Course Code: TN325G

Course Title: IBM Tivoli Network Manager IP Edition 4.2 Operations and Administration

Description:

This course covers the installation, configuration, use, customization, integration of Tivoli Network Manager 4.2 with Network Operations Insight, and network monitoring using the Network Manager pollers. The workshop includes approximately 40% lecture and 60% hands-on exercises. The workshop begins with a basic overview of product components and their associated functions. You configure Tivoli Network Manager and perform a full discovery of simulated networks. To further understand the intricacies of the discovery cycle, you customize discovery by changing the behavior of finders and agents. You also learn to create real-time MIB gras, control polling behavior, connect isolated networks through manual map editing, and use the reporting functions of IBM Tivoli Network Manager. You also learn to use the Network Health Dashboard and create custom dashboards.

Objectives:

After you complete this course, you can perform the following tasks:

- Install IBM Tivoli Network Manager 4.2
- Navigate the Network Manager interface
- Describe discovery in the context of Tivoli Network Manager
- Configure and run a network discovery
- Schedule automatic full discoveries
- Use the discovery collector
- Build and use discovery filters
- Troubleshoot discovery issues
- Build network partition views
- Use the Network Health Dashboard
- Create custom dashboards
- View device link status and capacity information
- Manually instantiate undiscovered devices and connections.
- Use the Hop View and Network Partition view
- Create a network view with multiple domains
- Configure and customize Network Manager polling behavior
- Schedule event-based reports
- View asset and discovery reports
- Perform stitcher customizations to add custom data to a discovery
- Configure adaptive polling
- Configure database access
- Configure a custom report
- Schedule a report snapshot

Prerequisites:

Before taking this course, you should have the following skills: -

- Basic Linux shell script editing using vi or gedit

- Understanding of the function of routers and switches and layers 2 and 3 of the Open Systems Interconnect (OSI) model
- Understanding of the types of devices that operate at Layer 1 of the OSI model

Duration:

40 Hrs

Topics:

Introduction and Architecture

- Features overview
- Architectural overview
- Troubleshooting with log and trace files
- Architectural considerations

Discovery Basics

- How discovery works
- The discovery wizard
- Starting discovery
- Checking discovery status
- Discovery configuration tabs

Advanced Discovery Options

- Configure discovery of multicast networks
- Discovery filtering
- Discovering with collectors
- Troubleshooting discovery
- Optimizing discovery

Visualization Basics

- Visualization architecture
- Event views
- The Hop View
- Network views
- Link status and capacity
- Tabular and Grid views
- Tools

Advanced Visualization

- Path Views
- Topology Editor
- Device Structure Browser
- Bookmarks

- Adding classes and icons
- Cross-domain network views
- Network Health Dashboard
- Create custom dashboards

Polling

- Polling architecture
- Polling policies
- Polling definitions
- Manage and unmanage devices and interfaces
- Configure adaptive polling
- Realtime MIB graing
- Distributed polling
- Troubleshooting information

Optical Transport and Radio Access Networks

Understanding DNCIM

- DNCIM database basics
- Populating DNCIM database
- Mapping information into the MODEL service

Customizing Discovery

- Discovery in-depth
- Creating database tables
- Prepare stitchers to enrich discovery
- Run the custom scripts and stitchers

Gateway and Network Fault Isolation

- Architecture and basis concepts
- RCA overview
- Gateway plug-ins
- New rules for special events
- Troubleshooting gateway event processing

Administrative Perl Scripts

Tivoli Network Manager Failover

- Failover basics
- What happens with failover

Tivoli Network Manager Reports

- Overview
- Viewing and scheduling reports
- Cognos and BIRT reports
- Included reports
- Installing Tivoli Common Reporting
- Troubleshooting Cognos

Installing Tivoli Network Manager 4.1.1

- Installation preparation
- Installing Tivoli Network Manager
- The root user post installation tasks
- Install Tivoli Common Reporting
- Component communications
- Optional configuration of OMNIbus processes running as a non-root user
- Process control
- Starting Tivoli Network Manager

Audience:

This course is for administrators, integrators, and users who are responsible for configuring and using Tivoli Network Manager or Network Operations Insight.