

"Cloud"ucation: Episode 3

What is CCE and What it means to you!



Presented by:  AudioCodes

Housekeeping: Technical Issues



- If you have any **technical difficulties**:
 - Pls email us directly: mike.erps@audiocodes.com

We will **email you the slides from this presentation** for future reference or to share with your colleagues.

WELCOME!

It is time for your Clouduation to commence.

What is clouduation?

I am glad you asked:

cloud·u·ca·tion

[klaʊd,jə'kāSH(ə)n]

Noun

1. The process of receiving systematic knowledge and insight related to all things cloud communications (cloud, premises or hybrid communications!)
2. An enlightening experience, focused around everyone's favorite topic of cloud communications



Clouduation is your monthly webucation.

Cloud (and non-cloud) communication topics.



The 2nd Wednesday of each month + on demand.

Industry experts | Relevant Topics



30 to 45 minute episodes.

Tangible ideas | solution options | Q&A

Now, it is time to get Clouduated!

Episode 1 - Webinar Replay:

Driving Skype for Business User Adoption with Phone Devices and Headsets



SLIDES |



ON DEMAND

Episode 3: Get clouduated and learn what is CCE and what it means to you

COMING SOON

Today's Featured Speakers



Mike Erps

- UC Solution Manager
- 10+ years AudioCodes Experience

Nikolay Muravlyannikov

- Program Manager, Microsoft
- 10+ years UC experience



Now...lets get Clouducatated!



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Skype for Business Online

Cloud PBX + Deployment options

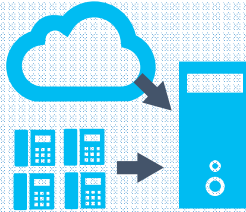


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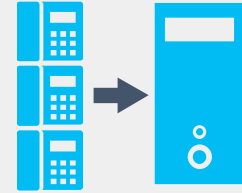
Skype for Business deployment options



Online



Hybrid



On-premises

- No unique on-premises functionality
- All users in Skype for Business Online
- Dial-in conferencing from Microsoft or a partner
- SIP trunk provided by Microsoft or via on-premises PSTN connectivity and Cloud Connector

- Cannot move all users at once or some users required to stay on-premises (unique functionality or regulations)
- Some users moved to the cloud; some stay on-premises
- For users moved online, Microsoft or partner dial-in conferencing provider must be used
- For users moved online, Microsoft or on-premises PSTN connectivity can be used

- If customer cannot move any users to the cloud due to compliance requirements or unique functionality that Skype for Business Online cannot provide
- All users and services on-premises
- Customer uses own trunk and provides dial-in conferencing

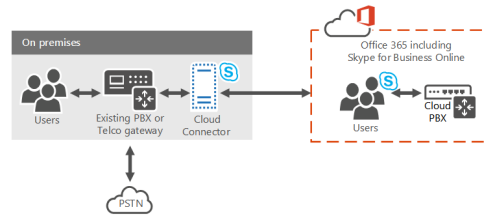
Cloud PBX deployment options

With PSTN calling service



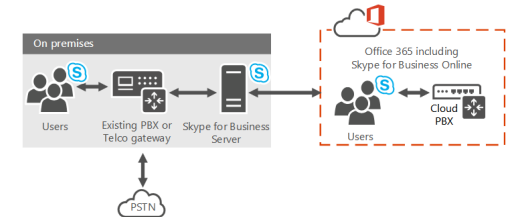
- ➔ Users homed online, PSTN service provided by Microsoft
- ➔ No on-premises Skype for Business or Lync infrastructure
- ➔ Available in the US, UK, France, Puerto Rico, and Spain only (more countries coming soon)

With on-premises PSTN connectivity via Cloud Connector



- ➔ Users homed online, PSTN service provided by third party
- ➔ Deployment of Cloud Connector on-premises required
- ➔ Available worldwide

With on-premises PSTN connectivity via an existing deployment



- ➔ Some users homed online, some users can be homed on-premises, PSTN service provided by third party
- ➔ Skype for Business Server 2015 deployment required*
- ➔ Available worldwide

Possible site architecture

Type 1:

Cloud PBX with Microsoft PSTN calling

Type 2:

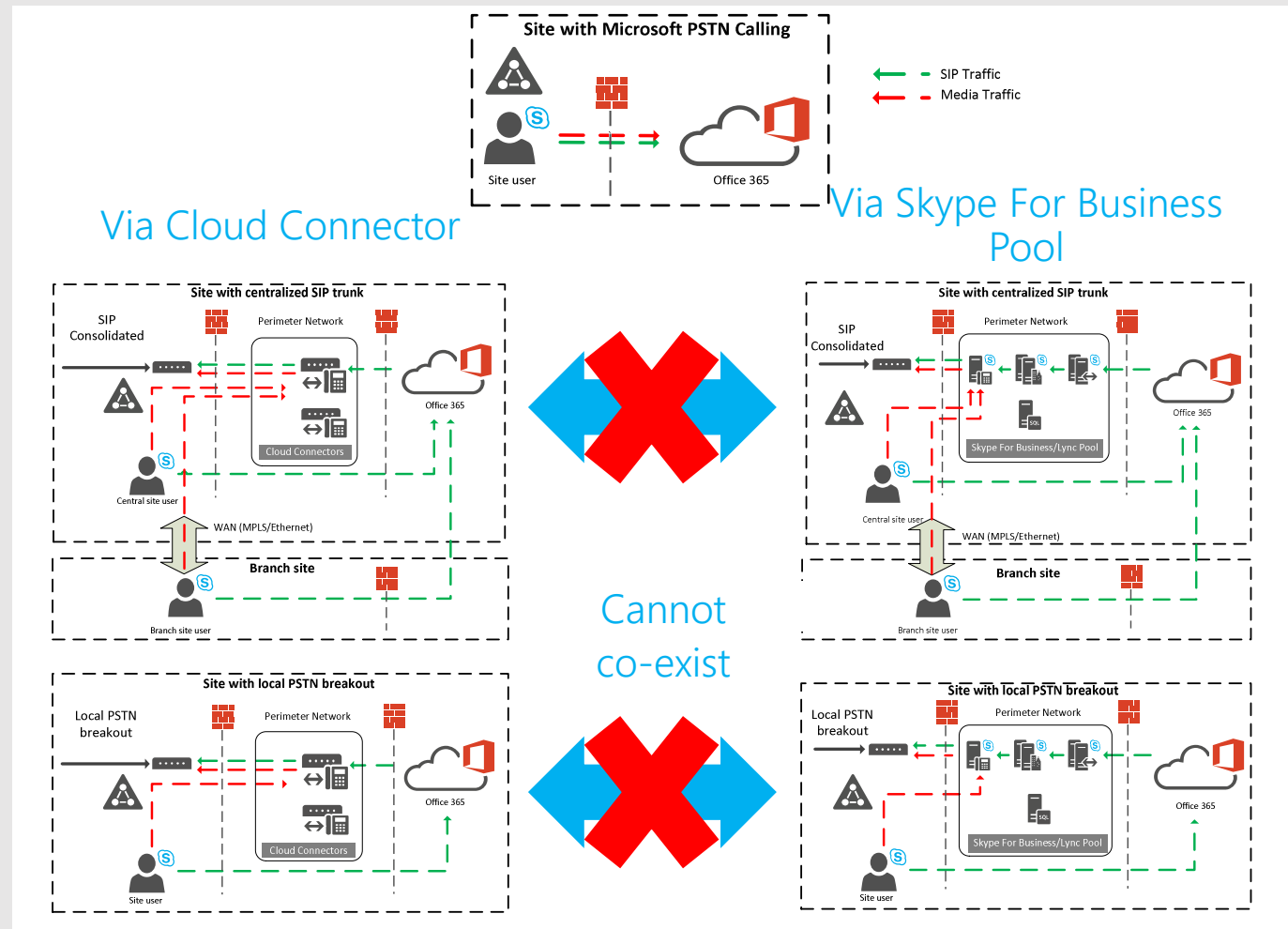
Cloud PBX with centralized on premises PSTN connectivity.

SIP trunks centralized, no local PSTN connectivity for branches required

Type 3:

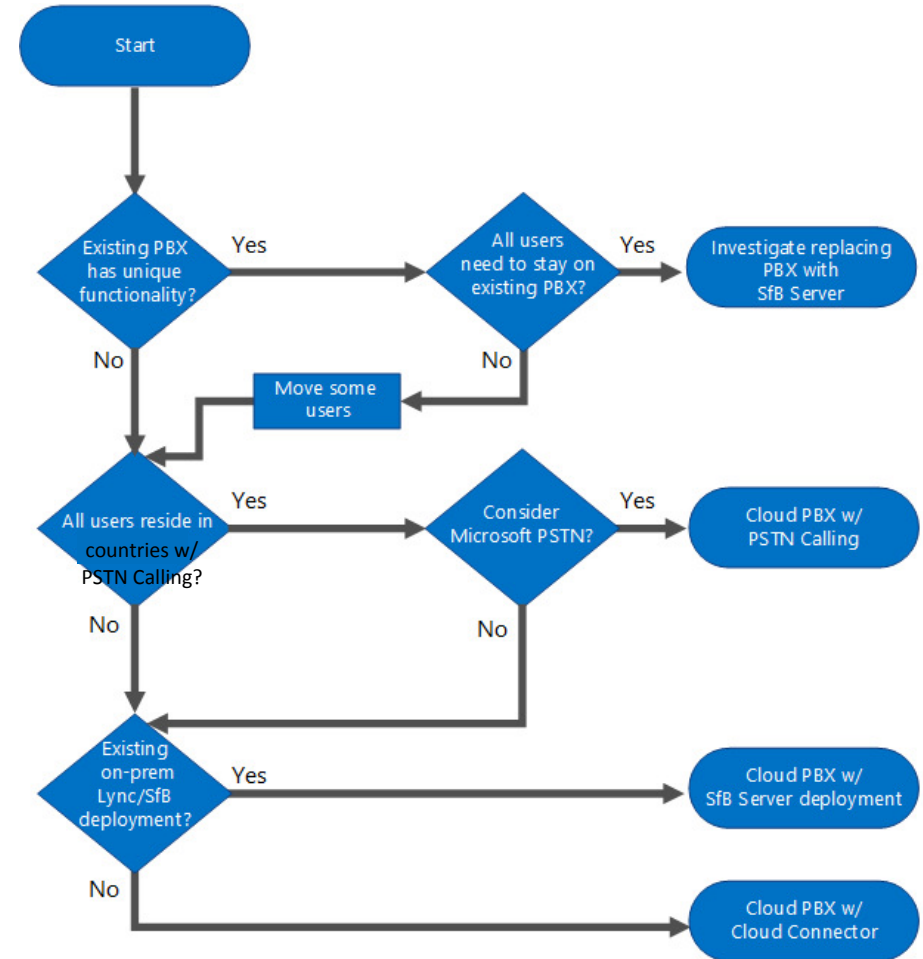
Cloud PBX with local on-premises PSTN connectivity.

Each site has own PSTN breakout



General decision tree

- Do you have any unique functionality that Skype for Business Online cannot provide?
- For US, UK, France, Puerto Rico, and Spain customers considering SIP trunk from Microsoft (Microsoft PSTN Calling), prioritize users porting their existing numbers
- Consider Cloud Connector when customer wants to keep their existing PSTN trunk, or outside the US, UK, France, Puerto Rico, and Spain
- Do not forget about dial-in conferencing (and Express Route)
- Note that at the moment Cloud Connector cannot co-exist with on-premises pools (hybrid).



Decision points



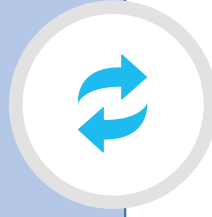
Online vs. Hybrid vs. On-premises?



User management and authentication



Migration to Skype for Business Online



On-premises server upgrade, in-place upgrade or side-by-side migration?

Open Discussion

What does Microsoft see as the most common scenario for CCE?



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Cloud Connector Updates

Version 1.4.2 released on March 20th

Release notes

Architecture change to improve deployment and management experience:

Introduction of Pin Point Zones for PSTN Gateway on DNS Host A record on Cloud Connector Active Directory DNS Server; Edge now part of internal Skype for Business Cloud Connector Edition virtual machine domain.

Improved certificate management:

Support for multi-tier certificates. External certificate can be issued from third party certification authority whose root CA certificate and/or intermediate CA certificate are not trusted by Microsoft;

Update Set-CcExternalCertificateFilePath cmdlet to support setting TLS gateway certificate and importing new external certificates;

Introduction of cmdlets to manage certificates that are near expiration or compromised. New cmdlets

- Renew-CcCACertificate;
- Renew-CcServerCertificate;
- Reset-CcCACertificate

Bug fixes:

Resolve issue PSTN call from Skype for Business mobile client shows wrong caller number in Cloud Connector Edition.

Resolve failure occurred during installation when confirming services running on Mediation Server and Edge Server if Domain Admin and VM Admin credentials were different.

Resolve failure to input special characters, like &, used in passwords.

Cloud Connector support statement

After release of 1.4.2 support statement:

Microsoft supports only current version of Cloud Connector and version minus one for 60 days after releasing a new version. If you configured auto update, the Cloud Connector will update on its own. If you choose manual update you need to upgrade to the newer version within 60 days after the new version available.

Upcoming this summer

Cloud Connector Media Bypass;

Co-existence between Cloud Connector and Cloud PBX via on-premises Lync or Skype for Business Deployment

Technical readiness overview

Hybrid Voice team blog <https://blogs.technet.microsoft.com/sfbhybridvoice/>

Recent posts

Prepare for Cloud Connector Update

Understanding Cloud Connector Auto Update;

Understanding Cloud Connector Auto Recovery;

Using Call Quality Dashboard with Cloud Connector;

Custom Cloud Connector Configurations

AudioCodes with Cloud PBX

Things to consider in addition



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AudioCodes Appliance for Skype for Business CCE

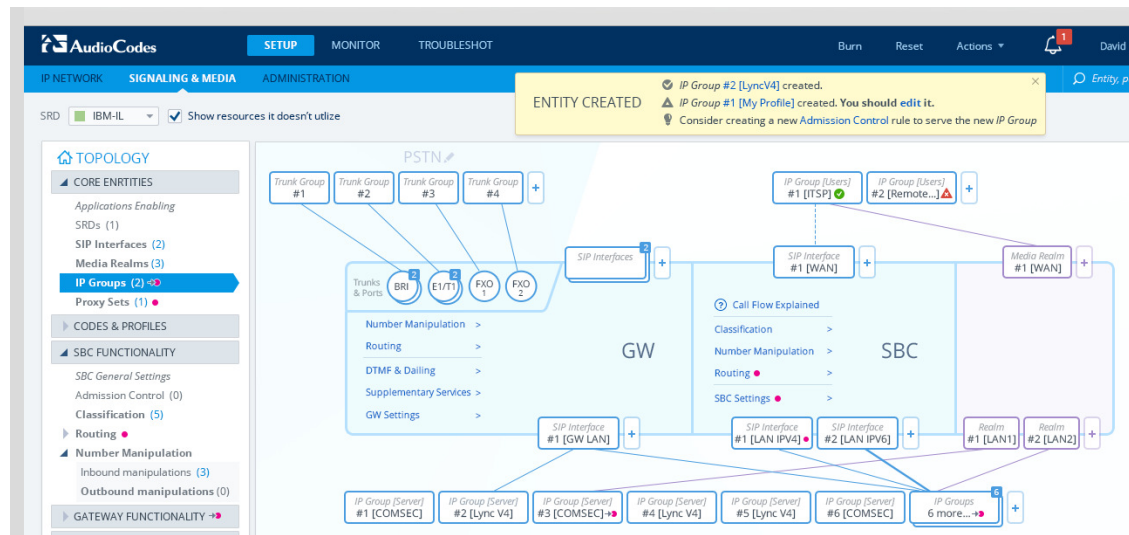
- An integrated appliance bringing the benefits of CCE, integrated within Gateway/SBC Enables bring-your-own voice services
- Two platforms:
 - Mediant 800
 - HP Server
- Users capacity is determined by traffic concentration planning (SBC/E1/T1 capacity)
- Supports HA with active-active appliance
- Benefits:
 - Simplifies procurement
 - Reduces rack space
 - Windows Server licenses included
 - Reduces lengthy SW download process
 - Can be upgraded to CloudBond 365 if needed



Connectivity for CCE Architecture

AudioCodes SBCs and Gateways Enhance the Cloud PBX Experience

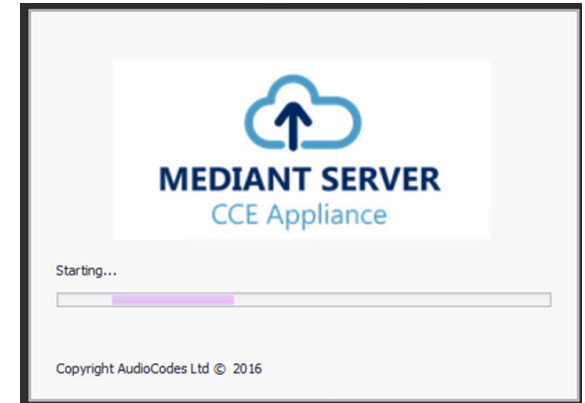
- Provides full interoperability with SIP-T and IP-PBX
- Provides Advanced Voice Routing
- Provides HA for Incoming calls
- Provides CDR
- Call Recording for PSTN calls
- Support for Analog and Fax Devices
- Local Voice Survivability



Completely Revised User Interface

Accelerating & Simplifying the Deployment

- Automated CCE deployment using the configuration wizard
 - Installs Hyper-V
 - Virtual NIC settings
 - Edits CCE INI configuration file
 - Runs CCE PowerShell
 - Installs public certificates
 - Automatically downloads and installs the latest Microsoft CCE version
 - Deploys CCE with latest Windows Updates CU
 - Integrated setup of SBC settings
 - Import and Export CCE INI file to allow quick installations for multiple CCE's
 - Deploys the AudioCodes vSBC for server appliance
- Includes rescue dongle for complete refresh/recovery of appliance



Note: No changes are made to CCE Deployment scripts

AudioCodes CCE Appliance Deployment Wizard

AudioCodes Mediant CCE Appliance Installation Wizard

Startup checks and actions

SBC Configuration Wizard

General Setup (Step 2 of 7)
Choose application type, configuration template and network setup.

Application: **Cloud Connector (CCE) Appliance**

Equipment (Interop): SIP Trunk

SIP Trunk: ☒ Generic SIP Trunk

Network Setup: One port: LAN

Diagram: LAN -> SBC -> WAN (ITSP)

Are you looking for a specific interop template which is not available?
If you do, all we need is a configuration file tested in this environment
and we will do the rest. Send us e-mail to interop@audiocodes.com.

Help < Back Next > Cancel

AudioCodes Mediant CCE Appliance Installation Wizard

template and network
port questionnaire to
etails. The wizard
need to load to the

...s, 89 SIP trunks)

wizard@audiocodes.com

SipDomains
Domain(s) of SIP URIs used by company users.
Domain(s) registered on O365.
Support multiple domains separated by space. First domain is the
default used.
for phone URL.

Fields:
Name: The gateway name
FQDN: The gateway FQDN
IP: The gateway IP address
Port: The gateway SIP port
Protocol: Protocol for SIP traffic (TCP or TLS)
VoiceRoutes: List of voice routes used by this gateway

< Back Next > Exit

Starting...

Copyright

Set the Mediant CCE appliance directories and

Site Directory:

Appliance Directory:

External Certificate path:

Creating Site Directory ... OK
Setting Appliance folder... OK
Setting Site folder... OK
Creating the share CcSiteDirectory.
Setting Certificate path... OK
The C:\CCE\appliance\CloudConne
Completed

AudioCodes CCE Dashboard

- View AudioCodes CCE Appliance from a single interface
- Single pain of glass to monitor CCE and SBC/GW
 - View alarms from the CCE servers roles
 - CMS
 - Domain Controller
 - Mediation
 - Edge
 - View alarms from SBC/GW
 - Monitor KHI
 - Manage CCE
 - Update times
 - Site information
 - Server names + IP addresses
 - SSO to the SBC/GW

The screenshot displays the AudioCodes CCE Dashboard interface. The top navigation bar includes tabs for SETUP, MONITOR (active), and TROUBLESHOOT. The main content area is titled 'Cloud Connector Virtual Machines' and shows a summary of system components and their status.

Cloud Connector	CC1	AudioCodes	1.4.1	6.17:07:07.3702344	7.2.16.41753
Status	Server Name	Site Name	Running Version	Last Boot UpTime	CCE Config Version
EdgeServer Internal Server IPs: 10.21.56.241 Status: Operating normally Internal Pool Name: edgepool External SIP Pool Name: ap External SIP IPs: 195.189.192.48 External MR FQDN Pool Name: ap External MR IPs: 195.189.192.48 External MR Port Range: 10000	Domain Controller AD Status: ● Memory: 2048 MB CPU: 0% UP Time: 6:16:53:55	Central Management Store (CMS) CMSServer Status: ● Memory: 3072 MB CPU: 0% UP Time: 6:16:53:57	Mediation role MediationServer Status: ● Memory: 4096 MB CPU: 1% UP Time: 6:16:53:17		

CCE Dashboard – Preview

The screenshot displays the AudioCodes CCE Dashboard interface. The top navigation bar includes the AudioCodes logo, a hamburger menu, and tabs for SETUP, MONITOR, and TROUBLESHOOT. The user is logged in as .Administrator. The left sidebar shows a tree view with categories like DASH, SKYPE, and PERFORMANCE, with sub-items like DASH, SKYPE, and PERFORMANCE. The main content area is titled 'Edit Update Time r3' and contains the following configuration fields:

- Name:** A text input field containing 'update 1'.
- Start Time:** A time picker set to 00:00:00.
- Duration:** A time picker set to 23:00:00.
- Type:** A dropdown menu set to 'Monthly'.
- Day Or Weeks:** A dropdown menu set to 'Days Of Week'.
- Weeks Of Month:** A list of checkboxes for selecting weeks: First (checked), Second, Third (checked), Fourth, and Last (checked).
- Days Of Week:** A list of checkboxes for selecting days: Sunday, Monday (checked), Tuesday, Wednesday, Thursday (checked), Friday (checked), and Saturday (checked).

At the bottom of the configuration area, there are two buttons: 'Update' and 'Back'.

Q&A

Thank You for your time today



Mike Erps

- UC Solution Manager
- 10+ years AudioCodes Experience

Nikolay Muravlyannikov

- Program Manager, Microsoft
- 10+ years UC experience



Next Steps

More about
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