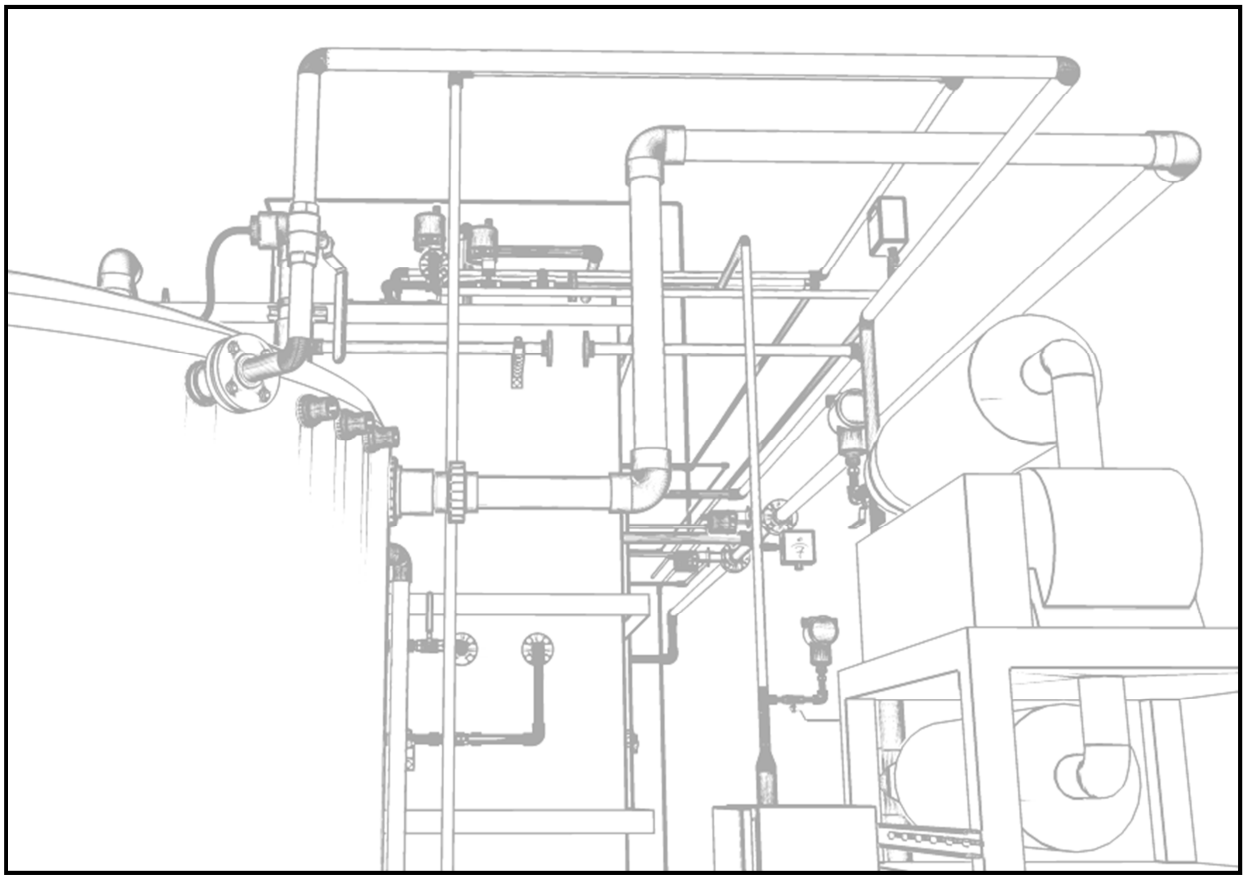
Autodesk Vault

Reference Guide



Created 27 Sept 2010
By Cameron Whetten

This page is intentionally blank.

This page is intentionally blank.

Overview

Vault is a file storage and management system that organizes and stores files from Inventor, AutoCAD, Microsoft Office, and of any other type. The Vault environment is composed of three major elements: the server, the client program, and the application integrations such as the Inventor Add-In for Vault.

File interdependency is the ruling principle when working with files in Vault. Inventor files often have internal references to other Inventor files. For example, a simple assembly file composed of a few part files contains only the positional and constraint information that locates these parts. The part geometry is not stored in the assembly file, but is referenced from the actual part files. If these references are incorrect (e.g. if a part file is renamed), an assembly file will not open correctly. These internal references must be maintained in order for Inventor files to be stored and managed. Vault's file system is based on maintaining these inter-file relationships; therefore, in order to properly use Vault, the user must understand how Inventor files relate to one another.

This page is intentionally blank.

2 Vault Environment

2.1 Vault Server

All of the files stored by Vault are located on a network server. The ordinary vault user does not directly manipulate or manage the server or its files. The user only indirectly accesses the server through the vault client software (Autodesk Vault) and the Inventor Vault Add-In.

The vault server can contain multiple databases. These can be thought of as individual, independent "vaults" organized to separate files from different groups.

The vault server also contains the databases for each of the Content Center libraries (ANSI, ISO, custom read/write, etc.).

2.2 Autodesk Vault (Client)

The main vault client program is called Autodesk Vault. This program allows the user to access the files stored on the server, to view their status and relationships, and to add, edit, delete, and otherwise manipulate the files. Autodesk Vault is navigated in a very similar way to Windows Explorer. These two programs share some visual similarities, as well, such as a folder tree browser, a window that displays a list of the files, and toolbars that offer commands for manipulating vaulted files. A user familiar with browsing files in Windows will feel comfortable browsing files in the vault.

2.3 Application Integrations (Add-Ins)

The vault client software is integrated within several common applications such as the Autodesk applications Inventor and AutoCAD, as well as non-Autodesk applications like MS Word and Excel. These application integrations allow a user to access the vault directly through each application. This document will mainly discuss the Inventor integration. The basic concepts are identical across all of the applications.

2.4 Vault Workflow

The user does not work directly on files that are in the vault. These files are downloaded from the server to the user's local computer (e.g. the D drive). The files are manipulated through their native application, saved, and then uploaded to the vault to update the copy stored on the vault. The vault server creates a new version of the modified file and keeps the older versions in storage. A simple example follows.

A user has created a new Inventor part file called NewPart.ipt. Because this file is new, it does not yet exist in the vault server database. Through the Inventor vault add-in, the user adds, or "checks in", the file to the vault. A copy of the file is uploaded to the vault database and is

stored as the first version of NewPart.ipt. The copy of the file residing on the user's local drive is changed to read-only. This prevents the user from inadvertently changing the file without checking it out from the vault and avoids situations where the local copy of the file does not match the vaulted file.

Later, the user needs to modify NewPart.ipt. The user checks out the file. Checking out the file reserves it so that the user may make changes; this also prevents other users from simultaneously making changes. By checking out the file, the current version of the file is downloaded from the vault to the user's local hard drive. The downloaded file replaces the copy of the file on the user's hard drive and the read-only status of the file is removed. This ensures that when the file is opened, the user is working on the correct version of the file.

The user makes the necessary changes, saves the file, and then checks the file back into the vault. The original vaulted copy of the file is not overwritten; instead, the changed copy being uploaded is assigned as the next version (e.g. version 2). This way, the vault keeps a version history of each file that is modified with this workflow.

IMPORTANT! To avoid inadvertently overwriting files and losing work, users MUST understand how the vault is managing files as they are downloaded or uploaded. More details will be given the following sections.

3 Autodesk Vault Client Application

The Autodesk Vault client application is found under Start > All Programs > Autodesk > Autodesk Data Management > Autodesk Vault (Current Version), where (Current Version) is the year of the currently installed version (e.g. Autodesk Vault 2011).

3.1 Logging In to the Vault Server

When the application launches for the first time, a Welcome dialog box will appear (see Figure 1). If preferred, the user may uncheck the "Show this dialog at startup" option.

Figure 1 – The Welcome Dialog

Select the Log In button. A Log In dialog appears. If the entire dialog is not visible, click on the More button circled in Figure 2.

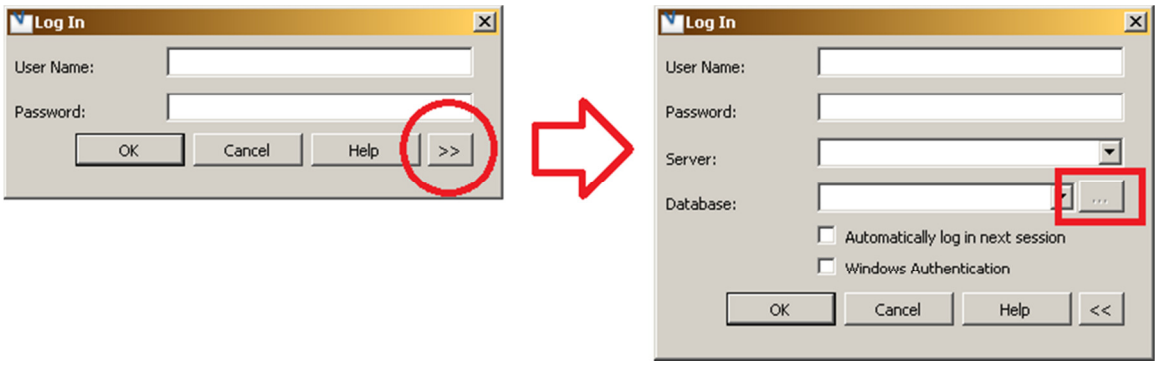


Figure 2 – The Vault Log In Dialog

Before logging in to the vault server, the user must specify the server name and the name of the vault database. Check with the vault administrator to learn the names of the server and database. If the server name is entered correctly, clicking on the ellipsis button (boxed in Figure 2) will offer a list of available databases on that server.

Each user must have a username and password created by the vault administrator. Once this has been done, the user may enter them into the Log In dialog to log in to the vault server. For convenience, the "Automatically log in next session" option may be checked, but the username and password must be remembered for future use.

Leave the Windows Authentication option unchecked.

Once logged in to the vault client, the user may access her or his user profile by clicking on the menu bar File > User Profile. The user may change his or her first or last name, email address (not required), and password.