



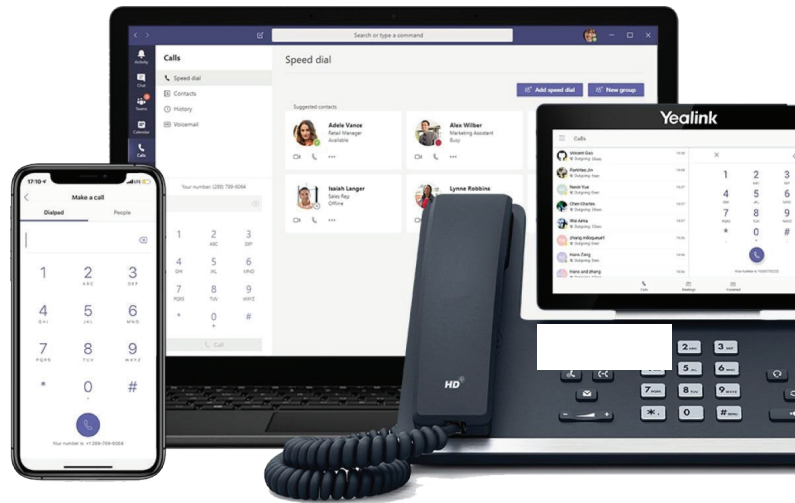
Direct Routing Solutions for Microsoft Teams

Use Teams to make and receive business calls

Microsoft Teams is a powerful alternative to traditional office phone systems, making it easy for employees to make and receive business phone calls from anywhere. Ribbon has a portfolio of Microsoft certified Session Border Controllers (SBCs) that enable organizations to securely connect Teams to a telecom provider.

Ribbon SBCs secure the telecom connection, assure interoperability with hundreds of providers, and help integrate legacy equipment. Rapidly deploy Ribbon solutions from the cloud (AWS or Azure), in a data center or in the office.


- Solutions for a single location or a global, multi-site, enterprise
- Integrate with existing PBXs, phones, and analog devices
- Deployment in the cloud or as software or hardware
- Buy the solution or acquire as a service
- Local survivability options (Microsoft SBA support)
- Emergency calling (911/999) integration
- More than a decade of experience enabling Microsoft solutions




Use Ribbon solutions to securely connect external phone lines to Microsoft Phone System. Use Microsoft Teams to replace legacy office phone systems.



Microsoft Certified for Direct Routing



Connect with Existing Carriers and PBXs



Cloud, Software or Hardware Options

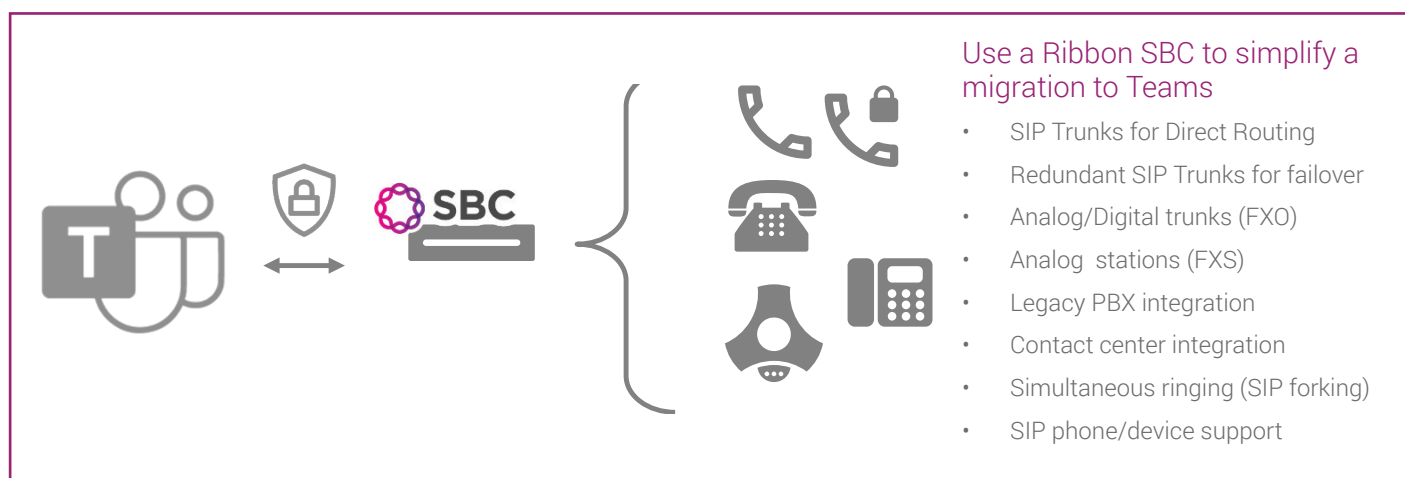


Local Survivability Options

Getting Connected

Using Teams to make phone calls – 4 key requirements:

1. Microsoft Phone System license in Microsoft 365 (typically included in the E5 package and an add-on for E3 & E1 – check your contract for details).
2. A telecom provider that offers IP phone lines (SIP Trunks) for Microsoft Direct Routing. Retain your existing telecom provider or seek out a new one.
3. A Microsoft-certified Session Border Controller instance to terminate the SIP Trunks. The SBC acts as a voice firewall and can mitigate interoperability issues.
4. A trained staff member or an IT professional that can assist with set-up of the solution.



What is the SBC's Role in Direct Routing?

Microsoft requires a certified SBC to act as bridge between Teams and the telephone network. Ribbon's session border controllers provide multiple functions:



- **Security** – it acts as a voice-aware firewall and encrypts traffic to protect the voice traffic itself and to prevent bad actors from entering the data network via the voice network



- **Interoperability** – not every SIP Trunking provider is identical, Ribbon's SBCs can adjust key parameters to make set-up easy and trouble-free



- **Legacy Connectivity** – many organizations still have analog phones, elevator phones, door phones and fax machines. Ribbon's hardware-based SBCs have analog ports (FXS) to keep these assets working for years to come

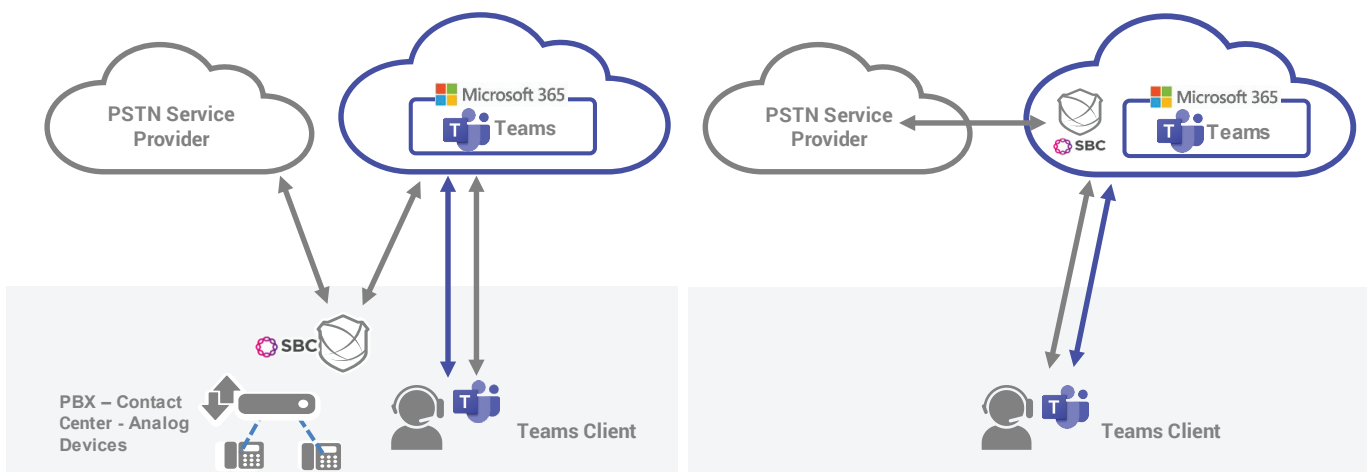


- **Migration** – often organizations want to slowly migrate to Teams, keeping their legacy PBX in place for weeks or even months or years. Ribbon SBCs can provide simultaneous ringing so that both Teams and the old PBX share connectivity.



- **Resiliency or Fail over** – Ribbon SBCs have multiple options including WAN connection failover and Microsoft Survivable Branch Appliance (SBA) support to manage disruptions in service. These tools can keep your organization connected even if the unexpected happens.

Getting Connected



Premises-based SBC Software or Hardware

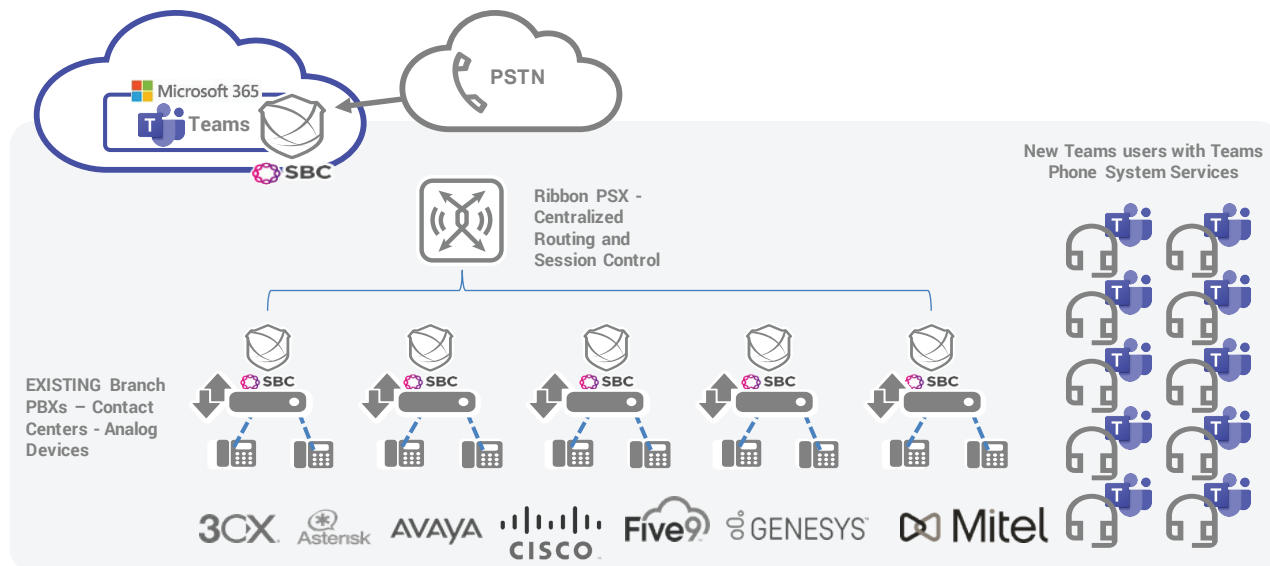
Cloud-based SBC including "as a Service" options

Hardware	Virtualized Software	Cloud Instance	As a Service
<ul style="list-style-type: none"> • CapEx • Hardware, software support & maintenance <p>Benefits</p> <ul style="list-style-type: none"> • Legacy migration tools <ul style="list-style-type: none"> • FXO, FXS T1/E1 ports • Local PSTN connectivity • Local survivability <ul style="list-style-type: none"> • PSTN • WAN • Microsoft SBA (SBC 1000 & 2000) • Enterprise-wide deployment options (SBC 5400 & 7000) 	<ul style="list-style-type: none"> • CapEx • Software support & maintenance <p>Benefits</p> <ul style="list-style-type: none"> • Ideal for local PSTN connectivity • Easily deployed on standard hardware or in a datacenter • Highly scalable with high availability options 	<ul style="list-style-type: none"> • CapEx or OpEx • Software support & maintenance <p>Benefits</p> <ul style="list-style-type: none"> • Ideal for cloud PSTN deployments • AWS and Azure cloud options • Rapid deployment • Low touch support • Highly scalable with high availability options 	<ul style="list-style-type: none"> • OpEx • Fully managed cloud service with portal (no hardware or software) • Includes Teams user configuration <p>Benefits</p> <ul style="list-style-type: none"> • Automated deployment • Includes Teams & PBX integration to SIP trunks • Ideal for cloud PSTN deployments • Instant deployment
<p>Ribbon Solutions</p> <ul style="list-style-type: none"> • SBC 1000 • SBC 2000 • EdgeMarc Portfolio • SBC 5400 • SBC 7000 	<p>Ribbon Solutions</p> <ul style="list-style-type: none"> • SBC SWe • SBC SWe Edge 	<p>Ribbon Solutions</p> <ul style="list-style-type: none"> • SBC SWe • SBC SWe Edge • SBC CNe Edge 	<p>Ribbon Solutions</p> <ul style="list-style-type: none"> • Ribbon Connect for Microsoft Teams Direct Routing



Ribbon is the only Microsoft certified SBC provider that can deliver security solutions for any size organization, across multiple deployment models. From a small retail shop to a global enterprise Ribbon's Direct Routing solutions are more secure and more resilient than our competition.

Ideal for Enterprise-wide Deployments



Ribbon can integrate thousands of existing sites and tens of thousands of Teams users into a cohesive communications network

Multiple Survivability and Resiliency Options

As organizations move exclusively to cloud-based communications, the reliability of cloud access becomes even more important. Ribbon has multiple options to provide survivability in case a WAN link fails, or the Microsoft 365 cloud is unreachable. Options include:

- Support for Microsoft's Survivable Branch Appliance (SBA)
- Support for resilient WAN links with rapid or seamless fail-over
- High availability software architectures (with multi-route resiliency)
- Redundant hardware options

Ribbon's heritage supporting some of the world's largest carrier networks means that we know how to build communication networks that support 99.999% uptime. Our experts can help develop the most effective solution for your deployment requirements.

The Ribbon Difference

Ribbon has a longstanding relationship with Microsoft, so it is no surprise that we have the largest portfolio of Microsoft-certified session border controllers. We've created more choices because Ribbon understands that every organization has unique communications and security requirements depending on the markets they serve, business processes, organization size/scope and their existing communications environment.

Many of the world's largest communication service providers use Ribbon SBCs to protect their networks and deliver the SIP Trunks they provide for Direct Routing. There's a good chance your Ribbon SBC will be connecting to its peer in the service provider's cloud.

[Click Here to Get a Quote for One of Our SBCs](#)