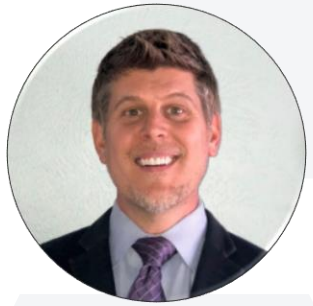
Microsoft audiocodes

# Microsoft Teams Direct Routing & Integration

## Moving to Microsoft Teams Phone

# Presenters



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AudioCodes

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Solution Engineer
AudioCodes

# Agenda

Introduction to AudioCodes

Direct Routing & Managed Services (Live)

Migration strategies to move users from PBX to Microsoft Teams Phone

Topology Overview

User experience moving to Microsoft Teams Phone

Administrator experience moving to Microsoft Teams Phone

Questions and answers

# Top 10 Reasons of Direct Routing

1. **Cost Efficiency**. It's a lot cheaper to use Direct Routing then Calling Plans.
2. **Simple Deployment.** Direct Routing eliminates the need for any call carrying equipment (CCE). But if physical equipment that is on-prem SBC is required then Direct Routing makes it possible.
3. **Leverage Existing contracts** which includes current infrastructure, DIDs and telephony contracts with service providers.
4. **Pain Free Migration**. Direct Routing helps to migrate from On-Prem Infrastructure to Cloud platform.
5. **Troubleshooting.** If there is an issue with calls/voice quality, it is easier to troubleshoot since we terminate the PSTN connection. Leveraging OVOC (AudioCodes Management platform) we can see a call from PSTN to Teams and even Teams to Teams calls on a single management system.
6. **Integration**. We can connect to legacy PBX's and Calling Center platforms (among other things)
7. **Remote User Troubleshooting**. Monitoring the users calling platform to see what they are using (headset attached to laptop, IP Phones, 3rd party device, etc.). From there we can resolve.
8. **Coverage.** Enable PSTN connectivity in countries where Microsoft Calling Plans doesn't exist.
9. **Survivability.** Direct Routing along with Teams Survivable Branch Appliance helps you achieve survivability during network outage which means connection to TEAMS cloud being down.
10. **Analog Connectivity.**

# Migration strategies


# Microsoft Teams Phone is more than a technical migration

Change doesn't **automagically** happen

**Resistance is a normal, adopting to change takes time**

**Shadow IT** is more prominent than ever

**80% admit to using their communication tool of choice**[1]

People and change are not one-size-fits-all

**Organizations are made up of early adopters, laggards, and everyone in between**

Technical readiness and user adoption go hand in hand

**Plan, pilot, and deploy both readiness activities together**

[1] "What is Shadow IT?", https://www.skyhighnetworks.com/cloud-security-university/what-is-shadow-it/ (accessed March 2017)

# Replace your traditional PBX with Microsoft Teams Phone

## Unify your legacy PBX system in Microsoft 365

Provide a complete voice solution in the cloud. Reduce reliance on-premises hardware and eliminate points of failure.

## Simplify IT

Increase agility and consolidate voice management with rapid provisioning, reporting, and diagnostics in the Teams admin center.

## Scale globally

Connect your phone system to the Microsoft worldwide network and get the power of the Microsoft cloud wherever your business goes.

# Which migration path should customers take?

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

## Path A

**Co-existence migration**

**Overlapping capabilities**

**Modular and agile process**

### Considerations:

Set up Direct Routing for PBX and Microsoft Teams Phone to function side by side

Voice capabilities available in both PBX and Microsoft Teams Phone

Enables controlled velocity move to Microsoft Teams Phone

## Path B

**Cutover migration**

**Replacement of solutions**

**Coordinated move of services**

### Considerations:

More complex environments are nearly impossible to immediately replace all services

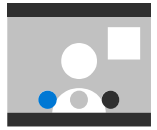
Creates more points of no return during the project

Project timeline is significantly shorter

Path A

# Co-existence migration

Overlapping capabilities, considerations & impact



## Feature requirements & overlap

Calling features available in both PBX and Teams

Requires setup of Direct Routing as well as Phone System and Calling Plan

Dial Plan planning is critical

Allows both solutions access to most of the other systems resources

## Moving users one at a time or in groups

**Granular control:** Migration experience can be controlled on a per user or per group basis

**Individuals:** Champions and Super Users can be early adopters leading to greater exposure and building excitement around the solution

**Groups:** Organizational groups can be moved together for a shared experience

## Additional considerations

Proof of Concept testing of solution to ensure the separate systems will function as expected

Setup dial plans to allow for individual numbers to be routed to specific destinations - requires more administration during migration

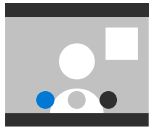
Plan which non-user devices will move during which stages. i.e.. common area phones, analog devices, integrated solutions

Emergency Calling needs to be fully functional in both systems

Path B

# Cutover migration

## Overlapping capabilities, considerations, and impact



### Feature requirements and overlap

Calling features available in the system of choice until the decided cutover time

Fastest method of moving users to Microsoft Teams Phone

Requires all users be moved at one time

May create points of no return where the ability to back out of the change is not feasible, such as porting telephone numbers or removing and replacing telephones.

### Moving users on a PBX all at once

**Quick velocity:** All users have the same capability and experience at once which simplifies adoption

**Site level move:** May be able to move high-level sites at a single time rather than entire PBX. This depends on the setup of carrier services and PBX configuration.

**Shorter runway**: Allows for an organization to focus intense effort on moving users quickly to Microsoft Teams Phone.

### Additional considerations

Adoption and change management is crucial for user acceptance of new solution.

Extensive testing in proof of concept will avoid many issues found during cutover.

Full discovery of non-user devices will ensure that no services are missed during cutover.

# Microsoft Teams calling

# Microsoft Teams calling

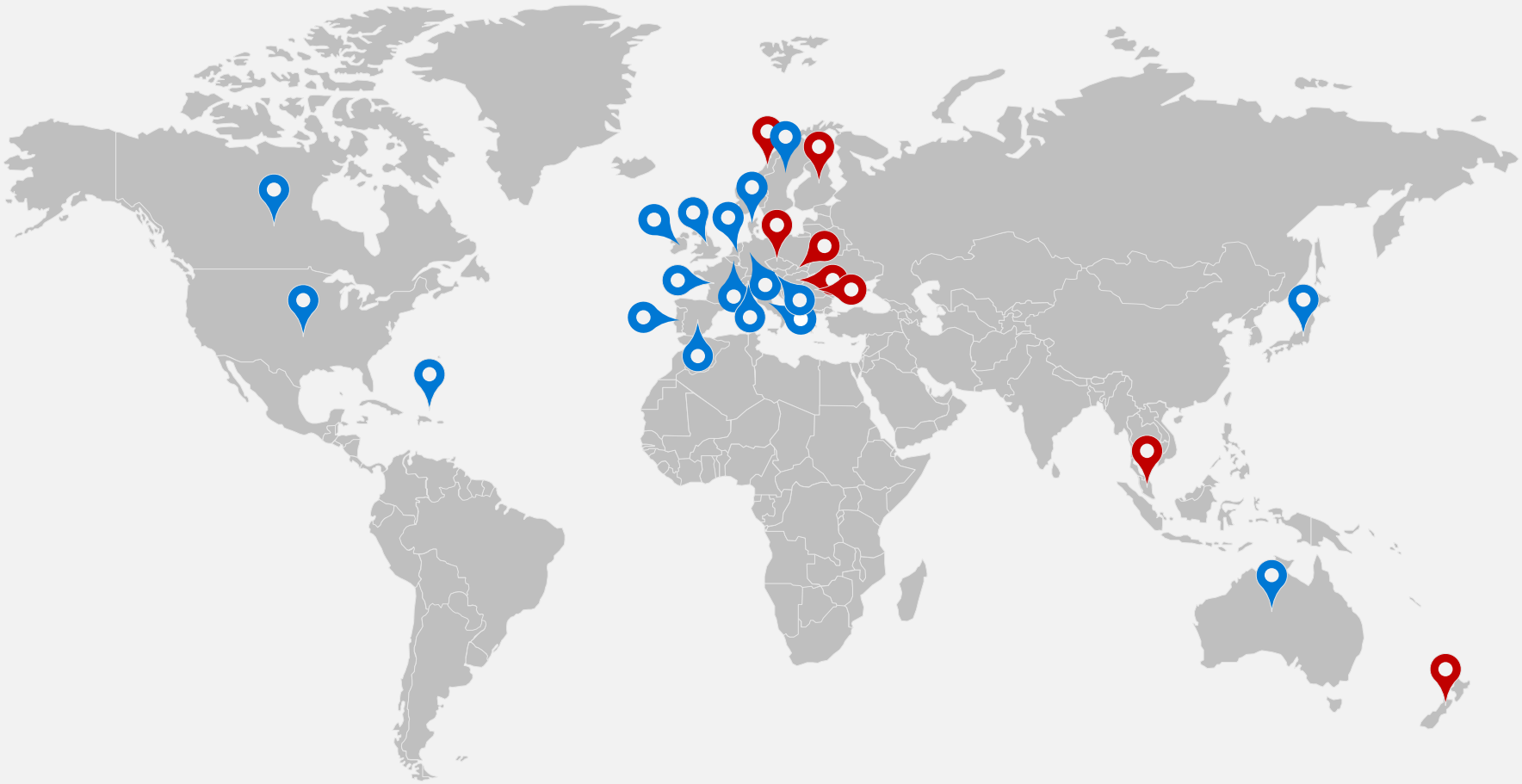
## Microsoft Teams Calling Plans

Microsoft is your operator

# Microsoft Teams calling

## Microsoft Teams Calling Plans

Microsoft is your operator



# Microsoft Teams calling

## Microsoft Teams Calling Plans
Microsoft is your operator

## Operator Connect
Simply and seamlessly integrate qualified operators

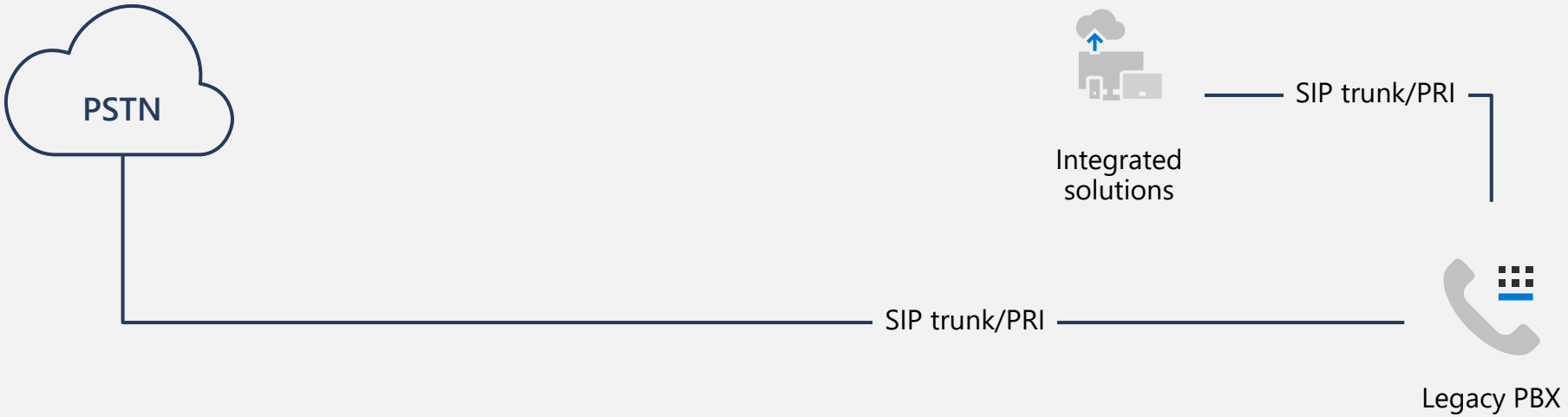
## Direct Routing
Use your existing infrastructure, supported in >180 countries

# Topology Overview


# Migrating PBX calling to Direct Routing: Topology

Telco-provided connection

- SIP trunk
- PRI line (T1/E1)




## Phase 1 “Current”

Legacy PBX

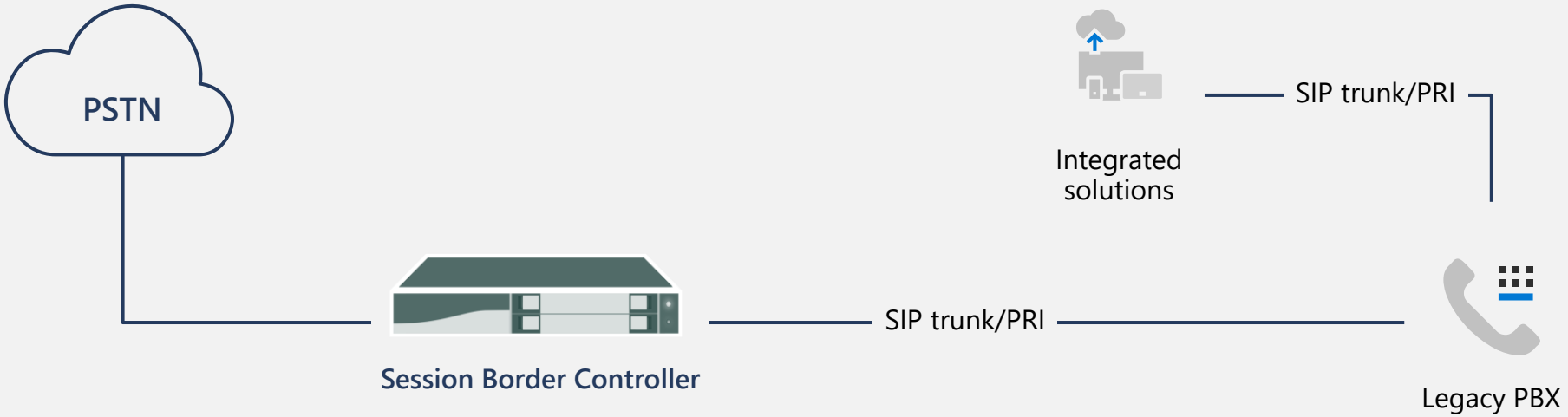
Stations and trunks

Integrated solutions

# Migrating PBX calling to Direct Routing: Topology

Telco-provided connection

- SIP trunk
- PRI line (T1/E1)



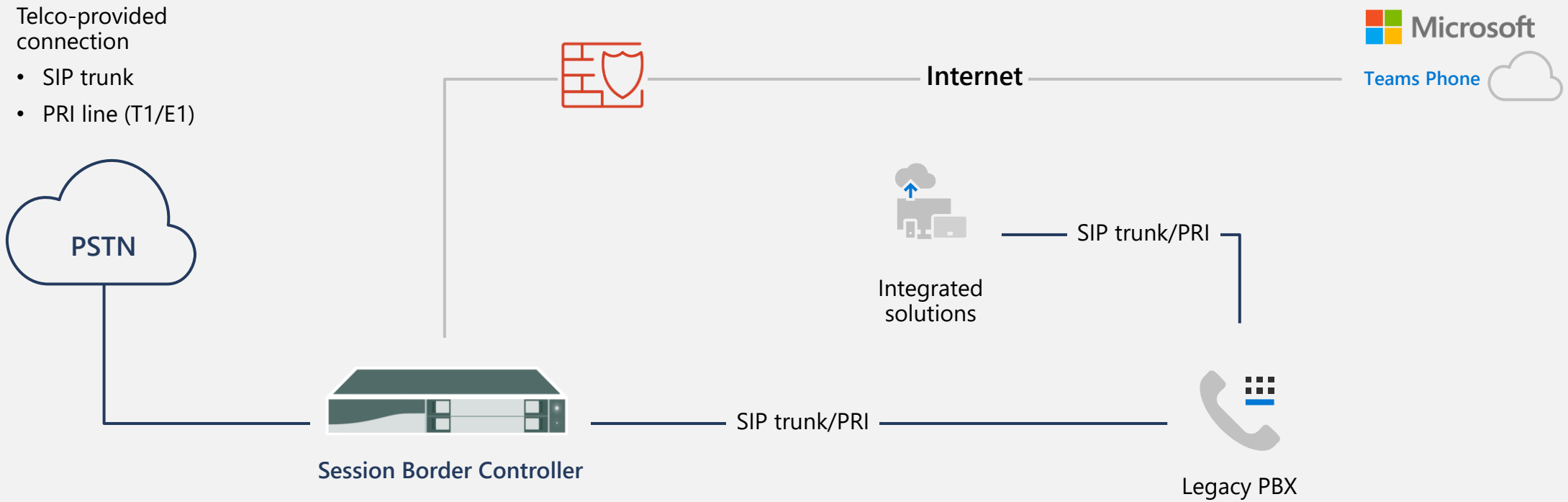

## Phase 1.5 "Preparing for Microsoft Teams"

Session Border Controller

Allows granular control of PSTN services

Connect multiple integrated systems

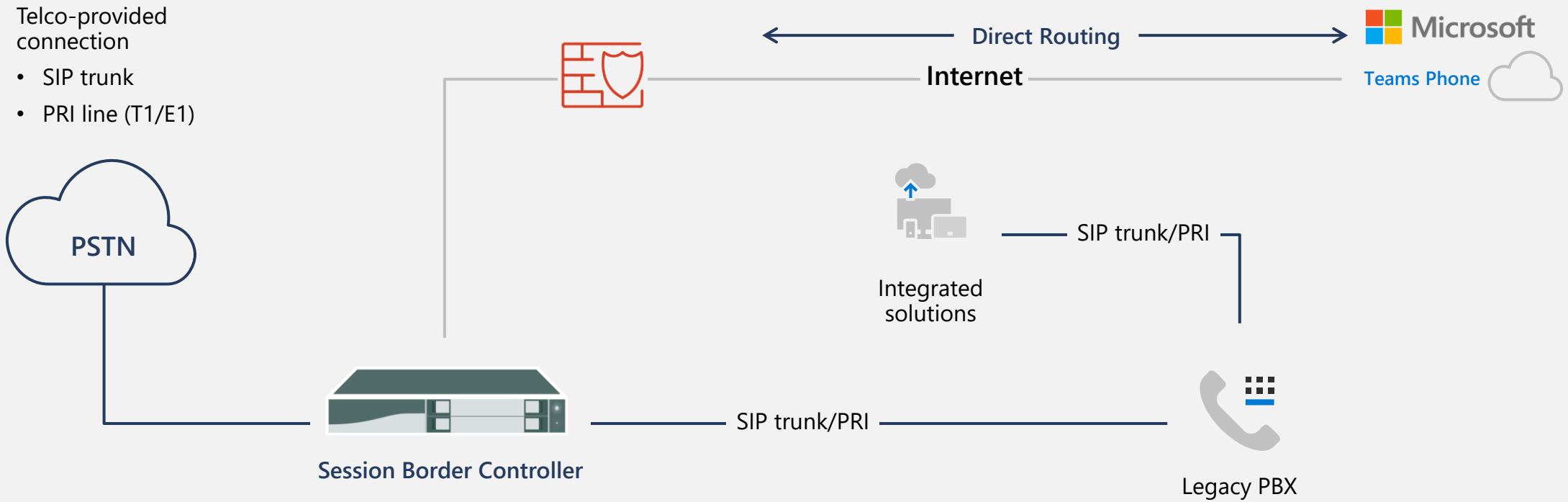
# Migrating PBX calling to Direct Routing: Topology




## Phase 2

Teams Phone working side by side with legacy systems

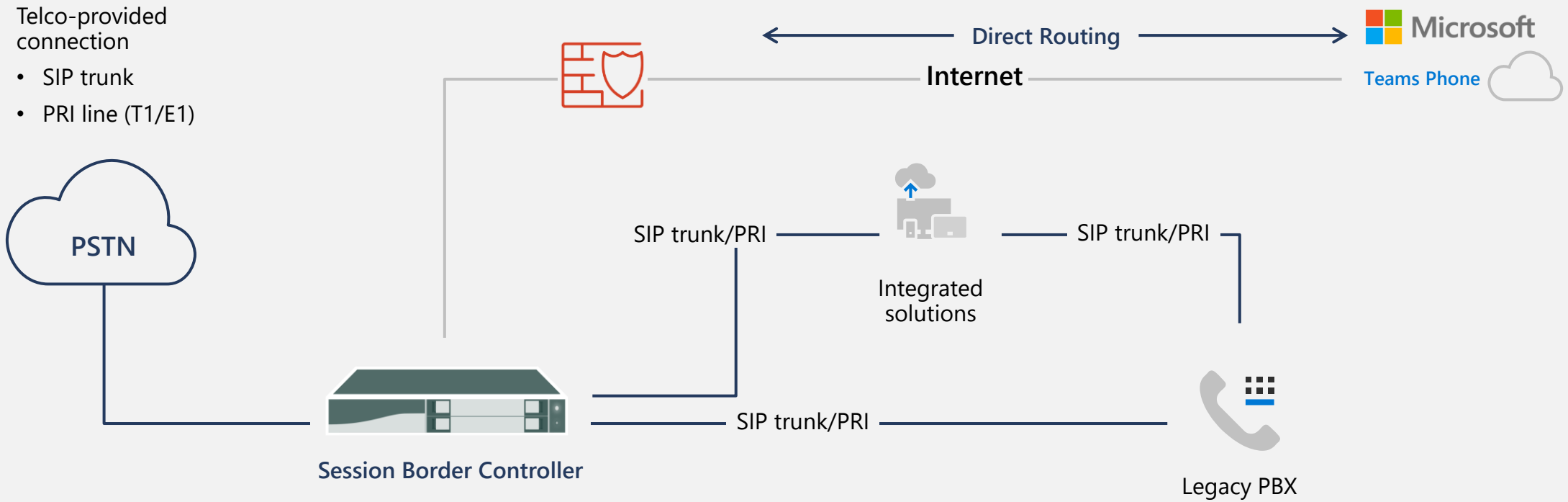
# Migrating PBX calling to Direct Routing: Topology




## Phase 3 - Teams Phone with Direct Routing

Direct Routing allows Microsoft Teams Phone to interact with legacy systems for extension dialing, analog connections, integrated solutions, and other on-prem systems.

# Migrating PBX calling to Direct Routing: Topology




## Phase 4 - Teams Phone

Teams calling is the primary telephony solution

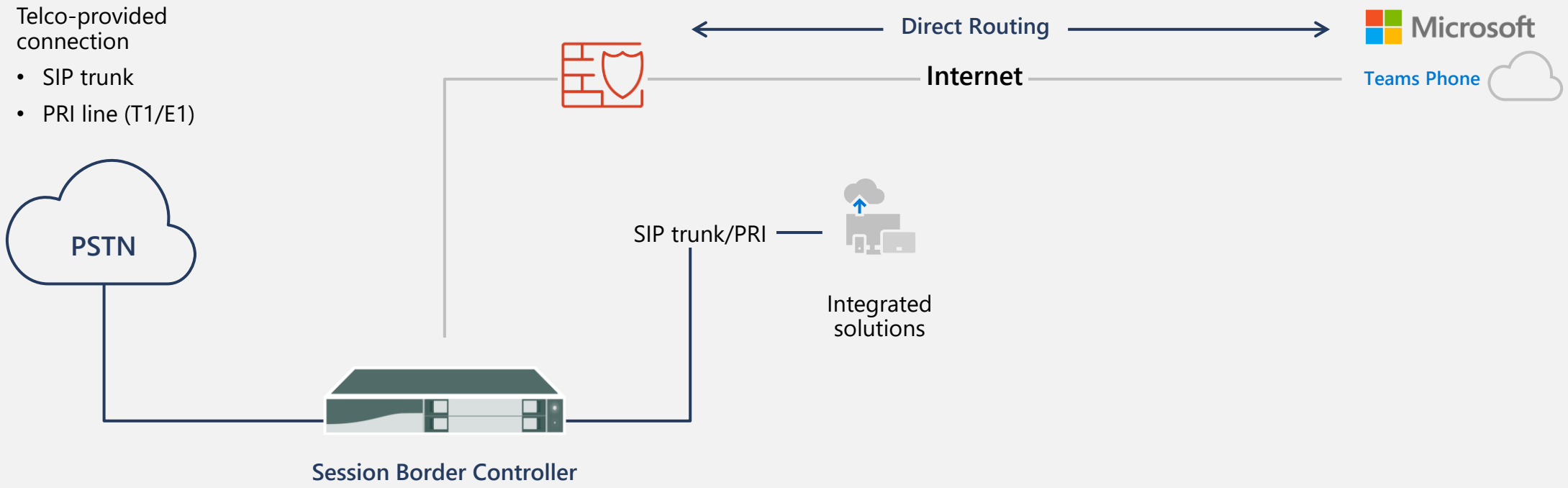
SBC provides integration with required legacy systems

Local trunks and/or Microsoft Calling Plan may be used

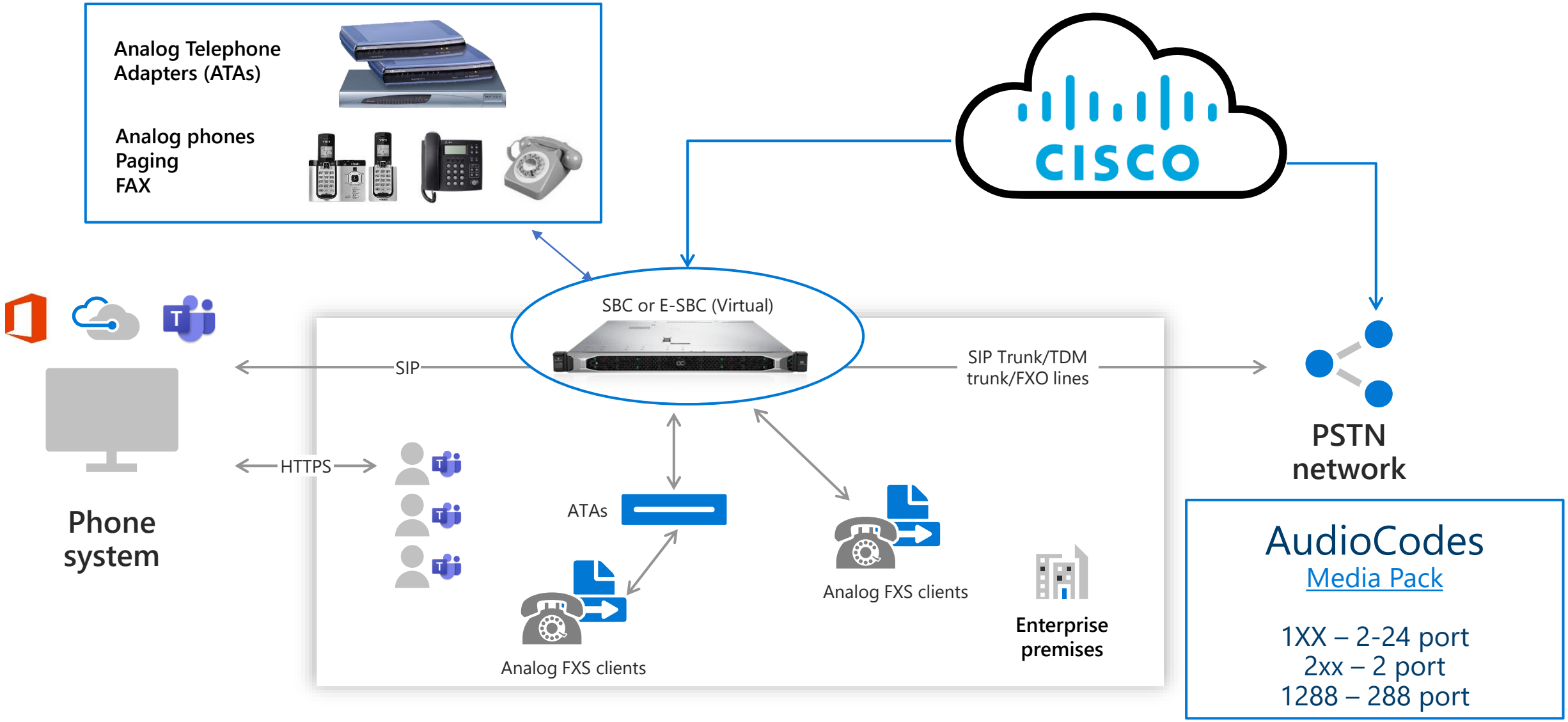
Extension dialing still possible

Analog, paging, custom solutions through SBC

# Migrating PBX calling to Direct Routing: Topology



# Session Border Controllers Integration with Cisco




## AudioCodes

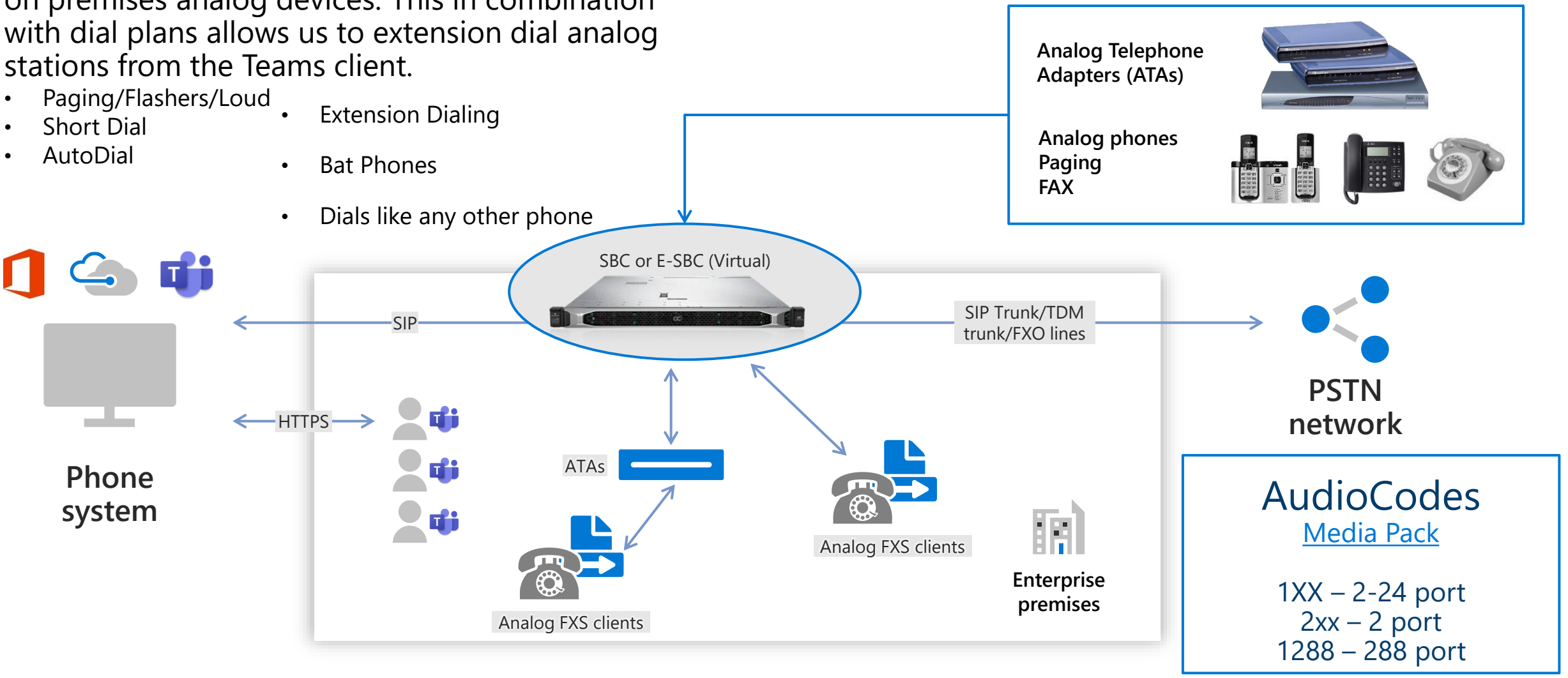
Media Pack

1XX – 2-24 port
2xx – 2 port
1288 – 288 port

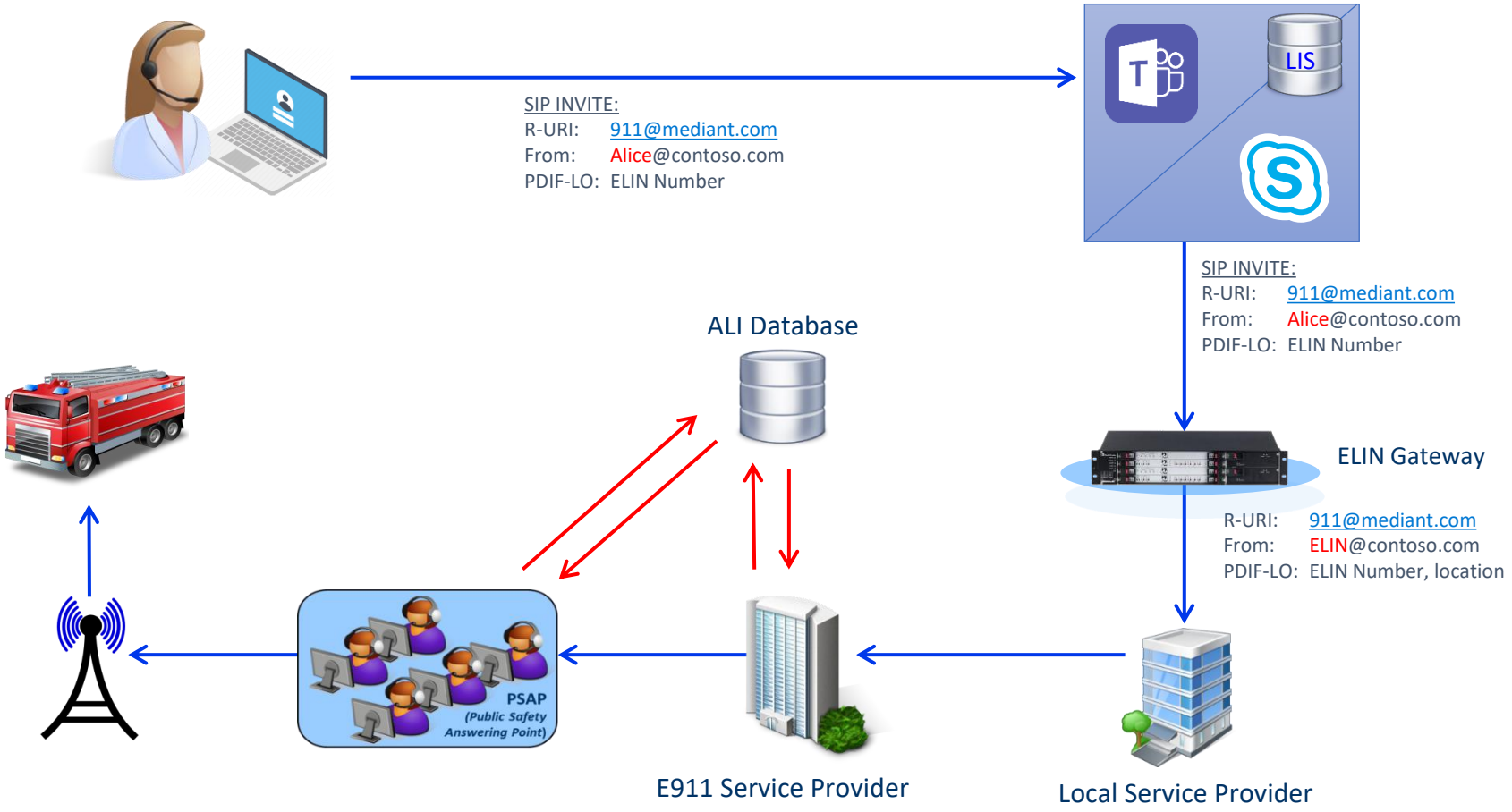
# Analog Device Interoperability

Direct routing with SBC allows for connectivity to on premises analog devices. This in combination with dial plans allows us to extension dial analog stations from the Teams client.

- Paging/Flashers/Loud
- Short Dial
- AutoDial
- Extension Dialing
- Bat Phones
- Dials like any other phone

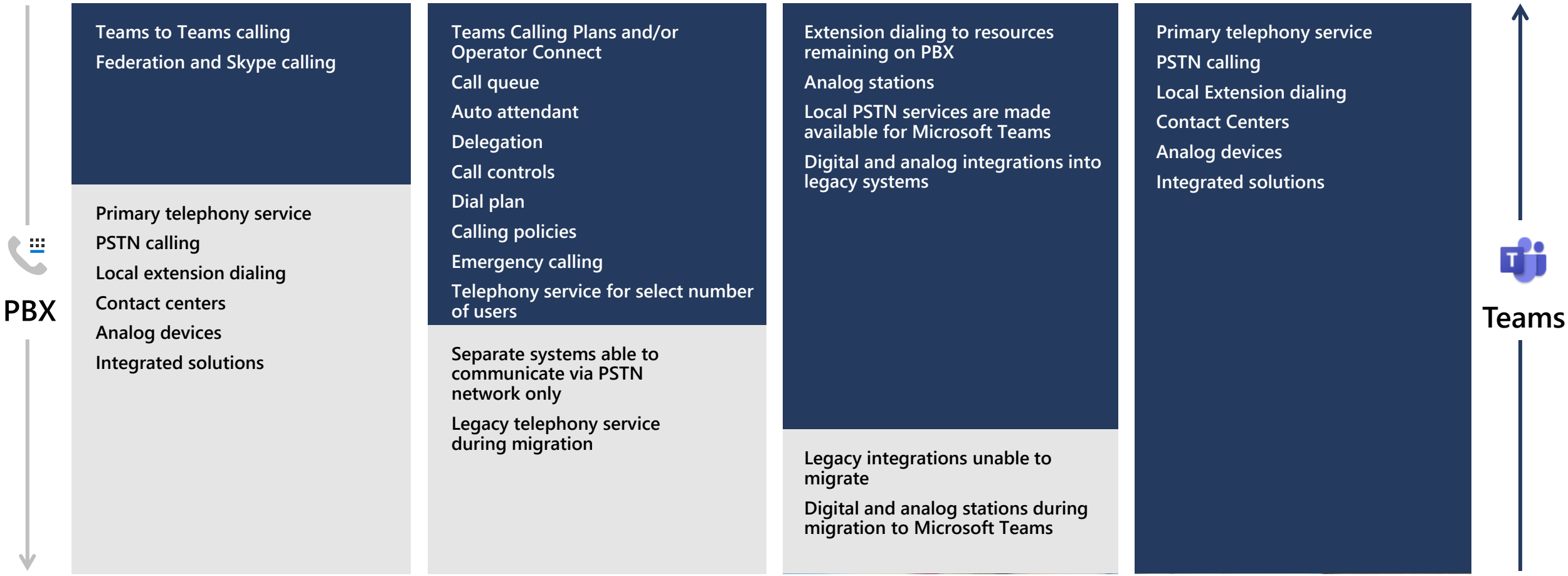


# Emergency call



# User Experience


# Microsoft Teams Phone user experience




## Phase 1

Microsoft Teams only mode without calling features

## Phase 2

Microsoft Teams Phone with Calling Plans and/or Operator Connect

## Phase 3

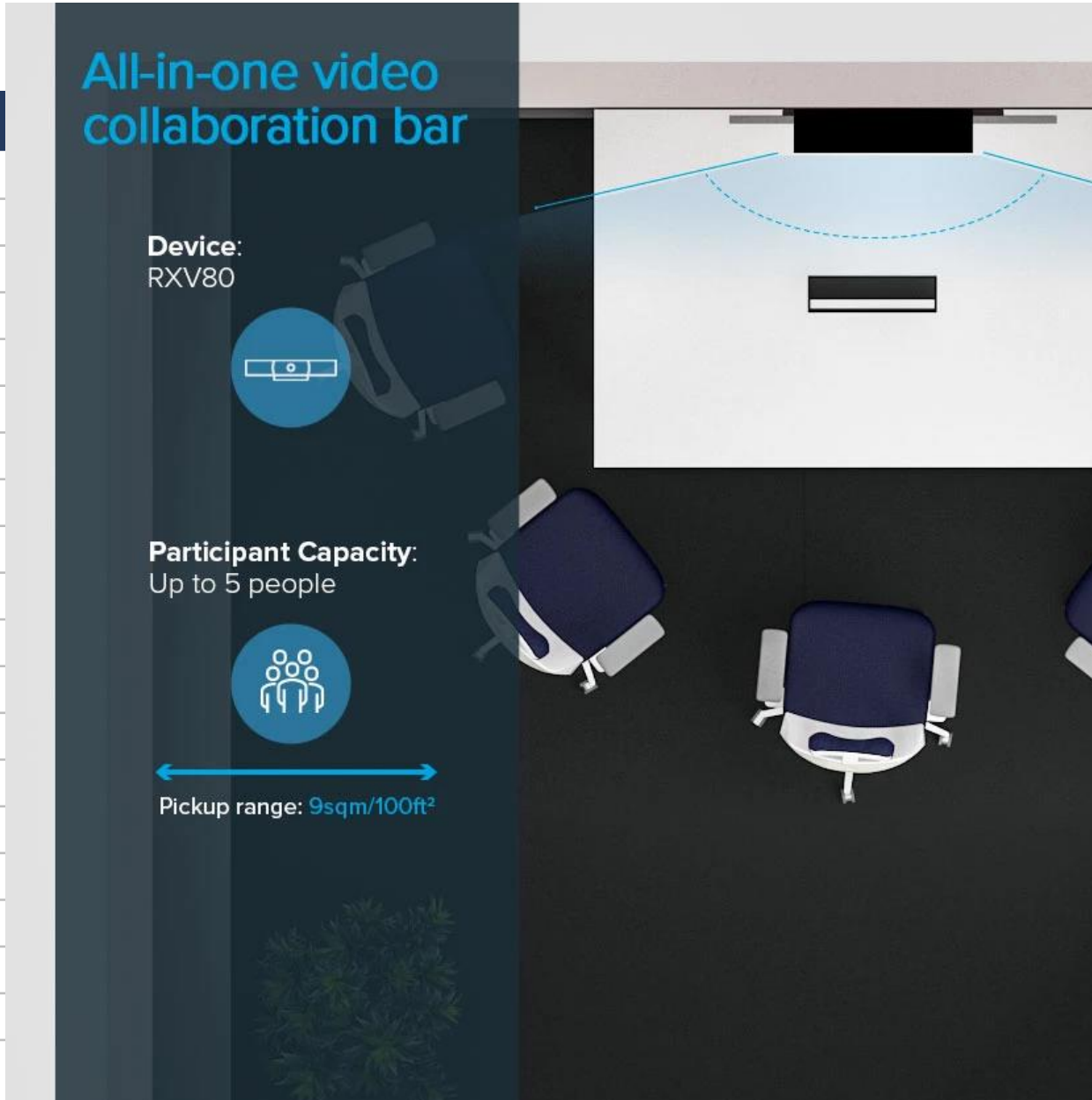
Microsoft Teams Phone
Direct Routing
AUDC Live

## Phase 4

Microsoft Teams Phone

# Microsoft Teams Phone feature transition

| From (PBX) | To (Teams Phone) |
|---|---|
| Bridged call/Shared lines | Delegate feature |
| Call park | Call park |
| Call pickup | Group call pickup |
| Caller-ID | Caller-ID policies |
| Cover path | Call answering rules |
| Cover answer group | Call queues |
| Directory | Active Directory lookup |
| Distinctive ring | Ringtones |
| Single number reach | Call answering rules |
| Extend call | Call transfer to cell |
| Forward | Call forward settings |
| Group page | Group chat |
| History | Call history |
| Hold | Hold |
| Intercom | Teams calling and chat |
| Posted messages | Status feed |
| Send calls (to voicemail) | Status to do not disturb |
| Transfer (announced) | Consultative transfer |
| Transfer (blind) | Call transfer |



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# Administrator Experience

# Microsoft Teams Phone Administrator Experience

Example

PBX

Teams

| Phase 1 | Phase 2 | Phase 3 | Phase 4 |
|---|---|---|---|
| Basic Microsoft Teams enablement<br>Microsoft Teams admin center defaults | Dial plan shared between systems<br>Microsoft Teams devices for calling inventory and management<br>Microsoft Teams policies for calling in Teams admin center<br>Call Quality Dashboard | Dial plan administration<br>Microsoft Teams devices move to primary telephony device<br>Microsoft Teams Phone features replace legacy PBX features<br>Call queue and auto attendant replace legacy call routing systems<br>Call Quality Dashboard and call analytics | Primary telephony service<br>Teams policies<br>Teams devices<br>Call Quality Dashboard<br>Call analytics |
| Traditional PBX administration<br>Digital and analog wiring<br>Dial plan management<br>Physical phone inventory and management<br>Traditional reporting methods<br>Carrier services | Administration of both systems required<br>Carrier services working independent of each other<br>Calling between systems via PSTN<br>Legacy call detail reporting | Legacy integrations unable to migrate<br>Digital and analog stations during migration to Microsoft Teams | |
| Teams only mode without calling features | Teams Phone with Teams Calling Plans and/or Operator Connect | Microsoft Teams Phone<br>Direct Routing<br>AUDC Live | Teams Phone |

# Microsoft Teams Phone Administrative Experience (cont.)

Example

PBX

Teams

## Phase 1

Teams only mode without calling features

Microsoft Teams deployment without Teams Phone or Teams Calling Plans

Chat, P2P, or federated calling and collaboration only

Primary telephony service

PBX contracts remain

Service provider contracts remain

Existing abilities

## Phase 2

Microsoft Teams Phone with Direct Routing

Adding Microsoft Teams Phone licensing

Adding Microsoft Teams Calling Plans and/or Operator Connect to Teams

Equivalent voice abilities

Users, groups, or sites can be moved

May port telephone numbers

Separate systems able to communicate via PSTN network only

Legacy telephony service during migration

## Phase 3

Microsoft Teams Phone

Direct Routing

AUDC Live

Extension dialing to resources remaining on PBX

Analog stations

Local PSTN services are made available for Microsoft Teams Phone

Digital and analog integrations into legacy systems

Legacy integrations unable to migrate

Digital and analog stations during migration to Microsoft Teams

## Phase 4

Microsoft Teams Phone

Direct Routing

AUDC Live

Primary telephony service

PSTN calling

Local Extension dialing

Contact centers

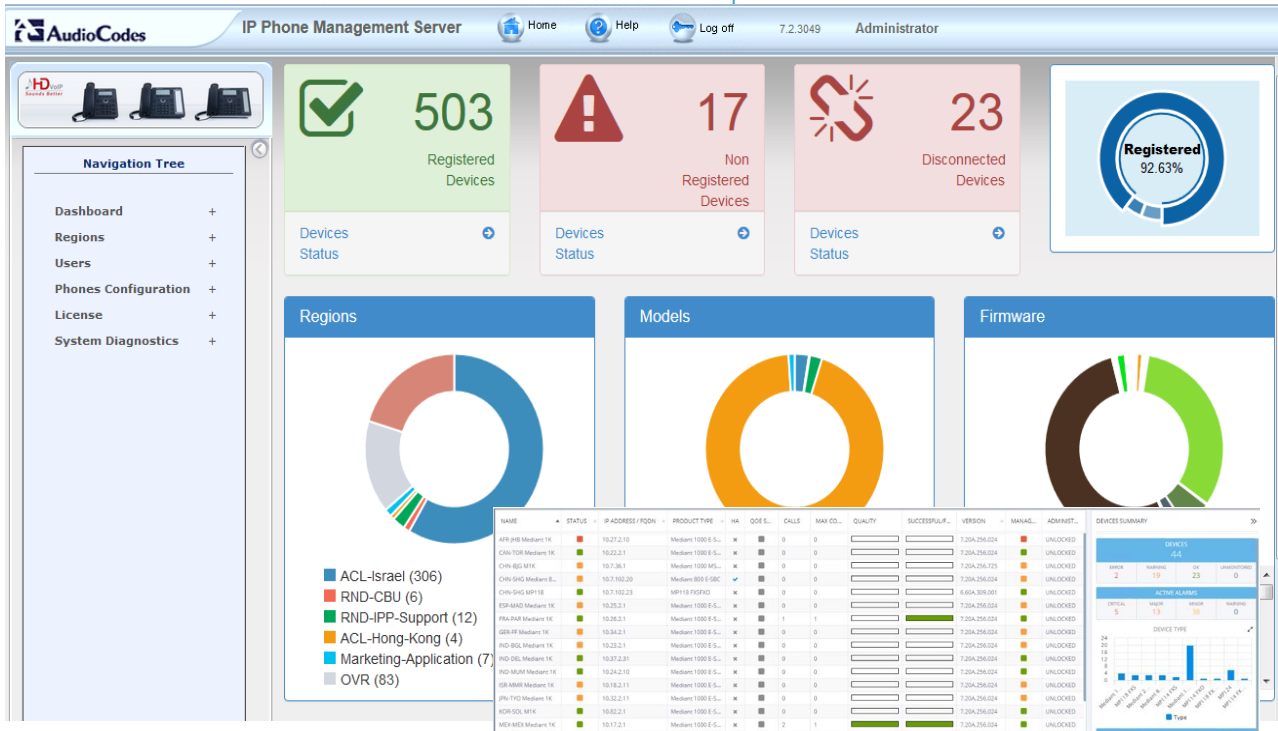
Analog devices

Integrated solutions

# Device Management

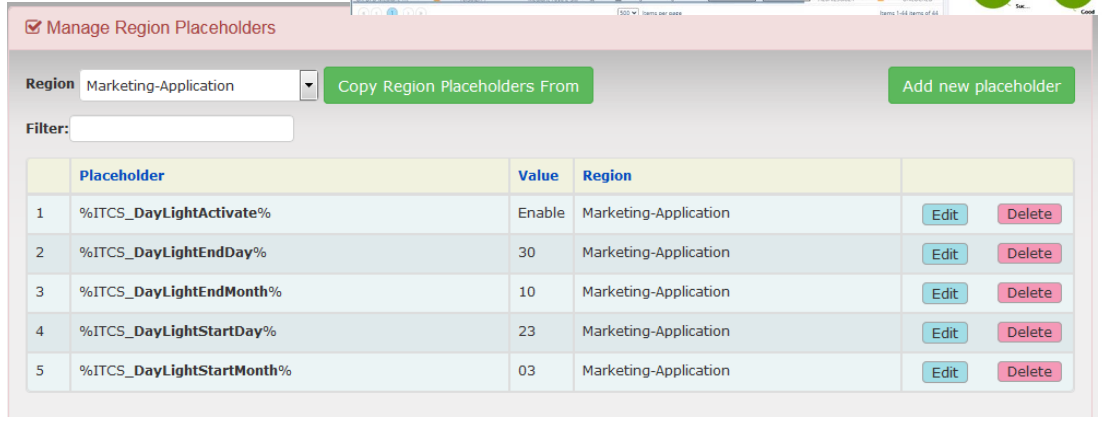
## Considerations

- How will devices be managed?
- What happens when something is unplugged will you know?
- Who updates configs or firmware, Phone, SBC, ATA?
- One bad change could affect all of PCP




## Why – AudioCodes OVOC

- Standard configurations
- Logical groups (sites) supporting various configurations
- Update devices individually or groups
- Reduce operational expense thanks to remote management
- Scalability designed for large enterprise
- Runs virtualized (AWS, Azure, HyperV, VMWare)



# Questions and Answers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