Training: Micro Focus
NA120 - Network Automation Essentials

TRAINING GOALS:

The Network Automation 10.x Essentials training class is designed for network engineers and administrators. This course teaches the skills needed to successfully implement the product to manage small, medium, or large networked enterprises. Participants get the opportunity to master the skills required to develop advanced scripts to implement complex configuration changes. The course covers how to create and enforce policies which enforce security best practices. The course also covers how to integrate external applications using the NA API and how to develop customer device drivers.

The hands-on lab exercises in this course use Network Automation software version 10.1.

Upon successful completion of this course, you should be able to:

- Describe the basic components and functions of NA
- Add and delete devices
- Create groups for device management
- Run tasks against devices and groups
- Create, edit, and use templates and command scripts
- Create and use policies for compliance
- Create and use reports
- Plan for an NA installation
- Use NA to upgrade device operating systems
- Create and use workflows for change control
- Describe the NA application programming interface (API) and what it can do
- Describe the NA Network Driver Studio (NDS)

Audience/Job Roles

- Network engineers or administrators who are responsible for maintaining the configurations and policy compliance of a network infrastructure
- Consultants who want to implement and add value to customers' NA installations

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CONSPECT:

- Course Introduction
  - Introductions
  - Describe the functions and features of NA
- Network Automation Overview
  - Describe the features of NA
  - Describe the NA system architecture:
  - Tiered architecture
  - Driver architecture
  - Identify the concepts and terminology associated with NA
  - Describe the NA user interface
- Device Management
  - Identify the device authentication process
  - Add devices
  - Describe the auto-discovery process
  - Import devices from a .csv file
  - Search for devices
  - Edit, view, and deploy a configuration
  - Compare device configuration versions
  - Perform a bare-metal install
  - Provision a device from a device template
- Device Access Methods and Device Groups
  - Explain device access methods
  - Identify the connection methods in NA
  - Identify the transfer protocols in NA
  - Differentiate between device groups and parent groups
  - Differentiate between partitions and realms
  - Configure device groups
  - Identify the major task types available in NA
  - Create, manage, and perform device tasks
- Scripting and ACLs
  - Explain the difference between simple and advanced scripts
  - Create and use templates
  - Create, edit, view, and execute scripts
  - Explain the concept of Diagnostic scripts

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- Explain the Access Control Lists (ACLs)
- Create, edit, and run ACL scripts

- Deploying Software Images and Using the CommandLine Interface
  - Upload and manage software images
  - Deploy software images
  - Use the CLI of NA to manage network devices
  - Create advanced scripts from (automatically) recorded user sessions
- Managing Policies
  - Explain the compliance life cycle
  - Manage configuration policies, including:
  - Creating configuration policies
  - Editing configuration policies
  - Export and import configuration policies
  - Review policy activity
  - Test configurations against policies
- Managing Reports
  - Identify the different reports available in the NA system
  - Explain the use of the Statistics dashboard
  - Search for reports
  - Create and view the following reports:
  - Summary reports
  - User & System reports
  - Device Status report
  - Compliance Center report
  - Device Software report
  - Software Vulnerability report
  - Diagramming
  - Best Practices
- Task Troubleshooting
  - Find failed tasks
  - Read the task details
  - Troubleshoot failed tasks
  - Review common device issues
- Installation and Planning
  - Identify the implementation requirements for installing the NA system, including the requirements for the:
    - Software

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        - Database
        - Hardware
        - Network
        - Explain the NA implementation best practices
    - Authorizing User Access
        - Plan for users, access, and authorization
        - Differentiate between roles and permissions
        - Create user accounts and user groups
        - Edit user accounts
        - Add users to user groups
        - Create partitions
        - Add users, user groups, devices, and device groups to partitions
    - Workflows
        - Explain the workflow process
        - Create, edit, and run workflows
    - Monitoring Server Health
        - Check the server status with the built-in NA monitoring tools
        - Explain data pruning tasks
        - Configure and use Event Notification and Response Rules
    - Administrative Settings
        - Explain the NA server administrative settings
        - Properly configure and manage the NA server administrative settings
    - Module 15: Administrative Troubleshooting
        - Identify NA-related problems
        - Diagnose NA-related problems
        - Isolate NA-related problems
        - Resolve NA-related problems
        - Locate additional references and support materials:
        - Contacting NA Support:
        - Reporting a problem
        - Knowledge Base
        - Class registration
        - Documentation
        - The Live Network
    - NA APIs
        - Explain NA API architecture

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- Describe the structure of APIs
- Create simple Java/Perl code based on the NA API
- Use Web Services API (WSAPI) with NA

- Network Driver Studio
  - Describe the contents of a device driver
  - Install Network Driver Studio (NDS)
  - Create an NDS project in Eclipse
  - Use NDS to create a device driver
  - Install your device driver on your NA server
  - Perform a driver discovery and snapshot with your device driver
  - Execute a command script with your device driver

REQUIREMENTS:

To be successful in this course, you should have the following prerequisites or knowledge.

- Familiarity with networking terms and concepts
- Familiarity with web browsers and telnet or SSH connection methods
- Familiarity with different flavors of operating system environments

Difficulty level

CERTIFICATE:

The participants will obtain certificates signed by Micro Focus (course completion).

This course prepares you also for such related Micro Focus certification exam: Network Automation Essentials v10.x ASP exam.

TRAINER:

Authorized Micro Focus Trainer.

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