Hewlett Packard Enterprise

Course Data Sheet

NA350 –Network Automation 10.x Advanced

Course No.: NA350-101	Category/Sub Category: Operations Management/Network Management Center
For software version(s): 10.0 – 10.1 Software version used in the labs: 10.1	Course length: 4 days
Delivery formats: Instructor Led (ILT) and Virtual Instructor Led (VILT)	Training is available as a private session onsite.
To order visit: http://h20546.www2.hp.com/main/US/	

Course Description

Participants in this training learn the skills required to implement, use, and maintain the Network Automation application. This training is useful for persons responsible for supporting and administering the implementations of Network Automation. This training is useful for persons wishing to integrate NA with third-party applications and those wanting to create custom device drivers.

Audience / Job Roles

- Network Management Tools Support
- Application Developers
- Network Automation Consultants

Course Objectives

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

- Implement multi-server Network Automation (NA) configuration to achieve resilience and scalability
- Use the API/Simple Object Access Protocol (SOAP) interfaces to achieve rich integrations with third party or in house software
- Implement integration to Network Node Manager i (NNMi) and Operations Orchestration
- Use Lightweight Directory Access Protocol and Terminal Access Controller Access Control System (TACACCS) as NA external authentication
- Create reports extracting information from the NA database directly or using the APIs
- Build custom device drivers
- Maximize the performance of an NA server and perform in-depth diagnostics and troubleshooting

Prerequisites / Recommended Skills

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

- Java/Perl programming Skills

- Basic SQL experience

- NA skills equivalent to the NA120 essentials class

The following are desirable but not essential:

- NNM Administration experience

- Unix/Linux Administration experience

- OO experience

Learning Path

NA120 - Network Automation 10.x Essentials → NA350 - Network Automation 10.x Advanced

Certification

N/A

Course Topics

Modules	Objectives
Module 1: Introduction and Overview	• Introductions • Describe the functions Network Automation
Module 2: Distributed NA Implementation	• Configure a Multimaster Mesh • Configure a Horizontal Scalability environment in two NA cores • Configure a core gateway and a satellite
Module 3: NA API	• Describe the fundamental principles of the Simple Object Access Protocol (SOAP) • Use the Java API to interact with an NA Core • Use the Perl API to interact with an NA Core • Use Perl APIS in advanced scripts
Module 4: External Authentication	• Describe the principles of the Lightweight Directory Access Protocol (LDAP • Configure NA to use the LDAP authentication service • Describe the principles of Terminal Access Controller Access-Control System + (TACACS+) • Configure NA to use the TACACS+ authentication service
Module 5: Custom Reporting	• Describe the fundamental SQL statements • Create SQL statements to extract device data from the NA database • Create SQL statements to extract event data from the NA database • Use the Perl API that uses the API to extract data from the NA server • Configure the Dynamic Group Recalculation settings
Module 6: NNMi and OO Integration	• Describe the Network Node Manager i (NNMi) and NA integration features • Configure NNMi and NA integration • Describe the Operations Orchestration (OO) and NA integration features • Configure OO and NA integration
Module 7: Troubleshooting	• Enable custom logging options • Enable task logging • Identify driver issues • Identify key performance metrics • Manipulate Rendition Configuration eXtension (RCX) files
Module 8:Driver Development	• Describe the interaction between an NA core and device driver • Explain the syntax of the JavaScript code used to implement a driver function • Create a Driver project in Network Driver Studio (NDS) • Describe the purpose of each driver file