Autodesk® Vault Professional ® SolidWorks Integration

Visualization files

Autodesk Vault SolidWorks Integration supports creation of and viewing of DWF format files for light weight view of Vault professional users without the need for CAD software via the Vault Professional Explorer or Vault Professional Thin Client.

DWF files can also be used in batch plotting operations, as Pack'n'Go outputs from Vault, published to external folders for sharing via windows explorer or even integration with other business systems.

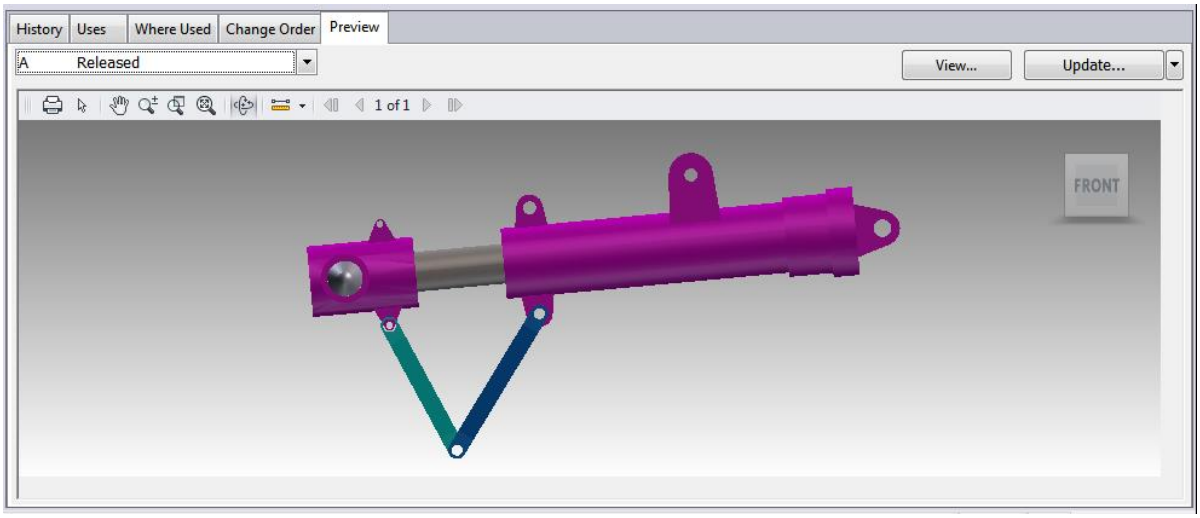
This article is intended as a guide to creating and managing DWF creation as part of the SolidWorks Integration, for further detail on Visualization file usage please see Vault Help.

Viewing DWF Files

DWF files provide a simple light weight method for CAD users to preview their files without having to open them and enables non CAD users to view files without needing access to the software that created the file.

DWF files support both 2D and 3D viewing formats and when used with Autodesk Design Review provide basic measure and markup capabilities.

There are two main methods though for accessing DWF files which are via the Autodesk Vault Explorer client or the browser based Thin Client.



When a user logs into one of these clients they are able to select a SolidWorks file and by choosing the preview option the DWF file associated with the model or drawing (a hidden attachment) is loaded for viewing using Autodesk Design Review integration.

DWF Attachments

Autodesk Vault manages and stores visualization files (DWF) files as hidden, so these files by default do not appear in the Explorer or Thin Client file grid. Once created, the DWF is checked into Vault as an attachment to the source file and set to hidden. If required, users can view the hidden attachments in Vault Explorer by selecting "Show Hidden Files" from the Options menu under Tools, but this should not generally be required.

If the document selected does not have a DWF file created for some reason there will be no attachment and no lightweight preview available, in this case the user will need to create a DWF to enable lightweight viewing.

Creating DWF Files

The Vault Integration with SolidWorks supports two methods of file DWF creation:

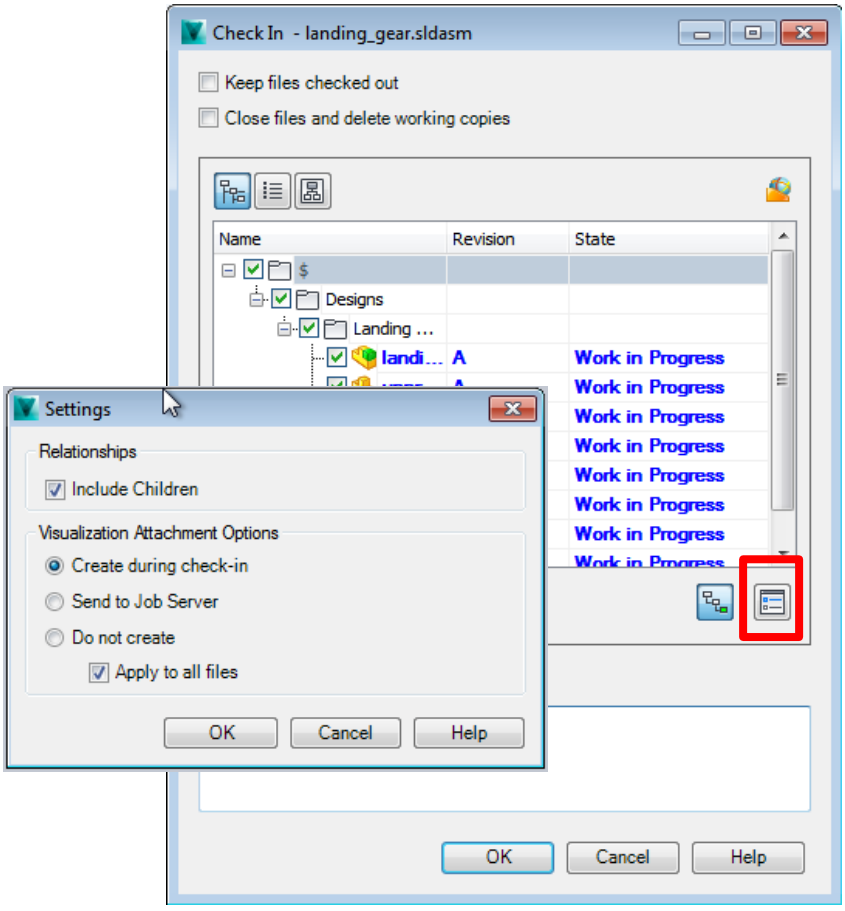
1. Create DWF on local machine during check in
2. Create DWF on job processor (support for batch DWF creation on demand, via autoloader or check in)

Please note that the SolidWorks add in does not support DWF creation via the Vault Explorer "Update" command, users here will need to create the DWF via job processor.

Create DWF via Check In

In order to create a DWF for SolidWorks files locally as part of your regular work flow on check in, simply select "Create during Check-in" from the check in settings under the Visualization Attachment Options. A DWF will be created during the check in operation on your local machine and attached to the original document in Vault for viewing.

"Apply to all files" will create visualization files for all children as part of the same check in operation.

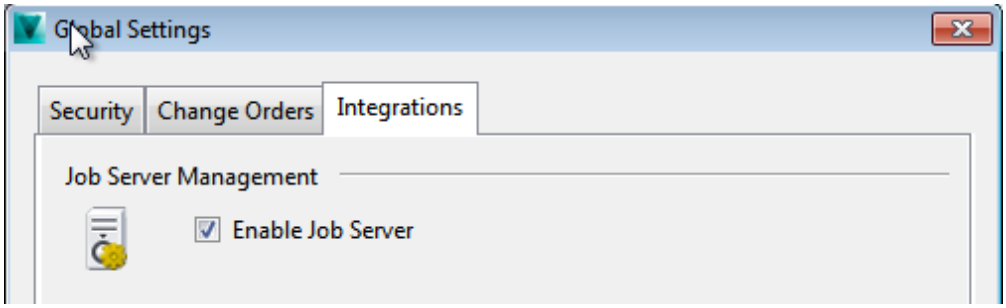


Create DWF via Job Processor

Job Server

The Autodesk Vault Job Server is a server based job queue that allows users to add and manage a number of automated Vault tasks that were traditionally executed manually on a user's machine.

The Job Server must be enabled in your environment by the Administrator via the Vault Administration Global settings (from Vault Explorer select Tools > Administration > Global Settings and the Integrations Tab). Please see the help topic on Autodesk Vault Job Server for further detail.



Job Processor

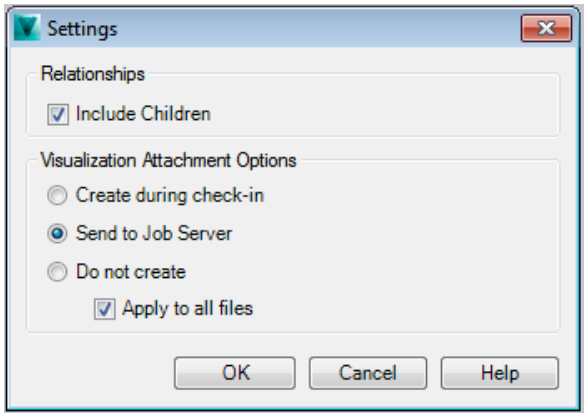
The Autodesk Vault Job Processor is a Vault client install that executes Vault tasks from the Job Server Queue, these tasks by default include property synchronization and DWF creation for certain Autodesk CAD file formats but can be extended to include custom job handlers to do any number of other tasks. Administrators should see the help topic on Autodesk Vault Job Processor for further detail.

In order to execute DWF creation tasks for SolidWorks files, users need to enable the Job Server and install the Autodesk Vault SolidWorks integration Job Processor on at least one devoted client side machine. Please see "SolidWorks Integration Installation Basics" for more details on installing and configuring a Job Processor for SolidWorks.

Methods

Once the SolidWorks Job Processor is configured and running, users are able to send "DWF" jobs to the server to be processed in a number of ways:

1) **During check in the user is able to select to send DWF to "Job Server"**
   This method allows users to check in files quickly (without waiting for DWF creation) and get on with additional design tasks.



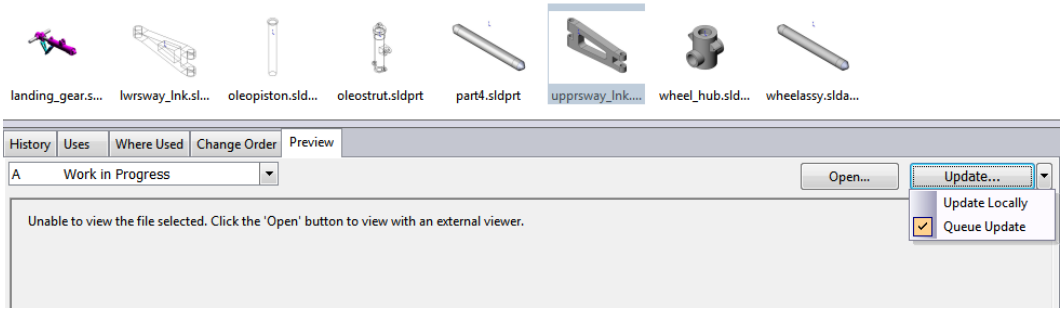
This option is suggested when users are dealing with large assemblies that may require extended time to create and upload all DWF files

Please note that the DWF file will not be immediately available in Vault Explorer / Thin Client dependent on the current Job Queue and Job Processor availability.

2) **By selecting the preview tab the user can opt to "Queue Update" of visualization file**

If a user attempts to view a SolidWorks file DWF via the preview tab in Vault Explorer and there is no preview available they are able to select to update the DWF via "Queue Update" option.

Please note that the Vault Explorer does NOT support a local update of the SolidWorks DWF, the only option here is to configure "Queue Update" for this command.

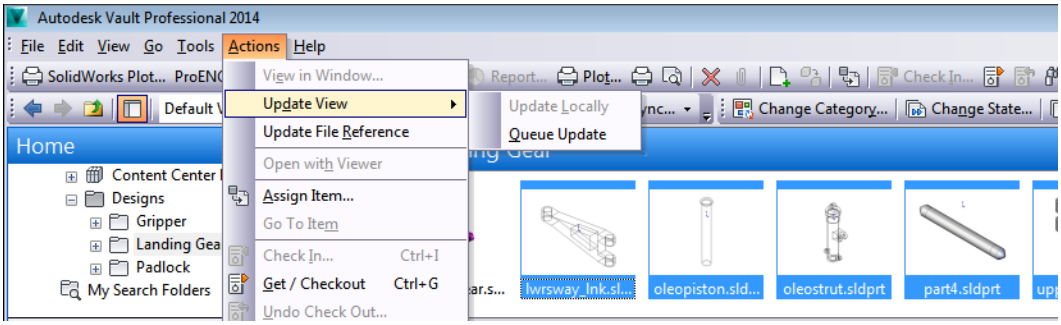


3) **By selecting a number of files in the main grid and selecting "Queue Update" from the actions menu.**

If a user finds a number of files that are a number of files without visualization attachments or would like to carry out a batch update of DWF attachments it is possible to queue a number of documents for update.

Highlighting one or multiple files from the grid the users can select "Update View" from the Actions menu and Queue Update.

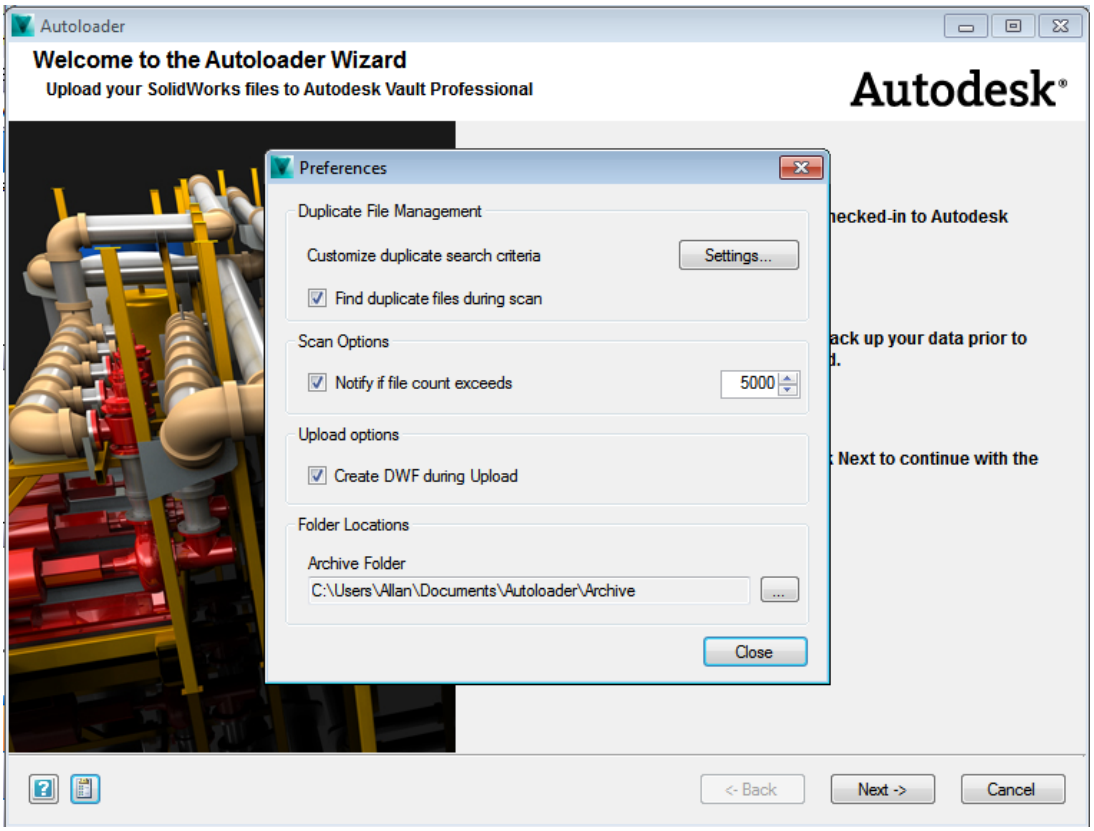
Note once again Local update is not supported for SolidWorks DWF files or multiple files.



4) **During Autoloading of a number of documents the user can select to send DWF to "Job Server"**
Another component of the Autodesk Vault SolidWorks Integration is the client side bulk loading tool the "Autodesk Autoloader for Vault Professional and SolidWorks", this tool permits users to scan existing data sets, clean up duplicates and ultimately load into Vault complete with attached DWF files. Please see "SolidWorks Integration Installation Basics" and "SolidWorks Integration Data Loading Basics" for more details on installing Autoloader for SolidWorks and loading data into Vault.

After starting the Autodesk Autoloader for Vault Professional and SolidWorks, the administrator will see stings options in the bottom left of the dialog. Opening the settings dialog there is an option to "Create DWF during Upload"

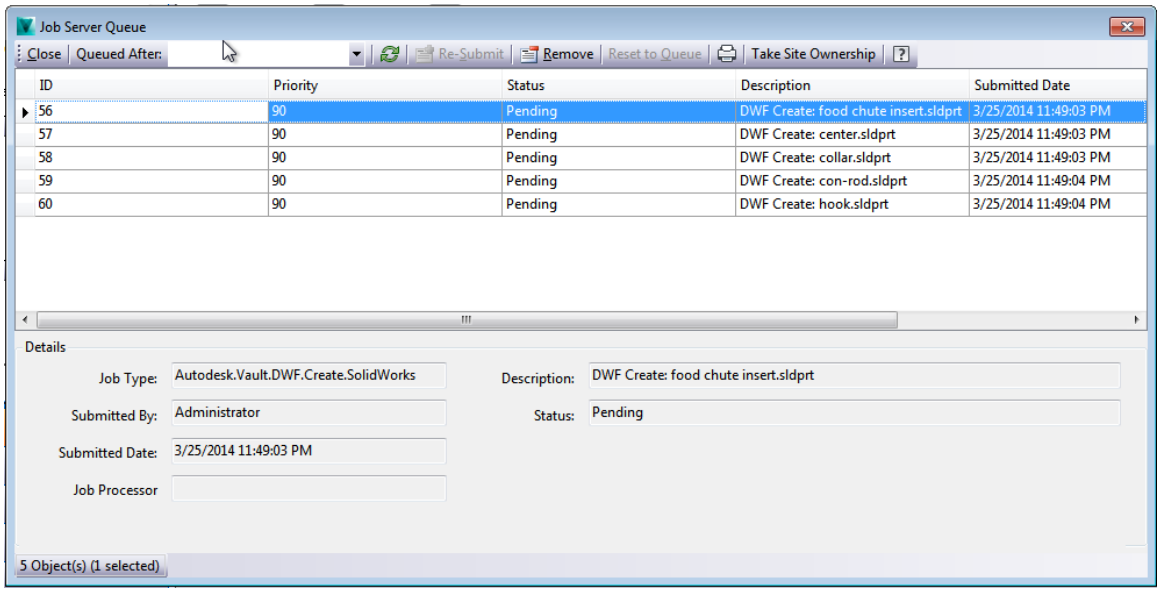
Enabling this option will create a DWF task for each file scanned and successfully uploaded to Vault in the Job Queue and will be executed by a local job processor



Job Server Queue

After sending a job to the queue for processing users are able to view the queue from Vault Explorer. By logging into Vault Explorer user can select Tools > Job Queue.

The Job Server Queue details the current jobs in the queue and status along with some extended information.



From here users can remove jobs, view job failure details, resubmit failed jobs, see job processor current activity etc. For more information see the help article on Autodesk Vault Job Server.

Jobs will remain pending in this list until the first available job processor configured to create SolidWorks visualization files on that site becomes available. Job Processor will poll periodically for new jobs, but note that if no Job Processors are running, tasks will simply sit in this queue.

For more information on DWF creation and usage please see the Autodesk Vault Help.

AUTODESK.