

(SBC10) Basic Overview

Course Description:

The SBC10 Basic Overview is a 3 – 4 hour self-pace course which will provide the student with an introduction to the SBC Session Border Controller and the GENView-Real-Time Session Manager (RSM). This course is divided into six lessons. At the end of each lesson, the student will have the ability to check their knowledge and a final exam is presented at the end of the course. The student must achieve an 85% or greater on the exam to pass the course and to move onto the SBC15 Combination SBC & GENView-RSM Fundamentals, Operation & Maintenance course. The SBC10 Basic Overview is the pre-requisite to all future SBC courses.

Intended Audience:

This course is intended for anyone requiring basic knowledge/functionality of the SBC and GENView-RSM Fundamentals.

Objectives:

The purpose of this training is to gain a better understanding of the GENBAND SBC by learning the components associated with the Session Border Controller (SBC) and the GENView Real-Time Session Manager (GENView-RSM). Upon completion of this course, the student will be able to:

- Understand what is a Session Border Controller
 - Distinguish the difference between a Proxy Server and a B2BUA
 - Identify features of the SBC regarding Session Management
 - Identify features of the SBC regarding Network Interworking
 - Identify features of the SBC regarding Service Level Assurance
- Gain a better understanding of the SBC Architecture
 - Understand the acronyms associated with the SBC
 - Identify the roles and responsibilities of the SBC and the GENView-RSM
 - Identify internal components of the SBC and the GENView-RSM and their interactions
- Gain a better understanding of the SBC Hardware Requirements
 - The hardware supported for the SBC and the GENView-RSM
 - Hardware modules used
 - Media processing card used in the SBC
 - System requirements
- Understand the SBC software requirements, licensing and interfaces used to configure your SBC
 - Identify the SBC Software requirements
 - Identify the SBC Database type
 - Identify SBC License information
 - Identify GENView-RSM Software requirements
 - Identify the GENView-RSM Database type
 - Identify GENView-RSM License information
 - Identify the three SBC Configuration interfaces
 - Identify SBC Command Line utilities
 - Identify GENVIEW-RSM Web interface
 - Identify GENView-RSM Console
- Understand the concepts of configuring Partitions, Outbound Proxy and Mirror Proxy, Least Cost Routing, Lossless Least Cost Routing and identify the building components of a Realm
 - Identify the concept of Partitioning
 - Identify how users are associated to Partitions
 - Describe what a Realm
 - Identify the concept of Outbound Proxy Mode

- Identify the concept of Mirror Proxy Mode
- Identify the concept of Least Cost Routing / Lossless Least Cost Routing within the GENView-RSM and the SBC
- Understand CDRs, Reporting, Events, Actions and Alarms using the GENView-RSM
 - Identify Call Detail Records (CDRs)
 - Identify Reports, Events, Actions and Alarms from the GENView-RSM

Pre-requisite Skills:

Basic Understanding of TDM or IP Theory and should know basic UNIX or Linux commands.

Prerequisite Courses:

N/A

Course Length and Delivery Method

1/2-day, Self-Pace

(SBC15) Combination SBC and GENView-RSM Fundamentals, Operations & Maintenance

Course Description:

The 5-day Leader Led SBC15 – Combination SBC & GENView-RSM Fundamentals, Operation & Maintenance course provides individuals with the skills necessary to support the SBC Session Border Controller (SBC) and the GenView-Real-time Session Manager (RSM). Students will learn how to install and commission the SBC, provision, operate and maintain signaling and media traffic between the SBC and other network components as well as Signaling and Media Vnets, Realms, EndPoints and Calling Plans.

Intended Audience:

This course is intended for anyone requiring basic knowledge/functionality of the SBC and GENView-RSM Fundamentals.

Objectives:

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

- Getting Started
 - Understand how to cable the SBC and the GENView-RSM
 - Understand how to check the hardware platform
 - Understand how to Stop and Start the iServer Process
 - Understand Licensing on the SBC and GENView RSM
- Basic Configuration
 - Understand how to Configure Partitions through the GENView-RSM
 - Understand how to Configure Administrative Users and Passwords through the GENView-RSM
 - Understand the SBC Configuration Interface using:
 - Command Line Interface (CLI)
 - GENView-RSM Console
 - Creating Signaling Vnets
 - Creating Media Vnets
 - Creating Media Resource and Media Routing Pools
 - Creating Realms
- Endpoint Provisioning
 - Understand how to configure the SBC for:
 - Endpoints
 - Outbound Proxy Configuration
 - Mirror Proxy Configuration
 - Header Manipulation
 - Understand how to do traces using tethereal/tshark utility and Wireshark for display
 - Understand Basic Media Troubleshooting (Statclient Utility)
- Routing
 - What is a Calling Plan
 - What are Call Legs
 - Understand how to create Calling Plans
 - Understand how to use the Call Trace Route Utility
 - Phone-Context Manipulation
- Call Detail Records

- Examine records generated by the SBC when handling calls:
 - Identify Call Detail Record Types
 - Identify and Set Call Detail Record Configuration Settings
 - Locate Call Detail Record Log Files
 - Identify and use CDR scripts
 - View Call Detail Record Log files
 - Identify the GENView-RSM Agent CDR Transfer Utility
 - Identify the GENView-RSM Agent Configuration Settings
 - Troubleshoot the GENView-RSM Agent CDR Transfer Utility
- Reporting
 - Identify and generate CDR Reports
 - Identify and generate ASR reports
 - Identify and generate NER Reports
 - Identify and generate QoS Reports
 - Identify Business Reports
 - Configure SNMP Settings
 - Identify Events
 - Identify and create Actions
 - Identify and create Alarms
- Maintenance
 - Understand how to use the nxconfig.pl Utility
 - Understand how to monitor the SBC in a Redundant Environment (HA)
 - Understand how to monitor the System Status
 - Understand Redundancy using the RSM Console
 - Understand and use Database Utilities
 - How to contact GENBAND Support
- Appendix A – RSM Provisioning
 - Understand how to Monitor the SBC in a Redundant Environment
 - Understand how to Monitor the System Status
 - Understand Redundancy using the GENView-RSM Console
- Appendix B – SIP Trunking

Pre-requisite Skills:

Basic Understanding of TDM or IP Theory and should know basic Unix or Linux commands.

Prerequisite Courses:

SBC10 Basic Overview

Course Length and Delivery Method

5-day, Leader Led

(SBC25) SBC Recovery, Security and Troubleshooting

Course Description:

The purpose of this course is to provide you with the skills and knowledge to understand how to perform disaster recovery, implement security configurations, and advanced troubleshooting techniques on GENBAND's SBC.

Intended Audience:

This course is designed for individuals who need an advanced understanding on how to recover GENBAND's SBC from a disaster scenario, implement security, and advanced troubleshooting.

Objectives:

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

- Understand how to recover GENBAND's SBC from a disaster scenario.
 - Required Documentation
 - Network LAN Configuration
 - Software Install/Patching/Upgrades
 - Software install of optional components
 - Database Restore
- Identify and implement different GENBAND SBC security implementations.
 - Rogue RTP Detect
 - Rate Limiting
 - Call Admission Control
 - Blacklisting
- Identify and utilize SBC troubleshooting tools and techniques.
 - Understand SBC signaling and media message flows.
 - Capture signaling and media packet flows on the SBC.
 - Media Card connectivity testing.

Prerequisite Skills:

Basic Understanding of TDM or IP Theory and should know Basic UNIX or LINUX commands.

Prerequisite Courses:

SBC10 and SBC15 or equivalent working knowledge of GENBAND's SBC product.

Course Length and Delivery Method

4-day, Leader Led

(SBC26) SBC Advanced Configuration and Operations

Course Description:

The purpose of this course is to provide you with the skills and knowledge to understand the advanced operations and configurations of Trunking, Routing, Transcoding (Internal and external), Media Interworking and Flexible Messaging Manipulation (FMM)

Intended Audience:

This course is designed for individuals who need an advanced understanding on how to configure and maintain the GENBAND SBC Trunking, Routing, Transcoding configurations, Media Interworking and FMM.

Objectives:

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

- Understand trunk group and routing support for the GENBAND SBC.
- Perform the trunk group routing lab exercise and test operational functionality.
- Describe the GENBAND SBC SIP to SIP-I interworking function.
- Perform the SIP to SIP-I lab exercise and test operational functionality.
- Identify the transcoding configurations supported on the GENBAND SBC.
- Perform the transcoding lab exercises and test operational functionality.
- Understand Flexible Message Manipulation functionality on the GENBAND SBC.
- Perform the FMM lab exercises and test operational functionality.
-

Prerequisite Skills:

Basic Understanding of TDM or IP Theory and should know Basic UNIX or LINUX commands.

Prerequisite Courses:

SBC10 and SBC15 or equivalent working knowledge of GENBAND's SBC product.

Course Length and Delivery Method

4-day, Leader Led

(FMM15) Flexible Message Manipulation

Course Description:

The information presented in this course is intended to teach people how to implement the power and functionality of Flexible Message Manipulation (FMM) for SBC release 9.x. This course will cover functionality, implementation and troubleshooting.

Intended Audience:

This course is designed for those individuals who already know the SBC and want to exclusively learn about the FMM functionality added in the 9.x software update.

Topics:

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

- Describe the FMM functionality.
- Explain the configuration of FMM to include:
 - Triggers.
 - Actions.
 - Rules.
 - Profiles.
- Describe basic FMM Troubleshooting capabilities.

Pre-requisite Skills:

Working knowledge of UNIX and LINUX OS Administration.

Prerequisite Courses:

None

Course Length and Delivery Method

2 days, Lead-Led or ½ day, Self-Paced

(DSBC10) Distributed Session Border Controller (D-SBC) Overview

Course Description:

This training event is designed to introduce GENBAND customers to the GENBAND Distributed Session Border Controller (D-SBC) solution.

Intended Audience:

This course is designed for operators that are new to DSBC that will be implementing the GENBAND Distributed Session Border Controller (DSBC) in their network. The course is for staff with no prior DSBC product knowledge or experience.

Key Topics:

- DSBC Functions and Capabilities
- D-SBC Architecture
- Q20-Q21 Hardware
- Q50 Hardware
- D-SBC User Interfaces
- D-SBC Licensing and Capabilities

Objectives:

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

- Describe the functions and capabilities of the SBC
- Understand the components and architecture of the Distributed-SBC
- Describe the Q20 and Q21 hardware supporting the SBC-ACS
- Describe the Q50 hardware supporting the SBC-AMS
- Identify the user interfaces of the D-SBC
- Describe the licensing and capacities of the D-SBC

Prerequisite Skills: A Basic understanding of IP/SIP is helpful

Course Length and Delivery Method: 1 Day – Self-Pace

(DSBC15) Distributed Session Border Controller (D-SBC) Operations, Administration, Maintenance, and Provisioning

Course Description:

The purpose of this course is to provide students with an understanding of the Distributed-SBC (D-SBC) technologies with an emphasis on both provisioning as well as understanding how to manage the operations and maintenance of D-SBC Network Elements

Intended Audience:

This course is designed for individuals who are responsible for the operations, administration, maintenance, and provisioning of D-SBC Network Elements.

Key Topics:

- Overview and Architecture
- Hardware
- User Interfaces
- Basic Provisioning
- Endpoints Provisioning
- Calling Routing using Calling Plans
- Trunk Group Routing
- Call Detail Record Management
- Performance Monitoring
- Maintenance and Backups
- High Availability Configurations

Objectives:

- Gain an Understand the D-SBC Technologies and Architecture
- Identify the Q20\Q21, Q50, and GVM-OneEMS Hardware and Connectivity
- Launch and navigate the SBC-ACS\AMS User Interfaces and GVM-OneEMS GUI
- Identify and Provision Virtual Networks, Media, Realms, and Endpoints
- Capture and view SIP traffic using Tshark and Wireshark
- Provision Routes and Calling Plans and verify the associated operations
- Provision Trunk Group Routing and verify the associated operations
- Identify, locate and view Call Detail Record information
- Monitor Performance Statistics for the SBC-ACS\AMS
- Perform basic maintenance on the SBC-ACS\AMS
- Identify High Availability aspects of the SBC-ACS\AMS

Prerequisite Skills: - A basic understanding of IP would be beneficial

Prerequisite courses: - None

Course Length and delivery method: 5 Days Leader-Led

(DSBC16) Distributed SBC (D-SBC) Operations, Administration, Maintenance, and Provisioning Delta

Course Description:

The purpose of this delta course is to provide experienced students of the SBC\RSM technologies with an introduction and understanding of the new interfaces available with the Distributed-SBC (D-SBC). This will allow the student to correlate existing knowledge to the new ACS\AMS Interfaces.

Intended Audience:

This course is designed for individuals who are experienced with the existing GENBAND SBC/RSM product and require an understanding of the differences between the SBC/RSM and the Distributed SBC (D-SBC).

Key Topics:

- D-SBC Overview and Architecture
- D-SBC Hardware and Networking
- GENView Manager OneEMS User Administration
- GENView Manager OneEMS Fault Management
- GENView Manager OneEMS Performance Monitoring
- SBC-ACS\AMS User Interfaces
- Understand ACS\AMS Core Provisioning
- Basic SBC Endpoints

Objectives:

- Understand the D-SBC Technologies
- Understand the function of the GENView OneEMS
- Identify the Q20\Q21\Q50 and GENView OneEMS Hardware and Connectivity
- Setup Users and Security Groups on the GENView OneEMS
- View Security Audit Logs on the GENView OneEMS
- View and Terminate Login Sessions on the GENView OneEMS
- Manage Faults on the GENView OneEMS
- Identify available Performance Statistics for the GENView OneEMS
- Configuring and Viewing Device Statistics
- Navigate the SBC ACS\AMS Operational and Configuration Modes
- View the Core ACS\AMS provisioning
- Identify and locate key data of the different Endpoint types of the SBC-ACS

Prerequisite Skills: - GENBAND SBC\RSM Technologies

Prerequisite courses: - Prior OAM&P knowledge of SBC release 9.x or below

Course Length and delivery method: 2 Days Leader-Led

(ISBC10) Integrated Session Border Controller (I-SBC) Overview

Course Description:

This training event is designed to introduce GENBAND customers to the GENBAND Integrated Session Border Controller (I-SBC) solution.

Intended Audience:

This course is designed for operators that are new to ISBC that will be implementing the GENBAND Integrated Session Border Controller (ISBC) in their network. The course is for staff with no prior ISBC product knowledge or experience.

Key Topics:

- I-SBC Basics
- SBC Functions and Capabilities
- GVM-OneEMS and Q21 Hardware
- GVM-OneEMS and CLI User Interfaces
- SBC-ACS and GVM-OneEMS Licensing
- Endpoints
- Call Handling
- High Availability and Redundancy

Objectives:

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

- Describe the roles of the GENBAND SBC and the I-SBC in the network
- Identify SBC functions and capabilities
- Summarize features of the hardware platform supporting the I-SBC
- Identify the I-SBC user interfaces
- Explain how the I-SBC manages licensing
- Identify the different endpoint types of the SBC-ACS
- Identify SBC-ACS Call Handling Method
- Identify High Availability aspects of the I-SBC and GVM-OneEMS

Prerequisite Skills:

Basic understanding of IP/SIP and Unix/Linux commands

Course Length and Delivery Method: 1 Day – Self-Pace

(ISBC15) Integrated Session Border Controller (I-SBC) Operations, Administration, Maintenance, and Provisioning

Course Description:

The purpose of this course is to provide students with an understanding of the Integrated-SBC (I-SBC) technologies with an emphasis on both provisioning as well as understanding how to manage the operations and maintenance of I-SBC Network Elements

Intended Audience:

This course is designed for individuals who are responsible for the operations, administration, maintenance, and provisioning of I-SBC Network Elements.

Key Topics:

- Overview and Architecture
- Hardware
- User Interfaces
- Basic Provisioning
- Endpoints Provisioning
- Calling Routing using Calling Plans
- Trunk Group Routing
- Call Detail Record Management
- Performance Monitoring
- Maintenance and Backups
- High Availability Configurations

Objectives:

- Gain an Understand the I-SBC Technologies and Architecture
- Identify the Q21 and GVM-OneEMS Hardware and Connectivity
- Launch and navigate the SBC-ACS User Interfaces and GVM-OneEMS GUI
- Identify and Provision Virtual Networks, Media, Realms, and Endpoints
- Capture and view SIP traffic using Tshark and Wireshark
- Provision Routes and Calling Plans and verify the associated operations
- Provision Trunk Group Routing and verify the associated operations
- Identify, locate and view Call Detail Record information
- Monitor Performance Statistics for the SBC
- Perform basic maintenance on the SBC
- Identify High Availability aspects of the SBC

Prerequisite Skills: - A basic understanding of IP would be beneficial

Prerequisite courses: - None

Course Length and delivery method: 5 Days Leader-Led

(ISBC16) Integrated Session Border Controller (I-SBC) Operations, Administration, Maintenance, and Provisioning Delta

Course Description:

The purpose of this delta course is to provide experienced students of the SBC\RSM technologies with an introduction and understanding of the new interfaces available with the Integrated-SBC (I-SBC). This will allow the student to correlate existing knowledge to the new ACS Interfaces.

Intended Audience:

This course is designed for individuals who are experienced with the existing GENBAND SBC/RSM product and require an understanding of the differences between the SBC/RSM and the Integrated SBC (I-SBC).

Key Topics:

- I-SBC Overview and Architecture
- I-SBC Hardware and Networking
- GENView Manager OneEMS User Administration
- GENView Manager OneEMS Fault Management
- GENView Manager OneEMS Performance Monitoring
- Understand Basic Configuration
- Basic SBC Endpoints

Objectives:

- Understand the I-SBC Technologies
- Understand the function of the GENView Manager OneEMS
- Identify the Q21 and GENView Manager OneEMS Hardware and Connectivity
- Setup Users and Security Groups on the GENView Manager OneEMS
- View Security Audit Logs on the GENView Manager OneEMS
- View Login Sessions on the GENView Manager OneEMS
- Manage Faults on the GENView Manager OneEMS
- Identify available Performance Statistics for the GENView Manager OneEMS
- Configuring and Viewing Device Statistics
- Navigate the operational and configuration modes of the CLI and execute commands
- Understand Realms and the SBC Networking Environment
- View the basic SBC provisioning including Vnets, Media, and Realms
- Identify and locate key data of the different Endpoint types of the SBC-ACS

Prerequisite Skills: - GENBAND SBC\RSM Technologies

Prerequisite courses: - Prior OAM&P knowledge of SBC release 9.x or below

Course Length and delivery method: 2 Days – Leader-Led

(FMM16) Flexible Message Manipulation (FMM) Basics on ACS

Course Description:

The information presented in this course is intended to teach people how to implement the power and functionality of Flexible Message Manipulation (FMM) for SBC release 10.x and above. This course will cover basic functionality, implementation and troubleshooting.

Intended Audience:

This course is designed for those individuals who already know the SBC and want to exclusively learn about the FMM functionality on the GENBAND Advanced Control server (ACS).

Key Topics:

- FMM functionality
- FMM Triggers
- FMM Actions
- FMM Rules
- FMM Profiles
- FMM Invocation points
- FMM Profile application
- FMM Command Files
- FMCTest Utility
- Basic FMM Troubleshooting

Objectives:

- Understand high level FMM functionality
- Identify and datafill FMM Triggers
- Identify and datafill FMM Actions
- Identify and datafill FMM Rules
- Identify and datafill FMM Profiles
- Identify FMM Invocation points
- Apply FMM Profiles
- Test FMM Invocation
- Identify basic FMM Troubleshooting capabilities

Prerequisite Skills:

Basic understanding of TDM or IP Theory.

Basic understanding Unix or Linux commands.

Working knowledge of the SIP Protocol.

Prerequisite courses:

ISBC15 or ISBC16

Or

DSBC15 or DSBC16

Course Length and delivery method: 2 days, Lead-Led or ½ day, Self-Paced

(GVO15) GENView OneEMS Operations, Administration, Maintenance, and Fault Management

Course Description:

The purpose of this course is to familiarize the student with the Operations, Administration, and Fault Management Features of the GENView OneEMS Application with a focus on understanding Session Border Controller network element management

Intended Audience:

This course is designed for individuals who are responsible for the provisioning and management of GENBAND SBC equipment in their network infrastructure.

Key Topics:

- Overview and Architecture
- Hardware and Software
- GVM-OneEMS Administration
- GVM-OneEMS Maintenance
- SBC Device Management
- SBC Fault Management
- Performance Management

Objectives:

- Describe the purpose of the GVM-OneEMS Application.
- Identify the Hardware and Software components for GVM-OneEMS.
- Understand how to Administer the GVM-OneEMS System
- Maintain the GVM-OneEMS Application and Network Element Environment
- Manage SBC Devices in the GVM-OneEMS Application
- Manage Alarms and Faults for the SBC Devices
- View Performance Data for the SBC Devices and for the GVM-OneEMS

Prerequisite Skills: - None

Prerequisite courses: - None

Course Length and delivery method: 1 Day – Leader-Led

(GVAN15) GENView Analytics Operations, Administration, and Reporting

Course Description:

The purpose of this course is to familiarize the student with the Operations, Administration, and Reporting Features of the GENView Analytics Application with a focus on understanding report management as well as creating charts and dashboards

Intended Audience:

This course is designed for individuals who are responsible for performing analysis and running reports on the GENBAND SBC equipment in their network infrastructure.

Key Topics:

- Overview
- Hardware and Software
- Administration
- Packet Capturing
- Reporting

Objectives:

- Describe the purpose of the GENView Analytics Applications
- Identify the hardware and software components for GENView Analytics.
- Understand how to administer the GENView Analytics system
- Describe the methods of Packet Capture for GENView Analytics
- Create and View Reports, Charts, and Dashboards in GENView Analytics.

Prerequisite Skills: - A basic understanding of GENBAND Session Border Controllers would be beneficial

Prerequisite courses: - None

Course Length and delivery method: 1 Day Leader Led

WAG15 Wireless Access Gateway OAM&P

Course Description:

The WAG15 is a two day leader led or self-paced GENBAND Wireless Access Gateway (WAG) OAM&P course. This course provides individuals with a fundamental understanding of the WAG including configuration and maintenance.

Intended Audience:

This course is intended for anyone requiring an understanding of the basic functionality and operations of the GENBAND WAG solution.

Key Topics:

Key topics discussed/reviewed during the GENBAND WAG OAM&P course:

- WAG introduction
- System and Hardware overview
- WAG configuration
- Provisioning WAG as a small cell Security Gateway (SeGW)
- Provisioning WAG as Tunnel Terminating Gateway (TTG)/evolved Packet Data Gateway (ePDG)
- Provisioning GTP-U Relay with GAN ALG or Iuh ALG
- Basic troubleshooting and maintenance

Objectives:

- Understand WAG and its relevant placement within a networks architecture
- Identify the WAG system and hardware elements (IA-RMS)
- Understand how to configure the WAG (System and Global parameters)
- Learn how to provision the WAG in various functions including;
 - As a SeGW
 - As a TTG/ePDG
 - As an ALG for GTP-U Relay
- Understand software upgrades
- Understand basic troubleshooting and maintenance

Course Length and Delivery Method

2 Day Leader led or Self-paced

(S215) Security Gateway Maintenance and Configuration

Course Description:

The 2-day Leader Led S2 Security Gateway course provides individuals with a fundamental understanding of the S2 Security Gateway. In addition, the student will learn the skills necessary to install, configure and maintain the S2 Security Gateway.

Intended Audience:

This course is intended for anyone requiring basic functionality of the Security Gateway.

Objectives:

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

- Security Gateway Overview
 - Describe the role of the Security Gateway
 - Identify S2 Terminology
 - Describe Service Protection
 - Describe Management
 - Describe Threshold Crossing Alarms
 - Describe Firewall Rules
 - Describe High-Availability Requirements
- Hardware Overview
 - Understand the S2 Hardware
 - Understand how to Replace Hardware Components
 - Describe High Availability Requirements
 - Establish a Console connection
 - Initialize the System Boot Up
- S2 Fundamentals – Basic Configuration
 - Access Command Line Help
 - Initial Configuration of the S2
 - Configure Management Ports
 - Enable Application Servers
 - Configure IP Local Applications
 - Configure SNMP
 - Configure Logical and Physical Interfaces
 - Configure Static Routing
 - Configure Users and Passwords
- S2 Functions – IPSec & RADIUS
 - Configuring IP Security (IPSec)
 - IKE Policies
 - IPSec Policies
 - Root and Server Certificates
 - Security Gateway System Key
 - Configure RADIUS Authentication
 - Configuring AAA Server Groups
 - Configuring Server Selection
 - Configuring EAP Identity
 - Creating Client IP Address Pool
 - Mapping Traffic to Client IP Address Pools
- Customer and Subscriber Configuration
 - Create a Customer and Subscriber
 - Specify IKE Version
 - Enable IKE MOBIKE Support
 - Specify the Crypto IP Address

- Configure the Security Gateway IKE Identity
- Configure IKE Initial Contact Behavior
- Configure Dead-Peer-Detection
- Configure Security Policy
- Configure IKE Peer Groups
- Enable / Disable the Security Gateway
- Event and Command Logging
 - Understand Event Logging
 - Understand S2 Logging
 - Understand Trace Logging
 - Troubleshooting Alarms
- System Boot and Shutdown
 - View the Boot Configuration Table
 - Display File Contents
 - Select a Configuration File at Startup
 - Insert a New Entry into the Boot Configuration Table
 - Delete an Entry from the boot Configuration Table
 - Modify an Entry from the Boot configuration Table
 - Set an Index Value
 - Shutdown the System
 - Restart the System without Powering Down
 - Describe Debug Command

Prerequisite Skills:

Basic Understanding of TDM or IP Theory and should know Basic UNIX or LINUX commands.

Prerequisite Courses:

NA

Course Length and Delivery Method

2-day, self-pace

(QFlex15) Enterprise SBC Installation & Provisioning

Course Description:

The QFlex15 Enterprise SBC Installation & Provision course is a 5 – 6 hour self-pace course which will familiarize students with the QFlex Solution, its architecture and what is required to get the QFlex and EMS servers installed and provisioned.

This course is divided into seven lessons which will provide an overview of the solution architecture, hardware & operating software requirements, how to install the QFlex software and perform basic administration and configuration of QFlex.

Intended Audience:

This course is intended for anyone requiring basic functionality of how to install, provision and configure the QFlex solution.

Objectives:

SIP Trunking adoption is steadily growing, creating security and interoperability challenges between the service provider and enterprise networks. GENBAND's QFlex is an enterprise Session Border Controller (eSBC) that resolves these challenges by providing a demarcation point with adaptors that protect both the service provider SIP Trunks and enterprise local network, as well as enable proven interoperability with a wide variety of IP PBXs and other network elements. The purpose of this training is familiarize students with the QFlex architecture, learn how to install the software and understand basic administration and configuration. Upon completion of this course, the student will be able to:

- Understand the QFlex Solution Architecture
- Understand the Hardware & Operating Software Requirements
- Understand the Application Files & Installation Procedures
- Perform QFlex Basic Administration
- Perform EMS Basic Administration
- Perform Basic In-Service Configuration

Pre-requisite Skills:

Basic Understanding of Basic UNIX or Linux commands.

Prerequisite Courses:

N/A

Course Length and Delivery Method

1/2-day, Self-Pace

(QFlex16) Enterprise SBC Installation & Provisioning

Course Description:

The QFlex15 Enterprise SBC Installation & Provision course is a one-day leader-led course which will familiarize students with the QFlex Solution, its architecture and what is required to get the QFlex and EMS servers installed and provisioned.

This course is divided into seven lessons which will provide an overview of the solution architecture, hardware & operating software requirements, how to install the QFlex software and perform basic administration and configuration of QFlex.

Intended Audience:

This course is intended for anyone requiring basic functionality of how to install, provision and configure the QFlex solution.

Objectives:

SIP Trunking adoption is steadily growing, creating security and interoperability challenges between the service provider and enterprise networks. GENBAND's QFlex is an enterprise Session Border Controller (eSBC) that resolves these challenges by providing a demarcation point with adaptors that protect both the service provider SIP Trunks and enterprise local network, as well as enable proven interoperability with a wide variety of IP PBXs and other network elements. The purpose of this training is familiarize students with the QFlex architecture, learn how to install the software and understand basic administration and configuration. Upon completion of this course, the student will be able to:

- Understand the QFlex Solution Architecture
- Understand the Hardware & Operating Software Requirements
- Understand the Application Files & Installation Procedures
- Perform QFlex Basic Administration
- Perform EMS Basic Administration
- Perform Basic In-Service Configuration

Pre-requisite Skills:

Basic Understanding of Basic UNIX or Linux commands.

Prerequisite Courses:

N/A

Course Length and Delivery Method

1-day, leader-led
