

Monitoring PTC Windchill 11.0 Performance Using the PTC System Monitor

Overview

Course Code	TRN-4832-T
Course Length	8 Hours

In this course, you will learn how to use PTC System Monitor to manage and troubleshoot Windchill system performance. You will focus on managing business transactions, tracking users, and identifying and resolving incidents. You will also learn how to implement dashboards, reporting and diagnostic capabilities to improve issue resolution times, and technical support efficiency. In addition, you will gain an understanding of the overall installation and configuration process.

This course has been developed using Windchill 11.0 F000 and PTC System Monitor 5.0.

PTC® Windchill® 11

Smart Connected PLM



SMART



CONNECTED



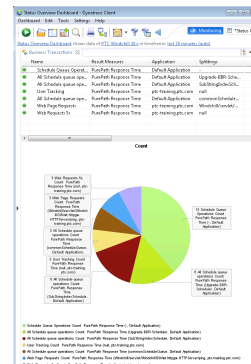
COMPLETE



FLEXIBLE

Course Objectives

- Identify the fundamentals of the PTC System Monitor.
- Understand PTC System Monitor architecture and deployment planning.
- Understand the installation and configuration process.
- Understand basic client navigation.
- Review health dashboards.
- Access and understand monitoring and diagnostic dashboards.
- Understand Dynatrace terminologies.
- Identify business transactions and their types.
- Search and analyze business transactions.
- Conduct end use tracking.
- Understand diagnostic capabilities.
- Perform Windchill cache and queue monitoring.
- Understand host infrastructure monitoring.
- Manage incidents and alerts.
- Manage Incident rules.
- Configure e-mail notification for system alerts.
- Review common diagnostic scenarios.



- Identify application performance problems.
- Identify database problems.
- Create stored sessions.
- Export sessions and transactions.
- Configure and generate reports.

Prerequisites

- Familiarity with the Windchill PDMLink 11.0 user interface.
- Some experience in administering the Windchill system environment.

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 PTC System Monitor Environment
Module	2	Installation and Configuration Overview
Module	3	Accessing and Understanding Dashboards
Module	4	Tracking Business Transactions and Users
Module	5	Managing Incidents and Alerts
Module	6	Exploring Common Diagnostic Scenarios
Module	7	Managing Sessions and Generating Reports

Course Content

Module 1. Introduction to the PTC System Monitor Environment

- i. PTC System Monitor Capabilities
- ii. PTC System Monitor Client Home Page
- iii. Cockpits Tab
- iv. Dashlet and Dashboard Display Area
- v. Status Line
- vi. Menu Bar
- vii. Settings Menu
- viii. Help Menu
- ix. PTC System Monitor Client Overview
- x. Basic Operations of the PTC System Monitor Client
- xi. Starting the Dynatrace Client
- xii. Starting the Webstart Client
- xiii. Monitoring Multiple Dynatrace Servers
- xiv. Client Startup in Kiosk Mode
- xv. System Profile
- xvi. Performance Warehouse
- xvii. Session Storage
- xviii. FastPack
- xix. Agent
- xx. Sensors
- xxi. PurePath Hotspots
- xxii. PurePath Example 1
- xxiii. PurePath Example 2
- xxiv. Business Transactions
- xxv. Monitors and Tasks
- xxvi. Incidents
- xxvii. Dashboards

Module 2. Installation and Configuration Overview

- i. PTC System Monitor Components
 - ii. Single Host Configuration
 - iii. Desktop Virtualized Installation
 - iv. Production and Test Configurations
 - v. Remote File Server Configurations
 - vi. PTC System Monitor Deployment Process
 - vii. Sizing Guidelines
 - viii. Default Deployment Sizes
 - ix. Data Repository Decisions
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- x. Additional Installation Information
- xi. Installation and Deployment Steps

Module 3. Accessing and Understanding Dashboards

- i. Accessing Dashboards
- ii. System Health Dashboard
- iii. Cache Dashboard
- iv. User Activity Dashboard
- v. Workspace Operations WGM Dashboard
- vi. Workspace Operations (Standalone Browser) Dashboard
- vii. Workspace General Operations Dashboard
- viii. Workspace Object Operations Dashboard
- ix. Workspace Object Operations Embedded Browser Dashboard
- x. Common End User Operations Dashboard
- xi. View Operations Dashboards
- xii. Container and Team Operations Dashboard
- xiii. Content Download Dashboard
- xiv. Life Cycle and Workflow Operations Dashboard
- xv. Purge Dashboard
- xvi. Purge Collection Monitoring Dashboard
- xvii. ATO Operations Dashboard
- xviii. PartsLink Operations Dashboard
- xix. ProjectLink Operations Dashboard
- xx. MPMLink Operations Dashboard
- xxi. Method Server Status Dashboard
- xxii. Background Method Server Status Dashboard
- xxiii. Server Manager Status Dashboard
- xxiv. File Server Status Dashboard
- xxv. Process Queues Dashboard
- xxvi. Publish Queues Dashboard
- xxvii. Schedule Queues Dashboard
- xxviii. Windchill Application Overview Dashboard
- xxix. Host Health Dashboard
- xxx. JVM Health Dashboard

Module 4. Tracking Business Transactions and Users

- i. Searching for Information
 - ii. The Find/Search Filter
 - iii. Searching Business Transactions
 - iv. Applying Search Filters
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- v. Search Filter Example
- vi. Analyzing a Business Transaction
- vii. PurePaths
- viii. The PurePaths Tab
- ix. The Contributors Tab
- x. The Errors Tab
- xi. Viewing PurePath Tree
- xii. Viewing PurePath Transaction Flow
- xiii. Viewing API Distribution of PurePaths
- xiv. Drilling Down a Transaction
- xv. Viewing PTC Business Transaction Categories
- xvi. PTC Solution-Specific Business Transactions
- xvii. Workspace Operation Business Transactions
- xviii. User Tracking
- xix. Tracking User Login
- xx. Monitoring Users Using the User Activity Dashboard
- xxi. Tracking Content Download Activity

Module 5. Managing Incidents and Alerts

- i. Incident, Alerts, and Thresholds
- ii. Using Incidents to Locate Issues
- iii. Using Incident Details from Dashboards
- iv. The Incidents Dashboard
- v. Incident State and Count
- vi. Viewing Incident Rules
- vii. Editing Incident Rules
- viii. Adding or Editing Conditions
- ix. Adding or Editing Actions
- x. Configuring the Linked Dashboard
- xi. Configuring E-mail Notification Infrastructure
- xii. Configuring and Using the Extended Mail Plugin
- xiii. Suggested Practices to Control Alerts

Module 6. Exploring Common Diagnostic Scenarios

- i. Identifying Performance Problems
 - ii. Identifying and Resolving User Complaints
 - iii. Example of a User Problem
 - iv. Identifying and Resolving Memory Leaks
 - v. Identifying and Resolving CPU Problems
 - vi. Investigating a Windchill Server Shutdown Incident
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- vii. Investigating a GC Utilization Incident
- viii. Troubleshooting Indexing and Publish Queues
- ix. Investigating Deadlocked Thread Incident
- x. Sorting Key SQL Statements
- xi. Identifying Problem SQL Statements
- xii. Identifying a Problem SQL Statement from the Database View
- xiii. Evaluating Systems for Skewed Tiers
- xiv. Identifying Running Business Transactions

Module 7. Managing Sessions and Generating Reports

- i. What is a Session?
- ii. Stored Session Information
- iii. Exporting Specific PurePaths or Business Transactions
- iv. Storing Specific PurePaths
- v. Live Sessions Storage
- vi. Exporting Session for a Given Time Frame
- vii. Sending Data to PTC Technical Support
- viii. Reporting Overview
- ix. Generating Client-Side Reports



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