Essentials

Autodesk®

Vault Basic 2020

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

July 2019

AUTODESK.
Authorized Publisher

© 2019 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., and/or its subsidiaries and/or affiliates in the USA and other countries: 123D, 3ds Max, Alias, ATC, AutoCAD LT, AutoCAD, Autodesk, the Autodesk logo, Autodesk 123D, Autodesk Homestyler, Autodesk Inventor, Autodesk MapGuide, Autodesk Streamline, AutoLISP, AutoSketch, AutoSnap, AutoTrack, Backburner, Backdraft, Beast, BIM 360, Burn, Buzzsaw, CADmep, CAiCE, CAMduct, Civil 3D, Combustion, Communication Specification, Configurator 360, Constructware, Content Explorer, Creative Bridge, Dancing Baby (image), DesignCenter, DesignKids, DesignStudio, Discreet, DWF, DWG, DWG (design/logo), DWG Extreme, DWG TrueConvert, DWG TrueView, DWGX, DXF, Ecotect, Ember, ESTmep, FABmep, Face Robot, FBX, Fempro, Fire, Flame, Flare, Flint, ForceEffect, FormIt 360, Freewheel, Fusion 360, Glue, Green Building Studio, Heidi, Homestyler, HumanIK, i-drop, ImageModeler, Incinerator, Inferno, InfraWorks, Instructables, Instructables (stylized robot design/logo), Inventor, Inventor HSM, Inventor LT, Lustre, Maya, Maya LT, MIMI, Mockup 360, Moldflow Plastics Advisers, Moldflow Plastics Insight, Moldflow, Moondust, MotionBuilder, Movimento, MPA (design/logo), MPA, MPI (design/logo), MPX (design/logo), MPX, Mudbox, Navisworks, ObjectARX, ObjectDBX, Opticore, P9, Pier 9, Pixlr, Pixlr-o-matic, Productstream, Publisher 360, RasterDWG, RealDWG, ReCap, ReCap 360, Remote, Revit LT, Revit, RiverCAD, Robot, Scaleform, Showcase, Showcase 360, SketchBook, Smoke, Socialcam, Softimage, Spark & Design, Spark Logo, Sparks, SteeringWheels, Stitcher, Stone, StormNET, TinkerBox, Tinkercad, Tinkerplay, ToolClip, Topobase, Toxik, TrustedDWG, T-Splines, ViewCube, Visual LISP, Visual, VRED, Wire, Wiretap, WiretapCentral, XSI.

NASTRAN is a registered trademark of the National Aeronautics Space Administration.

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
ASCENT Center for Technical Knowledge
630 Peter Jefferson Parkway, Suite 175
Charlottesville, VA 22911

866-527-2368

www.ascented.com

Sample provided by ASCENT for review only
All copying and use strictly prohibited

Contents

Introduction ..... **v**

Practice Files ..... **xiii**

Chapter 1: Introduction to Autodesk Vault **1**
Lesson: Autodesk Vault Overview **2**

Chapter 2: Basic Vault Tasks **17**
Lesson: Accessing the Vault **18**
Lesson: Autodesk Vault User Interface **28**
Exercise: Use the Vault Interface 40
Lesson: Working with Files and the Vault **42**
Exercise: Perform Basic Vault Tasks 59

Chapter 3: Working with Vault and Autodesk Inventor **67**
Lesson: Adding Inventor Models to a Vault **68**
Exercise: Add Existing Projects 78
Lesson: Common Vault Tasks in Autodesk Inventor **83**
Exercise: Edit Autodesk Inventor Files 98
Lesson: Working With Vault in Autodesk Inventor **107**
Exercise: Place Inventor Files 116

Chapter 4: Working with Vault and AutoCAD **125**
Lesson: Opening and Accessing the Vault in AutoCAD **126**
Exercise: Access the Vault 129
Lesson: Working with AutoCAD Files **131**
Exercise: Check Files In and Out of the Vault 141
Lesson: Working with External References in AutoCAD **146**
Exercise: Use the External References Palette 152

Chapter 5: Working with Vault and AutoCAD Electrical **159**
Lesson: Working with AutoCAD Electrical Files **160**
Exercise: Access the Vault 177

Sample preview by ASCENT for review only
All copying or reuse strictly forbidden.

Chapter 6: Working with Vault and AutoCAD Mechanical. 183
Lesson: Working with AutoCAD Mechanical Files 184
Exercise: Check Files In to the Vault 196
Lesson: Working with External References in AutoCAD Mechanical 199
Exercise: Attach a Drawing from the Vault 205

Chapter 7: Working with Vault and AutoCAD Civil 3D 209
Lesson: Accessing the Vault in AutoCAD Civil 3D 210
Exercise: Setting up the Vault 215
Lesson: Working with AutoCAD Civil 3D Files 217
Exercise: Check Files In and Out of the Vault 225
Lesson: Working with External References in AutoCAD 230
Exercise: Use the External References Palette 236

Chapter 8: Common Vault Tasks 243
Lesson: Customizing Views 244
Exercise: Customize Vault Explorer Views 251
Lesson: Finding Files 255
Exercise: Find Files in the Vault 271
Lesson: Managing Versions 276
Exercise: Manage File Versions 287
Lesson: Renaming and Moving Files 293
Exercise: Rename and Move Files 301
Lesson: Reusing Designs 305
Exercise: Copy Designs with Autodesk Vault 309
Lesson: Using Vault Files Outside of the Vault Environment 315
Exercise: Pack and Go 320
Lesson: Managing Properties 323
Exercise: Edit File Properties 326
Lesson: Replacing Files 331
Exercise: Replace Files 335

Chapter 9: Organizing and Populating a Vault 341
Lesson: How Autodesk Inventor Files Are Organized 342
Lesson: Adding Existing Models to a Vault 353
Exercise: Add Existing Projects to a Vault 361

Chapter 10: Managing Vault 371
Lesson: Setting Up Vault 372
Exercise: Create and Set Up a Vault 384
Lesson: Managing Users and Access 390
Exercise: Manage Users and Access 396
Lesson: Managing File Properties 400
Exercise: Manage File Properties 411
Lesson: Backing Up and Restoring Vaults 419
Exercise: Back Up and Restore a Vault 424
Lesson: Maintaining Vault 426
Exercise: Perform Vault Maintenance 440

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden

Appendix A: Vault Basic Integrations 447

Appendix B: Additional Resources 455

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Introduction

Welcome to the *Autodesk® Vault Basic 2020 Essentials* learning guide for use in Authorized Training Center (ATC®) locations, corporate training settings, and other classroom settings.

Although this guide is designed for instructor-led courses, you can also use it for self-paced learning.

This introduction covers the following topics:

- Course objectives
- Prerequisites
- Using this guide
- Notes, tips, and warnings
- Feedback
- Free Autodesk Software for Students and Educators

Refer to the Course and Classroom Setup section for installing the practice files and setting up the database.

Refer to the Course Workflow section for understanding the placement of chapters and the dependencies between course exercises.

This guide is complementary to the software documentation. For detailed explanations of features and functionality, refer to the Help in the software.

Course Objectives

After completing this guide, you will be able to:

- Describe the features and functionality of Autodesk Vault Basic.
- Log in to and work with non-CAD files using Autodesk Vault Basic and the Vault add-in for Microsoft Office.
- Add existing Autodesk® Inventor® models to a vault and work with Inventor files from the vault.
- Add existing AutoCAD® drawings to a vault and work with AutoCAD files from the vault.
- Add an AutoCAD® Electrical project to a vault and work with AutoCAD Electrical files from the vault.
- Add existing AutoCAD® Mechanical and AutoCAD® Civil 3D drawings to a vault and work with them from the vault.
- Perform common everyday tasks using Autodesk Vault Basic.
- Organize Autodesk Inventor files for best results.
- Set up, manage users and file properties, and backup and restore your vaults.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Prerequisites

This course is designed to teach new users the essential elements of using Autodesk Vault Basic 2020 for managing files and projects.

The primary focus of this guide is on using Autodesk Vault with Autodesk® Inventor®. The guide also includes lessons on working with other software, such as AutoCAD®, AutoCAD® Mechanical, AutoCAD® Electrical, and AutoCAD® Civil 3D.

It is recommended that you have a working knowledge of one or more of the following products:

- Microsoft® Office
- Autodesk Inventor
- AutoCAD
- AutoCAD Mechanical
- AutoCAD Electrical
- AutoCAD Civil 3D
- Microsoft® Windows® 10
- Microsoft® Windows® 8
- Microsoft® Windows® 7

Using This Guide

The lessons are independent of each other. However, it is recommended that you complete these lessons in the order that they are presented unless you are familiar with the concepts and functionality described in those lessons.

Each chapter contains:

- Lessons: Usually two or more lessons in each chapter.
- Exercises: Practical, real-world examples for you to practice using the functionality you have just learned. Each exercise contains step-by-step procedures and graphics to help you complete the exercise successfully.

Notes, Tips, and Warnings

Throughout this guide, notes, tips, and warnings are called out for special attention.

Notes contain guidelines, constraints, and other explanatory information.

Tips provide information to enhance your productivity.

Warnings provide information about actions that might result in the loss of data, system failures, or other serious consequences.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Feedback

Autodesk understands the importance of offering you the best learning experience possible. If you have comments, suggestions, or general inquiries about Autodesk Learning, please contact us at learningtools@autodesk.com.

As a result of the feedback we receive from you, we hope to validate and append to our current research on how to create a better learning experience for our customers.

Free Autodesk Software for Students and Educators

The Autodesk Education Community is an online resource with more than five million members that enables educators and students to download for free the same software used by professionals worldwide (see website for terms and conditions). You can also access additional tools and materials to help you design, visualize, and simulate ideas. Connect with other learners to stay current with the latest industry trends and get the most out of your designs.

Get started today. Register at the Autodesk Education Community (www.autodesk.com/joinedu) and download one of the many available Autodesk software applications.

Note: Free products are subject to the terms and conditions of the end-user license and services agreement that accompanies the software. The software is for personal use for education purposes only and is not intended for classroom or lab.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Course and Classroom Setup

Before you start the course, you must install Autodesk Vault Basic and the course data sets. Autodesk Vault Workgroup or Autodesk Vault Professional software can also be installed and used however please note that the course was created using the Autodesk Vault Basic software and therefore the screenshots reflect the Autodesk Vault Basic interface.

Installing the Practice Files

To install the data files for the exercises:

1. Download the Practice Files ZIP file using the link on the Practice Files page in the learning guide. Unzip the zip file to the C: drive.
2. The path for all the chapter folders should be *C:\AOTGVault*\.

After you install the data, this folder contains all the files required to complete each exercise in this guide. If Autodesk Vault software has been previously used on the computer, restore default settings for the user interface

Installing Autodesk Vault

You must install and run this courseware from individual computers. You cannot run the courseware from a shared server. Do not install the courseware on a computer that stores your working vault data.

Install both Autodesk Vault Basic Client and Autodesk Vault Basic Server on each computer. See the Autodesk Vault Basic installation media for installation instructions.

Course Setup Information

By default, the data files for each exercise are placed in the *C:\AOTGVault* folder. Be aware that if you select a different installation location, you might need to manually edit some of the supplied project files to modify their library search paths. These folders contain parts, assemblies, drawing library files, and other files required by the exercises.

The exercises are designed to be used back-to-back from start to finish. It is recommended that you log in to Autodesk Vault at the beginning of each exercise and when finishing an exercise, you should exit Autodesk Vault. The chapter folders contain subfolders holding documents for the chapter exercises.

If you are using any of the following Autodesk® software applications in conjunction with Autodesk Vault, they must also be installed:

- Autodesk Inventor
- AutoCAD
- AutoCAD Mechanical
- AutoCAD Electrical
- AutoCAD Civil 3D

Sample material provided by ASCENT for review only
All copying and reuse strictly forbidden.

Classroom Environment

The courseware is intended for use in an instructor-led environment. If you plan to use the courseware on your own in a non-classroom environment, you must set up Autodesk Vault correctly. Before you set up your system, you should be aware of the following:

- Do not use a production vault for the exercises. It is recommended that you set up a separate vault on a separate vault server.
- If you plan to repeat an exercise, you must remove any files that were added to the vault when you previously completed the exercise. It is recommended that you delete the entire vault and start again with a new vault.
- Do not attempt these exercises on a production vault server until you are familiar with the procedures that are covered.

If you have installed AutoCAD or other Vault compatible products after installing Vault, you might need to Uninstall/Change the Autodesk Vault Client installation and select **Add or Remove Features** to select the appropriate Add-In software.

Setting up the Database for the Exercises

Before you start any exercise, you need to perform the basic setup for this course. You must:

- Create a vault
- Add a user

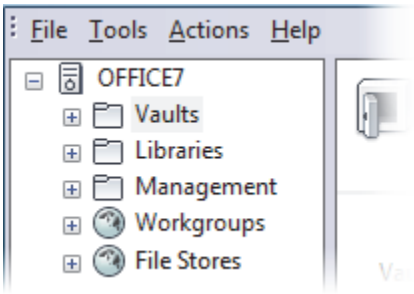
Note: You must have Autodesk Vault installed.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

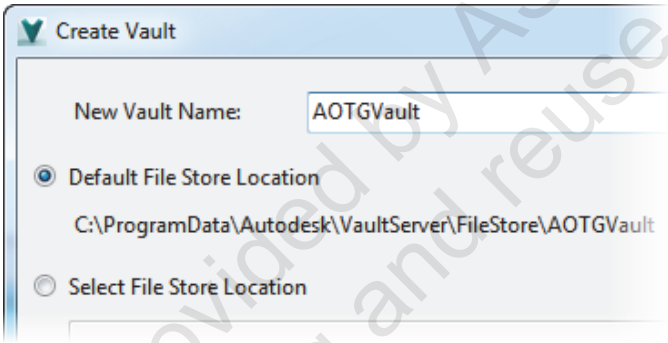
Create a Vault

1. Click Start menu>All Programs>Autodesk>Autodesk Data Management>Autodesk Data Management Server Console 2020.
2. In the Log In dialog box:
   - For User Name, enter **Administrator**.
   - Leave Password blank.
   - Click OK.

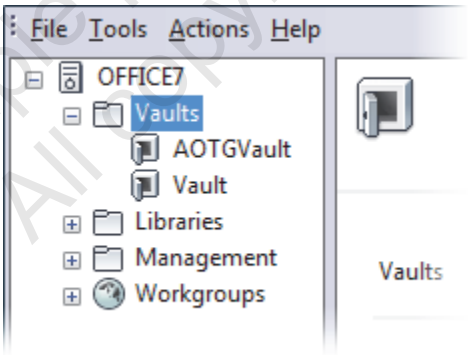
Autodesk Data Management Server Console is displayed.



3. Right-click Vaults. Click Create.
4. In the Create Vault dialog box, in New Vault Name, enter **AOTGVault**. Click OK.



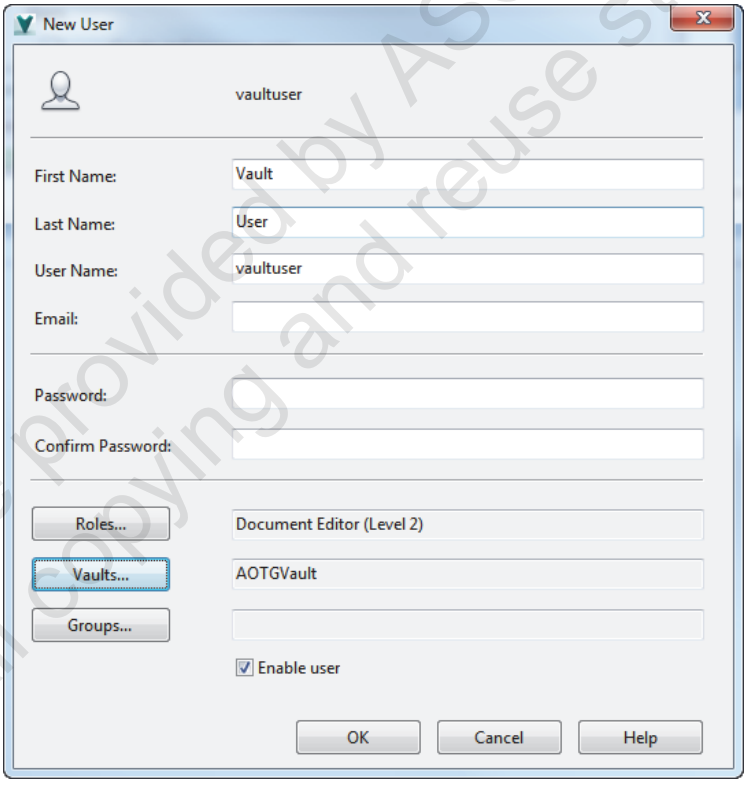
5. Click OK. The vault is added to the list of vaults (you might need to click on the + sign next to Vaults to see the list).



Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Add a User

1. Click Tools menu>Administration.
2. On the Security tab, click Manage Users….
3. In the User Management dialog box, click New User.
4. In the New User dialog box, enter the following information:
   - In First Name, enter **Vault**.
   - In Last Name, enter **User**.
   - In User Name, enter **vaultuser**.
5. Leave Password and Confirm Password blank
6. Click Roles.
   - In the Add Roles dialog box, select Document Editor (Level 2).
   - Click OK.
7. Click Vaults.
   - Select AOTGVault and then click OK.
   - Ensure that Enable User is checked.
   - Click OK to close the New User dialog box.



8. Click File menu>Exit to close the User Management dialog box.
9. Click Close to close the Global Settings dialog box.
10. Click File menu>Exit to close the Autodesk Data Management Server Console.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

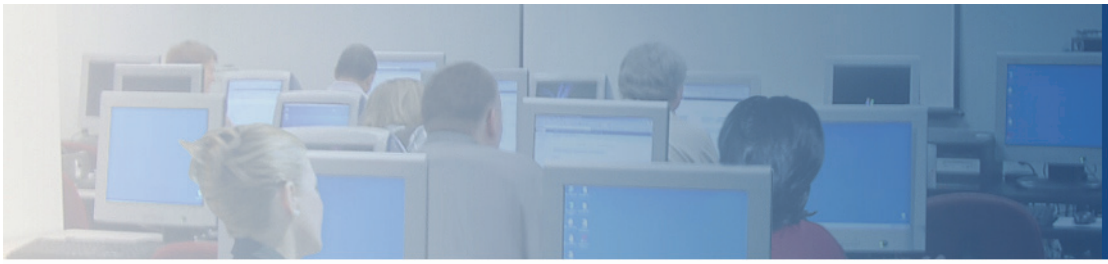
Course Workflow

The following table outlines dependencies between course exercises. Exercises in some chapters can be completed without first completing exercises in previous chapters.

Chapter	Exercises
Introduction	Complete the setup instructions in this chapter. No exercises are included in this chapter.
Chapter 1: Introduction to Autodesk Vault	No exercises are included in this chapter.
Chapter 2: Basic Vault Tasks	The exercises in this chapter are the first course exercises. You must complete the exercises in the order in which they are presented.
Chapter 3: Working with Vault and Autodesk Inventor	Complete the exercises in this chapter after completing the exercises in the Basic Vault Tasks chapter. If you complete the exercises in this chapter without completing the previous exercises, some screen captures will differ from your views of files in the vault.
Chapter 4: Working with Vault and AutoCAD	Complete the exercises in this chapter after completing the exercises in the Working with Vault and Autodesk Inventor chapter. If you complete the exercises in this chapter without completing the previous exercises, some screen captures will differ from your views of files in the vault.
Chapter 5: Working with Vault and AutoCAD Electrical	Complete the exercises in this chapter after completing the exercises in the Working with Vault and Autodesk Inventor chapter. If you complete the exercises in this chapter without completing the previous exercises, some screen captures will differ from your views of files in the vault.
Chapter 6: Working with Vault and AutoCAD Mechanical	Complete the exercises in this chapter after completing the exercises in the Working with Vault and Autodesk Inventor chapter. If you complete the exercises in this chapter without completing the previous exercises, some screen captures will differ from your views of files in the vault.
Chapter 7: Working with Vault and Civil 3D	Complete the exercises in this chapter after completing the exercises in the Working with Vault and AutoCAD Mechanical chapter. If you complete the exercises in this chapter without completing the previous exercises, some screen captures will differ from your views of the files in the vault.
Chapter 8: Common Vault Tasks	Complete the exercises in the Working with Vault and Autodesk Inventor chapter before completing the exercises in this chapter.
Chapter 9: Organizing and Populating a Vault	You can complete the exercises in this chapter without completing previous course exercises.
Chapter 10: Managing Vault	You can complete the exercises in this chapter without completing previous course exercises. Some screen captures might differ slightly from your view of files in the vault.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.



Chapter

1

Introduction to Autodesk Vault

This chapter provides an overview of Autodesk® Vault features and functionality. You learn how to use Autodesk Vault to manage engineering design data in a secure, centralized location.

Chapter Objectives

After completing this chapter, you will be able to:

- Describe the features and functionality of Autodesk Vault.

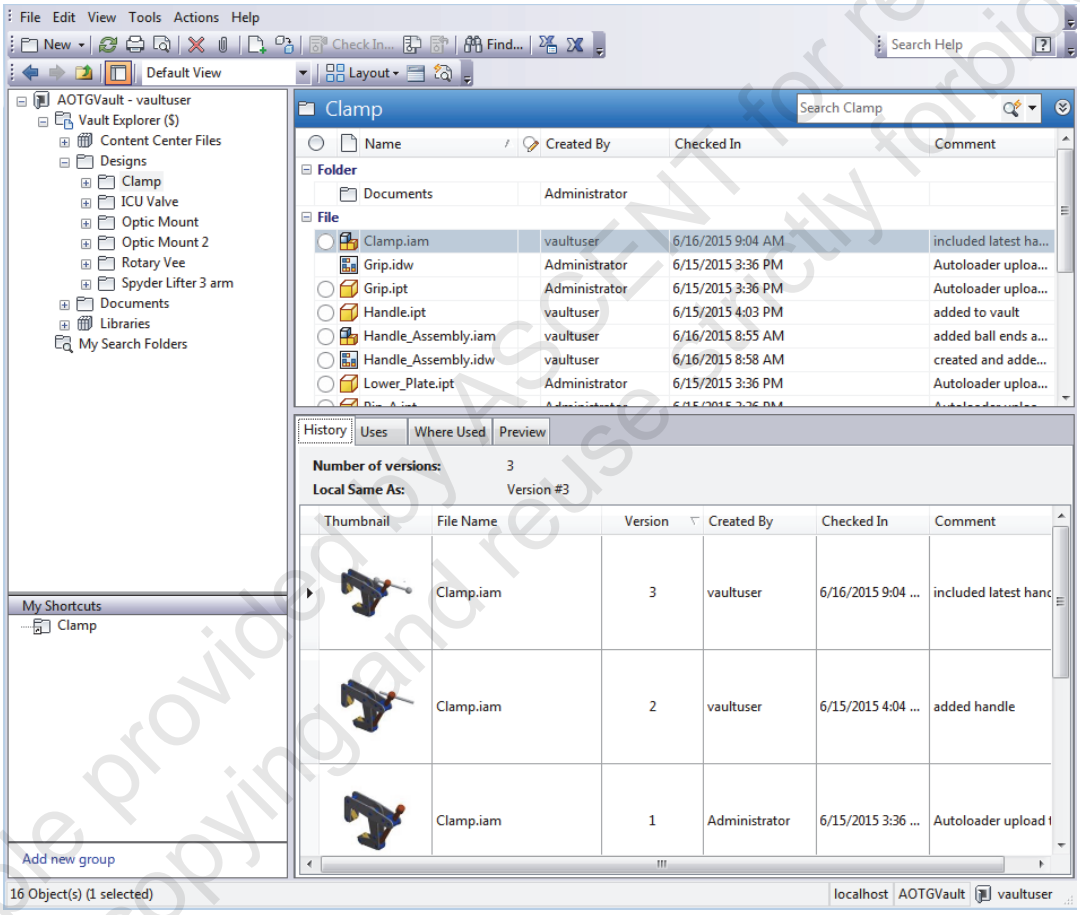
Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Lesson: Autodesk Vault Overview

Overview

Autodesk Vault is a secure, centralized storage solution for your design data. In this lesson, you learn about the features of Autodesk Vault, the components of a Vault installation, and how you can extend Vault to manage revisions and engineering changes.

In the following image, Autodesk Vault, a stand-alone application, is used to view the history of an Autodesk® Inventor® file that is stored in a vault.



Objective

After completing this lesson, you will be able to:

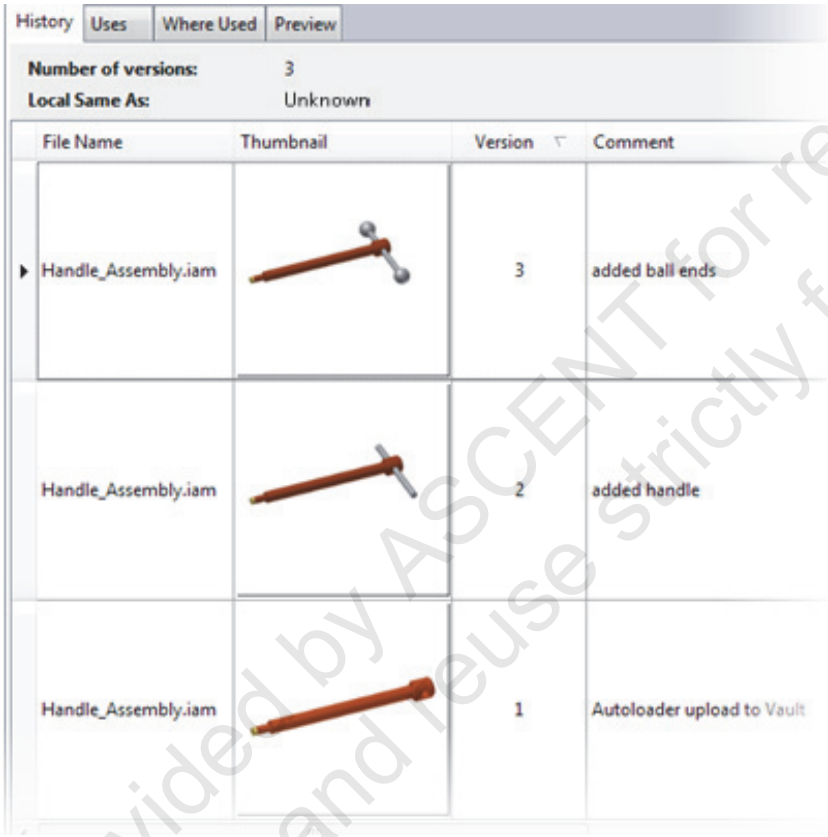
- Describe the main features of Autodesk Vault.
- Describe the components of a Vault server.
- List the clients you use to access a vault.
- Describe the workflow to edit a file stored in the vault.
- Describe how you can extend the capabilities of Autodesk Vault to include management of revisions, bills of materials, and the change process.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

About Vault

Autodesk Vault is a file management and version control system that you use to manage your project files. Vault offers security, version management, multi-user support, and integration with Autodesk applications.

In the following image, the versions of a design are shown in Autodesk Vault, a standalone client that you use to perform common tasks.

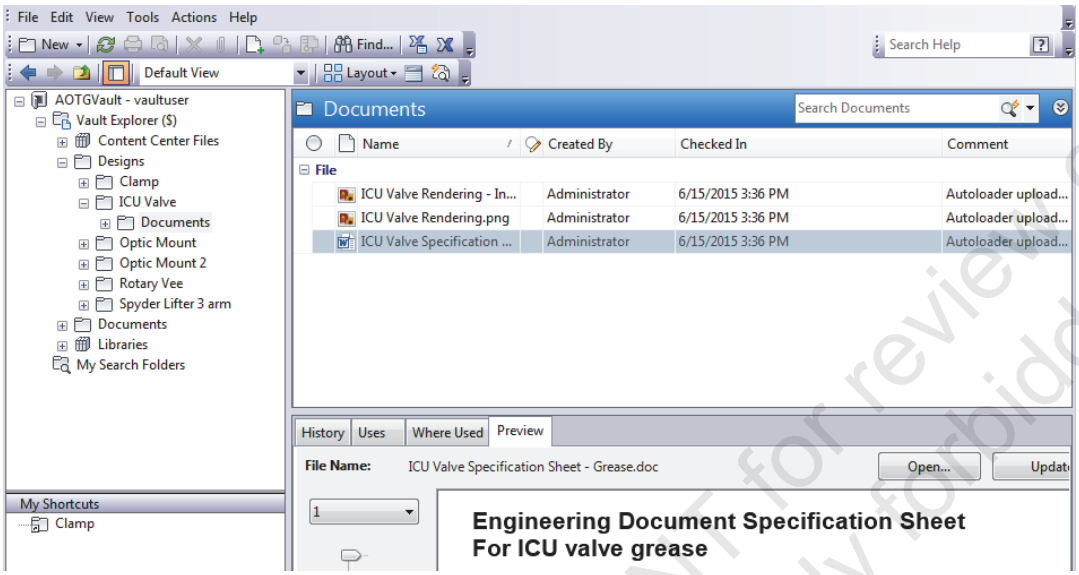


Centralized Storage

You can use Autodesk Vault to manage all your project files regardless of file format. This includes files from Autodesk Inventor, AutoCAD®-based products, Autodesk® 3ds Max®, Autodesk Revit products, AutoCAD Civil3D®, FEA, CAM, Microsoft Office, and more. You can organize all your files and keep them in one central location for easy access by all members of the design team.

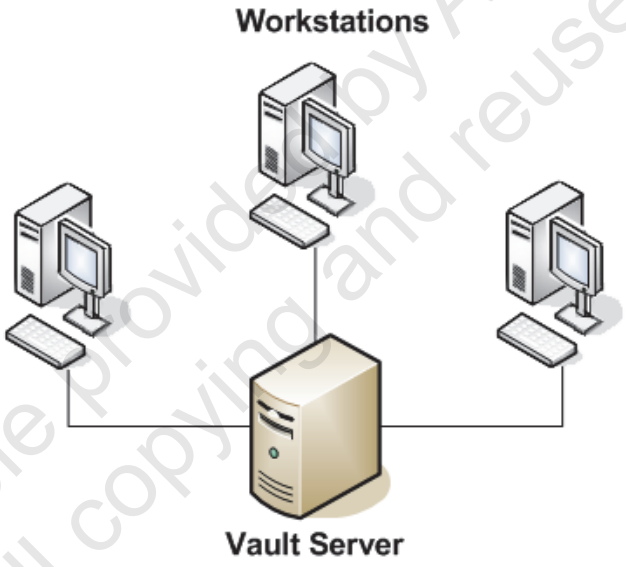
Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

You organize files in the vault the same way that you organize files outside of the vault. You create folders and then add files to those folders as shown in the following image.



Multi-User Support

Autodesk Vault supports a single user on a single workstation or multiple users with a shared server as shown in the following image.

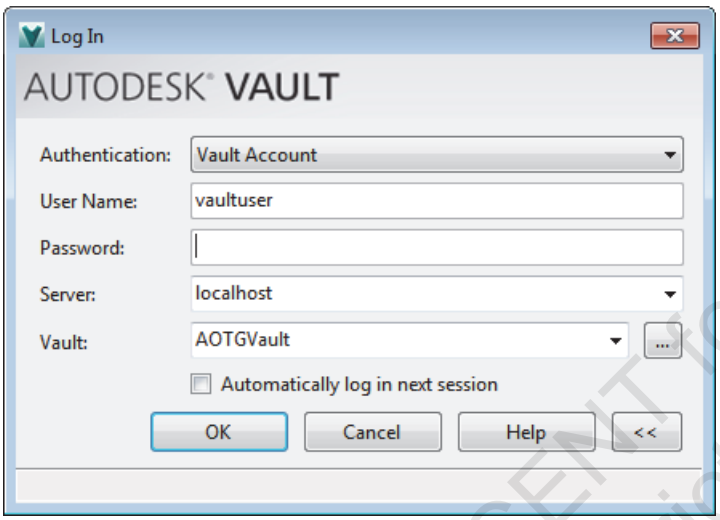


Check out and check in capabilities prevent more than one user from editing a file at one time, and enables all members of the design team to work together. Feedback via status icons and properties keeps all members of the design team informed of the status of files.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

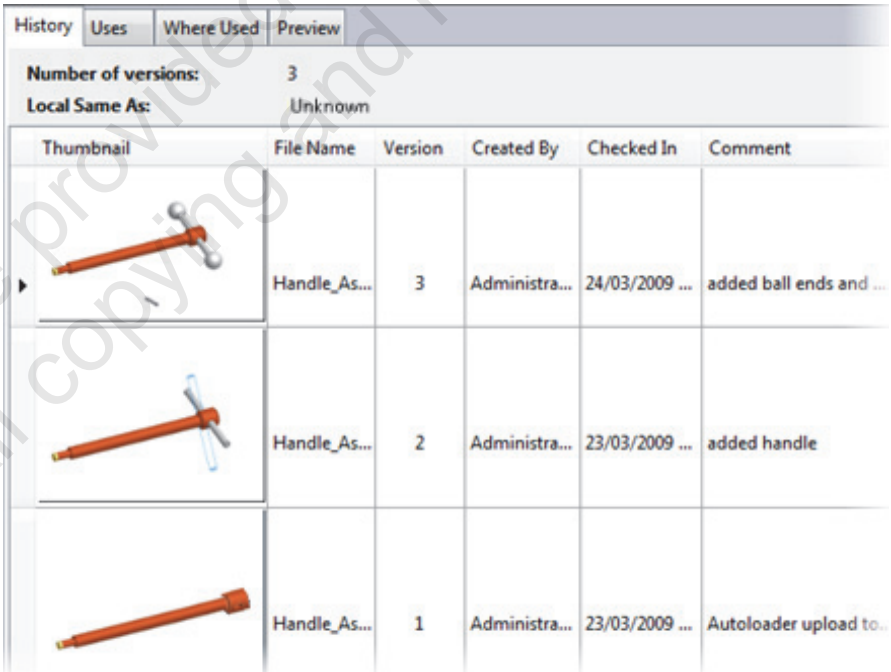
Security

Autodesk Vault provides an extra level of security over the standard file system. As shown in the following image, all users must log in to access design data. Autodesk Vault tracks each user's activities so that you can determine who modified a file. Because you cannot easily delete files, and because all file versions are retained, past versions are never misplaced or overwritten.



Version Management

Autodesk Vault stores every version of a file and its dependencies. You can view any previous version and its associated files or roll back the design to a previous version. In the following image, the three versions of an Autodesk Inventor assembly are displayed in Autodesk Vault, a stand-alone application that you use to view the contents of a vault.

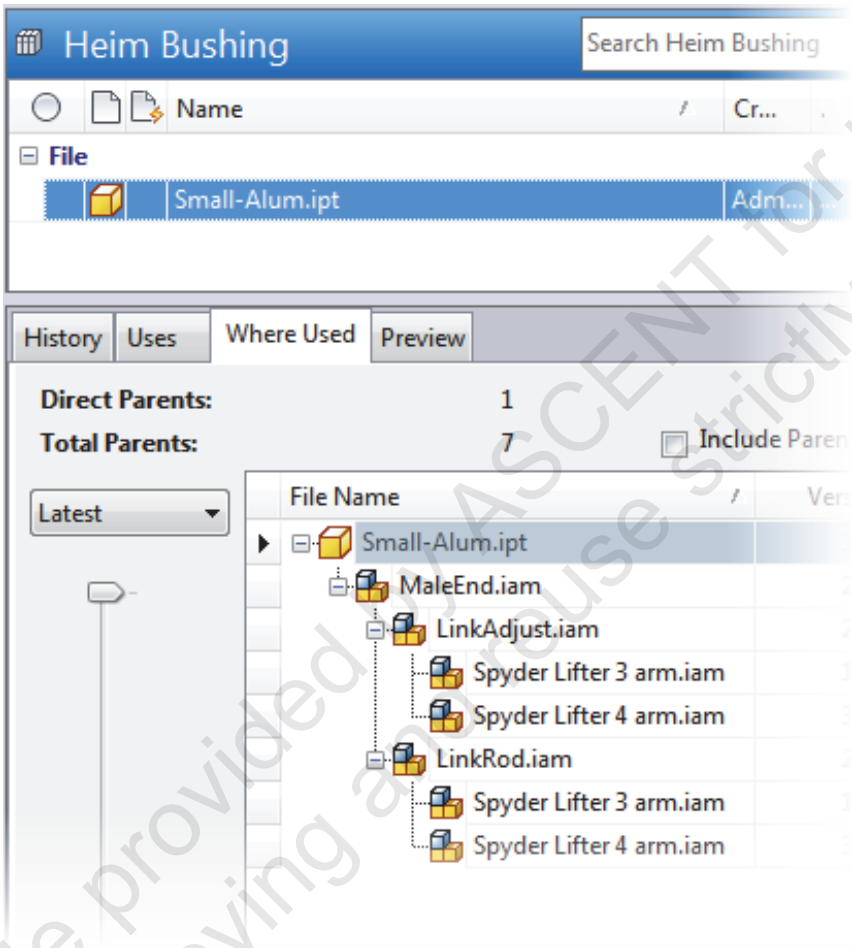


Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

File Relationships

Autodesk Vault understands the relationships between files and maintains those relationships for you. If you rename or move files in the vault, the required parent files are updated so the correct relationship is maintained.

You can view file relationships to determine how a change might impact other designs. For example, before you edit a file, you can determine which designs use the file so that you understand the scope of your changes. In the following image, the Where Used information indicates which designs use an Autodesk Inventor part file.

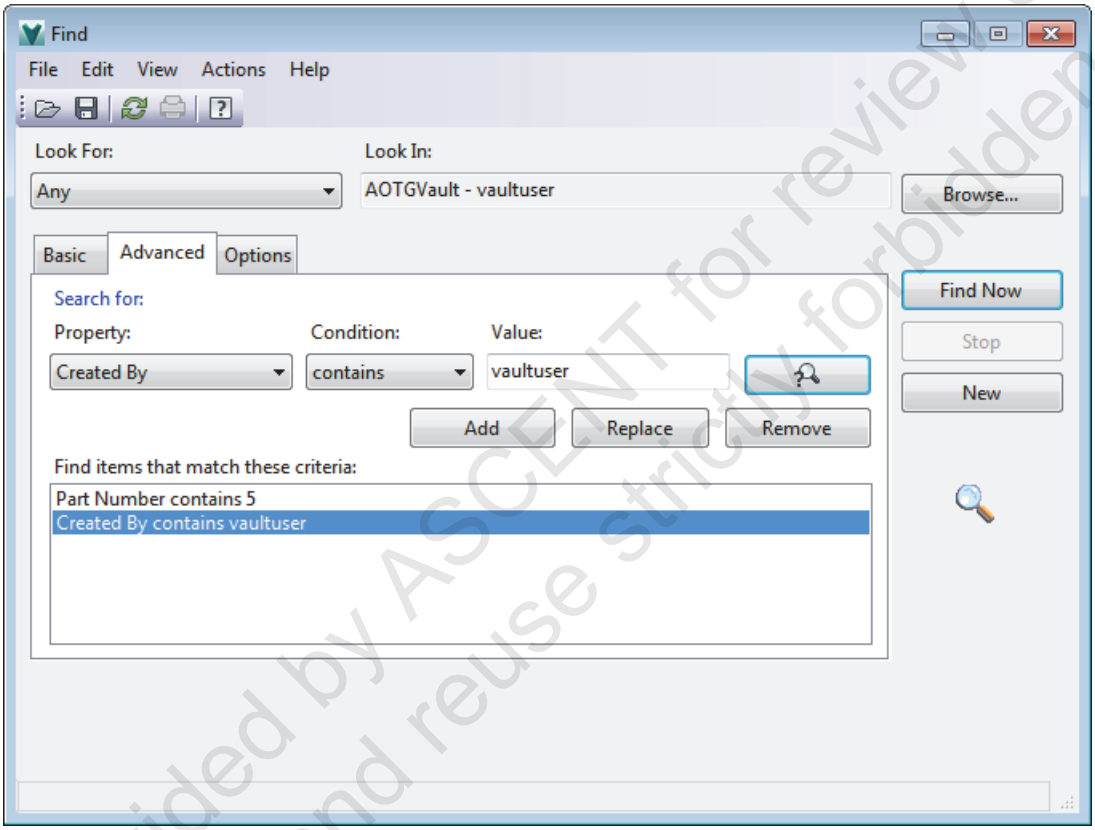


Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

File Properties

When you add a file to Autodesk Vault, the file's properties are extracted and saved in the database. Additional properties are added to the database, including your user name, the version number, the date, and comments. Using Vault, you can view file properties and search for files based on their properties.

The following image displays the Find tool, which you use to find a file based on its properties.

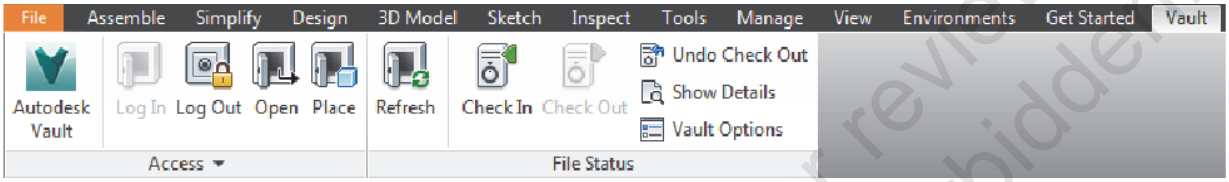


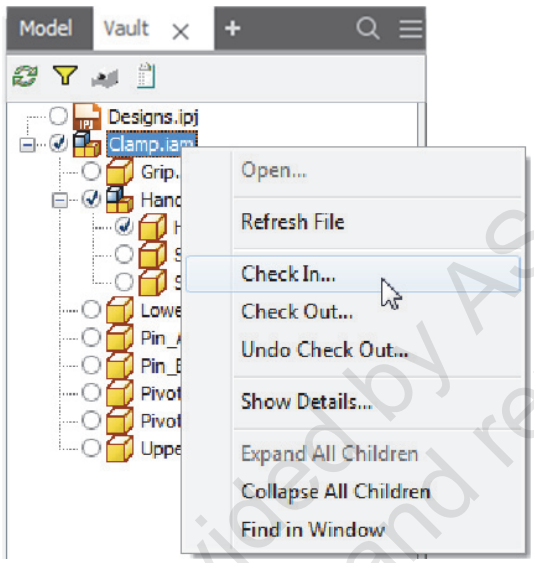
Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Integration with Applications

Autodesk Vault is integrated into Autodesk® Inventor®, AutoCAD®, AutoCAD® Mechanical, AutoCAD® Electrical, AutoCAD® Civil 3D®, Autodesk® 3ds Max®, Microsoft Office and more. The integration provides commands within the application that you can use to perform most Vault tasks without leaving the application.

For example, the Vault client interface for Autodesk Inventor includes a Vault browser. Icons indicate each file's status and shortcut menus give access to common Vault commands as shown in the following image.





Sharing Project Files with Other Users

Autodesk Vault makes it easy to keep other members of the design team up-to-date by automatically publishing visualization files, such as DWF™ and DWFx, each time a file changes. You can publish to a shared folder outside the vault. Project Sync is available in Vault Professional.

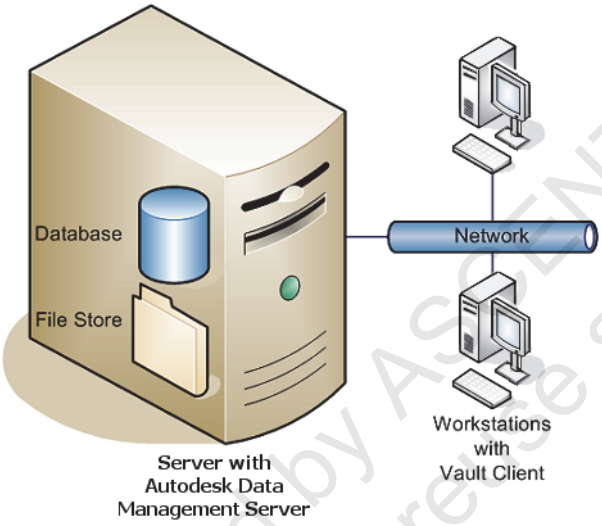
Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Autodesk Data Management Server

About the Vault Server

The vault server consists of a computer and the software required to manage the vault itself and the transactions between the vault and the vault clients. The server can be located on a single workstation to support a single user or it can be located on a shared workstation or server to support multiple users.

The vault server includes a secure database that stores file properties and file relationships so you can quickly search across all your designs or determine where files are used. The server also includes a secure file store where the versions of your design files are stored. You create, manage, and maintain vaults and content center libraries with the Autodesk Data Management Server (ADMS) software.



In a typical multi-user installation, the Vault server software is installed on a server that is accessible by all workstations throughout a network. The vault clients, including Vault Explorer and the Vault add-ins for specific applications, are installed on each workstation.

In a single-user, single-workstation environment, the server and clients can be installed on a single workstation as shown in the following image.

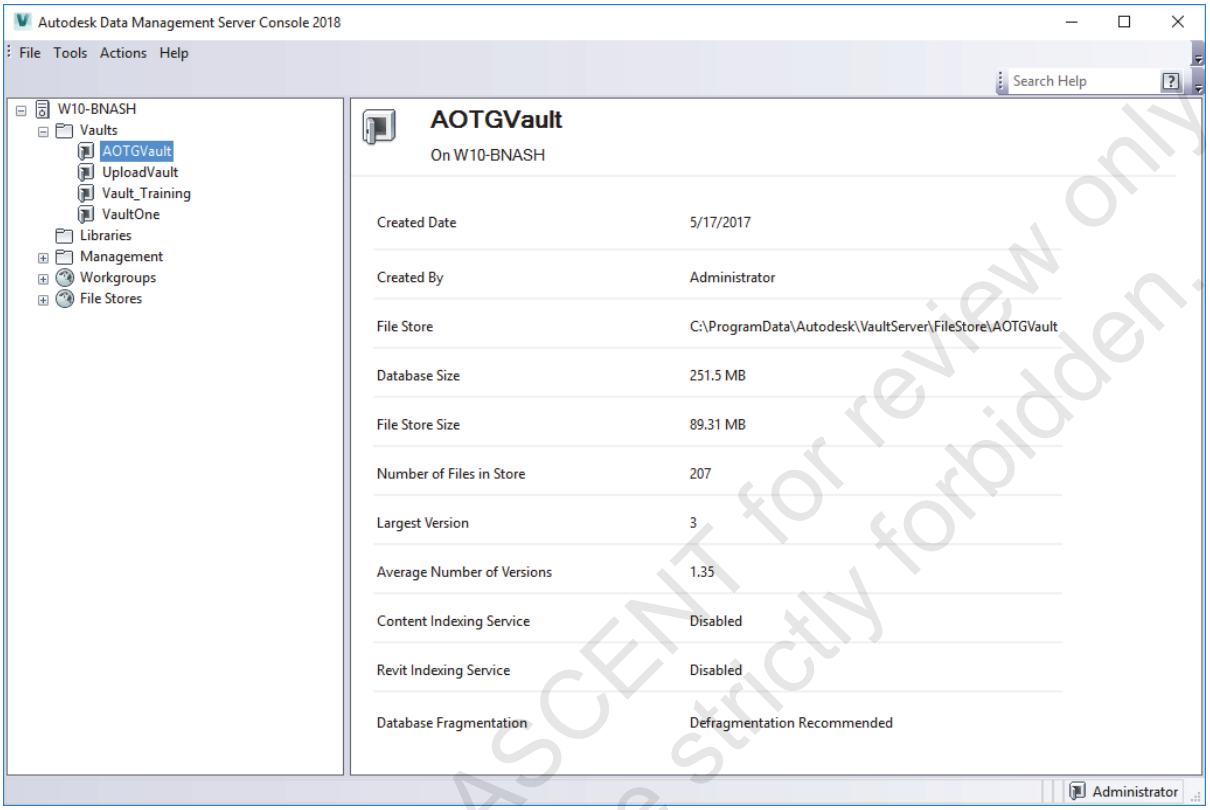
About Autodesk Data Management Server Console

Autodesk Data Management Server (ADMS) Console is an application that runs on the vault server. You use ADMS Console to perform maintenance and management tasks on vaults such as:

- Creating and deleting vaults.
- Backing up and restoring vaults.
- Moving vault databases and file stores.
- Purging unneeded versions of files.
- Defragmenting vault databases.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden!

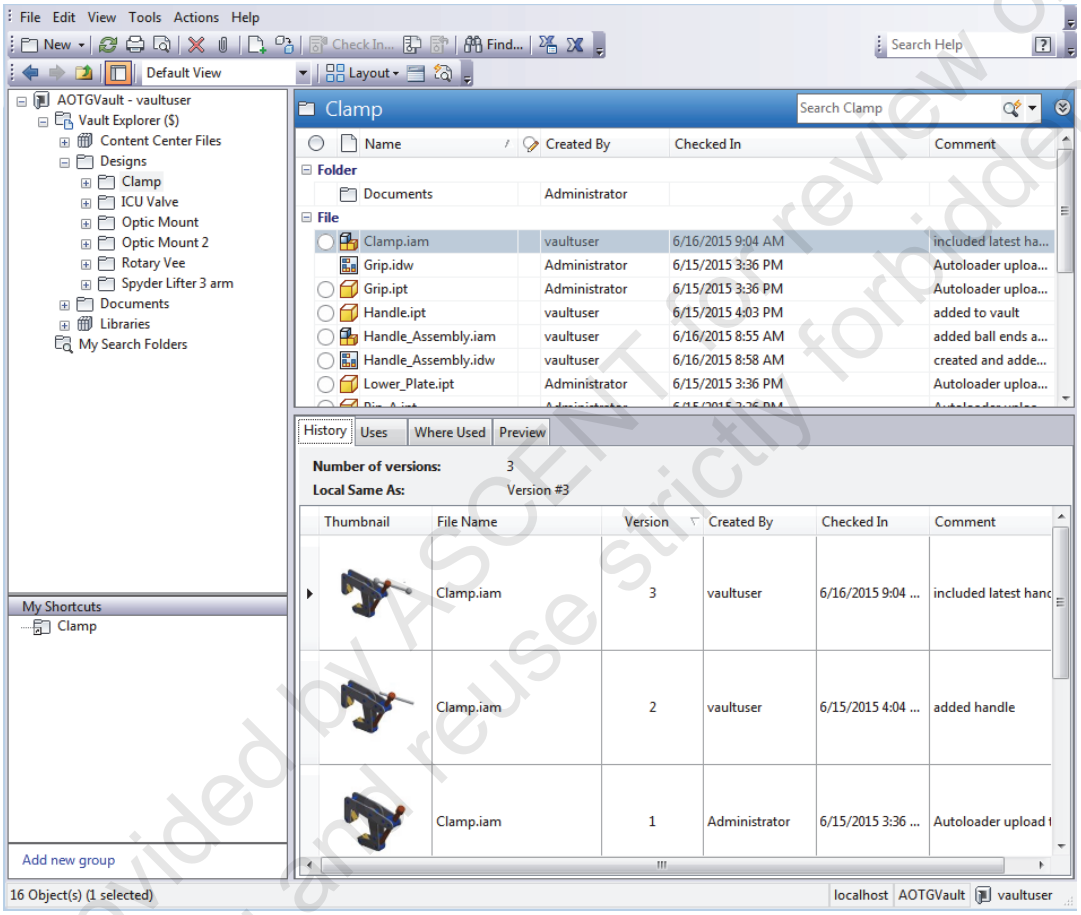
The ADMS application is shown in the following image.



Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Vault Clients

You access files in the Vault using vault clients that run on your workstation. You use a stand-alone client to perform common tasks on all files and folders in a vault. In each application that you run, you use the built-in client to seamlessly work with the files associated with that application. The following image displays the Vault client.



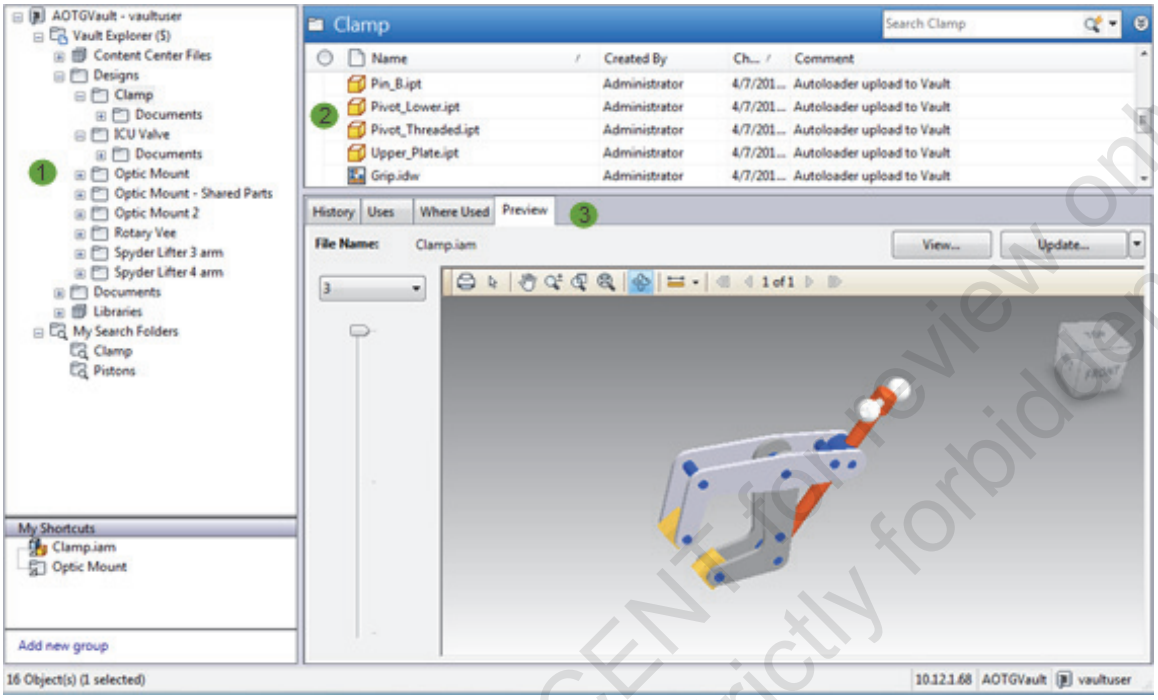
About Autodesk Vault

Autodesk Vault is a stand-alone application that you use to perform vault tasks such as:

- Viewing files and properties.
- Determining the status of a file.
- Finding designs based on file properties.
- Viewing the history of designs.
- Viewing file relationships to determine where a file is used.
- Moving and renaming files.
- Copying an existing design as a start point for a new design.
- Creating folders in a vault.
- Checking out files and opening them (in the corresponding application).

Sample provided by ASCENT for preview only.
All copying and reuse strictly forbidden.

The Autodesk Vault client application is shown in the following image.



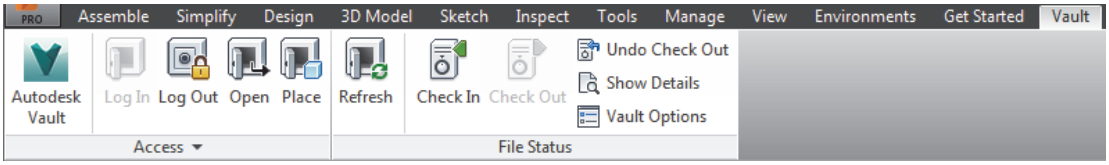
1. The folder structure indicates how files are organized in the vault. You organize files in the vault using the same techniques that you use to organize files on a local drive.
2. The file pane lists the contents of the selected folder. Details for each file are shown such as the current status, the latest version number, who checked out the file, and comments. You can customize the file pane to show any of the properties that are stored in the vault.
3. The tabs provide access to detailed information on the selected file, file history, and relationships to other files. The Preview tab displays the associated visualization file.

Autodesk Vault Add-ins for Applications

The add-ins that you use are integrated into your application. Vault add-ins are available for most Autodesk products and for Microsoft Office applications. Using commands built in to each application, you can perform common editing-related vault tasks such as the following:

- Determining the status of files.
- Adding files to a vault.
- Checking out files and opening them in their associated application.
- Getting files from the vault.
- Checking files in and out of the vault.

For example, in Inventor, you can access common vault commands from either the ribbon or a toolbar as shown in the following image.



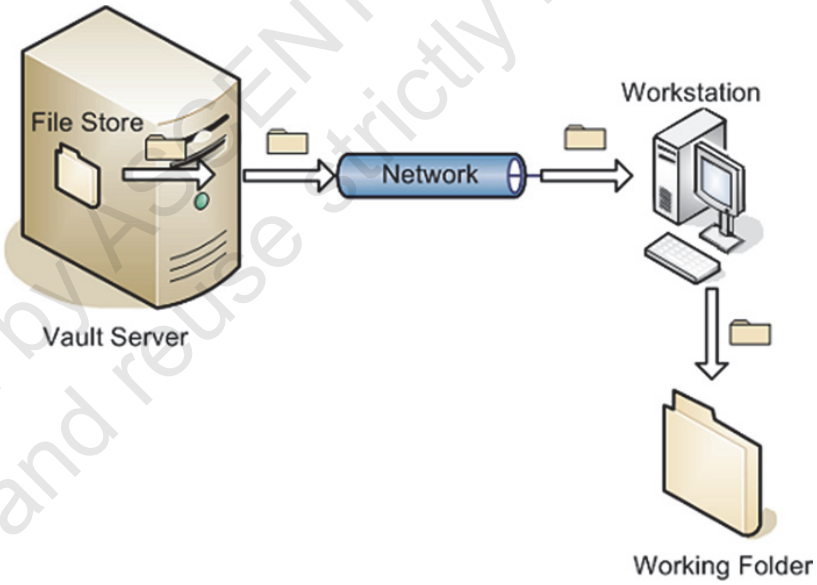
Sample provided by ASCENT for preview only
All Copyright and use is strictly forbidden.

A Typical Workflow

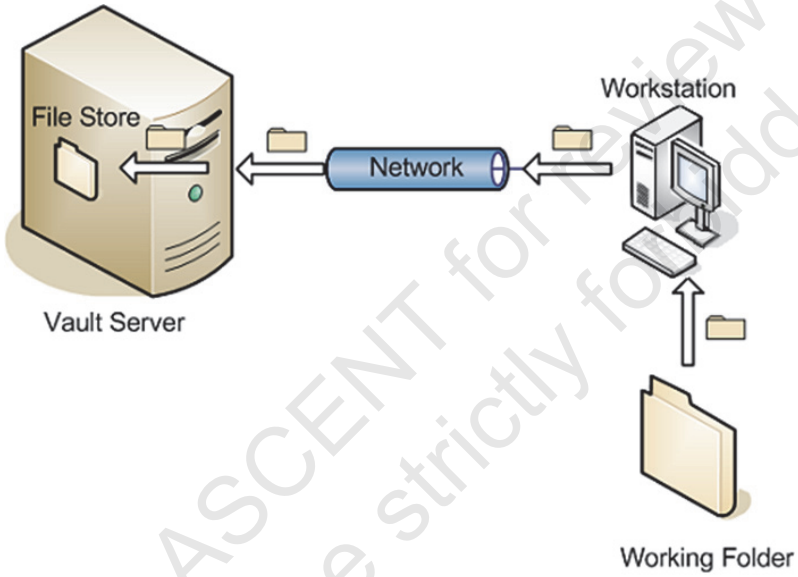
To work on files from the vault, you get a copy of the files onto your local working folder. To edit the files, you check them out. After editing the files, you check them back in to return them to the vault.

Process: A Typical Workflow

The following steps describe a typical workflow for editing a file from the vault. Details on how to use Vault with specific applications are presented in later chapters.

Step	Description
Get a copy of the file from the vault	The first step is to get a copy of the files from the vault onto your local computer. The vault contains the master copy of all the files so that all users have access to the latest versions. When you are editing files, you always work on copies of the files on your local computer. The local copy of the file is copied to the working folder on your workstation as shown in the following image. 
Check out the files to edit	Once the files are on your computer, you work on them as you normally would. Before you edit a file, however, you must check it out of the vault. This informs all other users of the file that you have it reserved for editing and prevents them from editing the same file. Multiple users can have copies of the same files on their computers but a file can be checked out to just one user at a time. Other members of the design team can still get read-only copies of files from the vault for viewing or for reference in their designs or can check out another file in the same model for editing.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Check in the completed files	Once you finish editing a file, you check it back in to the vault. When other users check the status of the files, they will be informed that you have finished editing the file and they can refresh their local copies of the model files to get the latest version from the vault. When you check in a file, the local copy of the file is copied back to the Vault server as shown in the following image. The previous version is not overwritten— the file and its dependencies are saved so you can recall the previous version of the model at any time. 

Key Points

- You do not work on files in the vault. You work on files on your local computer that you have copied from the vault.
- You must check a file back in to the vault in order to update the copy in the vault.

Extending Vault Basic

As your needs grow, you can extend Autodesk Vault Basic by purchasing Autodesk Vault Workgroup or Autodesk Vault Professional. Each application builds on Vault by adding capabilities to manage revisions, bills of materials, and the engineering change process. Autodesk Vault Basic forms the basis for all of these applications and continues to provide secure storage, version management, property management, and collaboration capabilities.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.

Chapter Summary

In this chapter, you learned about the features of Autodesk Vault and how Autodesk Vault is a secure, centralized storage location for managing engineering design data.

Having completed this chapter, you can:

- Describe the features and functionality of Autodesk Vault.

Sample provided by ASCENT for review only
All copying and reuse strictly forbidden.