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# Introduction

Ribbon believes that the best partner is an educated partner.

Our Education Services department has been instructing partners on the benefits of Ribbon technology and solutions for more than a decade. Each class is led by an experienced, certified instructor with deep knowledge of real-time communications disciplines including voice, interworking of data networks, security, Unified Communications, service definition, wireless/broadband technologies, and database design.

Our approach is simple and effective: experienced instructors, small classes, stimulating lesson plans and hands-on laboratories. Instructor led workshops have a maximum of 12 students so that classes are interactive, and an effective transfer of knowledge is achieved.

Classes are available through a variety of methods:

# Virtual instructor-led training.

Partners can receive live, interactive training from a Ribbon trainer from their secure location(s). Available through Microsoft TEAMS and a remote laboratory environment accessed through a PC or laptop browser for a maximum of 12 students. Students receive instruction from the same instructors who teach face to face classes. The same content is addressed as in live classes including hands-on access to lab systems. Using the remote lab capability, instructors virtually look over the shoulder of students and provide individual assistance and feedback.

# **Blended Learning**

Support Certifications for PSX, SBC Core, SBC Edge, Edgmarc and EdgeView are now offered in a blended learning solution which contains a mandatory self-paced Overview and Fundamentals course, the theoretical exam and a final leader led practical lab session.





# Training Certification Tracks by product and Functional Role

Ribbon offers training certification curriculums designed to ensure our partners are capable of selling, deploying, and supporting Ribbon products. Certifications are comprised of self-paced courses (eLearning) and in-depth Instructor led courses (Workshops) that provide extensive hands-on exercises. Information about classes scheduled at a Ribbon facility or in a virtual environment are posted on the Ribbon Training Page and on the Partner Portal.

# SBC CORE

# **SBC CORE and EMS Sales and Sales Engineer Professional Certification**

SBCC200 - SBC Core and EMS Sales and Sales Engineer Professional – 16 Hours Self-Paced Certification Expiration - Perpetual

# SBC CORE Support Professional Certification

SBCC11 – SBC Core Support Technical Prerequisites – 2 Days Self-Paced SBCC20 - SBC Core Support Practical Exercises – 3 Days Leader- Led Certification Expiration – 2 Years

# **SBC CORE Implementation Professional Certification**

SBCC25 - SBC Core Implementation Class – 4 Days Leader-Led Note: SBCC20 is a required prerequisite course Certification Expiration – 2 Years

# SBC EDGE

# SBC EDGE and EMS Sales and Sales Engineer Professional Certification

SBCE200 - SBC Edge and EMS Sales Engineer Professional – 1 Day Self-Paced Certification Expiration - Perpetual

# SBC EDGE Implementation and Support Professional Certification

SBCE11 - SBC Edge Support Technical Prerequisites – 1 Day Self-Paced SBCE20 - SBC Edge Implementation & Support Practical Exercises – 2 Days Leader-Led

Certification Expiration - 2 Years

### SBC SWe Lite and TEAMS Direct Routing Implementation Certification

SBC SWe Lite and TEAMS Direct Routing Implementation – 1 Hour Self-Paced Certification Expiration - Perpetual

# Ribbon Edge 8000

# Ribbon Edge 8000 Implementation and Support Professional Certification

RE8K20 – Ribbon Edge 8000 Implementation and Support – 3 Days Leader-Led Certification Expiration – 2 Years





# **PSX**

# **PSX Sales and Sales Engineer Professional Certification**

PSX200 - PSX Sales and Sales Engineer Professional – 4.5 Hours Self-Paced Certification Expiration - Perpetual

# **PSX Support Professional Certification**

PSX11 - PSX Support Technical Prerequisites – 1 Day Self-Paced PSX20 – PSX Support Practical Exercises – 2 Days Instructor Led Certification Expiration – 2 Years

# **EMS**

# **EMS Implementation & Support Professional Certification**

REMS16 – Partner EMS Implementation & Support Class – 3 Days Leader-Led Certification Expiration – 2 Years

# **RAMP**

# **RAMP Support Professional Certification**

If you have previous experience and/or certification with the Insight EMS, you can achieve the RAMP Support Professional Certification by taking the:

- RAMP10 Ribbon Application Management Platform Overview 2 Hours Self-Pace
- RAMP Support Professional Certification Exam

Else, you will need to take:

- RAMP15 Ribbon Application Management Platform Basics Class 2
  Days Leader-Led
- RAMP Support Professional Certification Exam

Certification Expiration - 2 Years

# **RAMP Implementation Professional Certification**

RAMP16 – RAMP Implementation – 1 Days Leader-Led Certification Expiration – 2 Years

# AS

# **AS Sales and Sales Engineer Professional Certification**

AS200 - AS Sales and Sales Engineer Professional – 1 Hour Self-Paced Certification Expiration - Perpetual

# **AS Support Professional Certification**

AS11 – Application Server (AS) Standalone Overview – 1 Day Self-Paced AS30 – Application Server (AS) Standalone Accounting – 1 Day Self-Paced AS21 - Application Server (AS) Standalone Administration, Provisioning and Fault Management Class - 4 Days Leader-Led Certification Expiration – 2 Years





# G5

### **G5 Sales and Sales Engineer Professional Certification**

G5200 - G5 Sales and Sales Engineer Professional – 1 Hour Self-Paced Certification Expiration - Perpetual

# **G5 Support Professional Certification**

G5SE10 - G5 SIP ESA Overview - 4 Hours Self-Paced

G515 - G5- Access Line Gateway Operations, Maintenance, Fault Management Class – 2 Leader-Led

Certification Expiration - 2 Years

# EdgeMarc and EdgeView

# **EdgeMarc and EdgeView Sales and Sales Engineer Professional Certification**

EMV200 – EdgeMarc and EdgeView Sales and Sales Engineer Professional - 2 Hours Self-Paced

Certification Expiration - Perpetual

# **EdgeMarc and EdgeView Support Professional Certification**

EMV11 - EdgeMarc and EdgeView Technical Prerequisites – 2 Days Self-Paced EMV20 – EdgeMarc and EdgeView Implementation and Support Practical Exercises - 2 Days Leader-Led

Certification Expiration - 2 Years

# **Ribbon Analytics**

# Ribbon Analytics Sales and Sales Engineer Professional Certification

RP200 – Ribbon Analytics Sales and Sales Engineer Professional – 1 Hour Self-Paced

**Certification Expiration - Perpetual** 

# **Ribbon Analytics Support Professional Certification**

RP15 - Ribbon Analytics Basics - 2 Days Leader-Led RP26 - Ribbon Analytics Advanced - 2 Days Leader-Led

Certification Expiration - 2 Years

# **Packet Optical Networks**

# Packet Optical Networks Sales and Sales Engineer Professional Certification

Packet Optical Network Sales and Sales Engineer Professional – 2 Hours Self-Paced

Certification Expiration - Perpetual

# Packet Optical Networks Planner Professional Certification

Neptune Network Planner – 30 mins Self-Paced Apollo Network Planner – 1 hour 40 mins Self-Paced Certification Expiration – Perpetual

# Direct Routing as a Service

# Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Sales and Sales Engineer Professional Certification

RC100 – Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Sales and Sales Engineer Professional – 1 Hour Self-Paced

Certification Expiration - Perpetual





# Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Technical Onboarding Professional Certification

RC300 – Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Technical Onboarding Professional – 1 Hour Self-Paced Certification Expiration - Perpetual

# Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Customer Support Professional Certification

RC500 – Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Customer Support Professional – 16 Minutes Self-Paced Certification Expiration - Perpetual

# **Tactical Edge Solution**

# **Tactical Edge Sales and Sales Engineer Professional Certification**

TES200 - Ribbon Tactical Edge Solution – 35 Minutes Self-Paced Certification Expiration – Perpetual

# <u>Tactical Edge Support Professional Certification</u>

TES20 – Tactical Edge Solution: Provisioning, Operations, Administration, and Fault Management – 2 Days Leader-Led Certification Expiration – Perpetual

# <u>Tactical Edge Implementation Professional Certification</u>

TES40 - Tactical Edge Solution Deployment – 2 Days Leader-Led Certification Expiration – Perpetual

# **Certification Time Requirement**

Product	Sales and Sales Engineering	Support Engineering	Implementation Engineering	Admin	Network Planner
SBC Edge	1 Day	3 Days			
SBC Core	16 Hours	5 Days	4 Days		
Ribbon Edge		3 Days			
8000					
PSX	4.5 Hours	3 Days	NA		
EMS		3 Days			
RAMP		2 Hours or	1 Day		
		2 Days			
AS	1 Hour	6 Days			
G5	1 Hour	2.5 Days			
EdgeMarc	2 Hours	4 Days			
Ribbon	1 Hour	4 Days			
Protect					
PON	2 Hours				2 Hours
DRaaS	1 Hour	16 Minutes		1 Hour	
Tactical Edge	35 Minutes	2 Days	2 Days		





# SBC Core and EMS Sales and Sales Engineer Professional Certification

# SBCC200 - SBC Core and EMS Sales and Sales Engineer Professional

# **Course Description:**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position Engineer and sell the SBC Core product.

Course Length and Delivery Method: 16 Hours Self-Paced

# **Intended Audience:**

Channel Partners working toward SBC Core Sales and Sales Engineering Certification.

# **Key Topics:**

- SBC 5000 Series Sales
- SBC 7000 Sales
- SBC 5000/SWe Implementation
- SBC 5000 SWe Sales
- SBC 5000 Video Primer
- SBC 5400 Hardware Overview
- SBC 5400 Configuration and Interface Options
- SBC 5400 Licensing
- SBC 5400 Sales
- EMS Overview
- SBC 5000 Series Deployment Considerations Part 1
- SBC 5000 Series Deployment Considerations Part 2
- SBC 5000 Series Deployment Considerations Part 3
- SBC 5000 Series Licensing Structure
- SBC 5000 Series Product Architecture
- SBC 5000 Security and Best Practices Overview Part 1
- SBC 5000 Security and Best Practices Overview Part 2
- SBC 5000 Security and Best Practices Overview Part 3
- SBC 5000 Series Video Capabilities
- SBNC 7000 Overview and Hardware Architecture
- SBC Opportunity #1: Providing SIP trunks to Enterprises
- SBC Opportunity #1: SIP Trunks in Enterprises
- SBC Opportunity #2: Enablement of Hosted Services
- SBC Opportunity #2: Microsoft Lync and PBX Interworking
- SBC Opportunity #3: The Over the Top Service Providers
- SBC Opportunity #4: Wholesaler Peering Enablement
- SBC Opportunity #5: SBC Managed Services
- SBC SWe Licensing Structure
- SBC 5000 SIP Message Manipulation (SMM)
- Where to sell the SBC 5X00 Series in the Service Provider Market
- Where to Sell the SBC Solution Suite in The Enterprise Market
- Ribbon Insight Element Management System





# **SBC Core Support Professional Certification**

# **SBC Core Support Blended Learning Course**

## **Curriculum Description:**

This is a Blended Learning Course. This Blended Learning training has two components which is made up of both Self-Pace and Leader-Led content. The following two courses make up this Blended Learning training:

- SBCC11 SBC Core Support Technical Prerequisites Self-Paced 2 days
- SBCC20 SBC Core Support Practical Exercises Leader-Led 3 days

You <u>must</u> complete the SBCC11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCC20 Leader-Led course.

This Blended Learning Course is designed for Partners tasked with implementing converged voice and data solutions using session border controllers in their network.

Below, you will find the course syllabi for the two courses that make up this Blended Learning training.

# **Part 1:** SBCC11 – SBC Core Support Technical Prerequisites

### **Course Description:**

The purpose of this course is to familiarize the student with the Ribbon SBC Core technologies and associated product line. Basic SBC Concepts as well as the operations, administration, fault, maintenance, and provisioning will be discussed.

You <u>must</u> complete the SBCC11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCC20 Leader-Led course.

#### **Intended Audience:**

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management, and support of Ribbon VoIP equipment

#### **Key Topics:**

- Introduction
- SBC Platforms
- Management Interfaces
- Software Architecture and Call Flows
- Transcoding
- Security and Traffic Policing
- Fault Management
- · Performance Monitoring

#### **Objectives:**

Upon completion of this course, a student will be able to:

- Understand the Solution Architecture and Components
- Understand the SBC Hardware, Connectivity, Redundancy, and Failover





- · Describe the SBC Interfaces
- Understand Architecture, Routing, and Call Flow
- Understand the role of the PSP for Transcoding
- Understand the role of the ACL in security
- Understand Faults management and troubleshooting tools
- Understand how to monitor and view SBC Performance

Prerequisite Skills: None

**Prerequisite Courses: None** 

Course Length and Delivery Method: 2 Days - Self-Pace

# Part 2: SBCC20 – SBC Core Support Practical Exercises

# **Course Description:**

The purpose of this course is to reinforce the content you learn in the SBCC11 - SBC Core Support Technical Prerequisites course by immersing you in hands-on lab exercises.

You <u>must</u> complete the SBCC11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCC20 Leader-Led course.

#### **Intended Audience:**

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management and support of Ribbon VoIP equipment

# **Key Topics:**

- Management Access and Navigation
- Basic Provisioning and verification
- Route Provisioning and verification
- · Packet Service Profiles Provisioning and verification
- Call Trace
- Packet Capture
- Alarms/Live Monitor
- SBC CLI
- Security/Access Control List
- Additional Configurations
- Troubleshooting
- System Backup
- Exploring the SBC Configuration off-board
- Debugging and Gathering Information

# **Objectives:**

Upon completion of this course, a student will be able to:

- Use and navigate the SBC EMA, CLI, and the Insight EMS SBC Manager.
- Perform basic provisioning on the SBC to connect to a SIP Peer.
- Perform route provisioning to route calls though the SBC.
- Provision the SBC with Packet Service Profiles to transcoding of calls.





- Access Call Detail Records and analyze it for specific information.
- Create Call Trace filters and analyze the captures to understand the call flows.
- Implement Packet Capture capabilities and collect files for viewing.
- Navigate and use the SBC EMA interface to understand alarms.
- Using the SBC CLI interface practice issuing commands to understand the syntax.
- Create an Access Control List (ACL) and test to see that it is working properly.
- Provision and test a SIP trunk connection.
- Troubleshoot call completion failures.
- Perform a SBC System backup and download it.
- Download a SBC Configuration file for off-board viewing.
- Understand debugging techniques and tools that you can use for to collect system information.

Prerequisite Skills: None

Prerequisite Courses: SBCC11 - SBC Core Support Technical

Prerequisites

Course Length and Delivery Method: 3 Days - Leader-Led





# SBC Core Implementation Professional Certification

# SBCC25 - SBC Core Implementation Class

# **Course Description:**

This course provides training and tools to channel partners who will be deploying Ribbon SBC 5K Hardware/Software Edition solutions on their own. During this hands-on workshop, students will use Ribbon documentation to perform a "basic" deployment on SBCs in a Ribbon lab in accordance with the Service Description.

All the Key topics required for a successful SBC deployment to your customers include Network design, site preparation, SBC configuration, licensing, testing, and software upgrades. End of the class practical and theoretical exam are required for assessment purposes. To achieve certification, you must pass the theoretical exam with a score of 80% or higher.

Course Length and Delivery Method: 4 - Days Instructor Led

#### **Intended Audience:**

System engineers, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the implementation, management, and support of the Ribbon SBC Core product.

# **Course Objectives:**

Upon completion of this course, a student will be able to:

- Successfully deploy an SBC 5K/SWe at a customer site without assistance from Ribbon
- Gather relevant information for the deployment.
- Use the Ribbon customer questionnaire to document the deployment.
- Install and deploy a customer using information from the questionnaire and any applicable Ribbon documentation of procedures (application notes) for a given scenario.
- Successfully install software and perform a software upgrade (with the aid of documentation)
- Add SBC configurations for a deployment.
- Verify and test configurations using the Ribbon Verification Test Plan as a guideline
- · Perform basic troubleshooting.
- Interpret alarms for EMA.
- CDR analysis using "toolbox."
- Wireshark (Tshark from SBC EMA/Troubleshooting tab)
- Call trace/packed trace with EMA and LX Tool

# **Key Topics:**

- Network Design and Preparation
- · Lab Details and Tour
- Installation of equipment at customer location discussion
- VM (SWe) installation
- SBC software (SWe) installation
- SBC Configuration
- Call testing
- Debugging
- Test Plan Execution
- · Post Implementation Topics





• SBC Software Upgrades

# Prerequisites:

SBCC20 or SBCC21- SBC Core Support Class





# SBC Edge and EMS Sales and Sales Engineering Professional Certification

# SBCE200 - SBC Edge and EMS Sales and Sales Engineer Professional

# **Course Description:**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position, sell, and engineer the SBC Edge product.

Course Length and Delivery Method: 4 Hours Self-Paced

# **Intended Audience:**

Channel Partners working toward SBC EDGE sales and sales engineering certification.

# **Key Topics:**

- Product Overview
- Support Tools and Documentation
- Hardware Architecture
- Deployment Scenarios
- System Setup and User Interface
- SWe Lite
- Selling the SBC Edge
- Where to Sell the Ribbon SBC Solutions Suite in the Enterprise Market
- SBC Opportunity #1: SIP Trunks in Enterprises
- SBC 1000 and SBC 2000 Licensing Structure
- SBC Edge Logs





# SBC Edge Implementation & Support Professional Certification

**SBC Edge Support and Implementation Blended Learning Course** 

## **Curriculum Description:**

This is a Blended Learning Course. This Blended Learning training has two components which is made up of both Self-Pace and Leader-Led content. The following two courses make up this Blended Learning training:

- SBCE11 SBC Edge Support and Implementation Technical Prerequisites
  Self-Paced 2 days
- SBCE20 SBC Edge Support and Implementation Practical Exercises -Leader-Led - 2 days

You <u>must</u> complete the SBCE11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCE20 Leader-Led course.

This Blended Learning Course provides Partners with a solid competency in the SBC 1000, SBC 2000 and SWe Lite. It dives into the technical challenges in enterprise voice, Microsoft and BroadSoft environments, and will highlight the importance of highly scalable and flexible Unified Communications devices to meet the needs of today's advanced VoIP deployments, both in the Enterprise as well as Service Provider environments.

Below, you will find the course syllabi for the two courses that make up this Blended Learning training.

# **Part 1:** SBCE11 – SBC Edge Support and Implementation Technical Prerequisites

# **Course Description:**

The purpose of this course is to build equipment implementation planning, configuration and troubleshooting skills required for all deployments such as ISDN trunks, SIP Trunks and integration into Microsoft and BroadSoft environments. With an emphasis on understanding call flows through the devices, different call routing scenarios are presented and configured, including Active Directory and Survivable Branch Appliance integration. At the end of the class, a theoretical exam will be taken for assessment purposes. To achieve certification and take the follow-on course SBCE20, you must pass the practical exam with a score of 100%.

You <u>must</u> complete the SBCE11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCE20 Leader-Led course.

# **Intended Audience:**

System engineers, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the implementation, management, and support of Ribbon VoIP equipment within enterprise VoIP and Microsoft UC environments.

#### **Key Topics:**

- Introduction
- Support Tools and Documentation





- Hardware Architecture
- Deployment Scenarios
- Initial Setup
- User Interface
- Local SIP Provisioning
- Deployment Options
- Call Flow Architecture
- Planning, Support, and Troubleshooting
- Features and Enhancements
- Partner Deployment Options

# **Objectives**

Upon completion of this course, a student will be able to:

- Understand the SBC Edge Architecture and Components.
- Explain the features, interfaces, and cards for the SBC 1000 and SBC 2000, and describes the options for the Application Solution Module.
- Describe the different deployment scenarios for the SBC Edge, including connecting with legacy PBXs and/or Skype for Business and/or Teams
- Understand the process on how to install and login into the SBC Edge device for initial setup.
- Understand the SBC Edge Web Interface and how to use it to configure and manage different functionality.
- Describe the process to provision the SBC Edge to support SIP call processing.
- Understand the different deployment options and scenarios
- Understand call flow routing and transformation tables and how they affect call processing.
- Understand how to access and use relevant Support Tools and Documentation.
- Describe the different features supported by the SBC Edge.
- Understand how the SBC Edge is deployed for different Partner scenarios.

**Prerequisite Skills:** Microsoft Active Directory, Skype for Business / MS Teams competency and an understanding of PBX and IP telephony concepts such has ISDN, SIP, and CAS. Basic familiarity with Regular Expressions (Regex).

**Prerequisite Courses: None** 

Course Length and Delivery Method: 2 Days - Self-Pace

# **Part 2:** SBCE20 – SBC Edge Support and Implementation Practical Exercises

#### **Course Description:**

The purpose of this course is to reinforce the content you learn in the SBCE11 - SBC Edge Support Implementation Technical Prerequisites course by immersing you in hands-on lab exercises.

You <u>must</u> complete the SBCE11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the SBCE20 Leader-Led course.





### **Intended Audience:**

System engineers, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the implementation, management and support of Ribbon VoIP equipment within enterprise VoIP and Microsoft UC environments.

# **Key Topics:**

- Getting Connected, First Time Checks
- Local SIP Client Calls
- Provisioning SIP Trunks
- Provisioning ISDN PRI Trunks
- Reading Log Files with LX
- Call Forking
- Integrating Active Directory
- Preparing for the Practical Assessment

# **Objectives:**

Upon completion of this course, a student will be able to:

- Access the SBC Edge and verify its initial configuration.
- Define a local registrar for SIP endpoints and configure a signaling group with call routing to enable these endpoints to call each other.
- Build a SIP trunk to an "ITSP" and verify its operations.
- Establish an ISDN PRI trunk and manipulate call routing and transformation tables to control the how the call is processed.
- Open a log file using LX and analyze it to answer questions about the call that was captured and the configuration of the SBC Edge.
- Configure Call Forking so that an incoming call will ring multiple local clients and verify that it works as expected.
- Provision your SBC Edge to connect to an Active Directory server and replicate parts of its database to the SBC for use in call routing.
- Prepare your SBC Edge to ensure it is ready for you to use during the Practical Lab assessment.

**Prerequisite Skills:** Microsoft Active Directory, Skype for Business / MS Teams competency and an understanding of PBX and IP telephony concepts such has ISDN, SIP, and CAS. Basic familiarity with Regular Expressions (Regex).

**Prerequisite Courses:** SBCE11 – SBC Edge Support and Implementation Technical Prerequisites

Course Length and Delivery Method: 2 Days - Leader-Led





# **SBC SWe Lite and TEAMS Direct Routing Implementation Professional Certification**

# SBC SWe Lite and TEAMS Direct Routing Implementation Professional

# **Course Description:**

This course provides the Partner Support Engineer employee with knowledge necessary to implement the SBC SWe Lite and TEAMS Direct Routing in the Azure cloud.

Course Length and Delivery Method: 1 Hour Self-Paced

# **Intended Audience:**

Channel Partners deploying SBC SWe Lite in the Azure Cloud using the Quick Launch and setting up Teams Direct Routing

# **Objectives:**

- Explain the network architecture of a SWe Lite deployment in Azure
- Prepare Azure to deploy SWe Lite using Quick Launch
- Initiate Quick Launch and complete the steps for deploying SWe Lite
- Connect into the newly deployed SWe Lite instance
- Run the Easy Configuration Wizard for the first time to set up Teams
- DirectRouting a connection to an outside SIP Server

# **Prerequisites:**

SBC Edge Implementation and Support Certification





# **Ribbon Edge 8000 Implementation & Support Professional Certification**

# RE8K20 - Ribbon Edge 8000 Implementation and Support

# **Course Description:**

The purpose of this course is to provide you with the skills and knowledge to install and support the Ribbon Edge 8000.

Course Length and Delivery Method: 3 days Leader-Led

#### Intended Audience:

This course is designed for customers and partners who are responsible for installing and maintaining the Ribbon Edge 8000.

# **Key Topics:**

- Overview
- Software Architecture
- Hardware Architecture
- Initial Setup
- User Interfaces
- Licensing
- RAMP Integration
- SIP Provisioning (Local SIP Registrar)
- Analog Port Provisioning (PRI, FXS, and FXO)
- Call Flow Architecture
- Planning, Support, and Troubleshooting
- Operations and Maintenance

### **Objectives:**

- Describe the purpose of the Ribbon Edge 8000.
- Identify the different software architecture for the Ribbon Edge 8000.
- Identify the hardware architecture of the Ribbon Edge 8000.
- Understand and Perform the Initial Setup of the Ribbon Edge 8000.
- Understand and navigate the different user interfaces of the Ribbon Edge 8000.
- Understand the licensing requirements needed to support the Ribbon Edge 8000.
- Define the Ribbon Edge 8000 and RAMP interworking's.
- Provision the Ribbon Edge 8000 SBC SWe Edge to support SIP UA (local SIP Registrar).
- Provision the Ribbon Edge 8000 SBC SWe Edge to support Analog Ports (FXS/FXO).
- Understand and build Ribbon Edge 8000 SBC SWe Edge call flows.
- Identify the required planning and troubleshooting tools for use on the Ribbon Edge 8000 SBC SWe.
- Identify and perform different operational maintenance activities for the Ribbon Edge 8000 system.





# **PSX Sales and Sales Engineer Professional Certification**

# **PSX200 - PSX Sales and Sales Engineer Professional Course**

# **Course Description:**

This curriculum provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the PSX product.

Course Length and Delivery Method: 4 Hours Self-Paced

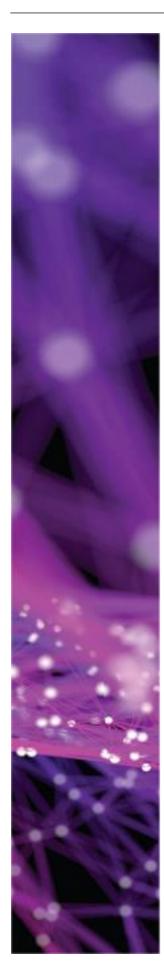
# **Intended Audience:**

Channel Partners working toward PSX Sales and Sales Engineering certification.

### **Key Topics:**

- Policy Solutions Positioning Training
- Selling the Policy Solution
- Where to sell Policy in the Enterprise Market
- Policy Enterprise Opportunity #1: Dial Plan
- Policy Enterprise Opportunity #2: Call Centers
- Policy Enterprise Opportunity #3: Call Centers
- Policy Product and Architecture
- Policy Deployment and Redundancy Models
- Policy Licensing Guidelines
- Internal Architecture and Call Processing Part 1 and 2
- Where to Sell the Policy in The Service Provider Market
- Policy Services Provider Opportunity #1 Consolidated Routing
- Policy Service Provider Opportunity #2: Number Portability
- Policy Service Provider Opportunity #3: Least Cost Routing





# **PSX Support Professional Certification**

# **PSX Support Blended Learning Course**

## **Curriculum Description:**

This is a Blended Learning Course. This Blended Learning training has two components which is made up of both Self-Pace and Leader-Led content. The following two courses make up this Blended Learning training:

- PSX11 PSX Support Technical Prerequisites Self-Paced 2 days
- PSX20 PSX Support Practical Exercises Leader-Led 2 days

You <u>must</u> complete the PSX11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the PSX20 Leader-Led course.

This Blended Learning Course is designed for PSX Call routing specialists who are tasked with how to provision the PSX Policy Server to perform call routing/translations.

Below, you will find the course syllabi for the two courses that make up this Blended Learning training.

# Part 1: PSX11 – PSX Support Technical Prerequisites

### **Course Description:**

The purpose of this course is to familiarize the student on PSX Call Routing in IP Environments. This course teaches how to provision the PSX Policy Server to perform call routing/translations for calls processed by an SBC. It teaches how to fill essential database tables on the PSX Policy Server implemented either as a standalone PSX or as an ePSX embedded within an SBC, based on the most common Ribbon applications.

You <u>must</u> complete the PSX11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the PSX20 Leader-Led course.

# **Intended Audience:**

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management and support of Ribbon VoIP equipment

### **Key Topics:**

- Architecture
- PSX Navigation
- Basic Simulated Call Trace Tools SSReq
- PSX IP (SIP) Trunk Group Setup
- Simulated Call Trace Tool (SSReg)
- Advanced Routing Techniques
- Announcements and Service Profile Editor
- Treatment Services
- Routing Services
- Enhanced Services
- Digit Manipulation
- Local Database Translation



Command Line Interface

# **Objectives:**

Upon completion of this course, a student will be able to:

- Describe what the PSX is and what it does
- Describe how the PSX processes a Policy Request
- Identify different PSX configurations
- Access and navigate the PSX Manager through Ribbon Insight
- Access the PSX documentation from the Online Library or the Ribbon Support Portal
- Provision the PSX database to support basic routing
- Access and use the SS Request tool from the PSX Manager to test routes provisioned
- Build a Trunk Group record
- Provision the PSX database using Advanced Routing techniques
- Understand the use of announcements and creation of scripts
- Configure and test Treatment Services to block or screen calls
- Provision and test Special Routing Services
- Create Digit Manipulation rules
- Translate numbers using the PSX database

Prerequisite Skills: None

**Prerequisite Courses: None** 

Course Length and Delivery Method: 2 Days - Self-Pace

# Part 2: PSX20 – PSX Support Practical Exercises

## **Course Description:**

The purpose of this course is to reinforce the content you learn in the PSX11 - PSX Support Technical Prerequisites course by immersing you in hands-on lab exercises.

You <u>must</u> complete the PSX11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the PSX20 Leader-Led course.

# **Intended Audience:**

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management and support of Ribbon VoIP equipment

### **Key Topics:**

- Basic routing
- Basic SSReq use
- Trunk Group provisioning
- Least Cost Routing
- TAR Routing
- Entity Based Routing
- Route Hopping
- Originating Entity Routing
- Off Net Routing
- Screening
- International Blocking





- Routing Services
- Digit Manipulation
- Local Database

# **Objectives:**

Upon completion of this course, a student will be able to:

- Create a Routing Label and a Standard Route to trunk group, gateway, and peer combination.
- Use the SSReg tool to validate the entities you built in the PSX.
- Create a trunk group and associate with a routing label and verify that routing is working correctly.
- Using the SSReq tool verify and troubleshoot the output of the Policy Response.
- Create a route label that uses Least Cost Routing and verify.
- · Create and test TAR routes.
- Create and test an entity based standard route.
- Create and test Route Hopping.
- Create and test 911/112 calls.
- Test the effects of the Routing Criteria and verify its relationship with the carrier selected while processing a call.
- Complete a Screening Exercise to analyze trunk group screen and trunk screening with an exception.
- Establish International Call Blocking.
- Establish Hifraud Country Blocking.
- Using Digit Manipulation manipulate a called Number based on DM Criteria's and rules.
- Provision the PSX to do number translations.

Prerequisite Skills: None

Prerequisite Courses: PSX11 - PSX Support Technical Prerequisites

Course Length and Delivery Method: 2 Days - Leader-Led





# **EMS Support & Implementation Professional Certification**

# **REMS16 - Partner EMS Support & Implementation Class**

# **Course Description:**

The object of this course is to provide the students with the knowledge and experience (hands-on labs will be available in each module) that they will need to install a standalone EMS, navigate the EMS, monitor the network, and perform daily or weekly tasks on the EMS. Students will learn how to perform baseline monitoring and maintenance tasks using the EMS as the managing tool. The EMS is mandatory in all Cloud SBC deployments.

Since there is no difference between the provisioning of a virtual EMS/SWe versus a physical device, the information provided in this course will be valid for monitoring, configuring, or provisioning both types of installations. End of class practical and theoretical exams are required for assessment purposes. To achieve certification, you must pass the practical exam with a score of 100% and the theoretical exam with a score of 80% or higher.

Course Length and Delivery Method: - 3 Day Instructor Led

#### **Target Audience:**

System engineers, Network Operations Center Tier 1 and 2 technicians, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the management, monitoring, and support of Ribbon equipment via the Ribbon Insight EMS

# **Course Objectives:**

Upon completion of this course, a student will be able to:

- Navigate the Insight EMS GUI and identify the proper application to use to perform task on the different Ribbon devices
- Create new users and groups, assigning security privileges, logins and passwords
- Monitor the individual devices or the network and to recognize when alarms indicate problems in the network; as well as what action to take to clear the alarm
- Create and read Call Detail Records and Trace Files to troubleshoot call problems
- Create and implement Data Collection Profiles, which in turn are used to run the performance reports that provide real-time and historical information as to the status of the network
- Install a Stand-Alone version of the EMS, PSX GUI package and On-Line Documentation
- · Register and discover Sonus Devices, add licenses to an EMS
- Perform daily and weekly routine maintenance, such as EMS status commands, backups and restores
- Monitor EMS processes
- Certification Exam

# **Key Topics:**

# **EMS-ISC - EMS Basics**

- Using an EMS, you will prove that you can:
- · Create Users and Roles
- Build a Fault Manager View and display that view using the Real-Time tab.





- Access the Advanced Fault Manager tabs and answer some questions
- Build and display a Performance Report
- Build a Call History Report
- View a Call Trace

# EMS-ISC - EMS SWe Installation Workshop

- Using VMWare, you will install a SA EMS, PSX GUI Package and On-Line Documentation
- Once the EMS is installed you will register and discover 2 Sonus devices: A PSX and SBC Core device
- Following the registration, you will add 2 licenses: Calls Per Second and CLI
- · You will also test access to the EMS CLI

### **EMS-ISC - EMS for SBC Core Devices**

- Produce an Inventory Report
- Backup and Restore a single SBC or a group of SBC devices
- Download backup files to your PC
- Upgrade an SBC Core device

# EMS-ISC - EMS for SBC Edge Devices

- Backup and Restore a single SBC or a group of SBC devices
- Download backup files to your PC
- Create configuration files from a backup
- Provision new SBCs from an existing configuration file
- Upgrade one or more 1Ks or 2Ks at the same time

# **EMS-ISC - EMS Routine Maintenance**

- Perform daily and weekly routine maintenance tasks
- Starting and Stopping the EMS
- Backing up an EMS
- Starting and Stopping the EMS Database and Listener
- Starting and Stopping the Fault Manger
- Create a snapshot of your EMS to send to Ribbon Support

# **EMS-ISC – EMS Support**

- Locate important EMS directories and log files
- Verify versions installed EMS package
- What would you do? Troubleshooting Scenarios

# Prerequisites - None





# **RAMP Support Professional Certification**

If you have previous experience and/or certification with the Insight EMS, you can achieve the RAMP Support Professional Certification by taking the:

- RAMP10 Ribbon Application Management Platform Overview 2 Hours Self-Pace
- RAMP Support Professional Certification Exam

Else, you will need to take:

- RAMP15 Ribbon Application Management Platform Basics Class 2 Days Leader-Led
- RAMP Support Professional Certification Exam

# RAMP10 — Ribbon Application Management Platform Overview

# **Course Description:**

The objective of this course is to provide the students with the knowledge and experience that they will need to navigate, monitor, and perform daily or weekly tasks on the Ribbon Application Management Platform (RAMP) solution. Additional notes, demos and explanations are covered to ensure the student's understanding of the topics

# **Intended Audience:**

Operators, Technicians, and Support Personnel who will be supporting RAMP solution.

# **Key Topics:**

- Introduction to the RAMP solution
- · Overview of the RAMP solution
- RAMP Web Interface
- · Provisioning of RAMP Objects
- Device Management
- RAMP Licensing
- Fault Management
- · RAMP System Operations and Reporting
- Provisioning, Backup, Restore and Upgrade Activities
- RAMP System Administration
- CDRs and Log Management
- Ribbon Customer Support Portal

# **Objectives:**

Upon completion of this course, a student will be able to:

- Describe the role of Ribbon Application Management Platform (RAMP) in your network
- Identify how to access and navigate the RAMP interface
- Operate the GUI to create different RAMP objects
- Demonstrate the process to add nodes and clusters to RAMP
- List the main features of Node-locked and NWDL licensing and verify licensing information
- Explain the main features of RAMP's Fault Management category
- Practice the different reporting capabilities of RAMP
- Manage provisioning, backup, restore and upgrade activities





- Assess the main RAMP settings
- Evaluate the RAMP Call Trace Tool for SBC Core devices
- Test the log in procedure to access Ribbon Documentation

**Prerequisite Skills:** Basic knowledge of the functions of the different devices in the Ribbon product suite.

Prerequisite Courses: None

Course Length and Delivery Method: 2 Hours - Self-Pace

# RAMP15 — Ribbon Application Management Platform

### **Course Description:**

The objective of this course is to provide the students with the knowledge and experience that they will need to navigate the RAMP, monitor the network, and perform daily or weekly tasks on RAMP, PSX and SBC Edge and Core product lines. Students will learn how to perform baseline monitoring and maintenance tasks using the RAMP as the managing tool.

### **Intended Audience:**

System engineers, Network Operations Center Tier 1 and 2 technicians, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the management, monitoring, and support of Ribbon equipment via the RAMP.

# **Key Topics:**

- Login and RAMP Administration
- Users, Roles, User Groups, Roles and Tenants
- Fault Management
- Advanced Fault Management
- · Performance Management
- Accounting SBC 5000/7000
- Call Trace SBC 5000/7000 and PSX
- Backup and Restore SBC 5000/7000 and SBC 1000/2000
- Network Provisioning
- Device Registration and Access
- Authentication and Authorization

# **Objectives:**

MUpon completion of this course, a student will be able to:

- Navigate the RAMP GUI and identify the proper application to use to perform tasks on different Ribbon devices
- Create new users, user groups, roles, and tenants, assigning security privileges, logins, and passwords
- Register and monitor individual devices
- Monitor the network, and to recognize problems in the network using alarms as well as what action to take to clear the alarm
- Perform routine maintenance, such as backup and restore activities, on the PSX and SBC suites
- Create and read Call Detail Records and Trace Files to troubleshoot call problems
- Create and implement Collection/Export Profiles, which in turn are used to run performance reports that provide real-time and historical information regarding the status of the network
- Configure RAMP to run only the software versions required by network devices and understand how to enable/disable them as required.





**Prerequisite Skills:** Basic knowledge of the functions of the different devices in the Ribbon product suite.

Prerequisite Courses: None

Course Length and Delivery Method: 2 Day - Leader-Led





# **RAMP Implementation Professional Certification**

# **RAMP16 — RAMP Implementation**

# **Course Description:**

The purpose of this course is to gain the skills required to install RAMP on VMware manually using assembled OVA and configuration .iso files.

### **Intended Audience:**

This course is designed for people who are responsible for deploying RAMP.

# **Key Topics:**

- CentOS Linux server build
- RAMP Deployment via OVA
- RAMP Backup and Restore

# **Objectives:**

- Understand the requirements to install RAMP on VMware.
- Install a RAMP SWe on a VMware host manually via OVA.
  - o Deploy CentOS 8 stream to support the deployment
  - o Gather the required files needed
  - o Configure the files needed
  - o Install RAMP onto VMware Manually
- Backup and Restore a RAMP configuration
- Adding Licenses

Prerequisite Skills: Linux administration File transfer VI editor

# **Prerequisite Courses:**

Achieved the Ramp Support Professional Certification

# **Course Length:**

1 Day - Leader Led with hands-on exercises





# AS Sales and Sales Engineer Professional Certification

# **Course Description:**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the AS "Application Server" product.

Course Length and Delivery Method: 1 Hour Self-Paced

# **Intended Audience:**

Channel Partners working toward AS Sales and Sales Engineer Certification.

# AS200 – AS Sales and Sales Engineer Professional Key Topics:

- AS Hybrid
- AS On-Premises
- AS Private Cloud
- AS Provisioning Portal
- AS Public Cloud





# **AS Support Professional Certification**

## **Curriculum Description:**

This curriculum provides the Partner Support employee with the working knowledge to support the AS "Application Server" product.

### **Intended Audience:**

Channel Partners working toward AS Support Certification.

# AS11 — Communications Application Server (AS) — Standalone Overview

# **Course Description:**

This course provides a technical overview of the Application Server – Standalone configuration.

# **Key Topics:**

- Identify the AS subscriber services and applications
- Describe the OAMP functions of the System Manager
- Describe the purpose of the Provisioning Manager
- Describe the AS call processing components
- Identify AS Media and voicemail servers
- Learn how to access the AS GUI interfaces
- Describe the purpose of the Session Border Controller

# **Objectives:**

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

- Identify the types of subscriber services and key concepts provided by the Application Server – Standalone configuration
- Describe the System Manager and the GUI used for the system configuration, fault, and performance management of the Application Server – Standalone configuration
- Describe how the Provisioning Manager is responsible for the creation and customization of customer-unique data in the Application Server – Standalone configuration
- Describe the purpose of each of the Application Server Standalone call processing components
- Describe the Media Application Server and the GUI used for the configuration, fault, and performance management of the MAS in the Application Server – Standalone configuration
- Describe the Session Border Controller in the Application Server Standalone configuration
- Describe each process used for accessing the Application Server applications and why each access process is used

**Prerequisite Skills: None** 

**Prerequisite Courses:** 

None

Course Length and Delivery Method: 1 Day - Self-Paced





# AS30 — Communications Application Server (AS) - Standalone Accounting

## **Course Description:**

This course teaches students how to manage and interpret the Internet Protocol Detail Record (IPDR) for Communication Application Server - Standalone.

### **Intended Audience:**

Managers, administrators, and anyone responsible for the management of accounting information in the Communication Application Server - Standalone.

# **Key Topics:**

- Introduction to the Accounting Manager
- Accounting Manager
- Internet Protocol Detail Record (IPDR) interpretation

## Objectives:

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

- Describe accounting terms and concepts in the Communication Application Server- Standalone configuration
- Describe how to configure the Accounting Manager and access the Accounting Manager files
- Interpret the Internet Protocol Detail Record (IPDR) accounting files and records generated in various call flow scenarios

# **Prerequisite Skills:**

None

# **Prerequisite Courses:**

AS11 - Communication Application Server (AS) - Standalone Overview

# **Course Length and Delivery Method:**

1 Day - Self-Paced





# AS21 — Communications Application Server (AS) - Standalone Administration, Maintenance, Provisioning and Fault Management Class

## **Course Description:**

The purpose of this course is to teach students Provisioning, Administration, Maintenance, and Fault Management tasks for the AS Application Server Standalone platform.

# **Key Topics:**

- Element Manager Access
- Network Element Administration
- Managing Domains
- Managing Telephony Routes
- · Managing Users
- · Provisioning a SIP Gateway
- Routine Maintenance
- · Fault Management

# **Objectives:**

- Upon completion of this course, you will be able to:
- Understand the element managers by performing navigational tasks
- Administer the element managers by building user accounts
- Understand the relationship between domains and subdomains
- Describe how telephony routes are used to perform translations
- Use the provisioning client to manage subscribers
- Manage gateway service nodes and trunks
- · Perform network maintenance activities
- Maintain the network elements using the fault management systems

# **Prerequisite Skills:**

None

# **Prerequisite Courses:**

AS11- Application Server (AS) - Standalone Overview

Course Length and Delivery Method: 4 Days - Leader Led





# **G5 Sales and Sales Engineer Professional Certification**

# **Course Description:**

This curriculum provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the G5 product.

Course Length and Delivery Method: 4 Minutes Self-Paced

### Intended Audience:

Channel Partners working toward G5 Sales and Sales Engineer Certification.

# **G5200- G5 Sales Engineer Professional**

**Key Topics:** 

- Introduction
- Media Gateway Portfolio
- Applications





# **G5 Support Professional Certification**

# **Curriculum Description:**

This curriculum provides the Partner Support employee with the working knowledge to support the G5 product.

Course Length and Delivery Method: 1/2- Day Self-paced and 2-Day Instructor Led

## Intended Audience:

Channel Partners working toward G5 Support Certification.

# G515 - G5- Access Line Gateway Operations, Maintenance, Fault Management Class

# **Course Description:**

This 2- Day Leader Led G515 Line Access Gateway course provides the skills required to deploy the G5 Line Access Gateway by understanding the physical connections and interfaces. It also will discuss how the features of the G5 Line Access Gateway will fit in the network.

#### **Intended Audience:**

This course provides a basic understanding of the Design, Architecture, Features and Capabilities of the G5 Line Access Gateway.

# **Objectives:**

- Understand the benefits of deploying the G5 Line Access Gateway
- Understand the physical connections and interfaces on the system
- Understand the features of the G5 Line Access Gateway and how it fits in the network
- Understand how to connect a PC to the G5 Line Access Gateway
- Understand how to access the TL1 Interface
- · Understand how to access the Web Interface
- Learn how to do basic provisioning on the G5 Line Access Gateway
- Learn how to monitor and troubleshoot the G5 Line Access Gateway

### **Prerequisite Skills:**

Basic Understanding of TDM or IP Theory. Basic Unix or Linux commands.

# **Prerequisite Courses:**

None

Course Length and Delivery Method: 2 Days - Leader-led

### G5SE10 - G5 SIP ESA Overview

#### **Course Description:**

The G5SE10 SIP ESA is a half-day, Self-Paced, G5 SIP ESA course that is geared toward Service Personnel, Administrators and Maintenance personnel who require an understanding of the G5 SIP ESA.

### **Intended Audience:**

This course provides a basic understanding of the GENBAND G5 SIP ESA.





# **Key Topics:**

- Identify the differences between G5 SIP ESA and G5 SIP Monitor
- Access and log into the G5 SIP GENBAND Compact Sever
- Navigate the G5 SIP ESA View functional areas
- Navigate the G5 SIP ESA Configure functional areas
- Navigate the G5 SIP ESA Update functional areas
- Navigate the G5 SIP ESA Support functional areas

# **Objectives:**

- · Identify the purpose and modes of the G5 SIP ESA
- Identify the Hardware components of the GENBAND Compact Server
- Access the G5 SIP ESA GUI and CLI
- Identify the key G5 SIP ESA GUI commands
- · Basic Provisioning
- Software Update
- · Backup and Restore

# **Prerequisite Skills:**

None

# **Prerequisite Courses:**

None

Course Length and Delivery Method: 1/2 Day - Self-Paced





# **EdgeMarc and EdgeView Sales and Sales Engineer Professional Certification**

#### **Course Description:**

This Course provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the EdgeMarc and EdgeView product.

Course Length and Delivery Method: 2 Hour Self-Paced

#### **Intended Audience**:

Channel Partners working toward EdgeMarc and EdgeView Sales and Sales Engineer Certification.

### EMV200 - EdgeMarc and EdgeView Sales and Sales Engineer Professional

#### **Objectives**

Upon completion of this course, a student will be able to:

- Understand the Network Edge Orchestration.
- Understand hardware and software strategy.
- Deploy common architectures.
- · Locate available training and support.
- · Identify sales opportunities.
- Quote and purchase Edgeview and EdgeMarc products.
- Setup the System and User Interface
- Identify available logs and captures.





# **EdgeMarc and EdgeView Support & Implementation Professional Certification**

EdgeMarc & EdgeView Implementation and Support Blended Learning Course

#### **Curriculum Description:**

This is a Blended Learning Course. This Blended Learning training has two components which is made up of both Self-Pace and Leader-Led content. The following two courses make up this Blended Learning training:

- EMV11 EdgeMarc & EdgeView Implementation and Support Technical Prerequisites – Self-Paced – 2 days
- EMV20 EdgeMarc & EdgeView Implementation and Support Practical Exercises - Leader-Led – 2 days

You <u>must</u> complete the EMV11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the EMV20 Leader-Led course.

This Blended Learning Course is designed for Customers tasked with implementing converged voice and data solutions using session border controllers in their network.

Below, you will find the course syllabi for the two courses that make up this Blended Learning training.

## Part 1: EMV11 – EdgeMarc & EdgeView Implementation and Support Technical Prerequisites

#### **Course Description:**

The purpose of this course is to familiarize the student with the Ribbon EdgeMarc and EdgeView products, their interfaces, and basic functionality as well as the operations, administration, fault, maintenance and provisioning will be discussed.

You <u>must</u> complete the EMV11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the EMV20 Leader-Led course.

#### **Intended Audience:**

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management and support of the Ribbon EdgeMarc and EdgeView products.

#### **Key Topics:**

- Overview of EdgeMarc (EM) and EdgeView (EV) Product line
- EdgeMarc installation and core configuration process
- EdgeMarc Web Interface and configure key functionality
- EdgeMarc Management tasks
- EdgeMarc Advanced Management tasks
- EdgeView installation and core configuration process
- EdgeMarc Configuration using EdgeView
- EdgeView Bulk Management





- Zero Touch Provisioning
- EdgeMarc Advanced Topics

#### **Objectives:**

Upon completion of this course, a student will be able to:

- Introduction to EdgeMarc (EM) and EdgeView (EV) Products line.
- Understand the EdgeMarc Installation and core configuration process.
- Understand the EdgeMarc Web Interface and how to use it to configure different functionality.
- Identify the different EdgeMarc basic management tasks
- Identify the different EdgeMarc advanced management tasks
- Understand the EdgeView Installation and core configuration process.
- Understand how to manage EdgeMarc devices using the EdgeView.
- Understand how to do bulk actions on EdgeMarcs using the EdgeView.
- Understand the Zero Touch Provisioning (ZTP) process.
- Identify different EdgeMarc configuration and deployment scenarios.

Prerequisite Skills: None

Prerequisite Courses: None

Course Length and Delivery Method: 2 Days - Self-Pace

## Part 2: EMV20 – EdgeMarc & EdgeView Implementation and Support Practical Exercises

#### **Course Description:**

The purpose of this course is to reinforce the content you learn in the EMV11 - EdgeMarc & EdgeView Implementation and Support Technical Prerequisites course by immersing you in hands-on lab exercises.

You <u>must</u> complete the EMV11 prerequisite Self-Pace course and pass the theoretical exam with a score of 80% or higher before you can enroll and attend the EMV20 Leader-Led course.

#### Intended Audience:

System engineers, consultants, and integrators, including Channel Partners working toward technical certification, who are responsible for the implementation, management and support of Ribbon VoIP equipment

#### **Key Topics:**

- EdgeMarc Initial Configuration
- How to Login to the EdgeMarc
- EdgeMarc WAN Failover Configuration
- How to Backup/ Restore EdgeMarc
- Securing the EdgeMarc
- How to Make a Simple SIP Call In a Hosted Environment
- Configuring Class of Service on an EdgeMarc
- Reading Basic Log Debug
- · Registering an EdgeMarc to EdgeView
- Logging In to EdgeView





- SD-WAN Configuration
- How to Backup/ Restore the EdgeMarc from EdgeView
- EdgeMarc Zero Touch Provisioning (ZTP)

#### Objectives:

Upon completion of this course, a student will be able to:

- Perform an Initial Configuration for the EdgeMarc.
- Login to the EdgeMarc from a Web browser, navigate the Configuration Menu, and identify the components that need to be configured after an initial configuration.
- Configure the EdgeMarc's WAN interfaces for Failover supporting Voice and Data.
- Perform a backup and restore a configuration file on an EdgeMarc.
- Secure an EdgeMarc and allow it to be accessed remotely.
- Configure the EdgeMarc to support simple SIP calls.
- Provision the Traffic Shaper class of service features on an EdgeMarc.
- Learn how to perform EdgeMarc basic log debug.
- Register an EdgeMarc to EdgeView.
- Login to an EdgeView and navigate through its Web user Interface.
- Configure the EdgeMarc to support SD-WAN.
- Backup and restore a configuration file on an EdgeMarc from the saved configuration file on the EdgeView.
- Perform a Zero Touch Provisioning configuration on an EdgeMarc.

Prerequisite Skills: None

**Prerequisite Courses:** EMV11 – EdgeMarc & EdgeView Implementation and Support Technical Prerequisites

Course Length and Delivery Method: 2 Days - Leader-Led





# **Ribbon Analytics Sales and Sales Engineer Professional Certification**

#### **Course Description**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the Ribbon Analytics product.

Course Length and Delivery Method: 1- Hour Self-Paced

#### **Intended Audience**:

Channel Partners working toward Ribbon Analytics Sales and Sales Engineer Certification.

### **RP200- Ribbon Analytics Sales and Sales Engineer Professional Objectives**

Upon completion of this course, a student will be able to:

- Describe the Analytics platform and architecture.
- Describe the differences between Static, Dynamic and ML.
- Determine Security Landscapes.
- Architect the Sale
- Describe the Applications.
- Understand what to lead with in a sale.
- Identify Use Cases.





## **Ribbon Analytics Support Professional Certification**

#### **Curriculum Description**

This curriculum provides the Partner Support employee with the working knowledge to support the Ribbon Analytics product.

Course Length and Delivery Method: 4- Days, Leader Led

#### **Intended Audience:**

Channel Partners working toward Ribbon Analytics Support Certification.

#### **RP15- Ribbon Analytics Basics Class**

#### **Key Topics:**

- Ribbon Analytics Overview and Purpose
- Software and Hardware Architecture and Resiliency
- · Visual and Dashboard Management
- Device and System Administration
- Creating Dashboard Reports and Network Ladder Diagrams
- Creating and Managing Visuals and KPI Monitors
- Security Applications, and Managing Incident Mitigations

#### Objectives:

Upon completion of this course, a student will be able to:

- Understand the Platform hardware and software
- Describe the Platform Resiliency Characteristics
- Access and Navigate the Web Interface
- Understand and manage supported Devics
- Understand Userid and Role Management
- Create Ladder Diagrams
- Manage Visuals, Dashboards, Reports, and Alerting Actions
- Customize Dashboards and Visuals
- Create and Manage KPI Monitors
- Manage Incidents, Events, and Mitigations
- Create and Manage Incident Types and Enforcement Profiles
- Understand the NetProtect Security Application
- Manage the TDoSProtect and RoboProtect Security Applications

Prerequisite: None

Course Length and Delivery Method: 2- Days Leader Led

#### RP26- Ribbon Analytics Advanced Class

#### **Key Topics:**

- Advanced Chart and Dashboard Tools
- Derived Fields and Custom Metrics
- Upgrades, Add-Ons, Package Management, and Troubleshooting
- Fraud and Incident Detectors
- Creating and Managing Data Sources
- Data Enrichment





#### **Objectives:**

Upon completion of this course, a student will be able to:

- Customize Chart Data with Filters, Sort and Limit, and Axes Labels
- Create and Manage Dashboard Reports
- Perform CDR searches and Analyze Specific Call Information
- Create Derived Fields and Custom Metrics in Customized Visuals
- Work with Software Packages and Add-Ons
- Identify troubleshooting tools on the Ribbon Analytics platform
- Describe the FraudProtect Security Applications
- Create and Manage KPI Sets, Incident Types, and Incident Detectors
- Create and Manage and Data Sources
- Understand the Data Enrichment Feature

Prerequisite: RP15 Ribbon Analytics Basics

Course Length and Delivery Method: 2- Days Leader Led





### Packet Optical Network Sales and Sales Engineer Professional Certification

#### **Course Description:**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position and sell the Packet Optical Network products.

Course Length and Delivery Method: 2- Hour Self-Paced

#### **Intended Audience:**

Channel Partners working toward Packet Optical Network Sales and Sales Engineer Certification.

#### **Key Topics:**

- Apollo Optical Systems
- Neptune Packet Systems
- Network Management
- Light INSIGHT
- Cyber Security Suite
- Muse Networks and Services Applications
- Muse Framework
- Muse Networks and Services Applications
- Muse Framework





### **Packet Optical Networks Planner Professional** Certification

#### **Curriculum Description**

"Neptune Network Planner" and "Apollo Network Planner Courses" both lead to a Network Planner Professional Certification certificate. This certification is a mandatory requirement for Partner Users of the Muse Network Planner tool which is and available as part of the Ribbon Partner Program, allowing Ribbon Silver, Gold and Platinum tier partners to create custom IP Wave network configurations to optimally serve their customer's needs and to collaborate with Ribbon technical experts to optimize the detailed designs.

Course Length and Delivery Method: 2 Hours 10 mins, Self-pace

#### Intended Audience:

The courses are intended for Sales and Solution Engineers and Network Architects of Ribbon Authorized Silver, Gold and Platinum Partners who have the right to resell Ribbon's IPWave products.

#### **Apollo Network Planner course**

#### **Key Topics:**

- Network Topology creation
- · CIR/EIR bandwidth Requirements and Forecasting
- Protection and Restoration Requirements
- Optimization Goal Setting
- Power budget
- Service and Transmission Performance Determination
- Traffic Stress and Failure Condition Simulation
- Network Site Equipment Provisioning and Installation documentation,
- Power, Inventory ERP and Topology Reporting

#### **Objectives:**

Upon completion of this course, a student will be able to:

- Use the Network Planner to plan multi-node networks of Ribbon's Apollo product family.
- Create network topologies and model customer demand.
- Execute the multi-level optimization and simulation capabilities of the tool to map the required services, network interconnections and protection schemes to optical cables and service ports.
- Produce and export detailed bills of materials and card-level schematics of the required network elements which can form the basis for quotations from Ribbon.

Prerequisite: Certified IPWave Sales and Sales Engineering Professional

Course Length and Delivery Method: 1 hour 40 mins - Self-Pace





#### **Neptune Network Planner course**

#### **Key Topics:**

- Network Topology creation
- CIR/EIR bandwidth Requirements and Forecasting
- Protection and Restoration Requirements
- Optimization Goal Setting
- Power budget
- Service and Transmission Performance Determination
- Traffic Stress and Failure Condition Simulation
- · Network Site Equipment Provisioning and Installation documentation,
- Power, Inventory ERP and Topology Reporting

#### **Objectives:**

Upon completion of this course, a student will be able to:

- Use the Network Planner to plan multi-node networks of Ribbon's Neptune product family.
- Create network topologies and model customer demand.
- Execute the multi-level optimization and simulation capabilities of the tool to map the required services, network interconnections and protection schemes to optical cables and service ports.
- Produce and export detailed bills of materials and card-level schematics of the required network elements which can form the basis for quotations from Ribbon.

Prerequisite: Certified IPWave Sales and Sales Engineering Professional

Course Length and Delivery Method: 30 mins - Self-Pace





### Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Sales and Sales Engineer Professional Certification

#### **Course Description:**

This curriculum provides the Partner Sales employee with the working knowledge to position and sell TEAMS DRaaS.

Course Length and Delivery Method: 1- Hour Self-Paced

#### **Intended Audience:**

Channel Partners.

#### Ribbon Connect Direct Routing as a Service Sales and Sales Engineer Professional

#### **Key Topics:**

- Common Terms
- Future of Microsoft Teams Calling.
- · Value of Microsoft Teams.
- Common Barriers
- Solution Overview
- SIP Trunking
- Existing PBX
- Portal Based Cloud Integration Service
- · Native Calling
- Teams Offer Structure
- Branding
- Consumption Model
- End Customer Trials
- Competitive Analysis
- Creating Indirect Partners
- Partner Ordering Process
- Creating and managing a Customer





### Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Technical Onboarding Professional Certification

#### **Course Description:**

This Course provides the Partner Support employee with the working skills to onboard Partners and Customers for TEAMS DRaaS.

Course Length and Delivery Method: 1- Hour Self-Paced

#### **Intended Audience:**

Channel Partners.

#### Ribbon Connect Direct Routing as a Service Technical Onboarding Professional

#### **Key Topics:**

- · Ribbon Connect Overview
- Ribbon Connect Users and Accounts
- Ribbon Connect Admin Portal
- Creating a new Portal
- Creating a new Customer
- Changing the Subscriptions for a Customer
- Deleting a customer
- Troubleshooting
- Open a Support Ticket





### Ribbon Connect for Microsoft TEAMS Direct Routing as a Service Customer Support Professional Certification

#### **Course Description:**

This course provides the Partner Support employee with the working skills to support TEAMS DRaaS.

Course Length and Delivery Method: 1- Hour Self-Paced

#### **Intended Audience**:

Channel Partners.

## Ribbon Connect Direct Routing as a Service Customer Support Professional

#### **Key Topics:**

- Ribbon Connect Direct Routing as a Service Requirements
- Ribbon Connect Platform in the Solution
- Navigation in the Ribbon Connect Platform
- Service Offering
- One Click Setup for Teams in the Ribbon Connect Platform.





# **Tactical Edge Sales and Sales Engineer Professional Certification**

## **TES200 - Ribbon Tactical Edge Solution Sales and Sales Engineer Professional**

#### **Course Description:**

This course provides the Partner Sales and Sales Engineer employee with the working knowledge to position, Engineer and sell the Tactical Edge Solution.

Course Length and Delivery Method: 35 Minutes Self-Paced

#### **Intended Audience:**

Channel Partners working toward the Tactical Edge Sales and Sales Engineering Certification.

#### **Key Topics**

- Customer Need
- What's in the Box
- Application Server
- Session Border Controller
- Tactical Core and Service Anywhere
- Competition
- · How is it Ordered?
- · How is it Deployed?
- Learn More
- EMS Overview





### **Tactical Edge Support Professional Certification**

## **TES20 - Tactical Edge Solution: Provisioning, Operations, Administration, and Fault Management**

#### **Course Description:**

This course provides the Channel Partners and Customers with the knowledge of how to Provision, Maintain, and Administer the Tactical Edge Solution. To achieve certification, you must pass the practical exam with a score of 100% and the theoretical exam with a score of 80% or higher.

Course Length and Delivery Method: 2 - Days - Leader Led

#### **Intended Audience:**

This course is designed for people interested in learning about the Provisioning and Management of the components that make up the Tactical Edge Solution.

#### **Key Topics**

- Tactical Edge Solution Overview
- Element Manager Administration
- Provision the Application Server Services
- Manage Application Server Subscribers
- Manage Session Border Controller Services and Provisioning
- Administer and Monitor the Application Server Environment
- Alarm Management and Troubleshooting

#### **Course Objectives:**

Upon completion of this course, a student will be able to:

- Describe the Solution Architecture and associated Components
- Manage the AS with the System Manager
- Manage AS/SBC Userids
- Manage AS Subscribers and Devices
- Provision AS Services, Service Profiles, and Service Sets
- Configure GENCom Softphones
- Manage SIP Hard Phones with the Endpoint Device Provisioning Tool
- Understand Translations and Routing
- Understand SBC Security Services
- Manage SBC Interfaces, Trunks, and Peers
- Monitor AS Servers and configure alarm thresholds
- Manage Alarms and Troubleshoot Faults





# **Tactical Edge Implementation Professional Certification**

#### **TES40 - Tactical Edge Solution Deployment**

#### **Course Description:**

The purpose of this course is to provide the Partner with the knowledge of how to deploy and configure the Tactical Edge Solution components to create a working system.

End of the class practical and theoretical exam are required for assessment purposes. To achieve certification, you must pass the theoretical exam with a score of 80% or higher.

Course Length and Delivery Method: 2 - Days - Leader Led

#### Intended Audience:

System engineers, consultants, and integrators, including members of Ribbon Channel Partners working toward technical accreditation, responsible for the implementation of the Tactical Edge Solution.

#### **Key Topics**

- Tactical Edge Solution Overview
- Deployment Builder Install
- Creating Configuration Files with the Deployment Builder
- Issuing the stacketl commands to Deploy the Solution
- Element Manager Access and Verification
- · Linux Userid Management

#### **Course Objectives:**

Upon completion of this course, a student will be able to:

- Understand the purpose of the Tactical AS Solution
- Manage the Docker Application
- Download Software and Manage File Sets
- Understand the design of the Edge and Core Networks
- Configure VMWare ESXI Settings
- Create Configurations using the Deployment Builder Application
- Deploy and verify the Tactical Edge Solution
- Login to the Application Server and MAS Element Managers
- Login to the Tactical Edge Dashboard and view alarms
- Login and view the Personal Agent Settings
- Login to the SBC EMA Element Manager
- Login to the AS/MAS console and reset management ID passwords
- Register the GENCom client to the Application Server
- Reset AS/MAS Management User Passwords