

Microsoft Academyadi

la partecipazione che ti premia

Microsoft Teams
Deployment &
Communications

Alessandro Appiani



Agenda

- Welcome
- Microsoft Teams Deployment (Best Practice)
- Upgrading from Skype for Business to Teams
- Microsoft Surface for Business

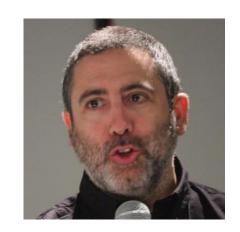
- Partner of the Month award winners
- Microsoft Teams Calling and Telephony
- Microsoft Teams Devices
- Microsoft Teams Meetings & Videoconference
- Q&A

Microsoft Teams Deployment & Communications

Alessandro Appiani

Alessandro Appiani

- 30-years experience in IT Technologies and Solutions
- Computer Science Master's Degree (magna cum laude) in 1989
- Founder of Italian Association for Artificial Intelligence in 1988
- Microsoft Certified since 1995
- Microsoft TechNet speaker & Train-the-trainer since 1996
- MVP Reconnect, MCITP Windows+Exchange+Lync+Office365
 - Microsoft Most Valuable Professional 2016-2019 (Teams/Office Servers)
 - Microsoft Windows Expert since version NT 3.51 (1995)
 - Microsoft Exchange Expert since first product release (Exchange 4.0 1996)
 - Microsoft Teams/Lync/Skype Expert since first product release (LCS 2003)
 - Microsoft Office 365 Expert since first Cloud version (BPOS 2009)
- Pulsar IT Founder & CTO
 - technologies, strategy, digital transformation, advisory, ...
- @AlexAppiani
 - https://it.linkedin.com/in/alexappiani/it

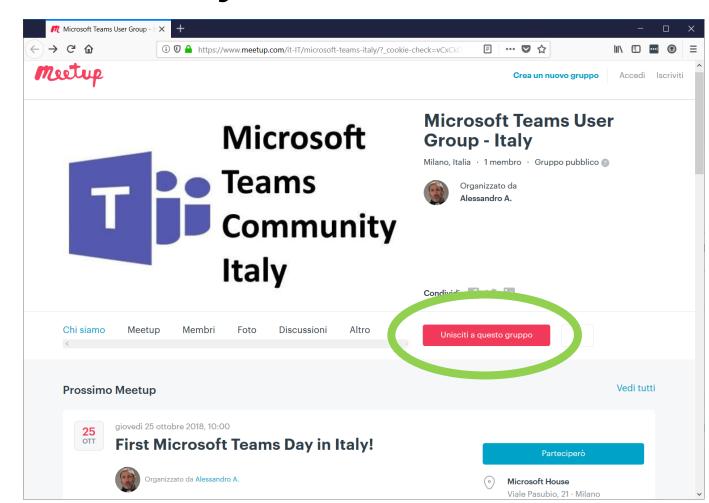




Microsoft Teams User Group - Italy

www.meetup.com/microsoft-teams-italy

- E' nato in occasione del primo Microsoft Teams Day in Italia
- Iscrivetevi alla community e contribuite con post, domande, discussioni!
- Contenuti ed eventi sono in arrivo...stay tuned!



Microsoft Teams Deployment (Best Practice)

Alessandro Appiani

Requirements

Microsoft Teams: a true Microsoft 365 tool

Foundation of Microsoft Teams

- Microsoft Teams is built on top of existing Microsoft 365
 Technologies:
 - Office 365 Groups
 - Azure Active Directory
 - Exchange
 - OneDrive
 - SharePoint
 - Document Library, Pages, OneNote, ...
 - Skype

Microsoft 365 and Office 365 licensing for Microsoft Teams

- Client Apps (online) are included in all subscriptions
- Compliance works based on underlying subscription features
- Teams license must be assigned to users as part of subscription plan (on by default with plan activation)

Small Business Plans	Enterprise Plans	Education Plans	Developer Plans
Microsoft 365 Business Basic	Office 365 Enterprise E1	Office 365 Education	Office 365 Developer
Microsoft 365 Business Standard	Office 365 Enterprise E3	Office 365 Education Plus	
Microsoft 365 for Business	Office 365 Enterprise E4 (retired)	Office 365 Education E3 (retired)	
	Office 365 Enterprise E5	Office 365 Education E5	
	Office 365 Enterprise F1		

Microsoft 365 and Office 365 licensing for Microsoft Teams https://docs.microsoft.com/en-us/microsoftteams/office-365-licensing

Requirements

- Teams is an Office 365 Cloud-only service (no on-prem version)
- Teams leverage Office 365 Groups, another Cloud-only feature
- Teams relies on Online version of
 - Azure AD (with modern authentication)
 - SharePoint
 - OneDrive
 - Skype
 - Exchange (On-Prem / Hybrid is supported with some limitations)
- Users must be enabled for all workload above to get full Teams features
- Users should be enabled for Office 365 Group creation (to create Teams)
- Azure Active Directory P1 highly recommended for Teams Governance (Policy)
 - It's now included in Microsoft 365 Business Premium
 - EMS E3 or Microsoft 365 E3

Exchange On-prem / Hybrid

- Full features enabled only with Exchange online
- Exchange on-premises supported in Hybrid Config and with Office 365 Groups integration (Exchange 2016/2019 latest CU for Hybrid)

User's mailbox is hosted in:	eDiscovery	Legal Hold	Retention	Team and Channel mgmt	Create and view meetings	Modify user profile picture	Call History	Manage Contacts	Access Outlook contacts	Voicemail	Add and configure connectors	Add and configure tabs	Add and configure bots
Exchange Online	Yes ²	Yes ²	Yes	Yes	Yes	Yes ⁸	Yes	Yes	Yes ⁷	Yes	Yes	Yes	Yes
Exchange Online Dedicated vNext	Yes ²	Yes ²	Yes	Yes	Yes	Yes ⁸	Yes	Yes	Yes ⁷	Yes	Yes	Yes	Yes
Exchange Online Dedicated – Legacy (Sync to Azure AD required)	Yes ²	Yes 2,3	Yes ⁴	Yes	No	No	Yes	Yes	No	Yes ⁵	Yes ⁶	Yes	Yes
Exchange On- premises (Sync to Azure AD & OAuth config required)	Yes ²	Yes 2,3	Yes ⁴	Yes	Yes (Exchange 2016 CU3+)	Yes ⁸ (Exchange 2016 CU3+)	Yes	Yes	No	Yes ⁵	Yes ⁶	Yes	Yes

Office 365 & Teams Network guidelines

Teams is a new world

- Collaboration & Communications in the Modern Workplace
- Teams is Cloud-born
 - Leverage Microsoft new Azure-based Skype Communications Platform
- Teams is Cloud-only ☺
 - We have to plan and deploy accordingly

Skype new platform is the backbone

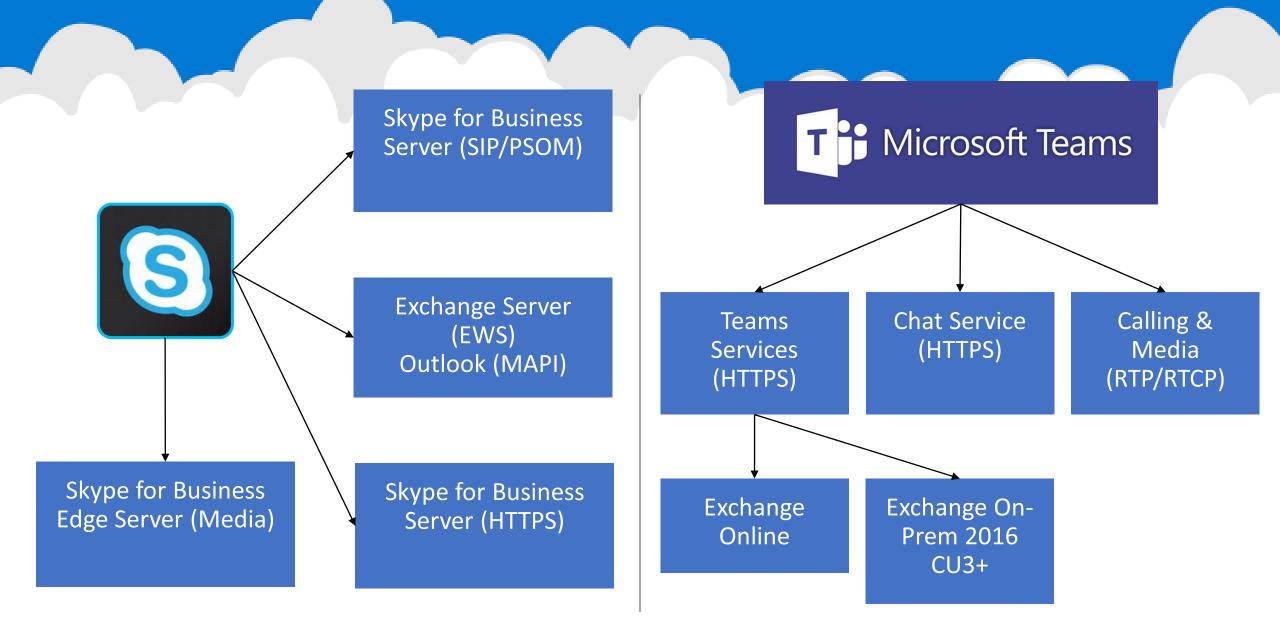
- Audio / Video Communication is online only
 - Skype for Business on-premises not used and not required
- Teams & Skype for Business loosely coupled
 - "Federated" integration
 - Presence is independent (integration / unification interop)
 - P2P interop from-to Teams users and Skype for Business Users
- Teams and Skype Consumer interop just released (P2P)

New infrastructure

- Built for enterprise-grade voice, video, and meetings
- More efficient bandwidth consumption
- Robust telemetry
- Maintenance and upgrades with minimal disruption
- Higher reliability & media quality
- Better browser experience (WebRTC)



Connectivity in Skype for Business vs. Teams



- SfB connections
- Teams in browser

Network+Security design & planning: why?

- Great performance drives user adoption
- Better to prevent then cure
- It's easy and you will reap the rewards in the future
- Just because it works, doesn't mean it works right

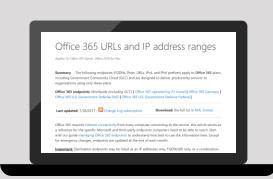
- New world requires new approach!
 - good planning and deployment are Best Practice in the cloud too ©

"if you use the principles of yesterday to protect the services of today, your network is likely to deliver degraded connectivity to users"

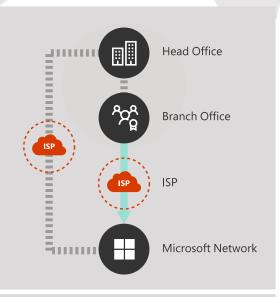
Tony Redmond - Network Principles for Office 365 Connectivity

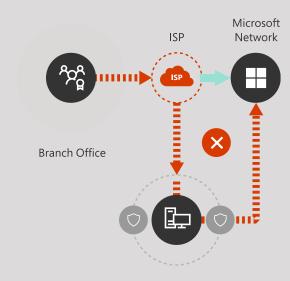
https://www.petri.com/network-principles-office-365-connectivity

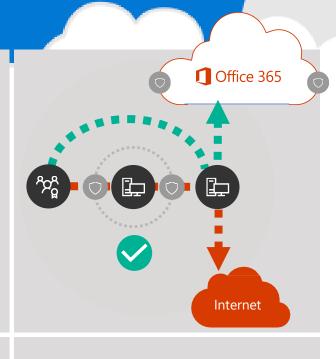
Office 365 connectivity principles



aka.ms/o365ip







Differentiate traffic

Identify and differentiate Office 365 traffic using Microsoft published endpoints data

Egress connections

Egress Office 365 data connections as close to the user as practical with matching DNS resolution

Optimize route length

Avoid network hairpins and optimize connectivity directly into the nearest entry point into Microsoft's network

Assess network security

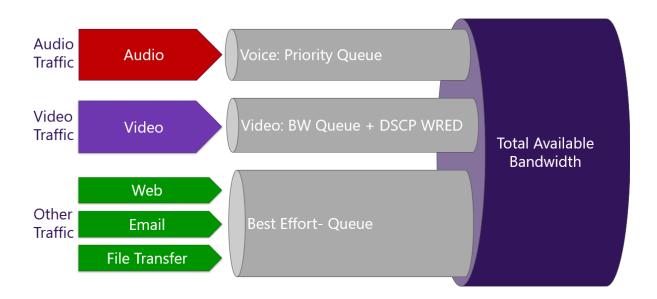
Assess bypassing proxies, traffic inspection devices and duplicate security which is available in Office 365

Bandwidth Planning

- Teams consumes bandwidth
- Essential for QoS implementation
- Considered a starting point for your deployment
- Lack of bandwidth will lead to user experience degradation

 While the adoption and usage grows use reporting to adjust and pivot

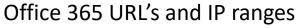
- Small <250 seats won't deploy QoS
- Larger will deploy QoS and planning is essential



Oversubscription = dropped packages or next queue

Signaling and ports

- Skype for Business online port ranges
 - Signaling: 443 TCP
 - Media: UDP 3478; 50,000-59,999 (preferred) or TCP 443; 50,000-59,999 (fall back)
- Teams Reduced Port Ranges
 - Signaling: 443 TCP
 - Media: UDP 3478-3481 (preferred) or TCP 443 (fall back)
- For media traffic the client attempts multiple connection methods simultaneously when starting media
 - Best method that gets a response is used



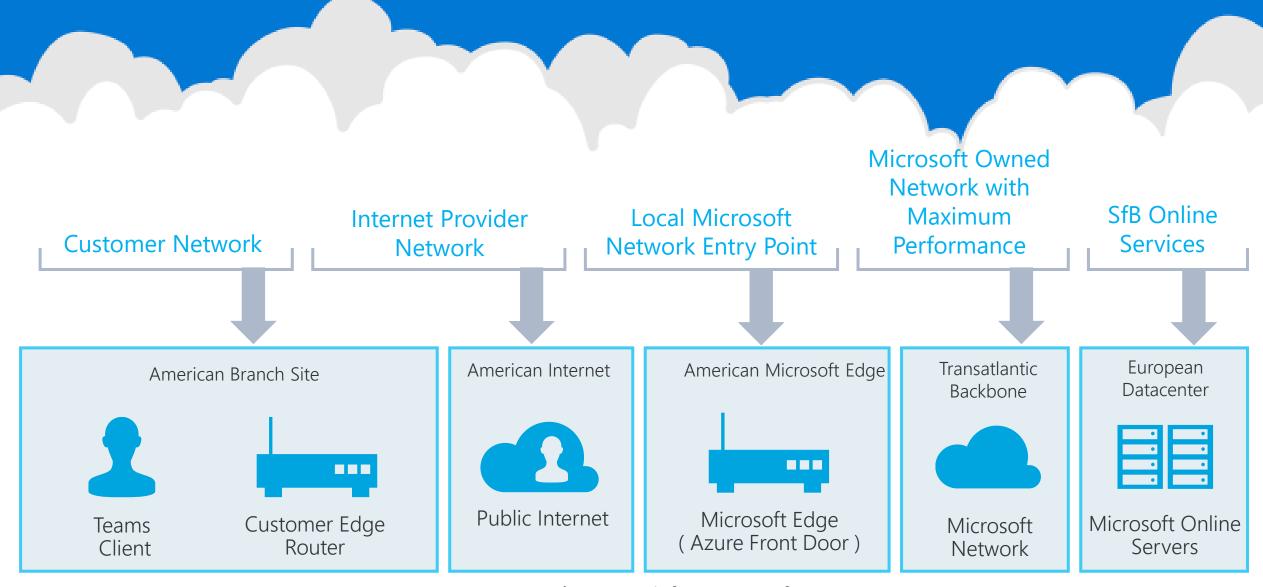
Firewall & Routing planning

- Rules of thumb
 - Shortest path to Office 365 is best
 - Closing ports will only lead to quality degradation
 - Any obstacles in between such as proxies are not recommended*
- General flow & hops
 - Client to Network Edge, 3 to 5 hops
 - ISP to Microsoft Network, 3 hops
 - Microsoft Network Edge to final destination, irrelevant

→ Get Office 365 traffic to Office 365 ASAP ←

^{*}Not using a proxy server is recommended

From Teams to Microsoft Online Services

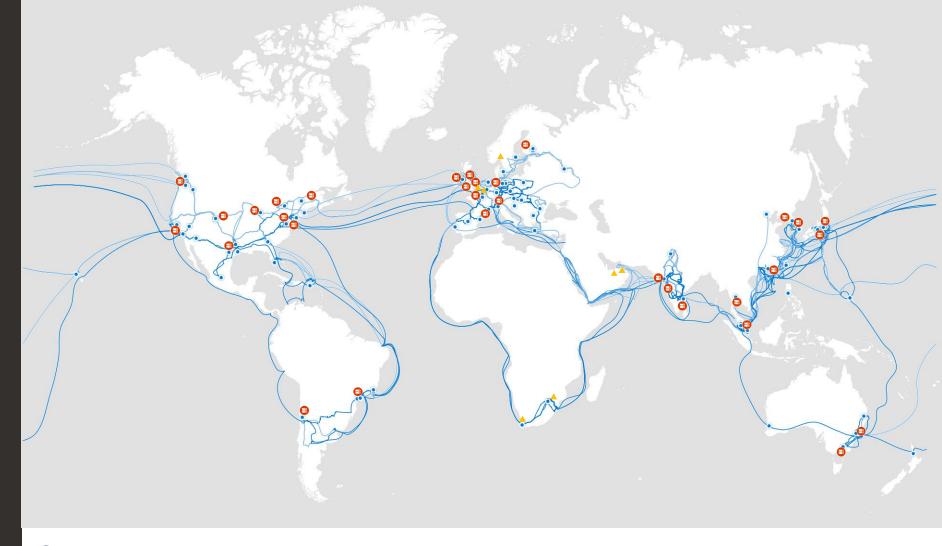


Prepare your organization's network for Microsoft Teams https://docs.microsoft.com/en-us/microsoftteams/prepare-network

Microsoft Global Network

- ✓ Fast, globally available network
- √ 100K miles of fiber in 130+
 locations
- ✓ 130+ global edge nodes reaching 63% of the Global GDP within 25ms
- ✓ Peering relationships with 2700+ ISPs in 190+ locations
- ✓ Connects 35+ Office 365

 Datacenter locations
- ✓ Fully software defined and managed by Microsoft



Peering & Service front door location

Office 365 Datacenter location

Announced new Office 365 location

Microsoft Global Network

Global foot print

- Microsoft's global network is one of the top two networks in the world
- Tens of thousands of route miles of privately-owned dark fiber
- Peered with over 2700 ISPs globally in 190 locations and 38 countries
- Available for 90+% of the internet connected population with metrics comparable to the Tier 1 ISPs/Telcos
- Media processors & relays deployed to 50+
 Microsoft data centers and edge sites with more being deployed

Optimized for media

- Fiber connections designed to reduce latency between regions
- Edge sites placed close to the users to reduce number
 of hops and latency
- Keep improving ISP peering performance based on Skype call quality telemetry
- Audio traffic prioritized throughout the Microsoft Global Network
- Meetings hosted close to the participants
- Single consolidated IP range for calling and media

Microsoft's fiber optic network could stretch to the moon and back, three times over!

Performance Requirements

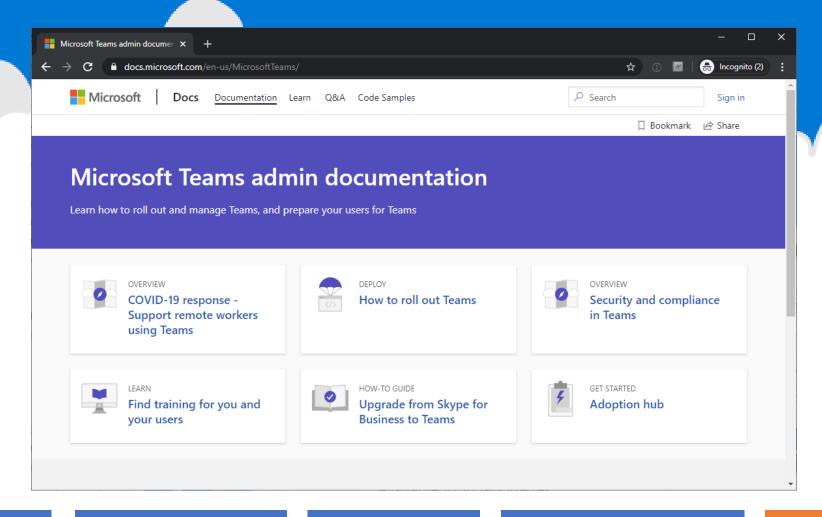
For optimal Teams media quality, the following network performance metrics must be met

Metric Metric	Client to Microsoft edge	Customer edge to Microsoft edge
Latency (one way)	<50ms	<30ms
Latency (RTT or Round-trip Time)	<100ms	<60ms
Burst packet loss	<10% during any 200ms interval	<1% during any 200ms interval
Packet loss	<1% during any 15s interval	<0.1% during any 15s interval
Packet inter-arrival jitter	<30ms during any 15s interval	<15ms during any 15s interval
Packet reorder	<0.05% out-of-order packets	<0.01% out-of-order packets

https://support.office.com/en-us/article/Media-Quality-and-Network-Connectivity-Performance-in-Skype-for-Business-Online-5fe3e01b-34cf-44e0-b897-b0b2a83f0917

Teamwork Deployment and Adoption

Practical Guidance: SuccessWithTeams.com



Planning

Deployment

Adoption

Best Practices

Industry Specific

Available in 18 languages

How to roll out Microsoft Teams



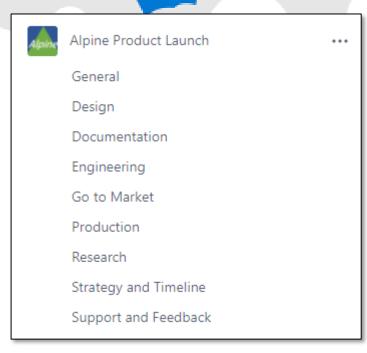
- Extra planning needed if starting from Skype for Business, on-premises, or hybrid deployments
- Enterprise Voice need extraeffort too

How to roll out Microsoft Teams

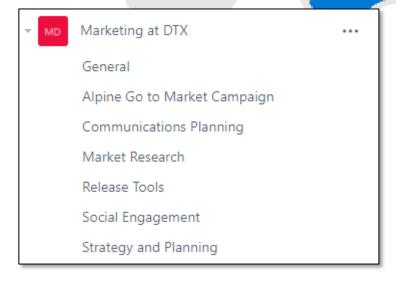
https://docs.microsoft.com/en-us/microsoftteams/how-to-roll-out-teams

Cross organization & function teams are the best practice

Example Teams & Channels





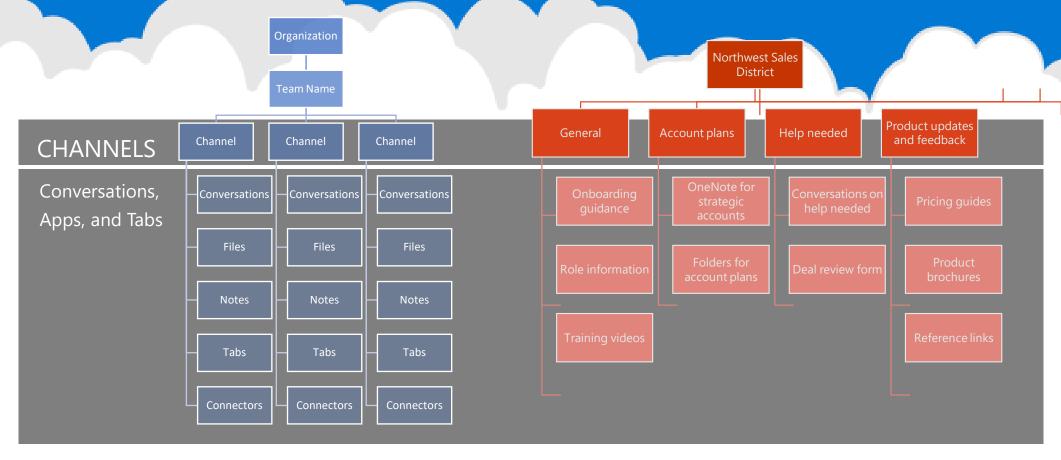








Organizational vs Project approach



- Teams is great for breaking down organizational silos and promoting crossfunctional teams
 - encourage users to think about **functional teams** rather than organizational boundaries

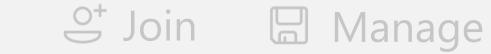
 Overview of teams and channels in Microsoft Teams

https://docs.microsoft.com/en-us/microsoftteams/teams-channels-overview#example-teams

Team Lifecycle







Team Templates

IT Admins can configure a template file and programmatically apply via Graph API it to create new teams:

- Specify channels
- Pinning
- Settings
- **Permissions**

Dynamic Team Membership

Create a team based on an AAD Dynamic Group. Employee access to a team is determined by their AAD properties.

- City
- Country
- Department
- Job Title

- Postal Codes
- State
- Usage Location
- Etc.

Azure AD Premium P1 licenses Required → included in Microsoft 356 Business Premium!

Plan for lifecycle management in Teams

https://docs.microsoft.com/en-us/microsoftteams/plan-teams-lifecycle

Team Lifecycle







Join by Code

Enables an Team owner to generate a unique code that can be sent around or distributed to people who need to join a team.

- Generate a code in Team Settings
- Send code to users
- Users enter code to join team
- Code can be cancelled / changed

Join by Link

Sends automatic requests to join a team when the user clicks on a link for a message in another team.

- Copy a link to a message in a channel
- Paste it into another team
- Users without permissions who click on it will get an option to join the team.

Team Lifecycle







Archive

When a project wraps up you can archive a team to preserve the content. This lets you reactivate it in the future if need be.

- Archive a team
- Marked Read-Only
- Removed from Teams and Channel list
- Can be restored if needed

Expiry

IT policy to set expiration dates on teams. Owners are notified when a team is close to expiration and can renew.

- Set expiration date
- Owners Notified when date approaches
- Owners can renew in Team settings
- "Soft deleted" for 30 days after date
- "Hard deleted" after 30 days

- Manage Teams (by Owners)
- Archive

Upgrading from Skype for Business to Teams

Alessandro Appiani

Why upgrade to Teams?



Advanced features, modern experiences

- Teams combines chat, video, calling, collaboration, and app integration into a single, integrated hub
- State-of-the-art cross-platform and mobile experiences



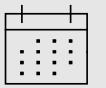
Performance by design

- · Reimagined client built on cloud infrastructure
- Teams provides improvements in call and meeting quality, and other operational metrics



Bottom-line benefits

• In a recent study, organizations that moved to Teams saw cost reductions from consolidating solutions to one platform, had 14.6% less downtime due to online availability of resources, and projected a three-year net present value per user of \$5,416*



July 31, 2021

Skype for Business Online retirement

- Skype for Business Online will be retired July 31, 2021
- Skype for Business Server is not affected, but customers with hybrid configurations will need to move Skype for Business Online users to Teams by the retirement date

^{*}The Forrester Study: The Total Economic Impact™ Of Microsoft Teams outlines cost savings and other financial benefits organizations can realize by adopting Teams

Skype to Teams Roadmap

Microsoft Skype to Teams roadmap phases

- Give to Full-Cloud organizations a modern and fantastic Collaboration & Communication environment ✓ OK!
- Transition all organization to a Full-Cloud Collaboration & Communication environment (switch to cloud-only UC&C) while supporting existing users
 - ✓ integration, coexistence, migration

Teams & SfB milestone

- 2018 October Only Teams enabled in new Online Tenant with <= 500 users (ie: not EA Tenant ☺)*
- 2018 October Existing Cloud-only Tenants (no DirSync in place), without use of SfB, automatically migrated to Teams
- 2018 October Existing Cloud-only Tenants with SfB Users "invited" to Teams (automatically migrated if Customer doesn't ask to remain on SfB)
- 2019 July Microsoft announced SfB Online retirement**
 - Skype for Business Online will be retired on July 31, 2021
 - Starting September 1, 2019, all new Office 365 customers will be onboarded to Teams and will not have access to Skype for Business Online

 *Starting October 1, 2018, Skype for Business Online is no longer included in Office 365 for new customers with fewer than 500 see

*Starting October 1, 2018, Skype for Business Online is no longer included in Office 365 for new customers with fewer than 500 seats https://support.microsoft.com/en-us/help/4465277/microsoft-teams-now-the-primary-client-for-meetings-and-calling

Balancing is the right word

- Teams give new collaboration features
- Teams leverage an excellent new communications infrastructure
 - definitely better than SfB
 - great benefit from cloud world-wide networking (Microsoft Azure Network and DataCenters)
 - audio/video and meeting are top quality
- Goal is to give new features minimizing problems on user-side
 - not really easy today for SfB On-prem organization
- Full switch to Teams is the target
 - Teams mixed with SfB is not a good option to stay (see Coexistence in next slides)

Upgrade path to Teams

and SfB Coexistence

Paths to Teams

- Starting point in all cases includes Skype for Business
- End point is all users using Teams Only
- Driving adoption in your key scenarios in Teams is critical success factor
- Key considerations when deciding your path:
 - ✓ Feature requirements & overlap between SFB and Teams
 - ✓ Moving users all at once or in cohorts
 - ✓ Velocity to move users to Teams Only





Cohort 1 Cohort

Cohort 3...

All users

Which coexistence path should customers take?

Microsoft offers flexibility for customers to choose their upgrade path on the road to Teams Only



Teams side-by-side to SFB with Chat, Meetings & Calling

Considerations:

- Skype for Business Online and most on-premises (recommended/ default path)
- Capabilities available in both SFB and Teams
- Enables quick velocity move to Teams

Teams side-by-side to SFB with selected features (Collab, Meetings)

Considerations:

- More complex environment with on premises enterprise voice
- No overlapping capabilities between SFB and Teams
- Designed with longer co-existence period in mind

Co-existence modes*

https://aka.ms/modes

	Mode	Calls and Chats	Meeting Scheduling	Teams Channels available?	Recommended Use Case
Skype for Business Modes	Islands	Either	Either	Yes	Default starting point. Side-by-Side with overlapping capabilities
	Skype for Business With Teams Collab	Skype for Business	Skype for Business	Yes	Side-by-Side with selected capabilities
	Skype for Business With Teams Collab And Meetings	Skype for Business	Teams	Yes	Side-by-Side with selected capabilities
	Skype for Business Only	Skype for Business	Skype for Business	No	Side-by-Side with selected capabilities
	Teams Only (Requires homed in Skype for Business Online)	Teams	Teams	Yes	The final state of being upgraded for either paths This is the default state for all *new* tenants as of September, 1st 2019

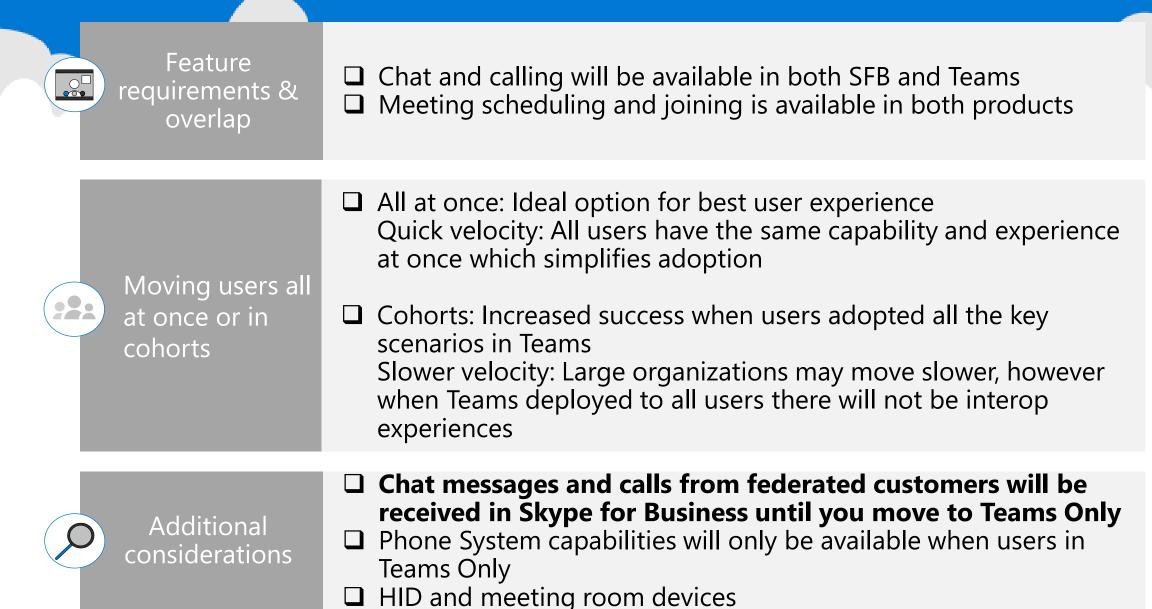
^{*}Defined by **UpgradePolicy** (Tenant, User)

Summary of upgrade methods*

Overlapping capabilities (using Islands mode)	Selected capabilities (using Skype for Business modes)
Prior to being upgraded to TeamsOnly, users must run both clients simultaneously since incoming chats and calls may land in either client.	Chats and calls only land in one client, based on the recipient's mode. Non-upgraded users may run both clients, but there is no functional overlap (calling and chat are not available in Teams).
Allows administrators to introduce overlapping functionality (chat, meetings, VOIP calling) in both Skype for Business and Teams to end users as well as new capabilities (Teams and Channels) in Teams.	Allows administrators to introduce select functionality of Teams to end users (Teams and Channels), without providing same functionality that also exists in Skype for Business.
Interop between Skype for Business and Teams does not exist while both users are in Islands mode.	Interop is required for communication between Skype for Business and Teams users.

 $[\]hbox{* \underline{https://docs.microsoft.com/en-us/microsoftteams/upgrade-and-coexistence-of-skypeforbusiness-and-teams\#summary-of-upgrade-methods}\\$

Overlapping Capabilities - Considerations & impact

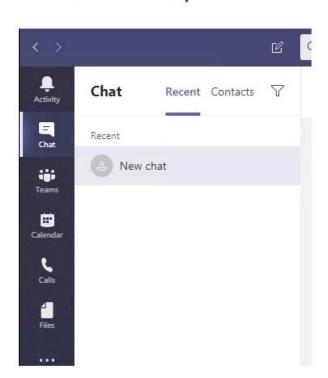


Teams client experience & coexistence modes

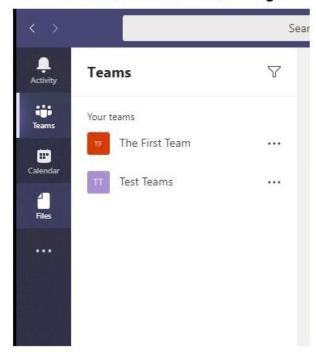
Teams functionality

• Teams Self-Presence

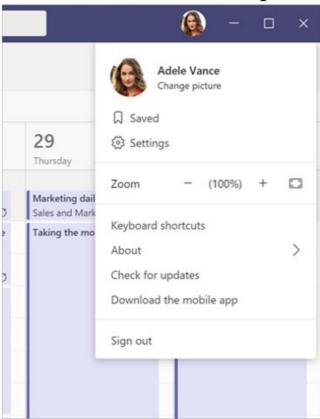
Mode = TeamsOnly or Islands



Mode = SfbOnly, SfbWithTeamsCollab, or SfbWithTeamsCollabAndMeetings



Mode = SfbOnly, SfbWithTeamsCollab, or SfbWithTeamsCollabAndMeetings



- Teams Admin Center
 - Org wide
 - Users
- Coexistence scenario
- Features & Issues



The modern workplace is changing

This is the world that Surface was built for



More data and information to drive innovation and decision-making



Fewer cubicles and silos, more collaborative workspaces



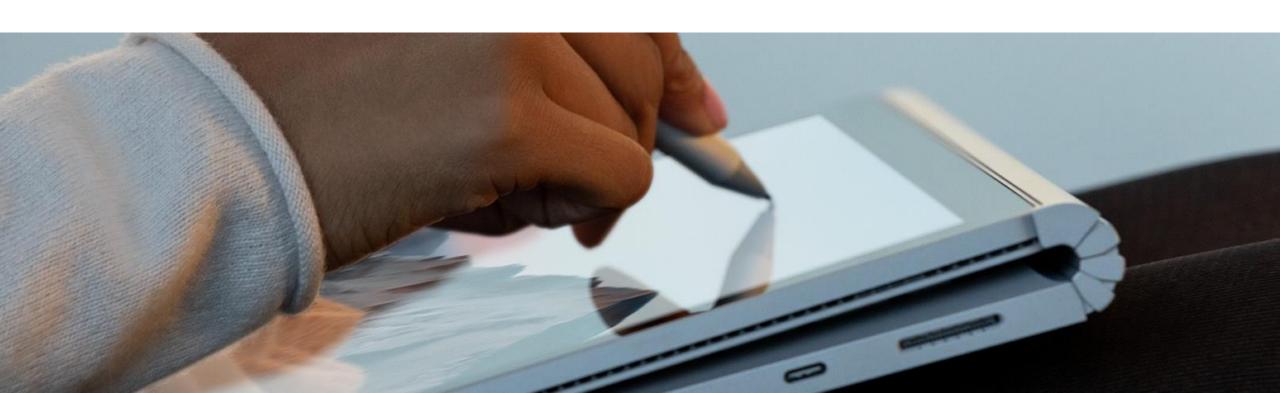
Higher expectations to be more creative and get more done with less



More pressure to deliver results faster



A focus on shared success over individual achievement





Microsoft Surface for Business

Loved by employees, built by Microsoft







Innovation & craftsmanship



Designed for the ways you work



Modern security & manageability from Microsoft

The tools you care about, built into Surface for Business

Surface for Business customers save time and money with streamlined deployment, modern device management, and built-in, cloud-powered security.

Leading modern management

Easy to deploy and manage.
With a custom Unified Extensible
Firmware Interface (UEFI)** paired with
Windows Autopilot, Surface Enterprise
Management Mode (SEMM), and
Microsoft Intune,⁷ Surface allows IT
administrators to remotely control
firmware-level functionality.

Enterprise-grade modern security

Protect data and allow IT to control user access with BitLocker, discrete and firmware TPM chips, and cloud-powered intelligent security with Microsoft Defender Advanced Threat Protection (ATP).

Windows 10 Pro

Comes standard on Surface for Business devices, offering advanced security protections, enterprise manageability, and enhanced productivity tools.

Support and warranty

In addition to the standard hardware warranty, commercial customers get Advanced Exchange⁸—a service offering with expedited device replacement, at no additional cost.

Optimal devices for Office 365 experiences

Business customers can choose to pair Surface with Microsoft 365 commercial offerings, empowering everyone to be creative and work together, securely.



Meet our new additions





Surface Go 2

Connect in the office, from the field, or on the go. Our compact, lightweight 2-in-1 empowers employees to get the job done with the full power of Windows 10.

Surface Book 3

Our most powerful Surface laptop yet is faster than ever, pairing speed and graphics with the versatility of a high-performance laptop, processor-powered tablet, and portable studio.

Surface Dock 2

Transform your Surface device into a desktop PC or workstation, with more ports and Fast Charging on enabled devices.

Microsoft Surface for Business

A device for every kind of work









Surface Go 2

The lightest, most compact 2-in-1 now has a bigger, 10.5" touchscreen.

Available with LTE Advanced.

Perfect for portable power in the office, in the classroom, or out in the field.

Surface Pro 7

The iconic Surface 2-in-1, now even faster and more versatile with USB-A & USB-C®.

Perfect for ultra-light performance and the versatility you love, to keep you productive on the go.

Surface Pro X

The thinnest, lightest, most mobile Surface Pro with 13" touchscreen and LTE.

Perfect for the innovator who wants to stay connected and get work done anywhere.

Surface Laptop 3

The most popular, slim, and stylish Surface laptop in a range of colors and materials, now with 13.5" and 15" touchscreens.

Perfect for people who want to get it all done in a thin, light, and elegant design.





Surface Book 3

Our most powerful Surface laptop is faster than ever, now with 13.5" and 15" touchscreens.

Perfect for ultimate power and blazing-fast graphics on the go.

Surface Studio 2

The most immersive and powerful Surface desktop with a 28" fully adjustable touchscreen.

Perfect to unleash your creativity in new ways: Studio 2 supports Surface Pen* with tilt activation, Surface Dial* on-screen interaction, and Zero Gravity Hinge.

Microsoft Surface for Business

Complete the experience









Surface Mice

Choose from a variety of mice to suit your needs. Ultraportable for exceptional accuracy, work the way that's best for you.

Surface Type Covers

Transform surface devices from tablets to laptops. Enjoy a full mechanical keyset, fast and fluid typing, and a large glass trackpad for precise navigation.

Surface Dial

Get inspired and uncover the common thread that connects Surface Dial to art, design, music, and movement. See how Surface Dial can add real-time fluidity to your process and help set your ideas free—from concept to creation.

Surface Headphones

The smarter way to listen. Music and calls sound spectacular with rich audio, active noise cancellation and on-ear touch controls.









Surface Pen

Surface Pen is better and faster than ever, with precision ink on one end and a rubber eraser on the other—plus tilt for shading,¹⁰ greater sensitivity, and virtually no lag.

Surface Dock 2

Transform your Surface device into a desktop PC, with all the next-gen ports you need.
Featuring two video-capable USB-C® ports, and Fast Charging for accessories and phones that require no more than 15W of power.

Surface Adapters

Surface has a number of adapters to keep you connected, wirelessly project, or stay compatible with existing peripherals.

Surface USB-C® Travel Hub

Turn your laptop into an on-the-go productivity companion with this multiport travel adapter.
Designed for on-the-go professionals, it gives you five ways to stay productive anywhere.



Surface Go 2 for Business

Make the most of Microsoft 365* with new Surface Go 2, our lightest and most compact Surface yet.

Surface Go 2 is a faster companion to run the essential business apps you rely on every day, with 8th Gen Intel® Core™ m3 and Pentium® processors. Stay connected anywhere with optional LTE Advanced connectivity, and get the manageability and security features you trust with Windows 10 Pro.



FEATURES:

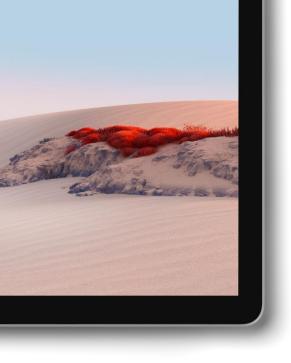
Compact and light, at 10.5" and just 1.2 pounds (not including Type Cover)

Sleek, modern design with tablet-to-laptop flexibility and built-in Kickstand

8th Gen Intel® Core™ m3 and Pentium® processors power full-feature desktop software

Optional LTE Advanced for on-the-go productivity

Natural typing and trackpad experience with Surface Go Type Cover*







What's new in Surface Go 2 for Business



A larger, brighter, and more brilliant touchscreen display in the same compact size, starting at just 1.2 lb.¹¹ and with improved 220 ppi resolution



Faster options,¹² running the essential business apps you rely on every day with 8th Gen Intel® Core™ m3 and Pentium® processors



Improved all-day battery life up to 10 hours¹³ and Fast Charging when connected to Surface Dock,* powering your battery up to 80% in just over an hour¹⁴



New choice of colors** to match your style with the durable Surface Go Type Cover* in Poppy Red and Ice Blue



Surface Book 3 for Business

Our most powerful Surface laptop yet is faster than ever, pairing speed and graphics with the versatility of a high-performance laptop, processor-powered tablet, and portable studio.

Surface Book 3 is a robust laptop that adapts to the ways you work, collaborate, and create.

A cutting-edge balance of performance, versatility, and mobility sets Surface Book 3 apart from the rest. Detach the screen and choose how you want to work, whether you need a processor-powered tablet or a graphics-intensive studio.



FEATURES:

Render video and motion graphics smoothly with the best graphics performance on any Surface laptop, powered by the latest NVIDIA® GeForce® or Quadro® GPUs and faster memory, with up to 2TB of lightning-fast, prolevel storage and 32GB RAM.¹⁵

Use **Surface Dial*** on screen for easy access to drawing tools, shortcuts, and controls.

Take notes, sketch ideas, and write naturally with **Surface Pen***.

Available in two sizes: 15" or 13.5" PixelSense™ Display

Four versatile modes of use: Laptop, Tablet, Studio, and View

All the connections needed for devices and accessories, including a USB-C® port

What's new in Surface Book 3

Designed for versatility, mobility, and high performance



Surface Book 3 13.5" is more than 50% faster than Surface Book 2 13.5" Surface Book 3 15" is 30% faster than Surface Book 2 15"



The most powerful Surface laptop yet. Surface Book 3 13.5" has 40% more graphics performance than Surface Book 2 13.5".



Surface Book 3 detaches up to 3x faster than Surface Book 2.



Instantly transforms into efficient desktop workstation with new Surface Dock 2*



Latest NVIDIA® Quadro® and GeForce® graphics, best of any Surface laptop



Immersive, spatial sound with Dolby Atmos®



Dual far-field Studio Mics for great calls and dictation

Surface Book 3 15"

Surface Book 3 13.5"



Surface Dock 2

Turn your Surface into a desktop



Pitch

Streamline the way you work and connect. New Surface Dock 2 instantly transforms your Surface into a desktop PC with all the next-gen ports you need, including USB-C®. Simply plug in the Surface Connect cable to charge your device and access external monitors, a keyboard, mouse, and more. Surface Dock 2 was built to maximize efficiency at the office, in a flexible workspace, or at home.

Top Reasons to Buy

- Transform your Surface into a desktop PC
- Connect two 4K monitors* while keeping your desk clutter free
- Access an external keyboard, mouse, and other USB peripherals*

Primary Device Attach

Surface Pro Surface Pro X Surface Book

Accessory Bundles

Surface Keyboard Surface Mouse Surface Precision Mouse

Surface USB-C® Travel Hub

All the connections, wherever you are



Pitch

Turn your laptop into an on-the-go productivity companion with this elegant, multi-port travel adapter. Designed for on-the-go professionals, it gives you five ways to stay productive anywhere. Connect to the internet, project content onto a big screen, charge accessories, and more. Compatible with modern PCs and all Surface laptops with a USB-C® port. Supports compatible accessory charging. Does not support laptop charging.

Top Reasons to Buy

- Stay productive on the go with this multi-port adapter
- Includes USB-C®, USB-A, VGA, gigabit Ethernet, and HDMI 2.0 with 4K video out

Primary Device Attach

Surface Pro Surface Pro X Surface Laptop

Accessory Bundles

Surface Keyboard Surface Mouse Surface Precision Mouse

Surface Headphones 2

The smarter way to listen



Pitch

Surround yourself with spectacular Omnisonic sound for music, shows, and calls. Stay focused with adjustable noise cancellation. And, listen in comfort all day long.

Immerse yourself in blissful silence with 13 levels of adjustable Active Noise Cancellation. Dial up the silence or dial it down when you want to be more aware of what's going on around you.

Effortlessly rotate the on-ear dials to adjust the volume or level of noise cancellation. Touch or tap the on-ear sensors to skip a song, pause your music, answer a call, or get assistance.

Top Reasons to Buy

- 13 levels of adjustable Active Noise Cancellation mean you choose how much you tune out.
- Be heard loud and clear with 4 microphones per ear cup for exceptional voice clarity and noise cancellation
- · Soft, over-ear pads are breathable, lightweight, and comfortable

Primary Device Attach

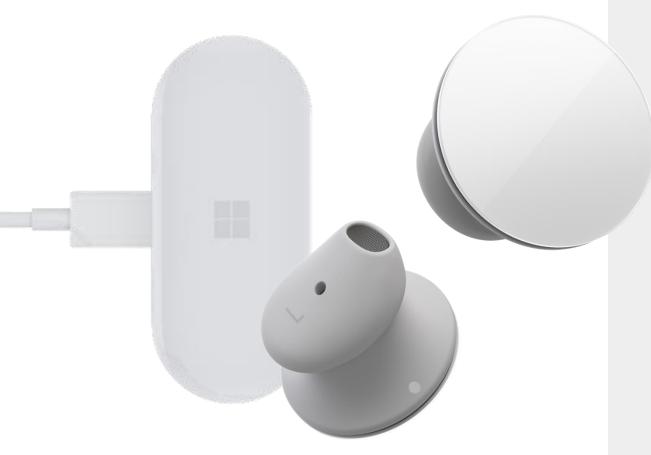
Surface Pro Surface Pro X Surface Laptop Surface Book Surface Studio

Accessory Bundles

Surface Pen

Surface Earbuds

Never miss a beat



Pitch

Stay on top of your day with Surface Earbuds.

Featuring an ultra-comfortable design, intuitive touch, and voice controls, immersive sound, and all-day battery, so you'll never miss a beat.

Innovative design with four anchor points so each earbud sits securely in your ear. Find your perfect size with three sets of interchangeable silicone ear tips.

Responsive touch surface enables intuitive gestures like tap, touch, and swipe. Skip a music track, adjust the volume, make a call, or get assistance.

Top Reasons to Buy

- Premium sound for music, calls, and shows. Custom designed drivers that are precisely tuned to deliver an exceptional acoustic experience.
- Touch and voice controls let you stay productive without having to look at your phone.
- All day battery¹ that keeps up with you. Get up to 24 hours of battery life with the included charging case.

Primary Device Attach

Surface Pro Surface Pro X Surface Laptop Surface Book Surface Studio

Accessory Bundles

Surface Pen



Grazie

FRANCESCO LONGO

a-frlong@microsoft.com +39 346 542 4936

+39 02 7039 2218



Coffee Break





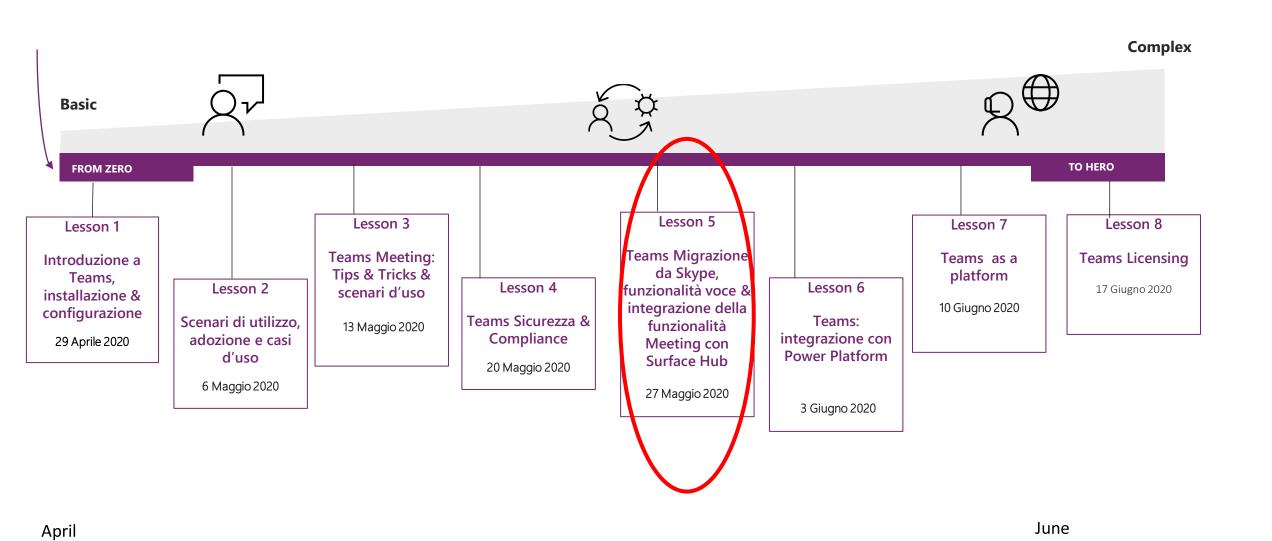


Teams Pills 2020

Un percorso di formazione tecnica e commerciale su #Teams



Prossimi appuntamenti





Microsoft Modern Workplace Academy Materiali utili per i nostri partner

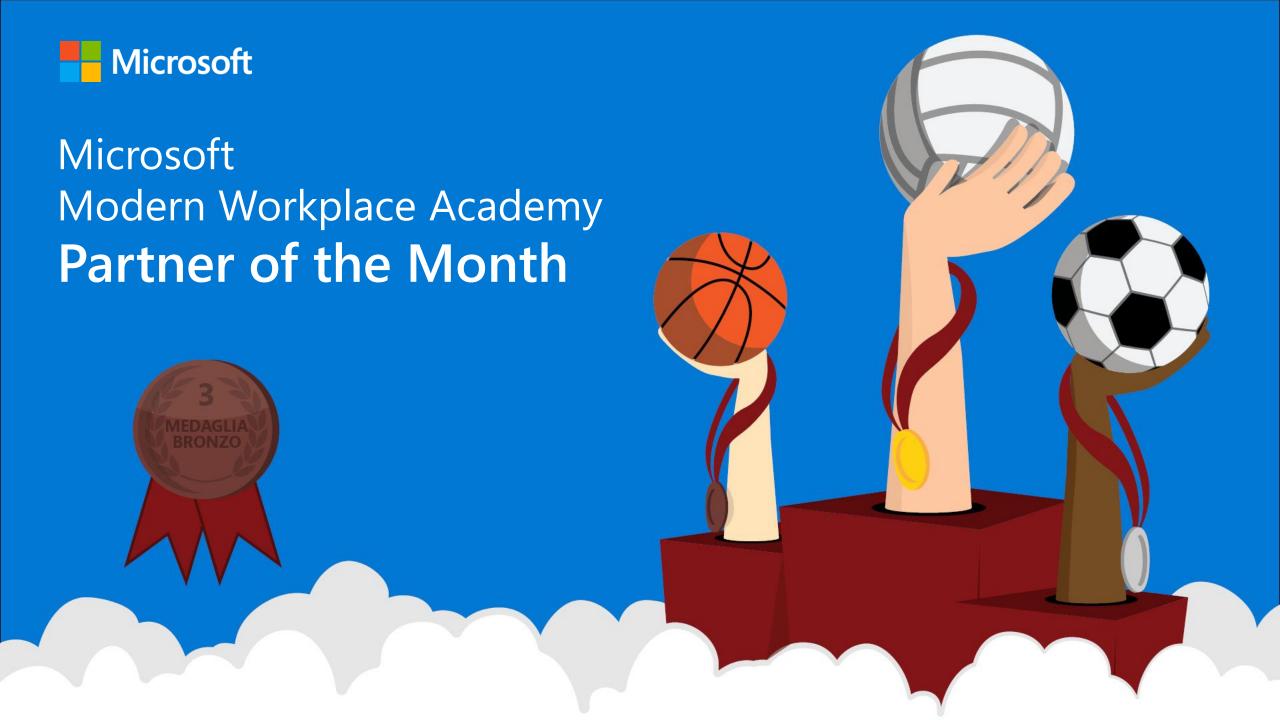
End of support: time to help customers move to M365

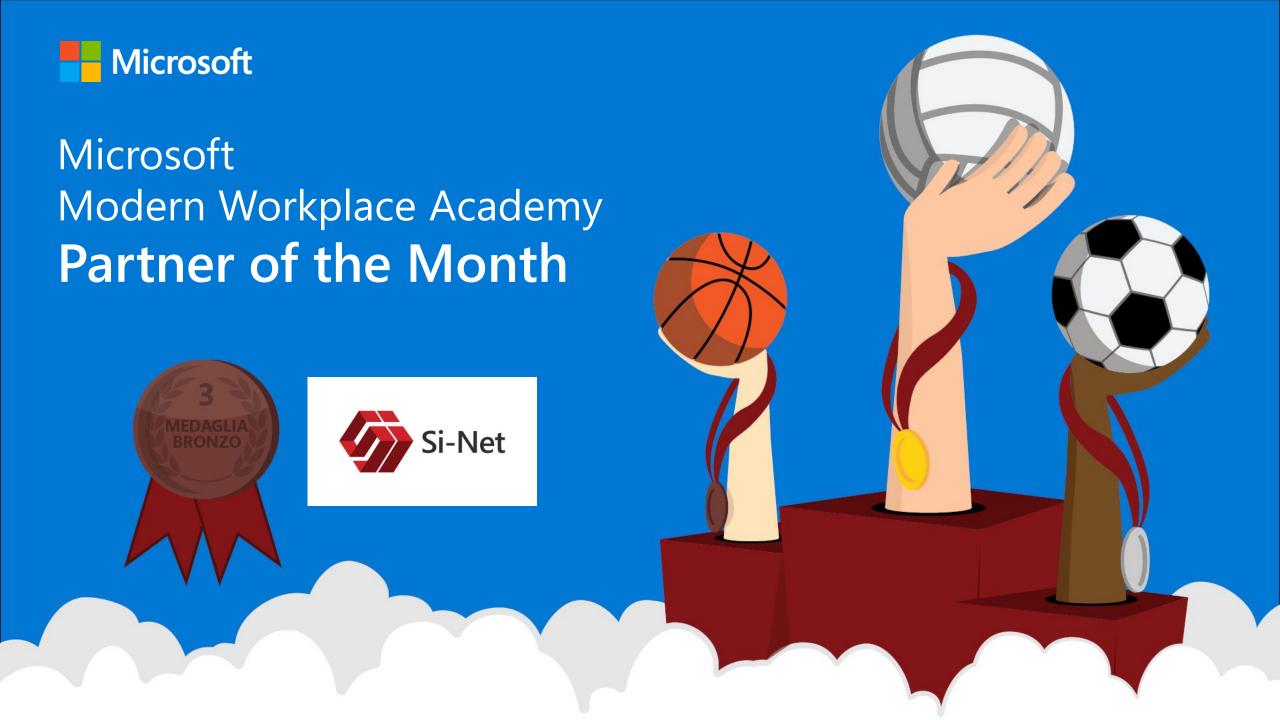
by Marco Cattaneo, Sr. Product Marketing Manager M365

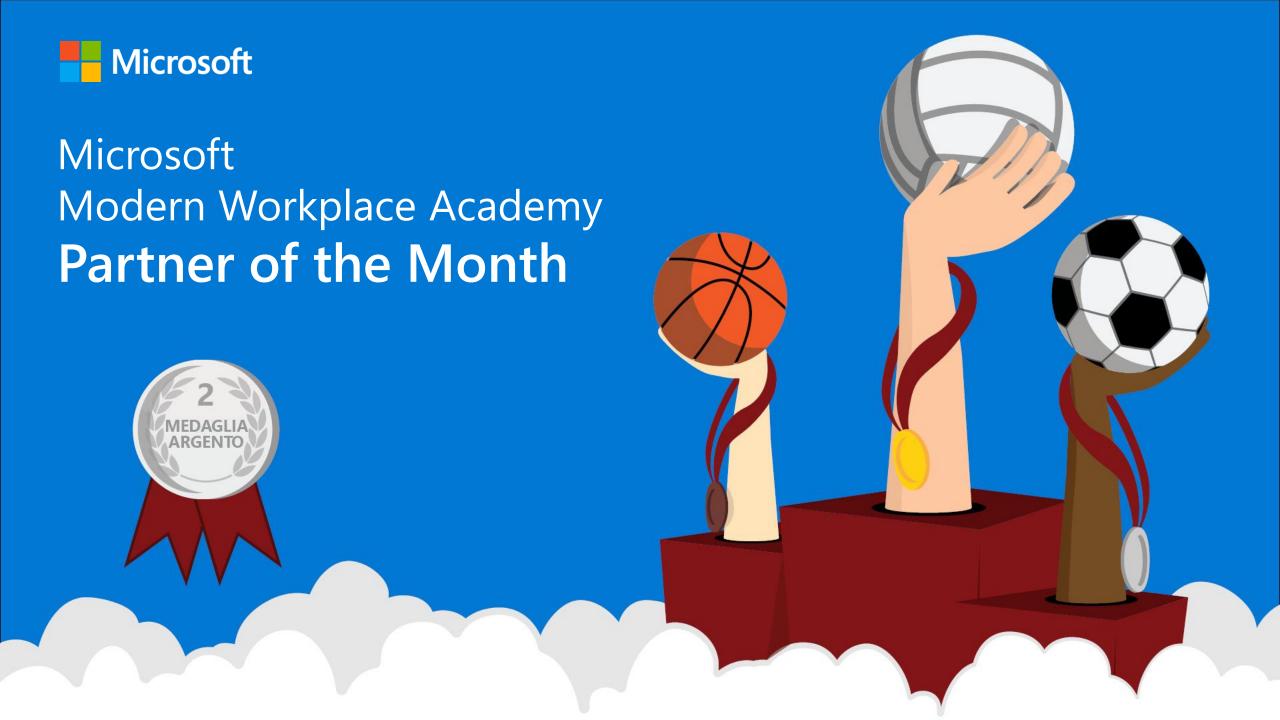
https://www.cloudchampion.it/c/end-of-support-time-to-help-customers-move-to-microsoft-365

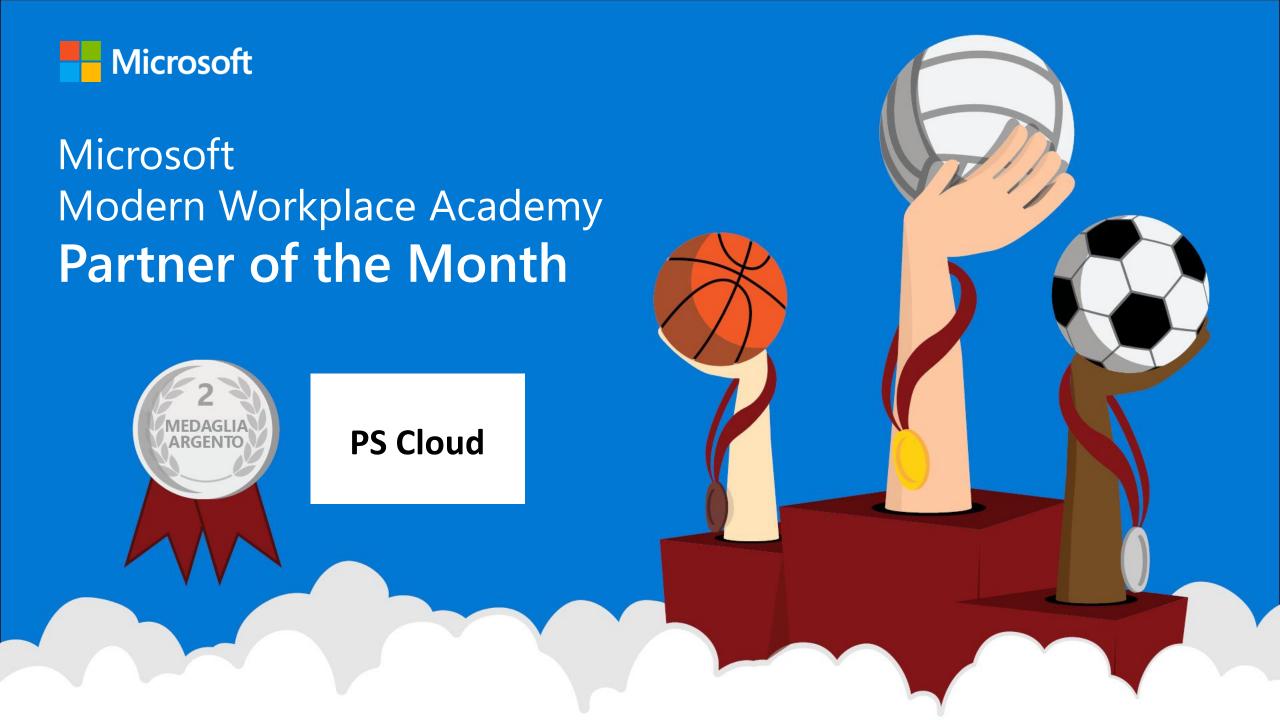


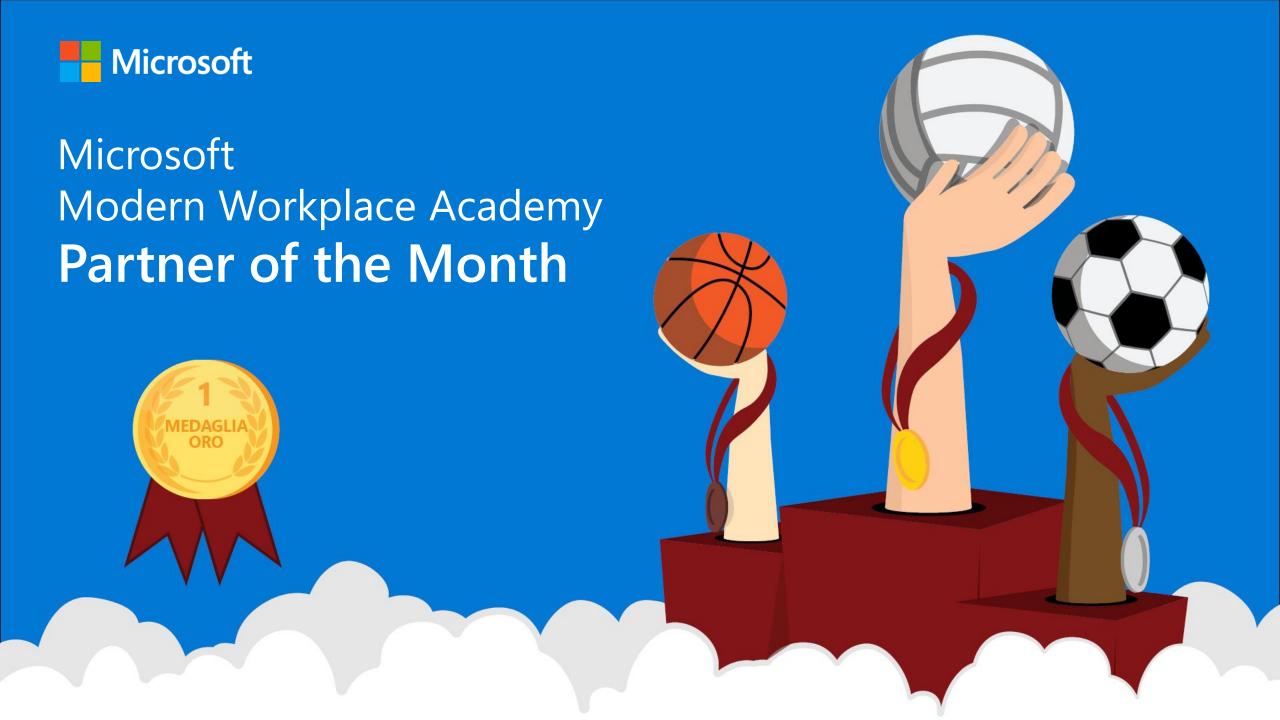
Microsoft Modern Workplace Academy Partner of the Month













Microsoft
Modern Workplace Academy
Partner of the Month







Microsoft Teams Calling and Telephony

Alessandro Appiani

Microsoft Teams Calling



All-in-one communication

Transform how work gets done by unifying chat, files, meetings, apps, with Calling



Calling by default for every user in Teams

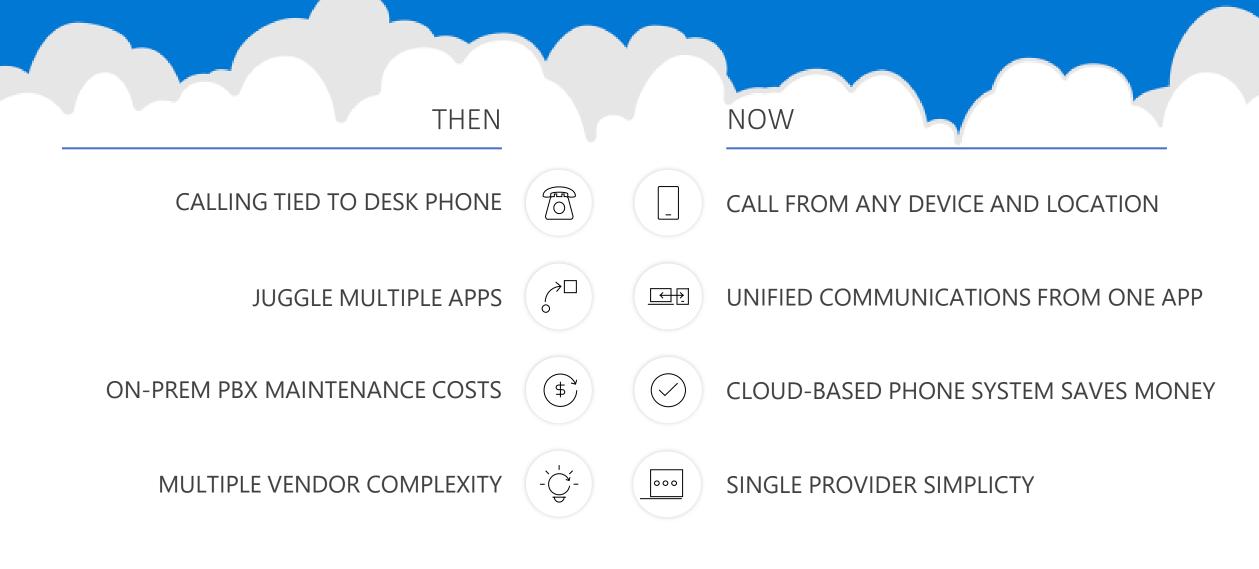
All of your Teams users can make and receive VOIP calls from other Teams users for true collaboration



Add dial tone seamlessly

Easy to add dial tone users and then manage then from the Teams admin portal

BUSINESS CALLING, REINVENTED



Welcome to Cloud Telephony

All-in-one communication, including Telephony*

Transform how work gets done by unifying calling, chat, meetings, calendar, and email



Calling, chat, and meetings in a single appSimplify your communications by unifying calling with chat and meetings in Microsoft Teams.



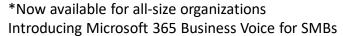
Built-in audio conferencing

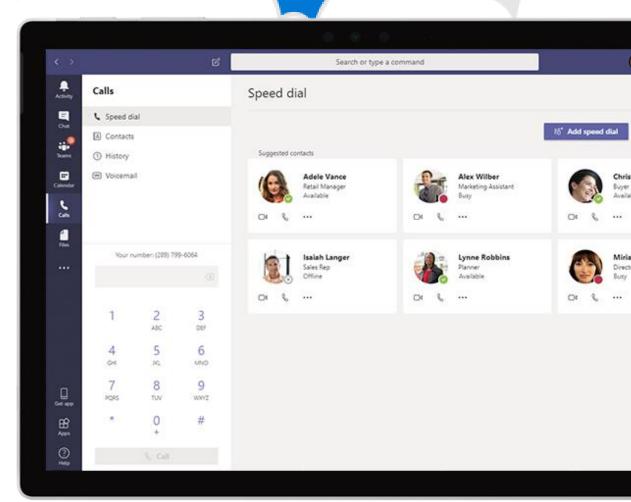
Add flexibility to your meetings with a dial-in number, integrated into every online meeting.



Do your best work, in one suite

Unified contacts and calendars across Teams & Outlook. Collaborate in the Office apps within calls and meetings.





Easy and intelligent calling

Communicate with more flexibility, ease, and intelligence so you can stay connected when you need to.



Call from anywhere, on any device

Stay connected with a single phone number across computers, mobile devices, & desk phones.



Quick one-click calling & meetings

Call any number, schedule & join meetings, and turn chats into a calls with a single click.



Al-powered intelligence

Automatic voicemail transcription plus inline chat translation & real-time captioning in meetings.



Business Voice features



Calling

Call Control

Call Park

Call Forwarding

Call Transfer: Supervised & Blind

Call Delegation

Call Screening

Call Hold

Call Logs

Call Blocking

Do Not Disturb / Breakthrough

Distinctive Ringtones

Group Call Pickup

Shared Line Appearance

Music on Hold

Visual Voicemail

Voicemail-to-email

Caller ID

One touch calling

Dial by name or number

Add Participants to a 1:1 Call

Presence

Outlook Integration

Calling Built-into Microsoft Teams

Teams Desktop & Mobile Apps

Teams-Certified Devices

Integrated Audio Conferencing

Unique Conferencing Dial-ins

Conferencing up to 250 Participants

Admin

Cloud PBX

Number Porting

Multi-level Auto Attendant

Multilingual IVR

Call Queue

Music on Hold

Global Call Routing

Location based routing

Emergency Location Based Routing

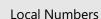
Exchange Calendar Call Routing

Dynamic E911

Multi-site Support

24x7 Customer Support

Single Sign-On



Toll-free Numbers

Company & User Phone Numbers

Extensions

Integrated Calling Plan

Bring Your Own Calling Plan

(Direct Routing)

Performance Reports

Quality of Service Reports

Call Logs

Call Monitoring

Call Analytics

Call Quality Dashboard

Device Management

Media Bypass Support

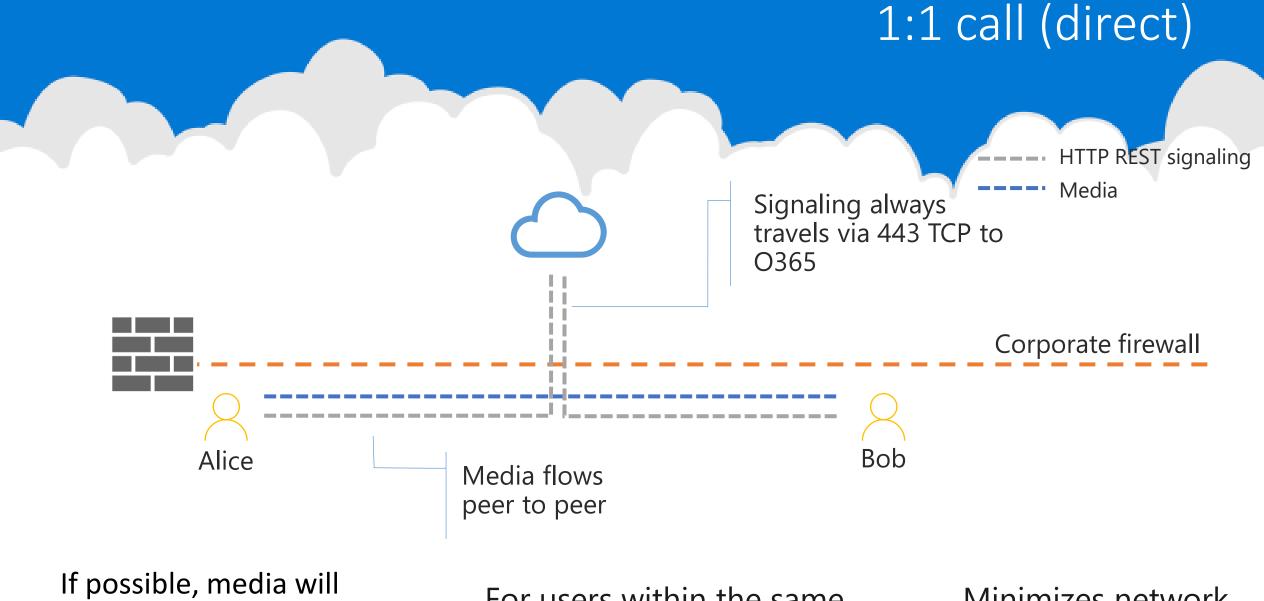
Expanded SBC Support



Calls

Calling and Media Streaming

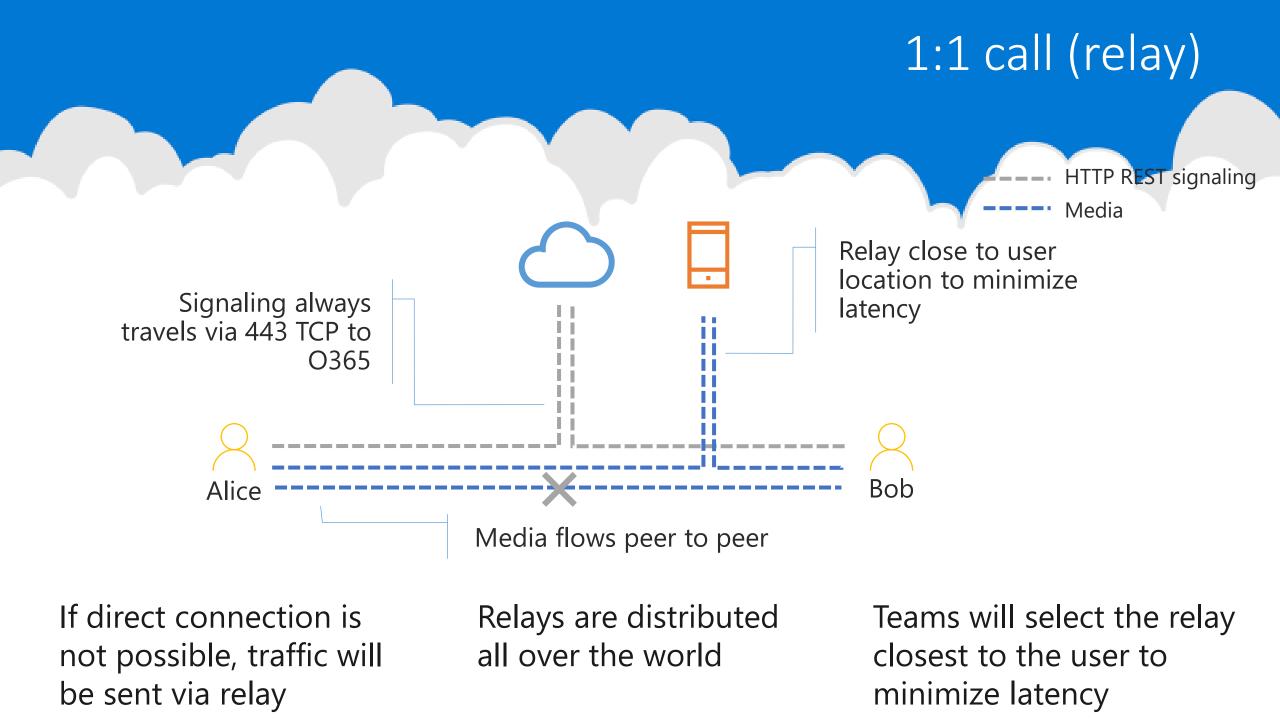
for audio calls, video calls, and meeting



flows peer to peer

For users within the same network, media traffic stays on the network

Minimizes network path and latency



Transport Relay

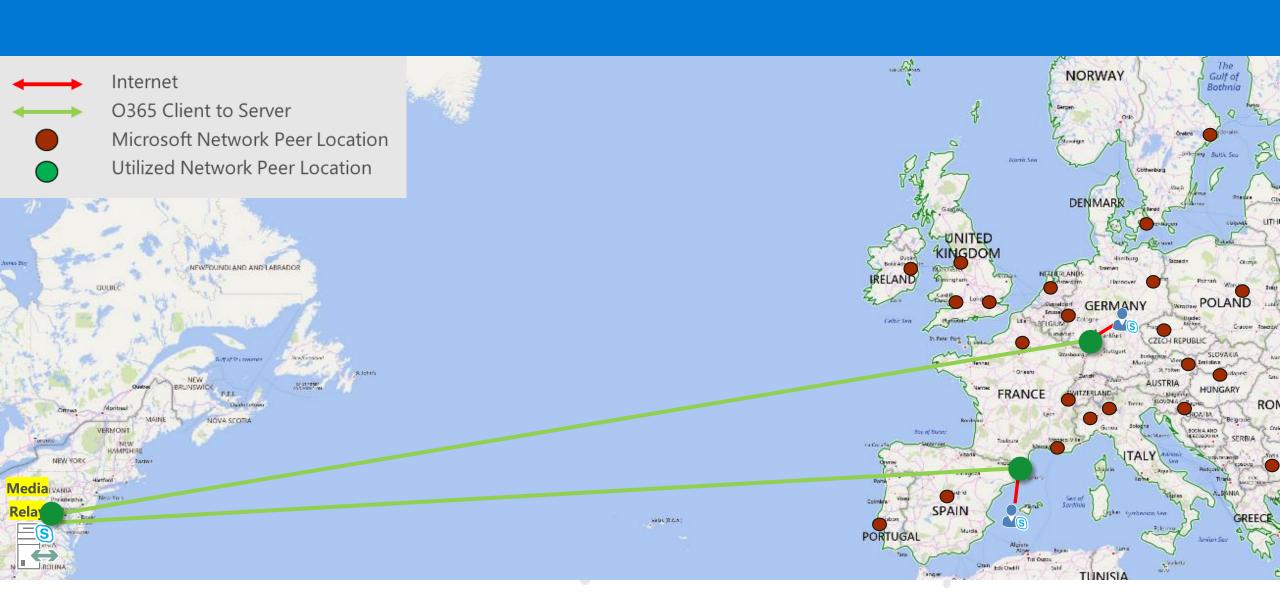
- Skype's world wide Anycast IP 13.107.8.2 (global.tr.skype.com)
 - Same IP assigned to geographical dispersed servers
 - IP routing ensures to always use the "closes" instance
- "Closest" available Transport Relay will receive traffic
 - Based on actual endpoint location
 - And based on privacy boundaries
 - Sovereign tenants users use local infrastructure
 - EU tenants use Transport Relay in EU and US
 - Other tenants use Transport Relays world wide

Customers can only benefit of this, if local internet breakouts are used.

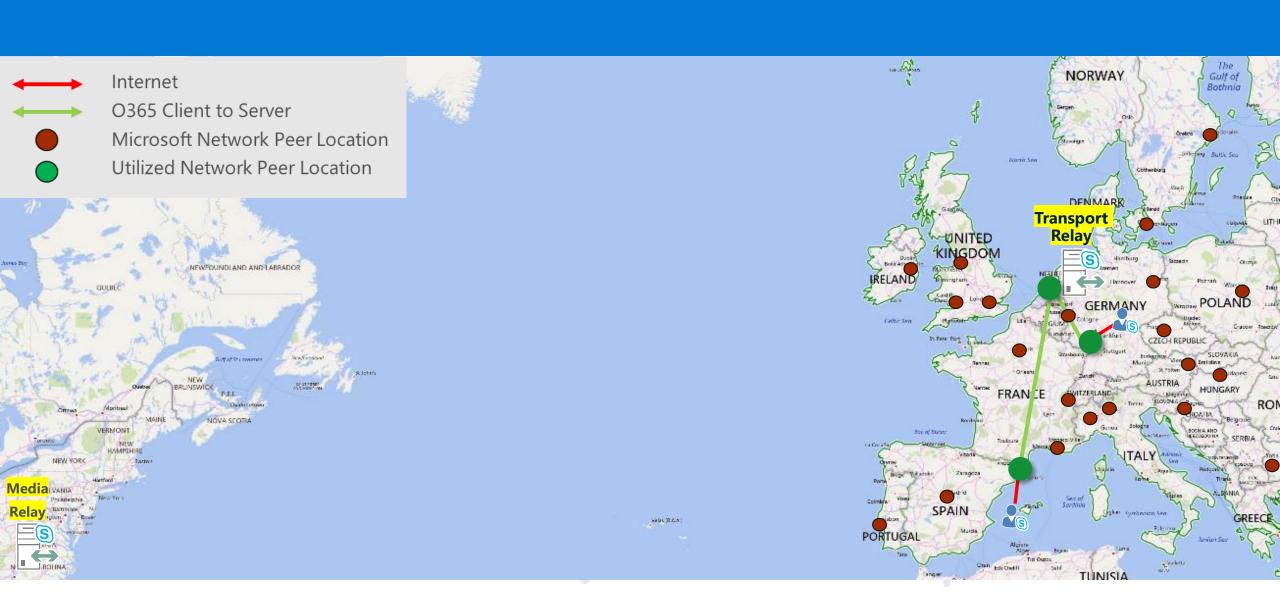
Meetings & Distributed User/Endpoint

- No matter where the tenant is located, users in single regions always have meetings in their region
 - A meeting will always be located in a data center closest to the first user joining
- Distributed relay for media transport
 - Each user «speak» with closest DataCenter to minimize latency

Skype for Business Peer to Peer calls on different networks (NAM Tenant)



Teams Peer to Peer calls on different networks (NAM Tenant)



Microsoft Phone System

What is Microsoft Phone System

 Phone System is the Microsoft technology for enabling call control and PBX capabilities in the Office 365 cloud with Skype for Business Online and Microsoft Teams*



 Is like a cloud version of SfB Enterprise Voice (and SfB Plus CAL)

Telephony in Teams vs Skype for Business

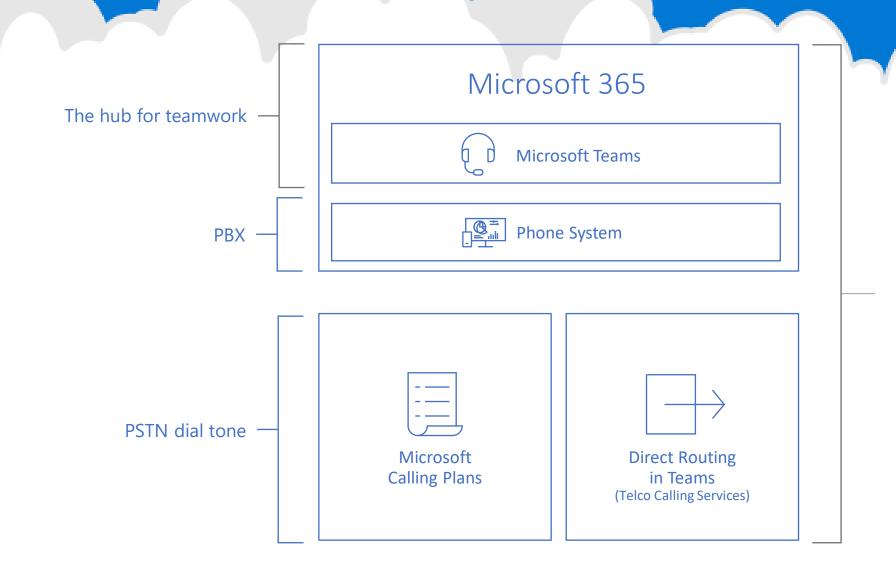
Teams

- Telephony can be enabled only thru Phone System
- Voice Users MUST be hosted online
- PBX Call Control is cloud-based and follow Cloud-based rules (ie Emergency Calls)
- Internet connectivity is required to place call
- Skype for Business
 - Telephony can be enabled thru Phone System (for online users) or thru Enterprise Voice
 - Voice users can be hosted online or on-prem (SfB Servers)
 - PBX Call Control is server-based and can be mixed with cloud-based in hybrid configurations
 - Internet connectivity is not required to place call

Mind the difference in platforms and protocols!

- Who speaks with whom
 - languages (protocol)?
- SfB Endpoint compatibility
 - IP Phone & devices
 - Audio Conference systems (rooms)
- Features & Futures

Microsoft Teams Calling components



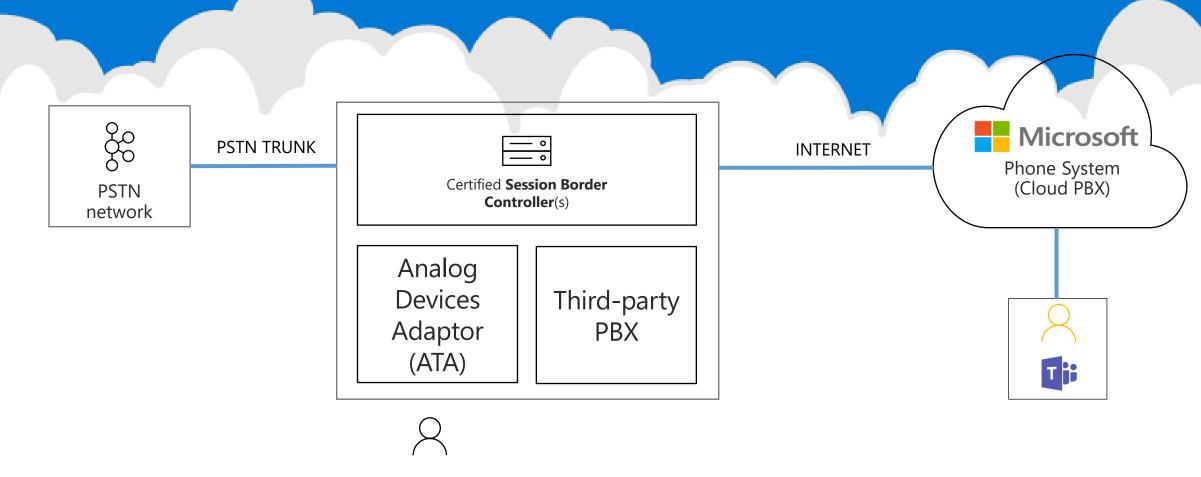
Phone System,
when paired with
Microsoft Calling
Plans and/or Direct
Routing, provides a
full enterprise calling
experience for Office
365 users in Teams
on a global scale

Two ways to connect the PSTN

- 1. Microsoft Calling Plans
 - Microsoft as a Telco provider (Carrier)
 - Bring your phone numbers to Microsoft
 - Not available in Italy
- 2. Office 365 Direct Routing for Teams
 - Leverage Onpremises Telephony
 - existing PBX (integration)
 - existing Telco PSTN Connectivity
 - legacy devices (analog, fax, ...)
 - Keep your numbers with traditional Telco/Carrier

Mix and Match is an available and interesting option © (ie: multinational organizations)

Direct Routing for Teams



Session Border Controllers (SBC) from certified partners such as Quadiocodes (SBC) from certified partners such as





Connect own PSTN trunk

For countries where Microsoft Calling plans are not available Customers that want to keep existing telco contract

Interoperability with third-party systems

Mix two systems (for example, provide the option to connect analog devices)

- Phone System configuration overview
- Direct Routing Dashboard
- Phone Numbers & Porting
- Dial Plan

Microsoft Teams Devices

Alessandro Appiani

Peripherals drive usage and experience



Roughly 72% of employees will be remote by 2020



Requirement for clear audio and crisp video



Defining user persona core to equipping the right device



Understanding the space in which we work



Microsoft Certified Devices



Tested for highest quality audio & video
Supported by Microsoft and our partners
Millions of devices shipping each year
All work with Microsoft Teams



Closer integration with Microsoft Teams
Integrated Teams notifications
Optimized for voice skills in Microsoft Teams



aka.ms/teamsdevices

Teams Devices















CRESTRON



Lenovo

logitech

Polycom

Yealink

Room phones







Personal devices













audiocodes

Jabra[®]

plantronics.

SENNHEISER

Yealink

@CRESTRON.

We work across spaces and devices

United by Microsoft Teams



Individual work spaces

At home

On the go or in transit

Individual office or dedicated workspace



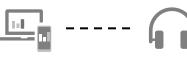
Group work spaces

Huddle spaces and focus rooms

Communal areas and touchdown spaces

Small, medium and large meeting rooms

Personal Devices



PCs and

Mobile

Audio & Video Peripherals



IP Phones







Surface Hub

Microsoft Teams Meetings & Videoconference

Alessandro Appiani

Teams Meeting

Overview

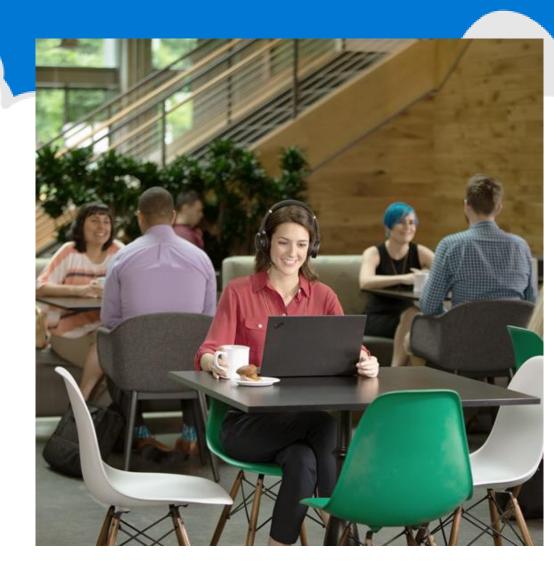
Improvements from Skype for Business

New investments to improve

Joining meetings including dial back
Mid-call Drops, stay connected
Audio and video quality
Desktop sharing
Low bandwidth network support

Cross company meeting simplification

Simplifying optional IP and port whitelisting Support for full port 443 SSL/HTTP transport Web clients for all platforms



Making Meetings just work

Joining a meeting

One click (or tap) join to audio conferences

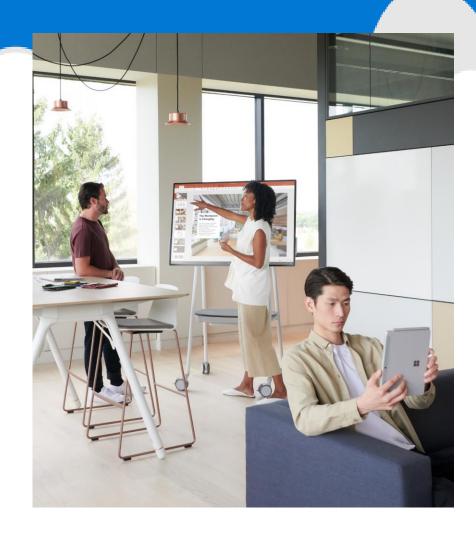
The right A/V device will be auto-picked while letting the user over-ride easily Easy meeting join from Mobile phones (iOS and Android) — Wi-Fi, mobile Echo, echo, echo... Howling prevention & echo cancellation while multiple devices are in the same room

Helping users

Better User Facing Diagnostics – Mic, speaker, audio quality, network connectivity

Interactive Troubleshooting – ex: notify user when speaking while Muted

Video privacy leveraging background blurring



Why Microsoft Teams Meetings?



Consistent, familiar experience across PC, mobile, web, and meeting rooms

Adaptive, resilient audio and video over poor bandwidth, echo and more

Real-time co-authoring with integrated Office 365 applications

7 Enterprise-grade security, compliance and manageability with Office 365

Staying in the know with Meetings Lifecyle, before, during and after

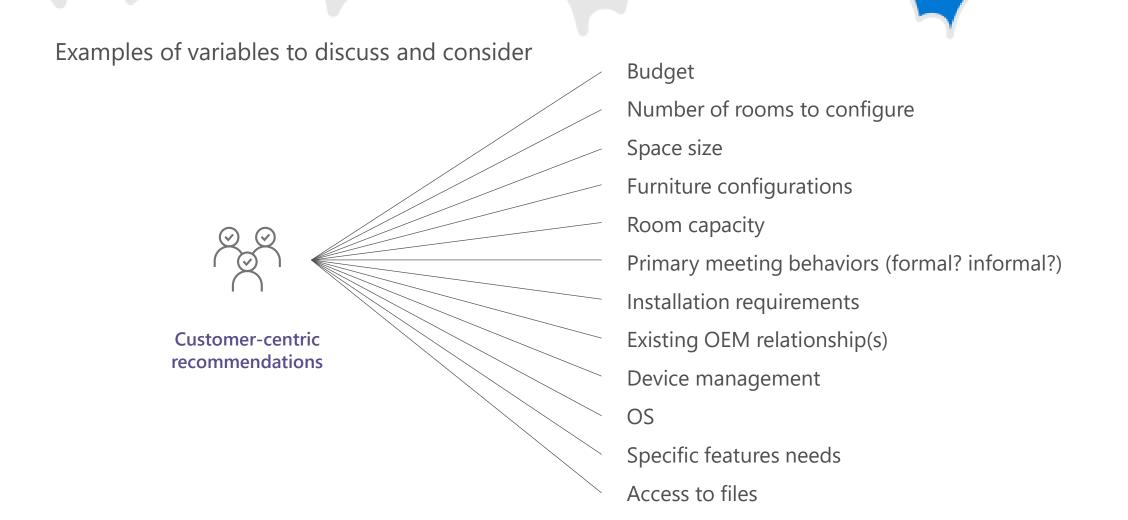
High-quality meetings that scale from 2 to 10,000 attendees

Translate live captions and transcripts to over 60 languages

Transform every meeting and conference room with Microsoft Teams Rooms

Audio Conferencing in 90+ countries, calling and full PSTN support Manage your files and video content with Office 365 services

Selecting the right device for your shared spaces



Microsoft Teams Shared Devices







Microsoft Teams Rooms

- Purpose-built calling and meeting solution delivering a native Microsoft Teams experience with HD audio and video, on Teams certified 3rd party hardware
- Consistent, intuitive and inclusive meeting experiences including one-touch join, wireless content sharing and intelligent content capture
- Offers the most comprehensive set of Microsoft Teams calling and meeting features
- Pairs with certified A/V peripherals enabling customizable configurations that scale to any room size
- Ability to join SfB, Cisco and Zoom meetings through Direct Guest Join (Coming CY2020)
- Deploy, manage and secure your rooms in a simple and scalable way with the Teams Admin Center

Collaboration bar for Microsoft Teams

- Purpose-built calling and meeting solution delivering a native Microsoft Teams experience, with HD audio and video, on Teams certified 3rd party hardware
- Consistent, intuitive and inclusive meeting experiences including one-touch join, wireless content sharing
- Designed for smaller rooms, the collaboration bar offers a subset of Microsoft Teams calling and meeting features
- Optimized for touch
- Integrated solution that can be deployed within minutes, reducing installation costs and simplifying device management and troubleshooting
- Deploy, manage and secure your rooms in a simple and scalable way with the Teams Admin Center

Microsoft Surface Hub 2S

- All-In-One meeting and co-creation solution delivering a native Microsoft Teams experience, with HD audio and video, on Teams certified 1st party hardware.
- Just like Teams Rooms and collaboration bar, Surface Hub delivers consistent, intuitive and inclusive meeting and creative experiences
- Surface Hub is certified for Focus rooms, huddle rooms, and small meeting rooms and delivers the core calling and meeting features available through Teams
- Surface Hub is optimized for touch and pen experiences so you can drive the meetings and cocreation sessions from the front of the room
- Robust manageability features are delivered through Microsoft's enterprise-ready Intune manageability solution.

Surface Hub

Primary
focus

Agile teamworking, co-create with Whiteboard, access to Office 365 content, 3rd party applications, and Microsoft Teams meetings. Mobile, uninterrupted teamwork

Configuration All-in-one

Displays 50-inch, 85-inch¹; 4K+ resolution pen/touch screen

Price US ERP \$8,999.99²

OS Windows 10 Team

Teams App Microsoft Teams for Surface Hub App



aka.ms/teamsdevices

² MSRP for 85-inch Surface Hub not yet announced; stand not included; price does not include any installation or licensing costs

Teams Rooms

Teams Rooms hardware and software



A center of room **touch controller** lets you manage a Microsoft Teams meeting end to end





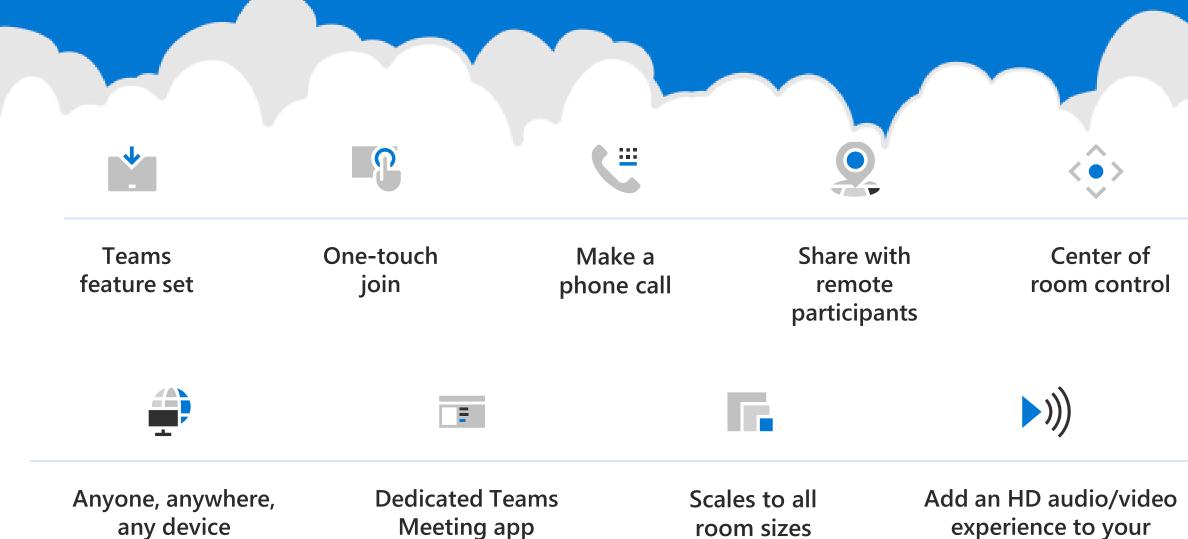


On the familiar Microsoft Teams app, built for Windows 10 Connects with displays and projectors, cameras and speakers

Add an HD audio/video experience to your meeting rooms

Transform your meeting rooms with Teams

meeting rooms



Intelligent communications and collaboration with Microsoft Teams

 Using AI, machine learning, and the power of Microsoft Graph, intelligent communications will bring new features and experiences before, during, and after every meeting and call.

Microsoft Teams Rooms features:

- Proximity beaconing
- Cortana in meetings
- Companion experiences
- Microsoft Whiteboard
- Touch/ink displays
- Content cameras and Intelligent Capture

Microsoft Surface Hub & Teams Room Coordinated Join



Flexible join options

Single-touch join from Microsoft Teams Room console or Surface Hub 2S home screen



Maximize screen real estate

Microsoft Teams Room display shows community view of video feeds, while Surface Hub 2S shows content or Whiteboard



Audio/video coordinated

Microsoft Teams Room runs the audio and video with muting of Surface Hub 2S



Anticipating go-live in CY 2020



Top recommendation by space and key usage patterns

	Large Office	Focus Room	Huddle/Open Space	Small Conference Room	Medium Conference Room	Large Conference Room	Extra Large Meeting Space
	1 + 3-4 people	3 to 5 people	3 to 5 people	5 to 7 people	11 people	18 people	+18 people
	Within 2.3-meter radius	3 meters by 3 meters	Within 2.3-meter radius	3 meters by 4.5 meters	4.5 meters by 6 meters	4.5 meters by 8.5 meters	8.5+ meters
Meet and Present	Microsoft Teams collaboration bar	Microsoft Teams collaboration bar	Surface Hub 2S	Microsoft Teams Room	Microsoft Teams Room	Microsoft Teams Room	Microsoft Teams Room
Meet and Co-Create	Surface Hub 2S Windows Pro/Enterprise*	Surface Hub 2S 50"	Surface Hub 2S	Surface Hub 2S 85"*	Microsoft Teams Room	Microsoft Teams Room Coordinated Join*	Microsoft Teams Room

with A/V accessories



^{*}Device/configuration not yet available; Surface Hub 2S 85" available by year-end CY 2020 (Preview with select customers in Q1 CY 2020). *Coordinated Join available during CY 2020

Surface Hub 2S

Teams meeting

Cloud Video Interop

What is Cloud Video Interop?





Call in from any standards-based video teleconferencing (VTC) system on SIP & H.323



Native experience for Teams users to view content and video from Standard based Systems

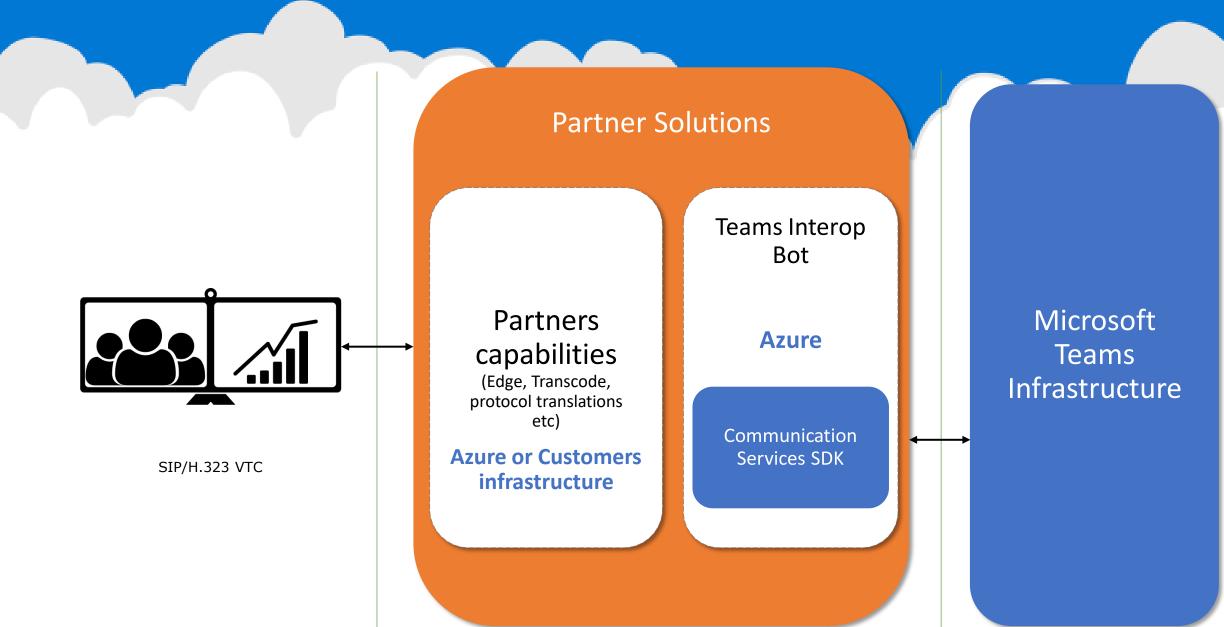


VTC systems join directly into Teams Meeting



Global availability

CVI Reference Architecture



Meet anywhere

Cloud Video Interop – Certified for Microsoft Teams



Poly RealConnect Service

рехір

Pexip Infinity
For Microsoft Teams

BlueJeans

BlueJeans Gateway For Microsoft Teams

HD video (1080p) and Content (VBSS)

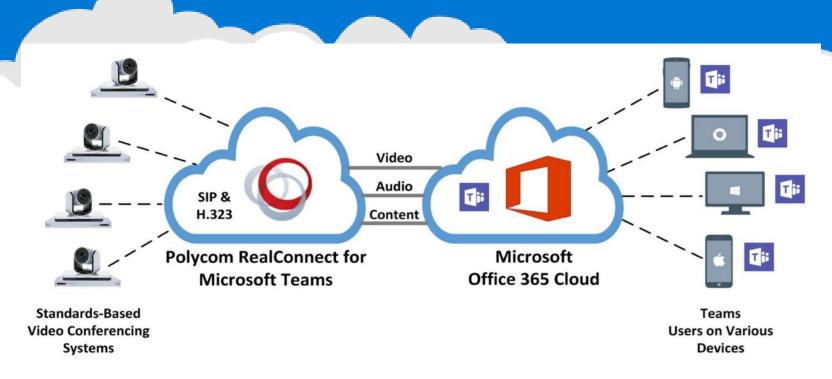
Support for H.323 and SIP meeting room devices

Native Teams/Exchange scheduling

Azure Scale with Cloud Solution



Polycom RealConnect for Teams



Cloud service

Offered by Polycom, worldwide

Hosted in the Microsoft Cloud using Microsoft Azure

Users can be enabled directly from within Office 365 portal

Supports wide range of devices

Non-native meeting devices can join a meeting

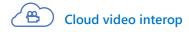
Extends the Polycom RealConnect interop technology

Supports Polycom, Cisco, and other VTC devices

Full video experience

Meeting audio and video hosted in Skype for Business

Simple scheduling and join URL experience Supports desktop and application sharing



Pexip Infinity Fusion

A private VTC interoperability gateway for Microsoft Teams



A complete Teams CVI platform for customers that

Are concerned about data ownership and privacy and require control over their IT environments

Have extensive and/or complex traditional VTC environments and want interoperability with these technologies

Want to simplify migration from Skype for Business to Teams

Want to runs in their own Azure instance or even in private data center (on-premises)

Supports a wide range of devices

Provides SIP and H.323 VTC video interoperability for Teams

Enables most non-Microsoft solutions to join Teams meetings

Full Teams experience

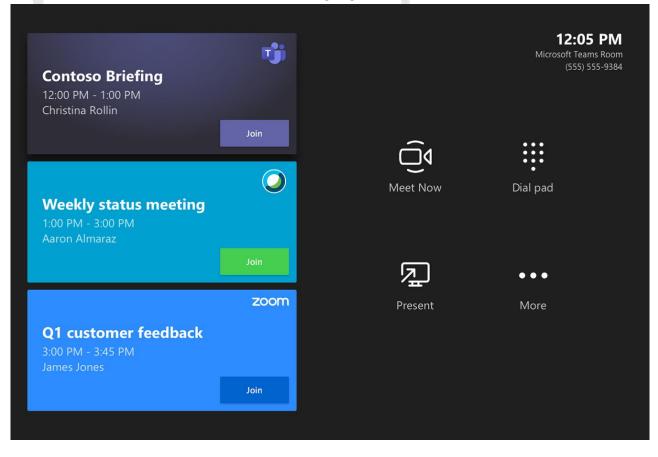
Meeting audio and video hosted in Teams

Native Teams scheduling and join experience

Full desktop and application sharing both from Teams and VTC

Cisco & Zoom - Web Based interoperability

- Extension of Touch Control Panel Teams App
- Web-based
- Coming in 2020
- Teams web-based
 Join will be available
 in Cisco Rooms

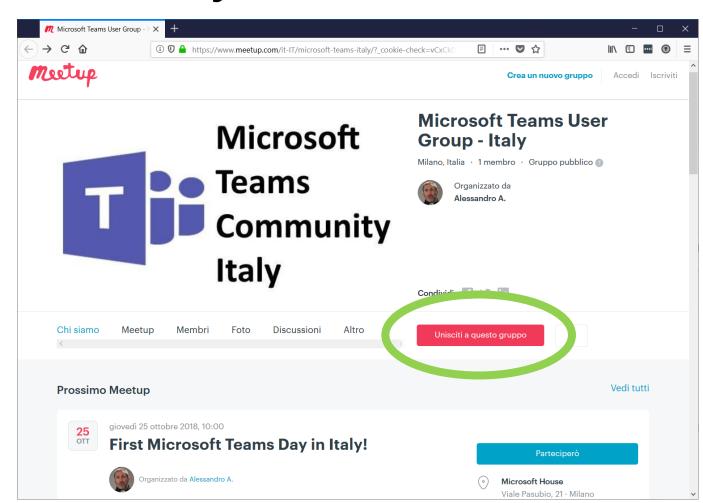


 Scheduling with Interop SfB / SIP / H.323

Microsoft Teams User Group - Italy

www.meetup.com/microsoft-teams-italy

- E' nato in occasione del primo Microsoft Teams Day in Italia
- Iscrivetevi alla community e contribuite con post, domande, discussioni!
- Contenuti ed eventi sono in arrivo...stay tuned!



Grazie!

domande?



