

Workflow Administration of PTC Windchill 11.0

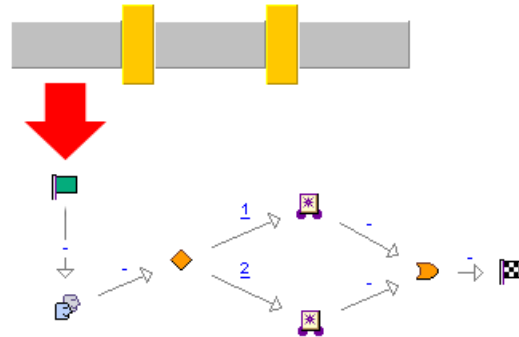
Overview

Course Code	TRN-4821-T
Course Length	16 Hours

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.

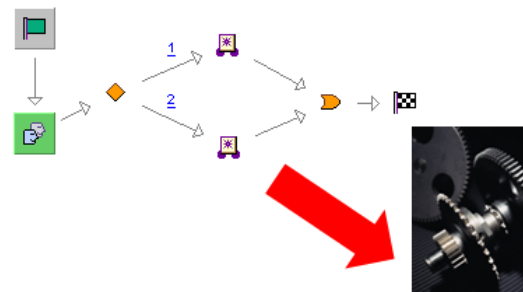
At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in PTC University Proficiency intended to evaluate your understanding of the course as a whole.

This course has been developed using Windchill 11.0 F000.



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 11.0

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
-

- 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. Understanding Life Cycle Transition Types
 - xi. Understanding Life Cycle Transition Types (cont.)
 - xii. Understanding Life Cycle Transition Types (cont.)
 - xiii. Transition Examples
 - xiv. Defining Role Participation
 - xv. Defining Access Permissions Using Life Cycles
 - xvi. Selecting Workflow Templates
 - xvii. Modular Workflow Approach
 - xviii. Single Workflow Approach
 - xix. Life Cycle Best Practices
 - xx. Managing Promotion Preferences
 - xxi. Understanding the Promote Action in a Basic Life Cycle
 - xxii. The Promotion Request Approval Process
 - xxiii. The Promotion Request Review Process
 - xxiv. Managing Promotion Preference Processes
 - xxv. Creating a New Promotion Process Preference
-

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

Knowledge Check Questions
