

Windchill PDMLink 10.2

Curriculum Guide



Live Classroom Curriculum Guide

- Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the End User
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team
 - Creo Parametric Data Management with Windchill PDMLink 10.2
 - Managing Design Variations with Windchill 10.2
 - Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the Administrator
 - Business Administration of Windchill PDMLink 10.2
 - Workflow Administration of Windchill 10.2
 - System Administration of Windchill 10.2
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Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the End User

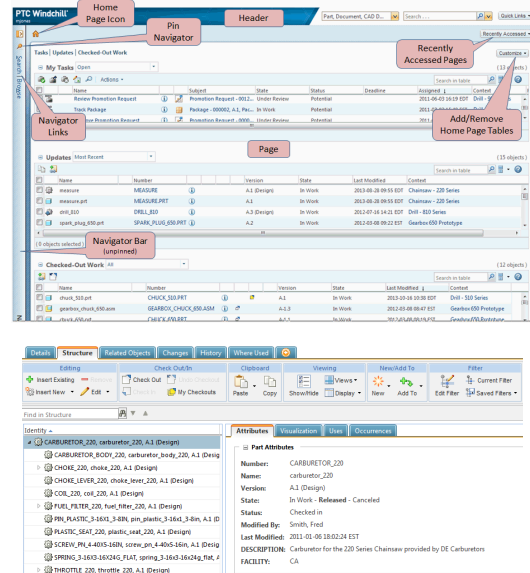
Overview

Course Code	TRN-4250-T
Course Length	1 Day

This course is designed for users who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in a Windchill PDMLink 10.2 environment. After completing the course, you will be able to identify and use new Windchill PDMLink features and perform common tasks and activities available in Windchill PDMLink 9.0 or 9.1 using the new Windchill PDMLink 10.2 interface.

In this course, you will learn about the feature and interface updates to Windchill PDMLink 10.2 from Windchill PDMLink 9.0 and 9.1. You will also learn about general Windchill usability enhancements, new ways to work with Windchill business objects, and specific enhancements for managing documents. Finally, you will learn about changes regarding how you participate in processes, creating and delivering work packages, and updates to configuration management.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Describe the updates to the Windchill user interface including the home page, quick links, and Windchill navigator
 - Configure your Windchill environment by customizing your home page, context pages, object information pages, and table columns and views
 - Locate information by searching or browsing for Windchill objects and navigating through context page options
 - Work with objects by using context actions and enhanced management tools such as multi-object edit, the Windchill clipboard, and event manager
 - Manage Windchill documents directly from Microsoft Windows Explorer or Microsoft Office using the latest version of desktop integration
 - Use the new create and update interfaces available for working with documents
 - Describe enhancements when collaborating with others in the Windchill environment
 - Review and manage processes and process history
 - Manage and reassign workflow tasks, life cycles, and teams
 - Create and manage work packages
 - Describe enhancements to Windchill change management, including new wizard-based change management forms and being able to use the Windchill collector to quickly find and include related objects in complex dependency operations
 - Use the new work items table to manage work being done on changes
 - Create and manage variances, including waivers and deviations
 - Describe enhancements to the Windchill product structure management, including BOM notes, effectivity processing, structure filtering, structure compare, and configurations and instances
 - Explore and use the new Product Structure Browser interface
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Prerequisites

- Working knowledge of Windchill PDMLink 9.0 or Windchill PDMLink 9.1

Audience

- This course is designed for users who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in the Windchill PDMLink 10.2 environment

Agenda

Day 1

Module	1	Windchill Usability Enhancements
Module	2	Working with Objects
Module	3	Document Management Enhancements
Module	4	Collaborating with Others
Module	5	Change Management Enhancements
Module	6	Product Structure Management Enhancements
Module	7	Creo Parametric Data Management Enhancements

Course Content

Module 1. Windchill Usability Enhancements

- i. Understanding the Windchill User Interface
- ii. Using the Home Page
- iii. Using Quick Links
- iv. Accessing Help
- v. Using the Navigator
- vi. Navigating Products and Libraries
- vii. Navigating Changes
- viii. Locating Information
- ix. Using Simple Search
- x. Using Advanced Search
- xi. Managing Searches
- xii. Browsing
- xiii. Using Windchill Tables
- xiv. Using Windchill Tables – Right-Click Actions
- xv. Working with Table Columns
- xvi. Managing Windchill Table Views

Knowledge Check Questions

Module 2. Working with Objects

- i. Understanding Information pages
- ii. Understanding Information pages – Common Tabs
- iii. Viewing Structure
- iv. Understanding Information pages – History Tab
- v. Customizing Information Pages
- vi. Editing Multiple Objects
- vii. Checking Out Previous Iterations of Objects
- viii. Moving Objects
- ix. Using the Windchill Clipboard
- x. Event Manager

Knowledge Check Questions

Module 3. Document Management Enhancements

- i. New Document: Set Attributes – Type
 - ii. New Document: Set Attributes – Template
 - iii. New Document: Set Attributes (Primary Content)
 - iv. New Document: Set Attributes (Attributes)
 - v. New Document: Set Attachments
 - vi. New Multiple Documents
 - vii. Document Preferences
 - viii. Attachment Preferences
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- ix. Modifying Documents — Replace Content
- x. Comparing Document Information

Knowledge Check Questions

Module 4. Collaborating with Others

- i. Enhancements to Participating in Processes
- ii. Workflow Task Information Page
- iii. Task Assistant
- iv. Reviewing Process History
- v. Reassigning Workflow Tasks
- vi. Reassigning Life Cycles
- vii. Resetting Teams
- viii. Viewing Processes
- ix. Managing Processes

Knowledge Check Questions

Module 5. Change Management Enhancements

- i. Change Management Usability Improvements Overview
- ii. Table Quick Entry
- iii. Change Baseline Report
- iv. Exporting Change Management Tables to a File
- v. Creating New Change Objects from the Changes Pages
- vi. Configuring Change Management
- vii. Change Management Business Rules
- viii. Change Notice Templates
- ix. Mass Change
- x. Wizard-Based Change Management Forms
- xi. Propagating Change Information
- xii. Collecting Affected Objects
- xiii. Editing Change Tasks – Set Attributes
- xiv. Editing Change Tasks – Select Affected/Resulting Objects
- xv. Change Task Sequencing
- xvi. Setting the Disposition of the Affected Objects
- xvii. Promotion Request Enhancements

Knowledge Check Questions

Module 6. Product Structure Management Enhancements

- i. The Product Structure Browser
 - ii. The Part Structure Command Ribbon
 - iii. The Part Structure Panes
 - iv. Product Structure Browser – Layout Options
 - v. Finding Components in the Product Structure
 - vi. Product Structure Browser – Visualization Tab
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- vii. Product Structure Browser – Uses Tab
- viii. Product Structure Browser – Occurrences Tab
 - ix. Show/Hide Related Information
 - x. Exploring Product Structures
 - xi. Building Product Structures
 - xii. Specifying Windchill Parts as End Items
- xiii. Enhancements to Managing Product Structures
- xiv. Bill of Materials Notes
 - xv. Creating Bill of Materials Notes
 - xvi. Adding a Reference Designator
- xvii. Importing BOM Data from Spreadsheets
- xviii. Exporting Bill of Materials to a File
 - xix. Filtering Structures
 - xx. Setting the Latest Filter
 - xxi. Setting the Baseline Filter
 - xxii. Setting the Effectivity Filter
 - xxiii. Setting the Promotion Request Filter
 - xxiv. Setting the Attribute Filter
 - xxv. Setting the Spatial Filter
 - xxvi. Saving and Managing Filters
- xxvii. Comparing Product Structures
- xxviii. Analyzing Structure Comparison

Knowledge Check Questions

Module 7. Creo Parametric Data Management Enhancements

- i. Windchill User Interface Enhancements for Managing Creo Parametric Data
 - ii. Enhancements to Modifying and Managing Design Data with Windchill
 - iii. Associating WTParts with CAD Documents
 - iv. Automatically Associating Windchill Parts
 - v. Automatically Associating Windchill Parts
 - vi. Using the Auto Associate Window
 - vii. Moving Design Documents
 - viii. Revise and Check Out Action
 - ix. Enhancements to File Relationships and Dependencies
 - x. Managing Dependencies and Links
 - xi. WTPart CAD Document Links
 - xii. WTPart CAD Document Links Example
 - xiii. Copying Viewables to Non-Owner Associated WTParts
 - xiv. Sample Creo Parametric Dependencies
 - xv. Viewing Dependency Information in Windchill
 - xvi. Relationship Report
 - xvii. Processing Dependencies
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- xviii. Managing Secondary Content Files with Windchill
- xix. Enhancements to Managing CAD Data
- xx. Upload Modified not Checked Out CAD Data
- xxi. Part Compare Browser Layout
- xxii. Part Compare
- xxiii. Enterprise Top-Down Design
- xxiv. Introduction to Workspace Frames
- xxv. Accessing Workspace Frames
- xxvi. Workspace Frames Details
- xxvii. CAD Data Management Updates

Knowledge Check Questions

Introduction to Windchill PDMLink 10.2 for Light Users

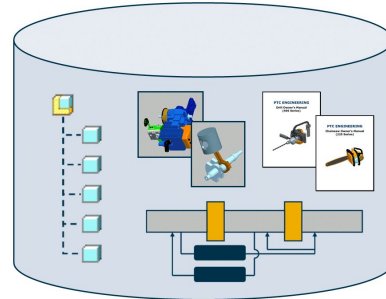
Overview

Course Code TRN-4260-T

Course Length 1 Day

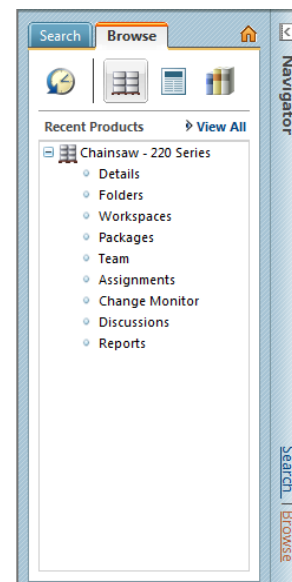
In this course, you will learn how to complete basic functions to navigate and view information within Windchill PDMLink. You will also learn how to access and navigate the Windchill PDMLink environment, view product information, use Windchill PDMLink's visualization tools, manage assigned tasks, and perform basic work management functions. In addition, you will learn how to use product information to make important business decisions. After completing the course, you will be able to complete basic Windchill PDMLink tasks and activities, as well as have a better understanding of how to use the Windchill PDMLink system.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate product information
- View product information
- Understand visualization concepts and terminology
- Use Creo View Lite to view product information
- Use Windchill PDMLink tools to manage your work
- Participate in Windchill PDMLink processes



Prerequisites

- Basic browser and Web navigation skills

Audience

- This course is intended for users who need to access the Windchill PDMLink system to view information, perform system tasks, or use product information when making business decisions. People in related roles will also benefit from taking this course.
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Agenda

Day 1

Module	1	Introduction to the Windchill Environment
Module	2	Locating Information
Module	3	Viewing Information
Module	4	Introduction to Visualization
Module	5	Using Creo Elements View/Lite to View and Annotate Information
Module	6	Managing Your Work
Module	7	Participating in Processes

Course Content

Module 1. Introduction to the Windchill Environment

- i. Integrated Windchill PDMLink and Windchill ProjectLink
- ii. Windchill PDMLink
- iii. Windchill ProjectLink
- iv. Pro/INTRALINK
- v. Arbortext Content Manager
- vi. Content Management
- vii. Windchill Environment
- viii. Data Management Objects
- ix. Change Management Objects
- x. Project Management Objects
- xi. Storage Locations
- xii. Iteration and Revision Controls
- xiii. Process Controls
- xiv. Access Controls
- xv. Collaboration Features
- xvi. Logging On to Windchill
- xvii. Understanding the User Interface
- xviii. Using the Home Page
- xix. Using Quick Links
- xx. Using the Navigator
- xxi. Using the Breadcrumb Trail
- xxii. Navigating Products and Libraries
- xxiii. Navigating Projects and Programs
- xxiv. Navigating Changes
- xxv. Accessing Help

Knowledge Check Questions

Module 2. Locating Information

- i. Locating Information
- ii. Using Simple Search
- iii. Using Advanced Search
- iv. Saving Searches
- v. Managing Searches
- vi. Browsing
- vii. Using Mini Information Pages

Knowledge Check Questions

Module 3. Viewing Information

- i. Using Windchill Tables
 - ii. Working with Table Columns
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- iii. Managing Windchill Table Views
- iv. New View: Set Name
- v. New View: Choose Object Types
- vi. New View: Set Filters
- vii. New View: Set Column Display
- viii. New View: Set Sorting
- ix. Understanding Information Pages
- x. Customizing Information Pages
- xi. Viewing Structure
- xii. Understanding Object Capabilities
- xiii. Document Capabilities
- xiv. CAD Document Capabilities
- xv. Part and End Item Capabilities
- xvi. Dynamic Document Capabilities
- xvii. Problem Report Capabilities
- xviii. Change Request Capabilities
- xix. Change Notice Capabilities
- xx. Relationship Explorer

Knowledge Check Questions

Module 4. Introduction to Visualization

- i. Identifying Visualization Concepts
- ii. Identifying Visualized Intellectual Property Types
- iii. Identifying Components in PTC's Visualization System
- iv. Generating Creo View Viewables
- v. Identifying Readable Visualization Object Types
- vi. Understanding Creo View's Basic Capabilities
- vii. Understanding the Creo View User Interface
- viii. Viewing Area User Interface
- ix. Understanding the Ribbon
- x. The Creo View File Menu User Interface
- xi. Quick Access Toolbar User Interface
- xii. Primary Panel User Interface
- xiii. Understanding the Upper Data Panel
- xiv. Understanding the Lower Data Panel
- xv. Starting Creo View as a Standalone Client
- xvi. Starting Creo View from Windchill
- xvii. Loading Viewables

Knowledge Check Questions

Module 5. Using Creo Elements View/Lite to View and Annotate Information

- i. Opening Non-Model Files with Creo View
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- ii. Viewing Drawings
- iii. Viewing Images
- iv. Orienting Drawings and Images
- v. Working with Pages and Sheets
- vi. Marking Up Creo View Viewables
- vii. Adding Annotation Objects
- viii. Notes and Reference Note Annotations
- ix. Leader Line Annotations
- x. Shape Annotations
- xi. Freehand Annotations
- xii. GTOL Annotations
- xiii. Stamp Annotations
- xiv. Measuring Lengths
- xv. Measuring Distances
- xvi. Measuring Angles
- xvii. Measuring Diameter or Radius
- xviii. Measuring Area
- xix. Measuring Mass Properties
- xx. Taking a Measurement Summary
- xxi. Taking an Envelope Measurement
- xxii. Creating Annotation Sets
- xxiii. Saving Annotation Sets to a PDM System
- xxiv. Retrieving Annotation Sets from a PDM System

Knowledge Check Questions

Module 6. Managing Your Work

- i. Managing Your Work
 - ii. Managing Tasks
 - iii. Managing the Notebook
 - iv. Managing Subscriptions
 - v. Creating Subscriptions
 - vi. Preference Manager
 - vii. Setting Attachment Preferences
 - viii. Setting Search Preferences
 - ix. Setting Display Preferences
 - x. Setting Table Preferences
 - xi. Setting Visualization Preferences
 - xii. Using the Windchill Clipboard
 - xiii. Software Downloads
 - xiv. Introduction to Communication Mechanisms
 - xv. E-mailing Team Members
 - xvi. E-mailing a Page
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- xvii. Holding Discussions

Knowledge Check Questions

Module 7. Participating in Processes

- i. Participating in Processes
- ii. Completing Tasks
- iii. Completing Promotion Tasks
- iv. Viewing Processes
- v. Reassigning Workflow Tasks
- vi. Managing Your Calendar

Knowledge Check Questions

Introduction to Windchill PDMLink 10.2 for Heavy Users

Overview

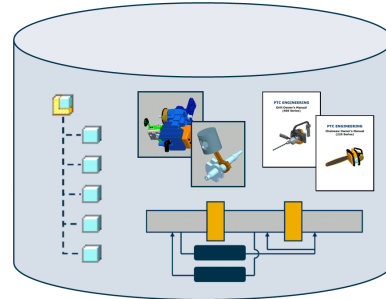
Course Code TRN-4261-T

Course Length 2 Days

In this course, you will learn how to complete the day-to-day functions that enable you to create and manage product information with Windchill PDMLink. You will learn how to access and navigate the Windchill PDMLink environment, use Windchill PDMLink's visualization tools, manage product structures, and manage product information changes. Other topics include how to use Windchill PDMLink's communication and collaboration tools, and access user support functions and information.

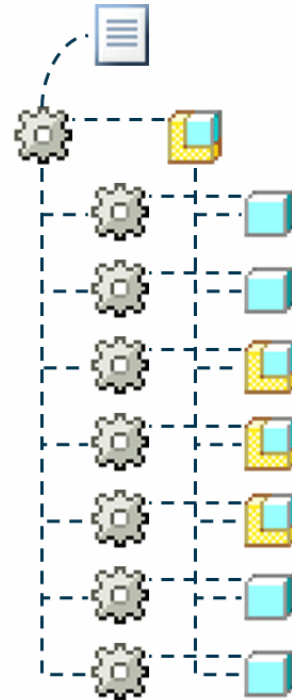
This course is designed for users who need to access the Windchill PDMLink system to view, create, and manage product information. For users who require CAD data management training, this course should be followed with the appropriate CAD data management course for the user's design tool. After completing the course, you will be able to complete Windchill PDMLink data management tasks and activities, as well as have a better understanding of how to use the Windchill PDMLink system.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate and view product information
- View information using Creo View Lite
- Understand the principles of product structure management
- Create and manage product structures
- Create and manage documents
- Understand the Windchill PDMLink change process
- Initiate and implement product change
- Use Windchill PDMLink tools to manage your work



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of product management processes and deliverables

Audience

- This course is intended for users who need to access the Windchill PDMLink system to view, create, and manage product information.

Agenda

Day 1

Module	1	Introduction to the Environment
Module	2	Locating and Viewing Information
Module	3	Viewing Information using Creo View Lite
Module	4	Introduction to Product Structure Management
Module	5	Creating Product Structures
Module	6	Managing Product Structures

Day 2

Module	7	Managing Structure Filters
Module	8	Managing Parts in Product Structure Explorer
Module	9	Creating and Managing Documents
Module	10	Introduction to the Change Process
Module	11	Initiating and Implementing Change
Module	12	Managing Your Work

Course Content

Module 1. Introduction to the Environment

- i. Windchill PDMLink
- ii. Windchill Environment
- iii. Data Management Objects
- iv. Change Management Objects
- v. Storage Locations
- vi. Iteration and Revision Controls
- vii. Process Controls
- viii. Access Controls
- ix. Collaboration Features
- x. Logging On to Windchill
- xi. Understanding the Windchill User Interface
- xii. Using the Home Page
- xiii. Using Quick Links
- xiv. Using the Navigator
- xv. Navigating Products and Libraries
- xvi. Navigating Changes

Knowledge Check Questions

Module 2. Locating and Viewing Information

- i. Locating Information
- ii. Using Simple Search
- iii. Using Advanced Search
- iv. Managing Searches
- v. Browsing
- vi. Using Windchill Tables
- vii. Working with Table Columns
- viii. Managing Windchill Table Views
- ix. Understanding Information Pages
- x. Viewing Structure
- xi. Understanding Object Capabilities
- xii. Document Capabilities
- xiii. CAD Document Capabilities
- xiv. Part and End Item Capabilities
- xv. Relationship Explorer

Knowledge Check Questions

Module 3. Viewing Information using Creo View Lite

- i. Identifying Visualization Concepts
 - ii. Identifying Visualized Intellectual Property Types
 - iii. Identifying Components in PTC's Visualization System
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- iv. Identifying Readable Visualization Object Types
- v. Understanding Creo View's Basic Capabilities
- vi. Understanding the Creo View User Interface
- vii. Viewing Area User Interface
- viii. Understanding the Ribbon
- ix. The Creo View File Menu User Interface
- x. Quick Access Toolbar User Interface
- xi. Primary Panel User Interface
- xii. Understanding the Upper Data Panel
- xiii. Understanding the Lower Data Panel
- xiv. Starting Creo View as a Standalone Client
- xv. Starting Creo View from Windchill
- xvi. Loading Viewables
- xvii. Visualizing and Interrogating a Creo View Model
- xviii. Views Group
- xix. Orienting the Model
- xx. Changing the Display of the Model
- xxi. Rendering Options
- xxii. Filtering Display and Other Items
- xxiii. Hiding and Unhiding Components
- xxiv. Opening Non-Model Files with Creo View
- xxv. Viewing Drawings
- xxvi. Viewing Images
- xxvii. Orienting Drawings and Images
- xxviii. Marking Up Creo View Viewables
- xxix. Adding Annotation Objects
- xxx. Notes and Reference Note Annotations
- xxxi. Leader Line Annotations
- xxxii. Shape Annotations
- xxxiii. Freehand Annotations
- xxxiv. GTOL Annotations
- xxxv. Stamp Annotations

Knowledge Check Questions

Module 4. Introduction to Product Structure Management

- i. Defining Configuration Management
 - ii. End Item Parts in Product Structures
 - iii. CAD Documents in Product Structures
 - iv. Documents in Product Structures
 - v. Creating Product Structures using CAD-centric Approach
 - vi. Creating Product Structures using Part-centric Approach
 - vii. Part Master and Version
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- viii. End Item Master and Version
- ix. Part Information Page
 - x. The Product Structure Browser
 - xi. The Part Structure Command Ribbon
 - xii. The Part Structure Panes
- xiii. Product Structure Browser – Layout Options
- xiv. Finding Components in the Product Structure
 - xv. Product Structure Browser – Visualization Tab
 - xvi. Product Structure Browser – Uses Tab
 - xvii. Product Structure Browser – Occurrences Tab
- xviii. Show/Hide Related Information
 - xix. Product Structure Related Objects
 - xx. Exploring Product Structures

Knowledge Check Questions

Module 5. Creating Product Structures

- i. Creating Windchill Parts
- ii. Creating Multiple Parts
- iii. Building Product Structures
- iv. Associating Windchill Parts with Documents
- v. Specifying Windchill Parts as End Items

Knowledge Check Questions

Module 6. Managing Product Structures

- i. Characteristics of Managed Baselines
- ii. Adding Parts to Baselines
- iii. Creating New View Versions
- iv. Bill of Materials Notes
 - v. Creating Bill of Materials Notes
 - vi. Creating Bill of Materials (BOM) Notes from Templates
- vii. Replacement Parts
- viii. Adding a Reference Designator
- ix. Multi-valued Attribute Support
 - x. Object Effectivity
 - xi. Setting Date Effectivity
- xii. Product Structure Reports
- xiii. Exporting Bill of Materials to a File

Knowledge Check Questions

Module 7. Managing Structure Filters

- i. Setting the Latest Filter
 - ii. Setting the Baseline Filter
 - iii. Setting the Attribute Filter
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- iv. Setting the Spatial Filter
- v. Saving and Managing Filters
- vi. Comparing Product Structures
- vii. Analyzing Structure Comparison
- viii. Comparing Part Information

Knowledge Check Questions

Module 8. Managing Parts in Product Structure Explorer

- i. The Product Structure Explorer (PSE)
- ii. Product Structure Explorer Menus
- iii. About Product Structure Explorer Modes
- iv. Product Structure Explorer Draft Mode
- v. Product Structure Explorer Edit Mode
- vi. Creating Windchill Parts in the Product Structure Explorer
- vii. Editing Product Structure Filters
- viii. Annotating Product Structure
- ix. Organizing Queries in the Product Structure Explorer

Knowledge Check Questions

Module 9. Creating and Managing Documents

- i. Document Capabilities
- ii. Creating Documents and Links
- iii. New Document: Set Attributes – Type
- iv. New Document: Set Attributes – Template
- v. New Document: Set Attributes (Primary Content)
- vi. New Document: Set Attributes (Attributes)
- vii. New Document: Set Attachments
- viii. New Multiple Documents
- ix. Overview of Modifying Documents
- x. Modifying Documents — Check Out
- xi. Modifying Documents — Edit
- xii. Modifying Documents — Check In
- xiii. Modifying Documents — Undo Checkout
- xiv. Modifying Documents — Replace Content
- xv. Modifying Documents — Revise
- xvi. Understanding Document Relationships
- xvii. Establishing Document References Relationships
- xviii. Associating Documents with Windchill Parts

Knowledge Check Questions

Module 10. Introduction to the Change Process

- i. Change Management Features: Introduction
 - ii. Configuration Management – How Does Change Management Fit In?
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- iii. Change Management Process Definition
- iv. Change Objects
- v. Roles in the Change Process
- vi. Change Notice without a Change Request
- vii. Monitoring Changes — Reports
- viii. The Change Process: Overview
- ix. The Change Process: Diagram
- x. The Change Process: Problem Report
- xi. The Change Process: Change Request
- xii. The Change Process: Change Request Tracking
- xiii. The Change Process: Change Notice
- xiv. The Change Process: Change Notice Implementation
- xv. Business Case for the Change
- xvi. Creating Problem Reports
- xvii. Creating Problem Reports: Set Attributes
- xviii. Creating Problem Reports: Select Affected End Items
- xix. Creating Problem Reports: Select Affected Objects
- xx. Creating Problem Reports: Set Attachments

Knowledge Check Questions

Module 11. Initiating and Implementing Change

- i. Analyzing Problem Reports – The Process
 - ii. Analyzing Problem Reports – Task Details
 - iii. Change Requests – Objectives and Benefits
 - iv. Creating Change Requests – The Process
 - v. Creating Change Requests – Set Attributes
 - vi. Creating Change Requests – Select Affected End Items
 - vii. Creating Change Requests – Select Affected Objects
 - viii. Creating Change Requests – Collect Affected Objects
 - ix. Creating Change Requests – Set Attachments
 - x. Creating Change Requests – Associate Changes
 - xi. Analyzing Change Requests – The Process
 - xii. Analyzing Change Requests – Fast Track Versus Full Track
 - xiii. Analyzing Change Requests – Task Details
 - xiv. Benefits of Change Notices
 - xv. Creating Change Notices – The Process
 - xvi. Creating Change Notices – Set Attributes
 - xvii. Creating Change Notices – Define Implementation Plan
 - xviii. Creating Change Notices – Set Attachments
 - xix. Creating Change Notices – Associate Changes
 - xx. Editing Change Tasks – Set Attributes
 - xxi. Editing Change Tasks – Select Affected/Resulting Objects
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- xxii. Viewing Related Tasks
 - xxiii. Change Tasks – Details
 - xxiv. Change Task Sequencing
 - xxv. Setting the Disposition of the Affected Objects
 - xxvi. Setting Effectivity
 - xxvii. Change Notice Plan Approval
 - xxviii. Change Notice Process – The Diagram
 - xxix. Change Notice Plan Execution
 - xxx. Mass Change
 - xxxi. Change Notice Audit
 - xxxii. Windchill Variance – The Diagram
 - xxxiii. Windchill Variance – Types
- Knowledge Check Questions*

Module 12. Managing Your Work

- i. Managing Your Work
 - ii. Managing Tasks
 - iii. Managing Recently Modified Objects
 - iv. Managing Checked Out Objects
 - v. Managing Subscriptions
 - vi. Creating Subscriptions
 - vii. Introduction to Communication Mechanisms
 - viii. Holding Discussions
 - ix. Generating Reports
 - x. Promotion Requests
 - xi. Viewing Promotion Requests
 - xii. Creating Promotion Requests
 - xiii. Participating in Processes
 - xiv. Completing Tasks
 - xv. Completing Promotion Tasks
 - xvi. Viewing Processes
 - xvii. Reassigning Workflow Tasks
 - xviii. Preference Manager
 - xix. Using the Windchill Clipboard
 - xx. Managing Folders
 - xxi. Software Downloads
 - xxii. Windchill Packages Definition
 - xxiii. Package Roles
 - xxiv. Packages Table
 - xxv. Viewing a Package
 - xxvi. Managed Collection
 - xxvii. Creating Managed Collections
- Knowledge Check Questions*
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Introduction to Windchill PDMLink 10.2 for the Implementation Team

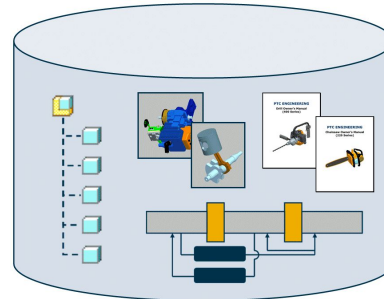
Overview

Course Code	TRN-4262-T
Course Length	2 Days

In this course, you will learn how to complete basic Windchill PDMLink functions. You will learn how to access and navigate the Windchill PDMLink environment, use Windchill PDMLink's visualization tools, manage CAD and product information, and manage product information changes. Other topics include how to use Windchill PDMLink's communication and collaboration tools, and access user support functions and information.

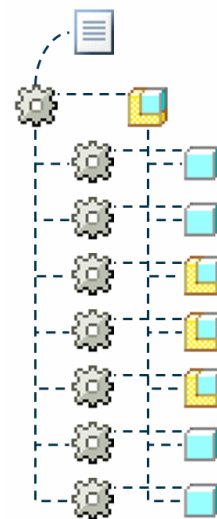
This course is designed to provide broad and basic coverage of Windchill PDMLink functionality to members of the Implementation Team. After completing the course, you will have a comprehensive understanding of Windchill PDMLink capabilities, which will enable you to contribute to the successful implementation of Windchill PDMLink to meet your company's Product Lifecycle Management goals.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate and view product information
- View information using Creo View Lite
- Understand the principles of CAD data management
- Initiate new designs and share design information
- Modify and manage design information
- Understand the principles of product structure management
- Create and manage product structures
- Create and manage documents
- Understand the Windchill PDMLink change process
- Initiate and implement product change
- Use Windchill PDMLink tools to manage your work



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of product management processes and deliverables

Audience

- This course is intended for members of the Implementation Team who require a broad understanding of Windchill PDMLink functionality to successfully implement the system.

Agenda

Day 1

Module	1	Introduction to the Environment
Module	2	Locating and Viewing Information
Module	3	Viewing Information using Creo View Lite
Module	4	Getting Started with CAD Data Management
Module	5	Initiating New Designs and Sharing Design Data
Module	6	Modifying and Managing Design Information
Module	7	Introduction to Product Structure Management

Day 2

Module	8	Creating and Managing Product Structures
Module	9	Creating and Managing Documents
Module	10	Introduction to the Change Process
Module	11	Initiating and Implementing Change
Module	12	Managing Your Work

Course Content

Module 1. Introduction to the Environment

- i. Integrated Windchill PDMLink and Windchill ProjectLink
- ii. Windchill PDMLink
- iii. Windchill ProjectLink
- iv. Pro/INTRALINK
- v. Arbortext Content Manager
- vi. Content Management
- vii. Windchill Environment
- viii. Data Management Objects
- ix. Change Management Objects
- x. Project Management Objects
- xi. Storage Locations
- xii. Iteration and Revision Controls
- xiii. Process Controls
- xiv. Access Controls
- xv. Collaboration Features
- xvi. Logging On to Windchill
- xvii. Understanding the Windchill User Interface
- xviii. Using the Home Page
- xix. Using Quick Links
- xx. Using the Navigator
- xxi. Navigating Products and Libraries
- xxii. Navigating Projects and Programs
- xxiii. Navigating Changes

Knowledge Check Questions

Module 2. Locating and Viewing Information

- i. Locating Information
 - ii. Using Simple Search
 - iii. Using Advanced Search
 - iv. Managing Searches
 - v. Browsing
 - vi. Using Windchill Tables
 - vii. Working with Table Columns
 - viii. Managing Windchill Table Views
 - ix. Understanding Information Pages
 - x. Viewing Structure
 - xi. Understanding Object Capabilities
 - xii. Document Capabilities
 - xiii. CAD Document Capabilities
-

- xiv. Part and End Item Capabilities
- xv. Relationship Explorer

Knowledge Check Questions

Module 3. Viewing Information using Creo View Lite

- i. Identifying Visualization Concepts
- ii. Identifying Visualized Intellectual Property Types
- iii. Identifying Components in PTC's Visualization System
- iv. Identifying Readable Visualization Object Types
- v. Understanding Creo View's Basic Capabilities
- vi. Understanding the Creo View User Interface
- vii. Viewing Area User Interface
- viii. Understanding the Ribbon
- ix. The Creo View File Menu User Interface
- x. Quick Access Toolbar User Interface
- xi. Primary Panel User Interface
- xii. Understanding the Upper Data Panel
- xiii. Understanding the Lower Data Panel
- xiv. Starting Creo View as a Standalone Client
- xv. Starting Creo View from Windchill
- xvi. Loading Viewables
- xvii. Visualizing and Interrogating a Creo View Model
- xviii. Views Group
- xix. Orienting the Model
- xx. Changing the Display of the Model
- xxi. Rendering Options
- xxii. Filtering Display and Other Items
- xxiii. Hiding and Unhiding Components
- xxiv. Opening Non-Model Files with Creo View
- xxv. Viewing Drawings
- xxvi. Viewing Images
- xxvii. Orienting Drawings and Images
- xxviii. Working with Pages and Sheets

Knowledge Check Questions

Module 4. Getting Started with CAD Data Management

- i. Creo Parametric and Windchill Connectivity
 - ii. Windchill Integration
 - iii. Windchill Integration – Creo Parametric Menus
 - iv. Windchill Integration – Model Tree
 - v. Windchill Integration – Folder Browser
 - vi. Windchill Integration – Search
-

- vii. Windchill Integration – Embedded or Separate Browser
- viii. Windchill Integration – Event Management
- ix. Registering a Windchill Server
- x. Introduction to the Workspace
- xi. Workspace Layout
- xii. Creating Workspaces
- xiii. Changing the Active Workspace
- xiv. Working with Workspaces
- xv. Workspace Preferences – General
- xvi. Introduction to Windchill Parts
- xvii. Duplicate Names

Knowledge Check Questions

Module 5. Initiating New Designs and Sharing Design Data

- i. Understanding Workspace Architecture
- ii. Sharing Creo Parametric Designs
- iii. Introducing New Designs to the Workspace
- iv. Workspace Save As
- v. Introducing New Designs to the Commonsplace
- vi. Commonsplace Save As
- vii. Understanding Save, Upload, and Check In
- viii. Understanding Web Browser Access to the Workspace
- ix. Understanding Advanced Check In Options
- x. Generating Viewables
- xi. Naming and Numbering Policy Example
- xii. Parameter to Attribute Mapping

Knowledge Check Questions

Module 6. Modifying and Managing Design Information

- i. Understanding Workspace Objects
 - ii. Modification Process – Check Out a CAD Document
 - iii. Modification Process – Modify a CAD Document
 - iv. Modification Process – Check In a CAD Document
 - v. Methods of Checking Out CAD Documents
 - vi. Understanding Check Out Status and Options
 - vii. Understanding Download and Check Out
 - viii. Workspace Status
 - ix. Associating WTParts with CAD Documents
 - x. Automatically Associating Windchill Parts
 - xi. WTPart CAD Document Links
 - xii. WTPart CAD Document Links Example
 - xiii. Copying Viewables to Non-Owner Associated WTParts
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- xiv. Updating and Synchronizing Workspace Objects
- xv. Updating CAD Documents in the Workspace
- xvi. Synchronizing Objects in the Workspace
- xvii. Importing and Exporting CAD Data
- xviii. Importing CAD Data
- xix. Exporting CAD Data
- xx. Viewing Family Table Information

Knowledge Check Questions

Module 7. Introduction to Product Structure Management

- i. Defining Configuration Management
- ii. End Item Parts in Product Structures
- iii. CAD Documents in Product Structures
- iv. Documents in Product Structures
- v. Creating Product Structures using CAD-centric Approach
- vi. Creating Product Structures using Part-centric Approach
- vii. Part Master and Version
- viii. End Item Master and Version
- ix. Part Information Page
- x. The Product Structure Browser
- xi. The Part Structure Command Ribbon
- xii. The Part Structure Panes
- xiii. Product Structure Browser – Layout Options
- xiv. Finding Components in the Product Structure
- xv. Product Structure Browser – Visualization Tab
- xvi. Product Structure Browser – Uses Tab
- xvii. Product Structure Browser – Occurrences Tab
- xviii. Show/Hide Related Information
- xix. Product Structure Related Objects
- xx. Exploring Product Structures

Knowledge Check Questions

Module 8. Creating and Managing Product Structures

- i. Creating Windchill Parts
 - ii. Creating Multiple Parts
 - iii. Building Product Structures
 - iv. Associating Windchill Parts with Documents
 - v. Bill of Materials Notes
 - vi. Creating Bill of Materials Notes
 - vii. Replacement Parts
 - viii. Object Effectivity
 - ix. Product Structure Reports
-

- x. Setting the Latest Filter
- xi. Setting the Attribute Filter
- xii. Saving and Managing Filters
- xiii. Comparing Product Structures
- xiv. Analyzing Structure Comparison
- xv. The Product Structure Explorer (PSE)
- xvi. Product Structure Explorer Menus
- xvii. About Product Structure Explorer Modes
- xviii. Product Structure Explorer Draft Mode
- xix. Product Structure Explorer Edit Mode
- xx. Creating Windchill Parts in the Product Structure Explorer

Knowledge Check Questions

Module 9. Creating and Managing Documents

- i. Document Capabilities
- ii. Creating Documents and Links
- iii. New Document: Set Attributes – Type
- iv. New Document: Set Attributes – Template
- v. New Document: Set Attributes (Primary Content)
- vi. New Document: Set Attributes (Attributes)
- vii. New Document: Set Attachments
- viii. Overview of Modifying Documents
- ix. Modifying Documents — Check Out
- x. Modifying Documents — Edit
- xi. Modifying Documents — Check In
- xii. Modifying Documents — Undo Checkout
- xiii. Modifying Documents — Replace Content
- xiv. Modifying Documents — Revise
- xv. Understanding Document Relationships
- xvi. Establishing Document References Relationships
- xvii. Associating Documents with Windchill Parts

Knowledge Check Questions

Module 10. Introduction to the Change Process

- i. Change Management Features: Introduction
 - ii. Configuration Management – How Does Change Management Fit In?
 - iii. Change Management Process Definition
 - iv. Change Objects
 - v. Roles in the Change Process
 - vi. Change Notice without a Change Request
 - vii. Monitoring Changes — Reports
 - viii. The Change Process: Overview
-

- ix. The Change Process: Diagram
- x. The Change Process: Problem Report
- xi. The Change Process: Change Request
- xii. The Change Process: Change Request Tracking
- xiii. The Change Process: Change Notice
- xiv. The Change Process: Change Notice Implementation
- xv. Business Case for the Change
- xvi. Creating Problem Reports
- xvii. Creating Problem Reports: Set Attributes
- xviii. Creating Problem Reports: Select Affected End Items
- xix. Creating Problem Reports: Select Affected Objects
- xx. Creating Problem Reports: Set Attachments

Knowledge Check Questions

Module 11. Initiating and Implementing Change

- i. Analyzing Problem Reports – The Process
 - ii. Analyzing Problem Reports – Task Details
 - iii. Change Requests – Objectives and Benefits
 - iv. Creating Change Requests – The Process
 - v. Creating Change Requests – Set Attributes
 - vi. Creating Change Requests – Select Affected End Items
 - vii. Creating Change Requests – Select Affected Objects
 - viii. Creating Change Requests – Collect Affected Objects
 - ix. Creating Change Requests – Set Attachments
 - x. Creating Change Requests – Associate Changes
 - xi. Analyzing Change Requests – The Process
 - xii. Analyzing Change Requests – Fast Track Versus Full Track
 - xiii. Analyzing Change Requests – Task Details
 - xiv. Benefits of Change Notices
 - xv. Creating Change Notices – The Process
 - xvi. Creating Change Notices – Set Attributes
 - xvii. Creating Change Notices – Define Implementation Plan
 - xviii. Creating Change Notices – Set Attachments
 - xix. Creating Change Notices – Associate Changes
 - xx. Editing Change Tasks – Set Attributes
 - xxi. Editing Change Tasks – Select Affected/Resulting Objects
 - xxii. Viewing Related Tasks
 - xxiii. Change Tasks – Details
 - xxiv. Change Task Sequencing
 - xxv. Setting the Disposition of the Affected Objects
 - xxvi. Setting Effectivity
 - xxvii. Change Notice Plan Approval
-

- xxviii. Change Notice Process – The Diagram
- xxix. Change Notice Plan Execution
- xxx. Mass Change
- xxxi. Change Notice Audit
- xxxii. Windchill Variance – The Diagram
- xxxiii. Windchill Variance – Types

Knowledge Check Questions

Module 12. Managing Your Work

- i. Managing Your Work
- ii. Managing Tasks
- iii. Managing Recently Modified Objects
- iv. Managing Checked Out Objects
- v. Managing Subscriptions
- vi. Introduction to Communication Mechanisms
- vii. Holding Discussions
- viii. Generating Reports
- ix. Promotion Requests
- x. Viewing Promotion Requests
- xi. Participating in Processes
- xii. Completing Tasks
- xiii. Completing Promotion Tasks
- xiv. Viewing Processes
- xv. Preference Manager
- xvi. The Set State Feature
- xvii. Using the Windchill Clipboard
- xviii. Managing Folders
- xix. Software Downloads
- xx. Windchill Packages Definition
- xxi. Package Roles
- xxii. Packages Table
- xxiii. Viewing a Package
- xxiv. Managed Collection
- xxv. Creating Managed Collections

Knowledge Check Questions

Creo Parametric Data Management with Windchill PDMLink 10.2

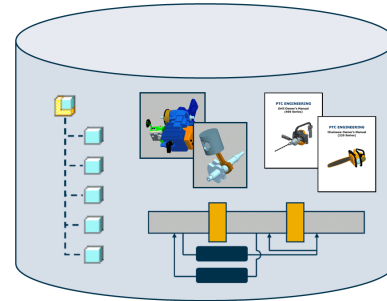
Overview

Course Code TRN-4300-T

Course Length 1 Day

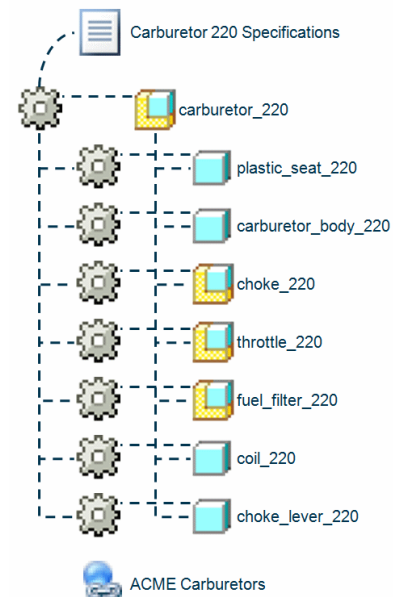
In this course, you will learn key capabilities and features of Windchill PDMLink CAD Data Management and how to use Windchill PDMLink to manage Creo Parametric design information. Specifically, you will focus on the day-to-day data management tasks required by the Creo Parametric user community, including how to use the CAD data structure to associate and build the product structure. You will also learn how to use Windchill to perform basic PDM functions on Creo Parametric CAD Documents and their associated Windchill parts. After completing this course, you will be prepared to complete basic Windchill PDMLink CAD data management tasks and activities. You will also have a better understanding of Windchill CAD data management processes.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Locate design information
- View design information
- Create new designs and share design information
- Modify and manage existing design information
- Understand Windchill parts and their association to CAD documents
- Understand file relationships and dependencies
- Manage family tables
- Use workspace frames



Prerequisites

- A basic working knowledge of Creo Parametric 2.0
- Completion of any one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for end users and System Administrators. People in related roles will also benefit from taking this course.

Agenda

Day 1

Module	1	Getting Started with Creo Parametric Data Management
Module	2	Initiating New Designs and Sharing Design Data
Module	3	Modifying and Managing Design Data
Module	4	Understanding File Relationships and Dependencies
Module	5	Managing Family Tables
Module	6	Managing CAD Data

Course Content

Module 1. Getting Started with Creo Parametric Data Management

- i. Creo Parametric and Windchill Connectivity
- ii. Windchill Integration
- iii. Windchill Integration – Creo Parametric Menus
- iv. Windchill Integration – Model Tree
- v. Windchill Integration – Folder Browser
- vi. Windchill Integration – Search
- vii. Windchill Integration – Embedded or Separate Browser
- viii. Windchill Integration – Event Management
- ix. Registering a Windchill Server
- x. Introduction to the Workspace
- xi. Workspace Layout
- xii. Creating Workspaces
- xiii. Changing the Active Workspace
- xiv. Working with Workspaces
- xv. Deleting Workspaces
- xvi. Changing Workspace Table Views
- xvii. Customizing Workspace Table Views
- xviii. Workspace Preferences – General
- xix. Workspace Preferences – Document Configuration Specification
- xx. Workspace Preferences – Part Configuration Specification
- xxi. Locating Design Information with Creo Parametric
- xxii. Searching for Design Information
- xxiii. Browsing for Design Information
- xxiv. Viewing CAD Document Information
- xxv. Viewing CAD Document Content
- xxvi. Exposing PDM Information using Creo Parametric File Open
- xxvii. Exposing PDM Information in the Model Tree
- xxviii. Duplicate Names

Knowledge Check Questions

Module 2. Initiating New Designs and Sharing Design Data

- i. Introduction to Windchill Parts
 - ii. Sharing Creo Parametric Designs
 - iii. Introducing New Designs to the Workspace
 - iv. Using CAD Templates in New Designs
 - v. Initiating New Designs Using New CAD Document
 - vi. Workspace Save As
 - vii. Introducing New Designs to the Commonsplace
 - viii. Understanding Check In
-

- ix. Commonsplace Save As
- x. Introducing New WTParts
- xi. Generating Viewables
- xii. Creating Representations
- xiii. Monitoring Publish Jobs
- xiv. Adding CAD Documents to the Workspace
- xv. Removing CAD Documents from the Workspace
- xvi. Understanding Workspace Architecture
- xvii. Understanding Save, Upload, and Check In
- xviii. Understanding Web Browser Access to the Workspace
- xix. Naming – Creo Parametric New Object
- xx. Naming and Numbering Design Documents
- xxi. Naming and Numbering Policy Example
- xxii. Parameter to Attribute Mapping

Knowledge Check Questions

Module 3. Modifying and Managing Design Data

- i. Understanding Workspace Objects
 - ii. Modifying Creo Parametric Designs
 - iii. Modification Process – Check Out a CAD Document
 - iv. Modification Process – Modify a CAD Document
 - v. Modification Process – Check In a CAD Document
 - vi. Methods of Checking Out CAD Documents
 - vii. Check Out of the Non-Latest Iteration
 - viii. Understanding Check Out Status and Options
 - ix. Understanding Download and Check Out
 - x. Understanding Advanced Check In Options
 - xi. Canceling Modifications
 - xii. Workspace Status
 - xiii. Locking CAD Documents in the Workspace
 - xiv. Understanding Gathering Parts
 - xv. Using Library Parts in Assemblies
 - xvi. Associating WTParts with CAD Documents
 - xvii. Automatically Associating Windchill Parts
 - xviii. Renaming CAD Documents
 - xix. Renaming WTParts
 - xx. Moving Design Documents
 - xxi. Revising Design Documents
 - xxii. Revising from the Non-Latest Version
 - xxiii. Revise and Check Out Action
 - xxiv. Modifying CAD Document Attributes
 - xxv. Creo Parametric Asynchronous Mode
-

Knowledge Check Questions

Module 4. Understanding File Relationships and Dependencies

- i. Managing Dependencies and Links
- ii. WTPart CAD Document Links
- iii. WTPart CAD Document Links Example
- iv. Copying Viewables to Non-Owner Associated WTParts
- v. Sample Creo Parametric Dependencies
- vi. CAD Document Fundamentals for Models
- vii. CAD Document Fundamentals for Drawings
- viii. Viewing Dependency Information in Windchill
- ix. Processing Dependencies
- x. Managing Secondary Content Files with Windchill
- xi. Downloading Non-Latest Configurations
- xii. Using Creo Parametric to Compare PDM Model Versions
- xiii. Intelligent Hyperlinks within a Drawing Revision Block
- xiv. Typical Data Management Problems
- xv. Regeneration Failures
- xvi. Incomplete Objects
- xvii. Resolving Incomplete Objects

Knowledge Check Questions

Module 5. Managing Family Tables

- i. Family Table Overview
- ii. Viewing Family Table Information
- iii. Creating Family Tables
- iv. Managing Family Tables
- v. Generic Modification Matrix
- vi. Individual Instance Modification Matrix
- vii. Modifying Family Tables
- viii. Modify Instance Parameters/Attributes in a Workspace
- ix. Saving Family Table Items as New Items

Knowledge Check Questions

Module 6. Managing CAD Data

- i. Part Compare Browser Layout
 - ii. Part Compare
 - iii. Enterprise Top-Down Design
 - iv. Introduction to Workspace Frames
 - v. Accessing Workspace Frames
 - vi. Workspace Frames Details
 - vii. Updating and Synchronizing Workspace Objects
 - viii. Updating CAD Documents in the Workspace
-

- ix. Synchronizing Objects in the Workspace
- x. Importing and Exporting CAD Data
- xi. Importing CAD Data
- xii. Exporting CAD Data
- xiii. Retrieving Simplified Representations On-the-Fly
- xiv. Using Flexible Components
- xv. Heterogeneous Design in Context (HDIC)
- xvi. Understanding Control Characteristics
- xvii. Defining Control Characteristics

Knowledge Check Questions

Managing Design Variations with Windchill 10.2

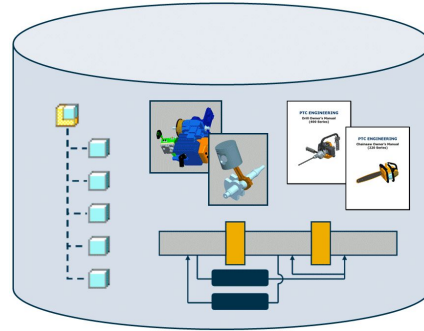
Overview

Course Code TRN-4307-T

Course Length 1 Day

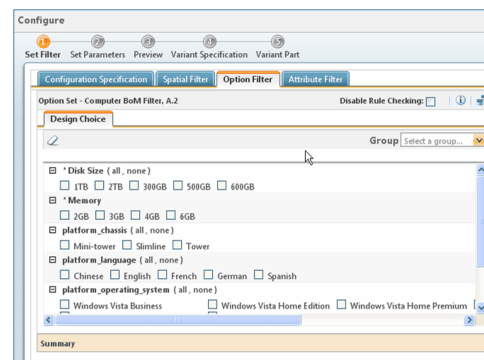
In this course, you will explore the capabilities, concepts, and processes for creating product options and variants. You will examine the environment and learn how to configure and organize your product structures to support your design variation requirements. Finally, you will learn how to view and filter product configurations based on choices and rules.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand Windchill design variation capabilities
- Create and manage options and choices definitions
- Use option sets to organize product families
- Set up configurable product structures
- Filter a configurable product structure
- Create and manage variants



Prerequisites

- Completion of one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for users that are familiar with Windchill product structures who will be developing the required options and variants.
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Agenda

Day 1

Module	1	Introduction to Windchill Options and Variants
Module	2	Working With Enterprise-wide Definitions
Module	3	Using Option Sets to Establish Product Families
Module	4	Developing Configurable Product Structures
Module	5	Assigning Choices to Parts
Module	6	Configurable Product Structure Filtering
Module	7	Advanced Selection Logic for Configurable Modules
Module	8	Creating and Managing Variants

Course Content

Module 1. Introduction to Windchill Options and Variants

- i. Introduction to Options and Variants
- ii. Strategies to Support Product Variability
- iii. Variant Design and Generation Process
- iv. Generic Platform Design
- v. Specific Variant Generation Phase
- vi. Managing Configurable Products
- vii. Options and Variants Capabilities
- viii. Options and Variants Terminology
- ix. Mapping Product Configuration Approaches to Windchill
- x. Managing Product Families and Configurations in Windchill
- xi. Workflow for Defining Product Families
- xii. Managing Configurable CAD Structures
- xiii. Choice Assignment Support in Windchill and Creo
- xiv. Elements of a Configurable Structure
- xv. Example of a Top-Down Configuration Approach
- xvi. Example of a Bottom-Up Configuration Approach
- xvii. Overview of the List-based Option Selection and Filtering
- xviii. Support for Configurable Structures and Access Control
- xix. Enabling Functionality for Optional Product Structures
- xx. Access Control to Objects Used in Option Filtering

Knowledge Check Questions

Module 2. Working With Enterprise-wide Definitions

- i. Creating and Managing Enterprise-wide Definitions
 - ii. Options and Choices
 - iii. Required Options
 - iv. Single-Choice Options
 - v. List-based Option Selection Object Types
 - vi. Enabling or Disabling the Sales and Design Option Subtypes
 - vii. Creating a New Options Soft Type
 - viii. Managing Options in an Option Pool
 - ix. Tree View of an Option Pool
 - x. Creating Options
 - xi. Viewing Information About an Option
 - xii. Editing an Option
 - xiii. Creating Option Groups
 - xiv. Assigning Options to Groups
 - xv. Viewing and Editing a Group
 - xvi. Creating and Working With Choices
-

- xvii. Ensuring Name Uniqueness for Options and Choices
- xviii. Defining Global Rules for Options and Choices
- xix. Rule Validation
- xx. Include Rules
- xxi. Viewing and Modifying Include Rules
- xxii. Exclude Rules
- xxiii. Viewing and Modifying Exclude Rules
- xxiv. Enable Rules
- xxv. Viewing and Modifying Enable Rules

Knowledge Check Questions

Module 3. Using Option Sets to Establish Product Families

- i. Understanding Option Sets
- ii. Defining an Option Set
- iii. Option Set Change Management
- iv. Assigning Option Sets
- v. Rules for Determining Which Assigned Option Set to Use
- vi. Option Set Assignment Example
- vii. Viewing the Assigned Option Set
- viii. Removing an Assigned Option Set
- ix. Overriding the Assigned Option Set Revision
- x. Working with Option Sets
- xi. Working with Options Within the Option Set
- xii. Managing Choices in the Option Set
- xiii. Managing Option Set Choice Rules
- xiv. Creating an Option Set with Save As
- xv. Renaming an Option
- xvi. Restrictions on Option Names

Knowledge Check Questions

Module 4. Developing Configurable Product Structures

- i. Setting Up Configurable Product Structures
- ii. Configurable Modules
- iii. Creating Configurable Modules
- iv. Creating a Configurable Product
- v. Configurable Module Information Page — Tables and Actions
- vi. Toggling Parts Between Standard and Configurable
- vii. Viewing Reports

Knowledge Check Questions

Module 5. Assigning Choices to Parts

- i. Assigning Choices for the List-based Option Selection
 - ii. Viewing Choices Assigned to Part Usage Links
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- iii. Assigning Choices to Part Usage Links
- iv. Overriding the Version of the Assigned Option Set
- v. Assigning Item Choices to Parts
- vi. Choice Where Used Information
- vii. Manufacturing Process Management Deliverables
- viii. Multiple Part Editing

Knowledge Check Questions

Module 6. Configurable Product Structure Filtering

- i. Filtering a Configurable Product Structure
- ii. Rules for Applying the Option Filter
- iii. Specifying the Filtering Criteria for the Option Filter
- iv. Effect of Rules on Choice Selection
- v. Saving Filtering Criteria

Knowledge Check Questions

Module 7. Advanced Selection Logic for Configurable Modules

- i. Developing Advanced Selection Logic for Configurable Modules
- ii. Adding and Editing a Parameter
- iii. Information Tab of the Edit Parameter Window
- iv. Constraint Tab of the Edit Parameter Window
- v. Equivalency Tab of the Edit Parameter Window
- vi. User Interface Tab of the Edit Parameter Window
- vii. User Interface Tab — Inserting a Page Break
- viii. Adding a Constraint
- ix. Case Table Editor
- x. Expression Editor
- xi. External Application Constraint Editor
- xii. Assigning a Logic Reference to Another Configurable Module
- xiii. Defining Part Parameters Using Another Configurable Module
- xiv. Mapping Parameter Values between Two Parts Example
- xv. Organizing Input for the Advanced Selection Logic
- xvi. Validating the Configurable Module Logic
- xvii. Adding a Child Resolution
- xviii. Variants from Configurable Modules with Advanced Selection Logic
- xix. Creating Variants with Collapsible Middle Nodes
- xx. Variant Properties

Knowledge Check Questions

Module 8. Creating and Managing Variants

- i. Creating and Managing Variants Process
 - ii. Configuring Parts to Create Variant Structures
 - iii. Set Filter Step: Specifying Expansion Criteria and Applying Filters
-

- iv. Set Parameters Step: Providing Inputs for Part Parameters
- v. Violation of the Minimum or Maximum Number of Child Parts
- vi. Using the Input Pages
- vii. Preview Step: Reusing Existing Variant Specifications and Variants
- viii. Variant Specification Step: Defining a Variant Specification
- ix. Variant Part Step: Generating a Variant
 - x. Controlling the Ability to Create Variant Parts
 - xi. Enabling E-mail Notification
- xii. Module Variant Information Page
- xiii. Variant Specification Information Page
- xiv. Reconfiguring a Variant Specification
 - xv. Comparing Variant Specifications
 - xvi. Comparing Variant Solutions
 - xvii. Comparing Variant Structures
- xviii. Revision and Change Management for Variant Specifications
 - xix. Managing Deliverables
 - xx. Filtering a Product Structure Using a Variant Specification
 - xxi. Setting Date Effectivity for Choices

Knowledge Check Questions

Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the Administrator

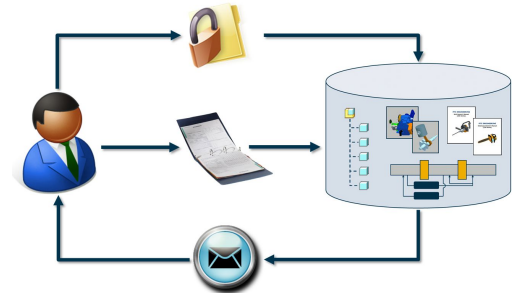
Overview

Course Code TRN-4320-T

Course Length 1 Day

In this course, you will review two main components: business administration enhancements and system administration enhancements. The business administration topics will include how to create new Windchill object types and add new attributes to objects more effectively, how to create and manage Windchill layouts as an alternative to Windchill customization, how to manage user profiles, how to administer Windchill workflows, and finally will review other miscellaneous business related enhancements. The system administration topics will highlight and cover enhancements related to the Windchill architecture, file vaulting and replication, system performance, and log and error reporting. This course is designed for administrators who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in a Windchill PDMLink 10.2 environment.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand Windchill 10.2 interface enhancements
- Understand the new Attribute and Type Management interface
- Create and add attributes to a Windchill type
- Create Windchill types
- Create and manage display layouts
- Modify layouts to make information editable
- Identify and use the new workflow process administration interface
- Use filters to search for workflow processes
- Analyze workflow process components



- Create and manage user profiles
- Assign users to profiles
- Identify the new charting feature
- Add charts to reports
- Explore Windchill architecture enhancements
- Identify new external file storage options and strategies
- Explore a distributed data replication architecture
- Monitor file vaults using new utilities
- Automatically set Windchill cache sizes using Windchill Configuration Assistant
- Identify queue performance enhancements
- Identify workflow queue pooling enhancements
- Identify new error reporting enhancements
- Analyze log files using the Log File Viewer
- Use System Configuration Collector to send error logs to PTC

Prerequisites

- Experience with the Windchill 9.0 or 9.1 business and system administration
- Familiarity with the Windows command prompt and the ability to execute basic scripts

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
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Agenda

Day 1

Module	1	Introduction to the Windchill 10.2 Environment
Module	2	Managing Objects, Object Types, and Object Attributes
Module	3	Managing Workflow Processes and Windchill Profiles
Module	4	Miscellaneous Business Administration Enhancements
Module	5	Managing Windchill Services
Module	6	File Vaulting and Replication Overview
Module	7	Performance Enhancements
Module	8	Log and Error Reporting Enhancements

Course Content

Module 1. Introduction to the Windchill 10.2 Environment

- i. Understanding the Windchill User Interface
- ii. Using the Navigator
- iii. Navigating Products and Libraries
- iv. Locating Information
- v. Understanding Information Pages
- vi. Accessing Help

Knowledge Check Questions

Module 2. Managing Objects, Object Types, and Object Attributes

- i. Windchill Objects Review
 - ii. Types of Attributes
 - iii. Modeled Attributes
 - iv. Standard and Global Attributes
 - v. Calculated and Alias Attributes
 - vi. Windchill Object Typing Capability
 - vii. Creating Global Attributes
 - viii. Extending and Subtyping Objects
 - ix. Constraining Attributes
 - x. Types of Constraints
 - xi. Constraining Strings to a Set of Values
 - xii. Conditional Constraints
 - xiii. The Type and Attribute Manager – Types
 - xiv. The Type and Attribute Manager – Enumerations
 - xv. Adding Attributes to Types
 - xvi. New Attribute Wizard – Page 1
 - xvii. New Attribute Wizard – Page 2
 - xviii. New Attribute Wizard – Page 3
 - xix. Managing Attribute Constraints
 - xx. Managing Attribute Visibility
 - xxi. Creating Subtypes
 - xxii. Managing Type Layouts
 - xxiii. Inheriting Type Layouts
 - xxiv. Localizing Types and Attributes
 - xxv. Alias and Calculated Attribute Display Enhancements
 - xxvi. Enabling Set Revision While Creating a New Object
 - xxvii. Windchill Link Typing Capability
 - xxviii. Identifying Link Behavior
 - xxix. The Relationship Constraint Manager
 - xxx. Creating a Relationship Constraint
-

Knowledge Check Questions

Module 3. Managing Workflow Processes and Windchill Profiles

- i. Workflow Process Administration
- ii. Workflow Process Administration Utility
- iii. Searching for Workflow Processes
- iv. Workflow Processes Table
- v. Workflow Process Nodes Table
- vi. Find Workflow Processes Filters
- vii. Workflow Process Health Check
- viii. User Profiles
- ix. Creating New User Accounts
- x. New User – Assign to Profile

Knowledge Check Questions

Module 4. Miscellaneous Business Administration Enhancements

- i. The Charting Feature
- ii. Creating a Chart
- iii. Saving Charts
- iv. Data Monitor
- v. Creating a New Data Monitor
- vi. The Save As New User Feature
- vii. Exporting and Importing Table Views
- viii. Performing Set State on Multiple Items
- ix. Agreement Security Label Filtering Enhancement
- x. Security Labels and Agreements for Specific Revisions
- xi. Creating Shared Tabs
- xii. Configuring the Windchill Home Page

Knowledge Check Questions

Module 5. Managing Windchill Services

- i. Identifying Major Windchill Services
- ii. Embedded Tomcat
- iii. Starting/Stopping Apache Web Server
- iv. Starting/Stopping Windchill Directory Server
- v. Starting/Stopping Oracle
- vi. Starting/Stopping Windchill
- vii. Windchill Directory Server Control Panel
- viii. Running Windchill Directory Server as a Service
- ix. Encrypted Passwords in Property Files
- x. Forms-Based Authentication

Knowledge Check Questions

Module 6. File Vaulting and Replication Overview

- i. Centrally Vaulted Content
- ii. Remotely and Centrally Vaulted Content
- iii. Types of File Vaults
- iv. Requesting Objects That Have Not Yet Been Replicated
- v. Requesting Objects from File Servers That Are Not Preferred
- vi. Server to Server Replication
- vii. Content Synchronization and Replication
- viii. Local Replication for File Servers
- ix. Automated Cleanup of Replica Vaults
- x. Generating Unreferenced Files Report
- xi. The Central Cache Vault
- xii. Setting Up External Storage
- xiii. Monitor File Vaults
- xiv. Monitoring Vaults using the System Configuration Collector

Knowledge Check Questions

Module 7. Performance Enhancements

- i. Server Status
- ii. PTC System Monitor
- iii. Windchill Configuration Assistant (WCA)
- iv. Affected Files
- v. Running the Windchill Configuration Assistant
- vi. Propagating Values from Intermediate Properties Files
- vii. Rolling Back Configuration Changes
- viii. Additional Caches Set Through the Windchill Configuration Assistant
- ix. Queue Manager
- x. Configuring a Background Method Server
- xi. Configuring Multiple Background Servers
- xii. Workflow Queues
- xiii. Pool Queues
- xiv. Monitoring Workflow Queue Entries
- xv. Configuring Queue Pooling
- xvi. After Queue Pooling
- xvii. Automatic Memory Management (AMM)

Knowledge Check Questions

Module 8. Log and Error Reporting Enhancements

- i. Setting Windchill Log Levels
 - ii. Viewing Windchill Log Files
 - iii. System Configuration Collector
 - iv. Managing Directory Server Logs
 - v. System Error Reporting
-

- vi. Using the Persisted Log Events Page
 - vii. The Log File Viewer Page
 - viii. The Log Event Details Page
 - ix. Administration Actions After Receiving Error Reports
- Knowledge Check Questions*
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Business Administration of Windchill PDMLink 10.2

Overview

Course Code TRN-4330-T

Course Length 3 Days

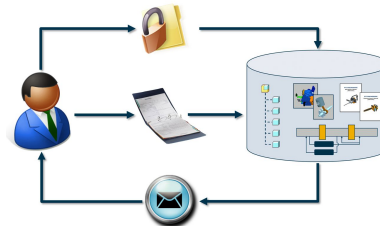
In this course, you will gain an understanding of basic Windchill PDMLink administration tasks. You will learn how to create user accounts and groups and how to effectively plan and create information management storage strategies. Other topics will include life cycles, workflows, teams, and configuring domain policies. These skills enable you to configure Windchill PDMLink to meet business needs. After completing this course, you will be well prepared to set up and manage a basic Windchill PDMLink implementation at your company.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the processes involved in defining your business environment
- Identify the use of a Windchill Organization
- Create an organization
- Create and manage user accounts and groups
- Identify best practices for managing organizations, groups, and user accounts
- Identify contexts and their relationships
- Assign product and library creators
- Create and manage product and library contexts
- Distinguish Windchill object names and their corresponding object type class names
- Create Global Attributes
- Add attributes to a Windchill Type
- Create a Windchill Type
- Identify and set object initialization rules
- Implement custom versioning sequences
- Create and define life cycle and workflow templates
- Associate life cycle and workflow templates
- Understand the Windchill domain policy architecture



- Define access control policies
 - Identify individual access control permissions
 - Administer and troubleshoot access control lists
 - Define notification policies
 - Define indexing policies
 - Use Context Teams to apply access control
 - Use Context Teams and team templates to conduct workflow role resolution
 - Create and manage document templates within product, library, and organization contexts
 - Identify how to create CAD document templates
 - Create product and library context templates
 - Create, manage, and edit promotion preferences
 - Identify the promotion review and approval processes
 - Identify the preconfigured Windchill change management functions
 - Access business metrics from Change Monitor reports
 - Use ModelCHECK validation during Check In
 - Administer administrator-saved searches
 - Administer user profiles
 - Administer Windchill views
 - Administer calendar functions
 - Administer organization preferences
 - Identify the report manager functions
 - Identify visualization publishing controls
 - Identify purge manager functions
 - Audit system events
-

Prerequisites

- Any one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for business administrators, system administrators, and project team leaders. Implementation team members, including user adoption team members and those with general Windchill PDMLink administration responsibilities, will also benefit from taking this course.

Agenda

Day 1

Module	1	Introduction to Windchill Business Administration
Module	2	Managing Participants
Module	3	Managing Contexts
Module	4	Managing Objects, Object Types, and Object Attributes

Day 2

Module	5	Managing Object Type Behavior
Module	6	Automating Processes Using Life Cycles and Workflows
Module	7	Managing Teams
Module	8	Managing Domain Policies and Access Control

Day 3

Module	9	Managing Organization Templates
Module	10	Implementing Promotion and Change Processes
Module	11	Administrative Support Tools

Course Content

Module 1. Introduction to Windchill Business Administration

- i. Windchill PDMLink
- ii. Windchill Architecture — Server
- iii. Windchill Architecture — Client
- iv. Windchill Architecture — Database
- v. Windchill Architecture — Optional Servers
- vi. Understanding Windchill Terminology
- vii. Understanding Primary Business Objects
- viii. Understanding Policies, Processes, and Participants
- ix. Role of the Business Administrator
- x. Planning a Windchill Implementation
- xi. Identifying the Data to be Managed
- xii. Common Windchill Objects
- xiii. Managing Participants
- xiv. Identifying a Data Storage Strategy
- xv. Identifying Business Processes
- xvi. Identifying How Users Interact with Data
- xvii. Identifying a Notification Strategy

Knowledge Check Questions

Module 2. Managing Participants

- i. Participant Architecture
 - ii. Identifying Windchill Users
 - iii. Users and Groups
 - iv. User Accounts
 - v. Groups
 - vi. User and Group Structure
 - vii. Best Practices for Organizations, Users, and Groups
 - viii. Introduction to Windchill Contexts
 - ix. Administrative Navigation
 - x. Creating a Windchill Organization Context
 - xi. Creating Users and Groups
 - xii. Creating User Accounts
 - xiii. Troubleshooting User Accounts
 - xiv. Creating Groups
 - xv. Group Membership
 - xvi. Managing Existing Participants
 - xvii. Moving Users Between Organizations
 - xviii. Updating User Account Information
 - xix. Deleting a User Account — Steps
 - xx. Identify the Results of Deleting a User
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- xxi. Business Process Implications of Deleting Users
- xxii. Workspace Implications of Deleting Users
- xxiii. Running Process Implications of Deleting Users
- xxiv. Deleting a User Account
- xxv. Deleting Groups
- xxvi. Results of Deleting a Group
- xxvii. Business Process Implications of Deleting Groups
- xxviii. Deleting an Organization

Knowledge Check Questions

Module 3. Managing Contexts

- i. Understanding Contexts
- ii. Relationships Between Contexts
- iii. Identifying Locations for Storing Data
- iv. Windchill Product Characteristics
- v. Results of Creating a Product
- vi. Windchill Library Characteristics
- vii. Results of Creating a Library
- viii. Assigning Context Creators
- ix. Creating Products
- x. Creating Libraries
- xi. Using Folders
- xii. The Move Action
- xiii. Moving an Object

Knowledge Check Questions

Module 4. Managing Objects, Object Types, and Object Attributes

- i. Windchill Objects Review
 - ii. Types of Attributes
 - iii. Modeled Attributes
 - iv. Standard and Global Attributes
 - v. Calculated and Alias Attributes
 - vi. Windchill Object Typing Capability
 - vii. Creating Global Attributes
 - viii. Extending and Subtyping Objects
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- xviii. New Attribute Wizard – Page 3
- xix. Managing Attribute Constraints
- xx. Managing Attribute Visibility
- xxi. Creating Subtypes
- xxii. Managing Type Layouts
- xxiii. Inheriting Type Layouts
- xxiv. Creating Shared Tabs
- xxv. Localizing Types and Attributes
- xxvi. Windchill Link Typing Capability
- xxvii. Identifying Link Behavior
- xxviii. The Relationship Constraint Manager
- xxix. Creating a Relationship Constraint
- xxx. Measurement System Administration
- xxxi. Quantity of Measure Administration

Knowledge Check Questions

Module 5. Managing Object Type Behavior

- i. Object Initialization Rules
- ii. Object Initialization Rule Management
- iii. Object Types Managed by Object Initialization Rules
- iv. Object Initialization Rule Example
- v. Life Cycle Association Rules
- vi. Team Template Association Rules
- vii. Object Numbering Scheme Rules
- viii. Custom Numbering Scheme Rules
- ix. Folder Path Rules
- x. Versioning Scheme Rules
- xi. Types of Harvard Versioning Schemes
- xii. File and State-Based Versioning
- xiii. File and State-Based Versioning (cont.)

Knowledge Check Questions

Module 6. Automating Processes Using Life Cycles and Workflows

- i. Identifying Business Processes
 - ii. Assess Your Business Processes
 - iii. Identifying Process Management Objects
 - iv. Understanding Windchill Life Cycles
 - v. Understanding Windchill Life Cycle Types
 - vi. Defining Object Life Cycle Resolution
 - vii. Creating a Life Cycle
 - viii. Specifying Life Cycle Properties
 - ix. Adding Life Cycle States
 - x. Defining States
 - xi. Identifying Life Cycle State Names
-

- xii. Identifying a Version Series
- xiii. State-Based Versioning Example
- xiv. Understanding Transitions
- xv. Defining Transitions
- xvi. Understanding Life Cycle Transition Types
- xvii. Understanding Life Cycle Transition Types
- xviii. Understanding Life Cycle Transition Types
- xix. Understanding Life Cycle Transition Types
- xx. Understanding Life Cycle Transition Types
- xxi. Transition Examples
- xxii. Defining Role Participation
- xxiii. Defining Access Permissions using Life Cycles
- xxiv. Selecting Workflow Templates
- xxv. Life Cycle and Workflow Template Relationships
- xxvi. Life Cycle and Workflow Template Relationships
- xxvii. Life Cycle Best Practices
- xxviii. Defining Workflow Templates
- xxix. Defining Workflow Templates
- xxx. Defining Workflow Template Properties
- xxxi. Understanding Assigned Activities
- xxxii. Defining Assigned Activities
- xxxiii. Understanding Connectors and Terminals
- xxxiv. Using Links
- xxxv. Setting Link Properties
- xxxvi. Simplifying Complex Processes
- xxxvii. Using Robots to Automate Tasks
- xxxviii. Creating a Workflow Template

Knowledge Check Questions

Module 7. Managing Teams

- i. Team Management
 - ii. Terminology – Context Team
 - iii. Terminology – Shared Team
 - iv. Terminology – Team Template
 - v. Terminology – Team Instance
 - vi. Terminology – Context and Participant Groups
 - vii. Terminology – Context and Resource Bundle Roles
 - viii. Context Teams
 - ix. Context Team Architecture
 - x. Context Team Architecture (cont.)
 - xi. Context Team Architecture Example
 - xii. Context Team Architecture Example (cont.)
 - xiii. Context Team Architecture Example (cont.)
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- xiv. Context Team Architecture Example (cont.)
- xv. Applying Access Control with Context Teams
- xvi. Access Control for Application Context Templates
- xvii. Best Practices for Using Context Teams for Access Control
- xviii. Shared Teams
- xix. Shared Teams Show Team Uses Query
- xx. Using a Shared Team
- xxi. Role Resolution with Teams
- xxii. Understanding Role Resolution and Team Templates
- xxiii. Understanding Role Resolution and Context Teams
- xxiv. Understanding Role Resolution and Team Instances
- xxv. Team Instance Definition
- xxvi. Team Instance Definition (cont.)
- xxvii. Defining Object Team Template Resolution
- xxviii. Creating Team Templates
- xxix. Proper Team Role Resolution
- xxx. Team Role Resolution Best Practices
- xxxi. Product and Library Template Context Team Roles
- xxxii. Guests Context Role
- xxxiii. Members Context Role
- xxxiv. Application Context Manager Role
- xxxv. Change Administrator and Change Review Board Context Roles
- xxxvi. Promotion Approvers and Reviewers Context Roles
- xxxvii. Organization Roles
- xxxviii. Application Context Roles
- xxxix. Custom Resource Bundle Roles
 - xl. Team Management Best Practices

Knowledge Check Questions

Module 8. Managing Domain Policies and Access Control

- i. Windchill Context Architecture
 - ii. Cabinets
 - iii. Administrative Domains
 - iv. Defining Windchill Domain Architecture
 - v. Defining Windchill User Domain Architecture
 - vi. Defining Windchill System Domain Architecture
 - vii. Defining Windchill Special Site Domain Architecture
 - viii. Defining Windchill Data Domain Architecture
 - ix. Defining Windchill Private Domain Architecture
 - x. Defining Windchill Folder Domain Architecture
 - xi. Domain Architecture in the Policy Administrator
 - xii. Security Labeled Objects
 - xiii. Understanding Access Control
-

- xiv. Planning Access Control Strategies
- xv. Defining Access Control Permissions
- xvi. Permissions Needed for Move Operations
- xvii. Permissions Needed for Set Life Cycle State Operations
- xviii. Permissions Needed for Change Identify Operations
- xix. Permissions Needed for View/Download Content Operations
- xx. Permissions Needed for Modify Content Operations
- xxi. Defining Access Control Policy Rules
- xxii. Access Control Permission Considerations
- xxiii. Access Control Permission Considerations (cont.)
- xxiv. Domain Access Control Permission Rules
- xxv. Best Practices for Applying Access Control Rules
- xxvi. Ad-Hoc Access Control
- xxvii. Checking Access Control Permissions
- xxviii. Troubleshooting Access Control Issues
- xxix. Defining a Notification Policy
- xxx. Implementing a Notification Policy
- xxxi. Troubleshooting Context-Based Notifications
- xxxii. Defining an Indexing Policy
- xxxiii. Implementing an Indexing Policy

Knowledge Check Questions

Module 9. Managing Organization Templates

- i. Windchill Templates
- ii. Context Templates
- iii. Template Access
- iv. Creating Document Templates
- v. Creating CAD Document Templates
- vi. Creating a Context Template
- vii. Out-of-the-Box Product and Library Templates
- viii. Organization Templates
- ix. Actions for Context Templates

Knowledge Check Questions

Module 10. Implementing Promotion and Change Processes

- i. Setting Up a Change Management Process
 - ii. Windchill Change Management
 - iii. Windchill Change Management Components
 - iv. Windchill Change Objects
 - v. Identifying Change Management Life Cycles
 - vi. Identifying Change Management Workflow Templates
 - vii. Problem Report Life Cycle
 - viii. Problem Report Workflow
 - ix. Change Request Life Cycle
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- x. Change Request Workflow
- xi. Change Notice Life Cycle
- xii. Change Notice Workflow
- xiii. Business Rules
- xiv. Implementing Business Rules – Change Notice Conditionals
- xv. Implementing Business Rules – Change Notice Code
- xvi. Implementing Business Rules – Change Notice Activity
- xvii. Business Rule Sets
- xviii. Business Rules and Links
- xix. Creating and Editing Business Rules
- xx. Change Activity/Change Notice Task Life Cycle
- xxi. Change Activity/Change Notice Task Workflow
- xxii. Process and Life Cycle Relationships
- xxiii. Identifying Change Management Team Templates
- xxiv. Assigning Participants to Change Management Roles
- xxv. Configuring Change Management Preferences, Policies, and Rules
- xxvi. Configuring Change Management Preferences and Administration
- xxvii. Managing Promotion Preferences
- xxviii. Understanding the Promote Action in a Basic Life Cycle
- xxix. The Promotion Request Approval Process
- xxx. The Promotion Request Review Process
- xxxi. Managing Promotion Preference Processes
- xxxii. Creating a New Promotion Process Preference
- xxxiii. Changing a Promotion Preference

Knowledge Check Questions

Module 11. Administrative Support Tools

- i. Using ModelCHECK Validation During Check In
 - ii. Administrator-Saved Searches
 - iii. User Profiles
 - iv. Windchill Views
 - v. Configuring Custom Views
 - vi. Calendar Management
 - vii. Preference Management
 - viii. Report Management
 - ix. Report Manager Queries
 - x. Visualization Publishing Tools
 - xi. Visualization Configuration Administrator
 - xii. Publish and Thumbnail Control
 - xiii. WVS Job Monitor
 - xiv. WVS Job Scheduler Administrator
 - xv. Purge Manager
 - xvi. Purge Manager Queries
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- xvii. Security Auditing and Usage Reporting
- xviii. Usage Reporting
- xix. Security Audit Reporting

Knowledge Check Questions

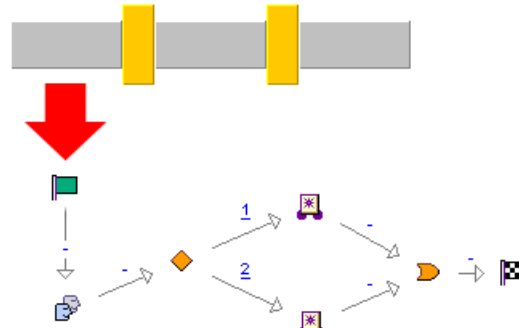
Workflow Administration of Windchill 10.2

Overview

Course Code	TRN-4339-T
Course Length	2 Days

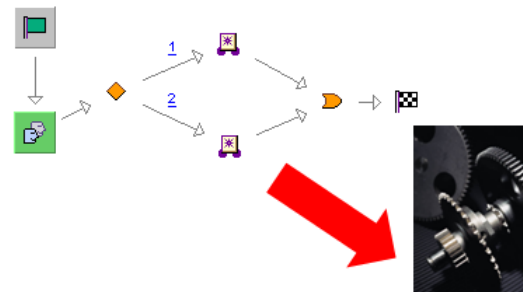
In this course, you will learn about Windchill workflow features and how to design, configure, and test workflow processes. After completing this course, you will be able to plan and configure workflow automation features to support your company's business processes.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Describe the business objects that control and define the Windchill business process definition
- Identify the tools used to manage workflow templates
- Display, create, and modify workflow templates
- Determine the purpose and function of a pre-written workflow process
- Initiate, track, and manage workflow processes
- Define and configure assigned activities
- Use connectors in workflow templates
- Use links in workflow templates
- Group workflow nodes into block processes
- Create references to other workflow templates using proxy processes
- Send notifications from a workflow process
- Check an object in or out automatically in a workflow process
- Move a Windchill object through its life cycle using workflow processes
- Create a time delay in a workflow process
- Launch an external application from a workflow process
- Execute a Java expression within a workflow process
- Synchronize a workflow process with a system event



- Communicate with another server using a URL from a workflow process
- Configure basic and advanced life cycles
- Specify the workflows to be used in advanced life cycles
- Configure a promotion request
- Modify a workflow for use with promotion requests
- Use routing to reassign a life cycle in a project or program
- Create a life cycle and workflow for use with project routing

Prerequisites

- Business Administration of Windchill PDMLink 10.2

Audience

- This course is intended for Windchill business administrators and application developers. People in related roles will also benefit from taking this course.

Agenda

Day 1

Module 1 Using Workflow Tools

Module 2 Defining Manual Tasks

Day 2

Module 3 Controlling Process Flow

Module 4 Simplifying Complex Templates

Module 5 Automating Tasks

Module 6 Using Workflow Templates

Course Content

Module 1. Using Workflow Tools

- i. Workflow Use in the Windchill Product Lines
- ii. Identifying Process Management Objects
- iii. Workflow Management Tools
- iv. Workflow Administrators
- v. Accessing Workflow Template Administration
- vi. Using the Workflow Template Administrator
- vii. Displaying Workflow Templates
- viii. Creating Workflow Templates
- ix. Validating and Checking In Workflow Templates
- x. Modifying Workflow Templates
- xi. Exporting and Importing Workflow Templates
- xii. Workflow Creation Best Practices
- xiii. Understanding Workflow Processes
- xiv. Initiating a Process from a Workflow Template
- xv. Workflow Process States
- xvi. Searching for Workflow Processes
- xvii. Browsing to Workflow Processes
- xviii. Viewing Process Information
- xix. Managing Workflow Processes With the Process Manager
- xx. Managing Workflow Processes With the Workflow Process Administrator
- xxi. Determining the Status of a Process Node
- xxii. Administratively Manipulating Processes
- xxiii. Manipulating Process Nodes
- xxiv. Testing Workflow Templates

Knowledge Check Questions

Module 2. Defining Manual Tasks

- i. Defining Workflow Template Properties
 - ii. Understanding Assigned Activities
 - iii. Defining Assigned Activities
 - iv. Defining General Properties
 - v. Defining Activity Properties
 - vi. Defining Instructions
 - vii. Defining Participants
 - viii. Best Practices for Defining Participants
 - ix. Defining Deadlines
 - x. Defining Global Workflow Variables
 - xi. Defining Assigned Activity Variables
 - xii. Creating Assigned Activity and Global Variables
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- xiii. Granting Additional Access
- xiv. Understanding Variable Scope
- xv. Defining Routing
- xvi. Defining Automatic Routing
- xvii. Defining Transition Conditions
- xviii. Defining Execution Options
- xix. Defining Role Setup
- xx. Defining Resource Pool

Knowledge Check Questions

Module 3. Controlling Process Flow

- i. Creating Complex Processes with Connectors and Links
- ii. Understanding Connectors and Terminals
- iii. Using Start, Ground, and End Connectors
- iv. Using And Connectors
- v. Using Or Connectors
- vi. Using Links
- vii. Setting Link Properties
- viii. Using Loop Links
- ix. Using Conditional Connectors
- x. Using Threshold Connectors

Knowledge Check Questions

Module 4. Simplifying Complex Templates

- i. Simplifying Complex Processes
- ii. Using Block Processes
- iii. Converting Nodes to a Block Process
- iv. Block Process Properties
- v. Using Proxy Processes
- vi. Proxy Process Properties: General
- vii. Proxy Process Properties: Deadline/Variable Mapping

Knowledge Check Questions

Module 5. Automating Tasks

- i. Using Robots to Automate Tasks
 - ii. Using Method Robots
 - iii. Using Method Robots to Mature Objects
 - iv. Using Method Robots: Set State
 - v. Using Method Robots: Submit
 - vi. Using Method Robots: Promote/Demote/Deny/Drop
 - vii. Using Notification Robots
 - viii. Notification Robot Properties: General/Recipients
 - ix. Notification Robot Properties: Message/Attachments
-

- x. Notification Message
- xi. Checkpoint Robot
- xii. Using Method Robots: Check Out/Check In
- xiii. Using Timer Robots
- xiv. Using Application Robots
- xv. Using Synchronization Robots
- xvi. Synchronization Robot Properties
- xvii. Object Event Synchronization
- xviii. Class Event Synchronization
- xix. Expression Synchronization
- xx. Using Expression Robots
- xxi. Expression Robot Properties
- xxii. Using the URL Robot
- xxiii. URL Robot Error Handling Properties

Knowledge Check Questions

Module 6. Using Workflow Templates

- i. Understanding Windchill Life Cycles
 - ii. Understanding Windchill Life Cycle Types
 - iii. Using Workflows in Windchill
 - iv. Life Cycle Association Rules
 - v. Defining Object Life Cycle Resolution
 - vi. Specifying Life Cycle Properties
 - vii. Adding Life Cycle States
 - viii. Defining States
 - ix. Understanding Transitions
 - x. Defining Transitions
 - xi. Understanding Life Cycle Transition Types
 - xii. Understanding Life Cycle Transition Types
 - xiii. Understanding Life Cycle Transition Types
 - xiv. Transition Examples
 - xv. Defining Role Participation
 - xvi. Defining Access Permissions using Life Cycles
 - xvii. Selecting Workflow Templates
 - xviii. Life Cycle and Workflow Template Relationships
 - xix. Life Cycle and Workflow Template Relationships
 - xx. Life Cycle Best Practices
 - xxi. Managing Promotion Preferences
 - xxii. Understanding the Promote Action in a Basic Life Cycle
 - xxiii. The Promotion Request Approval Process
 - xxiv. The Promotion Request Review Process
 - xxv. Managing Promotion Preference Processes
-

- xxvi. Creating a New Promotion Process Preference
- xxvii. Changing a Promotion Preference
- xxviii. Creating Workflow Templates for Promotion Requests
- xxix. Routing Objects in Projects and Programs
- xxx. Creating a Workflow Template for Routing
- xxxi. Creating a Life Cycle Template for Routing

Knowledge Check Questions

System Administration of Windchill 10.2

Overview

Course Code	TRN-4340-T
Course Length	3 Days

In this course, you will gain an understanding of how to perform routine Windchill system administration tasks, including how to manage Windchill services and optimize Windchill components for performance. You will focus on daily, weekly, and monthly system maintenance tasks required by the Windchill system administrators. You will also learn how to install and configure Windchill system components and how to implement file vaulting and content replication. Other topics that will be reviewed include managing an Oracle database, troubleshooting background queues, controlling system backup procedures, and setting up the client environment.

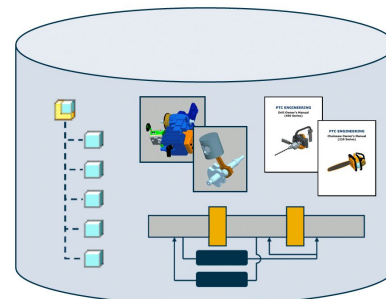
At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.

Note: Due to the subject matter of this class, simulated software is used for Windchill installation to provide an accurate, effective, and efficient training experience that could not otherwise be duplicated in a standard classroom environment.



Course Objectives

- Understand Windchill architecture
- Install and configure Windchill solutions
- Start and stop Windchill components
- Manage Windchill configuration properties
- Implement file vaulting and content replication
- Tune Windchill components for performance
- Tune Windchill workflows for performance
- Manage background queues
- Manage Oracle database
- Manage system backups
- Manage Windchill system logs and alerts
- Monitor daily, weekly, and monthly administration tasks
- Configure browser and JAVA settings for clients



Prerequisites

- Familiarity with the Windchill PDMLink 10.1 or Windchill ProjectLink 10.1 user interface
- Familiarity with the Windows command prompt and the ability to form and execute basic SQL statements

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
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Agenda

Day 1

Module	1	Introduction to the Windchill System Environment
Module	2	Installing Windchill Components
Module	3	Managing Windchill Services
Module	4	Managing Windchill Properties
Module	5	File Vaulting and Replication Overview
Module	6	Implementing File Vaults
Module	7	Implementing Content Replication

Day 2

Module	8	Tuning Windchill Server
Module	9	Managing Background Queues
Module	10	Tuning Workflow Processes
Module	11	Oracle Database Management
Module	12	Windchill Backup and Recovery

Day 3

Module	13	Managing Log Files and Alerts
Module	14	System Monitoring — Daily Tasks
Module	15	System Monitoring — Weekly Tasks
Module	16	System Monitoring — Monthly Tasks
Module	17	Setting up the Client Environment

Course Content

Module 1. Introduction to the Windchill System Environment

- i. Client Requirements
- ii. Windchill Architecture — Windchill Server
- iii. Windchill Architecture — Database
- iv. Windchill Architecture – Optional Servers
- v. Role of the System Administrator
- vi. Understanding Windchill Contexts
- vii. Windchill Product Characteristics
- viii. Windchill Library Characteristics
- ix. Using Folders
- x. Data Management Objects
- xi. Iteration and Revision Controls
- xii. Access Controls
- xiii. Process Controls
- xiv. Understanding the Windchill User Interface
- xv. Using the Navigator
- xvi. Navigating Products and Libraries
- xvii. Locating Information
- xviii. Understanding Information Pages
- xix. Accessing Help

Knowledge Check Questions

Module 2. Installing Windchill Components

- i. Windchill Software Matrices
- ii. Supported Virtualization Platforms
- iii. Sizing a Windchill System
- iv. Setting Application Name
- v. Software Downloads
- vi. Windchill Technical Documents
- vii. Windchill Required Components
- viii. Installing Oracle
- ix. Oracle Post Installation Activities
- x. The PTC Solution Installer (PSI)
- xi. Understanding Installation Types
- xii. Selecting the Database Size
- xiii. The Staging Area Options
- xiv. Installing Windchill Solution
- xv. Installing on Multiple Machines
- xvi. Installing Optional Components

Knowledge Check Questions

Module 3. Managing Windchill Services

- i. Identifying Major Windchill Services
- ii. Starting/Stopping Apache Web Server
- iii. Starting/Stopping Windchill Directory Server
- iv. Starting/Stopping Oracle
- v. Starting/Stopping Windchill
- vi. Running Apache as a Windows Service
- vii. Windchill Directory Server Control Panel
- viii. Running Windchill Directory Server as a Service
- ix. Running Windchill as a Windows Service
- x. Automating Windchill Startup
- xi. Automating Windchill Shutdown

*Knowledge Check Questions***Module 4. Managing Windchill Properties**

- i. System Administration Utilities
- ii. The Windchill Command
- iii. The Windchill Shell
- iv. Windchill Configuration Properties Files
- v. The site.xconf File
- vi. The JMX Clients
- vii. Using JConsole to Modify Property Values
- viii. The xconfmanager Utility
- ix. The xconfmanager — Options
- x. The xconfmanager – Example
- xi. The xconfmanager – Validate Changes
- xii. Properties Managed by the Windchill Configuration Assistant
- xiii. Creating a Custom XCONF File

*Knowledge Check Questions***Module 5. File Vaulting and Replication Overview**

- i. File Vaulting
 - ii. File Storage Options
 - iii. Local File Vaulting Architecture
 - iv. Content Replication
 - v. Content Replication Architecture
 - vi. Windchill File Servers
 - vii. Centrally Vaulted Content
 - viii. Remotely and Centrally Vaulted Content
 - ix. File Vaulting Strategies
 - x. Types of File Vaults
 - xi. Checking an Object into a Windchill Main Server
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- xii. Requesting Objects That Have Not Yet Been Replicated
- xiii. Requesting Objects from File Servers That Are Not Preferred
- xiv. Server to Server Replication
- xv. Content Synchronization and Replication
- xvi. Local Replication for File Servers

Knowledge Check Questions

Module 6. Implementing File Vaults

- i. Planning External File Storage
- ii. Multiple Vaults Configuration
- iii. Vaulting Rules
- iv. Single Vault Configuration
- v. Forcing Contents to a Single Vault — Implications
- vi. Single Vault vs. Multi Vault Configuration
- vii. Vaults with Automatic Folder Creation
- viii. The Central Cache Vault
- ix. Setting Up External Storage
- x. Managing Revaulting
- xi. Maintaining Vaults
- xii. Changing the Location of Files in Vaults
- xiii. The Default System Target Vault

Knowledge Check Questions

Module 7. Implementing Content Replication

- i. Installing the File Server — Requirements
- ii. Enabling Remote File Server Support
- iii. Generating the Security Key
- iv. Using the File Server Management Utility
- v. Registering the File Server
- vi. Configuring Replica Vaults
- vii. Creating Replication Rules
- viii. Creating Replication Schedules
- ix. Replication Performance and Scalability
- x. Replication and Visualization Service
- xi. Setting the Preferred File Server
- xii. User-Initiated Replication

Knowledge Check Questions

Module 8. Tuning Windchill Server

- i. Windchill Server Tuning Objectives
 - ii. Monolithic Windchill Configuration
 - iii. Multi-Tiered Windchill Configuration
 - iv. Server Heap Size
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- v. Setting Windchill Cache Sizes — wt.properties
- vi. Setting Windchill Cache Sizes — db.properties
- vii. Viewing Windchill Cache Statistics
- viii. Limiting Search Results
- ix. Windchill Configuration Assistant (WCA)
 - x. Affected Files
 - xi. Running the Windchill Configuration Assistant
- xii. Propagating Values from Intermediate Properties Files
- xiii. Rolling Back Configuration Changes
- xiv. Number of Method Servers
- xv. Cleaning Windchill System Cache
- xvi. Why Do Windchill Method Servers Stop Unexpectedly?
- xvii. Using Anti-Virus Software
- xviii. Server Cluster Configuration
 - xix. Server Status
 - xx. WAN Performance Optimizing Options
 - xxi. WAN Acceleration

Knowledge Check Questions

Module 9. Managing Background Queues

- i. Windchill Background Queues
- ii. Queue Manager
- iii. Queue Entry States
- iv. Out-of-the-Box Background Queues
- v. Single Method Server Configuration
- vi. Configuring a Background Method Server
- vii. Configuring Multiple Background Servers
- viii. Distributing Background Queues
- ix. Tuning Background Queues
 - x. Performing Regular Queue Maintenance
 - xi. Deleting a Queue

Knowledge Check Questions

Module 10. Tuning Workflow Processes

- i. Workflow Queues
 - ii. Pool Queues
 - iii. Monitoring Workflow Queue Entries
 - iv. Configuring Queue Pooling
 - v. After Queue Pooling
 - vi. Configuring Dedicated Workflow Queues
 - vii. Tagging Dedicated Workflow Queues
 - viii. After Dedicated Queues
-

*Knowledge Check Questions***Module 11. Oracle Database Management**

- i. Reviewing Instance and Database
- ii. System Global Area (SGA)
- iii. Reviewing Background Processes
- iv. Understanding Oracle Storage Hierarchy
- v. Oracle Enterprise Manager Database Control
- vi. Oracle Initialization Parameters
- vii. Control Files
- viii. Oracle Tablespace
- ix. Oracle Datafiles
- x. Redo Log Files
- xi. Automatic Memory Management (AMM)
- xii. Automatic Shared Memory Management (ASMM)
- xiii. Approximating Initial Memory Sizes
- xiv. Automatic Workload Repository (AWR)
- xv. Automatic Database Diagnostic Monitor (ADDM)

*Knowledge Check Questions***Module 12. Windchill Backup and Recovery**

- i. Windchill Backup Architecture
 - ii. Windchill Data Repositories
 - iii. Types of Backup
 - iv. Performing a Cold Backup
 - v. Recovering from a Cold Backup
 - vi. Performing a Hot Backup
 - vii. Recovering from a Hot Backup
 - viii. Oracle Backup and Recovery — Enterprise Manager
 - ix. Oracle Archive Log Mode
 - x. Oracle Flash Recovery Area
 - xi. Oracle Suggested Backup Strategy
 - xii. Suspending Background Queues
 - xiii. Read Only Mode for Vaults
 - xiv. Generating Vault Backup Information
 - xv. The WContentVerify Tool
 - xvi. Mirroring the Local Cache Vault
 - xvii. Rebuilding Replica Vaults
 - xviii. Backing up the Windchill Directory Server
 - xix. Backing Up LDAP Data using the Backup Command
 - xx. Restoring Windchill Directory Server
 - xxi. Backing Up LDAP Directory Data using Control Panel
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- xxii. Restoring LDAP Directory Data using Control Panel
- xxiii. Exporting LDAP Data
- xxiv. Importing LDAP Data

Knowledge Check Questions

Module 13. Managing Log Files and Alerts

- i. Windchill Logging Mechanism
- ii. Windchill Log Properties
- iii. Setting Windchill Log Levels
- iv. Populating JMX-Administrators
- v. Viewing Windchill Log Files
- vi. Managing Log Files using JConsole
- vii. System Error Reporting
- viii. Using the Persisted Log Events Page
- ix. The Log File Viewer Page
- x. The Log Event Details Page
- xi. Administration Actions After Receiving Error Reports
- xii. System Configuration Collector
- xiii. Oracle Alerts
- xiv. Oracle Alerts — Setting Up a Mail Server
- xv. Setting Up Direct Oracle Alert Notifications
- xvi. Oracle Alerts — Setting Metric Thresholds
- xvii. Managing Directory Server Logs
- xviii. Managing Web Server Logs

Knowledge Check Questions

Module 14. System Monitoring — Daily Tasks

- i. Daily System Monitoring Tasks — Checklist
 - ii. Perform and Verify Scheduled System Backups
 - iii. The Server Status Page
 - iv. PTC System Monitor
 - v. System Monitoring using JMX Clients
 - vi. Monitoring CPU and Memory Usage by Windchill Processes
 - vii. System Components Availability
 - viii. Monitoring Queues using Queue Manager
 - ix. Monitoring Queues using JMX Clients
 - x. Monitoring Queues using Queue Analyzer
 - xi. Queue and Workflow Health Check Script
 - xii. Monitor File Vaults
 - xiii. Monitoring Vaults using the System Configuration Collector
 - xiv. Review Application Server Logs
 - xv. Review Database Logs
-

- xvi. Check Database Schema Statistics
- xvii. Monitor Network Health
- xviii. Review PTC Technical Support Subscription E-mails

Knowledge Check Questions

Module 15. System Monitoring — Weekly Tasks

- i. Weekly System Monitoring Tasks — Checklist
- ii. Monitor Disk Space Usage
- iii. Identifying BLOBS That Have Not Been Vaulted
- iv. Remove Unreferenced Files from File Vaults
- v. The RemoveUnreferencedFiles Tool
- vi. Automated Cleanup of Replica Vaults
- vii. Generating Unreferenced Files Report
- viii. Defragment Windows Disks
- ix. Check Performance using Monitoring Tools
- x. Perform Database Maintenance

Knowledge Check Questions

Module 16. System Monitoring — Monthly Tasks

- i. Monthly System Monitoring Tasks — Checklist
- ii. Execute Performance Benchmarks
- iii. Windchill File Server Test
- iv. Perform Database Diagnostics
- v. Resolve Disconnected Principals
- vi. Cleaning up Data for Deleted Users
- vii. Evaluate System Settings using Windchill Configuration Assistant
- viii. Generate Throughput and Security Audit Reports
- ix. Perform Workgroup Manager Maintenance Tasks
- x. Review Windchill and Creo Settings
- xi. Purge Obsolete or Unused Data
- xii. Apply Maintenance Patches and Updates
- xiii. Clone Production Server to Test Server
- xiv. Yearly Administrative Tasks

Knowledge Check Questions

Module 17. Setting up the Client Environment

- i. Setting Up Your Browser
 - ii. Browser's ActiveX Settings
 - iii. Pop-Up Blocker Interference
 - iv. Browser Locale Settings
 - v. Memory Allocation for Applets
 - vi. Installing Creo View
 - vii. Installing Desktop Integration
-

- viii. Setting Your Preferred File Server Site
- ix. Product Structure Explorer Preferences
- x. Configuring the Windchill Home Page

Knowledge Check Questions

Web Based Curriculum Guide

- Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the End User
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team
 - Creo Parametric Data Management with Windchill PDMLink 10.2
 - Managing Design Variations with Windchill 10.2
 - Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the Administrator
 - Business Administration of Windchill PDMLink 10.2
 - System Administration of Windchill 10.2
 - Locate and View Information with Windchill PDMLink 10.2
 - Visualization with Creo View MCAD Lite 3.0 for Windchill PDMLink 10.2
 - MCAD Data Management of Creo Parametric Designs with Windchill PDMLink 10.2
 - Product Structure Management with Windchill PDMLink 10.2
 - Design Variation Management with Windchill PDMLink 10.2
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- Standard Document Management with Windchill PDMLink 10.2
 - Arbortext Document Management with Windchill PDMLink 10.2
 - Change Management with Windchill PDMLink 10.2
 - Work Management with Windchill PDMLink 10.2
 - Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.1 for the End User
 - Creo Elements/Direct Data Management with Windchill PDMLink 10.2
 - Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.0 for the Administrator
 - Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.1 for the Administrator
 - Creo Parametric Data Administration in Windchill 10.2
 - Arbortext Data Administration in Windchill 10.2
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Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the End User

Overview

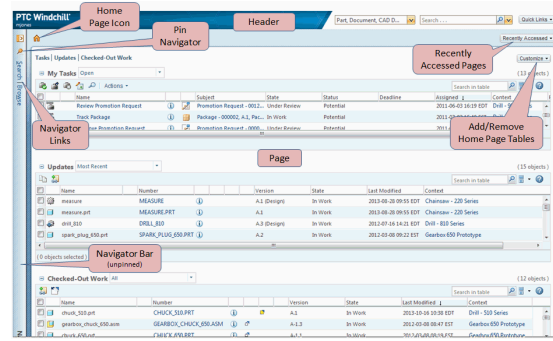
Course Code WBT-4250-0

Course Length 8 Hours

This course is designed for users who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in a Windchill PDMLink 10.2 environment. After completing the course, you will be able to identify and use new Windchill PDMLink features and perform common tasks and activities available in Windchill PDMLink 9.0 or 9.1 using the new Windchill PDMLink 10.2 interface.

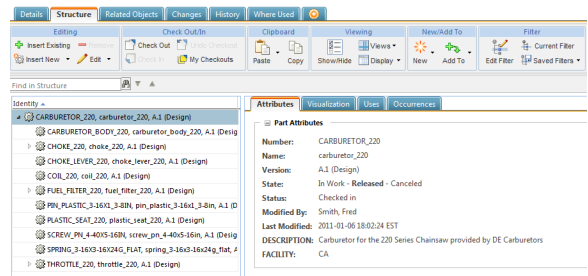
In this course, you will learn about the feature and interface updates to Windchill PDMLink 10.2 from Windchill PDMLink 9.0 and 9.1. You will also learn about general Windchill usability enhancements, new ways to work with Windchill business objects, and specific enhancements for managing documents. Finally, you will learn about changes regarding how you participate in processes, creating and delivering work packages, and updates to configuration management.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Describe the updates to the Windchill user interface including the home page, quick links, and Windchill navigator
- Configure your Windchill environment by customizing your home page, context pages, object information pages, and table columns and views
- Locate information by searching or browsing for Windchill objects and navigating through context page options
- Work with objects by using context actions and enhanced management tools such as multi-object edit, the Windchill clipboard, and event manager
- Manage Windchill documents directly from Microsoft Windows Explorer or Microsoft Office using the latest version of desktop integration
- Use the new create and update interfaces available for working with documents
- Describe enhancements when collaborating with others in the Windchill environment
- Review and manage processes and process history
- Manage and reassign workflow tasks, life cycles, and teams
- Create and manage work packages
- Describe enhancements to Windchill change management, including new wizard-based change management forms and being able to use the Windchill collector to quickly find and include related objects in complex dependency operations
- Use the new work items table to manage work being done on changes
- Create and manage variances, including waivers and deviations
- Describe enhancements to the Windchill product structure management, including BOM notes, effectivity processing, structure filtering, structure compare, and configurations and instances
- Explore and use the new Product Structure Browser interface



Prerequisites

- Working knowledge of Windchill PDMLink 9.0 or Windchill PDMLink 9.1

Audience

- This course is designed for users who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in the Windchill PDMLink 10.2 environment
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Table of Contents

Module	1	Windchill Usability Enhancements
Module	2	Working with Objects
Module	3	Document Management Enhancements
Module	4	Collaborating with Others
Module	5	Change Management Enhancements
Module	6	Product Structure Management Enhancements
Module	7	Creo Parametric Data Management Enhancements
Module	8	Appendix – Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0-9.1 for the End User

Introduction to Windchill PDMLink 10.2 for Light Users

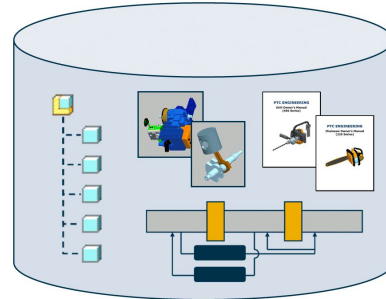
Overview

Course Code WBT-4260-0

Course Length 8 Hours

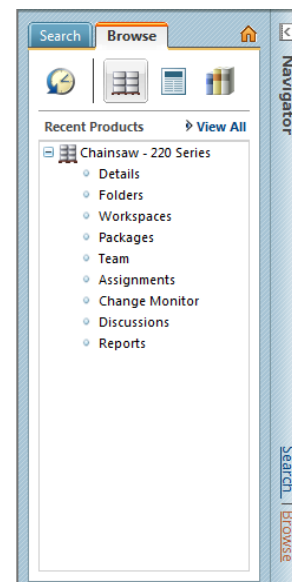
In this course, you will learn how to complete basic functions to navigate and view information within Windchill PDMLink. You will also learn how to access and navigate the Windchill PDMLink environment, view product information, use Windchill PDMLink's visualization tools, manage assigned tasks, and perform basic work management functions. In addition, you will learn how to use product information to make important business decisions. After completing the course, you will be able to complete basic Windchill PDMLink tasks and activities, as well as have a better understanding of how to use the Windchill PDMLink system.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate product information
- View product information
- Understand visualization concepts and terminology
- Use Creo View Lite to view product information
- Use Windchill PDMLink tools to manage your work
- Participate in Windchill PDMLink processes



Prerequisites

- Basic browser and Web navigation skills

Audience

- This course is intended for users who need to access the Windchill PDMLink system to view information, perform system tasks, or use product information when making business decisions. People in related roles will also benefit from taking this course.

Table of Contents

Module	1	Introduction to the Windchill Environment
Module	2	Locating Information
Module	3	Viewing Information
Module	4	Introduction to Visualization
Module	5	Using Creo View Lite to View and Annotate Information
Module	6	Managing Your Work
Module	7	Participating in Processes

Introduction to Windchill PDMLink 10.2 for Heavy Users

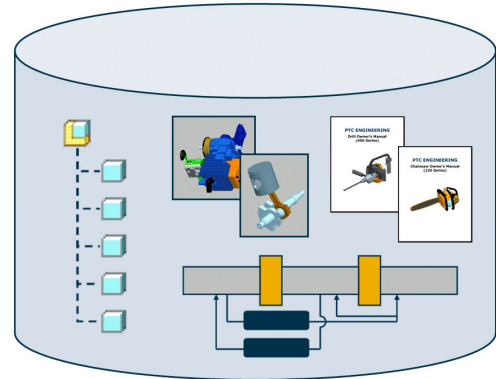
Overview

Course Code	WBT-4261-0
Course Length	16 Hours

In this course, you will learn how to complete the day-to-day functions that enable you to create and manage product information with Windchill PDMLink. You will learn how to access and navigate the Windchill PDMLink environment, use Windchill PDMLink's visualization tools, manage product structures, and manage product information changes. Other topics include how to use Windchill PDMLink's communication and collaboration tools, and access user support functions and information.

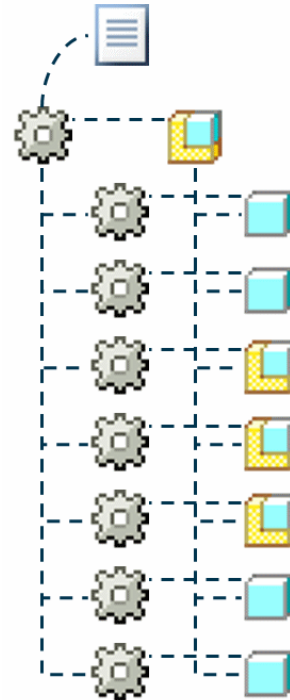
This course is designed for users who need to access the Windchill PDMLink system to view, create, and manage product information. For users who require CAD data management training, this course should be followed with the appropriate CAD data management course for the user's design tool. After completing the course, you will be able to complete Windchill PDMLink data management tasks and activities, as well as have a better understanding of how to use the Windchill PDMLink system.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate and view product information
- View information using Creo View Lite
- Understand the principles of product structure management
- Create and manage product structures
- Create and manage documents
- Understand the Windchill PDMLink change process
- Initiate and implement product change
- Use Windchill PDMLink tools to manage your work



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of product management processes and deliverables

Audience

- This course is intended for users who need to access the Windchill PDMLink system to view, create, and manage product information.

Table of Contents

Module	1	Introduction to the Windchill Environment
Module	2	Locating and Viewing Information
Module	3	Viewing Information using Creo View Lite
Module	4	Introduction to Product Structure Management
Module	5	Creating Product Structures
Module	6	Managing Product Structures
Module	7	Managing Structure Filters
Module	8	Managing Parts in Product Structure Explorer
Module	9	Creating and Managing Documents
Module	10	Introduction to the Change Process
Module	11	Initiating and Implementing Change
Module	12	Managing Your Work

Introduction to Windchill PDMLink 10.2 for the Implementation Team

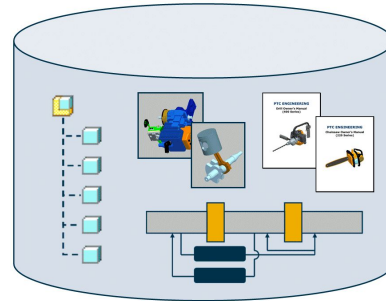
Overview

Course Code	WBT-4262-0
Course Length	16 Hours

In this course, you will learn how to complete basic Windchill PDMLink functions. You will learn how to access and navigate the Windchill PDMLink environment, use Windchill PDMLink's visualization tools, manage CAD and product information, and manage product information changes. Other topics include how to use Windchill PDMLink's communication and collaboration tools, and access user support functions and information.

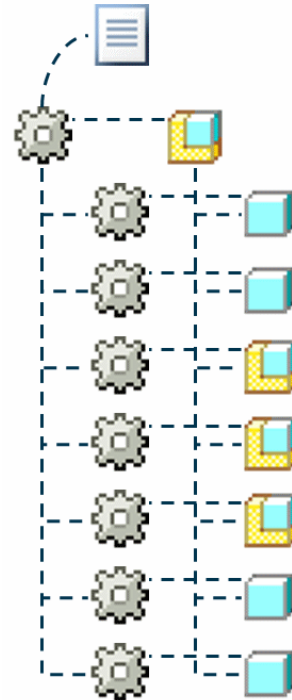
This course is designed to provide broad and basic coverage of Windchill PDMLink functionality to members of the Implementation Team. After completing the course, you will have a comprehensive understanding of Windchill PDMLink capabilities, which will enable you to contribute to the successful implementation of Windchill PDMLink to meet your company's Product Lifecycle Management goals.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill PDMLink environment and terminology
- Locate and view product information
- View information using Creo View Lite
- Understand the principles of CAD data management
- Initiate new designs and share design information
- Modify and manage design information
- Understand the principles of product structure management
- Create and manage product structures
- Create and manage documents
- Understand the Windchill PDMLink change process
- Initiate and implement product change
- Use Windchill PDMLink tools to manage your work



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of product management processes and deliverables

Audience

- This course is intended for members of the Implementation Team who require a broad understanding of Windchill PDMLink functionality to successfully implement the system.

Table of Contents

Module	1	Introduction to the Windchill Environment
Module	2	Locating and Viewing Information
Module	3	Viewing Information using Creo View Lite
Module	4	Getting Started with CAD Data Management
Module	5	Initiating New Designs and Sharing Design Data
Module	6	Modifying and Managing Design Information
Module	7	Introduction to Product Structure Management
Module	8	Creating and Managing Product Structures
Module	9	Creating and Managing Documents
Module	10	Introduction to the Change Process
Module	11	Initiating and Implementing Change
Module	12	Managing Your Work

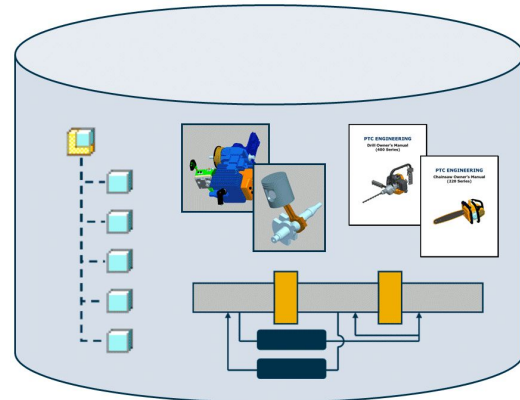
Creo Parametric Data Management with Windchill PDMLink 10.2

Overview

Course Code	WBT-4300-0
Course Length	8 Hours

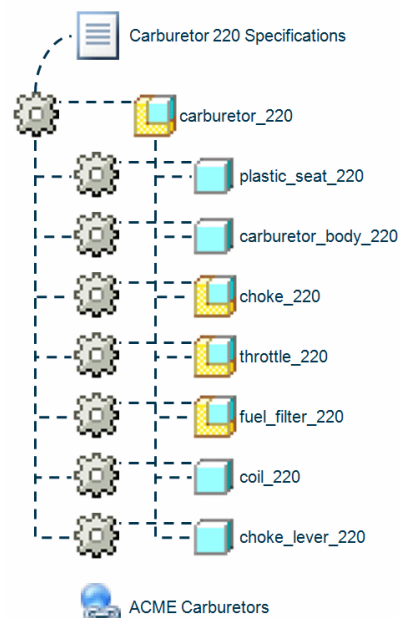
In this course, you will learn key capabilities and features of Windchill PDMLink CAD Data Management and how to use Windchill PDMLink to manage Creo Parametric design information. Specifically, you will focus on the day-to-day data management tasks required by the Creo Parametric user community, including how to use the CAD data structure to associate and build the product structure. You will also learn how to use Windchill to perform basic PDM functions on Creo Parametric CAD Documents and their associated Windchill parts. After completing this course, you will be prepared to complete basic Windchill PDMLink CAD data management tasks and activities. You will also have a better understanding of Windchill CAD data management processes.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Locate design information
- View design information
- Create new designs and share design information
- Modify and manage existing design information
- Understand Windchill parts and their association to CAD documents
- Understand file relationships and dependencies
- Manage family tables
- Use workspace frames



Prerequisites

- A basic working knowledge of Creo Parametric 2.0
- Completion of any one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for end users and System Administrators. People in related roles will also benefit from taking this course.

Table of Contents

Module	1	Getting Started with Creo Parametric Data Management
Module	2	Initiating New Designs and Sharing Design Data
Module	3	Modifying and Managing Design Data
Module	4	Understanding File Relationships and Dependencies
Module	5	Managing Family Tables
Module	6	Managing CAD Data

Managing Design Variations with Windchill 10.2

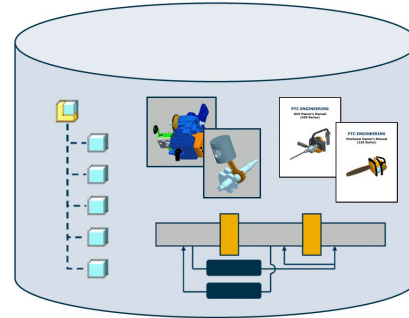
Overview

Course Code WBT-4307-0

Course Length 8 Hours

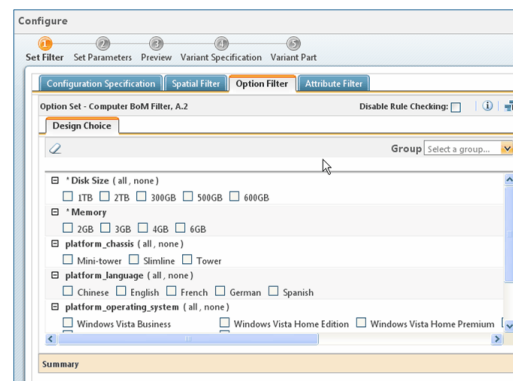
In this course, you will explore the capabilities, concepts, and processes for creating product options and variants. You will examine the environment and learn how to configure and organize your product structures to support your design variation requirements. Finally, you will learn how to view and filter product configurations based on choices and rules.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand Windchill design variation capabilities
- Create and manage options and choices definitions
- Use option sets to organize product families
- Set up configurable product structures
- Filter a configurable product structure
- Create and manage variants



Prerequisites

- Completion of one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for users that are familiar with Windchill product structures who will be developing the required options and variants.
-

Table of Contents

Module	1	Introduction to Windchill Options and Variants
Module	2	Working With Enterprise-wide Definitions
Module	3	Using Option Sets to Establish Product Families
Module	4	Developing Configurable Product Structures
Module	5	Assigning Choices to Parts
Module	6	Configurable Product Structure Filtering
Module	7	Advanced Selection Logic for Configurable Modules
Module	8	Creating and Managing Variants

Update to Windchill PDMLink 10.2 from Windchill PDMLink 9.0/9.1 for the Administrator

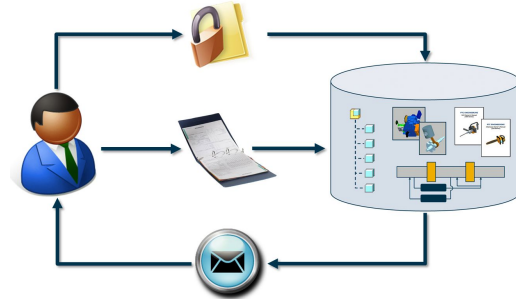
Overview

Course Code WBT-4320-0

Course Length 8 Hours

In this course, you will review two main components: business administration enhancements and system administration enhancements. The business administration topics will include how to create new Windchill object types and add new attributes to objects more effectively, how to create and manage Windchill layouts as an alternative to Windchill customization, how to manage user profiles, how to administer Windchill workflows, and finally will review other miscellaneous business related enhancements. The system administration topics will highlight and cover enhancements related to the Windchill architecture, file vaulting and replication, system performance, and log and error reporting. This course is designed for administrators who need to update their Windchill knowledge and skills from Windchill PDMLink 9.0 or 9.1 to work in a Windchill PDMLink 10.2 environment.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand Windchill 10.2 interface enhancements
- Understand the new Attribute and Type Management interface
- Create and add attributes to a Windchill type
- Create Windchill types
- Create and manage display layouts
- Modify layouts to make information editable
- Identify and use the new workflow process administration interface
- Use filters to search for workflow processes
- Analyze workflow process components



- Create and manage user profiles
- Assign users to profiles
- Identify the new charting feature
- Add charts to reports
- Explore Windchill architecture enhancements
- Identify new external file storage options and strategies
- Explore a distributed data replication architecture
- Monitor file vaults using new utilities
- Automatically set Windchill cache sizes using Windchill Configuration Assistant
- Identify queue performance enhancements
- Identify workflow queue pooling enhancements
- Identify new error reporting enhancements
- Analyze log files using the Log File Viewer
- Use System Configuration Collector to send error logs to PTC

Prerequisites

- Experience with the Windchill 9.0 or 9.1 business and system administration
- Familiarity with the Windows command prompt and the ability to execute basic scripts

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
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Table of Contents

Module	1	Introduction to the Windchill 10.2 Environment
Module	2	Managing Objects, Object Types, and Object Attributes
Module	3	Managing Workflow Processes and Windchill Profiles
Module	4	Miscellaneous Business Administration Enhancements
Module	5	Managing Windchill Services
Module	6	File Vaulting and Replication Overview
Module	7	Performance Enhancements
Module	8	Log and Error Reporting Enhancements

Business Administration of Windchill PDMLink 10.2

Overview

Course Code	WBT-4330-0
Course Length	24 Hours

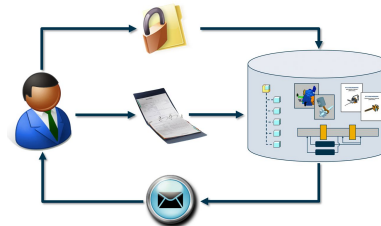
In this course, you will gain an understanding of basic Windchill PDMLink administration tasks. You will learn how to create user accounts and groups and how to effectively plan and create information management storage strategies. Other topics will include life cycles, workflows, teams, and configuring domain policies. These skills enable you to configure Windchill PDMLink to meet business needs. After completing this course, you will be well prepared to set up and manage a basic Windchill PDMLink implementation at your company.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the processes involved in defining your business environment
- Identify the use of a Windchill Organization
- Create an organization
- Create and manage user accounts and groups
- Identify best practices for managing organizations, groups, and user accounts
- Identify contexts and their relationships
- Assign product and library creators
- Create and manage product and library contexts
- Distinguish Windchill object names and their corresponding object type class names
- Create Global Attributes
- Add attributes to a Windchill Type
- Create a Windchill Type
- Identify and set object initialization rules
- Implement custom versioning sequences
- Create and define life cycle and workflow templates
- Associate life cycle and workflow templates
- Understand the Windchill domain policy architecture



- Define access control policies
 - Identify individual access control permissions
 - Administer and troubleshoot access control lists
 - Define notification policies
 - Define indexing policies
 - Use Context Teams to apply access control
 - Use Context Teams and team templates to conduct workflow role resolution
 - Create and manage document templates within product, library, and organization contexts
 - Identify how to create CAD document templates
 - Create product and library context templates
 - Create, manage, and edit promotion preferences
 - Identify the promotion review and approval processes
 - Identify the preconfigured Windchill change management functions
 - Access business metrics from Change Monitor reports
 - Use ModelCHECK validation during Check In
 - Administer administrator-saved searches
 - Administer user profiles
 - Administer Windchill views
 - Administer calendar functions
 - Administer organization preferences
 - Identify the report manager functions
 - Identify visualization publishing controls
 - Identify purge manager functions
 - Audit system events
-

Prerequisites

- Any one of the following courses:
 - Introduction to Windchill PDMLink 10.2 for Light Users
 - Introduction to Windchill PDMLink 10.2 for Heavy Users
 - Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for business administrators, system administrators, and project team leaders. Implementation team members, including user adoption team members and those with general Windchill PDMLink administration responsibilities, will also benefit from taking this course.

Table of Contents

Module	1	Introduction to Windchill Business Administration
Module	2	Managing Participants
Module	3	Managing Contexts
Module	4	Managing Objects, Object Types, and Object Attributes
Module	5	Managing Object Type Behavior
Module	6	Automating Processes Using Life Cycles and Workflows
Module	7	Managing Teams
Module	8	Managing Domain Policies and Access Control
Module	9	Managing Organization Templates
Module	10	Implementing Promotion and Change Processes
Module	11	Administrative Support Tools

System Administration of Windchill 10.2

Overview

Course Code WBT-4340-0

Course Length 24 Hours

In this course, you will gain an understanding of how to perform routine Windchill system administration tasks, including how to manage Windchill services and optimize Windchill components for performance. You will focus on daily, weekly, and monthly system maintenance tasks required by the Windchill system administrators. You will also learn how to install and configure Windchill system components and how to implement file vaulting and content replication. Other topics that will be reviewed include managing an Oracle database, troubleshooting background queues, controlling system backup procedures, and setting up the client environment.

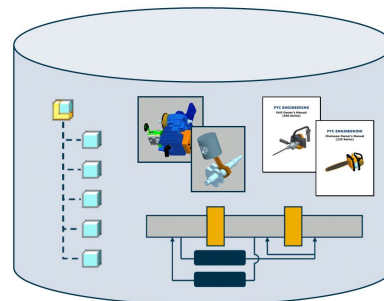
At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.

Note: Due to the subject matter of this class, simulated software is used for Windchill installation to provide an accurate, effective, and efficient training experience that could not otherwise be duplicated in a standard classroom environment.



Course Objectives

- Understand Windchill architecture
- Install and configure Windchill solutions
- Start and stop Windchill components
- Manage Windchill configuration properties
- Implement file vaulting and content replication
- Tune Windchill components for performance
- Tune Windchill workflows for performance
- Manage background queues
- Manage Oracle database
- Manage system backups
- Manage Windchill system logs and alerts
- Monitor daily, weekly, and monthly administration tasks
- Configure browser and JAVA settings for clients



Prerequisites

- Familiarity with the Windchill PDMLink 10.1 or Windchill ProjectLink 10.1 user interface
- Familiarity with the Windows command prompt and the ability to form and execute basic SQL statements

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
-

Table of Contents

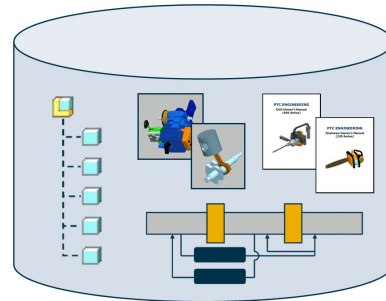
Module	1	Introduction to the Windchill System Environment
Module	2	Installing Windchill Components
Module	3	Managing Windchill Services
Module	4	Managing Windchill Properties
Module	5	File Vaulting and Replication Overview
Module	6	Implementing File Vaults
Module	7	Implementing Content Replication
Module	8	Tuning Windchill Server
Module	9	Managing Background Queues
Module	10	Tuning Workflow Processes
Module	11	Oracle Database Management
Module	12	Windchill Backup and Recovery
Module	13	Managing Log Files and Alerts
Module	14	System Monitoring — Daily Tasks
Module	15	System Monitoring — Weekly Tasks
Module	16	System Monitoring — Monthly Tasks
Module	17	Setting up the Client Environment

Locate and View Information with Windchill PDMLink 10.2

Overview

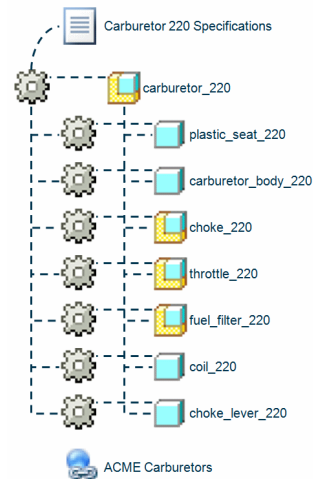
Course Code	WBT-4201-0
Course Length	2.5 Hours

In this course, you will learn basic skills required to access and view information, such as: logging on, accessing help, and locating and viewing product information. This course constitutes a comprehensive review of Windchill PDMLink locate and view functionality. In addition, the content is built to support topic-based course configurations. You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Identify and describe the capabilities of Windchill's primary object types
- Identify Windchill storage locations, iteration and revision controls, process controls, access controls, and collaboration features
- Access Windchill
- Navigate within Windchill
- Access Help
- Execute simple and advanced searches
- Save searches
- Browse contexts
- Use, manage, and create Windchill table views
- View the attributes, content, and relationships of Windchill objects



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of product development processes and deliverables

Audience

- This course is intended for any user who needs to access product information residing within the Windchill PDMLink system. People in related roles will also benefit from taking this course.

Table of Contents

Module	1	Introduction to the Windchill Environment
Module	2	Locating Information
Module	3	Viewing Information

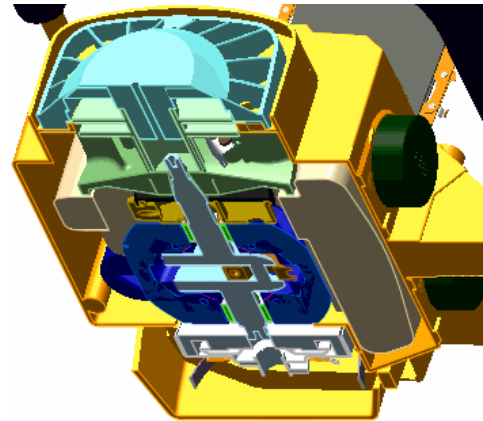
Visualization with Creo View MCAD Lite 3.0 for Windchill PDMLink 10.2

Overview

Course Code	WBT-4202-0
Course Length	3.5 Hours

In this course, you will complete a comprehensive review of the Creo View Lite 3.0 functionality. In addition, the content is built to support topic-based course configurations. You will learn about Creo View Lite and its role as a visualization solution for Product Data Management systems. You will also learn how to visualize products and navigate through or query 3-D models, 2-D drawings, images, and documents. Additionally, you will learn how to deconstruct models to view how components fit together. Finally, you will learn how to create markups and save annotation sets to communicate design ideas and problems.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Introduction to visualization
- Introduction to the Creo View Lite user interface
- Navigating and orienting 3-D models
- Finding and selecting model components
- Changing model appearances
- Working with model annotations
- Exploding model components
- Sectioning models
- Working with components and groups
- Viewing 2-D drawings, images, and documents
- Creating markups and annotation sets
- Taking measurements

ITEM	NAME	QTY	UNIT	DESCRIPTION	REV
1	PLATE_001.PRT	2	20	STEEL PLATE 001	1
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3	BRACKET_003.PRT	2	20	BRACKET 003	1
4	CONNECTOR_004.PRT	1	20	CONNECTOR 004	1
5	WHEEL_005.PRT	1	20	WHEEL 005	1
6	BEARING_006.PRT	1	20	BEARING 006	1
7	SHAFT_007.PRT	1	20	SHAFT 007	1
8	GEAR_008.PRT	1	20	GEAR 008	1
9	HOUSING_009.PRT	1	20	HOUSING 009	1
10	COVER_010.PRT	1	20	COVER 010	1
11	SCREW_011.PRT	1	20	SCREW 011	1
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100	WASHER_100.PRT	1	20	WASHER 100	1

Prerequisites

- Locate and View Information with Windchill PDMLink 10.2

Audience

- This course is intended for any user who needs to view and manipulate product information in Windchill PDMLink. People in related roles will also benefit from taking this course.
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Table of Contents

Module	1	Introduction to Visualization
Module	2	Getting Around in Creo View
Module	3	Viewing and Interrogating Models
Module	4	Deconstructing a Creo View Model
Module	5	Working with Components
Module	6	Viewing Drawings, Images, and Documents
Module	7	Working with Markups and Annotation Sets
Module	8	Working with Construction Geometry

MCAD Data Management of Creo Parametric Designs with Windchill PDMLink 10.2

Overview

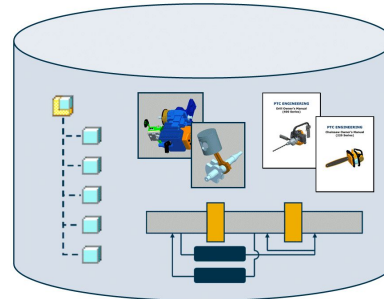
Course Code	WBT-4203-0
Course Length	4.5 Hours

This course constitutes a comprehensive review of Windchill PDMLink Creo Parametric data management functionality. In addition, the content is built to support topic-based course configurations.

After completing this course, you will be prepared to complete basic Windchill PDMLink CAD data management tasks and activities. You will also have gained a better understanding of Windchill CAD data management processes.

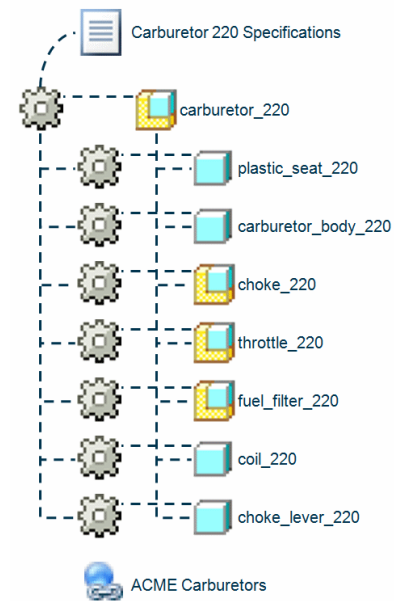
In this course, you will learn key capabilities and features of Windchill PDMLink CAD Data Management and how to use Windchill to manage Creo Parametric design information. Specifically, you will focus on the day-to-day data management tasks required by the Creo Parametric user community, including how to use the CAD data structure to associate and build the product structure. You will also be taught how to use Windchill to perform basic PDM functions on Creo Parametric CAD Documents and their associated Windchill parts.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Locate design information
- View design information
- Create new designs and share design information
- Modify and manage existing design information
- Understand Windchill parts and their association to CAD documents
- Understand file relationships and dependencies
- Manage family tables
- Use workspace frames



Prerequisites

- Locate and View Information with Windchill PDMLink 10.2
- Basic knowledge of Creo Parametric 2.0

Audience

- This course is intended for end users and System Administrators. People in related roles will also benefit from taking this course.

Table of Contents

Module	1	Getting Started with Creo Parametric Data Management
Module	2	Initiating New Designs and Sharing Design Data
Module	3	Modifying and Managing Design Data
Module	4	Understanding File Relationships and Dependencies
Module	5	Managing Family Tables
Module	6	Managing CAD Data

Product Structure Management with Windchill PDMLink 10.2

Overview

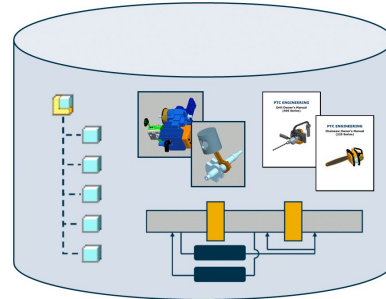
Course Code WBT-4205-0

Course Length 3 Hours

This course constitutes a comprehensive review of product structure management functionality. In addition, the content is built to support topic-based course configurations.

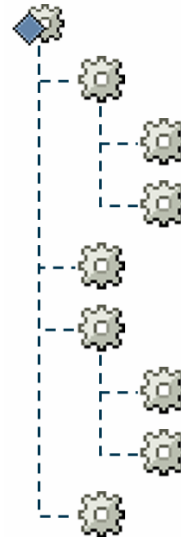
In this course, you will learn some of the concepts and terms that surround products and product structures, as well as how to create product structures using part-centric and CAD-centric approaches. You will explore the Product Structure Explorer interface and learn how to build product structures using Product Structure Explorer. Additionally, you will create baselines and new view versions of product structures, as well as bill of materials (BOM) notes that facilitate manufacturing. Finally, you will be taught about many of the more complex product structure configuration options and how they can be used.

You will complete Pro/FICIENCY skills assessment questions for each module. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Identify the role of parts, end items, and documents in product structures
- Identify various approaches used to create product structures
- Build and edit product structures
- Create product structures using Product Structure Explorer
- Identify various product configurations
- Add bill of materials (BOM) notes to product structures
- Add replacement parts to product structures
- Process part occurrences and add reference designator information
- Set product effectivity
- Create and manage product configurations and instances



Prerequisites

- Locate and View Information with Windchill PDMLink 10.2

Audience

- This course is intended for any user that needs to create or manage Windchill parts or product structures.
-

Table of Contents

Module	1	Introduction to Product Structure Management
Module	2	Viewing Product Structures
Module	3	Creating Product Structures
Module	4	Managing Product Structures
Module	5	Managing Structure Filters
Module	6	Managing Parts in the Product Structure Explorer
Module	7	Managing Configurations and Instances

Design Variation Management with Windchill PDMLink 10.2

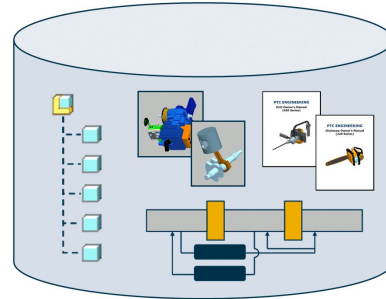
Overview

Course Code WBT-4206-0

Course Length 3 Hours

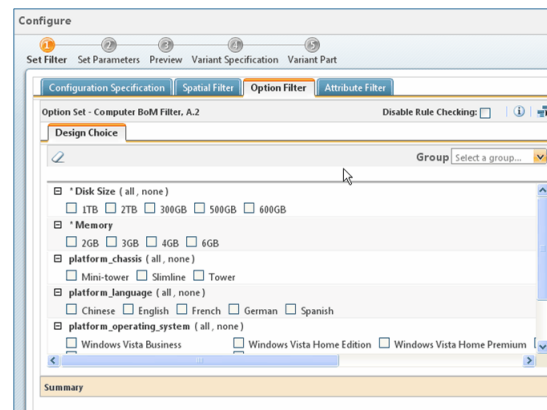
This course constitutes a comprehensive review of options and variants functionality. In addition, the content is built to support topic-based course configurations. You will explore the capabilities, concepts, and processes for creating product options and variants. You will examine the environment and learn how to configure and organize your product structures to support your design variation requirements in Windchill.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Understand Windchill design variation capabilities
- Create and manage options and choices definitions
- Use option sets to organize product families
- Set up configurable product structures
- Filter a configurable product structure
- Create and manage variants



Prerequisites

- Completion of one of the following courses:
 - WBT-4261 Introduction to Windchill PDMLink 10.2 for Heavy Users
 - WBT-4262 Introduction to Windchill PDMLink 10.2 for the Implementation Team

Audience

- This course is intended for users that will be developing the required options and variants, and who already understand Windchill product structures

Table of Contents

Module	1	Introduction to Windchill Options and Variants
Module	2	Working With Enterprise-wide Definitions
Module	3	Using Option Sets to Establish Product Families
Module	4	Developing Configurable Product Structures
Module	5	Assigning Choices to Parts
Module	6	Configurable Product Structure Filtering
Module	7	Advanced Selection Logic for Configurable Modules
Module	8	Creating and Managing Variants

Standard Document Management with Windchill PDMLink 10.2

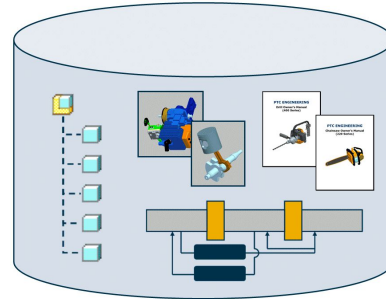
Overview

Course Code WBT-4207-0

Course Length 1 Hour

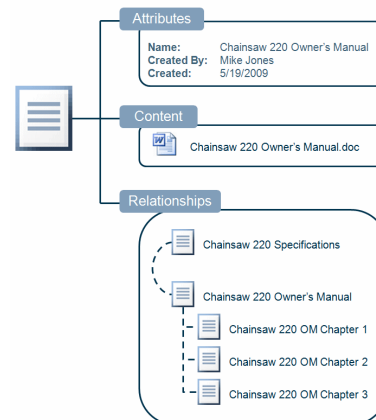
In this course, you will learn the basic skills necessary to perform typical document management tasks using Windchill PDMLink 10.2. You will learn document management skills such as creating and modifying documents. This course constitutes a review of the Standard Document Management functionality. In addition, the content is built to support topic-based course configurations.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Identify the capabilities of a standard document
- Set document preferences
- Create documents
- Create documents from templates
- Modify documents
- Revise documents
- Create document relationships



Prerequisites

- Locate and View Information with Windchill PDMLink 10.2

Audience

- This course is intended for any user who manages documents within Windchill PDMLink.
-

Table of Contents

Module	1	Creating Documents and Links
Module	2	Modifying and Managing Documents

Arbortext Document Management with Windchill PDMLink 10.2

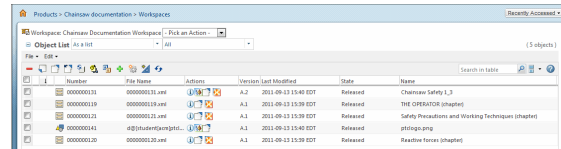
Overview

Course Code WBT-4209-0

Course Length 1.5 Hours

In this course, you will learn the basic skills necessary to use the Arbortext Integration to manage Arbortext Editor documents in the Windchill PDMLink environment. This course covers the basic operations to upload, check in, and check out Arbortext documentation from Windchill PDMLink. These skills are important because they enable a user to apply Windchill PDMLink capabilities toward meeting a company's Content Management goals.

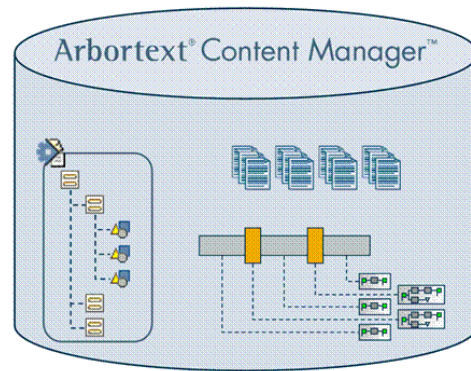
You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Number	File Name	Actions	Version	Last Modified	State	Name
0000000121	0000000121.pdf	[Icons]	A.2	2011-09-12 15:40 EDT	Released	Chemsafe Safety 1-3
0000000119	0000000119.pdf	[Icons]	A.1	2011-09-12 15:39 EDT	Released	THE OPERATOR (chapter)
0000000121	0000000121.pdf	[Icons]	A.1	2011-09-12 15:39 EDT	Released	Safety Precautions and Working Techniques (chapter)
0000000141	0000000141.pdf	[Icons]	A.1	2011-09-12 15:40 EDT	Released	pitdmg.dmg
0000000120	0000000120.pdf	[Icons]	A.1	2011-09-12 15:39 EDT	Released	Reaction Forces (chapter)

Course Objectives

- Log on and connect to Windchill PDMLink
- Understand and use workspaces
- Search and browse for dynamic documents
- Share Arbortext documents
- Use and manage visualization
- Generate and manage published content
- Understand and use burst configuration files
- Create and use managed baselines



Prerequisites

- Basic browser and Web navigation skills
- Basic understanding of Arbortext Editor functionality
- Basic understanding of Project Management processes and deliverables

Audience

- This course is intended for end users that generate documentation in Arbortext Editor and need to manage the documentation in a Windchill environment. People in related roles also will benefit from taking this course.

Table of Contents

Module	1	Getting Started with Arbortext Integration
Module	2	Sharing Arbortext Documents
Module	3	Modifying Arbortext Documents
Module	4	Managing Dynamic Documents

Change Management with Windchill PDMLink 10.2

Overview

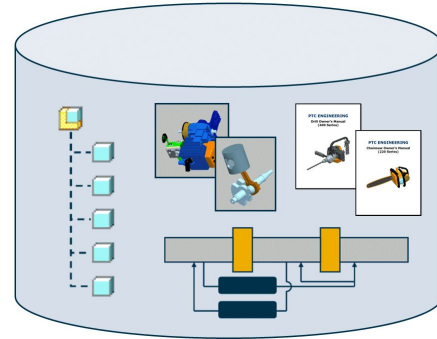
Course Code WBT-4210-0

Course Length 1.5 Hours

This course constitutes a comprehensive review of Windchill PDMLink Change Management functionality. In addition, the content is built to support topic-based course configurations. After completing this course, you will be prepared to complete basic Windchill PDMLink Change Management tasks and activities. You will also have a better understanding of Windchill PDMLink Change Management processes.

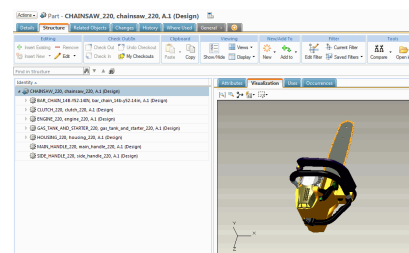
In this course, you will learn about change management capabilities in Windchill PDMLink. You will review the closed-loop change process that is the foundation of Windchill's Change Management discipline and also how to report problems and monitor the progress of changes. Additionally, you will review the entire fast-track change process, taking multiple roles while creating a change request, a change notice, and completing implementation tasks. Finally, you will learn about and create a variance.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Understand the Change Management process
- Create a problem report
- Create a change request
- Create a change notice and implementation tasks
- Implement changes
- Create a variance
- View the change monitor



Prerequisites

- Locate and View Information with Windchill PDMLink 10.1 or equivalent
- Basic understanding of product development processes and deliverables
- Basic browser and Web navigation skills

Audience

- This course is intended for any user that needs to report problems and interact with product change information in Windchill
-

Table of Contents

Module	1	Introduction to the Change Process
Module	2	Creating Change Requests
Module	3	Creating Change Notices
Module	4	Implementing Changes
Module	5	Creating Variances

Work Management with Windchill PDMLink 10.2

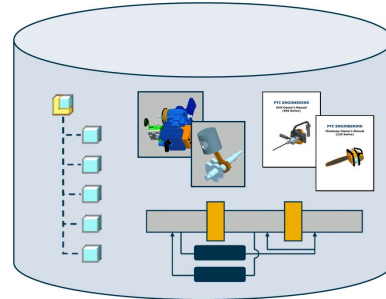
Overview

Course Code WBT-4211-0

Course Length 2 Hours

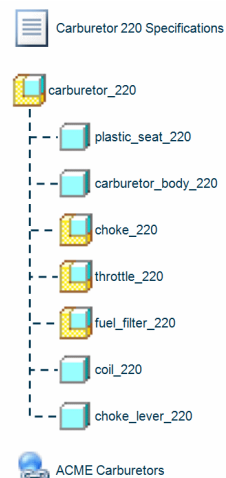
In this course, you will learn how to manage your work. This course constitutes a comprehensive review of common Windchill tasks. In addition, the content is built to support topic-based course configurations. You will explore the Windchill communication and collaboration mechanism including packages. You will also learn how to participate in Windchill processes and how to manage your tasks. Other miscellaneous topics include managing user preferences, and performing common tasks such as Move, Save As, and Rename. After completing the course, you will be prepared to perform common Windchill tasks, as well as have a better understanding of the Windchill system implementation at your company.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Manage your work environment
- Identify Windchill communication and collaboration tools
- Manage Windchill packages
- Participate in workflow processes
- Manage user preferences
- Perform common Windchill tasks



Prerequisites

- Basic Windchill 10.1 understanding

Audience

- This course is intended for any user who needs to learn about common tasks performed in Windchill.
-

Table of Contents

Module	1	Managing Your Work
Module	2	Communication and Collaboration
Module	3	Participating in Processes
Module	4	Performing Common Tasks
Module	5	Managing Windchill Packages

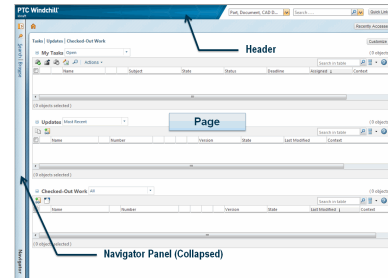
Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.1 for the End User

Overview

Course Code	WBT-4251-0
Course Length	1 Hour

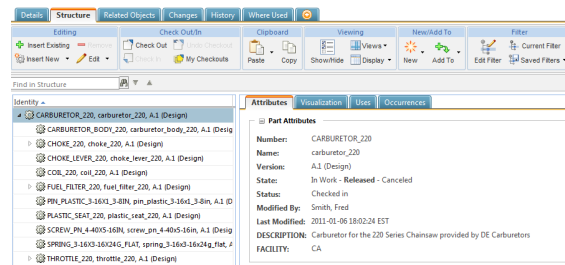
In this course, you will learn to identify the new Windchill features available in Windchill 10.2. This course enables you to update your Windchill knowledge and skills from Windchill PDMLink 10.1 to work in a Windchill PDMLink 10.2 environment.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Identify the Change Management updates
- Identify the CAD Data Management updates
- Identify the Relationship explorer updates



Prerequisites

- Working knowledge of Windchill PDMLink 10.1

Audience

- This course is intended for users who need to update their Windchill knowledge and skills from Windchill PDMLink 10.1 to work in the Windchill PDMLink 10.2 environment.

Table of Contents

Module	1	Windchill 10.2 Enhancements
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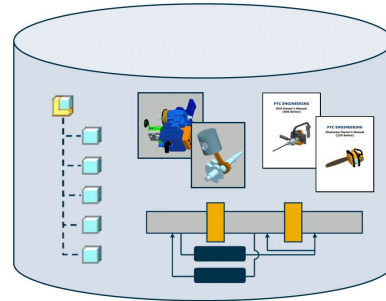
Creo Elements/Direct Data Management with Windchill PDMLink 10.2

Overview

Course Code	WBT-4301-0
Course Length	3.5 Hours

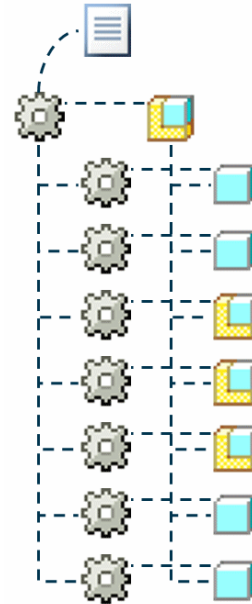
In this course, you will learn key capabilities and features of Windchill PDMLink CAD Data Management and how to use Windchill to manage Creo Elements/Direct Modeling design information. Specifically, you will focus on the day-to-day data management tasks required by the Creo Elements/Direct Modeling user community, including how to use the CAD data structure to associate and build the product structure. You will also learn how to use Windchill to perform basic PDM functions on Creo Elements/Direct Modeling CAD documents and their associated product structure objects. This course constitutes a comprehensive review of Windchill PDMLink Creo Elements/Direct Modeling data management functionality. The content is built to support topic-based course configurations. After completing this course, you will be prepared to perform basic Windchill CAD data management tasks and activities, as well as have a better understanding of Windchill CAD data management processes.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Locate information
- View information
- Create new designs and share design information
- Modify and manage existing design information
- Understand Windchill parts and their association to CAD documents
- Understand file relationships and dependencies



Prerequisites

- Locate and View Information with Windchill PDMLink 10.2 or equivalent
- Working knowledge of Creo Elements/Direct Modeling

Audience

- This course is intended for end users. People in related roles will also benefit from taking this course.

Table of Contents

Module	1	Getting Started with CAD Data Management
Module	2	Initiating New Designs and Sharing Design Data
Module	3	Modifying and Managing Design Data

Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.0 for the Administrator

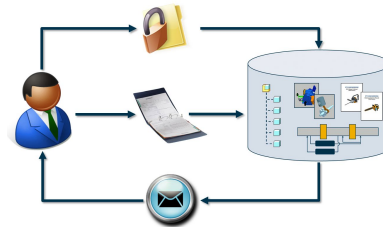
Overview

Course Code WBT-4321-0

Course Length 3 Hours

In this course, you will review two main components: business administration enhancements and system administration enhancements. The business administration topics will review miscellaneous business related enhancements. The system administration topics will highlight and cover enhancements related to the file vaulting and replication and system performance. This course is designed for administrators who need to update their Windchill knowledge and skills from Windchill PDMLink 10.0 to work in a Windchill PDMLink 10.2 environment.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Understand the new Attribute and Type Management interface
- Manage display layouts
- Modify layouts to make information editable
- Use the new charting feature
- Create new users from existing users
- Configure a common home page for users
- Create security labels and agreement enhancements
- Monitor file vaults using new utilities
- Identify the new error reporting features
- Set new Windchill cache sizes using Windchill Configuration Assistant



Prerequisites

- Experience with the Windchill 10.0 business and system administration

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
-

Table of Contents

Module	1	Business Administration Enhancements
Module	2	System Administration Enhancements

Update to Windchill PDMLink 10.2 from Windchill PDMLink 10.1 for the Administrator

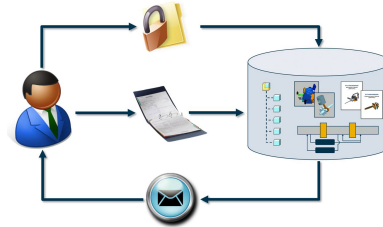
Overview

Course Code WBT-4322-0

Course Length 1 Hour

In this course, you will review two main components: business administration enhancements and system administration enhancements. The business administration topics will review miscellaneous business related enhancements. The system administration topics will highlight and cover enhancements related to the file vaulting and replication and system performance. This course is designed for administrators who need to update their Windchill knowledge and skills from Windchill PDMLink 10.1 to work in a Windchill PDMLink 10.2 environment.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.



Course Objectives

- Understand the new Attribute and Type Management interface
- Manage display layouts
- Modify layouts to make information editable
- Create new users from existing users
- Configure a common home page for users
- Create security labels and agreement enhancements
- Monitor file vaults using new utilities
- Set new Windchill cache sizes using Windchill Configuration Assistant



Prerequisites

- Experience with the Windchill 10.0 or 10.1 business and system administration

Audience

- This course is intended for System Administrators and Application Developers. People in related roles will also benefit from taking this course.
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Table of Contents

Module	1	Business Administration Enhancements
Module	2	System Administration Enhancements

Creo Parametric Data Administration in Windchill 10.2

Overview

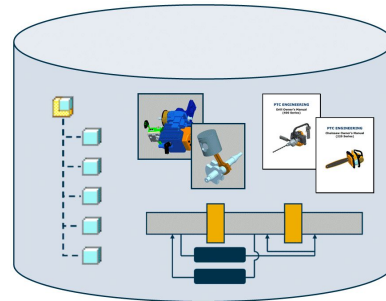
Course Code	WBT-4335-0
Course Length	1 Hour

This course constitutes a comprehensive review of configuring Creo Parametric with Windchill. In addition, the content is built to support topic-based course configurations.

After completing this course, you will be prepared to configure Creo Parametric to work in a Windchill environment. You will also have a basic understanding of the Creo Parametric and Windchill architectures.

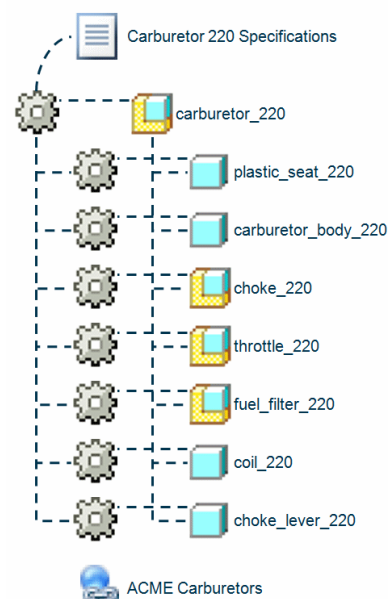
In this course, you will learn key capabilities and features of configuring Creo Parametric to work with Windchill, such as the Windchill architecture that is used to support Creo Parametric. Additionally, you will be taught about Creo Parametric configuration files and options, and the preferences in Windchill that together configure your working environment for the management of your Creo Parametric CAD documents.

At the end of the course, you will complete a course assessment in Pro/FICIENCY intended to evaluate your understanding of the course as a whole.



Course Objectives

- Understand the Windchill workspace architecture
- Use and edit Creo Parametric Startup Files (PSF)
- Use configuration elements to configure Creo Parametric to work with Windchill
- Configure Windchill CAD document management preferences in Windchill
- Map Creo Parametric parameters to Windchill attributes



Prerequisites

- Locate and View Information with Windchill 10.2 or equivalent
- Basic understanding of Creo Parametric

Audience

- This course is intended for System Administrators and end users.
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Table of Contents

Module	1	Creo Parametric Data Administration
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Arbortext Data Administration in Windchill 10.2

Overview

Course Code	WBT-4336-0
Course Length	1 Hour

In this course, you will learn how to configure some components of Arbortext Integration to connect Arbortext Editor to Windchill. You will understand the purpose of a process called bursting, and you will learn the system components, architecture, and files used for that process. You will gain knowledge of configuring bursting rules to create and use dynamic document structures within Windchill. Finally, you will learn how to configure Arbortext Publishing Engine for use with Windchill Visualization Services.

You will complete Pro/FICIENCY skills assessment questions for each topic. These questions are used to help reinforce your understanding of the course topics.

```

<comment> axdocbook.xml-
This sample file contains the object boundary specs
and object creational parameters for axdocbook.
Note, however, that a <boundaryspec> element isn't required,
since creational parameters can be used while not bursting.
The 'fileent' and 'graphics' attributes control conversion of
file-entities/xincludes and graphics to Windchill objects. <comment>
</comment>
<boundaryspec fileent="on" graphics="on">
  <element name="chapter" objectType="xinclude">
  <element name="sect1" objectType="xinclude">
  <element name="caution" objectType="xinclude">
</boundaryspec>
</comment>
<comment> Object creation parameters specific to axdocbook. Global defaults
are available in 'atidefaults'. <comment>
<comment> An object's name is assigned according
to a prioritized set of rules. Each of the rules below is checked in order, and
the first applicable rule determines the object's name.
"topmost-is-filename" takes effect only when it's the first
rule in the naming criteria. <comment>
</comment>
<namecriteria>
<comment> If we have a filename, use that for the top-level object <comment>
<name rule="topmost-is-filename">
<comment> For chapters, use names like "Foo (chapter)" <comment>
<name rule="chapter" nameexpression="concat(title, ' (', name, ')') rule="xpath">
<comment> For sect1s, use names like "Foo (sect1)" <comment>
<name rule="sect1" nameexpression="concat(title, ' (', name, ')') rule="xpath">
<comment> For cautions, use "Caution:" followed by the initial text <comment>
<name rule="caution" nameexpression="concat('Caution: ', rule="xpath">
<comment> For anything else, use the title if it has one <comment>
<name rule="title" nameexpression="title rule="xpath">
<comment> If no title, use the element content and element name <comment>
<name rule="content" nameexpression="concat(element-content, ' (', element-name, ')') rule="expression">

```

Course Objectives

- Define bursting and identify its purpose in Windchill
- Develop a bursting strategy based upon the needs of your organization
- Configure and manage Arbortext Integration to enable the bursting process
- Understand the requirements to achieve a successful bursting configuration
- Create and configure bursting rule configuration files to manage the bursting process
- Configure Arbortext Publishing Engine for use with Windchill Visualization Services

```

burstspec >
boundaryspec fileent="on" graphics="on" ←
element name="chapter" objectType="xinclude"
element name="sect1" objectType="xinclude"
element name="caution" objectType="xinclude"
<boundaryspec

```

Prerequisites

- Introduction to Arbortext Content Manager

Audience

- This course is intended for business administrators, system administrators, and project team leaders who need to configure Arbortext Content Manager bursting. Implementation team members, including user adoption team members and those with general Windchill ACM administration responsibilities, will also benefit from taking this course.

Table of Contents

Module	1	Managing Document Bursting
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