

# ExpertsLive Norway



Is Teams Voice and Video ready for  
your organization?

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MVP & Lead architect / Cellip

@MartenHellebro

Platinum Sponsor 2019



Microsoft

# Is Teams voice and video ready for your organization?

- Teams voice
  - Requirements
  - Features
- Teams video
  - Conference rooms
  - Traditional video conferencing rooms

# Introduction

## MÅRTEN HELLEBRO

*MVP & Lead Architect Cloud Voice at Cellip*



Cellip, the **leader** in Teams and Skype telephony. Microsoft **Voice Partner Of The Year**, Gold **Communication** Partner, Silver **Cloud Productivity**, TAP participant Teams Direct Routing – **global launch partner**



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#ExpertsLiveNO

# Is Teams voice ready for your organization?

# Teams voice

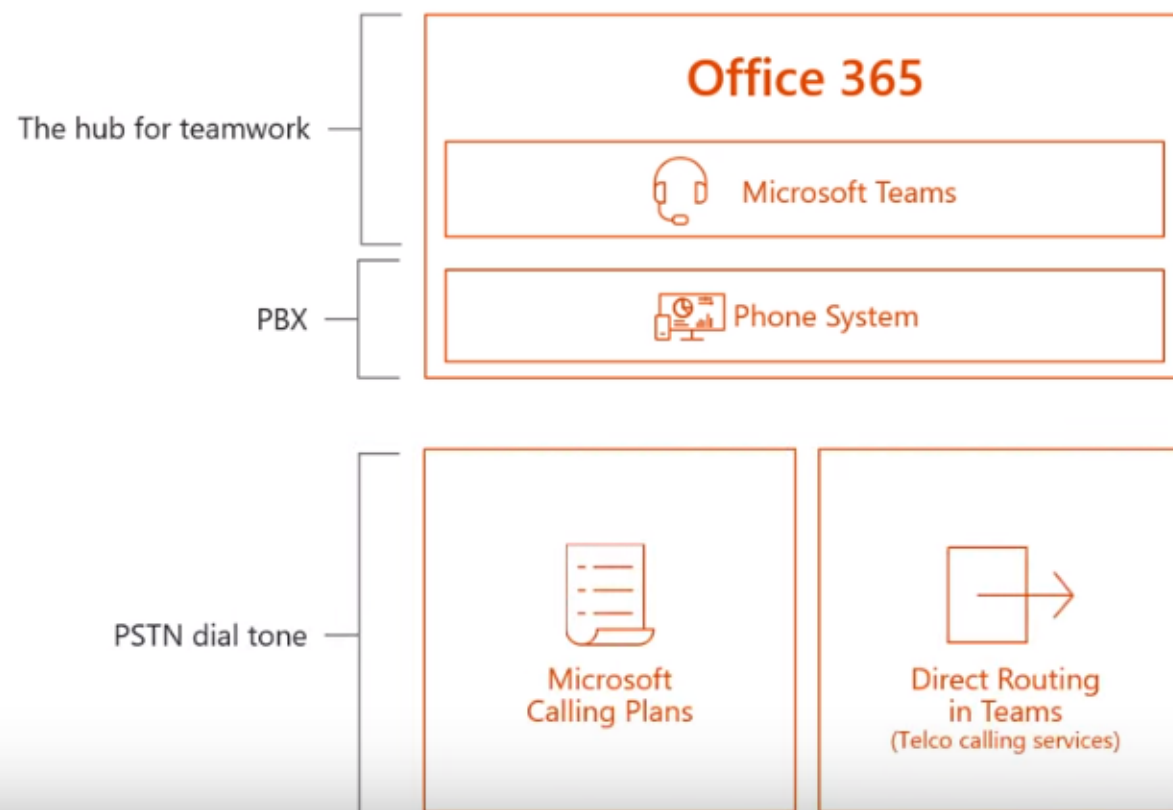
## PSTN-access

- Direct Routing
- Calling plans

## Licensing

- Phone System
  - E & A-plans

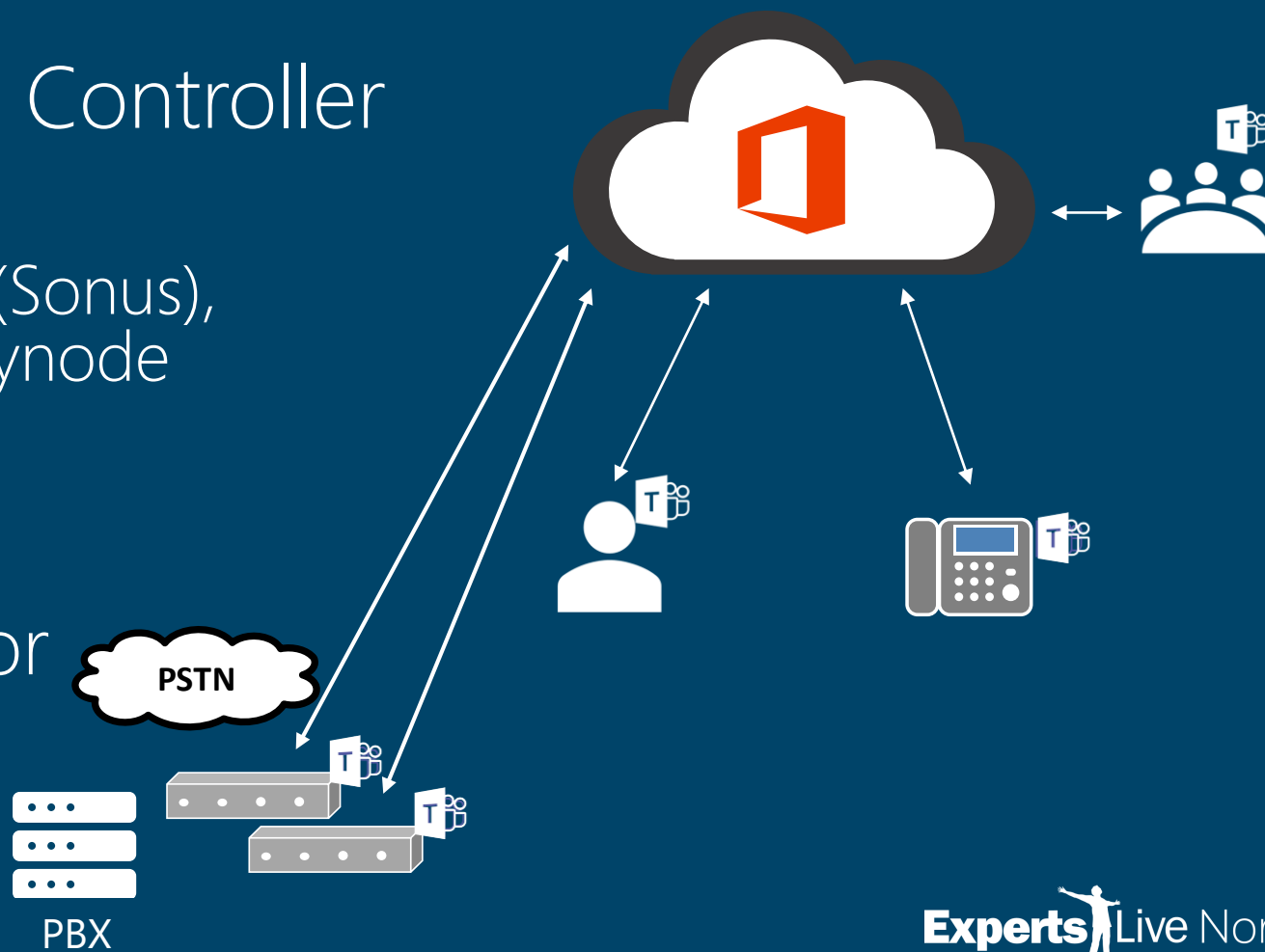
## Enterprise Voice for the cloud



# Teams voice

## Direct Routing

- SBC - Session Boarder Controller
  - Certified SBC
    - AudioCodes, Ribbon (Sonus), Oracle, Thinktel & Anynode
  - Certificate
  - PSTN access
  - CPE, partner hosted or public cloud
  - PBX integration



# Teams voice

## Direct Routing, Office 365

- PowerShell – pair the SBC
  - New-CsOnlinePSTNGateway
  - Set-CsOnlinePstnUsage
  - New-CsOnlineVoiceRoute
  - New-CsOnlineVoiceRoutingPolicy

# Teams voice

## Direct Routing, Office 365

- PowerShell – enable a user
  - Set-CsUser name@domain.com -EnterpriseVoiceEnabled \$true -HostedVoiceMail \$true OnPremLineURI tel:+47XXXXXXXXXX
  - Grant-CsTeamsCallingPolicy
  - Grant-CsOnlineVoiceRoutingPolicy



# Teams voice

Direct Routing, Office 365

- Licenses and phone number assignment

# Teams voice

Microsoft 365 admin center

>

Home

Users


Groups

Devices

Settings

Product licenses

Settings



Mårten Hellebro  
marten.hellebro@cellip.se

Change [Change password](#)

Username / Email

marten.hellebro@cellip.se

Edit

Aliases

admin@cce.cellip.com  
admin@skype365.se  
busyim@cellip.se  
cloud.support@cellip.se  
marten.hellebro@cellip.onmicrosoft.com

Product licenses

Visio Online Plan 2  
Microsoft Flow Free  
Office 365 E5

Edit

Microsoft Teams

Skype for Business Online (Plan 2)

Phone System

On

On

On

# Teams voice

Mårten HellebroSign out

Skype for Business admin center

dashboard

users

organization

voice

call routing

audio conferencing

online meetings

tools

reports

phone numbersport ordersvoice usersemergency locationson premises PSTN

Active users ▾Enabled ▾

<input type="checkbox"/>	Display name	Number	Number Status	PSTN Connectivity
<input type="checkbox"/>	Mårten CCE	<a href="#">+46 8 124 485 91</a>		On-premises
<input checked="" type="checkbox"/>	Mårten Hellebro	<a href="#">+46 8 558 010 24</a>		On-premises

Mårten Hellebro

Assigned number

[+46 8 558 010 24](#)Change | Remove

International calling

EnabledChange

Assigned license

Licensed

PSTN Connectivity

On-premises

# Teams voice

## Office 365

- Monitoring & Call Quality Dashboard



Dashboard



Teams



Devices



Locations



Users



Meetings



Messaging policies



Voice

Direct Routing

Call queues

Auto attendants

Call park policies

Calling policies



Analytics &amp; reports



Org-wide settings



Legacy portal



Call quality dashboard

Dashboard \ Direct Routing

## Direct Routing

Direct Routing lets you connect a supported Session Border Controller (SBC) to Microsoft Phone System to enable voice calling features. For example, you can configure on-premises PSTN connectivity with an SBC to send and receive calls from a user with the Teams app. [Learn more](#)

### DIRECT ROUTING SUMMARY

4

Total SBCs

3

SBCs with issues

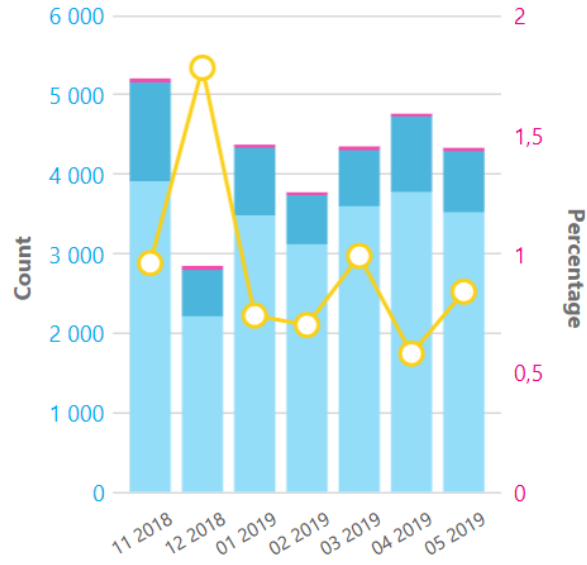
4 Items



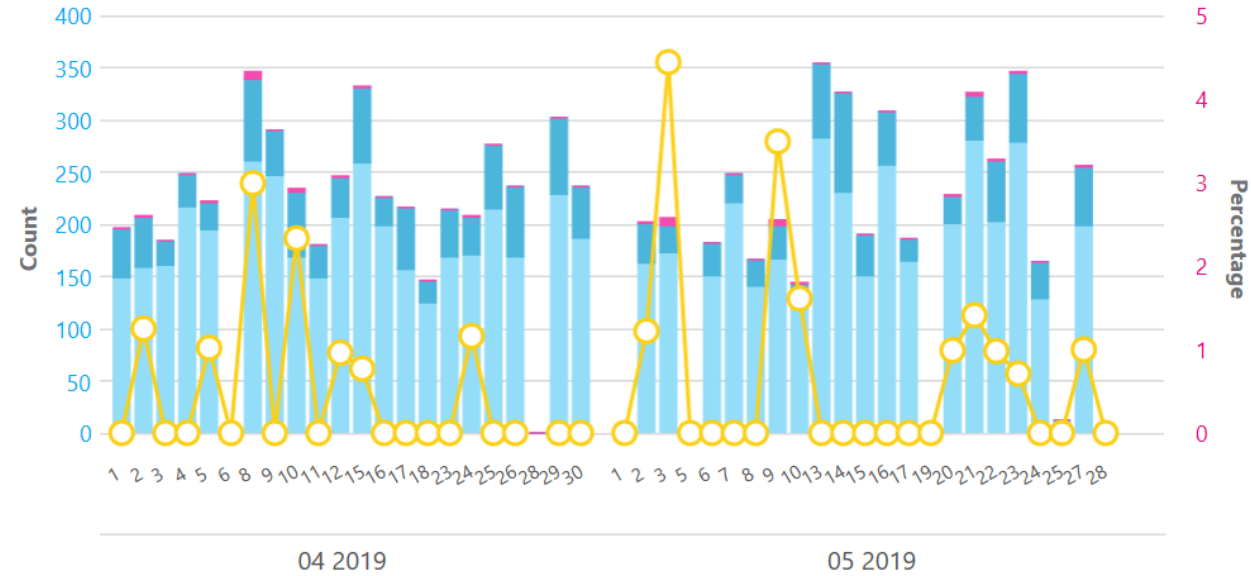
SBC	Network effectiveness (Calls) ?	Average call duration (Calls) ?	TLS connectivity status ?	SIP options status ?	Concurrent calls capacity
sbc1.pstnaccess.cell	96.77% (93)	4.29 mins	Active	Active	Within limits
sbc2.pstnaccess.cell	0% (0)	0 sec (0)	Inactive	Warning	Within limits
sbc3.pstnaccess.cell	0% (0)	0 sec (0)	Inactive	Warning	Within limits
sbc4.pstnaccess.cell	0% (0)	0 sec (0)	Warning	Warning	Within limits



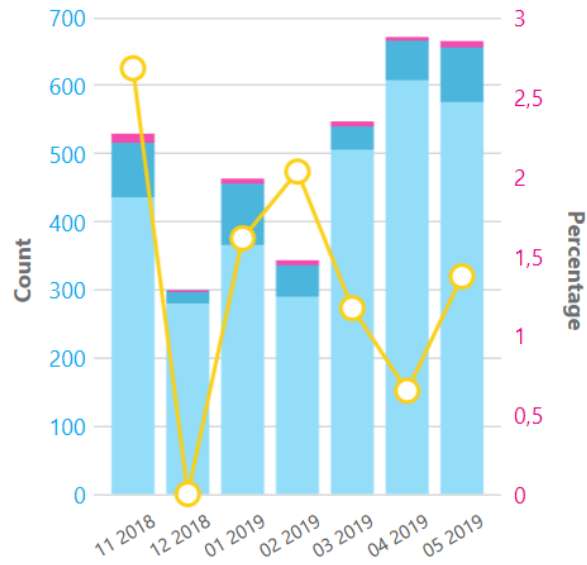
### Audio Streams Monthly Trend



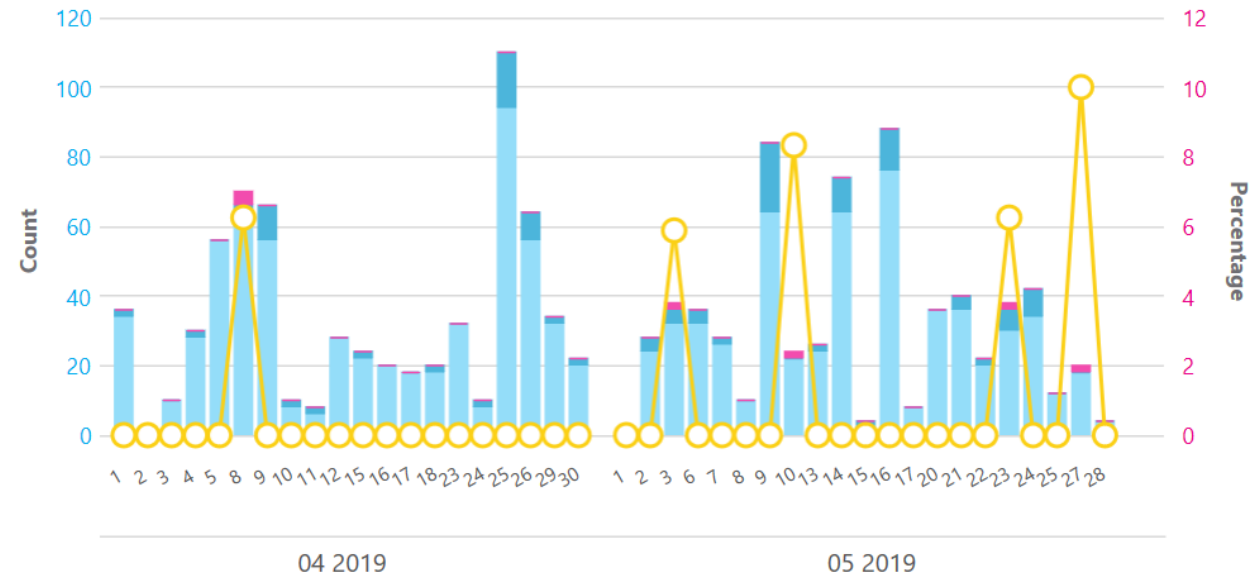
### Daily Trend



### Server - Client Monthly Trend



### Daily Trend



Concurrent calls capacity

Within limits

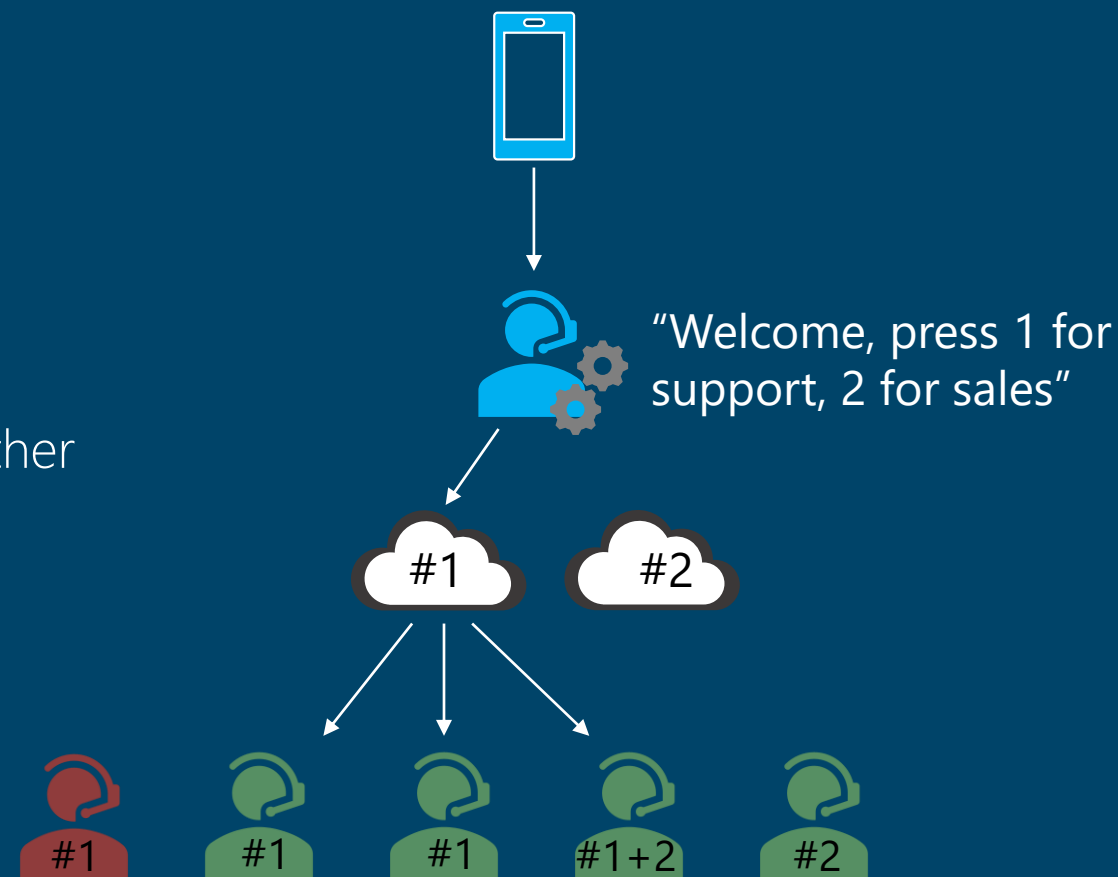
Within limits

Within limits

Within limits

# Teams voice

- Call features
  - Auto Attendant
  - Call Queues
  - Group Call Pickup
  - Delegation
    - Place/receive calls on behalf of another
- Client-side features
  - Call forwarding
  - Simultaneous ring
  - Call group
  - Voice mail
  - Forward, consult
  - Put on hold, now with music on hold
- Call Park
- Busy on busy





# Teams voice


## Call settings


- In Teams


### Settings


 General

 Privacy

 Notifications

 Devices

 Permissions

 Calls

#### Call answering rules

Choose how you want to handle incoming calls.

☒ Calls ring me ☐ Forward my calls

Also ring 

+46702103924

If unanswered 

Voicemail

Ring for this many seconds before redirecting

20 seconds (default)

#### Voicemail

Voicemails will show in the calling app with audio playback and transcript.

Change voicemail greeting



# Teams voice

## Call settings

- In Teams

- Voice mail

<https://aka.ms/vmsettings>

**Röstbrevlåda**  
Ändra dina inställningar för röstbrevlådan.

Spara Ignorera

Svarsregler för samtal

- Don't play greeting, and hang-up
- Play greeting, then hang-up
- Play greeting, then transfer the call
- Play greeting, then allow the caller to record a message**
- Play greeting, then allow the caller to recording a message or transfer to the target user

Fråga om språk  
Om du ändrar den här inställningen ändras språket för hälsningsfrågan

Svenska (Sverige)

Norska, bokmål (Norge) ▼

Konfigurera frånvaromeddelande  
Customize an Out of Office greeting message, and choose to play it to callers all the time, based on your Outlook auto-reply status, or calendar OOF status

☒ **Play Out of Office greeting all the time**

Spela upp frånvaromeddelande när:

- ☐ Jag har ett autosvar från Outlook
- ☐ Jag har en avtalad tid i kalendern för frånvaro

# Teams voice

Attendant, switchboard, receptionist

- Awaiting client-side API
- “Teams-ified” Skype-versions
- Skype client for attendants, everyone else using Teams

Call Center

- API available
- Basic functionality



# Teams voice

## Devices

- Headsets
  - Certified devices
  - Find your favorites, one-size doesn't fit all
  - Call controls
    - Skype client steals controls
- [aka.ms/teamsdevices](https://aka.ms/teamsdevices)

# Teams voice

## Devices

- Desk phones
  - Skype vs. Teams phones
    - 3PIP vs. Teams native
    - Teams vs. LPE
    - Upgrade Skype phones by 15 January 2020
- [aka.ms/teamsdevices](https://aka.ms/teamsdevices)



# Teams voice & video

Microsoft Teams Room (MTR) /  
Skype Room Systems (SRS)

License, Meeting Room

- Microsoft Teams
- Skype for Business Online Plan 2
- Phone System
  - Requires Direct Routing or a Calling Plan
- Audio Conferencing
- Microsoft Intune
- [aka.ms/teamsdevices](https://aka.ms/teamsdevices)



# Is Teams video ready for your organization?

# Teams video

- Microsoft Teams Room (MTR) / Skype Room System (SRS)
- Skype enabled conference rooms
- Surface Hub
- Huddle rooms
- External participants
  - Teams web client



# Teams video - Traditional video conferencing rooms

For example:



Service providers:





# Teams video

More than

# 90%

of Fortune 500 companies  
use VTC systems



## Large existing VTC investments

Organizations with existing VTCs want to continue using them - and the market is growing at 6% CAGR.



## Driving towards cloud deployments

Large enterprises have comprehensive and strict IT requirements and policies for data privacy and ownership – but Teams open up for cloud deployments.



## Geographically distributed

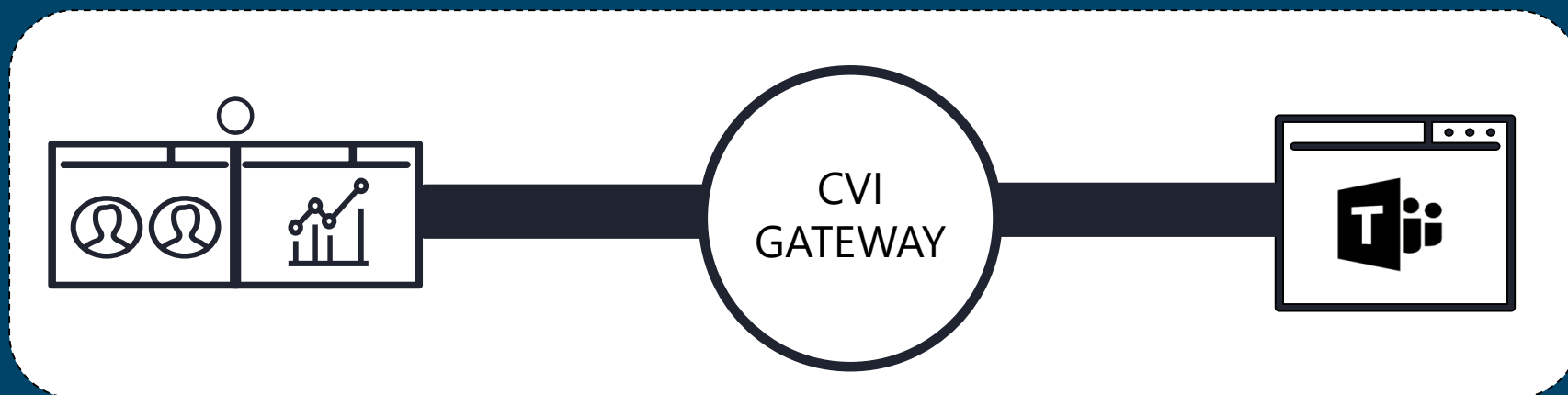
These organizations operate over many locations and time zones, so a flexible cloud solution is key.

# Teams video

## What is Cloud Video Interop?



Cloud Video Interop (CVI) is a Microsoft Qualified third-party solution that enables third-party meeting rooms (telepresence) and personal video devices (VTCs) to join Microsoft Teams meetings.



# Cloud Video Interop maintains a native user experience

## Native video endpoint UX



- High quality video and optimised video conference layout
- Bi-directional content sharing with native resolution
- Support dual screen display for presentation viewing/sharing



## Microsoft Teams native UX

- Video endpoints appears as any other Teams participant
- Video endpoint sharing content like any other Teams participant



# Teams video

Is Cloud Video Interop for me?




- If you have a large deployment of meeting room devices and personal video devices that are not qualified for direct integration with Microsoft Teams
- Would like to maximise existing investments in VTCs
- Have a strong user-experience with VTCs
- Transitioning from Skype for Business on-prem to Microsoft Teams



# CVI Teams Gateway service technical global coverage

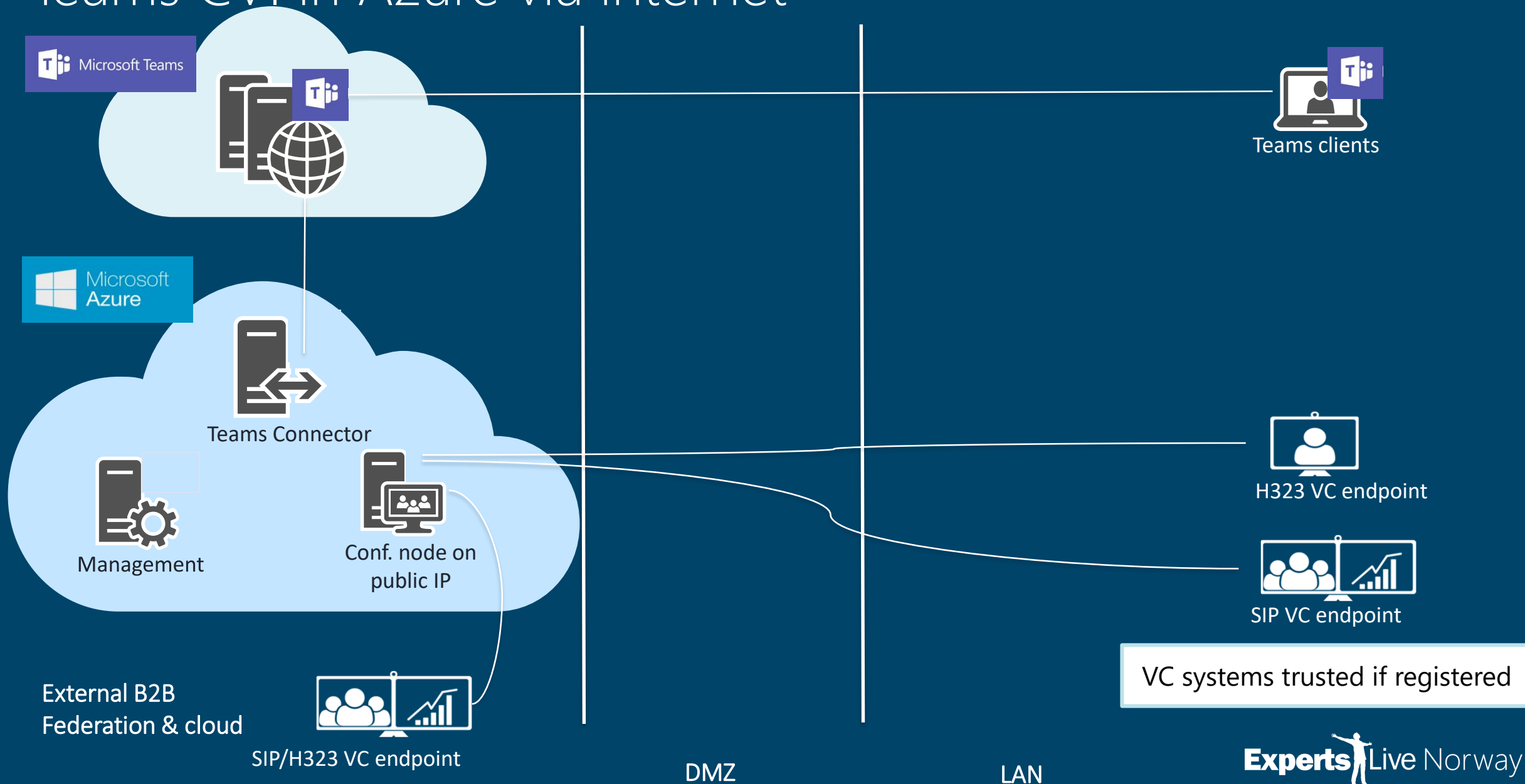
## QoS Backbone media proxies and Teams Gateways

### Key Deployment Locations

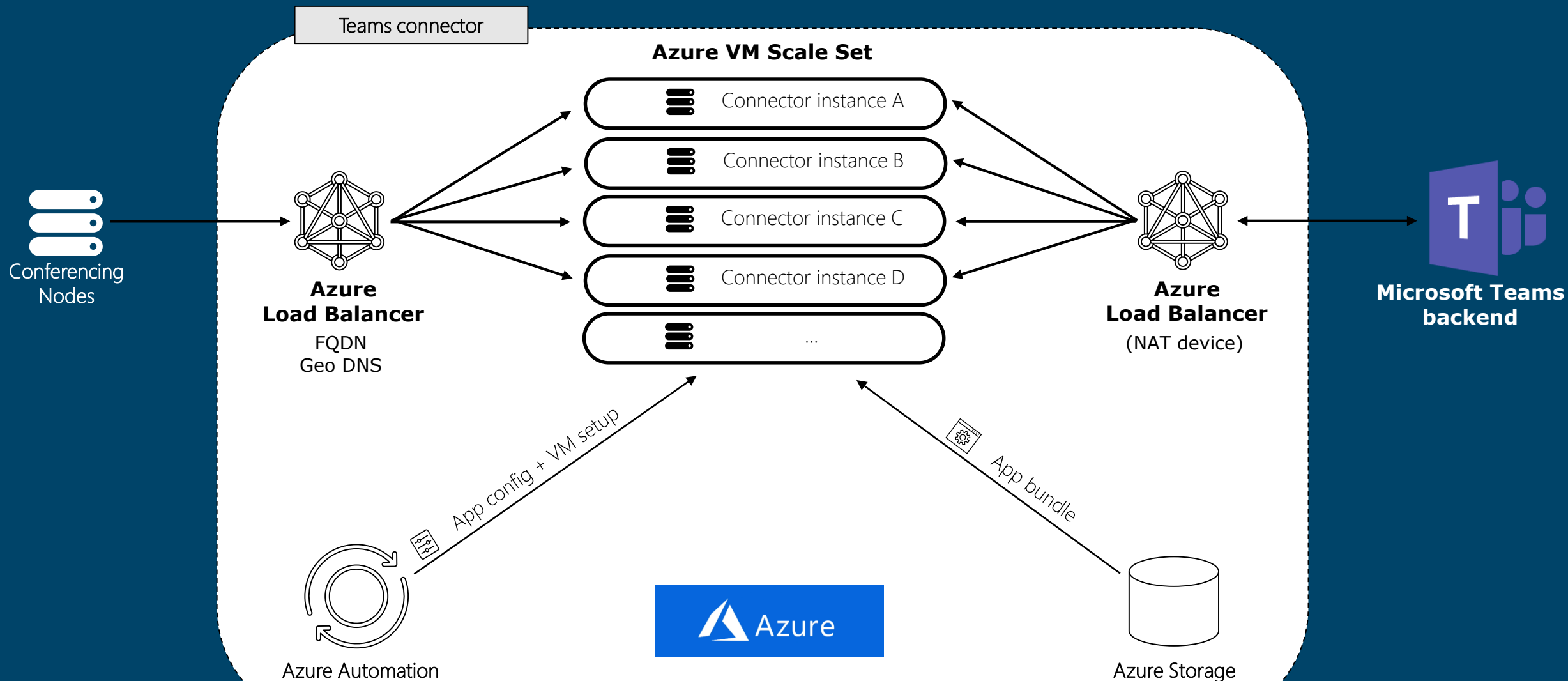
-  Dedicated CVI Breakouts
-  Azure locations, phase 1
-  Azure locations, future

Endpoints will be using the CVI breakouts with QoS network to ensure high quality and low latency to the closest Azure data centre.  
Endpoints hosted on the service will be verified & trusted into Teams meetings.




# Teams CVI in Azure via internet

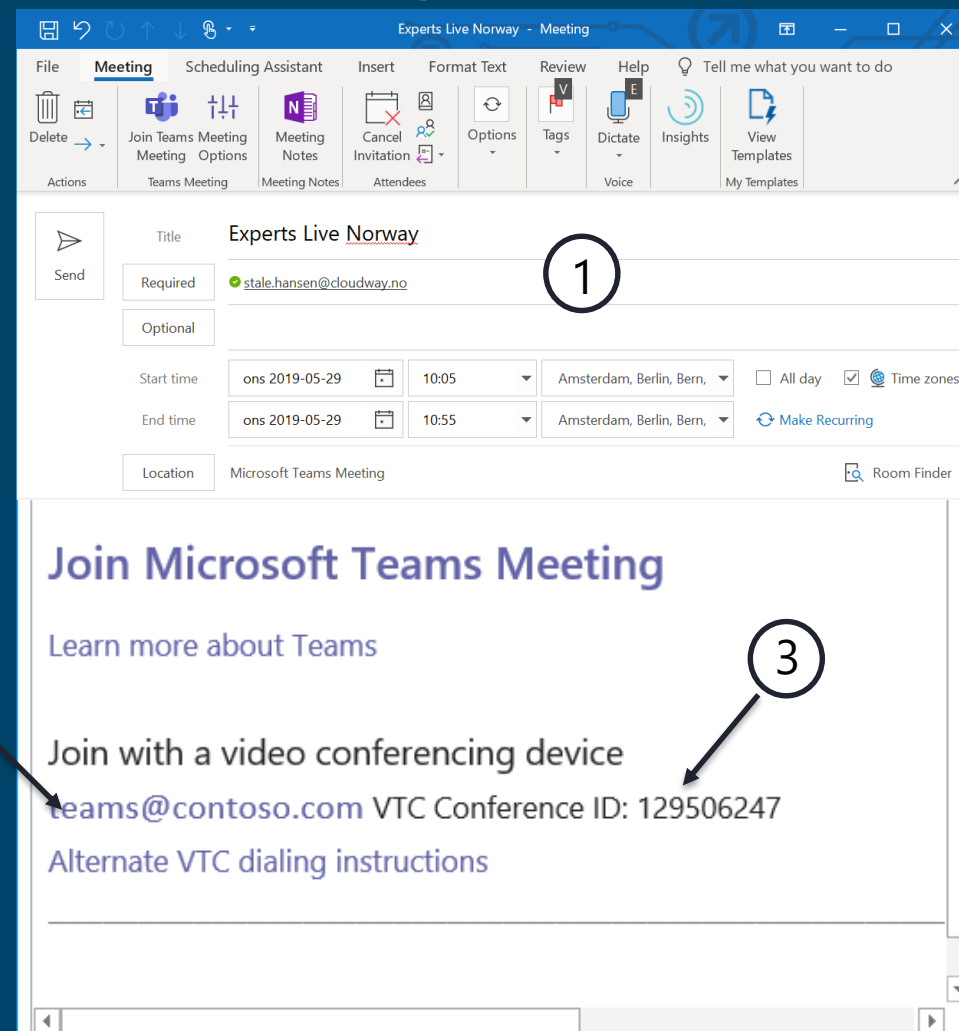


# Architecture overview connector in Azure



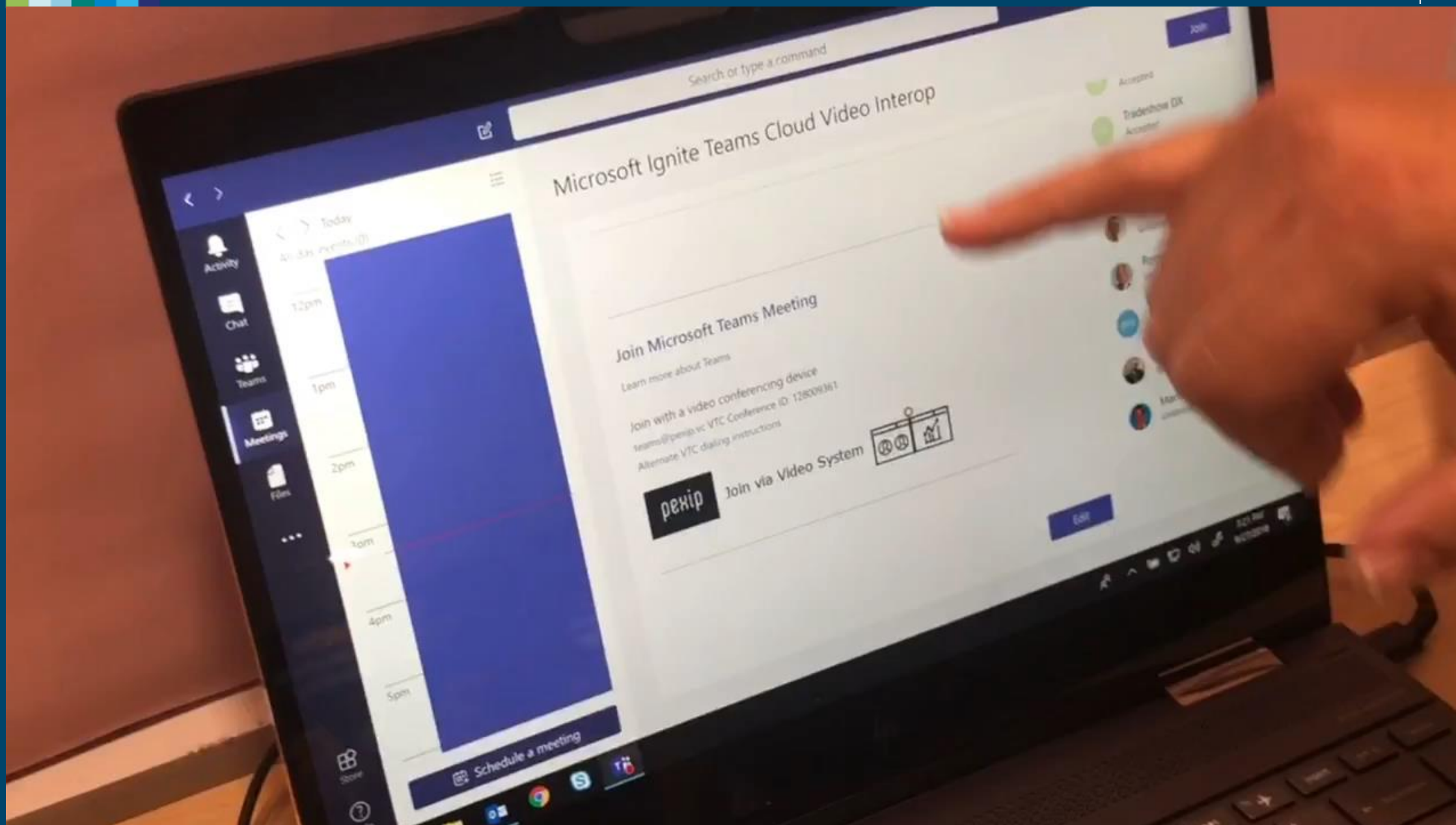
# Standardise the Join experience

- 1  Schedule a Teams meeting using Outlook or Teams client
- 2  Dial video endpoint into virtual reception using URI
- 3  Enter *Conference ID* on the video endpoint



The screenshot shows the 'Experts Live Norway - Meeting' window. The 'Required' field contains the email 'stale.hansen@cloudway.no' (callout 1). The 'Start time' is 'ons 2019-05-29' at '10:05' and the 'End time' is 'ons 2019-05-29' at '10:55'. The 'Location' is 'Microsoft Teams Meeting'. Below the meeting details, the 'Join Microsoft Teams Meeting' section includes a link to 'Learn more about Teams'. Under 'Join with a video conferencing device', the text 'teams@contoso.com VTC Conference ID: 129506247' is shown (callout 2). Below this, there is a section for 'Alternate VTC dialing instructions' (callout 3).







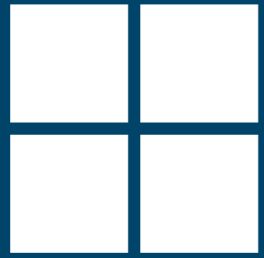
# So, is Teams Voice and Video ready for your organization?

- Now that you know what Teams is capable of, its up to you to make the decision if your organization is ready or not.



# Thank You!

## Platinum



Microsoft

## Gold

 audioCodes

## Silver

 au2mator

pexip

Jabra

logitech