



SV120 – Service Virtualization 2.x Essentials

Instructor-Led Workshop
For version 2.20

OVERVIEW

This introductory course provides students with the skills needed to effectively use and manage the HP Service Virtualization software product. This course uses a workshop format with the emphasis on the hands-on lab exercises which use HP Service Virtualization version 2.20. This course focuses on the basics of component and service testing and integrations with HP Test Automation tools.

This course is designed for users who are new to HP Service Virtualization.

INTENDED AUDIENCE

This course is intended for:

- Experienced and new product users
- Those responsible for, or involved in, performance testing
- Quality assurance engineers who will assume technical lead roles in the use of Service Virtualization
- Functional and automation engineers

DURATION: 4 Days

SOFTWARE VERSION: 2.20

PREREQUISITES

Working knowledge of:

- Windows Operating System
- Web sites and browsers
- Testing concepts
- Basic networking and Internet technologies
- Service Oriented Architecture (SOA) concepts
- Web services basics
- Web services security basics
- Queuing and messaging basics

COURSE OBJECTIVES

At the end of the course, you should be able to:

- Define the virtual services
- Utilize HP Service Virtualization to virtualize services
- Enhance virtual services with data and performance modeling
- Use supported services without a service description
- Define the competitive atmosphere surrounding virtual services
- Use HP Test Automation tools

RELATED COURSES

- PC120 – ALM Performance Center 11.5 Essentials
- ALM120 – Application Lifecycle Management 11.5 Essentials
- ALM920 – Application Lifecycle Management 11.5 Delta
- LR120 – Load Runner 11.5 Essentials
- ST120 – Service Test 11.x Essentials

Module 1 – Course Overview

- Identify contents of the course
- Define goals of the course
- Recognize fellow participants
- Define the class schedule
- Identify the prerequisites and out-of-scope topics

Module 2 – Introduction to Service Virtualization

- Define service virtualization
- Identify the need for service virtualization
- Identify a composite application's environment and its challenges
- Define HP Service Virtualization
- Identify the key benefits of HP Service Virtualization
- Identify HP Service Virtualization architecture and features

Module 3 – Installing and Deploying HP Service Virtualization

- Delineate Service Virtualization deployment
- Identify the prerequisites for installing Service Virtualization
- Install Service Virtualization
- Configure an HTTP port

Module 4 – Introduction to Virtual Services

- Identify virtual services
- Navigate through the Virtualization Explorer
- Identify the virtual service design
- Create a virtual service
- Define web services
- Define SOAP
- Import service descriptions
- Perform service administration
- Change servers
- Work with Service Virtualization Server

Module 5 – Using the Virtual Service Editor

- Navigate through the Virtual Service Editor
- Manage virtual services
- Define learning service behavior
- Learn a virtual service
- Simulate services
- Identify the features of the Runtime view
- Identify the Problem list
- Update virtual services
- Perform service discovery
- Use the Service Template
- View a sample application

Module 6 – Functional Model Basics

- Define data modeling
- Manage models
- Identify data rules
- Work with data rules
- Set rules priority

Module 7 – Working with Data Models

- Navigate through the Data Model Editor
- Specify custom rules and conditions
- Learn array binding

Module 8 – Working with Performance Models

- Identify performance modeling
- Define the need for performance modeling
- Work with the Performance model
- Use boosters and basic and advanced performance criteria
- Work with the Performance Model Editor
- Work with the Service Description Editor
- View a Simulation example

Module 9 – Schema Learning

- Identify the need for schema learning
- Learn a schema
- Update a schema

Module 10 – Composite Application Topologies

- Define composite applications topology
- Navigate through the Topology Editor and Tools
- Add topologies
- Model composite applications
- Test composite applications
- Create virtual services in topologies
- Reconfigure clients in topologies
- Learn service behavior in topologies
- Simulate service behavior in topologies

Module 11 – Supported Technologies and Environments

- List supported transport and message protocols
- Configure HTTP(S) Gateway agent
- Configure HTTP(S) Proxy agent
- Configure Windows Firewall and HTTP settings
- Configure IBM IMS agent
- Configure Web Sphere MQ agent
- Configure Generic JMS agent

Module 12 – Virtualized Services Security

- Define Virtualized Service security
- Set Transport security
- Set Message security
- Set authentication credentials

Module 13 – Integrating with UFT

- Define Service Test
- Perform Service Test management
- Work with Service Test
- Define control flow
- Define the role of security in Service Test
- Work with attachments
- Integrate with HP Unified Functional Testing (UFT)

Module 14 – Integrating with Other Automated Testing Tools

- Identify the components and architecture of HP Performance Center
- Identify the load testing concepts in Performance Center
- Define VuGen components
- Create VuGen scripts
- Record and replay a simple script
- Define transactions and parameters

Module 15 – Integrating with Performance Center

- Create a load testing scenario and execute it
- Integrate with LoadRunner/Performance Center

Module 16 – Troubleshooting

- Troubleshoot Runtime view
- Troubleshoot an aborted connection on an HTTPS client
- Configure an HTTP proxy on clients
- Set an HTTP Proxy in Designer
- Analyze slow Designer responsiveness