



AU Las Vegas 2019

Vault Class Brochure



DESIGN & MANUFACTURING



"A great learning opportunity, and a "must" for those who want to advance and elevate the productivity of the team, and the efficiency of workforce."

— Emeline Gabbour, Architectural Technician, Gorman & Company

Get More out of your Collection with Vault Professional

Vault interacts with each product within the collection. These classes will showcase the interoperability and advantages of have Vault at the center of all your designs and documentation.

[MFG323833 - Add It Up: How to Succeed with Vault Add-Ins](#)

Speaker: Traci Peurasaari

Vault software offers many different add-ins to let you interface with many of the Autodesk offerings. So how does Vault work with some of the different CAD products? What do you need to know to utilize Vault with these products? How do they differ from each other? Learn how to configure and manage multiple CAD products with Vault. Get the tools you need to expand your Vault functionality. This class will discuss general best practices for Vault add-ins, and dive more deeply into AutoCAD Electrical software, AutoCAD Plant 3D software, and Revit software. We'll also touch on some basics to interface with BIM 360 software and Fusion Team. Get tips and tricks, and learn some possible pitfalls and limitations. We'll cover what's different, what's the same, what you need to know for each of the covered products, and what does or doesn't function as expected in Vault software.

[IM321922 - Autodesk Product Design & Manufacturing and Vault Professional—Optimize Multidisciplinary Workflows](#)

Speaker: Markus Koechl

The Product Design & Manufacturing Collection offers tools and workflows, enabling multidisciplinary collaboration from ideas to manufactured products. This class will demonstrate use cases showing how Vault Professional software captures all relevant data to share the right information to all people involved at the right time. Follow best practices and practical use cases. Discuss challenges encountered in daily work of engineering and requirements of downstream processes of procurement, manufacturing planning, and machining. Watch live demonstrations using built-in capabilities, and learn how automation options of Inventor software and Vault Professional may eliminate repetitive and tedious tasks. Additional class materials are going to share all samples, configurations, and automation snippets used and shown during the class.

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[MFG322779 - How to Customize Vault Data Standard for Implementing National Standards](#)

Speakers: Robert Ostermann & Irvin Hayes, Jr.

In this session, Magna will show how to manage and structure a factory model and documentation data using the capabilities to customize Vault Data Standard software. You'll see an example of how to implement a national standard for buildings and production facilities. And, you'll get some best practice and instruction regarding how things work together (Vault Data Standard, XAML, and PowerShell).

[MFG322914 - The Truth Is Out There](#)

Speakers: Craig Breckenridge

A common engineering environment may consist of several different pieces of software that you need to transfer data between. We will present a workflow that we have developed for tracking member sizes and connection designs from our analysis software (Ansys) through AutoCAD software, Microsoft Excel, Inventor software, and Navisworks software. All of the data is stored in Vault software and actively monitored for the latest version. This presentation will show the process using Microsoft PowerPoint and demonstrate using live data.

PLM & PDM Workflows - End-to-End Product Development

During your product's journey from first version to final toolpath, Vault is there to connect and collect all relevant product development data.

[MFG316919 - Change Orders and Revisions with Vault Professional, Inventor, and AutoCAD](#)

Speakers: Chris Benner & Mark Lancaster

This class will be a discussion and demonstration of using Vault Professional software (along with the Vault Revision table and Engineering Change Orders) to control and document changes to your CAD documents. The focus will be on Inventor and AutoCAD drawings, but may be applicable in many other areas. We will show how to set up the Vault Revision table for Inventor and AutoCAD, and how to use that along with Vault's Engineering Change orders to control and track revision level drawing changes. This is one important step for maintaining an audit trail of document changes.

[IM319555 - Living the Lifestyle You Want—Utilizing Vault Lifecycles](#)

Speaker: Mike Thomas

To move past the basics of Vault software into the area of drawing revisions, approvals, security, and advanced property management, you need to deal with lifecycles. In this class, we'll look at Vault lifecycles. We'll configure lifecycles and discuss how they're used in the revision process and how they set the rules for state changes. As a cherry on top, we'll dive into setting up Vault to generate PDFs at various steps along the process.

[IM321580 - Looking into the Crystal Ball: The Future of Vault](#)

Speakers: Younes Yammouri & Irvin Hayes, Jr.

This lecture will cover planned functionality for Autodesk's product data management software. This session will feature Vault Professional software.

[MFG318225 - Understand the Power of Copy Design](#)

Speakers: James McMullen & Irvin Hayes, Jr.

Copy Design is one of the most powerful features in Vault software. Engineers use existing designs in one way or another, whether reusing the designs completely to eliminate design time, copying an existing design, or updating a design, which takes less time. And less time is less cost. Apart from reduced modeling time, design reuse will have further impact in the form of cost and time savings in the downstream engineering, manufacturing, and purchasing. The Copy Design feature in Vault 2020 has many enhancements that help engineers do more, faster, with existing designs. This class will discuss the enhancements to Copy Design, and show you how to use Copy Design to be more productive.

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[AS323707 - Vault for the Revit User](#)

Speaker: Anthony Dull

Think Vault software is only for manufacturing? Think again. You know working in Revit software creates a lot of information. Much of that can be managed within the model environment. But Vault adds additional data and project management support to the iterations, changes, and data created throughout your project's life. In this class, you'll learn how to marry Revit with Vault Professional software to create a secure single source of truth. You'll learn configurations and workflows that Vault Professional provides to assist your organization's current process. We'll even explore how to integrate BIM 360 software with Vault (and Revit) to learn how to sync the designs to your team site for distribution.

[IM323053 - Vault Data Standard—Introduction](#)

Speaker: Marco Mirandola

Vault Data Standard is a free Autodesk add-on for Vault software, Inventor software, and AutoCAD Mechanical software. This class will show what it is, what it can do, what it's good for, and how to install it, along with first insights into customization. Vault Data Standard comes with cool features out of the box, and can really improve your Vault experience. Join this class to see the latest version of Vault Data Standard and learn how to improve your workflows.

PLM & PDM Workflows - End-to-End Product Development

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[MFG321646 - What You Need to Know Before You Go: Tips and Tricks for Transitioning to Vault](#)

Speaker: Lauren Drotar

Making the decision to convert to a Vault system is easy, but the work required to make that leap can be daunting. In this class, attendees will learn tips to help the transition. From tackling duplicate file names, to overcoming the struggles of clean file migration, to making sure revision schemes work properly—there are many aspects of the Vault to organize. This class will cover best practices for not only Autodesk file management, but also Mastercam, Microsoft Office documents, and PDFs.

[MFG324340 - Vault Enables Effective, Efficient Design-Engineering Process at Global Manufacturer](#)

Speaker: Klaus Kapeller

Primetals Technologies is facing big challenges: more projects, faster design and engineering requirements, and more-complex projects—as well as task splitting throughout international teams, and everything needing to be handled by the same number of designers and engineers. To address these challenges, Primetals decided to implement Vault software, and many benefits have been realized. The design and engineering process are more streamlined; process and loading times are much faster (by more than 30%); and annoying activities like searching and reworking have been minimized. Plus, users can work immediately with Vault without extensive training, and they love the system. In short, designers and engineers no longer struggle with time-consuming, inefficient activities, and instead work on the things they love: designing and engineering.

Shop Floor to Top Floor

Communication and Feedback from design to manufacturing to field service is critical for reducing errors. These classes highlight Vault and interactions with CAM, SIM, and beyond the firewall collaboration.

[MFG320861 - Technical Dive and Talk–Vault Professional Data Beyond Your Firewall](#)

Speaker: Kim Hendrix

This will be a technical step-by-step presentation showing you how to set up, maintain, and use Vault Professional data outside of your firewall. Topics covered will include shared views, shared data, and project sync using Autodesk Drive and Fusion Team. We'll cover real end-user customer experiences and use cases.

[MFG322651 - Using Vault Professional and BIM 360 Docs–Publishing Drawings to the Outside World](#)

Speaker: Carlos Lastrilla

Vault software is the best tool for managing your CAD data, particularly for those involved in the design and engineering process. Once a design is completed, people outside the design team—clients, fabricators, manufacturers, and installers—will need to see your drawings. This class will show you how to use BIM 360 Docs software as your published documents portal, and how to get your approved drawings from Vault Professional software to BIM 360 Docs—where external consumers can access it through the BIM 360 Docs web portal or a mobile device. We'll walk through configuring Vault Project Sync to publish files to BIM 360 Docs, as well as configuring BIM 360 Docs to ensure that only the right people get access to the files. We'll also discuss the markup capabilities in BIM 360 Docs, and how to get the design team to see those markups.

[MFG323371 - Sharing Is Caring: Sharing Vault Data Outside the Firewall](#)

Speaker: Caleb Funk

This class will review the best ways to share data with users who are not part of a company's local area network. External collaborators and suppliers will be able to easily access drawing view and complete files. This class will cover Vault Professional software and Fusion Team Web.

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MFG322457 - Enterprise Design Process Automation with Vault

Speakers: Aravindan Subramanian & Kirubakaran Candasamy

In this class, a CIO of a leading ship-building company from India shall be jointly presenting with a partner a case study of their custom implementation of Vault software as a business process automation platform to synchronize their design and business workflows to their Enterprise Business systems—Infor ERP. The class will explore how various departments of a ship-manufacturing organization works around the design data that flows between various users and integrates critical items and BOM with their ERP system and automates several business workflows customized on Vault interface. The presenter will explain how they could save close to 20% of their design-to-manufacturing cycle time by streamlining Vault product data management (PDM) software to remove redundant work on ERP while enabling a collaborative and automated business environment. This class will explore the extent to which Vault can be customized beyond its basic features, and throw light on integration of BOM and related data to ERP or other applications.

MFG319298 - PDM and PLM United: Vault Fusion Lifecycle Connector—a Zero-Code Connector

Speakers: Christian Gessner & Brian Schanen

When used together, Vault Professional software and Fusion Lifecycle software provide a combined solution that is the best of all worlds for product data management (PDM) and product lifecycle management (PLM). While Vault runs on-premise to keep your CAD data safe behind your firewall, Fusion Lifecycle is cloud based for flexibility and ease of deployment. Sadly, this has made a seamless integration between the two difficult—until now. This class describes the benefits of the Vault Fusion Lifecycle Connector, including installation, configuration, and extensibility, so you can create a best-of-all-worlds solution.

The Power of Vault Customization

Vault is a power tool but you can take it to the next level with customization.

[SD321955 - Autodesk Vault 2020–Programming 101](#)

Speakers: Markus Koechl & Jeffrey Fishman

Get started programming Vault Workgroup or Vault Professional applications, extensions, and custom jobs. The Vault 2020 Software Development Kit (SDK) shares new templates and sample code removing barriers accessing the entry level in Vault Web Services, Vault Job Processor, and Vault Client programming. This class will discuss real-life automation and extension tasks, and will guide participants through the steps required to solve them.

[SD323470 - Feel the Power Between Vault and PowerShell](#)

Speakers: Jeffrey Fishman & Markus Koechl

The Vault client in itself is a powerful data utility, but just imagine there's so much more that can be done with the Vault software development kit (SDK) software. Learn how to use the versatility and flexibility of Microsoft PowerShell, and bring your logic to new levels of automation. Learn how to instantiate Vault objects, call Vault Web Service methods, and manipulate the data stored within Vault in a lightweight scripted .NET language.

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Tuesday - Nov 19

8:00 AM

- MFG322779 - How to Customize Vault Data Standard for Implementing National Standards
- IM323053 - Vault Data Standard—Introduction

1:30 PM

- MFG319298 - PDM and PLM United: Vault Fusion Lifecycle Connector—a Zero-Code Connector
- SD321955 - Autodesk Vault 2020—Programming 101

4:30 PM

- SD323470 - Feel the Power Between Vault and PowerShell

Wednesday - Nov 20

8:00 AM

- MFG323371 - Sharing Is Caring: Sharing Vault Data Outside the Firewall

9:15 AM

- MFG322914 - The Truth Is Out There
- MFG323833 - Add It Up: How to Succeed with Vault Add-Ins

10:30 AM

- IM321922 - Autodesk Product Design & Manufacturing and Vault Professional—Optimize Multidisciplinary Workflows
- MFG316919 - Change Orders and Revisions with Vault Professional, Inventor, and AutoCAD
- MFG320861 - Technical Dive and Talk—Vault Professional Data Beyond Your Firewall
- IM321580 - Looking into the Crystal Ball: The Future of Vault

2:45 PM

- MFG318225 - Understand the Power of Copy Design

4:30 PM

- MFG322651 - Using Vault Professional and BIM 360 Docs—Publishing Drawings to the Outside World

Thursday - Nov 21

8:00 AM

- MFG321646 - What You Need to Know Before You Go: Tips and Tricks for Transitioning to Vault

10:30 AM

- MFG322457 - Enterprise Design Process Automation with Vault

1:30 PM

- AS323707 - Vault for the Revit User
- MFG324340 - Vault Enables Effective, Efficient Design-Engineering Process at Global Manufacturer

2:45 PM

- IM319555 - Living the Lifestyle You Want—Utilizing Vault Lifecycles

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