AudioCodes One Voice™ for Microsoft® Skype for Business

# Mediant™ Appliances Mediant 800 CCE & Mediant Server CCE

Microsoft Skype for Business Cloud Connector Edition (CCE)

**Version 2.0.0.6** 





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Installation Manual Notices

#### **Notice**

This document describes how to install the Mediant 800 CCE Appliance for Microsoft Skype for Business and the Mediant Server CCE Appliance for Microsoft Skype for Business Cloud Connector Edition for Version 2.0.0.6.

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#### **Abbreviations and Terminology**

Each abbreviation, unless widely used, is spelled out in full when first used.



#### **Document Revision Record**

Document #	Description	
28080	Initial document release for Version 1.0.	
28081	Update to the link for downloading the latest CloudConnector.msi.	
28082	Update to support CCE 1.4.1.	
28083	Update to support Mediant CCE Appliance 2.0.0.	
28084	Update for version Mediant CCE Appliance 2.0.0.6	

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Installation Manual 1. Introduction

#### 1 Introduction

Thank you for purchasing the Mediant 800 CCE Appliance for Microsoft Skype for Business and the Mediant Server CCE Appliance for Microsoft Skype for Business Cloud Connector Edition for Version 2.0.0.6. Please read this manual before starting your deployment.

The guide provides the following:

- Information regarding the default configuration of the AudioCodes Mediant 800 Server CCE unit.
- The steps to deploy the AudioCodes CCE into an enterprise environment.
- Information on how to restore the CCE to default.

Download the latest documentation at: http://www.audiocodes.com/downloads.

Throughout this guide, AudioCodes Mediant 800 Server Cloud Connector Edition Appliance is referred to as Mediant CCE Appliance.

This document refers to Microsoft CCE Version 1.4.1 and AudioCodes Mediant CCE Appliance Install Wizard 2.0.0.6.



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# 2 Mediant CCE Appliance Hardware Platforms

The Mediant CCE Appliance is deployed on the following platforms:

- AudioCodes Mediant 800 CCE Appliance is installed on the OSN server.
- AudioCodes Mediant Server CCE Appliance is installed on an HP ProLiant server Hyper-V Virtual machine.

**Table 2-1: CCE Hardware Platforms Specifications** 

Appliance	AudioCodes Mediant 800 CCE Appliance	AudioCodes Mediant Server CCE Appliance
Hardware	Mediant 800 with OSN server	HP ProLiant server
Processor	64-bit processor, four core (4 real cores), 2.70 Gigahertz (GHz)	64-bit dual processor, six core (12 real cores), 2.50 gigahertz (GHz)
RAM	32 gigabytes (GB) RAM	64 gigabytes (GB) RAM
Disk	Single SSD 512 GB	Four 600 GB 10K RPM 128M Cache SAS 6Gbps disks, configured in a RAID 5 configuration
NICs	Two physical NICs 1Gbps + one 100Mbps	Four 1Gbps NICs



**Note:** The procedures described in this document are relevant for both Mediant Appliance CCE platforms as described above. In some cases, separate procedures are required for each platform, in which case, this is indicated.



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# 3 Default Configuration CCE Unit

The Mediant CCE Appliance Host server is installed on the Windows Server 2012 R2 platform with the following:

User: Administrator

Password: R3m0t3Supp0rt

Host default IP address: 192.168.0.10

- The host server disk includes a Recovery partition that contains the files needed to deploy CCE CCE software and Software SBC (used for Mediant Server CCE).
- The SBC/Gateway application component (hardware or software) uses the default IP address and default Username/Password as specified in the relevant SBC/Gateway User's Manual.

# 3.1 Mediant 800 Gateway/SBC Default Settings

#### 3.1.1 **Login**

**Username:** Admin **Password:** Admin

#### 3.1.2 IP Address Information

Factory default IP address: 192.168.0.2



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#### 4 CCE Installation

This section describes how to install the CCE. Before commencing with the installation, note the pre-installation information described in the section below.

#### 4.1 Pre-Installation Information

The following describes the pre-installation information which should be read before commencing the CCE installation.

#### 4.1.1 References

Before commencing the setup, refer to the references below that describe how to plan and configure the Skype for Business CCE. Reviewing these sources is very important for the successful CCE setup. The procedures described in this document assume that the user has reviewed these sources:

- Planning for Cloud Connector Edition –[1] <a href="https://technet.microsoft.com/en-us/library/mt605227.aspx">https://technet.microsoft.com/en-us/library/mt605227.aspx</a>
- Configuring Cloud Connector Edition [2] <a href="https://technet.microsoft.com/en-us/library/mt605228.aspx">https://technet.microsoft.com/en-us/library/mt605228.aspx</a>
- Upgrading from old CCE version to CCE 1.4.1 https://technet.microsoft.com/enus/library/mt740656.aspx



Note: References are made throughout this document to [1] and [2].

#### 4.1.2 Prerequisites

Note the following prerequisites before commencing the installation:

- Review the above links from Microsoft.
- Office 365 with CloudPBX license (E5 license or E3 + Cloud PBX) and all required DNS and SRV records created for the Office 365 tenant have been configured.
- A Global administrator role for your Office 365 tenant account. See <a href="https://support.office.com/en-us/article/About-Office-365-admin-roles-da585eea-f576-4f55-a1e0-87090b6aaa9d">https://support.office.com/en-us/article/About-Office-365-admin-roles-da585eea-f576-4f55-a1e0-87090b6aaa9d</a>
- Allocate the following six IP addresses in the internal LAN range:
  - CCE Host server LAN
  - CCE Edge LAN
  - CCE DC LAN
  - CCE Mediation LAN
  - CCE CMS LAN
  - Gateway/SBC LAN
- One external IP address (WAN/DMZ)
  - Edge WAN/DMZ
- One external certificate according to MSFT requirements [see Reference 1 above]. Make sure that your prepared external certificate contains private keys. This external certificate must be issued directly from the root CA certificate. Certificates from the intermediate CA in the chain of the external certificate are not supported.



Refer to the Microsoft Troubleshooting issue at: <a href="https://technet.microsoft.com/en-us/library/mt740658.aspx">https://technet.microsoft.com/en-us/library/mt740658.aspx</a>.

- The Enterprise firewall has been setup according to MSFT requirements [see Reference 2 above].
  - A correct firewall configuration. See <a href="https://technet.microsoft.com/en-us/library/mt605227.aspx">https://technet.microsoft.com/en-us/library/mt605227.aspx</a> for more info.
  - The BIOS has been set correctly setup according to Appendix A for optimal performance.
- Microsoft's Cloud Connector Edition update is triggered automatically by Microsoft Office 365 during the installation process.



**Important:** Microsoft's Cloud Connector Edition update is triggered by Microsoft Office 365

- The CCE platform is disabled until the CCE updates have completed.
- The CCE update may also restart the CCE host server.

At the time of CCE update, the following is expected:

- Call scenario: Skype for Business client > CCE > SBC > SIP trunk, Office 365 will not send INVITE to the CCE.
- Call scenario: SIP Trunk > SBC > CCE > Office 365, CCE Mediation Server may return **503 Proxy INVITE failed**.

#### 4.1.3 Remote Connection

You can connect to the Mediant CCE appliance Host server either vie remote desktop connection (RDP) or by connecting a keyboard, mouse and a screen. Use the following default credentials to connect to the Remote Desktop credentials:

User: Administrator

Password: R3m0t3Supp0rt

Host default IP address: 192.168.0.10

#### 4.1.4 Network Interfaces

The AudioCodes CCE Install Wizard creates several virtual switches for the usage of the CCE Virtual Machines under the following names:

- LAN to connect to corporate network
- DMZ to connect to internet

#### 4.1.5 CCE Appliance Platforms

This section describes the network interfaces of the CCE Appliance platform.

#### 4.1.5.1 Mediant 800 CCE Appliance

The Mediant 800 CCE appliance includes three NICs (two external NICs and one internal NIC). The external NICs are 1000 GbE LAN ports which are accessed from the OSN server module (on the rear panel). The internal NIC is a 100 Mb LAN port which is accessed from the front panel LAN GbE ports (connected to the OSN server via the device's backplane).

The CCE uses the two external NICs on the OSN server (rear panel). These ports are labelled GE1 and GE2. The internal NIC is used to connect to the Gateway and SBC application for management (refer to the *Mediant 800B Gateway and E-SBC User's Manual* for details on how to initially connect the Gateway and SBC application to the network).

These connections are shown in detail in the figures below.



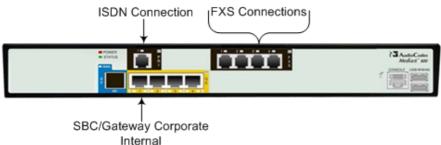
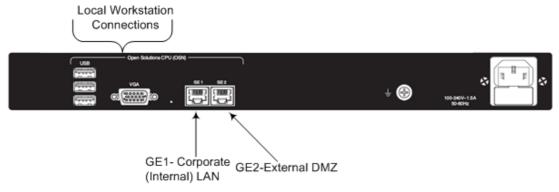


Figure 4-2: Rear View



When you initially connect to the Mediant 800 CCE appliance, there are no pre-configured factory default IP addresses, and therefore the network addresses must be acquired using DHCP or assigned with static IP addresses.

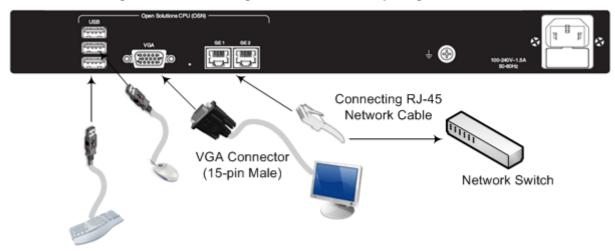
For acquiring these addresses, connect the OSN server's Ethernet ports (**GE1** and **GE2**) directly to the network using a straight-through Ethernet cable and plug in the OSN server accessories:

Connect computer peripherals (e.g., mouse and keyboard) to the USB ports (Standard-A type) labeled USB.



Connect a monitor using a 15-Pin D-type male connector to the VGA female port, labeled **VGA** (this VGA cable is not supplied).

Figure 4-3: Connecting OSN Server and Acquiring IP Address



#### 4.1.5.2 Server CCE Appliance

On the Mediant Server CCE Appliance there are four 1000 GbE LAN NICs. The CCE uses two of these NICs.

In the event where the Software SBC is installed on the Server CCE Appliance platform, you can share the same NICs with the CCE or define separate NICs.

Figure 4-4: Rear View



#### 4.2 Installing CCE

This section describes how to install the CCE on one of the CCE Appliance platforms described in Section 4.2.

#### **4.2.1** Step 1: General Operating System Preparation

The procedure below describes how to prepare the operating system.

- To prepare the general operating system:
- 1. Define the correct date and time on the host server.
- 2. Define the computer name.



**Note:** The computer name is used as the CCE name in Skype for Business Online.

- 3. Define the host IP address. The host must be able to connect to the Internet.
- 4. Activate Windows 2012 R2 on the host server with the key from the Microsoft sticker that is attached to the Mediant server.

The AudioCodes Mediant CCE Appliance is supplied with Windows Server 2012 R2 Standard Edition OEM licenses, with the Microsoft Product License code stickers attached to the server hardware.

#### **Notes:**



- You need to only activate the host server before starting the installation procedure.
- You must initially activate the Windows license on the Host server
- It is recommended to photograph or copy the Windows product key slickers and save them in a safe place for future use, for a system re-installation or if your server is physically placed in a rack where it may be difficult to access the Windows sticker during the installation process.

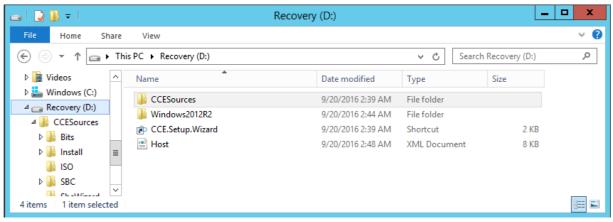


#### 4.2.2 Step 2: Run CCE Setup Wizard

The procedure below describes how to run the CCE Setup Wizard.

- To run the CCE Setup Wizard:
- 1. Access the Recovery partition, "Recovery (D)".

Figure 4-5: PC Directory



 Double-click CCE.Setup.Wizard. The Install wizard starts by checking for CCE Install Wizard updates. If a newer version of the Install wizard is found, it asks to download the new version.

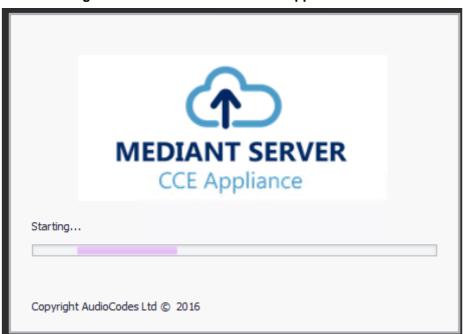


Figure 4-6: Mediant Server – CCE Appliance

#### 4.2.3 Step 3: Enable AudioCodes and Microsoft License Agreement

Read and agree to the AudioCodes and Microsoft end user license agreements. Microsoft license agreements are part of the Microsoft component installation. This step installs the PowerShell modules required for CCE setup, and performs several prerequisite actions such as creating virtual switches and changing the local Group Policy to not forcefully unload the user registry at user logoff.

#### > To install PowerShell modules:

1. On the License Agreement screen, select the I have read and understand the text above checkbox.

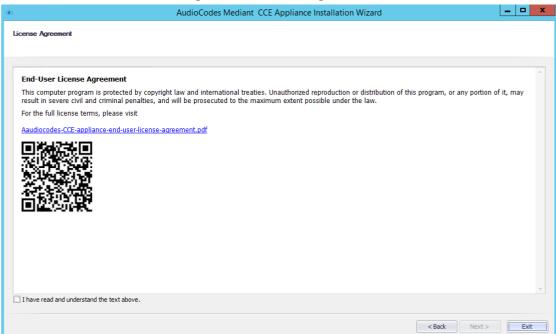
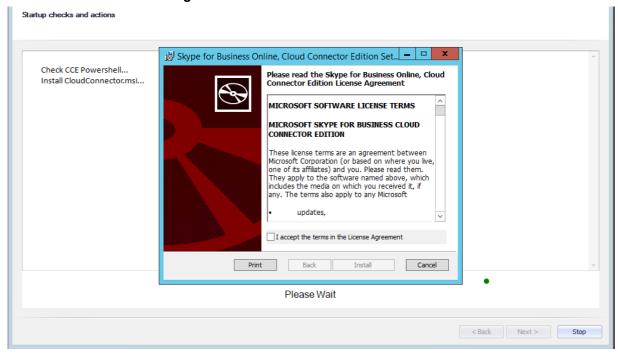


Figure 4-7: License Agreement



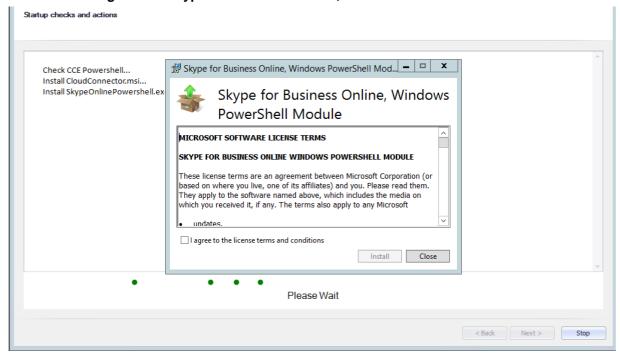
2. Click **Next**.; the following screen appears:

Figure 4-8: Check CCE PowerShell and CCE



Select the I accept the terms in the License Agreement and follow the Skype for Business Online Cloud Connector PowerShell setup.

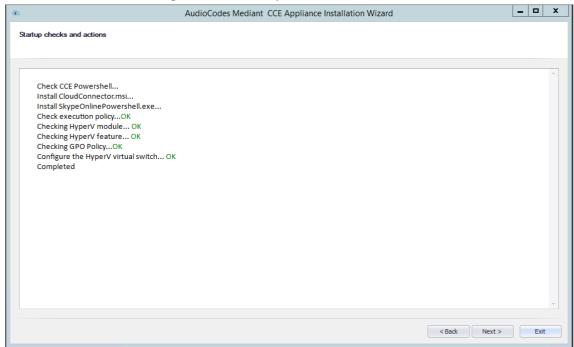
Figure 4-9: Skype for Business Online, Windows PowerShell Module



**4.** Select the **I agree to the license terms and conditions** and follow the Skype for Business Online Windows PowerShell setup.

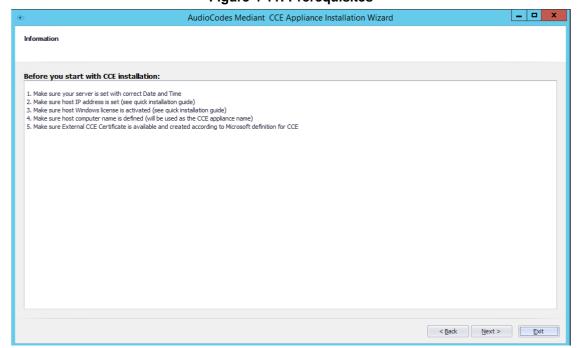
At this stage, the system checks that all prerequisites have been installed correctly. Click Next.





**6.** Make sure you have completed the displayed prerequisites before continuing to the next step, and then click **Next**.

Figure 4-11: Prerequisites



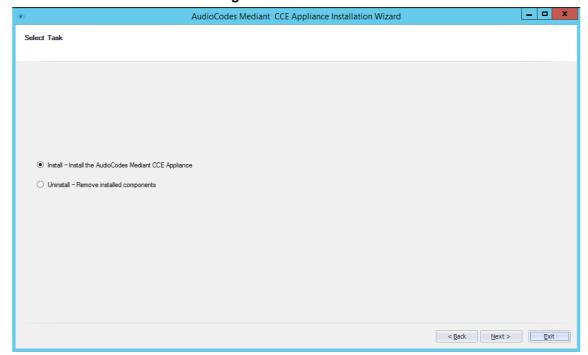


# 4.2.4 Step 4: Install/Uninstall CCE

The procedure below describes how to install/uninstall the CCE:

- ➤ To install the AudioCodes Mediant CCE application:
- 1. Click the **Install** option.
- 2. Click Next.
- ➤ To uninstall the AudioCodes Mediant CCE application:
- 1. Click the **Uninstall** option (usually done in case you encounter errors with the previous installation).
- 2. Click Next.

Figure 4-12: Select Task



# 4.2.5 Step 5: Set CCE Directories and Update Cloud Connector Edition Bits

The procedure below describes how to set the CCE directories.

#### > To set the CCE directories:

- 1. In the 'Site Directory' field, enter the CCE site directory (if it's not the first CCE, point the Site Directory to the share directory used by the first CCE on the site as the site directory).
- 2. In the 'Appliance Directory' field, enter the Appliance Directory.
- 3. In the 'External Certificate path' field, enter the path of the CCE Edge external certificate.
- 4. Click Run.

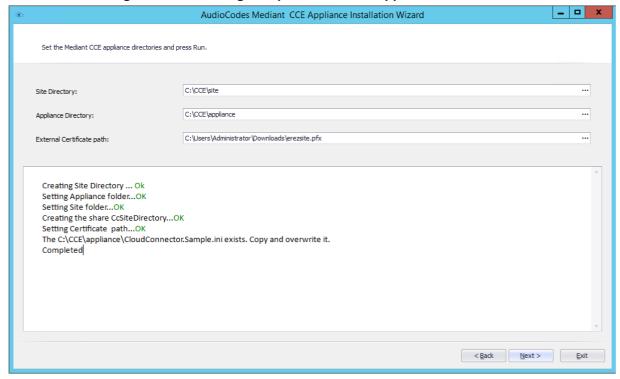


Figure 4-13: Set Mediant CCE Appliance Directories



The following screen appears:

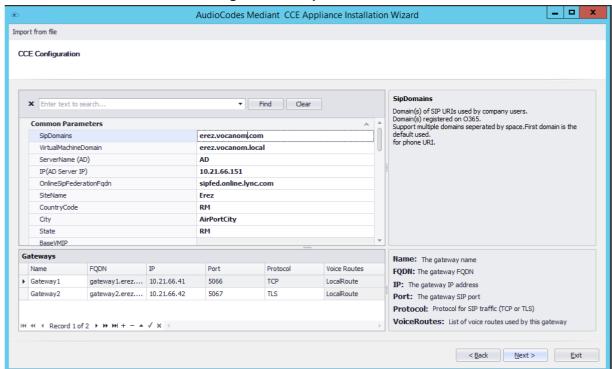
Figure 4-14: Running Setup Mediant CCE Appliance Directories



#### 4.2.6 Step 6: Configure the CCE Parameters

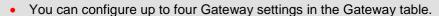
This step allows you to configure the CCE parameters (the CCE parameters are saved to the CCE ini file which is used by the CCE installer). For every parameter, there is a tooltip explanation on the right side of the screen.

Figure 4-15: Import from File



Configure the Gateway parameters in the Gateways table.

#### **Notes:**





- You can upload an ini file from another CCE by clicking Import from file in the top left corner of the screen.
- When setting the CCE parameters:
  - √ Edge Pool external FQDN must be same for all CCEs on the same site.
  - √ CCE can be installed behind a NAT. If this is the case, the ExternalMRPublicIPs parameter defines the global IP address.

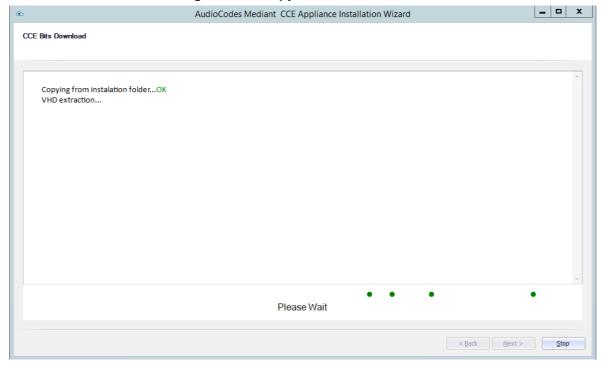


#### 4.2.7 Step 7: Copy and Download Files

The Wizard copies all the required files from the recovery partition to the selected directories. It downloads the latest CCE bits from the Microsoft site in case there is a newer version available. At the end of the process, it prepares the Windows VHDX file as the master that is used to prepare the CCE Virtual machines.

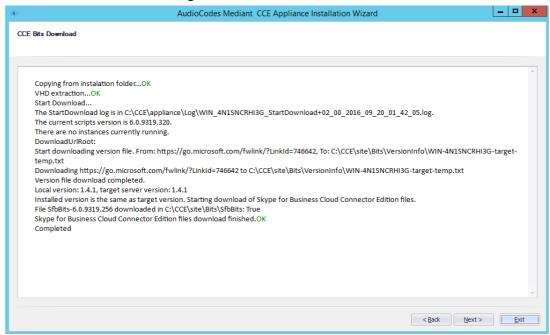
- To continue copying and downloading files:
- 1. Wait for this download phase to complete so that the **Next** button is active.

Figure 4-16: Copy and Download Files



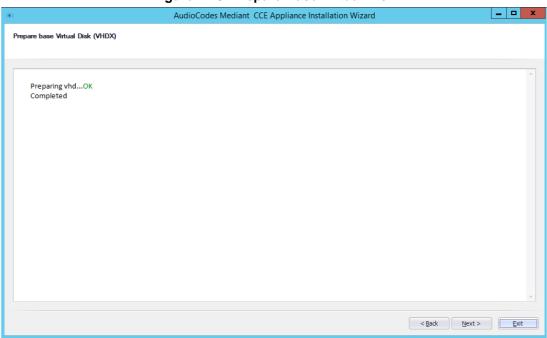
2. Click **Next**; the following screen appears:

Figure 4-17: CCE Bits Download



3. Click **Next**; the following screen appears:

Figure 4-18: Prepare Base Virtual Disk



4. Click Next.



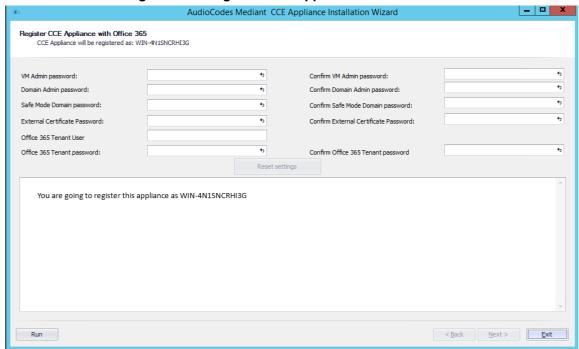
#### 4.2.8 Step 8: Install the CCE Instance

At this stage, enter your Office 365 tenant settings. The procedure below describes how to install the instance.

#### To install the instance:

1. Enter the password that will be used, the certificate password and the online tenant credentials. There is a tooltip for each field.

Figure 4-19: Register CCE Appliance with Office 365



- 2. Click Run.
- 3. If you are adding the CCE to an existing site:
  - Update the topology on the existing CCE instances by running the following cmdlet on each host server (run the cmdlet on the existing instances only):
     Publish-CcAppliance
  - Click Next to start the CCE installation; the following screen appears.



**Note:** This step takes approximately 90 minutes. It disables auto update while performing the setup.

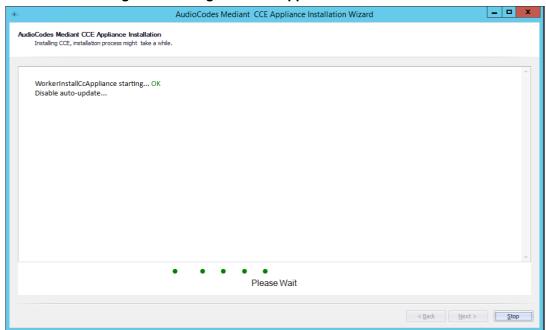


Figure 4-20: Register CCE Appliance with Office 365

**4.** At the end of the process, check that the installation has completed without errors and verify in the Hyper-V Manager that the installation command created the machines shown in the figure below.

Hyper-V Manager

File Action View Help

Hyper-V Manager

Hyper-V Manager

Virtual Machines

Name

State CPU Usage Assigned M

1.4.1 - Audiocodes - CMSServer

1.4.1 - Audiocodes - EdgeServer

1.4.1 - Audiocodes - MediationServer

1.4.1 - Audiocodes - AD

Figure 4-21: Hyper-V Manager Virtual Machines

5. Access all VMs and verify that all automatic/automatic delay services are running.

Running 0%

Running 0%

0 %

0 %

Running

Running

2048 MB

3072 MB

4096 MB

4096 MB

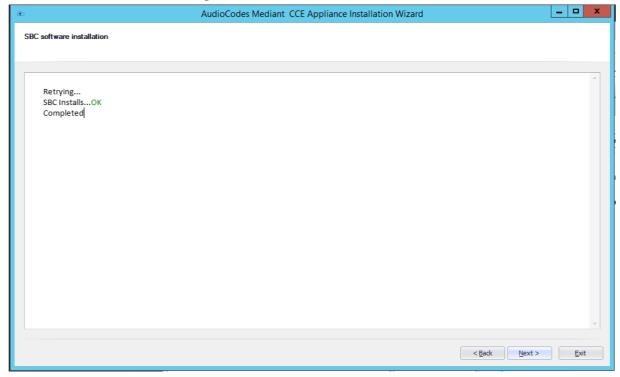


#### 4.2.9 Step 9: Add Software SBC on the Mediant Server CCE Appliance

For AudioCodes Mediant Server CCE Appliance (based on the HP server) the install wizard adds AudioCodes Software SBC as an extra Virtual machine. To configure the AudioCodes Virtual Software SBC, refer to document *LTRT-10406 Mediant Virtual Edition SBC Installation Manual Ver. 7.0.* 

> To add software SBC on the CCE Appliance

Figure 4-22: SBC Software Installation



- 1. Click **Next**; the completed CCE Installation page appears.
- Click Finish. You are asked if you wish to run the SBC wizard for configuring the SBC device using the SBC wizard and then generating an ini file at end of the process.

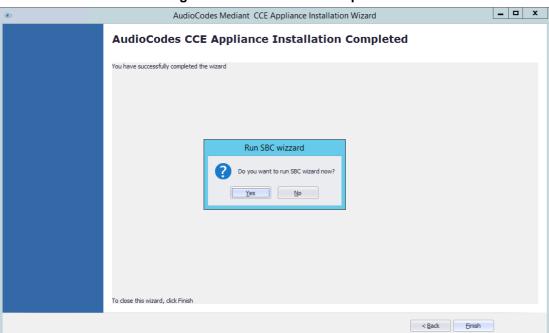


Figure 4-23: Installation Complete



#### 4.2.10 Step 10: Configure AudioCodes Gateway/SBC

To set the SBC, you can use the SBC Wizard which will be open at the end of the AudioCodes Mediant CCE install wizard.

X T SBC Configuration Wizard SBC Configuration Wizard Welcome This wizard will assist you with the initial configuration of AudioCodes Mediant SBC product. The wizard first asks you to select a configuration template and network setup. Once done, you will be prompted to fill in a short questionnaire to describe your network topology and configuration details. The wizard concludes by creating a configuration file, which you need to load to the device through the Web management interface. Wizard version: 2.6 Template Pack version: 2.10 (175 templates, 35 PBXs, 89 SIP trunks) AudioCodes For support or feedback, please send e-mail to: <a href="mailto:sbcwizard@audiocodes.com">sbcwizard@audiocodes.com</a> Help < Back Next > Cancel

Figure 4-24: SBC Configuration Wizard Welcome

Configure the AudioCodes Mediant 800 Gateway/SBC or Mediant Software SBC according to your PSTN/SIP trunk connection. For more information, refer to the relevant product documentation.

#### 4.2.11 Step 11: Post-Installation Configuration

Once the installation has completed, perform the post installation steps according to instructions in the *Configure Cloud Connector integration with your Office 365 tenant link* <a href="https://technet.microsoft.com/en-us/library/mt740651.aspx">https://technet.microsoft.com/en-us/library/mt740651.aspx</a>:

- Configure the firewall
- Set up PSTN gateways
- Setup your Office 365 tenant
- Update the domain for your tenant
- Add DNS records in Office 365 for your Edge
- Set up your users in Office 365
- Enable users for Cloud PBX voice and voice mail services



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# 5 Recovering CCE Image from USB

The AudioCodes Mediant CCE Appliance is shipped with the Host server pre-installed; however, in some cases customers may need to re-install or recover the CCE image.

This section describes the process for recovering the Mediant CCE Appliance (restore to default).



**Warning:** All data will be removed from the hardware device during the recovery process. During this process, a warning message is displayed, which prompts for permission to continue before data is erased.

This chapter describes the recovery procedures:

- Recovering AudioCodes Mediant Server CCE Appliance image (see below).
- Recovering AudioCodes Mediant 800 CCE Appliance image (see Section 5.2).

#### 5.1 Recovering Mediant Server CCE Appliance Image

The procedure below describes how to install the software on the Mediant Server CCE Appliance.

- To install the software on the Mediant Server CCE Appliance:
- 1. Insert the Mediant CCE Appliance recovery USB Drive to the front USB port.
- 2. Power up the server.
- 3. When the HP Splash screen appears, press F11 for the Boot Menu.



Figure 5-1: HP Splash Screen



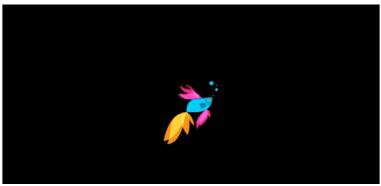
4. Select Option 3 One Time Boot to USB DriveKey option.

Figure 5-2: One Time Boot

```
1) One Time Boot to CD-ROM
2) One Time Boot to Floppy
3) One Time Boot to USB DriveKey
4) One Time Boot to HDD
5) One Time Boot to Network (1st NIC in IPL)
9) Enter the ROM Based Setup Utility (RBSU)
0) Exit Boot Override Menu and Continue Default Boot Process
This option allows the user to choose a specific boot override option for this boot only. This will not modify your normal boot order settings.
```

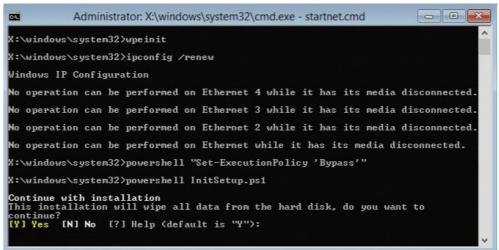
5. After selecting the USB key from which to boot, the WinPE Splash screen appears:





6. After the WinPE commences, you will see a command line window, prompting you to Continue with the installation.

Figure 5-4: Continue with installation



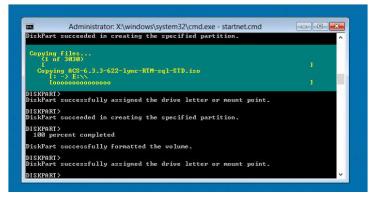
7. Click <Enter>, or <Y> followed by <Enter>, to continue the installation process.



Warning: All data will be erased from the device during installation.

The installer software will now partition and format all HDD storage of the hardware platform, and copy the contents of the USB to the recovery partition. The software will install Windows 2012R2 as the operating system and may reboot several times.

Figure 5-5: Copying files from USB to Recovery



Once Windows 2012 R2 has been installed, you may remove the USB key.

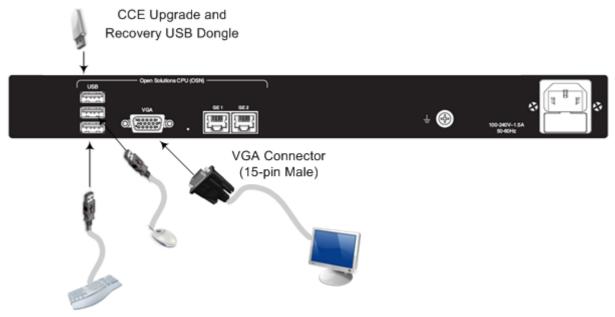


# 5.2 Recovering Mediant 800 CCE Appliance Image

The procedure below describes how to install or re-install the CCE software on the AudioCodes Mediant 800 CCE Appliance.

- To install or re-install the software on the AudioCodes Mediant 800 CCE Appliance:
- 1. Plug in the Mediant 800 appliance's OSN server accessories:
  - **a.** Connect computer peripherals (e.g., mouse and keyboard) to the USB ports (Standard-A type) labeled **USB**.
  - b. Connect the CCE Upgrade and Recovery USB dongle to one of the USB ports, labeled USB.
  - Connect a monitor using a 15-Pin D-type male connector to the VGA female port, labeled VGA (this VGA cable is not supplied).

Figure 5-6: Plugging OSN Server Accessories



- 2. Power up the OSN server.
- 3. When the AMI BIOS Splash screen is displayed, press F2 for Setup Menu.
- **4.** Navigate to the Save & Exit page, move the cursor down to Boot Override, and select the USB key. In the example below, the USB device appears as **MultipleCard Reader**.

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.

Main Configuration Boot Security Save & Exit Event Logs

Save Changes and Reset
Discard Changes and Reset

Restore Defaults
Boot Override
UEFI: Built-in EFI Shell
PLEXTOR PX-256MSPro
MultipleCard Reader 1.00

SPI Flash Write Protect Application
Control SPI Write Protect

++: Select Screen
11: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.

Figure 5-7: Mediant 800 Boot Override

5. Press Enter; the Mediant 800 OSN server restarts.

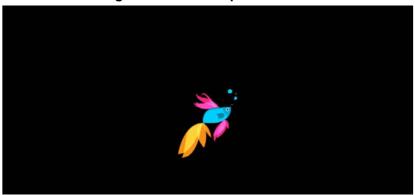


**Warning:** Failure to set the First Boot device and Boot Override correctly can result in the server performing an endless loop, constantly rebooting from the USB (partitioning, formatting, and installing Windows each time).



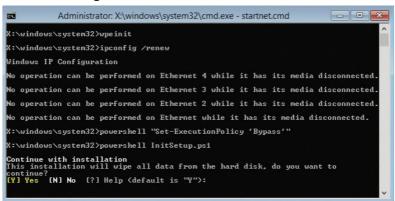
**6.** After restarting, the Mediant 800 CCE appliance's OSN server boots from the USB key (once only) and the WinPE Splash screen appears:

Figure 5-8: WinPE Splash Screen



 After WinPE starts, a command line window is displayed, prompting you if you wish to continue with the installation. Click Enter, or Y followed by Enter to continue the installation process.

Figure 5-9: Continue with Installation

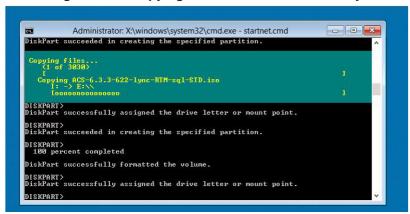




Warning: All data will be wiped from the device during installation.

8. The Installer software will now partition and format the HDD storage of the hardware platform, and copy the contents of the USB key to the recovery partition. The software will install Windows 2012R2 as the operating system and may reboot several times.

Figure 5-10: Copying Files from USB to Recovery



**9.** Once Windows 2012 R2 has been installed, you may remove the CCE Upgrade and Recovery USB dongle.



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**Installation Manual** A. BIOS Setup

#### **BIOS Setup** Α

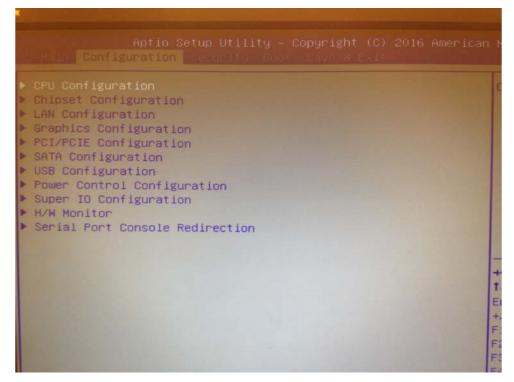
This appendix describes how to setup the BIOS of the CCE appliance.

#### **A.1 Mediant 800 CCE Appliance**

The Mediant 800 CCE appliance must operate with Hyper Threading (HT) disabled in the BIOS settings.

- > To setup the Bios:
- Reset the server and press **DEL** and **F2** to access the BIOS settings. 1.
- Open the CPU Configuration menu (BIOS menu > Configuration > CPU Configuration).

Figure A-1: CPU Configuration

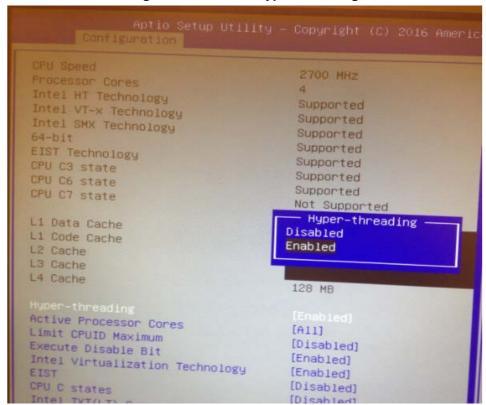


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3. Access the 'Hyper-threading' screen and disable Hyper-threading.

Figure A-2: Disable Hyper-threading



Installation Manual A. BIOS Setup

# A.2 Mediant Server CCE Appliance

The Mediant server CCE appliance must operate with Hyper Threading (HT) disabled and power performance set to maximum in the BIOS settings.

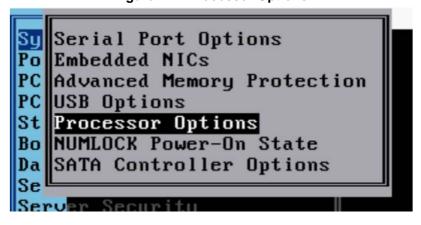
- Do the following:
- 1. Reset the server and press F9 to access the BIOS settings.

Figure A-3: Hyper Threading Settings

```
System Options
Power Management Options
PCI IRQ Settings
PCI Device Enable/Disable
Standard Boot Order (IPL)
Boot Controller Order
Date and Time
Server Availability
Server Security
BIOS Serial Console & EMS
Server Asset Text
Advanced Options
System Default Options
Utility Language
```

2. Choose System Options and then Processor Options:

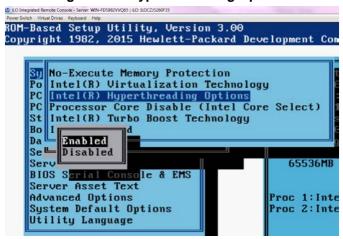
Figure A-4: Processor Options





3. Access the 'Hyper Threading Options' screen and choose Disabled.

Figure A-5: Hyper Threading Options



Installation Manual A. BIOS Setup

## **A.2.1 Power Performance Settings**

This section describes how to verify the power performance settings of the Mediant Server CCE appliance.

- To verify the power performance settings:
- 1. Choose Power Management Options.

**Figure A-6: Power Management Options** 

```
System Options

Power Management Options

PCI IRQ Settings

PCI Device Enable/Disable

Standard Boot Order (IPL)

Boot Controller Order

Date and Time

Server Availability

Server Security

BIOS Serial Console & EMS

Server Asset Text

Advanced Options

System Default Options

Utility Language
```

2. Choose **HP Power Profile** and verify that the power is set to maximum performance.

Figure A-7: HP Power Profile



**3.** Go to **HP Power Regulator** and verify that it is set to HP Static High Performance Mode.

### **International Headquarters**

1 Hayarden Street, Airport City Lod 7019900, Israel Tel: +972-3-976-4000

Fax: +972-3-976-4040

Contact us: <a href="https://www.audiocodes.com/info">www.audiocodes.com/info</a>
Website: <a href="https://www.audiocodes.com">www.audiocodes.com/info</a>

AudioCodes Inc.

27 World's Fair Drive, Somerset, NJ 08873 Tel: +1-732-469-0880 Fax: +1-732-469-2298

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