

AudioCodes

Technical Training and Knowledge
Services

Course Catalog

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Notice

This document provides a description of AudioCodes Technical Training Courses for AudioCodes' products.

Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee the accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions. Updates to this document and other documents can be viewed by registered customers at <http://www.audiocodes.com/support>.

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Introduction

AudioCodes' **Training and Knowledge Services** is responsible for technical training, targeted at service personnel who provide support for AudioCodes products.

This technical training includes the following areas:

- Installation and configuration of AudioCodes equipment
- Operation and maintenance of AudioCodes equipment
- Basic interoperability and support services
- In-depth analysis of operational and diagnostics capabilities
- Troubleshooting and support of AudioCodes equipment

AudioCodes Technical Training Course Offerings

AudioCodes offers the following generic technical training courses:

- AudioCodes CPE SIP I
- AudioCodes CPE SIP II
- AudioCodes Microsoft UM & OCS
- AudioCodes MP-20x SIP
- AudioCodes Mediant 3000 - SIP
- AudioCodes High Density Media Gateway - SIP
- AudioCodes CPE - MGCP/MEGACO
- AudioCodes Mediant 3000 - MEGACO/MGCP
- AudioCodes High Density Media Gateway - MEGACO/MGCP
- AudioCodes IPmedia Media Server
- AudioCodes EMS Server
- AudioCodes SS7/SIGTRAN
- AudioCodes VocalTec SS7
- AudioCodes MSBG
- AudioCodes CTI² InTouch Enterprise Edition
- AudioCodes nCite 1000 Session Border Controller
- AudioCodes nCite 4000 Session Border Controller
- AudioCodes nCite SE Session Border Controller

Pre-scheduled training sessions are available at selected AudioCodes offices around the world. However, on-demand sessions can be arranged, depending on the number of trainees and location, as well as available equipment.

In addition to generic technical training courses, AudioCodes offers customized training courses upon request. For more information, you can contact AudioCodes at:

- AudioCodes Technical Training Public Web site - <http://www.audiocodes.com/technical-training>
- AudioCodes Technical Training group e-mail - tech-training@audiocodes.com

AudioCodes Training Centers

AudioCodes offers a full range of International training courses at its Training Centers in five different locations worldwide:

- **EMEA:** AudioCodes Headquarters, Airport City, Israel
- **North America:** Research Triangle Park (Raleigh), North Carolina, USA
- **South America:** AudioCodes Argentina Office, Buenos Aires, Argentina
- **APAC:** AudioCodes Singapore Office, Singapore
- **Europe:** Hannover, Germany

These Training Centers are equipped with all AudioCodes products necessary for conducting professional training courses. In addition, all types of courses are available at these Training Centers. Note that AudioCodes can provide training courses at customer premises upon request, provided that these sites meet training course requirements.

Training Courses

CPE Products

AudioCodes CPE SIP I Training											
Course:	Four day hands-on, technical instruction covering installation, configuration, maintenance, troubleshooting and administration of AudioCodes equipment.										
Products:	MediaPack, Mediant 1000, Mediant 2000, Mediant 300 Simplex running the SIP protocol stack										
Student Profile:	Tier 1 and 2 support, sales engineers, trainers, technical writers, developers, and any other individuals requiring technical training on AudioCodes gateways.										
Time:	9:00AM to 5:00PM										
Background:	<p>The following syllabus describes the technical training program of service personnel expected to support AudioCodes CPE SIP gateways. This includes the following aspects:</p> <ul style="list-style-type: none"> • Installation and Configuration of AudioCodes equipment using various management methods • Operation and Maintenance of AudioCodes equipment (Performing backups, version updating, configuration changes, etc.) • Conducting basic interoperability and support services • Troubleshooting and Debugging of AudioCodes equipment 										
General Course Objectives:	<ul style="list-style-type: none"> • The trainee will be able to perform configuration, installation and administration of the MediaPack 11x, Mediant 1000, Mediant 2000™, and Mediant 3000 Simplex gateways. • The trainee will be able to troubleshoot and correct gateway and voice network problems. 										
Instruction Method:	The program is composed of two integral and correlated parts – instructor led lectures and practical experience with the equipment. The curriculum breaks down the material into logically related modules that are followed by practical experience with the concepts presented by the instructor. The student is expected to be an active participant in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies										
Prerequisites:	<p>Students with an applicable professional background and a minimum one year practical experience with the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9e1f2;"> <th style="text-align: center;">Skill</th> <th style="text-align: center;">Competency Level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SIP Control Protocol</td> <td style="text-align: center;">Basic</td> </tr> <tr> <td style="text-align: center;">PSTN networks</td> <td style="text-align: center;">Basic</td> </tr> <tr> <td style="text-align: center;">IP Networking</td> <td style="text-align: center;">Basic</td> </tr> <tr> <td style="text-align: center;">Ethereal / Packet Tracing</td> <td style="text-align: center;">Basic</td> </tr> </tbody> </table>	Skill	Competency Level	SIP Control Protocol	Basic	PSTN networks	Basic	IP Networking	Basic	Ethereal / Packet Tracing	Basic
Skill	Competency Level										
SIP Control Protocol	Basic										
PSTN networks	Basic										
IP Networking	Basic										
Ethereal / Packet Tracing	Basic										

AudioCodes CPE SIP I Training

Training Equipment:	<p>AudioCodes will provide the necessary equipment for the hands-on portion of the training if the training is held at an AudioCodes training facility. For training at the customer site, it is expected that the customer have equipment available for the training session. In some cases it is possible for AudioCodes to bring equipment to a customer site. The maximum ratio of student to equipment is no more than two students for every one AudioCodes gateway.</p> <p>The following general equipment/items need to be provided for staff who are attending the training at a customer site:</p> <ul style="list-style-type: none"> • Laptop computer • Cat 5 or 6 patch cable • Hubs/switches for laptops and gateways • Projector • Dry erase board and markers or paper and markers • Analog telephones (to use with FXS gateways) • PBX / POTS lines for FXO units • E1/T1 cables for Mediant gateways • Proxy or application servers as dictated by customer solution • Enough AudioCodes gateways to maintain no worse than a 2 to 1 ratio of students to equipment. <p>For training at an AudioCodes training facility customers are requested to bring their own laptops, but do not have any other equipment obligations.</p>
Learning Aids:	<p>The following are provided by AudioCodes to training class participants:</p> <ul style="list-style-type: none"> • CD-ROM with applicable materials • MediaPack and Mediant Installation, Operation and Maintenance Manuals • Software, utilities, tools, configuration samples and traces
Training Syllabus (4 Days):	<ul style="list-style-type: none"> • AudioCodes Introduction • Gateway hardware Overviews • Gateway Initialization and Installation • Using the Web Interface, an Orientation • Coder Selection and Dialing Options • Endpoint Configuration • Diagnostic Tools - Syslog • Diagnostic Tools - Network Monitor • Manipulation Tables • Routing Tables <ul style="list-style-type: none"> ✓ IP to Trunk Group ✓ Tel to IP ✓ Proxy Sets ✓ IP Trunk Groups • Supplementary Services • DTMF Configurations • Hunt Group and Trunk Group Configurations • FXO Operations Training • Analog Disconnect Methods • AudioCodes Feature Keys • Digital Gateway Configurations • Fax/Modem Training

AudioCodes CPE SIP I Training

- Proxy and Registration
- Command Shell
- Diagnostic Tools – Debug Recordings
- Basic Gateway Security

The overall flow and timing of the session is largely dictated by the pace at which the students master the hands-on activities.

AudioCodes CPE SIP II Training													
Course:	Four days hands-on, technical instruction covering advanced topics related to AudioCodes equipment												
Products:	MediaPack, Mediant 1000/2000, Mediant 3000 Simplex												
Student Profile:	Tier 1, 2 and 3 support, sales engineers, trainers, technical writers, developers, and any other individuals requiring technical training on AudioCodes gateways												
Location:	AudioCodes offices worldwide												
Duration:	4 days												
Time:	9:00AM to 5:00PM												
Background:	<p>The AudioCodes CPE SIP II Training course is designed to provide engineers who have completed AudioCodes CPE SIP I Training with experience with an additional, complex set of features and functionality available on the AudioCodes CPE gateway product line.</p> <p>AudioCodes requests that students adhere as strictly as possible to course prerequisites as basic concepts and theories are not covered or reviewed. Students are expected to be self-sufficient in areas listed in the prerequisite section. All students should have completed the AudioCodes CPE SIP I Training course at least six months prior to attending the AudioCodes CPE SIP II Training course to allow time for the concepts and theories covered in that course to be implemented and practiced in real-world scenarios.</p>												
General Course Objectives:	<ul style="list-style-type: none"> • Students will be able to provision, administer, and troubleshoot complex features of the MediaPack 1XX, Mediant 1000, Mediant 2000, and Mediant 3000 simplex. • Students will be able to perform advanced diagnostics on AudioCodes gateways. • Students will acquire the knowledge and skills necessary to become self-sufficient in debugging voice quality issues related to AudioCodes gateways 												
Instruction Method:	The program is composed of two integral and correlated parts – instructor led lectures and practical experience with the equipment. The curriculum breaks down the material into logically related modules that are followed by practical experience with the concepts presented by the instructor. The student is expected to be an active participant in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies												
Prerequisites:	<p>Students with an applicable professional background and meet the following minimum requirements:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #d9e1f2;">Skill</th> <th style="background-color: #d9e1f2;">Competency Level</th> </tr> </thead> <tbody> <tr> <td>AudioCodes CPE SIP Training I</td> <td>Completed at least 6 months prior</td> </tr> <tr> <td>SIP Protocol</td> <td>Intermediate to Expert</td> </tr> <tr> <td>PSTN (Digital and Analog)</td> <td>Intermediate to Expert</td> </tr> <tr> <td>IP Networking</td> <td>Intermediate to Expert</td> </tr> <tr> <td>Ethereal / Packet Tracing</td> <td>Intermediate to Expert</td> </tr> </tbody> </table>	Skill	Competency Level	AudioCodes CPE SIP Training I	Completed at least 6 months prior	SIP Protocol	Intermediate to Expert	PSTN (Digital and Analog)	Intermediate to Expert	IP Networking	Intermediate to Expert	Ethereal / Packet Tracing	Intermediate to Expert
Skill	Competency Level												
AudioCodes CPE SIP Training I	Completed at least 6 months prior												
SIP Protocol	Intermediate to Expert												
PSTN (Digital and Analog)	Intermediate to Expert												
IP Networking	Intermediate to Expert												
Ethereal / Packet Tracing	Intermediate to Expert												

AudioCodes CPE SIP II Training

Training Equipment:	<p>AudioCodes will provide the necessary equipment for the hands-on portion of the training when training is held in an AudioCodes training facility. For training at the customer site, it is expected that the customer have equipment available for the training session. The maximum ratio of student to equipment is no more than two students for every one AudioCodes gateway.</p> <p>The student is asked to bring the following equipment for their personal use:</p> <ul style="list-style-type: none"> • Laptop and category 5 ethernet cable <p>For training at the customer site, it is expected that the customer have equipment available for the training session. The following general equipment/items need to be provided for staff who are attending the training at a customer site:</p> <ul style="list-style-type: none"> • Laptop computer • Cat 5 or 6 patch cable • Hubs/switches for laptops and gateways • Projector • Dry erase board and markers or paper and markers • Analog telephones (to use with FXS gateways) including RJ-11 cables • PBX / POTS lines for FXO units • RJ-48 E1/T1 cables for Mediant gateways • Enough AudioCodes gateways to maintain no worse than a 2 to 1 ratio of students to equipment • Electricity Power cable splitter
Learning Aids:	<p>The following are provided by AudioCodes to training class participants:</p> <ul style="list-style-type: none"> • MediaPack and Mediant Installation, Operation and Maintenance Manuals • Software and diagnostic utilities • Configuration samples and traces
Training Syllabus (4 Days):	<ul style="list-style-type: none"> • Advanced Debugging <ul style="list-style-type: none"> ✓ AudioCodes Debug Recording ✓ Advanced Syslog Reading • SAS (Stand Alone Survivability) • IP-to-IP • Voice Quality Training <ul style="list-style-type: none"> ✓ Echo Cancellor ✓ Jitter ✓ Packet Loss ✓ Latency • Advanced Fax/Modem Debugging • Tones (Prerecorded and Call Progress Tones) <ul style="list-style-type: none"> ✓ Creating Customized Prerecorded Tones Files ✓ Creating Customized CPT files • Profiles <ul style="list-style-type: none"> ✓ IP Profiles ✓ PSTN Profiles ✓ Coder Profiles • Security Features <ul style="list-style-type: none"> ✓ IPSec and IKE ✓ SRTP ✓ TLS (Secure SIP)

AudioCodes CPE SIP II Training

- ✓ Internal Firewall
- Advanced Security Settings
 - ✓ IPsec and IKE
 - ✓ Internal Firewall
 - ✓ SRTP
 - ✓ TLS/SIPs
- VLANs
 - ✓ VLAN Settings
- Advanced PSTN Training
 - ✓ CAS
- Understanding AudioCodes CAS files
- Reading CAS State Machines
- Reading CAS Traces from AudioCodes gateways
 - ✓ ISDN
- NFAS Configuration
- AudioCodes ThroughPacket

CPE Products with Microsoft UM/OCS

AudioCodes Microsoft UM and OCS Training					
Course:	Four days hands-on, technical instruction covering installation, configuration, maintenance, troubleshooting and administration of AudioCodes gateways used in Microsoft solutions.				
Products:	MediaPack, Mediant 1000/2000				
Student Profile:	Tier 1 and 2 support, sales engineers, trainers, technical writers, developers, and any other individuals requiring technical training on AudioCodes gateways				
Duration:	4 days				
Time:	9:00AM to 5:00PM				
Background:	<p>The following syllabus describes the technical training program of service personnel expected to support AudioCodes gateways in the Microsoft Unified Messaging and Office Communications Server architectures. This includes the following aspects:</p> <ul style="list-style-type: none"> • AudioCodes gateways in the Microsoft Unified Communications architecture • Resources and information for AudioCodes equipment • Installation of AudioCodes equipment using various management methods • Operation and maintenance of AudioCodes equipment (Performing backups, version updating, configuration changes, etc.) • Troubleshooting and debugging of AudioCodes equipment 				
General Course Objectives:	<ul style="list-style-type: none"> • The student will be able to perform configuration, installation, administration, and troubleshooting of the MediaPack 11X, Mediant 1000 and Mediant 2000™ in Microsoft solutions. • The student will assimilate the knowledge and skills necessary to become self-sufficient on AudioCodes gateways 				
Instruction Method:	The program is composed of two integral and correlated parts – instructor led lectures and practical experience with the equipment. The curriculum breaks down the material into logically related modules that are followed by practical experience with the concepts presented by the instructor. The student is expected to be an active participant in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies				
Prerequisites:	<p>Students with an applicable professional background and a minimum one year practical experience with the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9e1f2;"> <th style="text-align: center;">Skill</th> <th style="text-align: center;">Competency Level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">IP Networking</td> <td style="text-align: center;">Basic Knowledge</td> </tr> </tbody> </table>	Skill	Competency Level	IP Networking	Basic Knowledge
Skill	Competency Level				
IP Networking	Basic Knowledge				

AudioCodes Microsoft UM and OCS Training

Training Equipment:	<p>AudioCodes will provide the necessary equipment for the hands-on portion of the training if the training is held at an AudioCodes training facility. The student is asked to bring the following equipment for their personal use:</p> <ul style="list-style-type: none"> • Laptop and category 5 ethernet cable <p>For training at the customer site, it is expected that the customer have equipment available for the training session. The maximum ratio of student to equipment is no more than two students for every one AudioCodes gateway.</p> <p>The following general equipment/items need to be provided for staff who are attending the training at a customer site:</p> <ul style="list-style-type: none"> • Laptop computer • Cat 5 or 6 patch cable • Hubs/switches for laptops and gateways • Projector • Dry erase board and markers or paper and markers • Analog telephones (to use with FXS gateways) including RJ-11 cables • PBX / POTS lines for FXO units • RJ-48 E1/T1 cables for Mediant gateways • Enough AudioCodes gateways to maintain no worse than a 2 to 1 ratio of students to equipment • Electricity Power cable splitter • Headphone sets <p>For training at the AudioCodes training facility customers are requested to bring their own laptops, but do not have any other equipment obligations.</p>
Learning Aids:	<p>The following are provided by AudioCodes to training class participants:</p> <ul style="list-style-type: none"> • MediaPack and Mediant Installation, Operation and Maintenance Manuals • Software and diagnostic utilities • Configuration samples and traces
Training Syllabus (3.5 Days):	<ul style="list-style-type: none"> • AudioCodes Company Overview • AudioCodes Gateway Capabilities • AudioCodes and Exchange 2007 UM Solution Architecture • AudioCodes and OCS 2007 Solution Architecture • Resources for Supporting Microsoft Solutions • AudioCodes Demo Kits for Unified Messaging and OCS • MediaPack Hardware Overview • Mediant 1000 Hardware Overview • Mediant 2000 Hardware Overview • Telephony and IP telephony Introduction • AudioCodes Gateway Installation for Microsoft UM and OCS • Diagnostic Tools - Syslog • Diagnostic Tools - Network Monitor • General Gateway Settings for Exchange 12 • Manipulation Table • Routing Tables • Supplementary Services for Microsoft UM • DTMF Training for Microsoft UM • Trunk Group Setting

AudioCodes Microsoft UM and OCS Training

- FXO Training for Microsoft UM and OCS
- Analog Disconnect Supervision for Microsoft UM
- AudioCodes Feature Key
- Digital Gateway Training for Microsoft UM
- Fax and Modem Training for Microsoft UM
- Proxy for Microsoft UM
- AudioCodes Gateway OCS Configurations
- Integrating Existing SIP
- Command Shell
- Diagnostic Tools - Debug Recordings

The overall flow and timing of the session is largely dictated by the pace at which the students master the hands-on activities.

AudioCodes Mediant 3000 – SIP/MGCP/MEGACO Systems Training											
Course:	Two to three day hands-on, technical instruction covering topics related to AudioCodes Mediant 3000 systems and AudioCodes EMS servers										
Products:	Mediant 3000 and AudioCodes EMS										
Student Profile:	Tier 1 and 2 support, sales engineers, trainers, technical writers, developers, and any other individuals requiring technical training on AudioCodes gateways										
Date:	TBD (2-3 days)										
Time:	9:00AM to 5:00PM										
Background:	<p>The <i>AudioCodes Mediant 3000 Systems Training</i> course is designed to provide engineers with experience configuring, maintaining, and troubleshooting AudioCodes Mediant 3000 gateways and AudioCodes EMS servers.</p> <p>AudioCodes requests that students adhere as strictly as possible to course prerequisites as basic concepts and theories are not covered or reviewed. Students are expected to be self-sufficient in areas listed in the prerequisite section.</p>										
General Course Objectives:	Students will be able to provision, administer, and troubleshoot Mediant 3000™ and AudioCodes EMS servers										
Instruction Method:	The program is composed of two integral and correlated parts – instructor led lectures and practical experience with the equipment. The curriculum breaks down the material into logically related modules that are followed by practical experience with the concepts presented by the instructor. The student is expected to be an active participant in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies.										
Prerequisites:	<p>Students with an applicable professional background and meet the following minimum requirements:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9e1f2;"> <th style="text-align: center;">Skill</th> <th style="text-align: center;">Competency Level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Control Protocol (SIP/MGCP/MEGACO)</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">PSTN</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">IP Networking</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">Ethereal / Packet Tracing</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> </tbody> </table>	Skill	Competency Level	Control Protocol (SIP/MGCP/MEGACO)	Intermediate to Expert	PSTN	Intermediate to Expert	IP Networking	Intermediate to Expert	Ethereal / Packet Tracing	Intermediate to Expert
Skill	Competency Level										
Control Protocol (SIP/MGCP/MEGACO)	Intermediate to Expert										
PSTN	Intermediate to Expert										
IP Networking	Intermediate to Expert										
Ethereal / Packet Tracing	Intermediate to Expert										
Training Equipment:	<p>AudioCodes will provide the necessary equipment for the hands-on portion of the training if the training is held in the AudioCodes training facility in RTP, North Carolina. For training at the customer site, it is expected that the customer have equipment available for the training session. In some cases it is possible for AudioCodes to bring equipment to a customer site. The maximum ratio of student to equipment is no more than two students for every one AudioCodes gateway.</p> <p>The following general equipment/items need to be provided for staff who are attending the training at a customer site:</p> <ul style="list-style-type: none"> Laptop computer Cat 5 or 6 patch cable Hubs/switches for laptops and gateways Projector 										

AudioCodes Mediant 3000 – SIP/MGCP/MEGACO Systems Training

	<ul style="list-style-type: none"> • Dry erase board and markers or paper and markers • Analog telephones (to use with FXS gateways) • T1 cables for Mediant gateways • Proxy or application servers as dictated by customer solution <p>For training at the AudioCodes training facility customers are requested to bring their own laptops, but do not have any other equipment obligations.</p>
Learning Aids:	<p>The following are provided by AudioCodes to training class participants:</p> <ul style="list-style-type: none"> • CD-ROM with applicable materials • MediaPack and Mediant Installation, Operation and Maintenance Manuals • Software, utilities, tools, configuration samples and traces
Training Syllabus (2-3 Days):	<ul style="list-style-type: none"> • AudioCodes Introduction <ul style="list-style-type: none"> ✓ AudioCodes Products • TP-6310 Overview <ul style="list-style-type: none"> ✓ Hardware Overview ✓ Hardware Configurations ✓ PSTN Interface Configuration Via INI File • Mediant 3000 Overview <ul style="list-style-type: none"> ✓ Chassis Overview ✓ HA Principles ✓ IP Address Assignments • AudioCodes Boot Process <ul style="list-style-type: none"> ✓ BootP ✓ INI Files ✓ CAS Files • EMS Training <ul style="list-style-type: none"> ✓ EMS Overview ✓ EMS Basics ✓ EMS Software Manager ✓ EMS Media Gateway Tree ✓ EMS Monitoring Gateways ✓ EMS Provisioning Concepts ✓ EMS Fault Management ✓ EMS and Mediant 3000 • Gateway Provisioning Training <ul style="list-style-type: none"> ✓ Info and Security Tab ✓ Network Tab ✓ Telephony Tab ✓ VoIP Media Tab ✓ VoIP Control Tab ✓ Trunk Provisioning • Diagnostics Tools <ul style="list-style-type: none"> ✓ PSTN Trace ✓ DSP Trace ✓ Syslogs ✓ Ethereal ✓ BootP

High-Density Media Gateways

AudioCodes High Density Media Gateway – SIP/MGCP/MEGACO Systems Training											
Course:	Three day hands-on, technical instruction covering topics related to AudioCodes Mediant 5000/8000 systems and AudioCodes EMS servers										
Products:	Mediant 5000, Mediant 8000 and AudioCodes EMS										
Student Profile:	Tier 1 and 2 support, sales engineers, trainers, technical writers, developers, and any other individuals requiring technical training on AudioCodes gateways										
Time:	9:00AM to 5:00PM										
Background:	<p>The AudioCodes High Density Media Gateway Systems Training course is designed to provide engineers with experience configuring, maintaining, and troubleshooting AudioCodes Mediant 5000/8000 gateways and AudioCodes EMS servers.</p> <p>AudioCodes requests that students adhere as strictly as possible to course prerequisites as basic concepts and theories are not covered or reviewed. Students are expected to be self-sufficient in areas listed in the prerequisite section</p>										
General Course Objectives:	Students will be able to provision, administer, and troubleshoot Mediant 5000/8000™ and AudioCodes EMS servers										
Instruction Method:	The program is composed of two integral and correlated parts – instructor led lectures and practical experience with the equipment. The curriculum breaks down the material into logically related modules that are followed by practical experience with the concepts presented by the instructor. The student is expected to be an active participant in the learning process. Emphasis is placed on diagnostic tools and troubleshooting strategies										
Prerequisites:	<p>Students with an applicable professional background and meet the following minimum requirements:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d9e1f2;"> <th style="text-align: center;">Skill</th> <th style="text-align: center;">Competency Level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Control Protocol (SIP/MGCP/MEGACO)</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">PSTN</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">IP Networking</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> <tr> <td style="text-align: center;">Ethereal / Packet Tracing</td> <td style="text-align: center;">Intermediate to Expert</td> </tr> </tbody> </table>	Skill	Competency Level	Control Protocol (SIP/MGCP/MEGACO)	Intermediate to Expert	PSTN	Intermediate to Expert	IP Networking	Intermediate to Expert	Ethereal / Packet Tracing	Intermediate to Expert
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Control Protocol (SIP/MGCP/MEGACO)	Intermediate to Expert										
PSTN	Intermediate to Expert										
IP Networking	Intermediate to Expert										
Ethereal / Packet Tracing	Intermediate to Expert										
Training Equipment:	<p>AudioCodes will provide the necessary equipment for the hands-on portion of the training if the training is held in the AudioCodes training facility in RTP, North Carolina. For training at the customer site, it is expected that the customer have equipment available for the training session. In some cases it is possible for AudioCodes to bring equipment to a customer site. The maximum ratio of student to equipment is no more than two students for every one AudioCodes gateway.</p> <p>The following general equipment/items need to be provided for staff who are attending the training at a customer site:</p> <ul style="list-style-type: none"> • Laptop computer • Cat 5 or 6 patch cable 										

AudioCodes High Density Media Gateway – SIP/MGCP/MEGACO Systems Training

	<ul style="list-style-type: none"> • Hubs/switches for laptops and gateways • Projector • Dry erase board and markers or paper and markers • Analog telephones (to use with FXS gateways) • T1 cables for Mediant gateways • Proxy or application servers as dictated by customer solution <p>For training at the AudioCodes training facility customers are requested to bring their own laptops, but do not have any other equipment obligations.</p>
Learning Aids:	<p>The following are provided by AudioCodes to training class participants:</p> <ul style="list-style-type: none"> • CD-ROM with applicable materials • MediaPack and Mediant Installation, Operation and Maintenance Manuals • Software, utilities, tools, configuration samples and traces
Training Syllabus (2-3 Days):	<ul style="list-style-type: none"> • AudioCodes Introduction • TP-6310 Training • TP1610 Overview • Mediant 500 and 8000-Hardware Overview • EMS-Installationv3_2 • Mediant 5000 and 8000-Initial Installation and Commissioning • Mediant 5000 and 8000-Installation Overview • EMS Overview <ul style="list-style-type: none"> ✓ EMS Basics ✓ EMS Software Manager ✓ EMS MG Tree ✓ EMS Monitoring Gateways ✓ EMS Provisioning Concepts ✓ EMS Fault Management ✓ EMS Performance Monitoring ✓ EMS- Mediant 5000 and 8000-Adding MG ✓ EMS- Mediant 5000 and 8000- Status Pane ✓ EMS- Mediant 5000 and 8000- Configuration Menus ✓ EMS- Mediant 5000 and 8000-Board Property Configuration ✓ EMS- Mediant 5000 and 8000-TP-1610 Trunk Provisioning ✓ EMS- Mediant 5000 and 8000-TP-6310 Trunk Provisioning ✓ EMS- Mediant 5000 and 8000-M3UA Configuration • Mediant 5000 and 8000-System Maintenance • Mediant 5000 and 8000-PSTN Clocking • Mediant 5000 and 8000-Basic Troubleshooting • Mediant 5000 and 8000-HA Overviews • Mediant 5000 and 8000-v3.2 Security • Mediant 5000 and 8000-Board Level CLI

nCite 1000 Session Border Controllers

AudioCodes nCite 1000 Session Border Controller Product Overview Training	
Course:	The nCite 1000 Product Overview course provides an overview of the nCite 1000 chassis, features, architecture, and VoIP processing. This course also provides an introduction to the nCite EMS and CLI management applications. This course is a prerequisite to all nCite 1000 training courses
Products:	nCite 1000
Student Profile:	This course is targeted for any person involved in the planning, engineering, administration, or maintenance of an nCite 1000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	Upon completion of this course, you will have a basic understanding of the nCite 1000: <ul style="list-style-type: none"> • VoIP features and applications • processing flow • hardware and software components • management applications • High Availability features and routing requirements
Training Syllabus:	<ul style="list-style-type: none"> • nCite VoIP Application • nCite Features • nCite Processing Overview • nCite Architecture • nCite High Availability

AudioCodes nCite 1000 Session Border Controller Installation and Configuration Training	
Course:	The nCite 1000 Installation and Configuration course provides hands-on training in the installation of nCite 1000 software and network configuration. After installation, the student configures the nCite 1000 for VoIP processing using the nCite Element Management System (EMS).
Products:	nCite 1000
Student Profile:	This course is targeted for any person involved in the installation and configuration of an nCite 1000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will be able to perform the following procedures for the nCite 1000:</p> <ul style="list-style-type: none"> • Install the required hardware components in a network rack configuration • Cable nCite 1000 hardware components to the customer's network • Install software on the nCite 1000 • Configure and implement a VoIP policy on the nCite SBC • Configure two nCite chassis in a redundant pair
Prerequisites:	nCite 1000 Product Overview
Training Syllabus:	<ul style="list-style-type: none"> • Installing nCite Hardware and Software • nCite Network Configuration • nCite Policy Configuration • Redundant Configuration

AudioCodes nCite 1000 Session Border Controller Maintenance and Troubleshooting Training	
Course:	The nCite Maintenance and Troubleshooting course provides hands-on training in performing maintenance procedures such as upgrading software and restoring configurations. After performing maintenance procedures, students will troubleshoot VoIP processing and configuration problem areas
Products:	nCite 1000
Student Profile:	This course is targeted for any person involved in the maintenance of an nCite 1000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will have a basic understanding of how to maintain and troubleshoot the nCite 1000:</p> <ul style="list-style-type: none"> • Upgrade and downgrade nCite software • Backup and restore nCite configurations • Identify and resolved nCite 1000 alarms and events • Use statistics, logs, and call flows to troubleshoot VoIP processing problems
Prerequisites:	<ul style="list-style-type: none"> • nCite 1000 Product Overview Training • nCite 1000 Installation and Configuration Training
Training Syllabus:	<ul style="list-style-type: none"> • Software Maintenance • Fault Management • Performance Management • Logging Configuration • Troubleshooting

nCite 4000 Session Border Controllers

AudioCodes nCite 4000 Session Border Controller Product Overview Training	
Course:	The nCite 4000 Product Overview course provides an overview of the nCite 4000 chassis, features, architecture, and VoIP processing. This course also provides an introduction to the nCite EMS and CLI management applications. This course is a prerequisite to all nCite 4000 training courses
Products:	nCite 4000
Student Profile:	This course is targeted for any person involved in the planning, engineering, administration, or maintenance of an nCite 4000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	Upon completion of this course, you will have a basic understanding of the nCite 4000: <ul style="list-style-type: none"> • VoIP features and applications • processing flow • hardware and software components • management applications • High Availability features and routing requirements
Prerequisites:	None
Training Syllabus:	<ul style="list-style-type: none"> • nCite VoIP Application • nCite Features • nCite Processing Overview • nCite Architecture • nCite High Availability

AudioCodes nCite 4000 Session Border Controller Installation and Configuration Training	
Course:	The nCite 4000 Installation and Configuration course provides hands-on training in the installation of nCite 4000 software and network configuration. After installation, the student configures the nCite 4000 for VoIP processing using the nCite Element Management System (EMS).
Products:	nCite 4000
Student Profile:	This course is targeted for any person involved in the installation and configuration of an nCite 4000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will be able to perform the following procedures for the nCite 4000:</p> <ul style="list-style-type: none"> • Install the required hardware components in a network rack configuration • Cable nCite 4000 hardware components to the customer's network • Install software on the nCite 4000 • Configure and implement a VoIP policy on the nCite SBC • Configure two nCite chassis in a redundant pair
Prerequisites:	nCite 4000 Product Overview
Training Syllabus:	<ul style="list-style-type: none"> • Installing nCite Hardware and Software • nCite Network Configuration • nCite Policy Configuration • Redundant Configuration

AudioCodes nCite 4000 Session Border Controller Maintenance and Troubleshooting Training	
Course:	The nCite Maintenance and Troubleshooting course provides hands-on training in performing maintenance procedures such as upgrading software and restoring configurations. After performing maintenance procedures, students will troubleshoot VoIP processing and configuration problem areas
Products:	nCite 4000
Student Profile:	This course is targeted for any person involved in the maintenance of an nCite 4000 chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will have a basic understanding of how to maintain and troubleshoot the nCite 4000:</p> <ul style="list-style-type: none"> • Replace control cards, fans, and power supplies • Upgrade and downgrade nCite software • Backup and restore nCite configurations • Identify and resolved nCite 4000 alarms and events • Use statistics, logs, and call flows to troubleshoot VoIP processing problems
Prerequisites:	<ul style="list-style-type: none"> • nCite 4000 Product Overview Training • nCite 4000 Installation and Configuration Training
Training Syllabus:	<ul style="list-style-type: none"> • Software Maintenance • Fault Management • Performance Management • Logging Configuration • Troubleshooting

nCite SE Session Border Controllers

AudioCodes nCite SE Session Border Controller Product Overview Training	
Course:	The nCite SE Product Overview course provides an overview of the nCite SBC product, features, SE architecture, and VoIP processing. This course also provides an introduction to the nCite EMS and CLI management applications. This course is a pre-requisite to all nCite SBC training courses
Products:	nCite SE
Student Profile:	This course is targeted for any person involved in the planning, engineering, administration, or maintenance of an nCite SE chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	Upon completion of this course, you will have a basic understanding of the nCite SE: <ul style="list-style-type: none"> VoIP features and applications processing flow hardware and software components management applications High Availability features and routing requirements
Prerequisites:	None
Training Syllabus:	<ul style="list-style-type: none"> nCite VoIP Application nCite Features nCite Processing Overview nCite Architecture nCite High Availability

AudioCodes nCite SE Session Border Controller Installation and Configuration Training

Course:	The nCite SE Installation and Configuration course provides hands-on training in the installation of nCite SBC software and SE hardware components. After installation, the student configures the nCite SBC for VoIP processing using an XML policy
Products:	nCite SE
Student Profile:	This course is targeted for any person involved in the installation and configuration of an nCite SE chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will be able to perform the following procedures for the nCite SE:</p> <ul style="list-style-type: none"> • Install hardware components • Cable nCite SE hardware components to the customer's network • Install software on the nCite SBC • Configure and implement a VoIP policy on the nCite SBC • Configure two nCite chassis in a redundant pair
Prerequisites:	nCite SE Product Overview
Training Syllabus:	<ul style="list-style-type: none"> • Installing nCite Hardware and Software • nCite Network Configuration • nCite Policy Configuration • Redundant Configuration

AudioCodes nCite SE Session Border Controller Maintenance and Troubleshooting Training

Course:	The nCite SE Maintenance and Troubleshooting course provides hands-on training in performing maintenance procedures such as replacing hardware components and upgrading software. After performing maintenance procedures, students will troubleshoot VoIP processing and configuration problem areas
Products:	nCite SE
Student Profile:	This course is targeted for any person involved in the maintenance of an nCite SE chassis
Time:	9:00AM to 5:00PM
General Course Objectives:	<p>Upon completion of this course, you will have a basic understanding of how to maintain and troubleshoot the nCite SE:</p> <ul style="list-style-type: none"> • Replace control cards, fans, and power supplies • Upgrade and downgrade nCite software • Backup and restore nCite configurations • Identify and resolved nCite SE alarms and events • Use statistics, logs, and call flows to troubleshoot VoIP processing problems
Prerequisites:	<ul style="list-style-type: none"> • nCite SE Product Overview Training • nCite SE Installation and Configuration Training
Training Syllabus:	<ul style="list-style-type: none"> • Software Maintenance • Hardware Maintenance • Fault Management • Performance Management • Logging Configuration • Troubleshooting

Reader's Notes

Technical Training and Knowledge Services

Course Catalog