

Using Autodesk Vault with a Single Inventor Project

Introduction

Proper setup of Autodesk Vault structure is critical to a successful and flexible vault. This white paper outlines one way to integrate Autodesk Vault within your organization without the overhead and complexity of multiple Inventor project files. This method is the most simple and most robust way to set up your vault environment for use with Inventor while continuing to offer a high level of freedom and flexibility

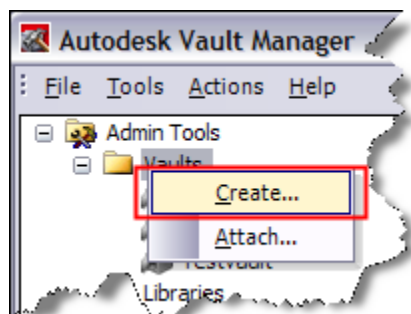
With the single project file configuration you gain:

- **Simplicity** - With a single project, you use the same project file for every design in your environment. This keeps you from having to remember what project file to use with which dataset. You also benefit from having a single common location for all of your data.
- **Reduced Resolution Failures** - Inventor can automatically search for any missing files throughout your entire data set. This greatly reduces the number of times you need to manually locate missing files.
- **Increased Design Reuse** - Greatly simplify the reuse of other data from your vault. Using this method, any data in the vault can be reused in any assembly by using the Place from Vault command. This method prevents you from having to ever worry about adding a library path or copying a file from another project.

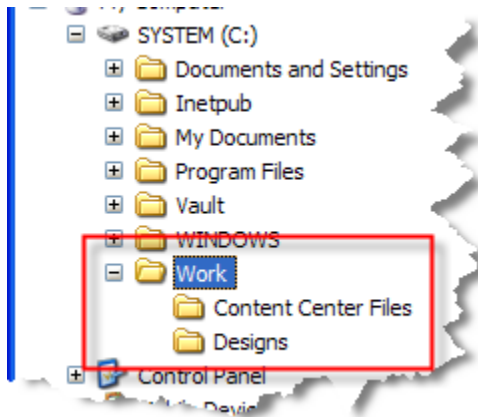
Step 1: Set Up Your Environment

Typically with Inventor, you create a new Inventor Project File (*.ipj) that is unique for each job you are working on. With Autodesk Vault and Inventor, you create a new folder for each design, not a new project file. In the example, we use sample data and a test vault. After you are comfortable with your configuration, you can apply this same practice to your actual design data.

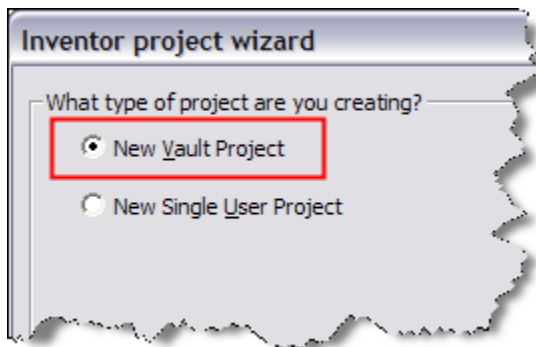
1. Open 'ADMS Console' (aka 'Vault Manager'). On the left side of the window, right-click Vaults. Create a vault called *Test*. Click OK.



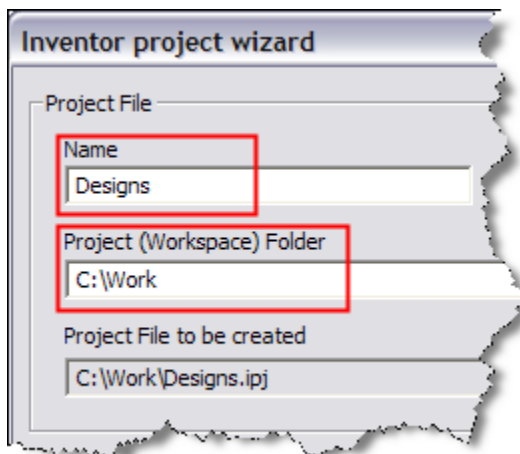
2. Open Windows Explorer. Create a folder under C:\ called Work. This is where all work on Inventor parts will be performed. In addition, create two new folders underneath Work called Content Center Files and Designs. These folders will store all of your design data.



3. Open Autodesk Inventor and the Project Editor. Click the New button at the bottom and step through the wizard to create a new Vault Project.




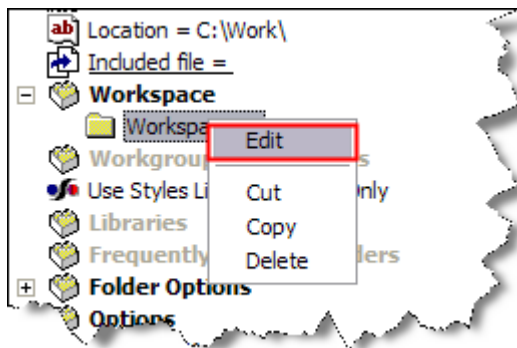
4. Enter Designs for the project name and set the Project (Workspace) Folder to C:\Work.



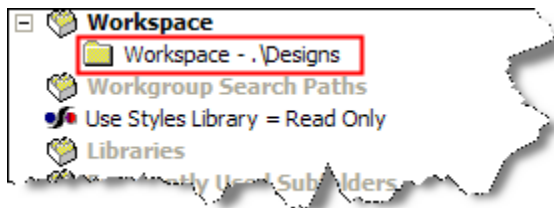
5. Click Finish to create the project file.
6. Double-click Designs.ipj to make it the active project.

Project name	Project location
Default	
Autoloader	C:\Program Files\Autodes
✓ Designs	C:\Work\
samples	C:\Program Files\Autodes
tutorial_files	C:\Program Files\Autodes

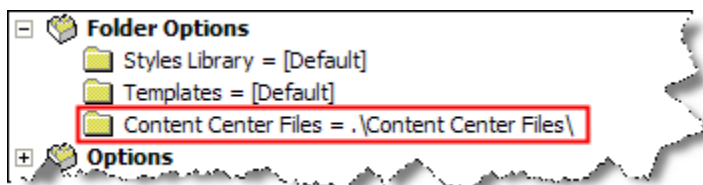
- In the Project Editor window, click and expand the chevron button  to display the Workspace.
- Expand the Workspace entry. Right click and select Edit.



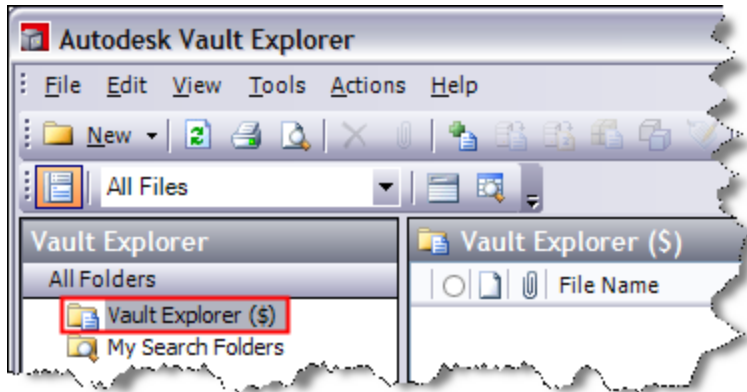
- Click the Browse button and navigate to C:\Work\Designs. Click OK.



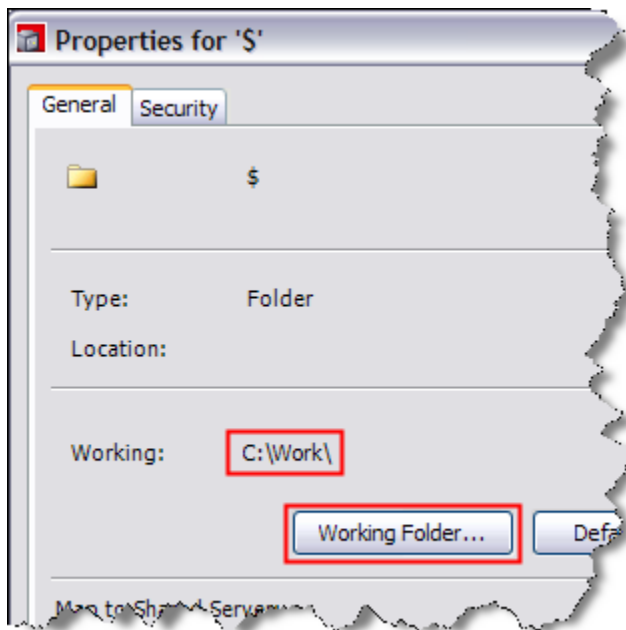
- Expand Folder options. Right Click Content Center Files and select Edit.
- Navigate to C:\Work\Content Center Files. Click OK.



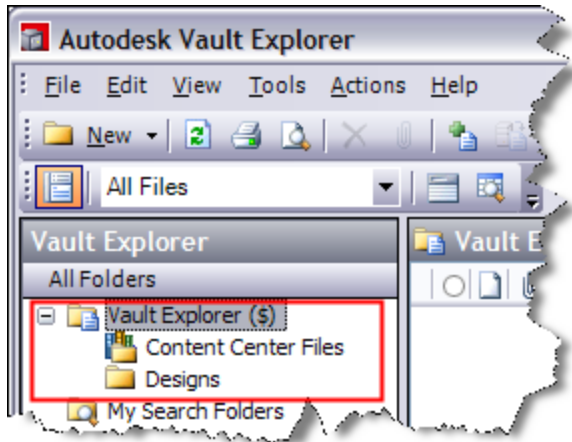
- Exit the Inventor Project Editor window.
- Open Vault Explorer. Log into the test Vault created earlier. Note that the vault is empty and the working folder has not been set. Right-click on the Vault Explorer (\$) folder and select Properties.



14. Click the Working Folder button. Browse to C:\Work. Click OK twice to exit the Properties dialog box.



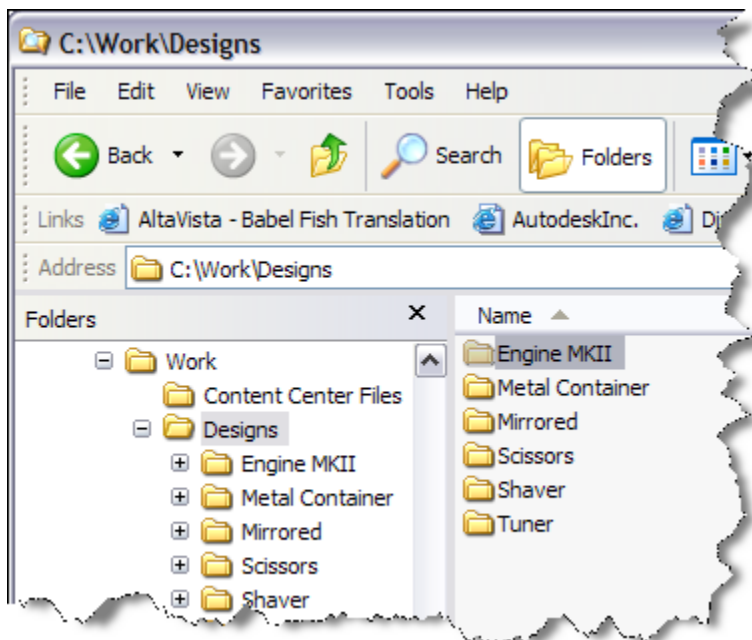
15. Right-click the Vault Explorer (\$) folder and select New Folder. Enter Designs and click OK. Make sure the folder name you type matches the folder name in Windows Explorer exactly.
16. Create a Library Folder called Content Center Files. Once again, make sure the name you enter is exactly the same as the name of the folder you created earlier.



You now have the starting structure in Vault Explorer for adding Inventor documents. **Note:** \$/Designs in Vault Explorer is equal to C:\Work\Designs in Windows Explorer. The structure inside and outside the vault must match.

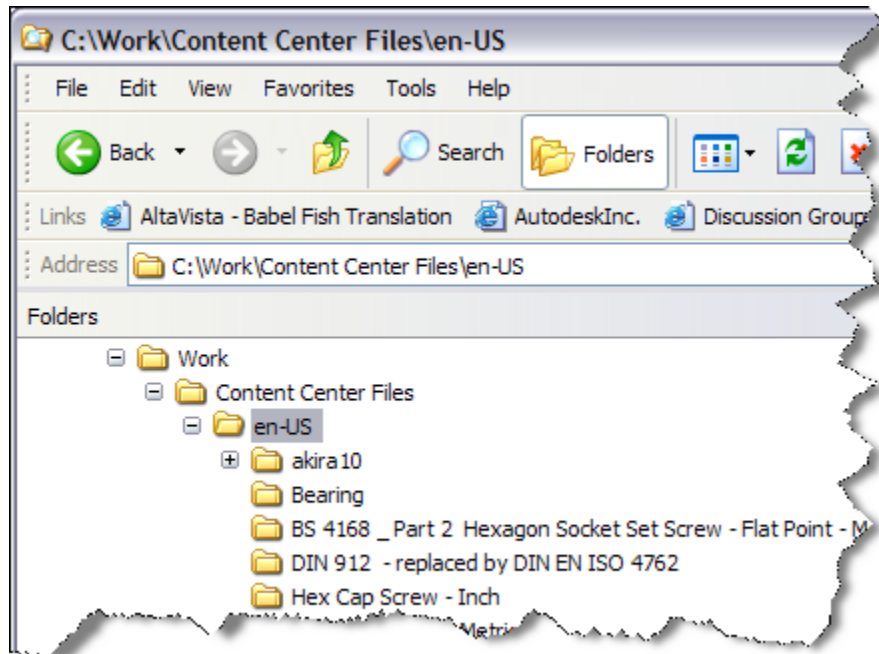
Step 2: Add Data to the Vault

1. Now you are ready to add files from inside Inventor. For this example, use the assembly sample models that install with Inventor. In Windows Explorer, copy a selection of folders under *C:\Program Files\Autodesk\Inventor 2008\Samples\Models\Assemblies* to *C:\Work\Designs*. Notice that we didn't bring the original project file to our new location. We are going to rely on the new project file we created earlier.

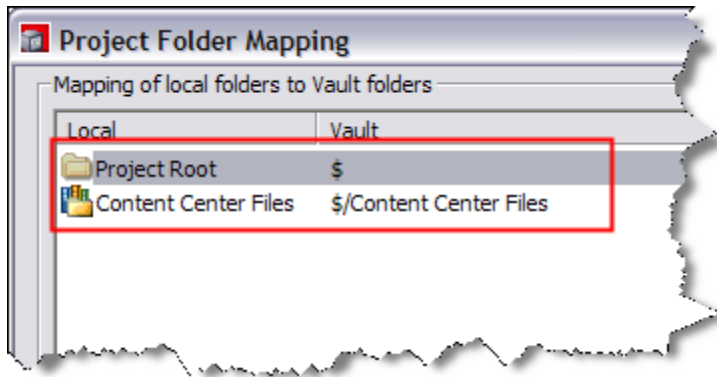


2. The Content Center Files for the Sample Files datasets need to be copied to the Vault Workspace. Select the en-US folder from C:\Program

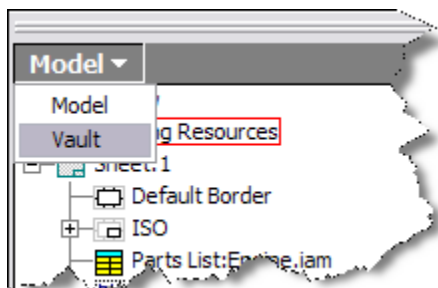
Files\Autodesk\Inventor 2008\Samples\Content Center Files to C:\Work\Content Center Files.



3. Open Autodesk Inventor. Log into the test Vault created earlier. Go to File>Autodesk Data Management Server>Log in.
4. Open the *Engine.idw* drawing from under the Engine MKII folder, Drawing folder. In this example, this drawing is our top level file and can be used to add the entire assembly to the vault.
5. Save the file. This step is very important since the files were moved. When you move files, you can potentially change the way that Inventor resolves related files. Saving these changes now prevents other users who access this data from the vault from having issues with opening the files.
6. The next step is to specify where the vault stores these files. From the File menu, select Vault > Map Folders and map the two paths to their corresponding folders we created in the vault earlier. This step only needs to be done once. After this is complete, every other user that works with the Vault leverages this same information. Click OK to save your changes.
7. Highlight Project Root and select Edit. Choose the \$ folder and click OK.
8. Highlight Content Center Files and select Edit. Choose the Content Center Files Vault folder and click OK.

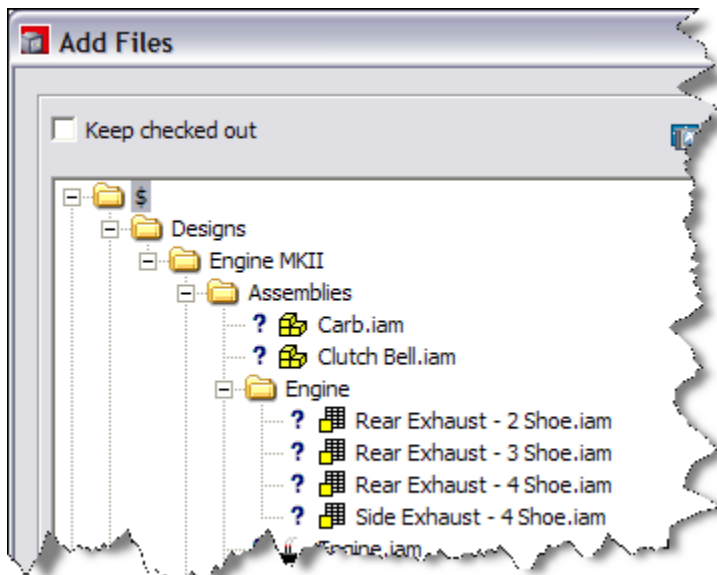


9. In Autodesk Inventor, switch to the Vault browser

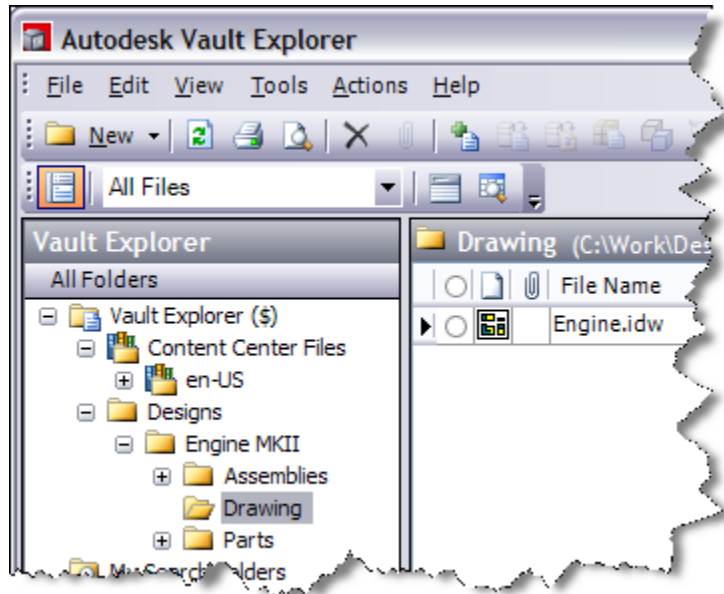


10. The question mark icons in the Vault browser indicate the files are not in the Vault yet. Right-click anywhere in the Vault browser and select *Add Files*.

11. The Add Files dialog box is displayed. Note how the vault is displaying the proper folder structure, including the *Engine MKII* folder. Add any comments as necessary: e.g., Initial Add to Vault, and click OK to copy your files to the vault.



12. Open, or switch to Vault Explorer and click the \$ folder. On the toolbar, click Refresh to see the newly added files and folders.



13. The Engine.idw drawing and all of its children have been added to the Vault. More importantly, the structure has been preserved. Note the creation of the Engine MKII and its subfolders (Assemblies, Drawing, and Parts). These are directly replicated from the folder structure found in Windows Explorer.
14. Repeat this with each design or Project as needed.

Step 3: Share Data with Other Users

The next step is to get all of the other users up and running with the vault. For each user, follow these steps:

1. On each user's computer, create a working folder. It is always easiest to use the same folder for every computer; however, this is not required.
2. Using Vault Explorer, set the working folder of the \$ folder in the vault to the newly created folder.
3. Have each user use the *Get Latest Version* command on the *Designs.ipj* file from the vault. Note that the proper directory structure (e.g. *C:\Work\Designs*) is automatically created.
4. Open Inventor and set the *Designs.ipj* file to be the current active project file in Inventor.
5. Have the users use the "Open from Vault" command in Inventor to start working on their designs.

Other Notes

Adding additional Inventor files using the Single Project Method involves creating sub folders under *C:\Work\Designs* and placing the new Inventor files there. In general, open the top level document and ensure it loads and resolves successfully. Upon adding files to populate the vault, always verify the structure before adding the files.

It is important that you understand that you will rely less on Windows Explorer and more on Vault Explorer daily to work with Inventor files outside of Inventor. Windows Explorer will still play a minor role in file management when working with Inventor and Vault, but you will end up using it less and less. Your working folder (*C:\Work*) should be considered a temporary folder for storing files. When you are finished working on a design and you have added the files and folders to the vault, you can clean up your working folder by deleting the files and folders from your workspace.