



# ACTIS ACADEMY

## AUDIOCODES TRAINING

## AUDICODES TRAINING

# AUDICODES SBC ESSENTIALS & CONFIGURATION

### Course

AudioCodes training for Session Border Controller (SBC) course is designed to provide engineers with experience in configuring, maintaining, and troubleshooting AudioCodes devices configured as an SBC.

### Student Profile

Engineers with experience in configuring, maintaining, and troubleshooting AudioCodes devices as an SBC.

### Products

AudioCodes SBC Series, AudioCodes Gateway Series.

### Prerequisites

Students are expected to have an applicable professional background with a minimum of one year of practical experience with:

- PSTN protocols and knowledge of analog and digital telephony systems
- VoIP and SIP network architecture
- Understanding of SIP control protocol signaling stacks
- IP networking

### Details

- Four days training.
- Classroom Instructor Led.
- ACA (AudioCodes Certified Associate).
- € 2.095,- ex. VAT per trainee.
- The training is subject to a minimum number of attendees.
- Access to the training course will only be accepted when the payment is fulfilled before the training date.
- Course code is TR-SBC-BSC-S.

## General Objectives

Students are expected to be active participants in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies to help students become self-sufficient in the use and support of AudioCodes SBC products. On completion of the course, students will be able to:

- Identify the AudioCodes products that support the Session Border Controller (SBC) features
- Identify the functions of the SBC
- Describe how the SBC handles SIP messages
- Understand the reasons for message manipulation
- Understand the survivability concept
- List SBC security features
- Configure SBC message manipulation rules
- Configure the parameters required by the SBC
- Configure the SBC for SIP trunking
- Configure AudioCodes Gateways for PSTN fallback needs

## Lab Activities

- Getting familiar with the GUI
- SBC Routing
- SBC Transcoding
- Header Manipulation
- SBC Survivability and PSTN Fallback



## AUDIOCODES TRAINING

# AUDIOCODES SBC ESSENTIALS & CONFIGURATION

### Course Outline

#### AudioCodes Presentation

#### User Interface Introduction:

- Basic configuration
- Management and maintenance options
- Web Interface

#### Documentation

#### AudioCodes SBC Platforms:

- Hardware SBCs:
- Mediant 2600/4000/9000
- Hybrid SBC Portfolio
- Mediant 500/8xx/1000/3000
- Integrated SBC and MSBR:
- Mediant 500/8xx/1000
- Software SBC

#### SBC Description:

- SBC definition
- SBC functions
- SBC topologies and deployment
- Logical and physical connections

#### SBC Features:

- NAT traversal
- Transcoding
- Topology hiding
- VoIP firewall
- SIP routing
- SIP normalization
- Survivability

### SBC Basic Terminology:

- Signaling Routing Domain (SRD)
- SIP Interface
- Media Realm
- IP Groups
- Proxy Sets
- SIP dialog initiation process description
- IP-to-IP routing
- Multi-tenancy Concepts
- Routing Policy

### SBC Configuration:

- Parameters and tables
- General parameters settings
- Table assignments
- Configuration example
- SBC Configuration Wizard

### Debugging Tools:

- Syslog and Syslog Viewer
- Wireshark
- SIP Test Calls

### SBC Media Handling:

- Media capabilities
- Media security
- Media handling modes
- Transcoding
- Extended and Allowed coders process
- Media handling example

### SBC Message Manipulation:

- Reasons for SIP message manipulation
- Message manipulation configuration

## AUDICODES TRAINING

# AUDICODES SBC ESSENTIALS & CONFIGURATION

### Message Manipulation Set

- Message manipulation rules
- IP-to-IP number manipulation

### SBC Security Brief Overview:

- Security needs
- Network security feature:
  - Topology hiding
  - Firewall
- SBC security feature:
  - SIP firewall filtering rules (classification rules)
  - Call Admission Control (CAC) to enforce limits
  - SIP protection – filter methods
  - Signaling security – TLS
  - Media security – SRTP
  - Block unregistered users
- Management security feature:
  - HTTPS
  - SSH
  - SNMP
- IDS

### AudioCodes Gateways Introduction:

- VoIP gateways
- Configuration basics
- IP-to-IP concept
- Inbound and outbound routing
- IP-to-IP SIP trunking scenario configuration example

### SBC Survivability:

- Concepts
- Configuration

### SBC High Availability:

- Concepts
- Configuration



g·r·o·w·y·o·u·r·n·e·t·w·o·r·k

Actis Academy  
Boeingavenue 8  
1119 PB Schiphol-Rijk

+31(0)20 - 316 21 21  
[academy@actis.nl](mailto:academy@actis.nl)





# ACTIS ACADEMY

## AUDIOCODES TRAINING