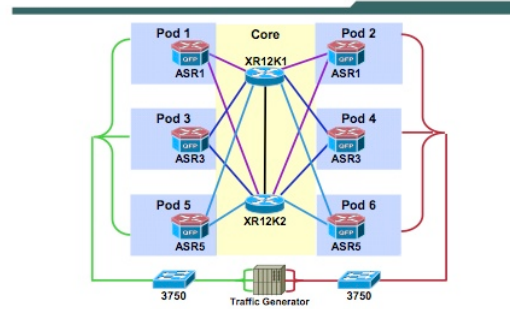


Advanced Services' ASR 1000 Series Essentials (ASR Essentials) v1.3

Length: 4-day Workshop

This is an instructor-led course that presents the major features, functions, characteristics, and connectivity options of the Cisco® ASR 1000 Series routers in enterprise and service provider environments. It includes detailed platform-specific information on the hardware and Cisco IOS® XE Software Release 2 operations. Also included is the functional operation of high availability, In-Service Software Upgrade (ISSU), quality of service (QoS), security, and multicast services in the Cisco ASR 1000 Series routers.



You will learn to:

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

- List and describe features, benefits, and functions of the Cisco ASR 1000 Series routers
- List and describe the architecture, features, and functions of hardware elements of the 2RU, 4RU, and 6RU chassis, route processor, embedded services processor (ESP), SPA interface processor (SIP), QuantumFlow processor, and power requirements
- Explain the Cisco ASR 1000 operating system and functionality
- Describe the way packets are processed and list the various components in this process
- Install software in and successfully reboot a Cisco ASR 1000 Series router
- Initiate a failover and describe the Cisco ASR 1000 high-availability capabilities
- Install software and describe the Cisco ASR 1000 ISSU capabilities
- Explain how QoS is implemented in hardware and how QoS features provide improved and more predictable network service
- Describe and configure QoS for ingress queueing and egress shaping
- Describe and configure multicast services
- Describe and configure IP Security (IPSec) and firewall/Network Address Translation (NAT) services

Recommended for:

This course is for technical professionals who need to know how to implement Cisco ASR 1000 Series routers in their network environment. The following are considered the primary audience for this course:

- Customer technical support personnel
- System engineers
- System integrators

Prerequisites:

Following are the prerequisites for this course.

- Attendance at the Interconnecting Cisco Network Devices (ICND) course or equivalent experience
- Knowledge of Cisco IOS Software commands

- Understanding of principles of QoS, multicast, and IPSec services