

# Autodesk **Vault** Professional Administrator Essentials

## Target Audience

This course is designed for CAD administrators, IT/PLM administrators, and Autodesk Vault power users responsible for configuring, deploying, and maintaining Autodesk Vault Professional within their organization. It is ideal for professionals working with Autodesk Inventor, AutoCAD, AutoCAD Mechanical, AutoCAD Electrical, Civil 3D, or Revit who need to manage data lifecycles, revisions, bills of materials, and engineering change orders across an extended design and manufacturing team.

## Course Objective

This course aims to provide learners with a comprehensive understanding of Autodesk Vault Professional administration. Participants will learn how to organize and populate a vault, manage categories and rules, configure lifecycle states, create and modify revision schemes, manage system-defined and user-defined properties, build automatic file naming schemes, work with items and bills of materials, and administer the engineering change order (ECO) process. The course focuses on practical methods for setting up and maintaining a Vault Professional environment that supports an automated release and change management workflow.

## Course Outcome

Upon completion of this course, learners will be able to confidently organize and populate a vault, manage categories and lifecycle definitions, create and modify revision schemes, manage properties and property mapping, configure automatic file naming schemes, create and work with items and bills of materials, and set up and process engineering change orders. Participants will also gain the skills required to generate reports, administer the Job Server, configure backups and Vault Revision Tables, and manage Active Directory integration, Vault Gateway, and replication across a multi-site Vault Professional environment.

**Course Outline:** The course comprises **40 hours** of theory and practical labs and is divided into **15** comprehensive chapters. Each chapter will be followed by hands-on lab exercises to reinforce learning and gauge understanding of the topics covered.



## Chapter 1: Introduction to Autodesk Vault Professional

- Autodesk Vault Professional overview
- About Autodesk Vault Professional
- Autodesk Vault Professional functions
- Security and users
- Integration with other products
- User interface
- About the Navigation pane
- About the Main pane
- About the Item Record dialog box

## Chapter 2: Organizing and Populating a Vault

- How Autodesk Inventor files are organized
- About project files
- About model files
- About library files
- About Content Center files
- Adding existing models to a vault
- Preparing models
- Uploading models

## Chapter 3: Managing Categories

- Categories and rules
- Categories
- Change Category command
- Rules
- Managing categories and rules

## Chapter 4: Lifecycle States

- Lifecycle definitions and states
- Viewing lifecycle definitions
- Creating a new lifecycle definition
- Configuring lifecycle states
- Configuring lifecycle state security
- Configuring lifecycle state transitions
- Control and comments settings



- Changing lifecycle states

## Chapter 5: Revision Management

- Revisions and versions
- Default revision schemes and scheme formats
- Creating and modifying revision schemes
- Revision scheme and revision formats
- Modifying an existing revision scheme
- Revising files
- Revision controlled documents
- Revisions and lifecycles
- Change Revision command
- Roll back the lifecycle state of a file

## Chapter 6: Managing Properties

- System-defined properties vs. user-defined properties
- Terms, data types, and attributes
- Introduction to the Property Definitions dialog box
- Examining usage count
- Specifying searchable properties
- Initial value and list values
- Add or remove a user-defined property
- The Properties grid
- Hide/restore properties
- Edit properties from the grid
- Mapping properties
- Mapping priority and mapping across data types
- Mapping AutoCAD block attributes
- AutoCAD Mechanical and AutoCAD Electrical mapping

## Chapter 7: Automatic File Naming in Autodesk Vault Professional

- Creating custom numbering schemes
- Define numbering schemes

## Chapter 8: Working with Items

- Creating items
- About items
- Item Master



- Attaching and detaching files
- Automatic attachments
- Working with items
- Using the Item Preview pane to view items
- Using the Where Used tab
- Define custom filters to view items
- Customize column display in the Item Master
- Find items
- Item properties
- Default item properties
- User-defined item properties
- Item numbering schemes
- Exporting items from Vault Professional

## Chapter 9: Managing Change

- Revision control
- Item lifecycle states
- Change orders
- Introduction to change orders
- Creating change orders
- Change orders and revisions
- Change orders and lifecycle states
- Roll back the lifecycle state of a file
- Roll back the lifecycle state of an item
- Clear item and change order locks
- Identifying change order participants

## Chapter 10: Creating Reports

- Creating reports
- About reports
- Report templates
- Microsoft Report Viewer
- Creating search reports
- Creating Autodesk Vault project reports
- Creating custom report templates
- Introduction to the Autodesk Report Template Utility
- Creating a new report template
- Including non-property vault data in a report



## Chapter 11: Working with Bills of Materials

- Bills of materials
- About bill of materials
- Editing a bill of materials
- Bill of materials output
- Integration with Autodesk Inventor
- About Autodesk Inventor and integration with Vault Professional
- Autodesk Inventor BOMs
- Virtual components
- Modifying Content Center component properties
- Working with DWG files

## Chapter 12: Autodesk Inventor In-CAD Data Management

- Working with data cards
- About data card views
- Understanding data card decks
- Editing properties with data cards
- Working with value collectors
- Managing the data card layout
- Data mapping and report generation
- Mapping your data
- Creating reports for your model
- Managing chart elements
- Managing data mapping reports
- Sheet Set Manager integration
- Resave all sheets
- Remove sheet or sheet subset
- Move, rename, and copy design in the Vault Client

## Chapter 13: Administering Autodesk Vault Professional

- Configuring items
- Units of measure
- Item categories
- Item numbering schemes
- Editing lifecycle state security for files associated with items
- Item revision schemes
- Item watermarking configuration
- Assign item configuration



- Property write-back configuration
- Configuring change orders
- Change order options
- Configuring a markup folder
- Link properties
- Change order numbering
- Routing definition – workflow selection
- Routing definition – change order routing lists
- Configure email notification
- Custom objects definition administration
- Create, edit, and delete a custom object definition

## Chapter 14: Job Server, Vault Revision Tables, and Backups

- Enabling the Job Server
- Job Server vs. Job Processor
- Job Server queue
- Initiating a job
- Configuring the Job Server
- Configuration via Job Processor UI
- The configuration file and log file
- PDF publishing
- Vault Revision Table administration
- Vault Revision Table supported drawings and prerequisites
- Backup and restore
- Restoring a vault
- Backing up vault data

## Chapter 15: Active Directory, Vault Gateway, and Replication

- Active Directory
- Managing groups
- Import an Active Directory domain user account
- Import an Active Directory domain group
- Vault Gateway
- Managing Vault Gateways
- Replication
- Replication solutions overview
- Managing workgroup replication
- Adding and deleting workgroups
- Replicating vaults, files, and folders



- Enabling or disabling a vault for a multi-site environment
- Replication priorities
- Scheduling replication for a multi-site environment
- Autodesk Vault File Server (AVFS) configuration

