SolarWinds Monitoring and Observability

Curriculum 3 Days

Day - 1 Day - 2

Introduction to Monitoring and Observability

- Overview of Monitoring and Observability Concepts
- Differences between Monitoring, Observability, and AlOps
- The importance of real-time monitoring for IT infrastructure
- Introduction to SolarWinds: History, Products, and Ecosystem

SolarWinds Platform Overview

- Introduction to SolarWinds Orion Platform
- Core modules: Network Performance Monitor (NPM), Server & Application Monitor (SAM), and NetFlow Traffic Analyzer (NTA)
- Key features: Dashboard, Alerts, and Reports
- Licensing and deployment options: On-Premises vs. SolarWinds Hybrid Cloud Observability

SolarWinds Network Performance Monitoring (NPM)

- Overview of SolarWinds NPM for network monitoring
- Setting up network devices for monitoring: routers, switches, firewalls
- Network performance metrics: Latency, Jitter, and Packet Loss
- Configuring network device discovery
- Visualizing data with customizable dashboards and real-time alerts

Setting up Alerts and Reports in SolarWinds NPM

- Customizing alerts: Threshold-based alerts, Email/SMS notifications
- Setting up automated network performance reports
- Real-world use cases: Proactive network troubleshooting and outage prevention

Hands-On Lab

- Installing and configuring SolarWinds NPM in a lab environment
- Exercise: Configuring network devices, setting up alerts, and reviewing network health

Server & Application Monitoring (SAM)

- Introduction to SAM for Windows/Linux environments
- Monitoring critical services and processes
- Monitoring hardware health: CPU, Memory, Disk Utilization
- Application performance monitoring: IIS, SQL Server, Apache, and more

Database Performance Monitoring (DPA)

- Overview of SolarWinds Database Performance Analyzer (DPA)
- Supported databases: SQL Server, Oracle, MySQL, PostgreSQL
- Query performance analysis, deadlock detection, and wait-time monitoring
- How to troubleshoot slow queries and optimize database performance

Real-Time Monitoring and Alerting for Servers and Applications

- Setting up real-time monitoring for Windows/Linux environments
- Configuring alerts for critical services and application performance
- Automating responses to application and server issues

Setting up Custom Dashboards and Reports in SAM and DPA

- Creating and customizing dashboards to visualize key metrics
- Setting up automated reports for server and application health
- Creating actionable reports for management

Hands-On Lab

- Exercise: Configuring server and application monitoring using SAM
- Troubleshooting slow queries using DPA
- Creating custom dashboards and reports for applications

Advanced Observability with SolarWinds Hybrid Cloud Observability

- Introduction to SolarWinds Hybrid Cloud Observability platform
- Comprehensive monitoring across cloud and on-premises environments
- Observability features: Application tracing, Log aggregation, and Real-time analytics
- Monitoring multi-cloud environments: AWS, Azure, GCP

Log & Event Management with SolarWinds Log Analyzer

- Introduction to Log Analyzer for event and log management
- Real-time log collection, searching, and analysis
- Setting up alerts and thresholds for critical log events
- Integration with SolarWinds Security Event Manager (SEM)

Advanced Network Traffic Monitoring with NetFlow Traffic Analyzer (NTA)

- Introduction to NTA for advanced network traffic monitoring
- Analyzing traffic patterns: Bandwidth usage, Application traffic, Protocol monitoring
- Identifying potential network bottlenecks and security threats
- Creating advanced alerts and reports for traffic analysis

Integrating SolarWinds with Other Tools

- Integrating SolarWinds with external tools (e.g., ServiceNow, Splunk)
- SolarWinds APIs for automation and custom integrations
- Automation with SolarWinds scripts and plugins

Hands-On Lab and Final Q&A

- Exercise: Advanced configuration with Hybrid Cloud Observability and Log Analyzer
- Configuring NetFlow Traffic Analyzer and monitoring network traffic
- Final Q&A and best practices discussion