

Autodesk Vault 2009

Managing Your Data

The Autodesk logo is displayed in white text on a black rectangular background. The word "Autodesk" is written in a bold, sans-serif font and is oriented vertically, reading from bottom to top.

January, 2008

© 2008 Autodesk, Inc. All Rights Reserved. Except as otherwise permitted by Autodesk, Inc., this publication, or parts thereof, may not be reproduced in any form, by any method, for any purpose.

Certain materials included in this publication are reprinted with the permission of the copyright holder.

Trademarks

The following are registered trademarks or trademarks of Autodesk, Inc., in the USA and other countries: 3DEC (design/logo), 3December, 3December.com, 3ds Max, ActiveShapes, Actrix, ADI, Alias, Alias (swirl design/logo), AliasStudio, AliasWavefront (design/logo), ATC, AUGI, AutoCAD, AutoCAD Learning Assistance, AutoCAD LT, AutoCAD Simulator, AutoCAD SQL Extension, AutoCAD SQL Interface, Autodesk, Autodesk Envision, Autodesk Insight, Autodesk Intent, Autodesk Inventor, Autodesk Map, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSnap, AutoSketch, AutoTrack, Backdraft, Built with ObjectARX (logo), Burn, Buzzsaw, CAiCE, Can You Imagine, Character Studio, Cinestream, Civil 3D, Cleaner, Cleaner Central, ClearScale, Colour Warper, Combustion, Communication Specification, Constructware, Content Explorer, Create>what's>Next> (design/logo), Dancing Baby (image), DesignCenter, Design Doctor, Designer's Toolkit, DesignKids, DesignProf, DesignServer, DesignStudio, DesignStudio (design/logo), Design Your World, Design Your World (design/logo), DWF, DWG, DWG (logo), DWG TrueConvert, DWG TrueView, DXF, EditDV, Education by Design, Exposure, Extending the Design Team, FBX, Filmbox, FMDesktop, Freewheel, GDX Driver, Gmax, Heads-up Design, Heidi, HOOPS, HumanIK, i-drop, iMOUT, Incinerator, IntroDV, Inventor, Inventor LT, Kaydara, Kaydara (design/logo), LocationLogic, Lustre, Maya, Mechanical Desktop, MotionBuilder, Mudbox, NavisWorks, ObjectARX, ObjectDBX, Open Reality, Opticore, Opticore Opus, PolarSnap, PortfolioWall, Powered with Autodesk Technology, Productstream, ProjectPoint, ProMaterials, Reactor, RealDWG, Real-time Roto, Recognize, Render Queue, Reveal, Revit, Showcase, ShowMotion, SketchBook, SteeringWheels, StudioTools, Topobase, Toxik, ViewCube, Visual, Visual Bridge, Visual Construction, Visual Drainage, Visual Hydro, Visual Landscape, Visual Roads, Visual Survey, Visual Syllabus, Visual Toolbox, Visual Tugboat, Visual LISP, Voice Reality, Volo, Wiretap, and WiretapCentral

The following are registered trademarks or trademarks of Autodesk Canada Co. in the USA and/or Canada and other countries: Backburner, Discreet, Fire, Flame, Flint, Frost, Inferno, Multi-Master Editing, River, Smoke, Sparks, Stone, and Wire

All other brand names, product names or trademarks belong to their respective holders.

Disclaimer

THIS PUBLICATION AND THE INFORMATION CONTAINED HEREIN IS MADE AVAILABLE BY AUTODESK, INC. "AS IS." AUTODESK, INC. DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THESE MATERIALS.

Published by:
Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903, USA

Contents

Chapter 1	Data Management	1
	Key Terms	1
	About Autodesk Vault	2
	Autodesk Vault	3
	Autodesk Vault Add-ins for Design Applications	3
	Microsoft Office Add-in	4
	Data Management	4
Chapter 2	Vault Clients	5
	About Vault Clients	5
	Logging In to Vault	6
Chapter 3	Autodesk Vault	9
	Key Terms	9
	Working with Autodesk Vault	9
	Starting Autodesk Vault	10
	Managing Vault Folders	10
	Creating the Folder Structure	11
	Creating Library Folders	12
	Managing Vault Files	12
	File Status Icons	13
	Adding Files to a Vault	16
	Moving Files within Vaults	16

Attaching Files in the Vault	16
Renaming Files Within Vaults	18
Labeling Files	18
Copying Designs	19
Understanding Check Out	20
Understanding Check In	21
Understanding Undo Checkout	23
Displaying Version History	25
Getting Latest Versions	25
Getting Previous Versions	26
Viewing Previous Versions	27
Displaying Other Files Used	28
Displaying Where Files Are Used	29
Publishing DWF Files	30
Performing Searches	30
Performing Basic Searches	30
Performing Advanced Searches	30
Packaging Files with Pack and Go	31
Customizing Vault	33
Chapter 4 Working with Autodesk Inventor	37
Key Terms	37
Vault Add-in for Autodesk Inventor	38
Organizing Files	38
Specifying Workspaces in Vault Projects	39
Specifying Libraries in Vault Projects	39
Creating Folder Structures in Vaults	39
Working with Legacy Projects	40
Converting Projects to Work With Vaults	40
Moving Existing Data into Vaults	41
Logging into Vaults in Autodesk Inventor	41
Setting Up Vault-Enabled Projects	42
Mapping Folders	44
Working with Files in Vaults	46
Vault Browser	47
Checking in Autodesk Inventor Files	48
Adding Projects	49
Checking Out Files	50
Checking In Files	52
Undoing File Check Outs	53
Getting Latest Versions	54
Viewing Histories of Files	55
Starting Autodesk Vault	55
Customizing Work Flows	56

Chapter 5	Using Vault with AutoCAD Products	59
	Key Terms	59
	About the Vault Add-in for AutoCAD	60
	Performing Tasks In Vaults	61
	Logging into Vaults in AutoCAD-based Products	61
	Setting Working Folders on Local Drives	62
	Creating Folders for Vault Projects	63
	Working with Files in Vaults	63
	Adding Files	64
	Checking Out Files	67
	Working with Library Files	68
	Checking In Files	70
	Undoing Check Outs	71
	Refreshing Models from Vaults	72
	Reloading Xrefs from Vaults	72
	Starting Vault	73
	Customizing Work Flows	74
	Recommended Workflows	76
	AutoCAD Mechanical and Mechanical Desktop	76
	AutoCAD Electrical	77
	Using Shared Workspaces	78
	Setting Shared Working Folders	78
	Rules For Using Shared Working Folders	79
Chapter 6	Working with Autodesk Productstream	81
	Key Terms	81
	Autodesk Productstream	82
	Working with Items	83
	Creating Items	84
	Updating Items	90
	Creating Item Numbering Schemes	91
	Managing Item Properties	93
	Working with Bills of Material	94
	Editing BOMs	94
	Comparing BOMs	95
	Working with Change Orders	95
	ECOs and Change Orders	102
	Autodesk Productstream Web Client	103
	Item Search	103
	View BOMs	104
	View Where Used	104
	View Attachment	104
	Configuration of Productstream	105
	Graphic Displayed at the top of the page	105
	Background Color	105

	Customizing Columns	105
	Item Displayed	106
	Printing Results	106
Chapter 7	Using Vaults with Microsoft Office Applications	107
	Key Terms	107
	Integrating with Microsoft Office Word	108
	Checking Out Files	109
	Checking In Files	110
	Undoing Check Outs	111
	Index	113

Data Management



Learn about the Autodesk® data management system and its configurations.

Key Terms

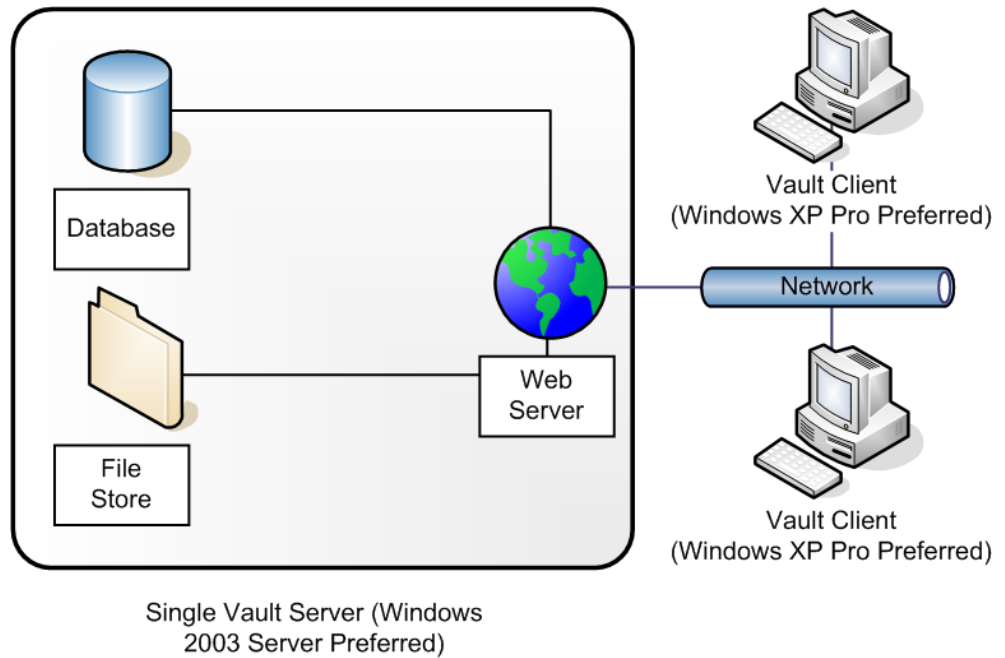
Term	Definition
Autodesk® data management server	The server used in conjunction with Autodesk® Vault, Autodesk® Productstream®, and Content Center for storing files and version data.
Autodesk Vault	A system for data management and version control. A general purpose application for interacting with a vault on the Autodesk data management server. You can browse the complete vault structure, add any file to the vault, and perform most other file-based operations, depending on your level of permission.
client	Applications that access the Autodesk data management server. These include stand alone applications such as Autodesk Productstream as well as integrated application add-ins such as Autodesk Vault for Inventor or Autodesk Vault for Microsoft® Office.

Term	Definition
data management	A means to organize and track files and design modifications through the design process.
server	The central location where all the vault data is stored and from which it is retrieved. The server must always be online for clients to access the vault. The vault server is configured using ADMS Console.
vault	The logical combination of a vault database and a vault file store that contains all of the information managed by Autodesk Vault. Each installation of Autodesk Vault can maintain several independent vaults. A single client can connect to several different vaults, but not simultaneously.

About Autodesk Vault

Autodesk Vault is a workgroup data management system for sharing design data across a project team. The vault is a file management and version control system for all engineering and related data providing design team members with a central and secure collaborative environment. Autodesk Vault consists of two components: the Autodesk data management server and vault clients. The server stores the master data files of all design information. The clients provide access to the files stored on the server.

Design teams use Autodesk Vault for version control and to store and share all types of engineering files and related data. Files can be Autodesk Vault, AutoCAD®, Autodesk® DWF™ (Design Web Format), FEA, CAM, Microsoft® Word, Excel®, or any other file used in the design process.



Autodesk Vault

Autodesk Vault is a general purpose application for interacting with a vault on the Autodesk data management server. You can browse the complete vault structure, add any file to the vault, and perform most other file-based operations, depending on your level of permission.

Autodesk Vault Add-ins for Design Applications

Add-in clients provide basic vault functions within the environment of a parent application. Add-ins maintain application-specific data relationships when adding files to a vault.

There are add-ins available for Autodesk and non-Autodesk® design applications.

NOTE As a general rule, if an integrated client is available for a particular application, managing files using that client minimizes loss of data, such as the assembly relationships. We recommend that you use integrated clients whenever possible.

Microsoft Office Add-in

The Microsoft® Office Add-in performs basic vault functions on documents, spreadsheets, and other non-CAD data within any of these Microsoft Office applications: Word, Excel, and PowerPoint®.

Data Management

All versions of files checked into the vault are retained, along with any file dependencies, providing a living history of the project. Team members have access to the files and data stored on the server, and the history of files. They check out files to prevent more than one member from editing the same file at the same time. After a file is checked back into the vault, team members can refresh their local copies.

Vault Clients

2

Learn how to configure vault clients and how to log in to a vault.

About Vault Clients

Vault clients include the following software applications:

Client Software	Description
Autodesk® Vault	A stand-alone client providing full access to a vault.
Vault add-in for Autodesk® Inventor™	Manage parts, assemblies, and other Autodesk Inventor files that are stored in the vault from the Autodesk Inventor interface.
Vault add-in for AutoCAD®	Perform basic vault functions within AutoCAD, AutoCAD® Mechanical, AutoCAD® Electrical, and Autodesk® Mechanical Desktop®.
Vault add-in for Microsoft® Office	Perform basic vault functions on documents, spreadsheets, and other non-CAD data within any of the Microsoft Office applications.

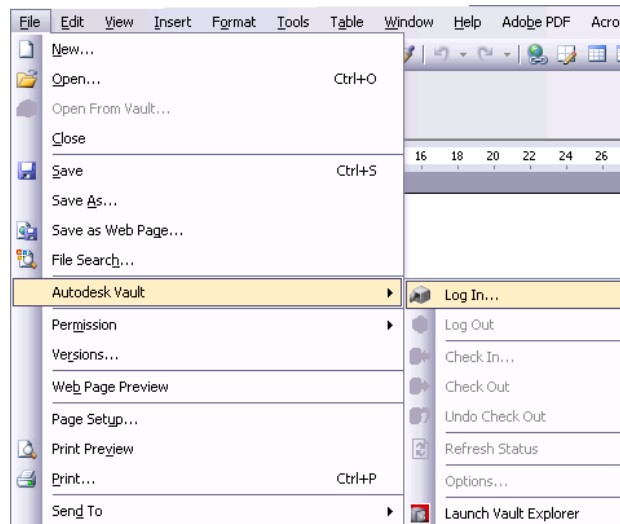
Logging In to Vault

When Autodesk data management server is installed, a vault and a user account are created. The name of the vault is Vault. The account name is administrator. No password is assigned to the account and the name is not case sensitive. The administrator account has full administrator privileges.

NOTE If a user account has already been created for you, log in using your user name and password.

Log into Autodesk data management server the first time

- 1 Use one of these methods:
 - On the Start menu, click Programs ► Autodesk ► Autodesk Data Management ► Autodesk Vault (version).
 - On the Start menu, click Programs ► Autodesk ► Autodesk Data Management ► Autodesk® Productstream® (version).
 - In an application with an integrated add-in, click File ► Autodesk Data Management Server ► Log In.



- 2 In the Log In dialog box, verify the following:
 - User name** The name for the vault account.

Password	The password associated with the vault account.
Server	The name of the computer on which the vault server is installed.
Database	The name of a vault database located on the specified server. The default is "Vault". Click the browse button to select from a list of available databases on the server.

- 3 A default user ID, vault server, and database are set up for you to get started using the vault right away. If a user account has already been created for you, use your own account information. If a user account has not been created for you, or the default values are not present, contact your vault administrator.
- 4 Use either the default values or, if an account has been created for you, use your own account information. The default values are:
 - 5 `User Name: Administrator`
`Password: empty`
`Server: Name of the computer on which the vault server is installed.`
Use localhost if the server is installed on the same machine as the client.
`Database: Vault`
- 6 Click OK.

You are logged into the vault.

NOTE You have the option to save the account information to automatically log into the vault the next time.

Autodesk Vault

3

Manage files using Autodesk® Vault, the general purpose interface to Autodesk® data management server.

Key Terms

Term	Definition
check in	Returning a modified file to the vault. The previous version is retained in the file history.
check out	Retrieving a read/write copy of a file stored in the vault for editing.
latest version	The most recent version of a file stored in the vault.
local copy	The copy of the vault source file placed in the local working directory.
previous version	An older version of a file stored in the vault. Previous versions of a file are retained and are accessible at any time.

Working with Autodesk Vault

Use Autodesk Vault to manage folders and files within a vault.

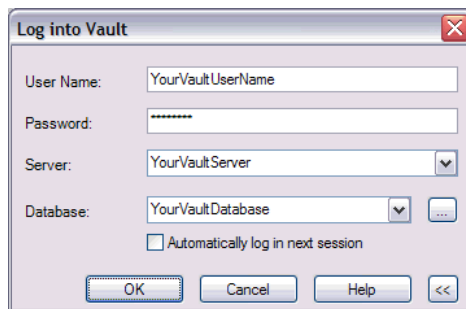
- Start Vault
- Manage folders

- Manage files
- Manage file versions
- Perform searches
- Package files

Starting Autodesk Vault

Start Vault

- On the Microsoft® Windows® Start menu, click Programs ► Autodesk ► Autodesk Data Management ► Autodesk Vault (version).
 - On the desktop, double-click the Autodesk Vault icon.
- 1 In the Log in dialog box, enter your user name, password, the server name, and the name of the computer.
 - 2 Click OK.



NOTE You may save your account information to automatically log into the vault upon next use.

Managing Vault Folders

Using Vault, create the folder structure for the vault.

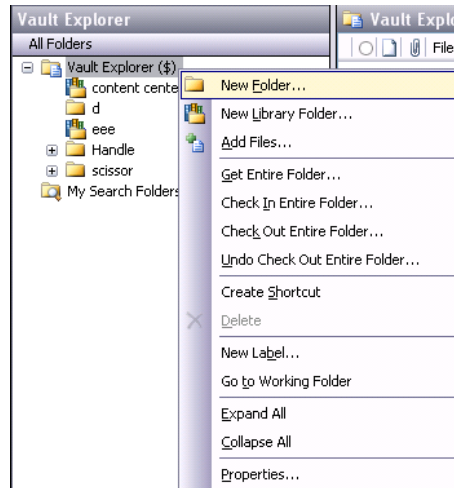
Creating the Folder Structure

Autodesk Vault is used to create the folder structure for the vault. The root directory in a vault is represented as \$/.

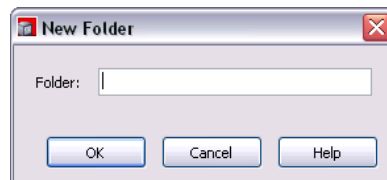
NOTE Autodesk® Inventor™ only. Because Autodesk Vault uses the Autodesk Vault project file as a reference for file organization, set the folder structure inside the vault identical to the folder structure of the project on the local computer.

Create a folder

- 1 Right-click the Vault (\$) folder, and then select New Folder.



- 2 In the New Folder dialog box, specify a name for the folder.

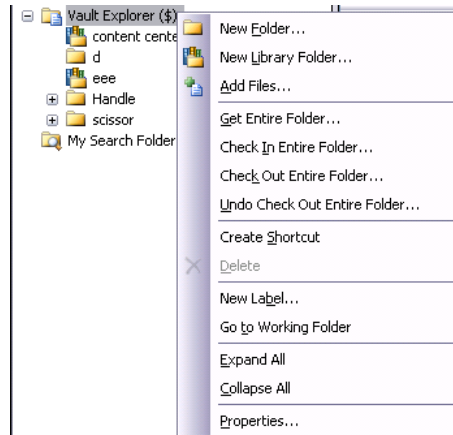


- 3 Click OK.

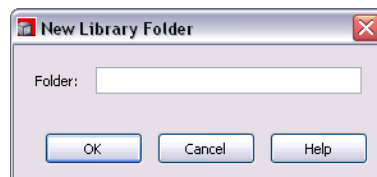
The folder is created below the root level of the vault. Additional subfolders might be created automatically when you add files to the vault using the Vault add-in for Autodesk Vault and for AutoCAD®-based products.

Creating Library Folders

- 1 To add a library folder, right-click the root level directory (\$), and then click New Library Folder.



- 2 In the New Library Folder dialog box, enter a name.



You can create library folders directly from the root level of the vault or below another library folder.

Managing Vault Files

Manage design and project files using Vault.

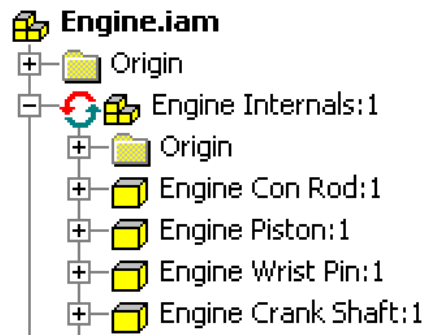
Any non CAD files can be added to a vault using Vault. When adding CAD data from Autodesk Vault, or any of the AutoCAD-based products, be sure to add the files from within the CAD application to maintain file relationships.

- For Autodesk Vault design files, use the Autodesk Vault add-in for Inventor.

- For DWG host files containing xrefs in applications such as AutoCAD, AutoCAD® Mechanical, AutoCAD® Electrical, or Autodesk® Mechanical Desktop®, use the Autodesk Vault add-in for AutoCAD.

File relationships are maintained among files stored in the vault. When getting a file, checking a file out, or checking a file in, the files related to a selected file can be included. The following terms refer to related files:



Children Files on which the selected file depends.
Parent Files that are dependent on the selected file.

















Autodesk Vault can be used to manage and track the many different types of files and data associated with a design project, including Autodesk Vault and AutoCAD data, to documents and spreadsheets.

File Status Icons

The following icons indicate the status of files in the Autodesk Vault window, the Vault browser in Autodesk Vault, , and the Xrefs Manager in AutoCAD-based products.

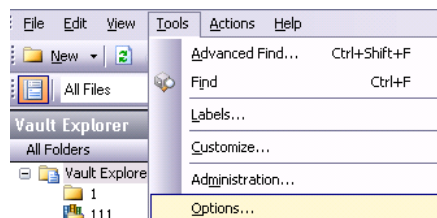
Icon	Description
	Not in the vault or the file has missing parent/child relationships. Use the Add Files command to add the item to the vault or resolve the missing links.
	Checked in to the vault and the version you are working on is the same as in the vault. Also referred to as the Latest Version.

Icon	Description
	Checked in to the vault, but the version you are working on is newer than the latest version in the vault. This typically means that the local file was changed without checking it out. To save the changes, check the file out, and make sure the Don't Get Local Copy option is selected.
	Checked in to the vault, but the version you are working on is older than the latest version in the vault. This typically means that another user made changes since your last update. Use Get Latest Version to update to the latest available version.
	Checked out to you and the version you are working on is the same as in the vault. Also referred to as the Latest Version.
	Checked out to you, but the version you are working on is newer than the latest version in the vault. This typically means that you made changes to the model since the last time you checked out the file, but have not checked it back in.
	Checked out to you, but the version you are working on is older than the latest version in the vault. This typically means that you started with a version from the vault that was older than the latest, and checked it out to promote it to the latest.
	Checked out to another user, and the version you are working on is the same as in the vault. Also referred to as the Latest Version. This typically happens if the other user did not check changes back into the vault. Check with the other user before proceeding.
	Checked out to another user, but the version you are working on is newer than the latest version in the vault. This typically happens if the user checked in saved changes to the vault, but kept the file checked out. Use Get Latest Version to update to the latest available version.
	Checked out to another user, but the version you are working on is older than the latest version in the vault, and another user checked out this file. Use Get Latest Version to update to the latest available version.

Icon	Description
	Autodesk Vault only: User is not logged into the vault.
	Has attachments. Expand the tree to see what files are attached.
	Has third-party OLE linked files. This is displayed in the Autodesk Vault browser only. Expand the tree to see what files are linked.
	An error occurred when adding your project to a vault. You must resolve the errors to add the files to the vault. This icon can also mean that you need to set a project folder mapping in the Map Folders dialog box.
	File doesn't exist in the expected working folder. This is common in two cases: 1) you created a new file but have not saved it to disk yet, and 2) an attachment isn't in the same folder as the file it is attached to. This is a requirement for files that are attached to Autodesk Vault documents.
	Library folder. The files within this folder are not intended to be edited when used in context of another assembly.

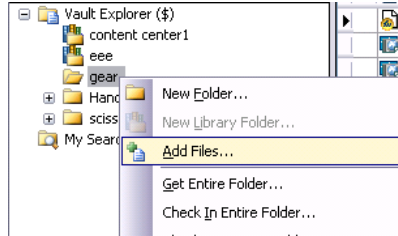
Choose between the large and small icons

- 1 Select Tools ► Options in Vault.
- 2 By default, the small icons are used to indicate status. Turn on the Use large status icons check box to display large icons.



Adding Files to a Vault

- 1 Right-click a vault folder, and then click Add Files.



- 2 In the Add files dialog box, select the file to add to the vault.
- 3 Click OK.

After adding a file to the vault, you can delete the local copy. When you want to view or modify a copy of the file, use Autodesk Vault to retrieve a version of the file and check it out.

Moving Files within Vaults

- 1 Ask all users to check in their local data and delete the local copies.
- 2 Using Autodesk Vault, drag one or more files from the existing location to a new location, to reflect the new file organization.
- 3 Drop the file in the new location and select Move from the context menu.
- 4 Check out the Autodesk Vault files and resolve any broken links.
- 5 After the vault files are moved and broken links are resolved, ask all users to log into the vault and get the latest version of the top-most file to their working folders.

Attaching Files in the Vault

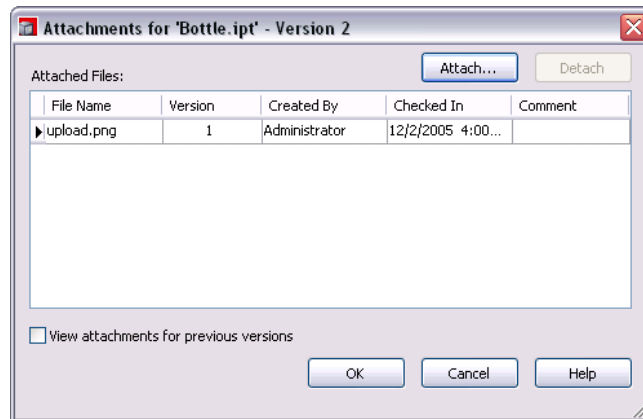
An attachment among files links them in the vault. You can manually add attachments among any two or more files within the vault. Using attachments, you can check out all the files that are linked, and work on them as a unit.

You can attach different file types. For example, you can attach a set of images to a Microsoft® Office Word document, and you can attach assembly instructions to the actual CAD assembly files.

NOTE Do not attach files that can be assembled (Autodesk Vault) or referenced together (AutoCAD-based products).

Attach a file

- 1 Select a file in the vault for which you want to define an attachment.
- 2 In the Vault menu, click Attachment or right-click the file to which you want to add an attachment, then click Attachment.
- 3 The Attachments dialog box displays the current attachments.
- 4 Click Attach.



- 5 A file browser is displayed. Browse to and highlight the files you wish to attach. To select multiple files, use a crossing window or hold down CTRL or SHIFT.
- 6 Click Open.
The selected files are listed in the Attached File list in the Attachments dialog box.
- 7 When you finish all attachments, click OK.

Remove an attachment

- 1 Select the file in the vault from which to remove an attachment.

- 2 On the Vault menu, click Attachments.
- 3 In the Attachments dialog box, select the file to remove.
- 4 Click Detach.
- 5 Click OK to detach the selected files and close the Attachments dialog box. A new version of the file is created in the vault with the selected files removed from it.

As a project grows, it may become necessary to move files and change the folder structure within a vault. Use Autodesk Vault to reorganize files and folders on the server.

NOTE Reorganizing files is only performed using Autodesk Vault. Never move files that are located in the working folder.

Renaming Files Within Vaults

As a project grows, it might become necessary to rename files within a vault. You must use Autodesk Vault to rename files so that file relationships are maintained.

If you want to rename the folder, make sure all the files in the folder are checked into the vault. A folder cannot be renamed if any of its files has an external dependency.

For more information about renaming vaulted files, see the Help within Autodesk Vault.

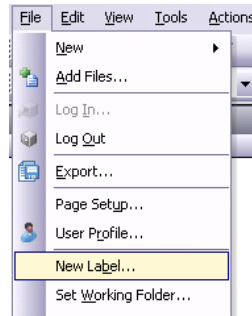
Labeling Files

In Vault, you can label development milestones such as customer proposals, design reviews, or concept variations so they can be easily identified. Using labels, you can establish baselines and track progress for work-in-progress files. You can also rename labels, extract labeled files from the vault using Pack and Go, and restore labeled files.

When you create a label, the most recent checked in version of every file in the project is assigned that label. There is no limit to the number of labels that can be assigned to a project. You cannot create more than one label with the same name. For more information on labels, see Labeling Files in the Autodesk Vault Help.

Label a file

- 1 Click File ► New Label.



- 2 In the New Label dialog box, enter a name for the label that indicates the milestone for that project. Label names can contain any alphanumeric text, excluding \ / : * ? " < > |.
- 3 Optionally, enter a comment to describe the label. Labels help identify the contents of the label.
- 4 Click OK.

Copying Designs

Create new products based on existing Autodesk Vault or AutoCAD designs by copying the entire assembly structure along with the related 2D drawings for 3D models within Autodesk Vault. You can manipulate existing assemblies to derive new designs and "one offs" complete with documentation.

In the Copy Design dialog box, you can selectively choose which parts of an existing design to copy, reuse, exclude, or replace. A naming scheme can be defined for the files being copied to the new design. A prefix and a suffix can optionally be added to the files automatically. The new files can also be automatically incremented if the original file names end in an integer. This is useful for when CAD files are named using item or part numbers. Autodesk Vault presentation files and drawing files can be automatically named to match the names of their direct part or assembly child.

For more information, see Copying Designs in the Autodesk Vault Help.

Copy a design

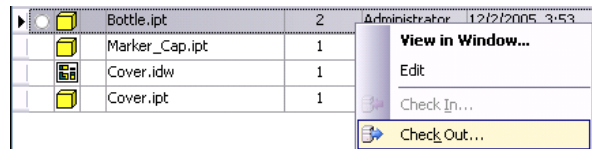
- 1 Select a file in either the main pane or the preview pane.
- 2 Click Copy Design in the toolbar.
- 3 In the Copy Design dialog, specify which parts to reuse, exclude, copy, or replace.
- 4 Click OK.

Understanding Check Out

When you check out a file, the read-only attribute of the local copy changes to read/write, and you can edit it. No one else can modify a file you check out until you check it back into the vault, but they can retrieve read-only copies. Only one member of a team can check out a file at one time.

Check out a file to edit

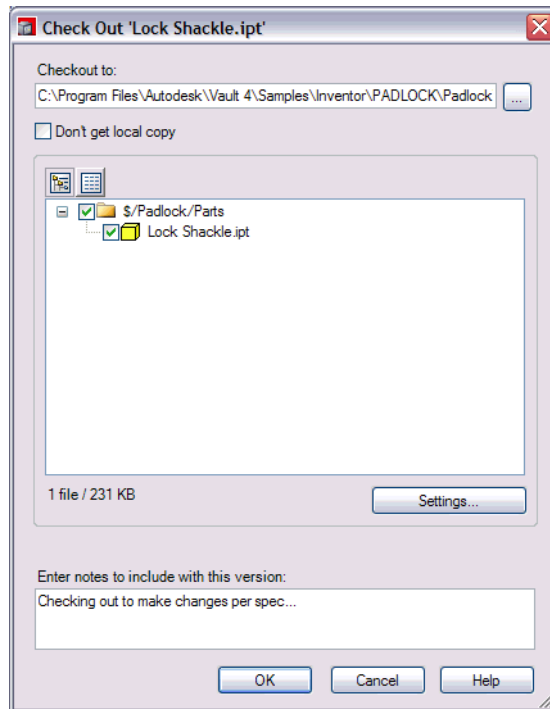
- 1 In Autodesk Vault, right-click a file, and then click Check Out.



- 2 In the Check Out dialog box, you can add a comment.

NOTE Autodesk Vault relies on consistent file locations to resolve links. Check files out to the default working directory.

As you check files out and in, use comments to add information for managing versions and to track the actions performed during the last working session. Use the advanced options to check out the parents and children of the selected file.



3 Click OK.

A check mark next to a file indicates that the file is currently checked out for editing. No other team members can check out a file that is currently checked out. However, others can get read-only previous versions and latest checked in versions of files that are currently checked out.

NOTE You can also right-click a folder, and click Check Out Entire Folder.

Understanding Check In

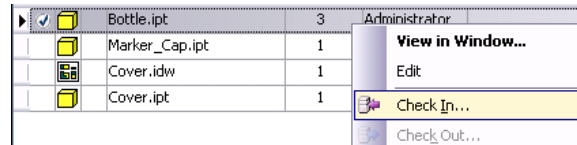
Check In returns the local copy of the file to the vault with the changes that have been made. When a file is checked in, it becomes the latest version and is accessible to others.

You must check in files from the working folder from which they were checked out. If files are moved from the working directory, you cannot check them back into the vault but you can undo the check out. The file properties

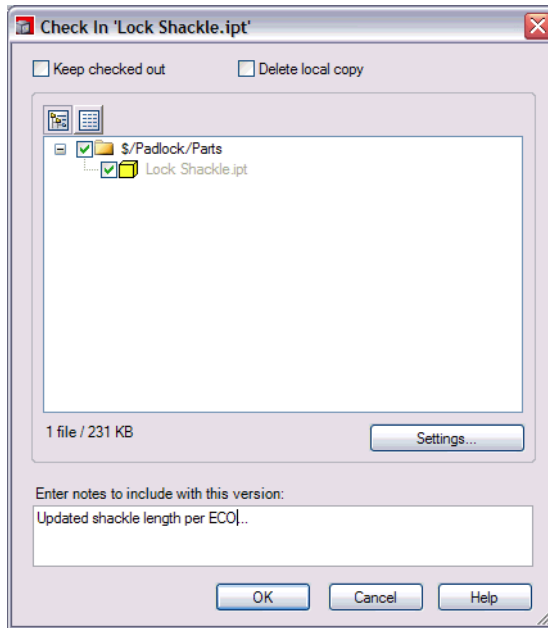
CheckoutMachine and CheckoutLocalSpec specify the required location of the file.

Check in a file

- 1 In Vault, right-click on a file, and click Check In.



- 2 In the Check In dialog box, you can:
 - Check in the file with your changes.
 - Check in your changes and keep the file checked out for further editing.
 - Delete the local copy upon check in if you check in the file.
 - Add a comment containing information about changes made in the file.
 - Use the Settings options to check in the parents and children of the selected file.



3 Click OK.

The information for the file in Vault indicates that the file is checked in. The file becomes the latest version and other team members can check it out.

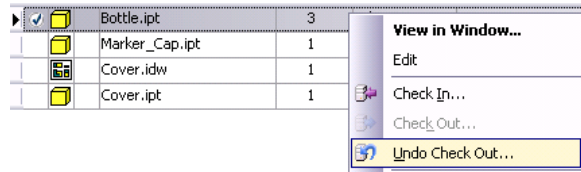
NOTE You can right-click a folder, click Check in Entire Folder.

Understanding Undo Checkout

Undo Checkout removes the checked out status on the file. The latest version of the file that was checked in is restored to the vault.

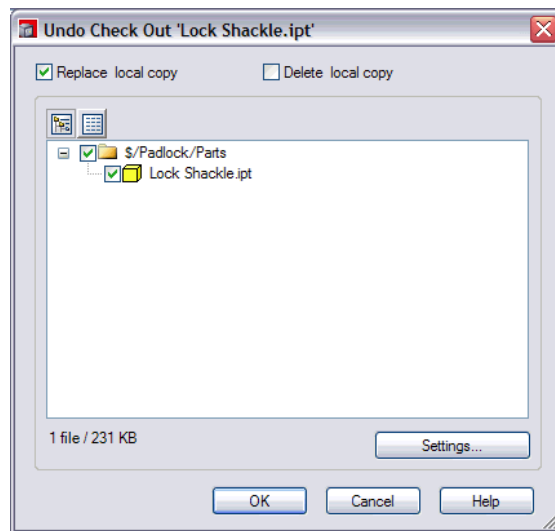
Undo a Checkout

1 In Vault, right-click a file, and then select Undo Check Out.



A prompt indicates that undoing a checked out file results in a loss of changes.

- 2 To make the local file the same as the file in the vault, select Replace working copy.



- 3 Click Settings to specify whether or not the children of the selected file are included.
- 4 Click OK.

The file has been returned to the vault. Any changes made to the local copy are lost.

NOTE You can right-click on a folder and then select Undo Check Out Entire Folder.

Displaying Version History

In addition to tracking versions, Autodesk Vault tracks properties associated with the data. You can use the version information and properties to help manage and search for data.

The files stored in the current vault are listed in the main pane of the Vault. Version and file information for the selected file is displayed in the bottom pane under four tabs; Versions, Uses, Where Used, and View. Each heading at the top of the pane represents a property field for the file. As you add more properties to a file, more fields are available for customizing the views within the tabs.

- 1 Select a file in Autodesk Vault.
- 2 Click the Version tab in the preview pane.

	File Name	Version	Created By	Checked In	Comment
▶	Marker_Cap.ipt	4	Administrator	1/16/2006 3:15 PM	
✓	Marker_Handle.ipt	2	Administrator		
✓	Market_Insert.ipt	2	Administrator		

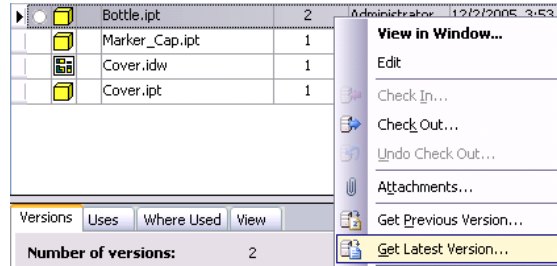
Versions	Uses	Where Used	View	
Number of versions:		4		
Local Same As:		Version 4		
File Name	Version	Created By	Checked In	Comment
▶ Marker_Cap.ipt	1	Administrator	1/14/2006 4:30 PM	
Marker_Cap.ipt	2	Administrator	1/16/2006 2:58 PM	
Marker_Cap.ipt	3	Administrator	1/16/2006 3:14 PM	
Marker_Cap.ipt	4	Administrator	1/16/2006 3:15 PM	

Getting Latest Versions

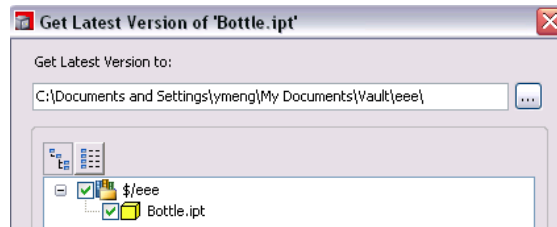
Get Latest Version retrieves a read-only copy of the most recent design data that is checked in. You cannot modify it until you check it out using Autodesk Vault or a Vault add-in product.

Get the latest version of a file or folder

- 1 In the Vault window, right-click the file or folder, and then click Get Latest Version.



- 2 In the Get Latest Version dialog box, click OK.
The most recent version is copied to the local working folder. If the most recent version in the vault is different from the copy currently in the working folder, you are prompted about overwriting data.
Click Settings to get the parents and children of the selected file.



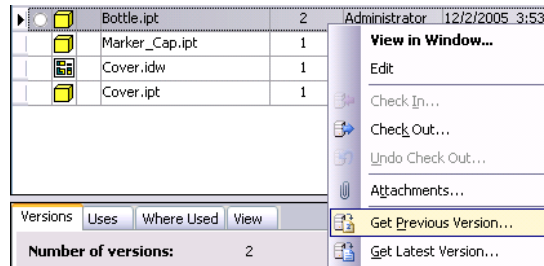
NOTE Autodesk Vault only: Library files and referenced files outside of the workspace are retrieved to a directory parallel to the working folder. To ensure that the correct version of the libraries are referenced, check out the project file from the vault and modify the library search paths to point to the new location.

Getting Previous Versions

Get Previous Version retrieves a past version of a file or a project and places a read-only copy in your working folder. Historical versions can never be modified. You can only create a new version of a file.

Get a previous version of a file or project

- 1 In the Vault window, right-click a file or project, and then click Get Previous Version.



- 2 In the Get Previous Version dialog box, select a version of the file or project to retrieve.



- 3 If the file has parents and children to get, click Settings, and then specify which related files are retrieved as well.
- 4 Click OK.

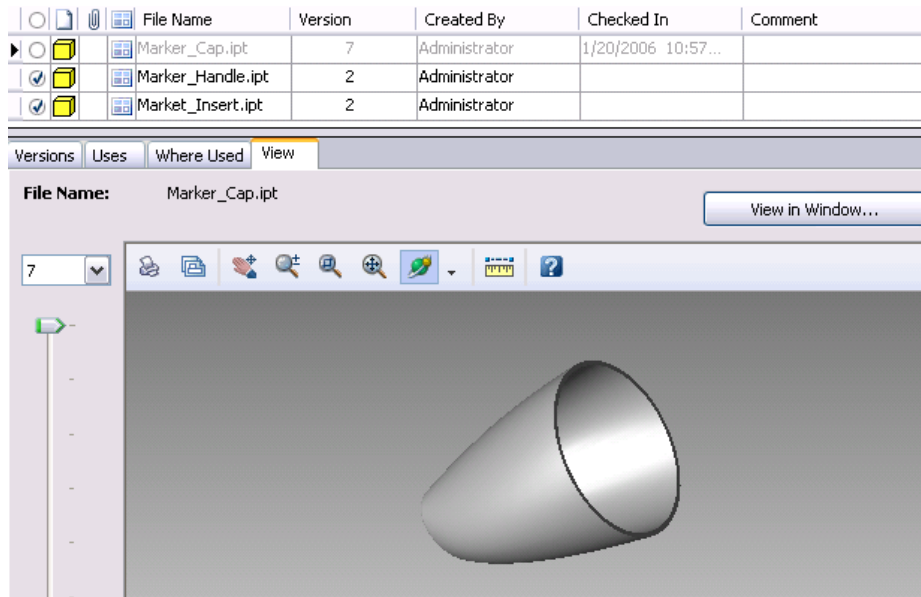
A read-only copy of the file is placed in the local working folder. You can view the file but you cannot modify it. To modify the file, you must check it out.

NOTE Autodesk Vault only: Library files and referenced files outside of the workspace are retrieved to a directory parallel to the working folder. To ensure that the correct version of the libraries is referenced, check out the project file from the vault and modify the library search paths to point to the new location.

Viewing Previous Versions

- 1 Select a file in Autodesk Vault.

- 2 Click View tab in the preview pane. The associated *.dwf* file of the selected file will be displayed using Autodesk DWF Viewer.
- 3 Choose the file version which you want to view by the version slider in the View tab.



Displaying Other Files Used

- 1 Select a file in Autodesk Vault.
- 2 Click the Uses tab in the preview pane.
The selected model is shown at the top. Other files used by the currently selected file, and the children and attached files are listed in a hierarchy as shown in the following illustration.

File Name	Version	Created By	Checked In	Comment
Handle.ipj	1	Administrator	1/14/2006 4:30 PM	
Handle.iam	3	Administrator		

Versions	Uses	Where Used	View
Direct Children:		3	
Total Children:		3	

File Name	Version	Created By	Checked In	Comment
Handle.iam	3	Administrator		
Marker ...	4	Administrator	1/16/2006 3:15 PM	
Marker ...	2	Administrator		
Market ...	2	Administrator		

Displaying Where Files Are Used

- 1 Select a file in Autodesk Vault.
- 2 Click the Where Used tab in the preview pane.

A list of parents in which the selected file is used is displayed. The component is listed at the top. Each assembly using the part is listed as follows.

File Name	Version	Created By	Checked In	Comment
Marker_Cap.ipt	4	Administrator	1/16/2006 3:15 PM	
Marker_Handle.ipt	2	Administrator		
Market_Insert.ipt	2	Administrator		

Versions	Uses	Where Used	View
Direct Parents:		1	
Total Parents:		1	<input type="checkbox"/> Include Parent Versions

File Name	Version	Created By	Checked In	Comment
Marker_Ca...	4	Administrator	1/16/2006 3:15 PM	
Handle. ...	3	Administrator		

Publishing DWF Files

DWF files can be automatically published for CAD files checked in to the vault using the vault add-ins for supported CAD applications. The *.dwf* attachments are only created for files that have changed or for files that do not have *.dwf* files published already. Automatic *.dwf* publishing can be turned off to save room and keep the size of the vault down. You can also specify a default folder location for the published *.dwf* files. For more information on automatic *.dwf* publishing, see Help in Autodesk Vault or each of the supported CAD application add-ins.

Performing Searches

Use the Advanced Find dialog box for basic searches and to create customized search criteria for locating specific information in your data. If the Content Indexing Service is enabled on the Autodesk data management server, you can search the content of files as well. For more information on searching, see Autodesk Vault Help. For more information on enabling content indexing, see ADMS Console Help.

Performing Basic Searches

- 1 On the Tools menu, select Advanced Find, and then click the Basic tab.
- 2 Enter your search criteria. Click Find Now.
The results of the search are displayed at the bottom of the Advanced Search dialog box.

Performing Advanced Searches

- 1 On the Tools menu, select Advanced Find, and then click the Advanced tab.
- 2 In the Property list, select a document property.
The Property list contains all the properties associated with the files stored in the current vault.
- 3 In the Condition list, specify a condition by which to search.

- 4 Enter a value to be used in the search criteria.
- 5 To add the search criteria to the list of stored searches, click Add.
- 6 Click Find Now.

The results of the search are displayed at the bottom of the Advanced Search dialog box.

Packaging Files with Pack and Go

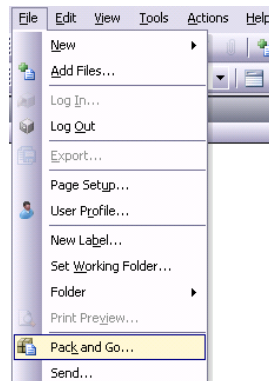
Pack and Go packages a file and all of its referenced files in a single location. All files that are referenced by a selected file are included in the package unless otherwise specified in the Pack and Go dialog box.

Use Pack and Go to:

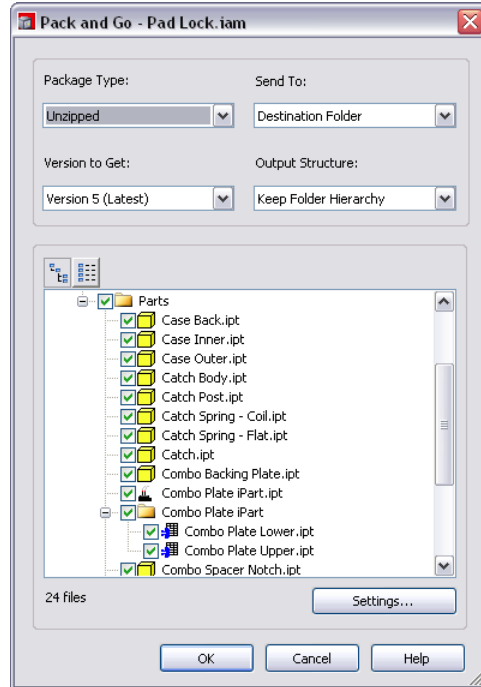
- Archive a file structure.
- Copy a complete set of files, while retaining links to referenced files.
- Isolate a group of files for design experimentation.
- Retrieve a previous version of a design and copy it into an isolated folder.
- Send the package to a mail recipient.

Package a set of files

- 1 Select a file from the file list in Autodesk Vault. Click File ► Pack and Go.



The Pack and Go dialog box shows a list of the files to be packaged.

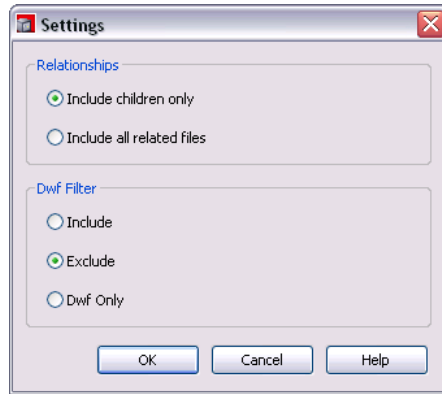


2 You can:

- Package the files to a *.zip* file or create a DWF package, a single *.dwf* file with each file represented as a page in the *.dwf* file.
- Select which version of the files to package.
- Specify the destination for the package, either a folder on the local computer or a mail recipient.
- Determine the structure of the files being packed. You can flatten all files and place them in a single folder, or preserve the structure as it appears in the vault.

NOTE If you choose to flatten all files and place them in a single folder, any file sharing the same name as another file is automatically renamed to avoid file name collisions. This may require that you manually resolve the renamed files in their native CAD systems.

- 3 Click Settings to select which related files will be included in the package and whether or not *.dwf* files are included.



- 4 Click OK . If the destination for the package is a mail recipient, an empty e-mail window is displayed with e package included as an attachment.

For more information on packaging files, see Autodesk Vault Help.

Customizing Vault

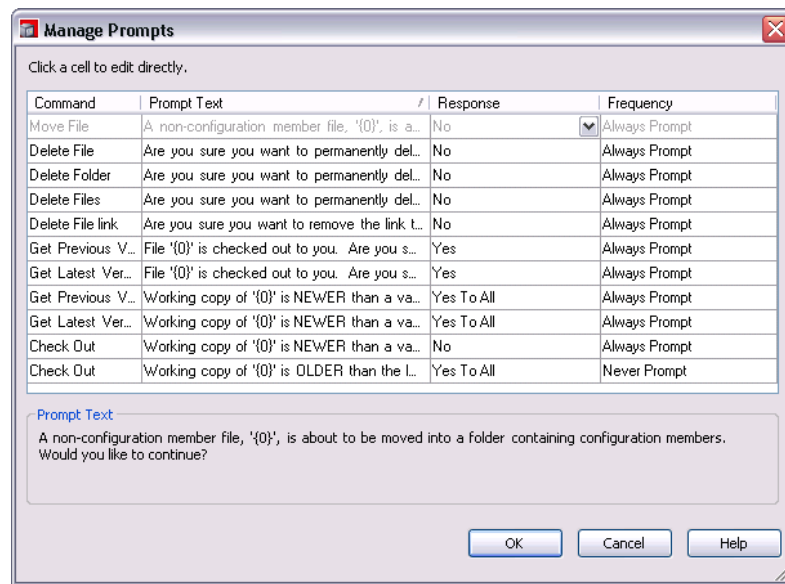
In Vault, you can customize your work environment. By suppressing dialog boxes for certain commands and controlling the default responses to various prompts, as well as when prompts appear you can greatly streamline your workflow. For more information on customizing your workflow and suppressing recurring prompts, see Autodesk Vault Help.

Customize your work environment

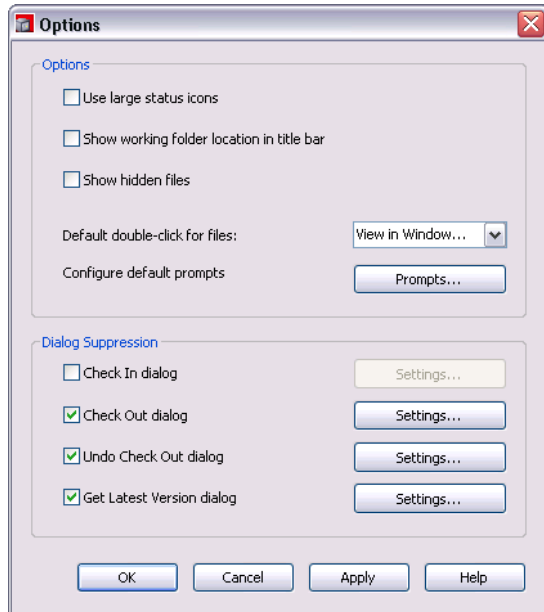
- 1 Click Tools ► Options. In the Options dialog you can do the following:
 - Select Use large status icons to display large icons.
 - Select Show working folder location in title bar to display the location of the working folder in the user interface.
 - Select Show hidden files to display the hidden files in the file list such as *.dwf* files.
 - When you double-click a file in the vault, the default action is to display the read-only file in a new window. If Edit is selected as the

default, the file is checked out of the vault and opened in the associated application for editing. To change the default action, select an action from the drop-down list.

- Configure prompts. To do this Click Prompts... A list of prompts appears. To modify the default response to a prompt click the dropdown menu in the Response cell. Go to the Frequency cell to adjust when and how often a prompt appears. Click OK.



- 2 In the Dialog Suppression Panel, there are four dialog suppression options. To suppress a dialog, select the checkbox next to it. Click the settings button and adjust the default settings. Click OK.



Working with Autodesk Inventor

4

Learn how the Autodesk® Vault add-in integrates with Autodesk® Inventor™. Before you proceed, make sure you are familiar with setting up Autodesk Inventor projects and the structure of your design project.

Key Terms

Term	Definition
Vault add-in for Autodesk Inventor	The Autodesk Vault client interface that is integrated with the Autodesk Inventor software application. This interface is used to manage the complex relationships among Autodesk Inventor files and communicate this information to the vault.
project file	The locations and settings that identify all the information necessary for a set of Autodesk Inventor design files to resolve their relationships. The file extension is <i>.ipj</i> .
library	A collection of Autodesk Inventor design files that are commonly used in designs and infrequently modified.
Check In	Placing Autodesk Inventor files in the vault using the Inventor add-in. Always use the Inventor add-in to add Autodesk Inventor files to the vault to retain file and data relationships.
vault-enabled project file	An Autodesk Inventor project file configured for use with Autodesk Vault. The multi-user setting is set to Vault and the paths are modified as necessary.

Term	Definition
vault browser	A specialized browser added to the Inventor browser panel for working with files in a vault. The vault browser is available once Autodesk Vault is installed and the current project is vault enabled.
workspace	Within a vault project, the logical location for storing Autodesk Inventor files for a design. Set up the file structure of the workspace folder to be the same as the file structure of the local working folder.

Vault Add-in for Autodesk Inventor

The vault add-in works within Autodesk Inventor, and adds tools for managing files using the Autodesk Inventor interface. Through the add-in, you can add files to the vault, check in and check out files, and map folder locations. The add-in works only with Autodesk Inventor files. We recommend you use the add-in to place Autodesk Inventor design files in a vault so that relationships among the files are preserved.

When the Autodesk Vault client is installed, the vault browser is added to the Autodesk Inventor browser bar and the vault submenu is added to the Autodesk Inventor file menu.

Organizing Files

Typical designs might include parts, libraries, iPart Factories, purchased parts, and common manufactured parts. To organize your files for effective data management, it is helpful to understand how Autodesk Inventor finds these files using the workspace and library search paths in the Autodesk Inventor project file, and how the Autodesk Inventor Content Library and iPart Factories publish parts.

The workspace path in an Autodesk Inventor project file indicates the location of the design data. In a vault-enabled project file, the workspace path specifies the location of the design data in the vault relative to the project file.

Specifying Workspaces in Vault Projects

In the vault project file, define the workspace path as a period (.), meaning the same folder as the project file, or to a subfolder below the project file, such as `.\Workspace`.

NOTE The best practice is to set the workspace path to the same folder as the project file.

For large design projects, the workspace folder can contain additional sub folders. However, you cannot map a project search path to a workspace sub folder.

For more information about setting up frequently used folders, see Autodesk Inventor Help.

Specifying Libraries in Vault Projects

Libraries, including Content Center libraries, contain files that are used in multiple designs. Library files do not change often and are frequently reused. For example, common components that are purchased, such as fasteners or electric motors, can be stored in a library.

Library files are typically stored in a library folder separate from the project files on a shared server so that all members of a design team have access to them. Library files cannot be modified in a vault-enabled project. Libraries cannot be located within the cone of influence.

Creating Folder Structures in Vaults

The master files for a vaulted project are all stored in the vault. To modify the files, they must be checked out to the local working folder. For ease of data management, the vault folder structure is set up to match the working folder structure for the project. For example, the vault folder structure for a project called Clamp is set up parallel to the structure of the local working directory and workspace folder.

Library folders cannot be located in the same folder structure as the model files in the vault. You add libraries to a vault at the root level of the vault directory. A project file must include a library search path for each of the libraries used by the model.

Working with Legacy Projects

Design projects that were created before Autodesk Vault was installed can either be converted to vault projects or you can use Autodesk Autoloader to create the vault project file. It is recommended you use Autodesk Autoloader to create the vault project. Autodesk Autoloader uploads an entire Autodesk Inventor project to a vault located on an Autodesk data management server.

To access Autodesk Autoloader: Program Files ► Autodesk ► Data Management Server ► Tools ► Autodesk Autoloader. Learn more about Autodesk Autoloader by clicking on Help.

NOTE If you choose to convert a legacy project to work with the vault using the Project Editor, back up the project file and data.

Converting Projects to Work With Vaults

Existing Autodesk Inventor projects can be converted for use with Autodesk Vault. To convert an existing project, you use the Project Editor to modify the project file to work with the vault and add the design data to the vault.

For more information about modifying a project file to be vault compatible, see “Converting Existing Project Files” in the Autodesk Vault Help.

Tips for converting projects to work with vaults

- In a shared or multi-user project, set the Multi-user setting to Vault.
- Consolidate Autodesk Inventor design files and the associated *.ipj* file manually.
- Before you remove a reference in the *.ipj* file, relocate the necessary design files from that location to the one referenced in the vault enabled *.ipj* file.
- Set up libraries in the vault for common components that are shared across multiple Vault Projects.
Include libraries for iParts and Autodesk Inventor Content Libraries that are referenced by the project.
In the Autodesk Inventor Projects dialog box, verify that the Autodesk Inventor Project File references the vault libraries correctly.
- For multi-user projects, make sure all users have their files checked in. All current data must be in the workgroup.

NOTE When converting an existing project to a vault-enabled project, turn on Using Unique File Names in the Autodesk Inventor project file. For more information, see Autodesk Inventor Help.

Moving Existing Data into Vaults

Existing Autodesk Inventor design data can be added to the vault. The data can be associated with a legacy Autodesk Inventor project file that has been converted to a vault project file or used with a brand new vault project file. In the Autodesk Vault add-in for Inventor, use the command Add Project to add existing data to the vault.

For more information about adding a project to the vault, see “Adding a Project” and “How to Add Files (Inventor)” in the Autodesk Vault Help.

NOTE It is recommended you use the utility called Autodesk Autoloader for uploading Inventor data into a vault instead of manually modifying the project file with the Project Editor. Autodesk Autoloader is a stand-alone utility independent of Autodesk Vault. Autoloader is available on the installation media. Contact the vault administrator for more information about installation and usage.

Logging into Vaults in Autodesk Inventor

If a vault is not open, the vault browser displays yellow icons with exclamation points in front of each file. When you log into the vault, the icons change to indicate the current status of the files, and the vault features are available on the context menu.

Log into a vault

- 1 Start Autodesk Inventor.
- 2 Click File ► Autodesk Data Management Server ► Log in.
- 3

User name	The name for the vault account.
Password	The password associated with the vault account.
Server	The name of the computer where the vault server is installed.
Database	The name of a database located on the specified server. The default is Vault. Click the browse button

to select from a list of available databases on the server.

- 4 A default user ID, vault server, and database are set up for you to get started using the vault right away. If a user account has already been created for you, enter your account information. If a user account is not yet created for you or the default values are not present, contact the vault administrator.
- 5 In the Log in dialog box, enter your user name, password, the name of the vault server, and the name of the vault database.
- 6 Click OK.

Setting Up Vault-Enabled Projects

Autodesk Vault can manage only vault-enabled project files. When you start a new Autodesk Inventor model, create the vault-enabled project file before you create any model files. Configure the project file to take the maximum advantage of Autodesk Vault.

Set up library folders in the vault to manage reusable common components, iParts, and content libraries. You must map the library search paths in the project file to the library folders in the vault.

For more information about mapping, see [Mapping Folders](#) on page 44.

Autodesk Inventor project files include several settings that tell Autodesk Inventor where to look for model files. When Autodesk Inventor opens the components of an assembly, it looks in the folders specified in the project file. For example, if a component is a non library component, Autodesk Inventor looks in the workspace folder specified in the project file. If a component is a library part, Inventor looks in the library paths specified in the project file.

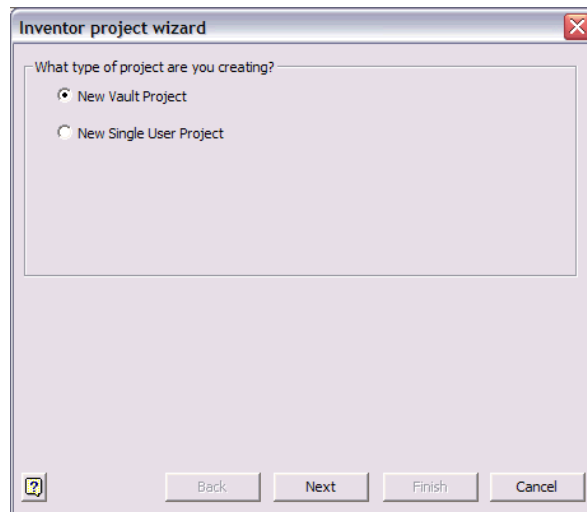
For more information about project files, see the sections about projects in the *Autodesk Inventor Getting Started* manual.

NOTE It is recommended you use Autodesk Autoloader to create the vault project. Autodesk Autoloader uploads an entire Autodesk Inventor project to a vault located on an Autodesk data management server.

Set up a new project file for a vault

- 1 Start Autodesk Inventor.

- 2 In the Open dialog box, click Projects ► New.
- 3 In the Autodesk Inventor project wizard select New Vault Project.



- 4 Click Next.
- 5 Name the vault project and specify the project location.
- 6 If you are referencing existing part libraries in the new project, click Next and select the libraries for the project.

If you are not referencing libraries, or you will be using new libraries, click Finish instead.

Specify a new library path

- 1 Click File ► Projects.
- 2 Double-click the new vault project to make it the active project.
- 3 Enter the library search paths where the library components are located on the network.
- 4 Click Save. Click Cancel to close the dialog box.

The new project file is now vault-enabled. As you create files in the project, you can add them to the vault using the Vault add-in for Autodesk Inventor.

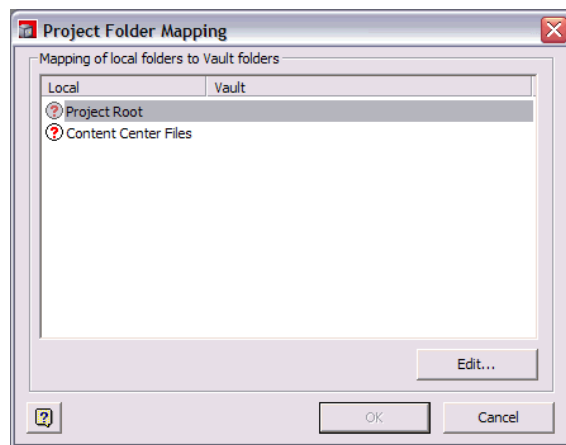
For more information about adding files to the vault from Inventor, see [Working with Files in Vaults](#) on page 46.

Mapping Folders

After the vault enabled project file is created, map the project root and any referenced libraries to corresponding folders in the vault.

Map the project root

- 1 If you are not currently logged into the vault, click on the File menu in Autodesk Inventor ► Autodesk Data Management Server ► Log in.
- 2 Click File ► Vault ► Map Folders.
- 3 In the Project Folder Mapping dialog box, select Project Root, and then click Edit or double-click Project Root.



The Browse Vault for Folder dialog box displays a list of the folders in the vault.

- 4 If the necessary folder exists in the vault, select the vault folder from the list and then click OK.

