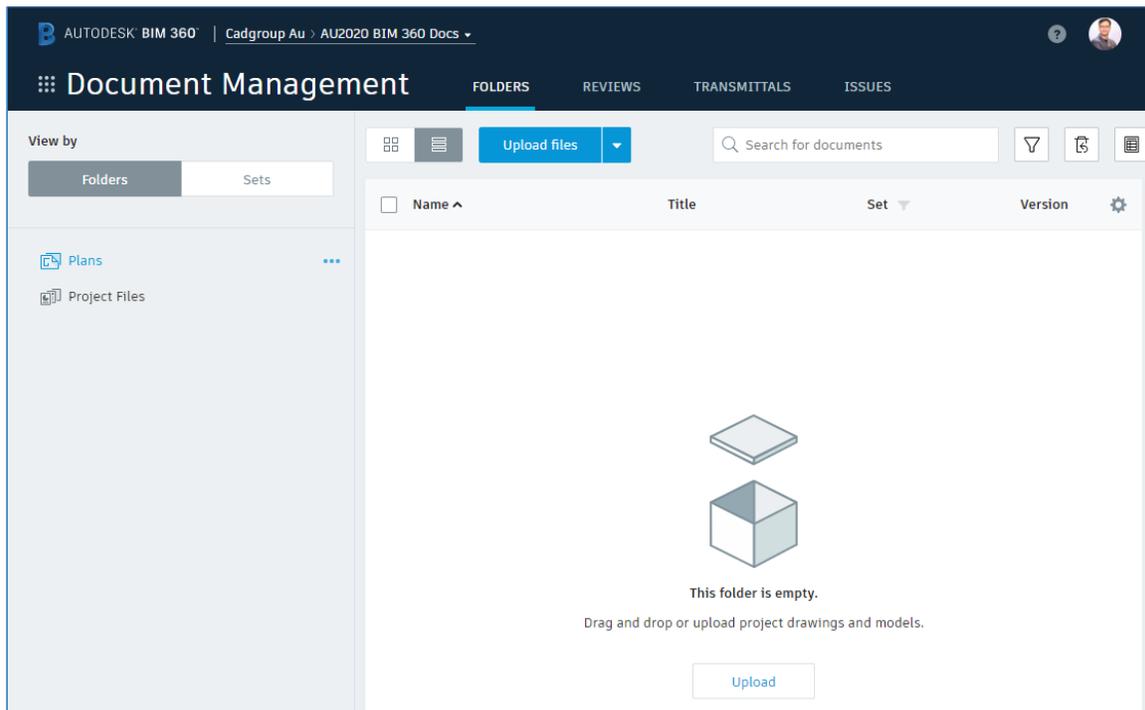
Reviewing the Document Management Interface

Before you start adding folders in Document Management, it is important for you to understand its interface, mainly the **Plans** and **Project Files** areas.

1. Click on the Module Selector, labeled as **1** in the figure below, and then click **Document Management**.



On doing so, the Document Management interface is activated with the **Plans** area active, as shown in the figure below.



Before you proceed any further, it is important to understand these two areas and the workflows for these areas.

Plans Area

As the name suggests, this area is used to manage the latest set of construction plans. Because the plans are in 2D format, if you upload a Revit model in this area, all its published 2D views and sheets, along with the 3D views, are automatically extracted and made available for review and markup. During this extraction process, the Titleblock information, such as sheet number, sheet title, and so on from the Revit sheets is also extracted. If you upload multi-sheet PDF files in this area, each sheet of the PDF file is extracted and made available for review and markup. However, the Titleblock information from the PDF sheets is extracted manually by running Optical Character Recognition (OCR) during the upload process. This area supports viewing of Revit, AutoCAD, DWF, PDF, and IFC file formats.

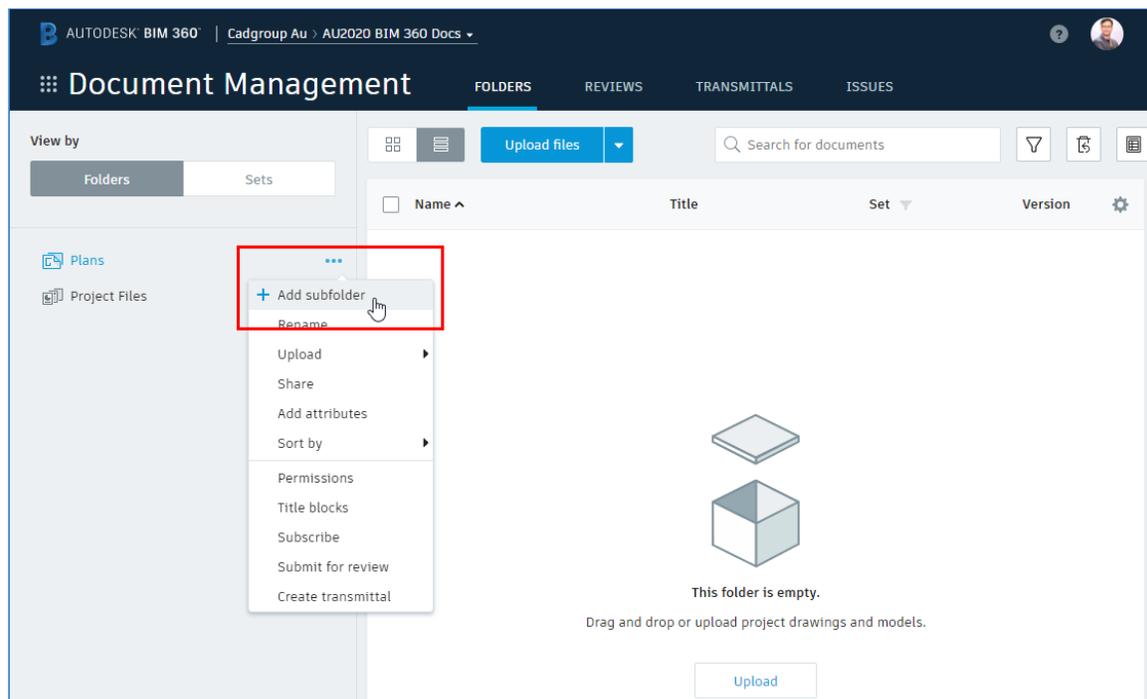
Project Files Area

This area is used to upload federated project models, such as Navisworks NWD files, project specs, spreadsheets, photos, and so on. In addition to the file formats supported by the **Plans** area, this area supports viewing of NWD, NWC, 3DS Max, Sketchup, and so on. It is important to note that if you upload a Revit or PDF file in this area, their sheets are not extracted.

Creating Folders in the Plans Area

As mentioned earlier, the **Plans** area automatically extracts the Sheets of the Revit files and displays them in the interface for review and markup. Therefore, if you need to upload Revit files, it is better to do that in the **Plans** area. The following is the procedure for creating folders in this area.

1. Click [...] on the right of **Plan** and select **Add subfolder** from the shortcut menu, as shown below; a new folder is added.



2. Rename the folder to the required name.
3. Repeat these steps to add additional folders in the **Plans** area. In the figure below, there are folders created for various disciplines to upload their respective Revit files. Additionally, there is a folder created for PDF files.

*Tip: As mentioned earlier, if you upload a multi-sheet PDF file in the **Plans** area, each sheet of that PDF file will be extracted and displayed as individual sheets in the folder.*

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Document Management

FOLDERS REVIEWS TRANSMITTALS

View by: **Folders** Sets

Upload files Showin... Search for

<input type="checkbox"/>	Name ^	Title
<input type="checkbox"/>	Architecture	--
<input type="checkbox"/>	Interiors	--
<input type="checkbox"/>	PDFs	--
<input type="checkbox"/>	Structure	--

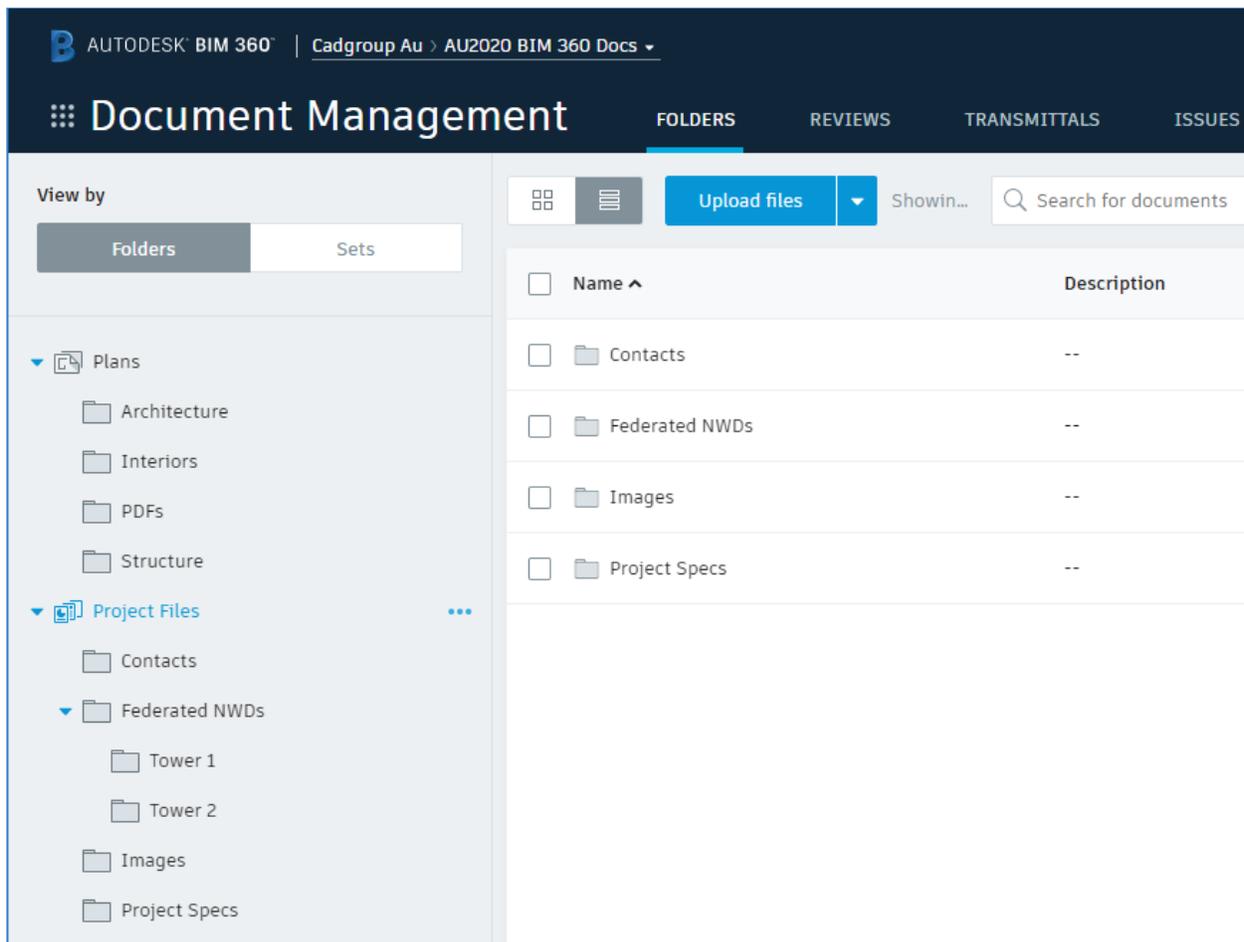
Plans

- Architecture
- Interiors
- PDFs
- Structure
- Project Files

Creating Folders in the Project Files Area

As mentioned earlier, the **Project Files** area is used to upload federated Navisworks files as well as project specs and documents. The following is the procedure for creating folders in this area.

1. Click [...] on the right of **Project Files** and select **Add Subfolder** from the shortcut menu, as shown in the section above; a new folder is added.
2. Rename the folder to the required name.
3. Repeat these steps to add additional folders in this area. The following figure shows various folders created in this area.



The screenshot shows the Autodesk BIM 360 Document Management interface. The breadcrumb path is "Cadgroup Au > AU2020 BIM 360 Docs". The main navigation bar includes "Document Management", "FOLDERS", "REVIEWS", "TRANSMITTALS", and "ISSUES". The "FOLDERS" tab is active. On the left, a tree view shows the folder structure under "Project Files":

- Plans
 - Architecture
 - Interiors
 - PDFs
 - Structure
- Project Files (selected)
 - Contacts
 - Federated NWDs
 - Tower 1
 - Tower 2
 - Images
 - Project Specs

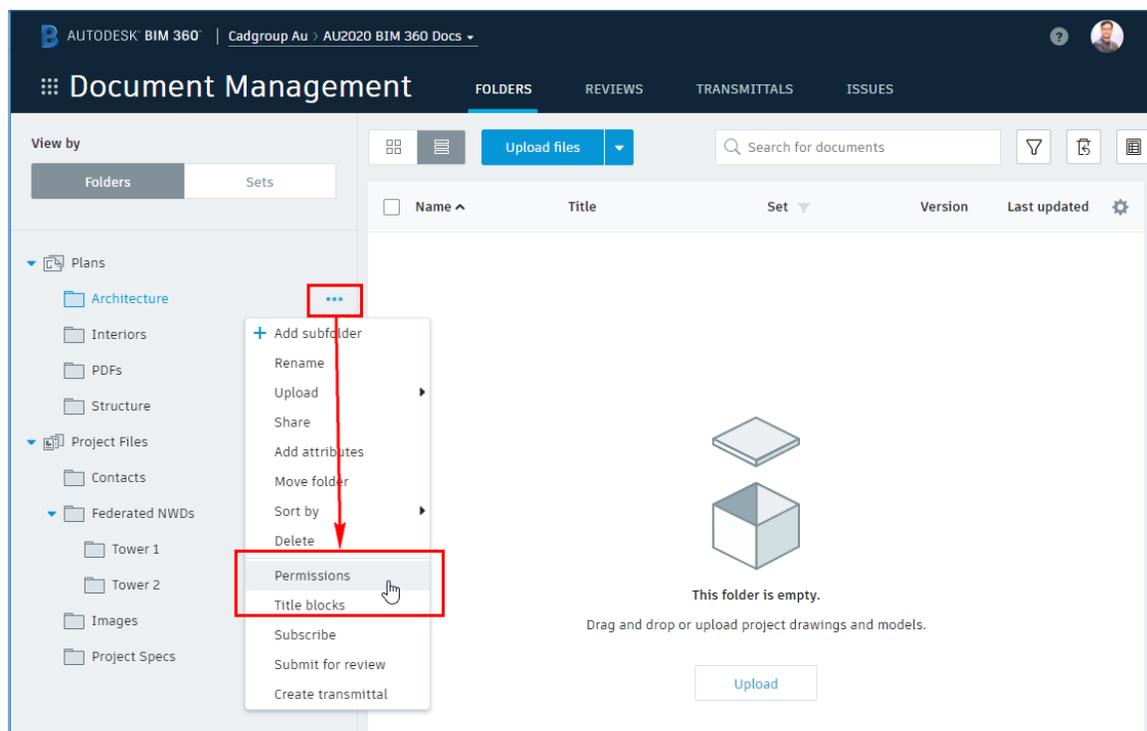
On the right, a table displays the folders:

Name ^	Description
Contacts	--
Federated NWDs	--
Images	--
Project Specs	--

Setting Up Folder Permissions

The folder permissions in the Document Management interface work Top-down. What this means is that if you set the permission of the top-level folder for a user, all the sub-folders will be applied the same level of permissions for that user. Therefore, it is important that you specify the right level of permission for the user to the right folder. It is strongly recommended that you go bottom-up on the folders while setting user permissions to avoid users getting permissions to wrong folders. The following is the procedure of setting folder permissions.

1. Click [...] on the right of the folder that you need to provide the permission for and select **Permissions** from the shortcut menu, as shown below; the **Folder Settings > Permissions** page is displayed.



Before you assign permissions to the members, it is important for you to understand various permission levels. The following are the level of permissions that can be assigned for the folders.

View Only: This permission level allows the user to view the documents in the folder and add markups and issues to them. However, the user cannot upload any data in that folder.

View + Download: This permission level allows the user to view and download the documents in the folder and add markups and issues to them. However, the user cannot upload any data in that folder.

Upload-only: This permission allows the member to upload the data in the folder, but not view or access any data from the folder. This type of permission can be handy when you create folders for users to submit their bids to the project or upload their expenses.

View + Download + Upload: This permission level allows the user to view, download, and upload the documents in the folder and add markups and issues to them.

View + Download + Upload + Edit: This permission level allows the users to edit the documents in the folder, along with the **View + Download + Upload** permissions.

Folder Control: This permission level provides all the permissions of the **View + Download + Upload + Edit** level, along with the permission to manage members and their permissions to this folder. Additionally, the user with this permission level can create title blocks for documents in that folder.

2. In the list at the top in the **Permissions** area, enter a company name, a role, the name of the user, or their email address.

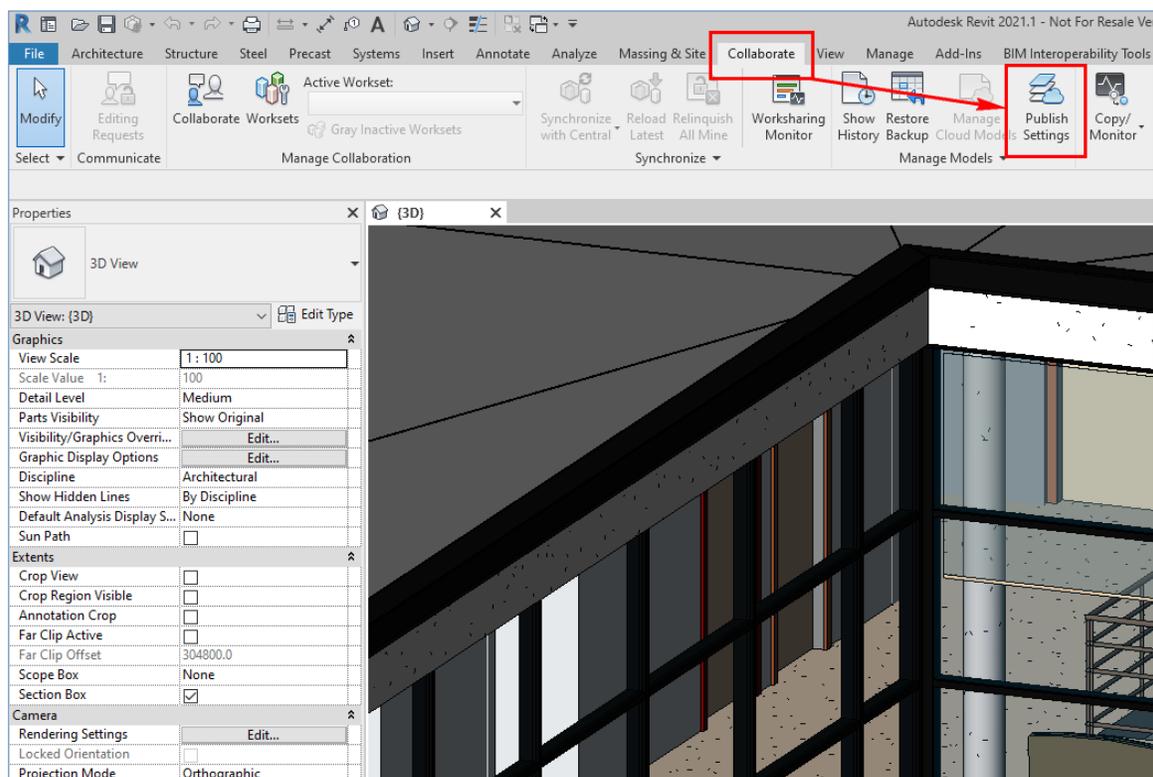
Note: If you enter the email address of the member who is not already added to the project, they will be invited via an email once you provide them the permission to the folder.

3. Select the permission level for the added user, role, or company.
4. Click **Add**.
5. Repeat the process for the rest of the folders in the **Plans** and **Project Files** areas.

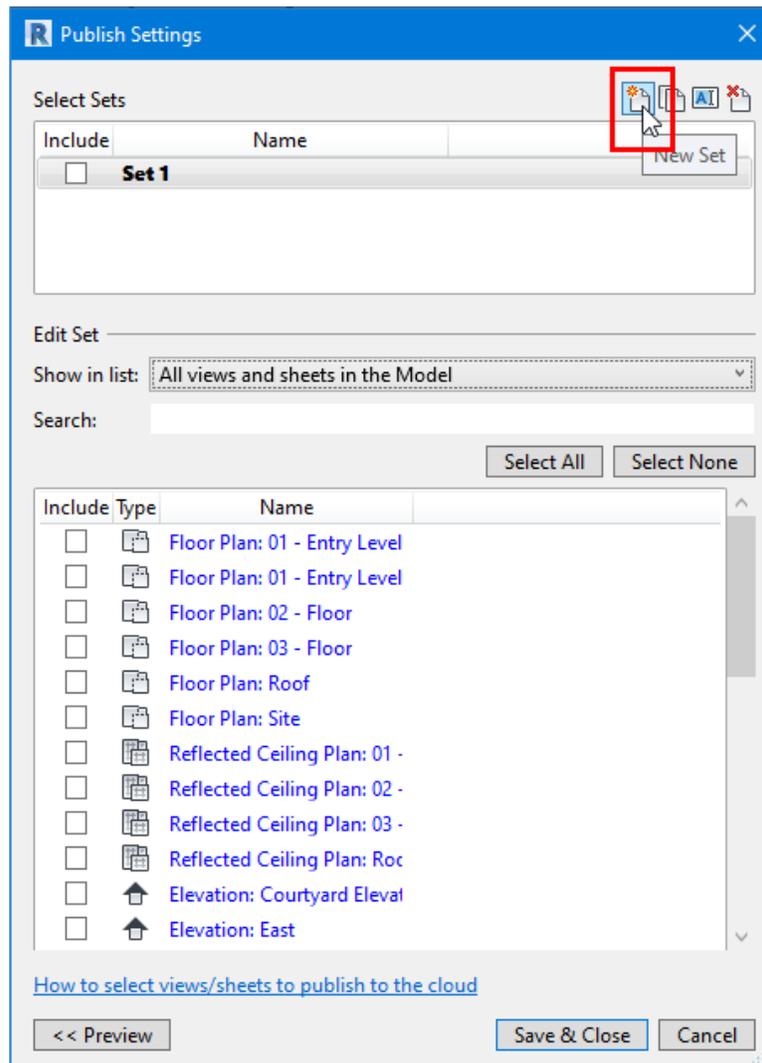
Creating Publish Sets in Revit Files for Uploading into the Plans Area

Generally, Revit files contain a large number of views and sheets. However, you may not want to extract all those sheets and views in the Document Management interface for viewing and marking up. Therefore, you can create publish sets with only the required views and sheets before you upload the files. The following is the procedure for doing this.

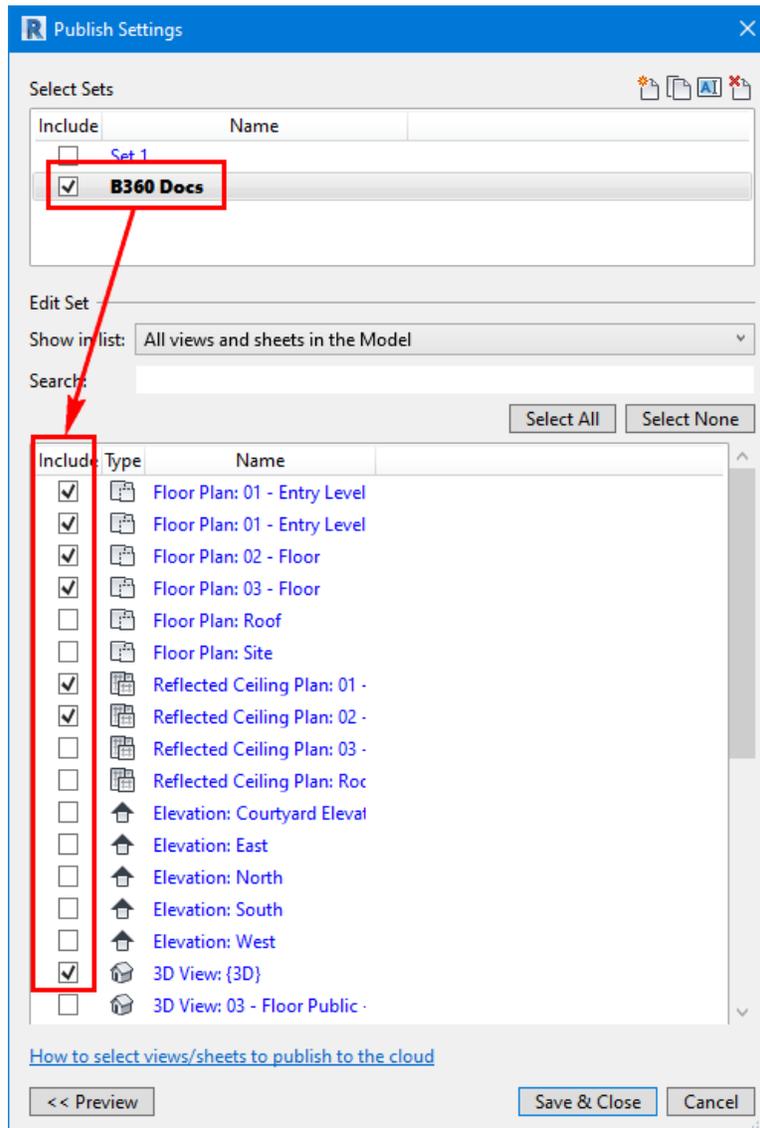
1. Open the Revit file.
2. From the **Collaborate** tab, click **Publish Settings**, as shown below; the **Publish Settings** dialog box is displayed.



3. In the **Publish Settings** dialog box, click **New Set**, as shown below; the **New Set** dialog box is displayed.



4. Enter the name of the set in the **New Set** dialog box and then click **OK**; you are returned to the **Publish Settings** dialog box and the new set is highlighted.
5. Select the check box on the left of the new set.
6. Select the sheets that you want to be made available in BIM 360 Docs. The following figure shows the 3D view and sheets selected.



7. Click **Save & Close** in the **Publish Settings** dialog box.

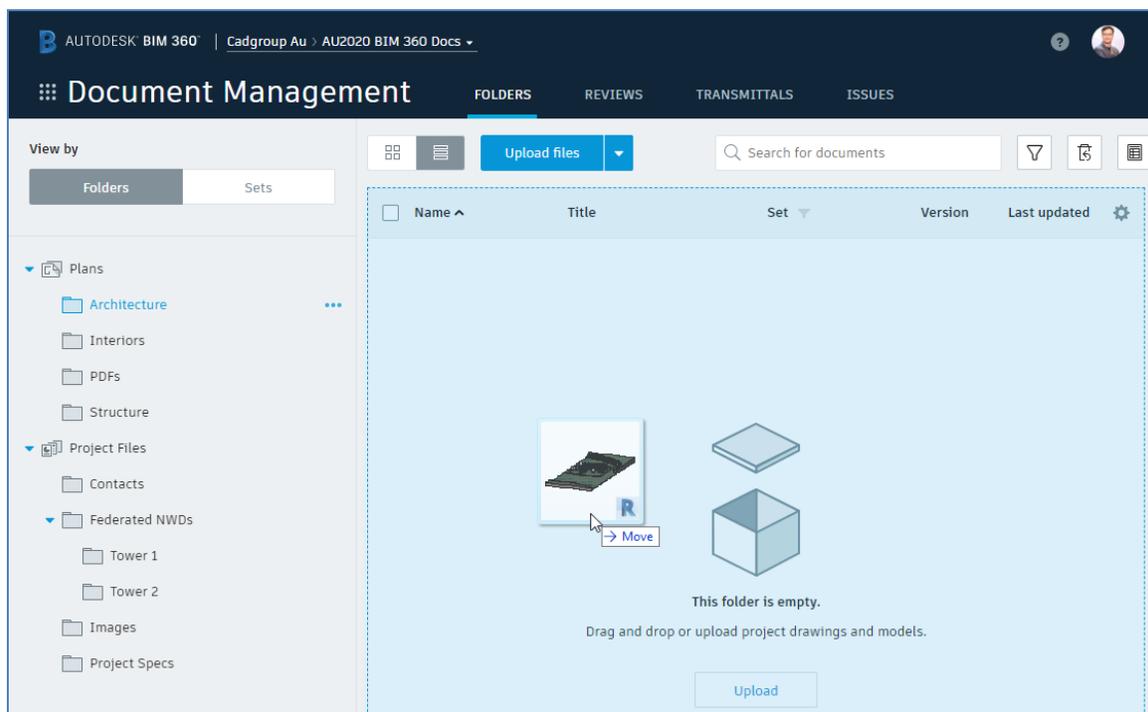
This file is now ready to be uploaded on BIM 360 Docs.

8. Save and close the Revit file.

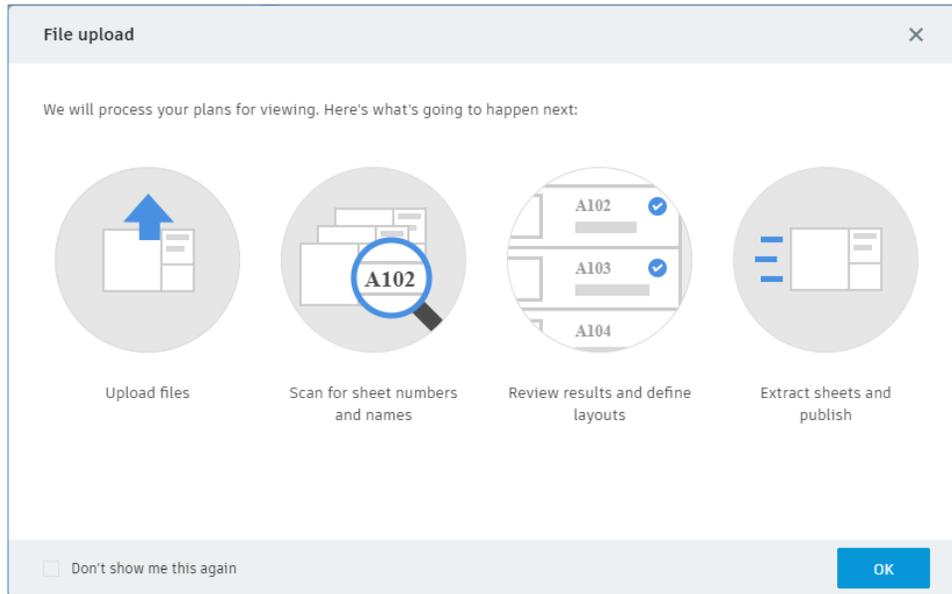
Uploading Revit Files in the Plans Area

As mentioned earlier, when you upload Revit files in the **Plans** area, the sheets of the file are automatically extracted and are made available for viewing and marking up in the Document Management interface. The following is the procedure for doing this.

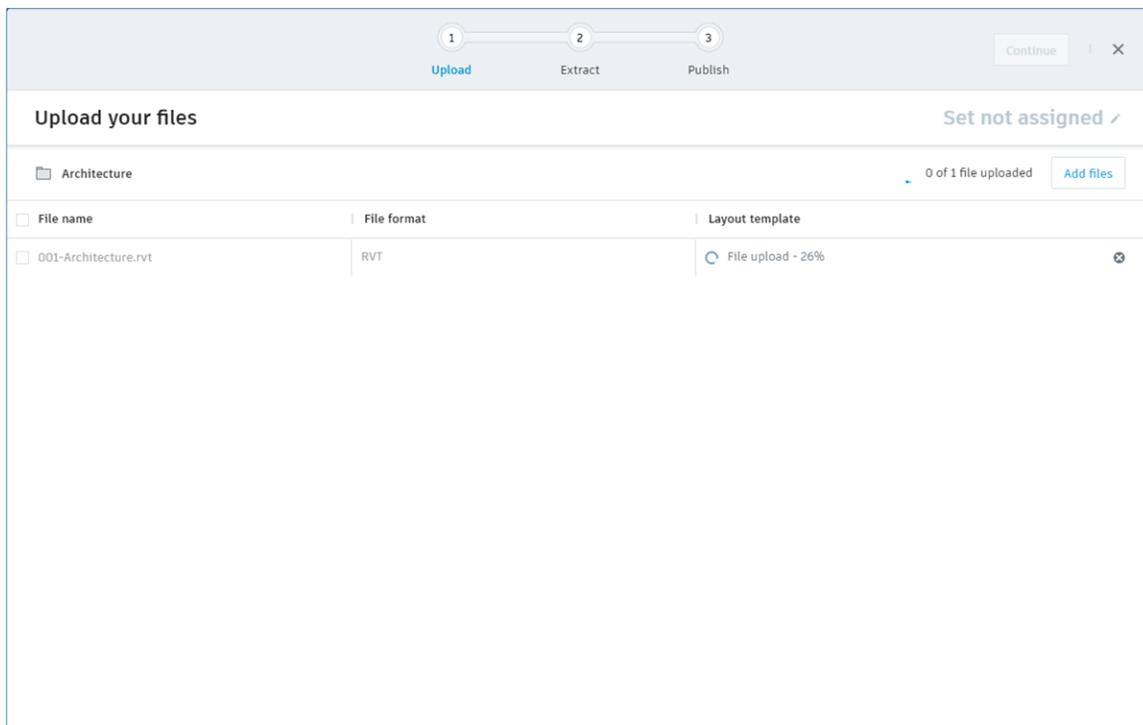
1. In the **Plans** area of the Document Management interface, select the folder in which you want to upload the Revit file.
2. Drag and drop the Revit file into the selected folder. The figure below shows a file being dragged and dropped into the **Architecture** folder in the **Plans** area.



On doing so, the **File Upload** window is displayed, as shown below. This window informs you that uploading files and extracting sheets is a four-step process.



3. Click **OK** in the **File Upload** window; the process of uploading the **Upload your files** window is displayed and the file upload starts, as shown in the figure below.



Once the file is uploaded, the **Continue** button on the top right of this window becomes active.

4. From the top right of the **Upload your files** window, click **Continue**; the process of extracting the sheets will start.

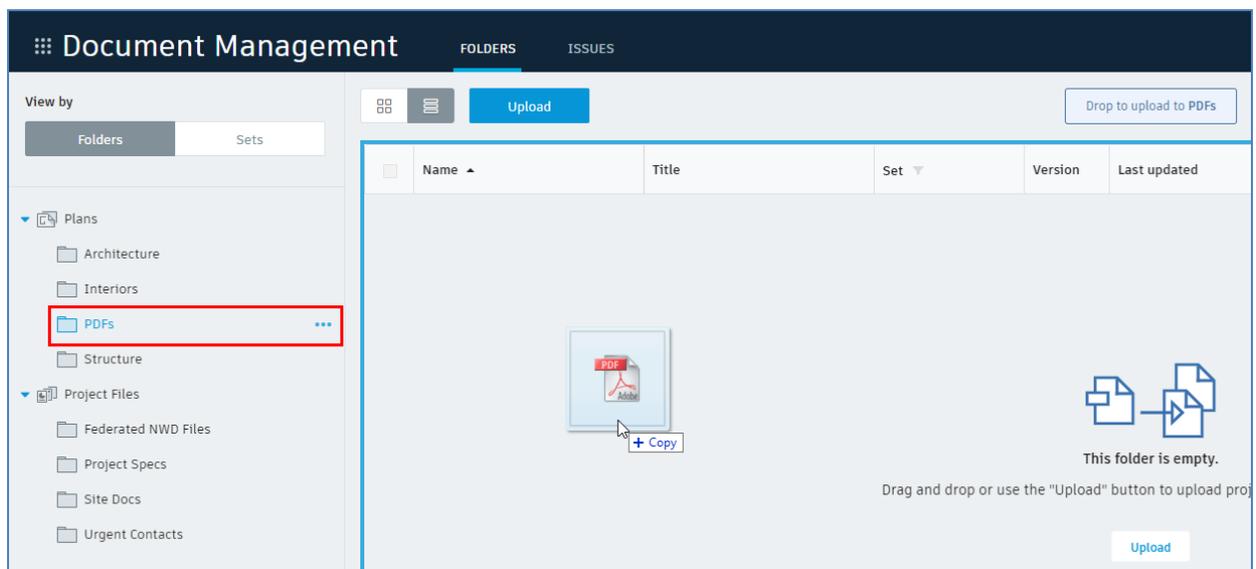
At this stage, you can click the ↗ symbol on the top right of the **Processing your document** window to navigate away from this window and upload more files. Once the sheets are extracted, you will be notified in an email about it. It is important to note that

Once the sheets are extracted, they will be listed in the selected folder, along with the 3D view, as shown in the figure below.

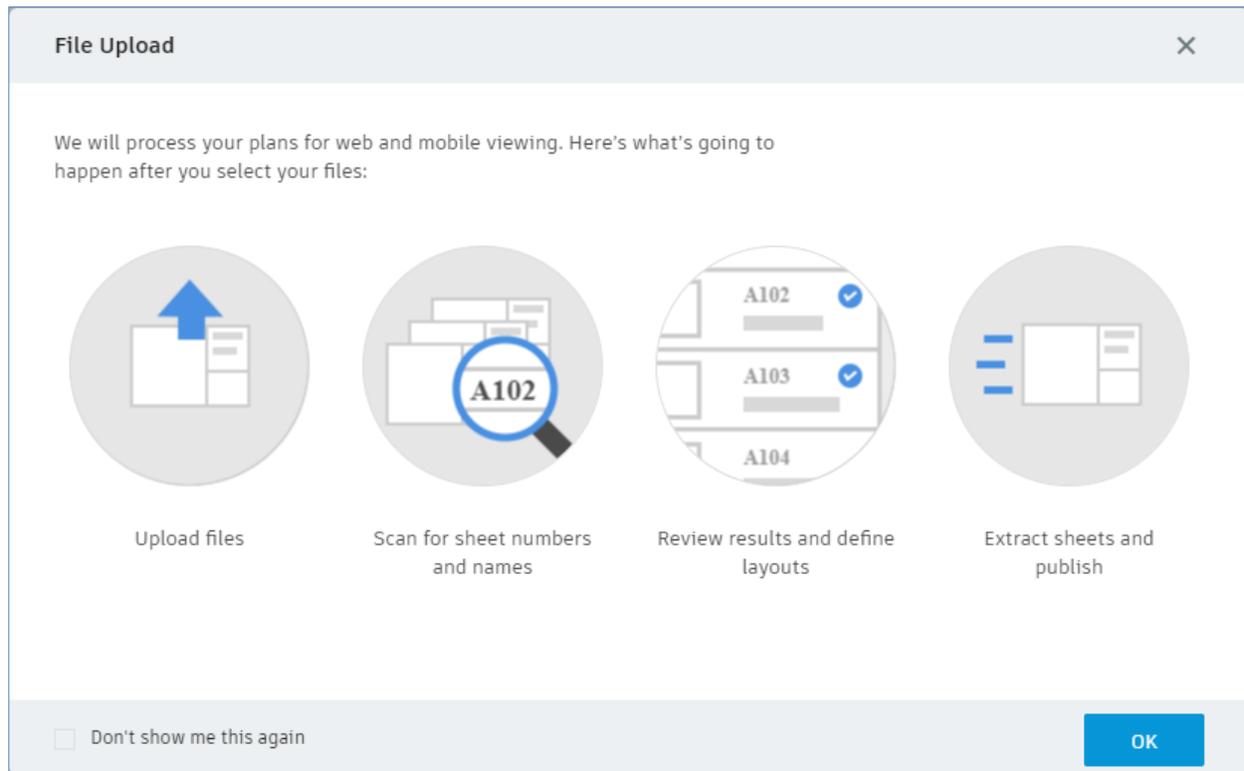
Uploading Multi-sheet PDF File in the Plans Area

As mentioned earlier, when you upload a multi-sheet file in the **Plans** area, all the sheets are automatically extracted and are made available for viewing and marking up in the Document Management interface. You are also able to run Optical Character Recognition (OCR) to extract the information from the title block of the PDF file. The following is the procedure for doing this.

1. In the **Plans** area of the Document Management interface, select the folder in which you want to upload the multi-sheet PDF file.
2. Drag and drop one or multiple PDF files, as shown below.



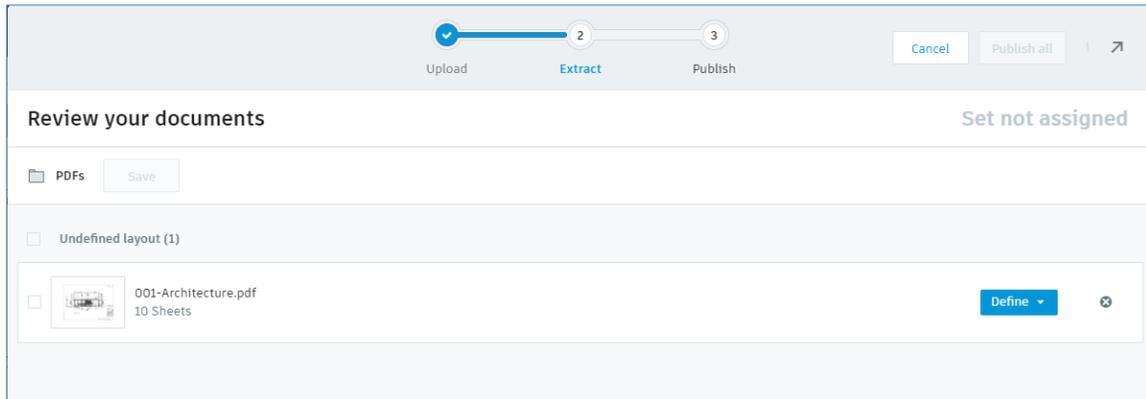
On doing so, the **File Upload** window is displayed, as shown in the figure below, informing you that uploading the PDF files is a four-step process.



3. Click **OK** in this window; the **Upload your files** window is displayed showing you the progress of the upload.
4. Once the upload process is complete, click **Continue** from the top right in the **Upload your files** window; the process of extracting sheets from the PDF file starts.

At this stage, you can click the ↗ symbol on the top right of the **Processing your files** window to navigate away from this window and upload more files. Once the sheets are extracted, you will be notified in an email about it.

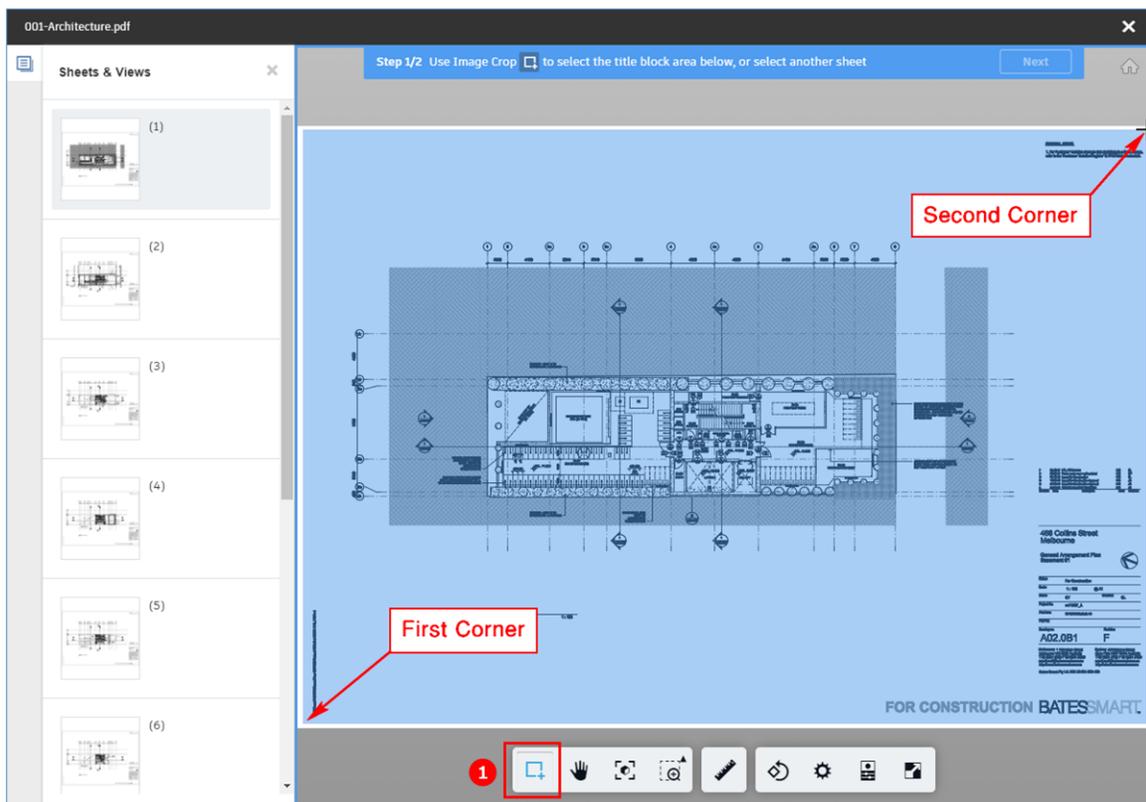
Once the process of the files is complete, the **Review your documents** window is displayed, as shown below. This window allows you to define the layout and title block information.



5. Click **Define > Define** on the right of the PDF document name; the extracted sheets are displayed in the thumbnail preview and the first sheet is displayed on the screen. Also, the first step of extracting the title block information starts.

In this step, you need to define the extent of the title block of the sheet using the **Image Crop** button in the toolbar at the bottom of the window.

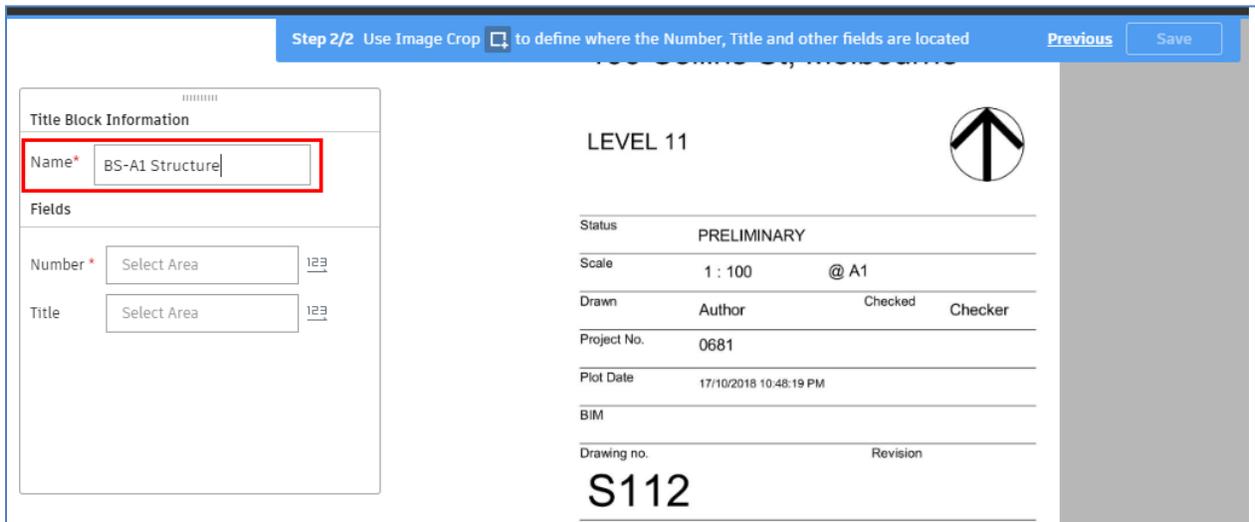
6. Using the **Image Crop** tool, labeled as **1** in the figure below, drag two opposite corners to define the extents of the title block.



- Once you have defined the extents of the title block, click **Next** from the top of the sheet; the processing of the title block starts.

Once the process is completed, the second step starts in which you need to define the region of the title block from where you can enter the **Name** of the title block and then extract the sheet **Number** and **Title** by dragging boxes.

- Using the **Zoom** and **Pan** tools available at the bottom of the window, zoom to the area of the title block where you can extract the above-mentioned information from.
- In the **Title Block Information > Name** field, enter the name of the title block as shown below.



The screenshot shows a software interface with a blue header bar containing the text "Step 2/2 Use Image Crop [icon] to define where the Number, Title and other fields are located" and buttons for "Previous" and "Save".

On the left, a "Title Block Information" panel is visible. The "Name*" field contains the text "BS-A1 Structure" and is highlighted with a red border. Below it, the "Fields" section contains "Number*" and "Title" fields, both with "Select Area" buttons and a magnifying glass icon.

On the right, a title block layout is shown. At the top, it says "LEVEL 11" next to a circular arrow icon. Below this is a table of metadata:

Status	PRELIMINARY		
Scale	1 : 100	@	A1
Drawn	Author	Checked	Checker
Project No.	0681		
Plot Date	17/10/2018 10:48:19 PM		
BIM			
Drawing no.	Revision		

At the bottom of the title block, the text "S112" is displayed in a large font.

- Click on the field on the right of the **Number** box; the **Image Crop** tool is activated. You now need to define a region to run OCR on the area of the title block where the sheet number is located.
- Drag two corner points around the area that defines the sheet number in the title block, as shown below.

001-Architecture.pdf

Step 2/2 Use Image Crop  to define where the Number, Title and other fields are located Previous Save

Title Block Information

Name* BS-A1-Architecture

Fields

Number* 123

Title 123

General Arrangement Plan Basement 01



Status	For Construction		
Scale	1 : 100	@ A1	
Drawn	CT	Checked	CL
Project No.	m11537_A		
Plot Date	20/10/2018 9:58:53 AM		
Plot File			
Drawing no.	A02.0B1		Revision
			F

On doing so, the region you defined is highlighted and the text **Number** is written on the top left of that region. Also, the number is listed in the **Number** field in the **Title Block Information** area, as shown below.

Title Block Information

Name* BS-A1-Architecture

Fields

Number* 123

Title 123

General Arrangement Plan Basement 01

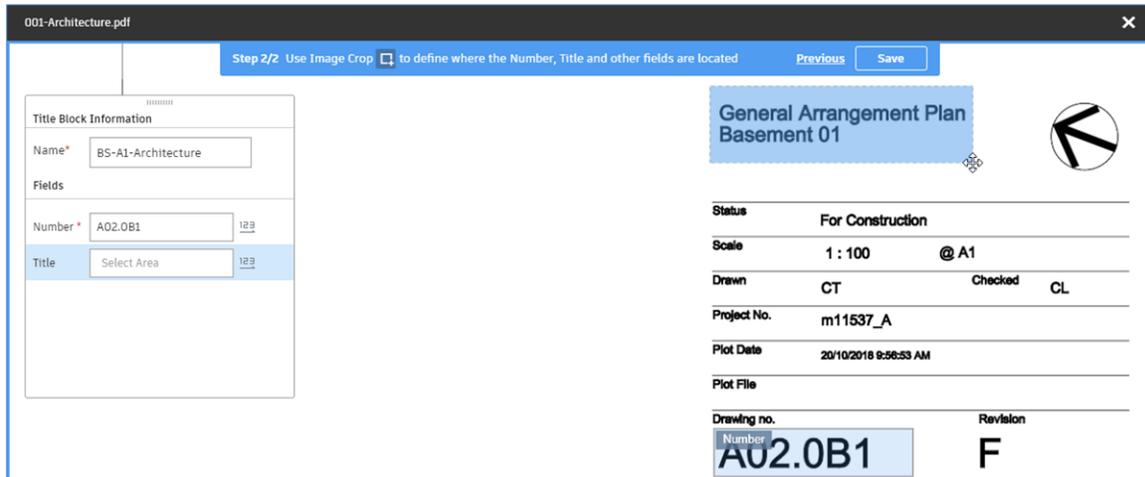


Status	For Construction		
Scale	1 : 100	@ A1	
Drawn	CT	Checked	CL
Project No.	m11537_A		
Plot Date	20/10/2018 9:58:53 AM		
Plot File			
Drawing no.	A02.0B1		Revision
			F

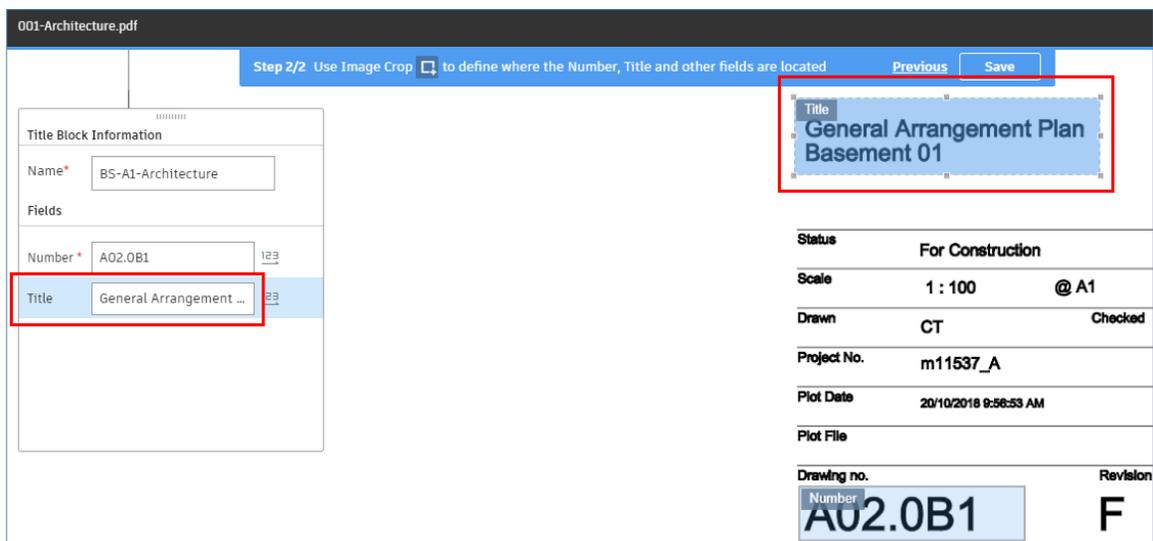
Next, you need to define the sheet title.

12. Click on the field on the right of the **Title** box; the **Image Crop** tool is activated. You now need to define a region to run OCR on the area of the title block where the sheet title is located.

13. Drag two corner points around the area that defines the sheet number in the title block, as shown below.

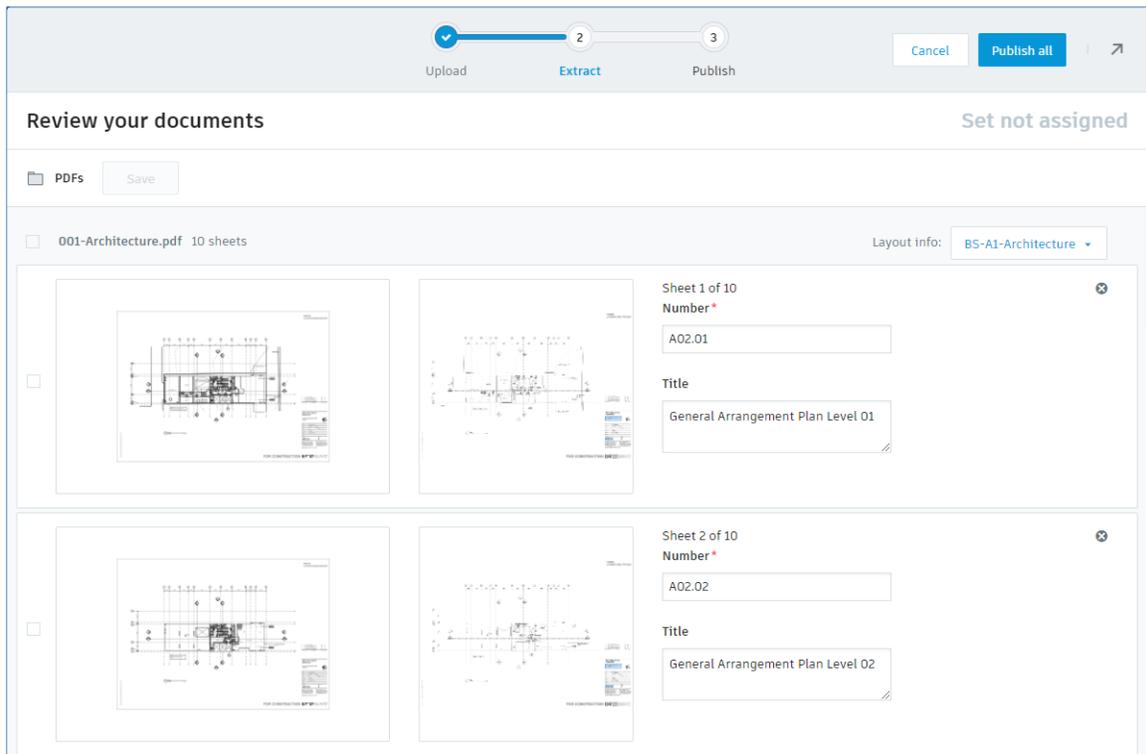


On doing so, the region you defined is highlighted and the text **Title** is written on the top left of that region. Also, the title is listed in the **Title** field in the **Title Block Information** area, as shown below.



14. Click **Save** from the top of the sheet; the process of extracting the title block information from all sheets starts.

Once the title block information is extracted from all the sheets, the **Review your documents** window is displayed informing you how many sheets were extracted. Also, the preview of the sheets, along with the number and title is displayed, as shown in the figure below.



15. From the top right of the **Review your documents** window, click **Publish all**; the process of publishing all the sheets starts.

Once the documents are published, you will be informed about how many PDF files were published, as shown in the figure below.



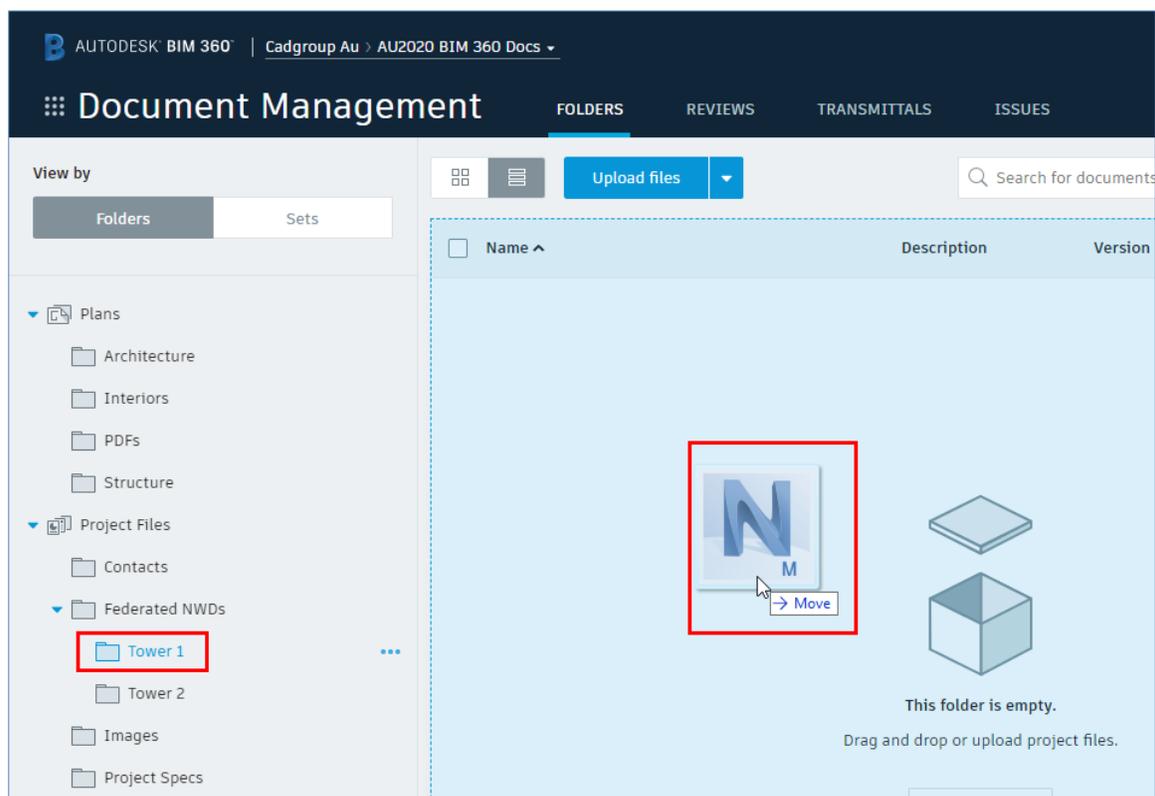
16. From the top right of this window, click **Show in folder**; you are returned to the selected folder in the Document Management interface and the extracted PDF sheets are displayed, as shown in the figure below.

<input type="checkbox"/> Name ^	Title	Set ▾	Version	Last updated	Updated by ⚙
<input type="checkbox"/>  A02.0B1	General Arrangement Plan Basement 01		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.01	General Arrangement Plan Level 01		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.02	General Arrangement Plan Level 02		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.03	General Arrangement Plan Level 03		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.04	General Arrangement Plan Level 04		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.05	General Arrangement Plan Level 05		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.06	General Arrangement Plan Level 06		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.07	General Arrangement Plan Level 07		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.08	General Arrangement Plan Level 08		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input type="checkbox"/>  A02.10	General Arrangement Plan Level 10		V1	Sep 29, 2020 4:31 PM	Deepak Maini

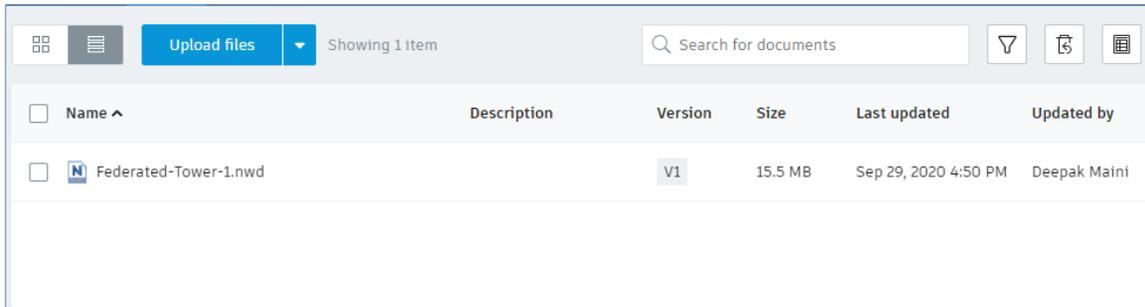
Uploading Files in the Project Files Area

As mentioned earlier, the project files area is used to upload files such as the Navisworks federated models, project specifications, pictures, Microsoft documents, and so on. The following steps show how to upload an NWD file in this area. The process of uploading any other file is the same.

1. In the **Project Files** area of the Document Management interface, select the folder in which you want to upload the file.
2. Drag and drop one or multiple files in the selected folder, as shown below.



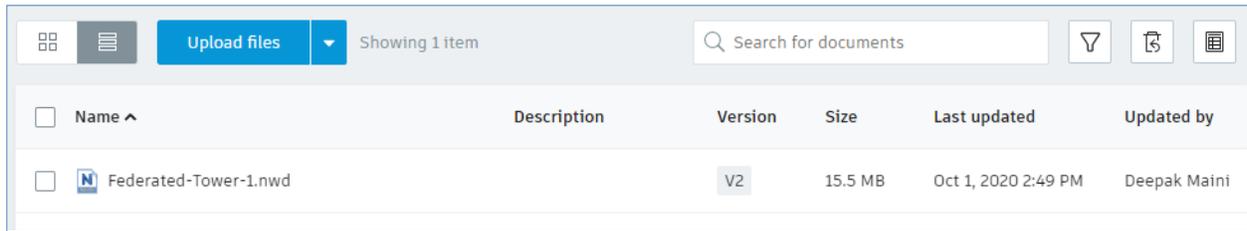
On doing so, the process of uploading the files starts. The progress of the upload is displayed on the lower right corner of the window. Once the uploading and processing of the files is completed, they will be listed in the folder. Once the process is completed, the files will be listed in the folder, as shown below.

A screenshot of a web-based file management interface. At the top, there is a navigation bar with a grid icon, a list icon, a blue 'Upload files' button, and the text 'Showing 1 item'. To the right is a search bar labeled 'Search for documents' and three utility icons (filter, refresh, print). Below this is a table with columns for Name, Description, Version, Size, Last updated, and Updated by. One file is listed: 'Federated-Tower-1.nwd' with version 'V1', size '15.5 MB', and updated on 'Sep 29, 2020 4:50 PM' by 'Deepak Maini'.

<input type="checkbox"/>	Name ^	Description	Version	Size	Last updated	Updated by
<input type="checkbox"/>	 Federated-Tower-1.nwd		V1	15.5 MB	Sep 29, 2020 4:50 PM	Deepak Maini

Uploading Revised Versions of Files in the Plans or Project Files Area

The process of uploading revised versions of files in the **Plans** or the **Project Files** area is exactly the same as that discussed above. Once you upload a file, if a version of that file already exists in that folder, the version of that file is automatically bumped to V2. Similarly, whenever you upload a revised version of the file, it is automatically bumped to the next version. The following figure shows the NWD file is bumped to version 2 once the revised file was uploaded.



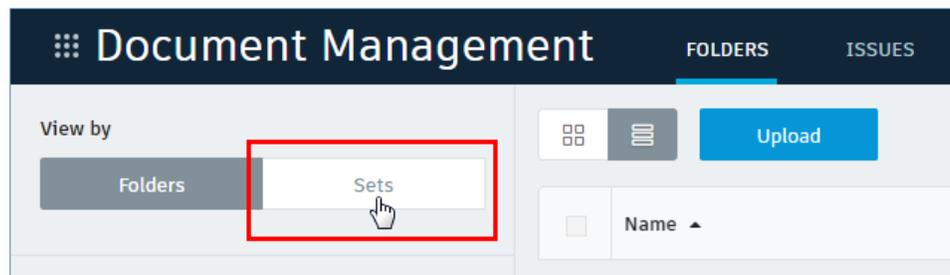
<input type="checkbox"/>	Name ^	Description	Version	Size	Last updated	Updated by
<input type="checkbox"/>	 Federated-Tower-1.nwd		V2	15.5 MB	Oct 1, 2020 2:49 PM	Deepak Maini

Tip: You can click on the version number of the file, highlighted above, to see the history about when were the various versions of files uploaded and by whom.

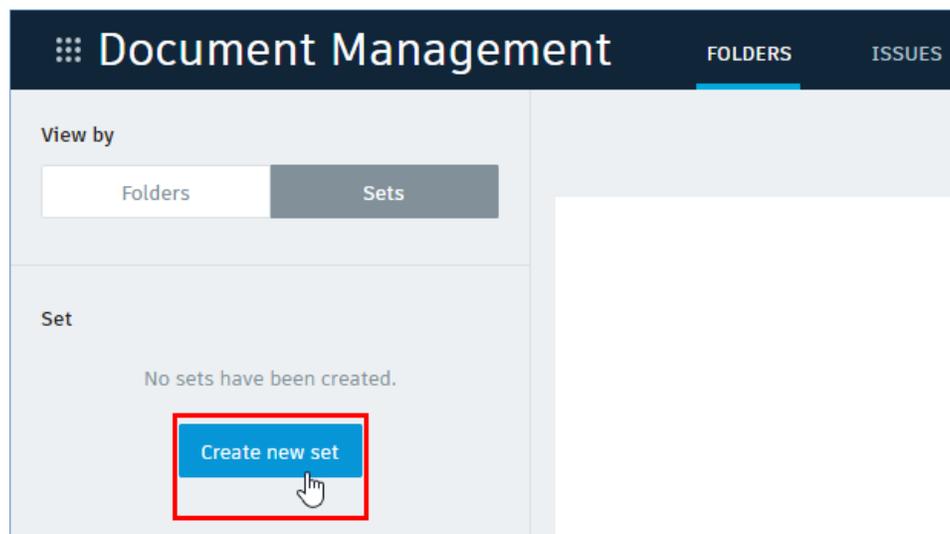
Creating Sets in Document Management

Once you upload a large number of documents in the Document Management interface, you need to find a way to filter and sort them. To do this easily, you can use Sets, which are one of the most versatile concepts in Document Management. Sets allow you to filter your documents based on any kind of requirements. For example, you can create sets for various versions of the documents, for documents that are issued for construction, for documents that are to be reviewed, and so on. It is important to note that only the Project Admins have the rights to create sets. The following is the procedure for creating sets.

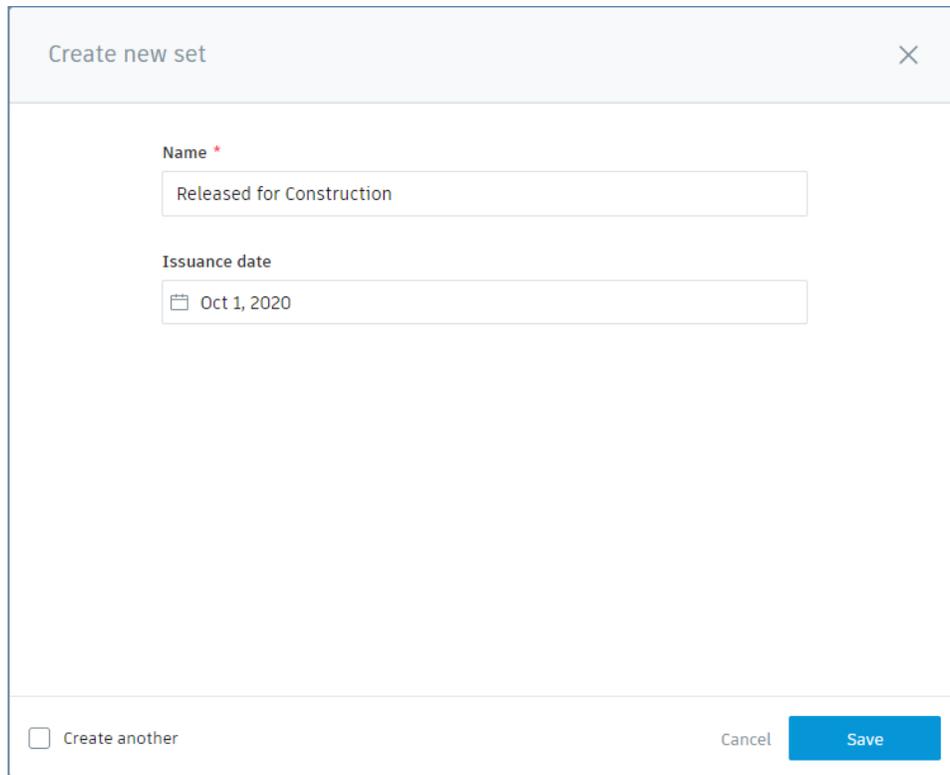
1. Make sure you are logged in as the Project Admin.
2. In the Document Management interface, select **Sets**, as shown below; the **Sets** area is displayed.



3. In the **Sets** area, click **Create new set**, as shown below; the **Create new set** window is displayed.



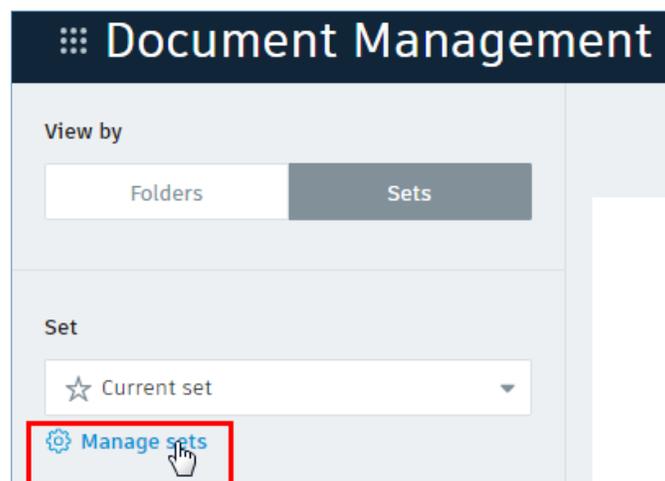
4. In the **Create new set** window, enter the name of the set, and then select the **Issuance date**, as shown below. Note that specifying the issuance date is not mandatory.



The image shows a 'Create new set' dialog box with the following fields and controls:

- Name ***: A text input field containing 'Released for Construction'.
- Issuance date**: A date picker field showing 'Oct 1, 2020'.
- Bottom controls**: A checkbox labeled 'Create another' (unchecked), a 'Cancel' button, and a blue 'Save' button.

5. Click **Save** at the bottom right of the **Create new set** window; the new set is created.
6. To create additional sets, click **Manage sets** as shown below; the **Manage sets** window is displayed.



- In the **Manage sets** window, click **Create new set** and then enter the name and issuance date of the new set, as shown below.



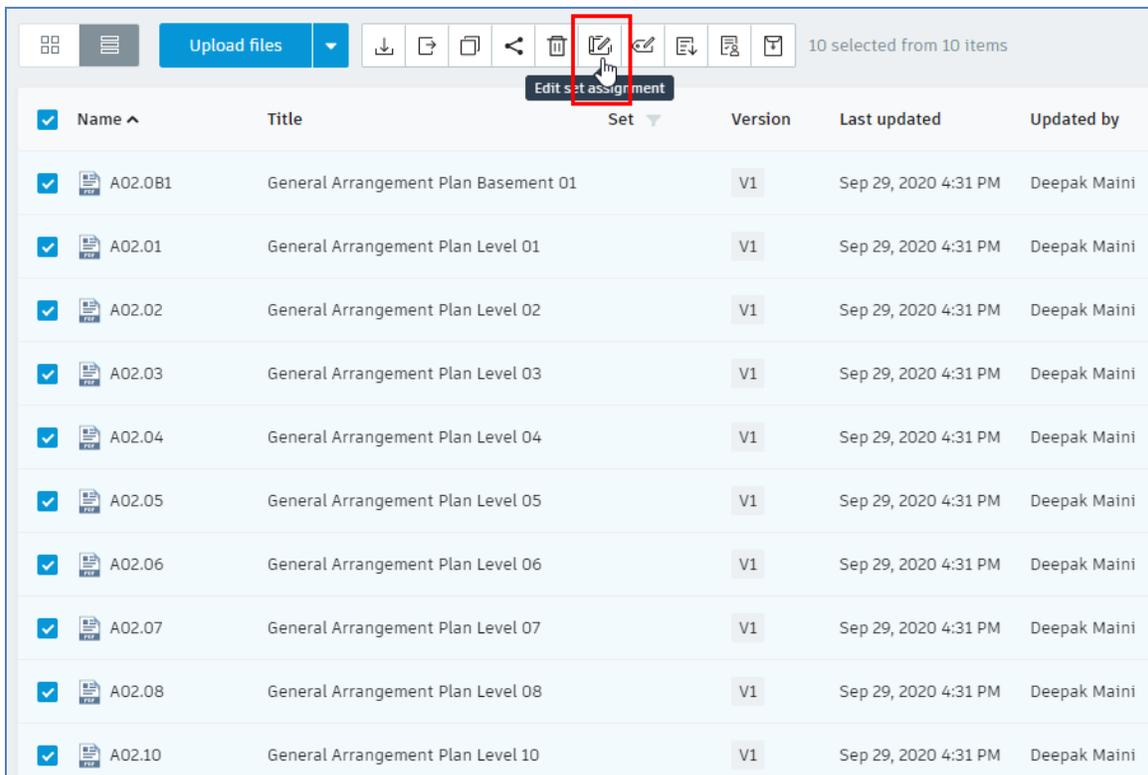
The screenshot shows a window titled "Create new set" with a close button (X) in the top right corner. Below the title bar, there are two input fields. The first is labeled "Name *" and contains the text "For Review". The second is labeled "Issuance date" and contains a calendar icon followed by the text "Oct 1, 2020".

- Click **Save** on the lower right of the **Create new set** window; the set is created and you are returned to the **Manage sets** window.
- Repeat the process to create any additional set. You can also click on the name or issuance date of the sets in the **Manage sets** to edit that information.
- Close the **Manage sets** window; you are returned to the Document Management interface.

Assigning Sets to the Documents

Once you have created sets, you are ready to assign them to the documents. The following is the procedure for doing this.

1. Make sure you are logged in as the Project Admin.
2. In the Document Management interface, select the folder of the documents that you want to assign to the sets.
3. Select all the documents you want to assign to a set and then click **Edit set assignment** in the toolbar at the top, as shown below; the **Edit set assignment** window is displayed.



The screenshot shows the Document Management interface with a toolbar at the top. The 'Edit set assignment' button is highlighted with a red box. Below the toolbar is a table of 10 selected documents.

<input checked="" type="checkbox"/>	Name ^	Title	Set	Version	Last updated	Updated by
<input checked="" type="checkbox"/>	A02.0B1	General Arrangement Plan Basement 01		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.01	General Arrangement Plan Level 01		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.02	General Arrangement Plan Level 02		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.03	General Arrangement Plan Level 03		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.04	General Arrangement Plan Level 04		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.05	General Arrangement Plan Level 05		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.06	General Arrangement Plan Level 06		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.07	General Arrangement Plan Level 07		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.08	General Arrangement Plan Level 08		V1	Sep 29, 2020 4:31 PM	Deepak Maini
<input checked="" type="checkbox"/>	A02.10	General Arrangement Plan Level 10		V1	Sep 29, 2020 4:31 PM	Deepak Maini

4. In the **Edit set assignment** window, click on **Move to existing set** radio button, if the set already exists, and then select the set name, as shown below. Alternatively, you can click on the **Move to new set** radio button, if the set does not exist.

Edit set assignment ✕

Remove from set
 Move to a new set

Name * **Issuance date**

Move to an existing set !

For Review
 Released for Construction

- Click **Save** from the bottom right of the **Edit set assignment** window; you are returned to the Document Management interface and the name of the set is displayed for each document, as shown below.

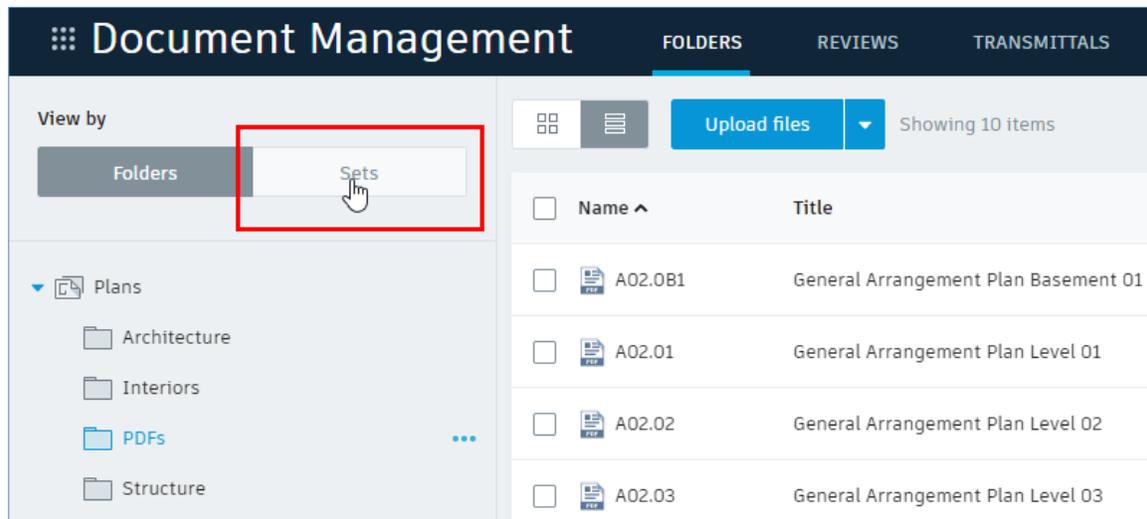
☰ ☰ Upload files Showing 10 items						
<input type="checkbox"/> Name ^	Title	Set ▼	Version	Last updated	Updated by	
<input type="checkbox"/> A02.0B1	General Arrangement Plan Basement 01	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.01	General Arrangement Plan Level 01	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.02	General Arrangement Plan Level 02	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.03	General Arrangement Plan Level 03	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.04	General Arrangement Plan Level 04	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.05	General Arrangement Plan Level 05	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.06	General Arrangement Plan Level 06	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.07	General Arrangement Plan Level 07	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.08	General Arrangement Plan Level 08	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	
<input type="checkbox"/> A02.10	General Arrangement Plan Level 10	For Review	V1	Oct 1, 2020 4:52 PM	Deepak Maini	

- Repeat the process to assign sets to various documents.

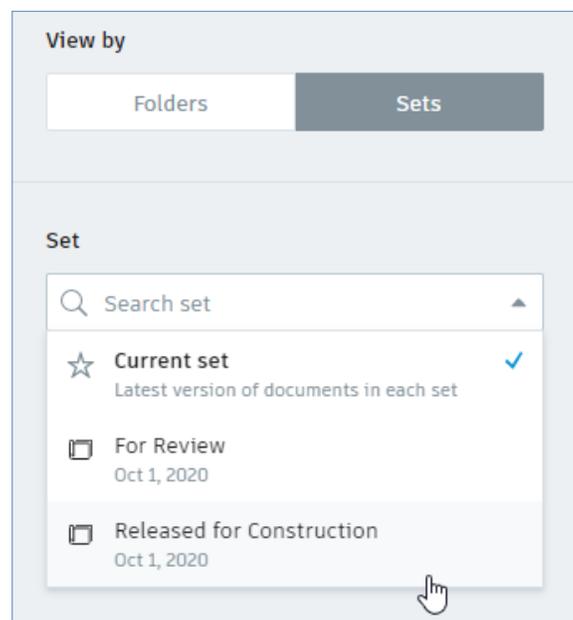
Viewing Documents Based on Sets

Once the documents are assigned sets, any user to view documents based on those sets. The following is the procedure for viewing documents based on sets for a non-admin user.

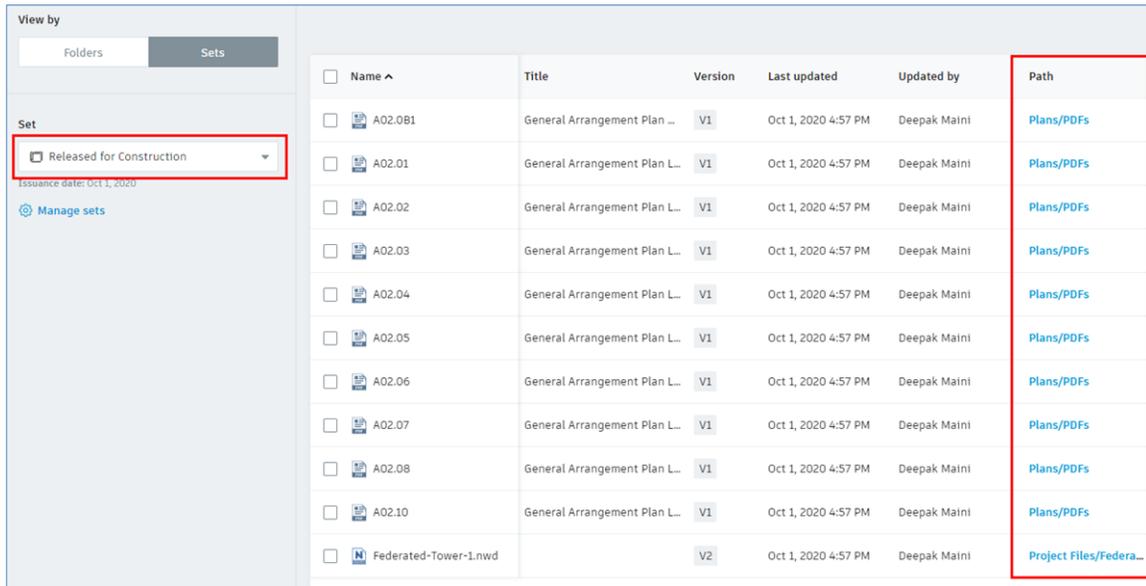
1. In the Document Management interface, click on **Sets**, as shown below.



2. Click on the list in the **Sets** area and select the name of the set whose documents you want to view, as shown below.



On doing so, documents of that set are displayed. Notice that the documents of all types are displayed in the same window. Also, notice that you can view the location of those documents in the same window as well, as shown in the figure below.



The screenshot shows a software interface with a sidebar on the left and a main table area. The sidebar has a 'View by' section with 'Folders' and 'Sets' tabs, and a 'Set' dropdown menu currently set to 'Released for Construction'. The main table displays a list of documents with columns for Name, Title, Version, Last updated, Updated by, and Path. The 'Path' column is highlighted with a red box, showing paths like 'Plans/PDFs' and 'Project Files/Federa...'. The 'Released for Construction' set is highlighted with a red box in the sidebar.

Name	Title	Version	Last updated	Updated by	Path
A02.0B1	General Arrangement Plan ...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.01	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.02	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.03	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.04	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.05	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.06	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.07	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.08	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
A02.10	General Arrangement Plan L...	V1	Oct 1, 2020 4:57 PM	Deepak Maini	Plans/PDFs
Federated-Tower-1.nwd		V2	Oct 1, 2020 4:57 PM	Deepak Maini	Project Files/Federa...