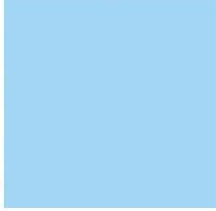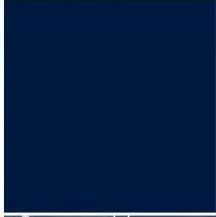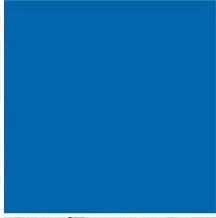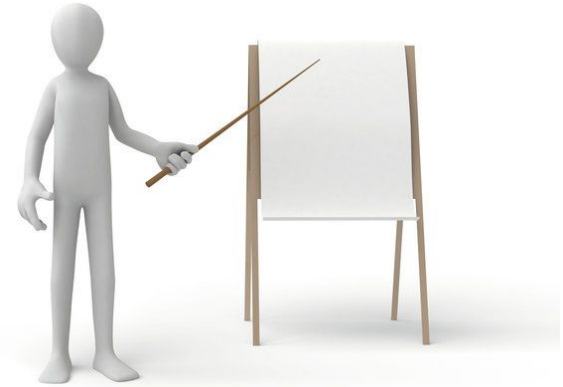# Microsoft Teams Direct Routing

Use-Cases & Specifications
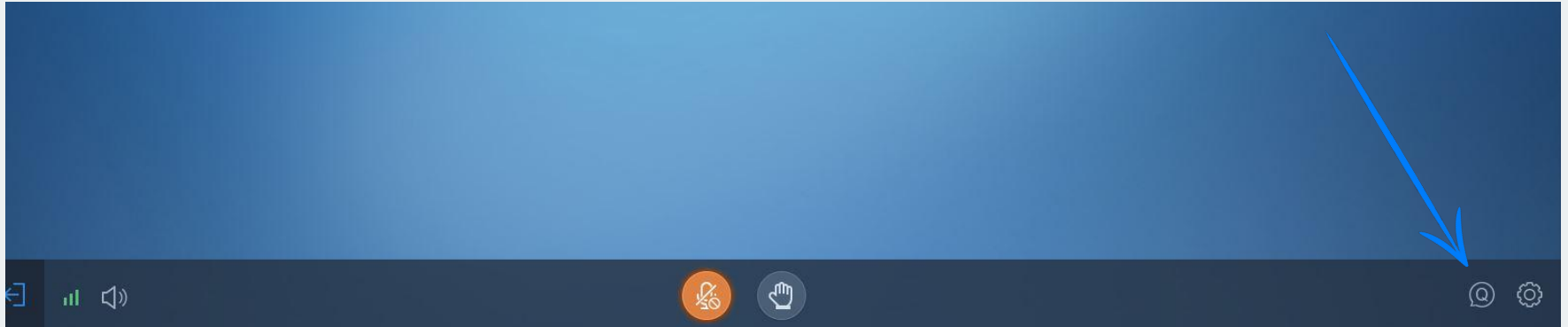
Agenda

Introduction VoIP Supply

Introduction Patton

Direct Routing with MS Teams

SBC portfolio

Application

Features and Benefits

MS Teams Licenses

QA

During the webinar please use the Q&A feature
located in bottom right corner of your screen!

We will answer the questions at the end of the presentation
Thank you!

Reseller Benefits

Since 2002 VoIP Supply has delivered unparalleled service and expertise to over 125,000 customers worldwide.

VoIP Rental Program
our Device as a Service (DaaS) rental program gives your customers the widest variety of VoIP Products for a low monthly payment!

Hardware & Provisioning
featuring over 60 manufacturers that offer over 16,000 products and the ability to provision for you!

CloudSpan MarketPlace
a single place to shop various VoIP service providers - build up your MRR and receive discounts on hardware selling through VoIP Supply

Fulfillment
provisioning and professional services from multiple warehouse locations in North America; providing real-time access to manage your projects from order through delivery

Refresh & Reclaim
offering certified reconditioned devices at a fraction of the cost plus offering an outlet for selling off used and excess VoIP equipment

Who we are

Multinational company with more than 35 years of experience in engineering and manufacturing communications products.

- Headquartered in the US
- Offices in Bern and Budapest
- US Manufactured products

Our mission is to support Service Providers, Value Added Resellers and System Integrators in their transition to All-IP enabling Unified Communications

Microsoft Direct Routing for MS TEAMS

- Direct Routing allows you to connect a certified session border controller (SBC) to the Microsoft Phone System service
- With this feature you can access, with the Microsoft Teams client, the switched network and other SIP business telephony services
- Communications are secure at the signaling (SIP-TLS) and media (SRTP) level
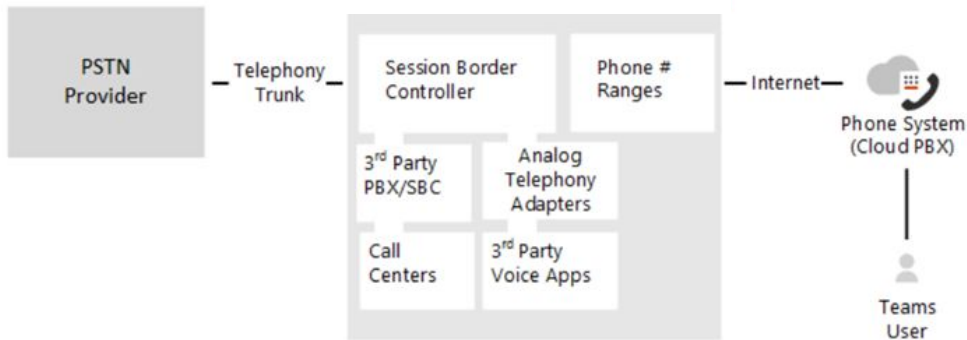
Microsoft Interoperability (all of the above)

More than a DECADE of certified interoperability with Microsoft!

OCS Certification 2007
SmartNode
Gateway Certification

Lync 2010 & Lync 2013
SmartNode
Basic Gateway Certification

Skype for Business 2018
SmartNode
Basic Gateway Certification

Enhanced Gateway Certification

eSBC Certification

Teams & Office 365
SmartNode
Basic Gateway Certification

Enhanced Gateway Certification

eSBC Certification

eSBC Portfolio

Certified for
Microsoft Teams

| eSBC	vSN	SN500	SN5300	SN5480	SN5490	SN5500	SN5530	SN5540	SN5550	SN5570	SN5600	SN10500
Product Photo												
Embedded Software	Trinity™	Trinity™	Trinity™	SmartWare™ or Trinity™	SmartWare™ or Trinity™	Trinity™	Trinity™	Trinity™	Trinity™	Trinity™	Trinity™	SmartMedia™
Telephony Interfaces	N/A	N/A	N/A	N/A	N/A	N/A	2, 4 or 8 BRI	2, 4 or 8 FXS/FXO	BRI with FXS/FXO	1 or 2 PRI	N/A	N/A
SIP Sessions	1 to 1,000's	4 to 30	4 to 60	Up to 80	Up to 80	4 to 200	4 to 200	4 to 200	4 to 200	4 to 200	4 to 1,000	5,000
Transcoded Calls	N/A	N/A	N/A	Up to 64	Up to 64	Up to 16	Up to 8	Up to 4	Up to 4	Up to 15	N/A	2,744
IP router IP Routing, QoS, VPN, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/A
Number of Ethernet Ports	HW dependent	2 10/100/1000	4 10/100	2 10/100/1000	2 10/100/1000	2 10/100/1000	2 10/100/1000	2 10/100/1000	2 10/100/1000	2 10/100/1000	2 10/100/1000	Up to 6 10/100/1000
Transcoding	Roadmap	N/A		✓	✓	✓	✓	✓	✓	✓	N/A	✓
WAN Access	N/A	N/A	G.SHDSL.bis (ATM or EFM)		Fiber G.SHDSL EFM X.21	G.SHDSL EFM&ATM, ADSL-VDSL	VDSL/ADSL G.SHDSL.bis	VDSL/ADSL G.SHDSL.bis		VDSL/ADSL G.SHDSL.bis	N/A	N/A

MS Teams Direct Routing Application Overview
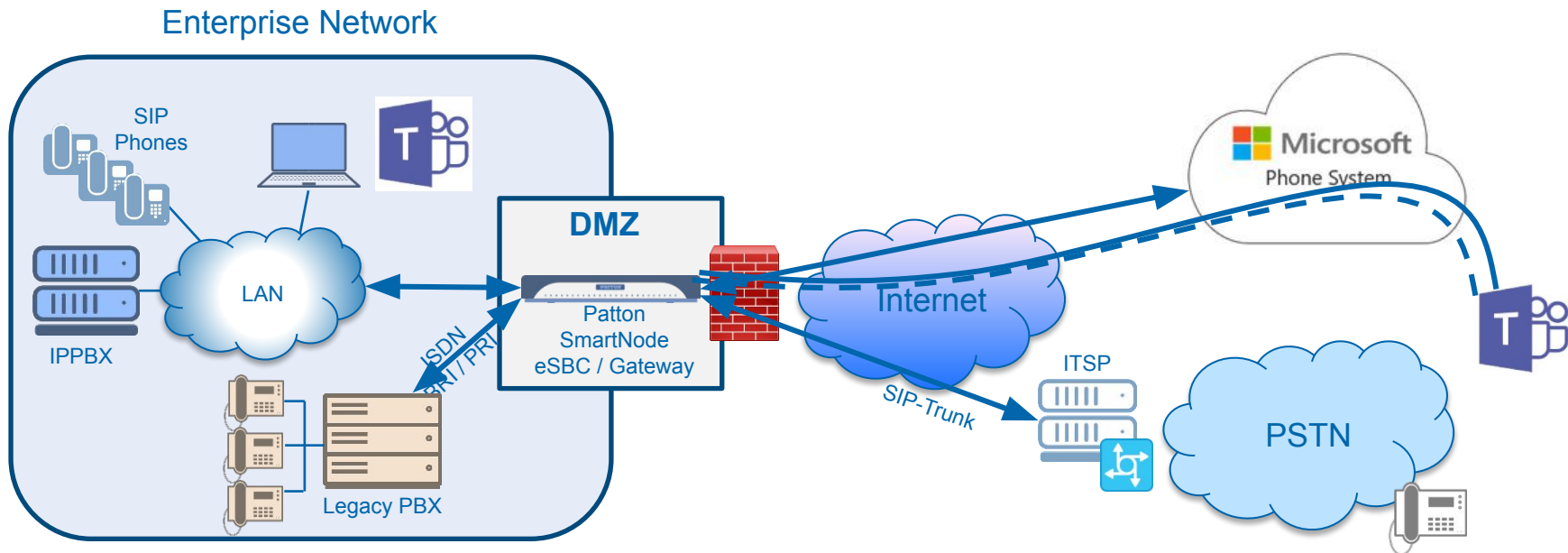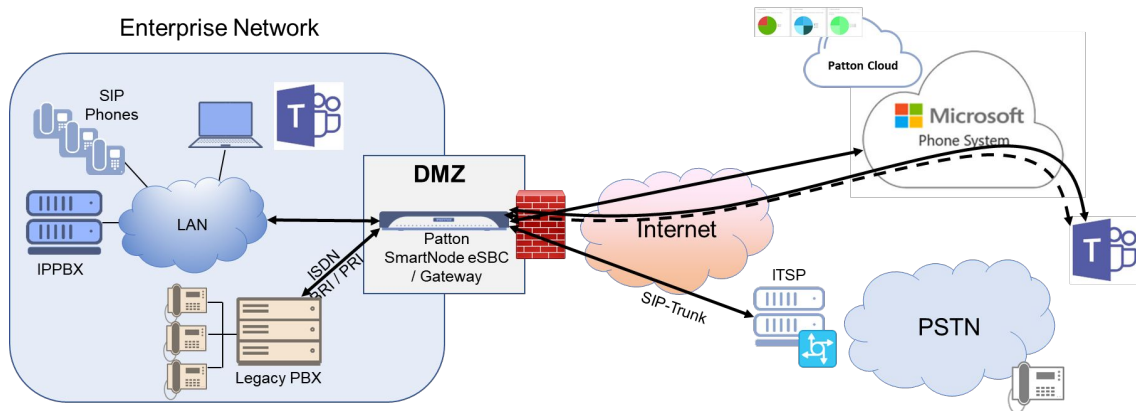
Non-Media Bypass Use Cases

All-IP Direct Routing

- SIP Trunk &
- On premise IPPBX integration
- SIP Security
- SIP Normalization
- Call Quality monitoring & alerting
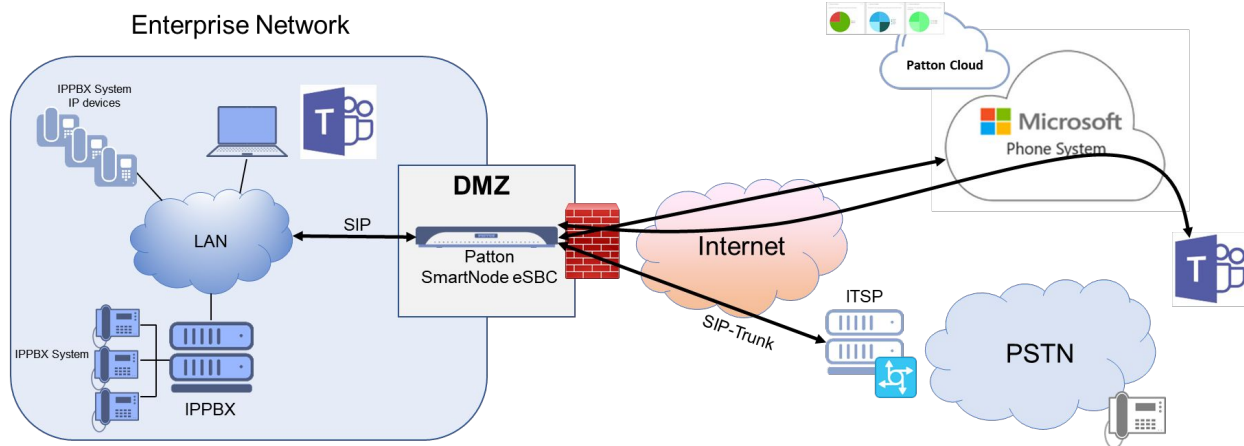
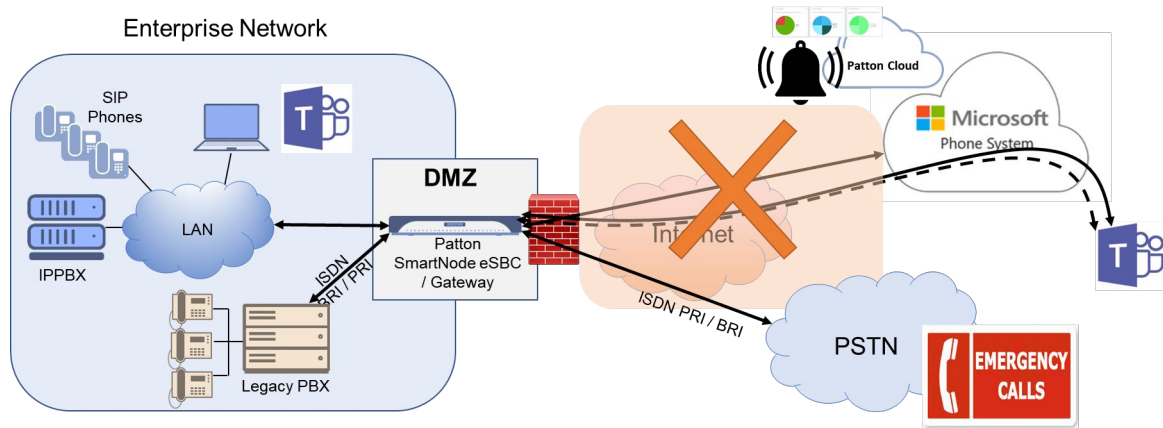## Non-Media Bypass Use Cases

Hybrid Direct Routing

- Integration of
  - On premise IPPBX
  - SIP Trunk
  - Legacy PBX / Telephony equipment
- SIP Security
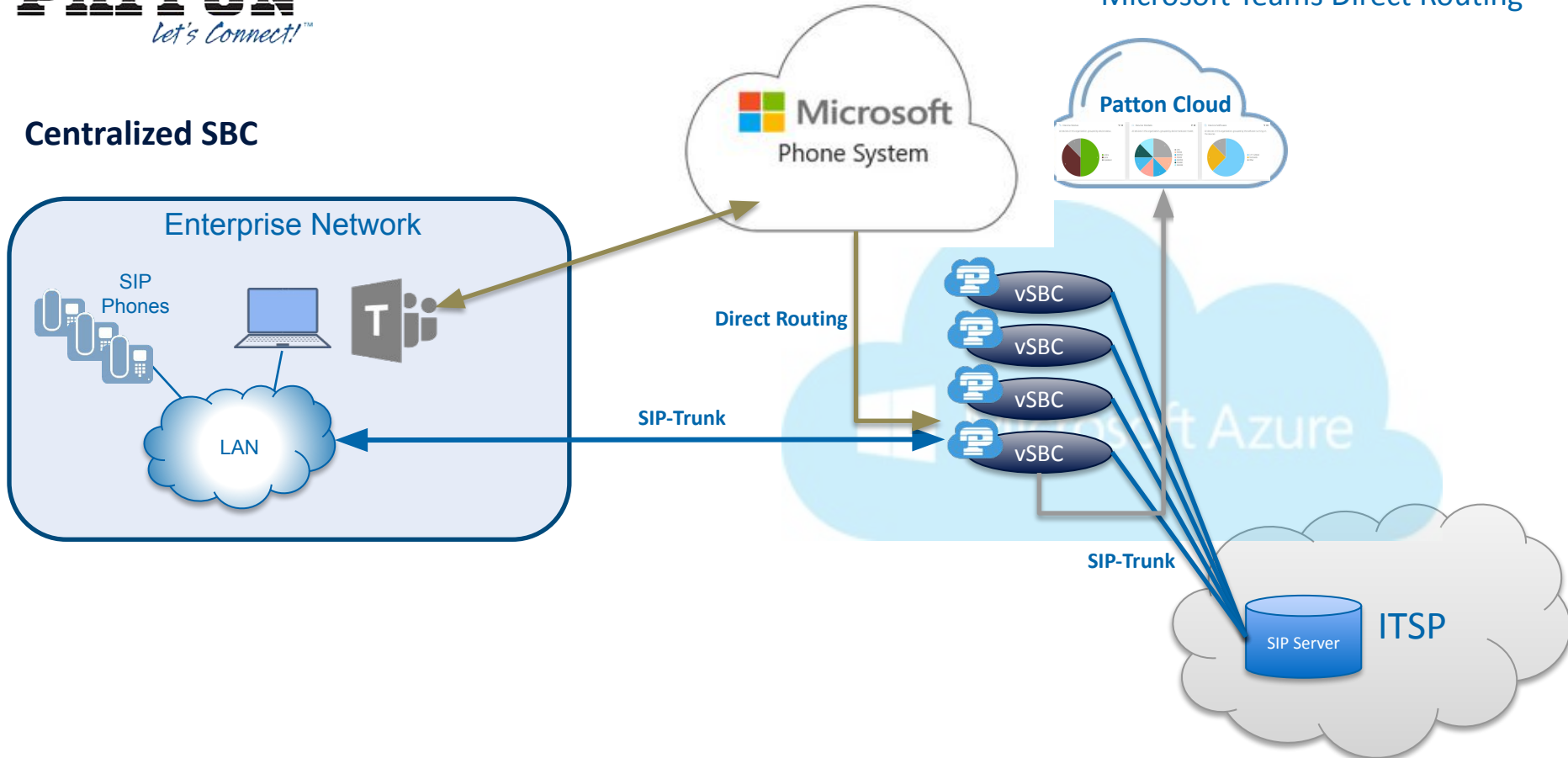- SIP Normalization
- Call Quality monitoring & alerting

Non-Media Bypass Use Cases

Survivability

- PSTN Failover
- Priority Call service for Emergencies
- Local SIP Registrar
  - Station to Station calling
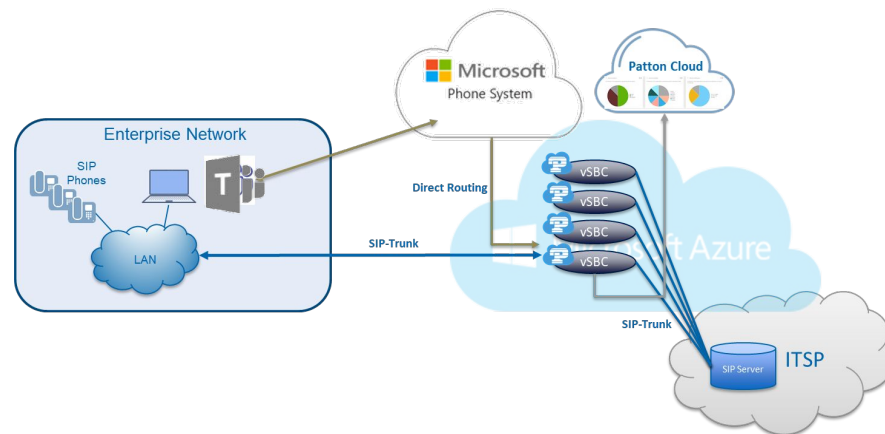
Centralized SBC

☐ Ideal for Hosted Service Providers

☐ No HW required on Customer Prem.

☐ Scalable Solution in MS Azure Cloud

☐ Direct Routing Support

☐ ITSP SIP-Trunk integration

☐ SIP Normalization & Interop

☐ Secure VoIP using VPN to Enterprise

☐ Optional: vSBC to terminate VPN links

Patton Cloud

- **Management** - Software License, Alarming & Notification, CPE Supervision, Config Management
- **Customer Service Aid** – Remote Troubleshooting, Warranty Management, Configuration adaptation
- **Provisioning** – Zero Touch, Cloud Wizard Easy Install, Install Progress Monitoring
- **Integration** – OSS/BSS, Business Process integration, more efficiency and less problems
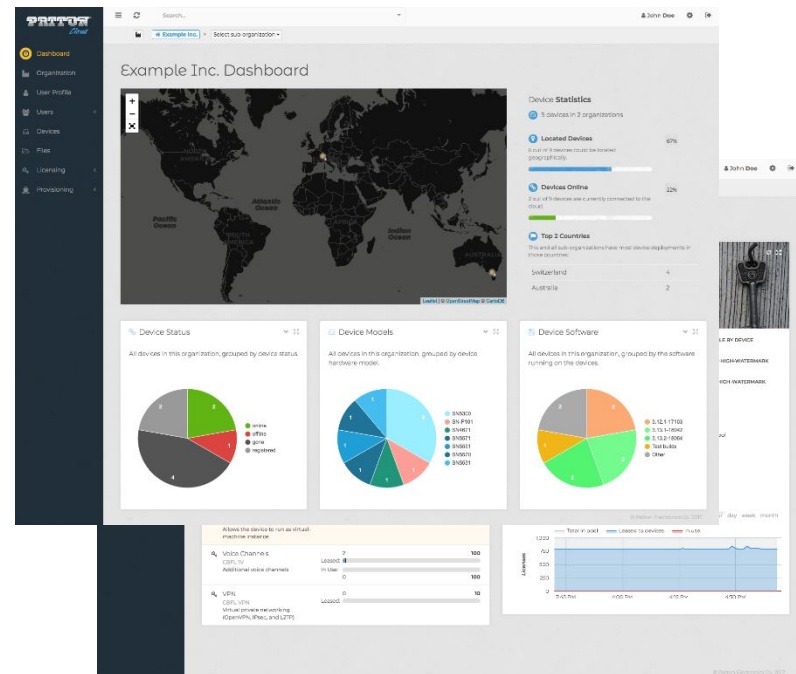
Patton Cloud-Edge Orchestration Service
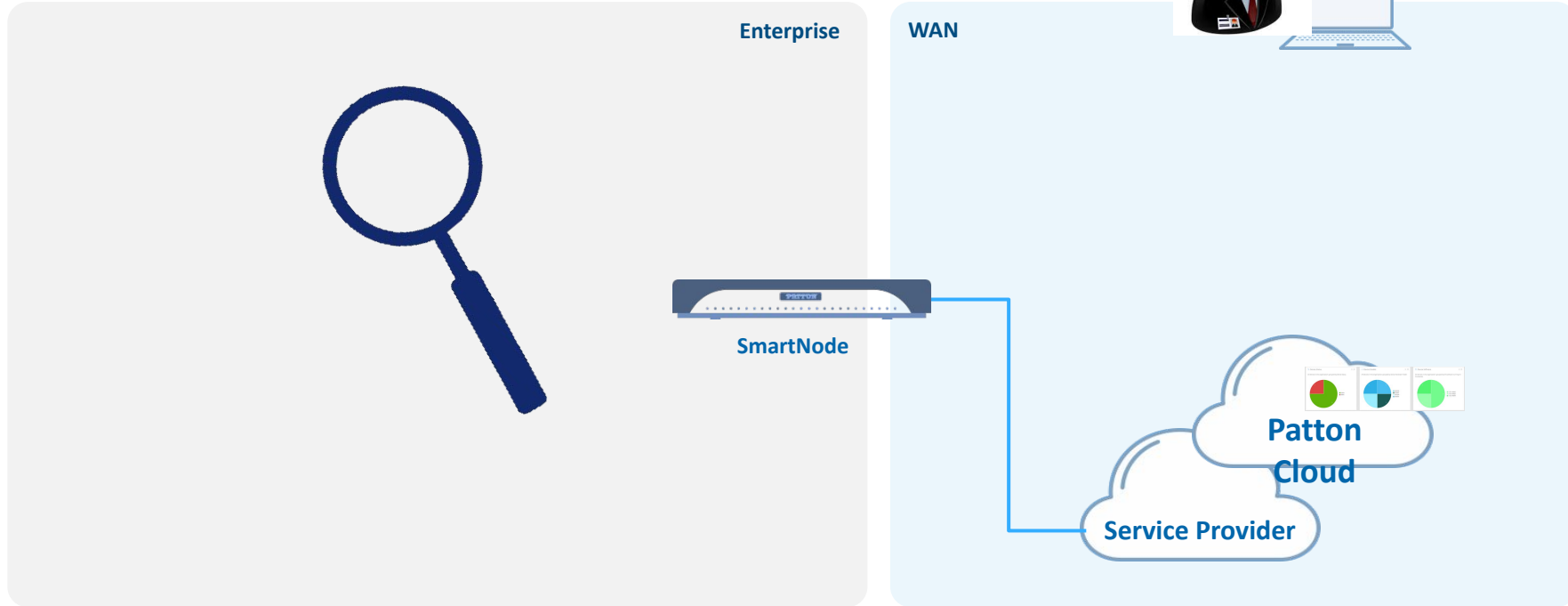
	Basic purchase now	Standard purchase now	Advanced purchase now	Professional purchase now or 90-Day Free Trial
Managed Devices ⓘ	5	10	50	500
Basics ⓘ	✓	✓	✓	✓
Redirect ⓘ	✓	✓	✓	✓
Provisioning ⓘ		✓	✓	✓
Licensing ⓘ		✓	✓	✓
Files ⓘ		✓	✓	✓
Basic Call Records ⓘ		✓	✓	✓
LAN Discovery ⓘ			✓	✓
File Synchronization ⓘ			✓	✓
File Backup/Restore ⓘ			✓	✓
Software ⓘ			✓	✓
Alerts ⓘ			✓	✓
Wizard Editor ⓘ			✓	✓
Packet Capture ⓘ			✓	✓
Call Quality Scoring ⓘ			✓	✓
Advanced CDRs and Call Quality Metrics ⓘ			✓	✓
Multi-Tenant ⓘ				✓
Support ⓘ				✓
API ⓘ				✓

* Devices purchased separately

LAN Device Discovery & Management

NEW

Enterprise

WAN

SmartNode

Patton Cloud

Service Provider

LAN Device Discovery & Management

NEW

SIP Phones

WiFi Accessp.

Printers

IPPBX

Enterprise

WAN

Patton Cloud

Service Provider
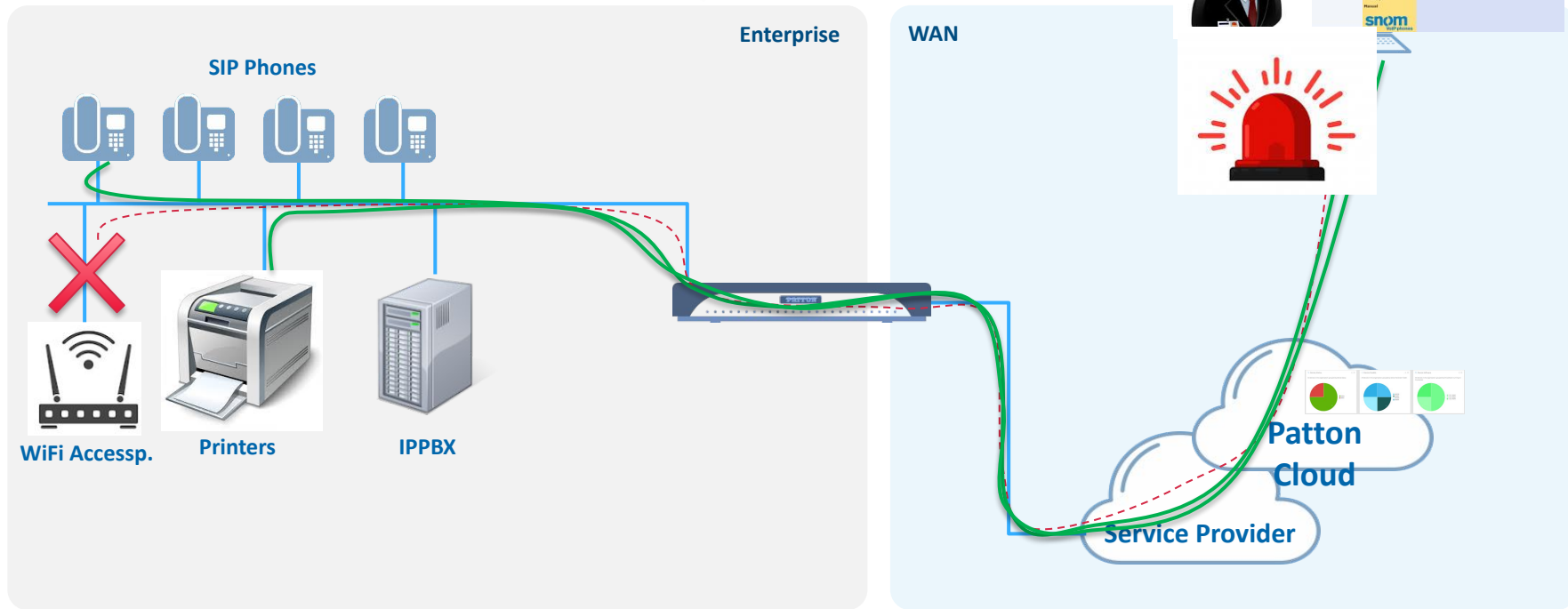
Product Features & Benefits

- Direct Routing
- Legacy equipment integration (BRI, E1/T1, FXS/FXO)
  - FXS long reach – 3REN @ 10km
  - MWI, AOC, TACACS+, TR-069
- Non MS Teams Certified SIP Device Integration
- Extensive SIP Interop Partnership
- Zero Touch provisioning
- Patton Cloud Orchestrated
  - Floating Software Feature Licensing
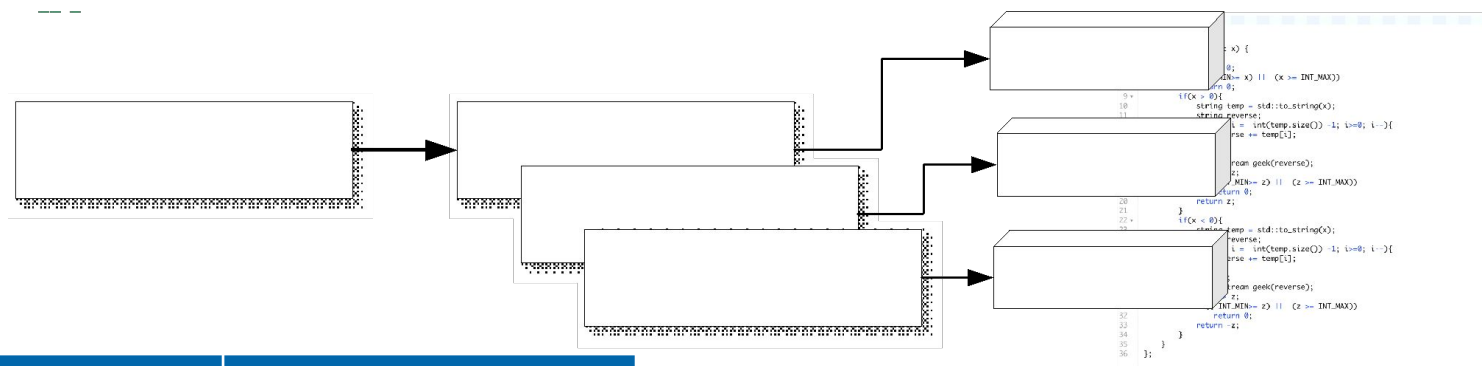 - Remote Troubleshooting
  - Call Quality Monitoring

- IP Routing
  - VRRP, GRE, RIP, BGP
  - IPv4, IPv6 Dual Stack
  - ACL, packet & protocol-based Routing
  - QoS Management (up & downstream)
  - DHCP Server & Client, NAPT, PPPoE

SIP Interop Partners

Bundled License Model

Pros	Cons
Single SKU Ordering	What appears in cloud inventory does not match what is ordered
	Reorder SKUs will not match ordered SKU
	Bundles can be split up and distributed to other devices

Multi-function License Model
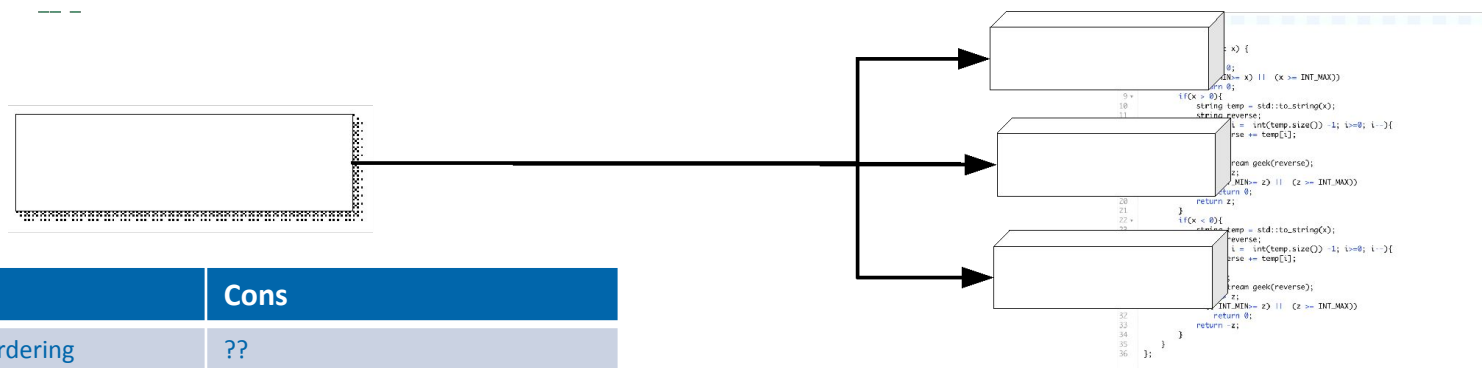
Pros	Cons
Single SKU Ordering	??
Cloud Inventory matches what is ordered	
Reorder will order the original SKU	
Multifunction license cannot be distributed to other devices	

Two New MS Teams Multi-function license

TSW-MST – Permanent, device-based license for full activation of Teams Direct Routing, TLS and device-wide SRTP

CBFL-MST – Cloud-based, device-based license for full activation of Teams Direct Routing, TLS and device-wide SRTP

Customers require help. We have a TEAMs-specific, Professional Services starter SKU, to support the integration or installation.

SVC-INTEG-MST - Professional Services for up to 3hrs of MS Teams integrations support. This is listed on the website as an accessory to the MST licenses.

Three simple steps to Teams

Activating TEAMs functionality on a Patton SBC is **EASY!!!**

- Start with an SBC (if you want to use Teams with a Patton Gateway, you must upgrade it to an SBC first)

    - Trinity Operating System 3.19.2 and beyond

- Apply either the CBFL-MST or TSW-MST license to the device

- Use SVC-INTEG-MST to have Patton's service team help you get the device configured – or – use Patton provided Wizard and video content to self-configure.

Patton Product Matrix

eSBC	Teams Sessions	Transcoded Calls	Telephony Interfaces
Transcoding eSBCs (including Gateway eSBCs)			
SN5500	100	Up to 16	All IP
SN5530	100	Up to 8	2,4,or 8 BRI
SN5540	100	Up to 4	2, 4, or 8 FXS/FXO
SN5550	100	Up to 4	BRI with FXS/FXO
SN5570	100	Up to 15	1 or 2 PRI
Non-Transcoding All-IP eSBCs			
SN5501/4B/EUI	100	None	All IP
vSN (Virtual SmartNode)	1000's (hardware dependent)	None	All IP
SN5600	500	None	All IP
SN500	15	None	All IP
Gateways (Must have eSBC licenses installed)			
SN4130	100	Up to 8	2,4,or 8 BRI
SN4140	100	Up to 4	2, 4, or 8 FXS/FXO
SN4170	100	Up to 15	1 or 2 PRI

License Overview

SKU	Description
TSW-MST	Permanent, device-based license for full activation of Teams Direct Routing, TLS and device-wide SRTP
CBFL-MST	Cloud-based, device-based license for full activation of Teams Direct Routing, TLS and device-wide SRTP
SVC-INTEG-MST	Professional Services for up to 3hrs of MS Teams integrations support. This is listed on the website as an accessory to the MST licenses.

MS Teams related resources

- **MS Teams General resources:**
- https://www.patton.com/microsoft/

- **MS Teams Certification:**
- https://www.patton.com/partners/partner_detail.asp?i=69&p=ippbx

- **MS Teams Config Guide:**
- https://www.patton.com/manuals/ms_teams_patton_uide.pdf

- **MS Teams Wizard files:**
- https://www.patton.com/wizard/

- **MS Teams Step-by-step Video Guide(s):**

Thank you!

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PATTON