

MFG323371

Sharing Is Caring: Sharing Vault Data Outside the Firewall

Caleb Funk
IMAGINiT Technologies

Learning Objectives

- Understanding Shared Views
- Describe required components for Vault Sync
- Configure Vault Sync

Description

This class will review the best ways to share data with users who are not part of a company's local area network. External collaborators and suppliers will be able to easily access drawing view and complete files. This class will cover Vault Professional software and Fusion Team Web.

Speaker(s)

Caleb Funk began his career as a professional CAD instructor after a short stint as a production draftsman, and has 20+ yrs CAD experience starting with AutoCAD R12. He enjoys sharing his knowledge of drafting and solid modeling best practices, and is well known for his versatility and extensive knowledge of CAD and data management software. He believes that his strengths lie in making complex topics easy to understand through conversations.

Understanding Shared Views

Shared views are the simplest way to share design information outside the firewall. Since you are sharing only a viewable you do not have to be concerned with anyone changing your data or accessing your intellectual property.

Shared views can be uploaded to the Autodesk View site. They can be accessed via the Autodesk View online app. Shared views can be generated from subscription versions of Autodesk Vault Workgroup and Autodesk Vault Professional.

Owners upload a visual representation of a design to share online



Owners manage shared views and respond to comments from within the product

Collaborators view and post comments from desktop or mobile

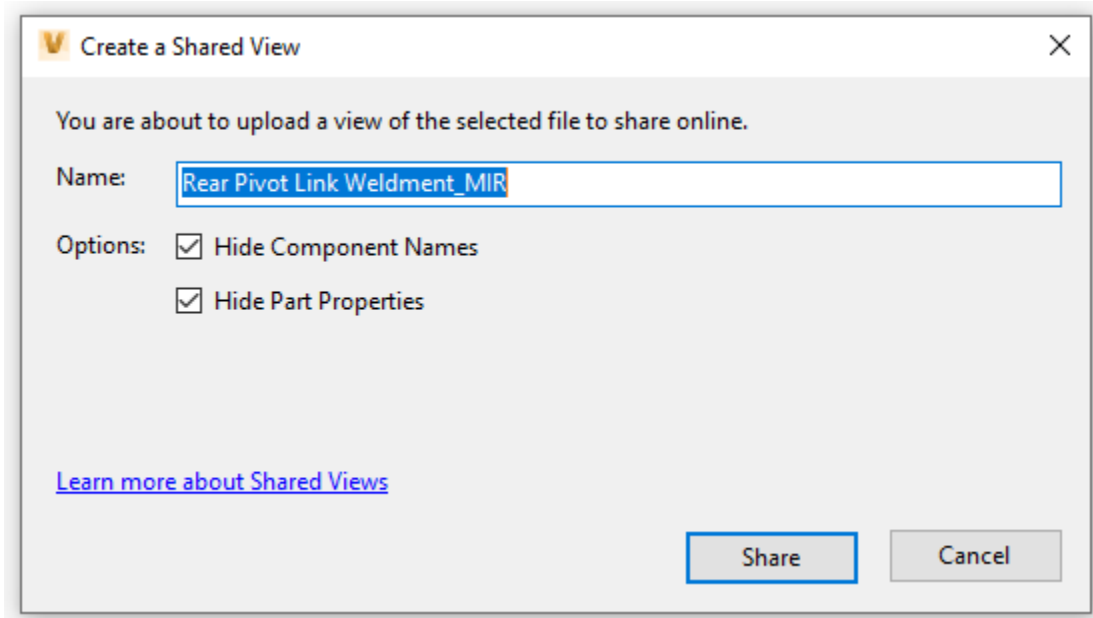
The Autodesk Viewer app does is completely free to use and only requires the user to sign in if they want to comment. No Autodesk software is required to view the files and comment on the shared views.

Shared views and Vault

Shared views can be published and managed directly from Autodesk Vault. Vault will then maintain a shared views list to facilitate collaboration and management of the shared views.

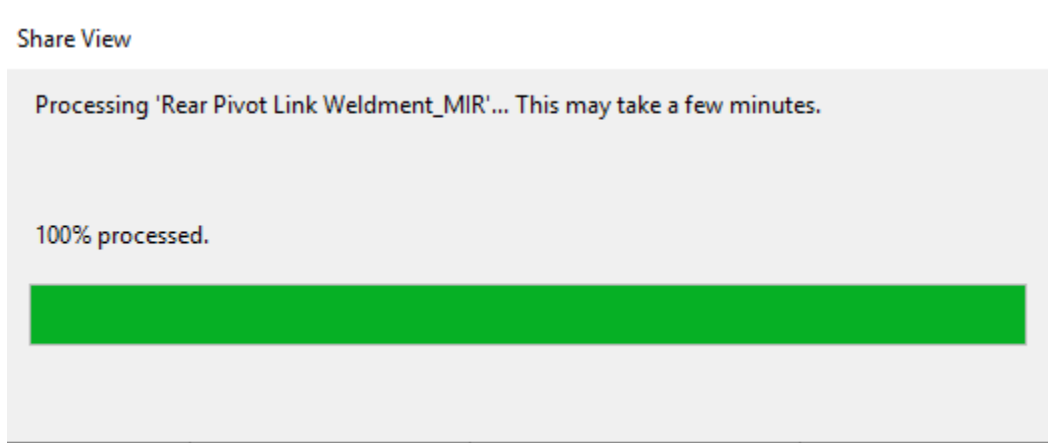
Publishing a share view from Vault

1. Right click on the file that you want to create a shared view from. It can be a drawing, part, or assembly file.
2. Choose Share view from the pop-up menu.
3. The following dialog box will appear:

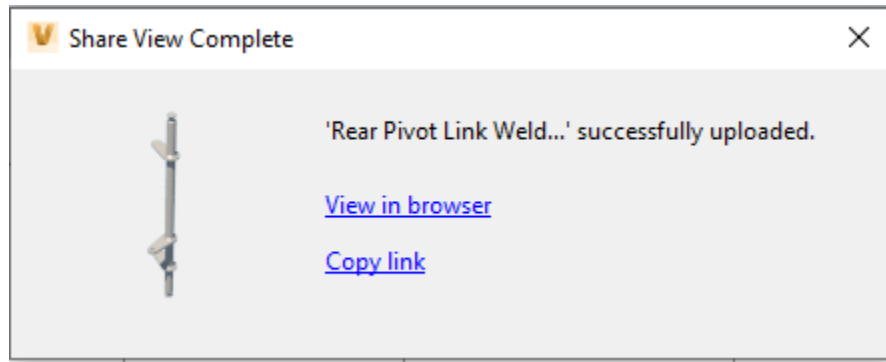


Creating Shared Views Dialog

4. Enter a name for the shared view. This name will appear in Autodesk View and the Shared Views panel in Vault, but will not be present in the hyperlink.
5. Choose whether or not to hide component names and part properties. If hide component names is checked then the shared view will list the components as numbers only.
6. Choose the Share button to generate the shared view.
7. Vault will now upload the files to the Autodesk Viewer website. A share view will be generated and you will be notified when it is complete.



Processing Share View Dialog

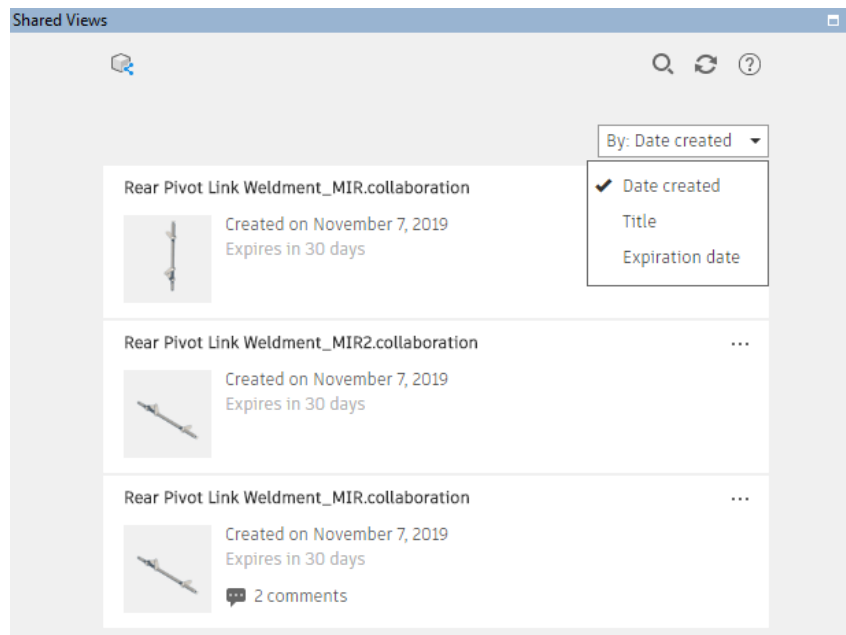


Processing Share View Dialog

Two options are presented: Viewing in browser and Copy Link. Viewing the file in the browser will take you to the Autodesk Viewer website. Copy the link will copy the hyperlink to the file to your clipboard so that you can paste it into an email.

Managing Shared Views via the Shared Views List

The shared views list allows the creator of the shared views to delete the shared view or extend the expiration date of a shared view. Views can be sorted by Title, expiration date, or creation date.



Shared Views List

Collaborating using Shared Views

Once a view is shared, users outside the firewall can view, redline and comment on shared views. The underlying technology for this is Autodesk Viewer. The viewable portion is handled in the cloud, so no apps are necessary for viewing the files.

If viewers create markups on the viewable, the markups will be saved as separate scenes. This allows for the original to stay intact while the markups are preserved.

Shared views automatically expire and are deleted from Autodesk Viewer after 30 days. They can be renewed for an additional 30 days at any time.

The following commands are available in Autodesk Viewer:



Autodesk Viewer Commands

Home – returns to the starting view

Fit – fits all components within the view window

Orbit – allows the user to rotate the model view

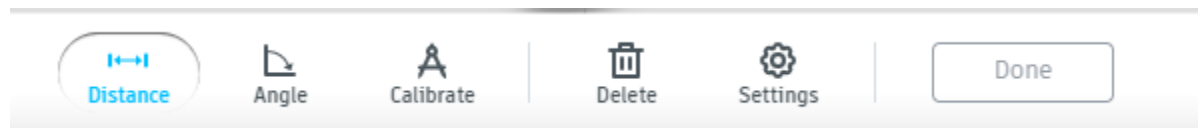
Pan – allows the user to pan the model view

Zoom – allows the user to pan the model view

First Person – This tool would be used for architectural or factory layout designs. It provides the user with a view similar to a first person video game.

Section – Allows the user to section the view from the X, Y, or Z plane. The section depth is dynamic and can be adjusted.

Measure – Clicking this icon brings up the measure toolbar



Autodesk Viewer Measure Toolbar

Explode – Allows the user to explode the model based on values chosen from a slider bar

Markup – Clicking on this icon brings up the markup toolbar.



Autodesk Viewer Markup Toolbar

Required Components for Project Sync

While Shared Views are a powerful tool, they only allow the collaborating partners to view the file, not make changes to the actual design file. Vault Sync can be used to share design files with outside collaborators. Vault Sync require several components in order to be used.

Required components for Project Sync are:

1. Autodesk Vault Professional 2020
2. Active Job Processor
3. The Desktop Connector for Fusion
4. A subscription for Fusion Team with access to a hub and project

Job Processor

The Autodesk ID that is logged into the Job Processor must tie to Fusion Team in addition to its Vault login. The Job Processor has specific sync job types that can run on demand or according to a set schedule.

The Job Processor's role in the Project Sync process is to extract the files from Vault and place them in the sync folder. The Desktop Connector then uploads the files to the Fusion Team hub.

Special notes on the Job Processor:

- Synchronization jobs in the queue have the highest job priority (higher than DWF, PDF, Property Sync, etc.)
- Project Sync understands file relationships and will automatically sync child files required by a parent file.
- The Vault account that the Job Processor uses should have an Administrator role.

Desktop Connector

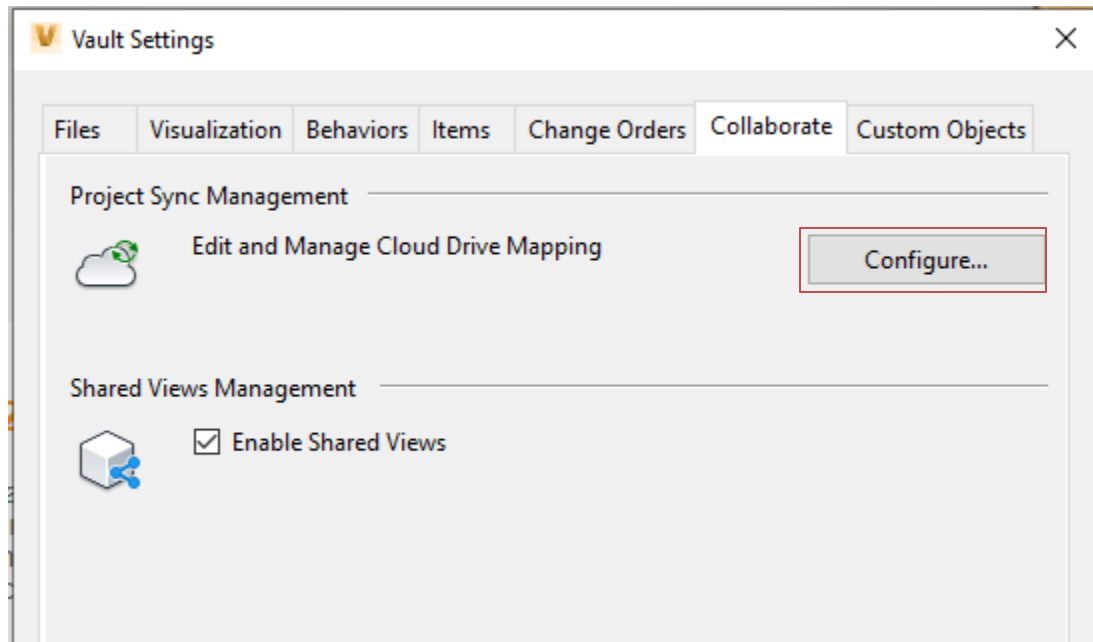
The Desktop Connector is a desktop service that integrates an Autodesk data management source (or data source) with your desktop folder and file structure. The Desktop Connector uses a local folder known as a connected drive and links it to Fusion 360. The folder structure of the connected drive will be mirror in the Fusion 360 hub.

Project Sync will not work if the Autodesk Desktop Connector is not installed. You must also sign into the Desktop Connector to connect it with the Fusion 360 Hub.

Fusion Team

A Fusion Team subscription is necessary. You may purchase Fusion Team subscriptions directly from the Autodesk Store, if Autodesk sells products and services directly in your region. If not, you can purchase Fusion Team through a reseller. When you purchase a Team subscription, you are buying a contract for a fixed number of seats. This contract needs to be assigned to an active Team hub.

Setting up Project Sync



Configure Project Management

To set up a project sync, log in to Vault as an administrator and go to Tools > Administration > Vault Settings > Collaborate Tab and select the Configure button. This will open the Cloud Drive Mapping dialog box.

In this dialog, you can choose which Vault Folder will be synced with the desired cloud folder. Multiple cloud drive mapping definitions can be set up, but often only one is necessary. In that instance, the root of the Vault would be chosen and the Vault folder.

Two options to consider when setting up the mapping are:

- Enable manual sync: This controls whether users can manually sync files. If this is not selected, only scheduled folder syncs will push the files.
- Upload Related files based on Release bias: If checked, files that are released have are selected for upload. If a file is currently being revised and is in a WIP state, the previous release will be synced and not the WIP file.

Cloud Drive Mapping - 'New Definition'

Name:

New Definition

Vault folder:

...

☒ Enable cloud drive mapping

☒ Enable manual sync
 ☐ Upload related files based on Release bias

Cloud Drive folder:

...

Schedule Folder Sync

Sync Folder:

+

×

Folder Path	Scheduled	Action

GeneralScheduleFilter

Select folder:

...

Action

☐ Upload to cloud drive
 ☐ Download from cloud drive
 ☐ Bi-directional sync

☐ Apply selected action to subfolders

OK

Cancel

Apply

Help

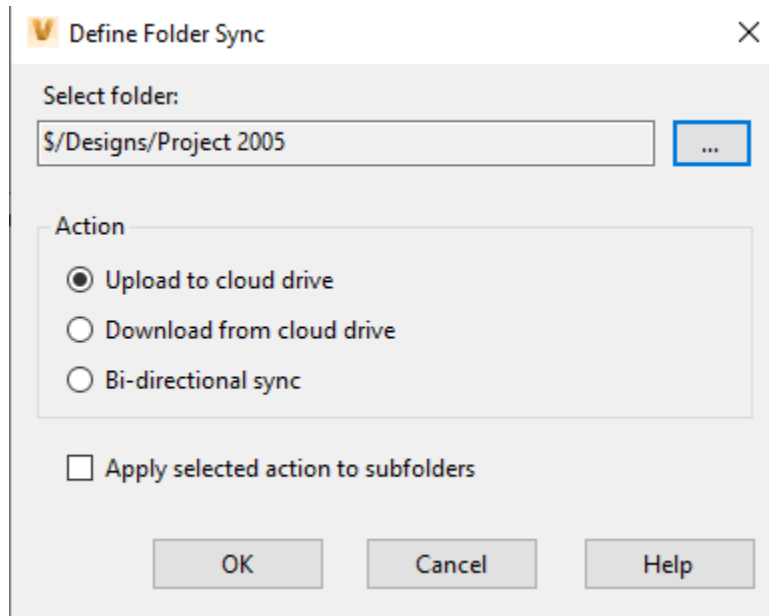
Cloud Drive Mapping Dialog

Schedule Folder Sync

Once the cloud drive mapping definition has been configured a schedule can be set for the folder syncing. The option for the Schedule Folder Sync control how often the files are synced, whether it is a push, a pull or bi-directional sync and which files get synced.

Define Folder Sync

Selecting the plus icon will bring up the Define Folder Sync dialog box. This dialog is where the Vault folder that is to be synced is defined. This would typically be a specific project that is to be shared with an outside vendor or contractor.



Define Folder Sync

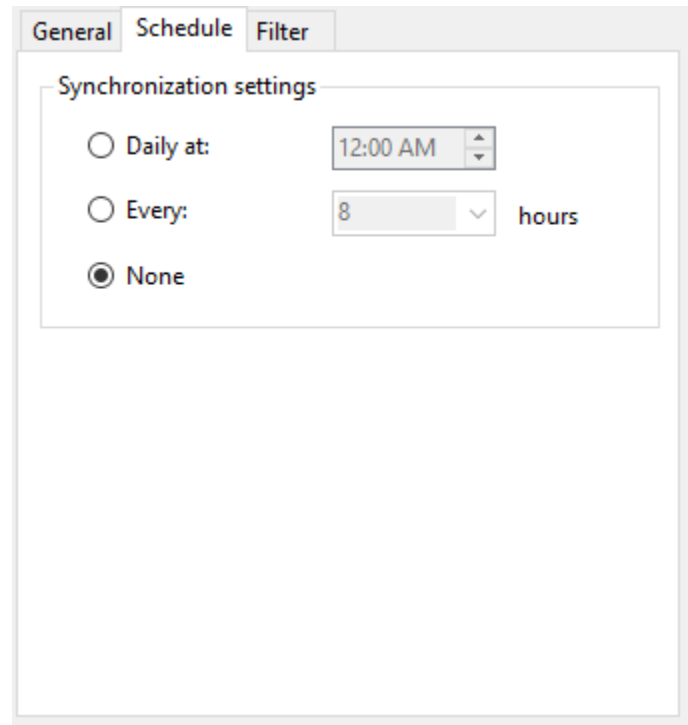
Other options are:

- Upload to cloud drive
 - This option pushes the files from the Vault to the mapped cloud drive.
- Download from cloud drive
 - This option download files placed in the cloud drive to the Vault
- Bi-directional sync
 - This option syncs changes in both directions
- Apply selected action to subfolders
 - Sync options are propagated to subfolders.

Once you have made the proper selections, click the OK button to apply the selections and close the dialog box.

Folder Sync Schedule

Once the definition has been created a schedule can be defined for the sync. The options are daily at a specific time or every 8, 12 or 16 hours.



Folder Sync Schedule

Filter Options

The Filter tab allows you to filter which files get synced. The filters can be created from Vault system properties or user defined properties. Below are some common examples of filters that are used:

File Extension IS PDF

This syncs any file with a PDF extension to the Fusion Team hub.

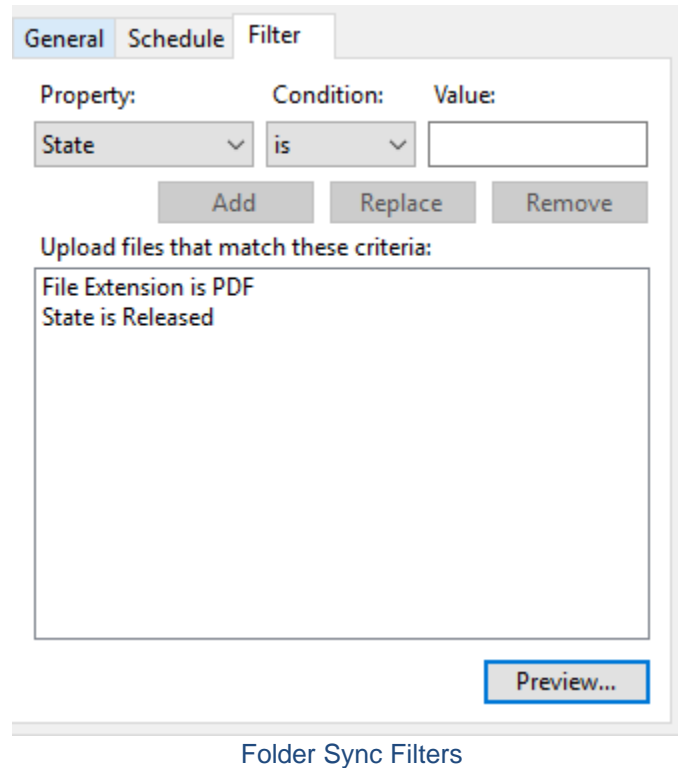
ProjectNumber IS 1234

This syncs any file with a user defined property called ProjectNumber that is equal to 1234 to the Fusion Team hub.

State IS Release

This syncs files in the released state to the Fusion Team hub.

Note: If more than one filter is used, all of the filters must be true for the files to be synced. For example State is Released and ProjectNumber is 1234 would only sync files that are in a released state with a ProjectNumber that equals 1234.



General Schedule **Filter**

Property:	Condition:	Value:
State ▼	is ▼	

Add Replace Remove

Upload files that match these criteria:

File Extension is PDF
 State is Released

Preview...

Folder Sync Filters

Project Sync Concerns

Project Sync is a powerful tool for communicating with stakeholders outside the firewall. But there are some areas of concern with its use.

Collaborative Engineering

Fusion Team has no file reservation capability tied to Vault. Once the files are synced to Fusion team they can be edited. It is possible that the files could be edited out of turn. Communication is key to ensure that this does not occur.

All files sync

Fusion Team does not sync only the files that have changed but does a full push or pull of all files. This can be an issue if the sync folder selected is particularly large.

Upload from contributors

Fusion Team editors can upload files to Fusion Team. If bi-directional sync is set up, these files will be downloaded into the Vault on the next sync.