



Operator Connect

Benefits of Operator Connect:

Operator Connect allows you to manage all your numbers and users directly inside of the Microsoft Teams Admin Center. You can request a relationship directly from the Teams Admin Center, which allows you to see and assign numbers provided to you by NUWAVE.

Still to come:

Because Operator Connect is still in its infancy stages, it currently has limited functionality and features that may be required for larger enterprise customers who may want to have more control over their network. As features get added, NUWAVE can help you bridge the gap with Direct Routing while OC grows.

Reasons to choose Operator Connect:

- ✓ Simplified Deployment Process
- ✓ Fast Setup, setup in minutes
- ✓ Phone Number management from Teams Admin Center
- ✓ Fully Cloud Based Solution, No equipment required, Fully Managed Solution
- ✓ 1:1 network connection for enhanced resilience through MAPS
- ✓ Manage Numbers from Multiple Operators in the Teams Admin Center
- ✓ Can Coexist with Direct Routing and Calling Plans in the same tenant

Currently not supported:

- Common Area Phones
- Meeting Rooms
- ATA support for Analog devices (i.e., Paging)



Fully Managed
Solution



Direct Connection
Through Microsoft
Azure Peering Services



Teams Admin Center
Management



Operator Connect

Dashboard

Teams

Devices

Locations

Users

Meetings

Messaging policies

Teams apps

Voice

Phone numbers

Emergency policies

Dial plans

Direct Routing

Phone numbers

Order history

+ Add

↓ Port

Edit

✓	Phone number	Location	Number type
	+1 772 212 2422	Port St Lucie, United States	Users
	+1 772 217 5946	Port St Lucie, United States	Users
✓	+1 772 228 4226	Port St Lucie, United States	Users
✓	+1 772 228 4971	Port St Lucie, United States	Users
	+1 772 226 0668	Port St Lucie, United States	Users

Building now for the future

Number Provisioning:

Manage all your numbers and users directly inside of the Microsoft Teams Admin Center.

- Self Service Management of Phone Numbers and users through the Teams Admin Portal
- DID inventory management and assignment

Operator Connect Operator Management

Operator Management:

You can request a relationship directly from the Teams Admin Center, which will also allow you to see and assign numbers provided to you by Operators.

The screenshot shows the Microsoft Teams Admin Center interface for Contoso Electronics. The left sidebar contains navigation links: Home, Teams, Users, Teams devices, Teams apps, Meetings, Messaging policies, Voice, Phone numbers, Operator Connect (selected), Direct Routing, Calling policies, Call park policies, Caller ID policies, Dial plans, Emergency policies, Voice routing policies, Auto attendants, Call queues, Holidays, and Resource accounts. The main content area is titled 'Operator Connect \ NuWave'. It features the NuWave logo (powered by ipilot) and statistics: 'Acquired phone numbers 0' and 'Available products Calling'. Below this is the 'Operator settings' section with a heading 'Review products by region and select where to partner with this operator'. It contains two columns of checkboxes for various countries: Austria, Belgium, Canada (checked), Denmark, France, Germany (checked), Ireland, Italy, Netherlands, Portugal, Spain, Sweden (checked), Switzerland, United Kingdom (checked), and United States (checked). At the bottom, there are input fields for 'Full name *' (Ken), 'Email *' (Ken@Contoso.com), 'Company name *' (Contoso), 'Phone number (optional)', and 'Company size *' (1000 to 2999 people). A checkbox 'I accept the data privacy terms' is checked. At the bottom are 'Add as my operator' and 'Cancel' buttons.

Building now for the future

For the Customer:

- Easy access to Operators for Calling Management
- Easily segregate access by Region/Geography/Calling areas per Operator

For the Operator:

- No special permissions such as delegated admin permissions to manage Calling Services
- Single Point of Contact information for customer updates & maintenance

Operator Connect Numbers

Number Provisioning:
Manage all your numbers and users directly inside of the Microsoft Teams Admin Center.

Dashboard

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	+1 772 236 0668	Port St Lucie, United States	Users

Number Provisioning

For the Customer:

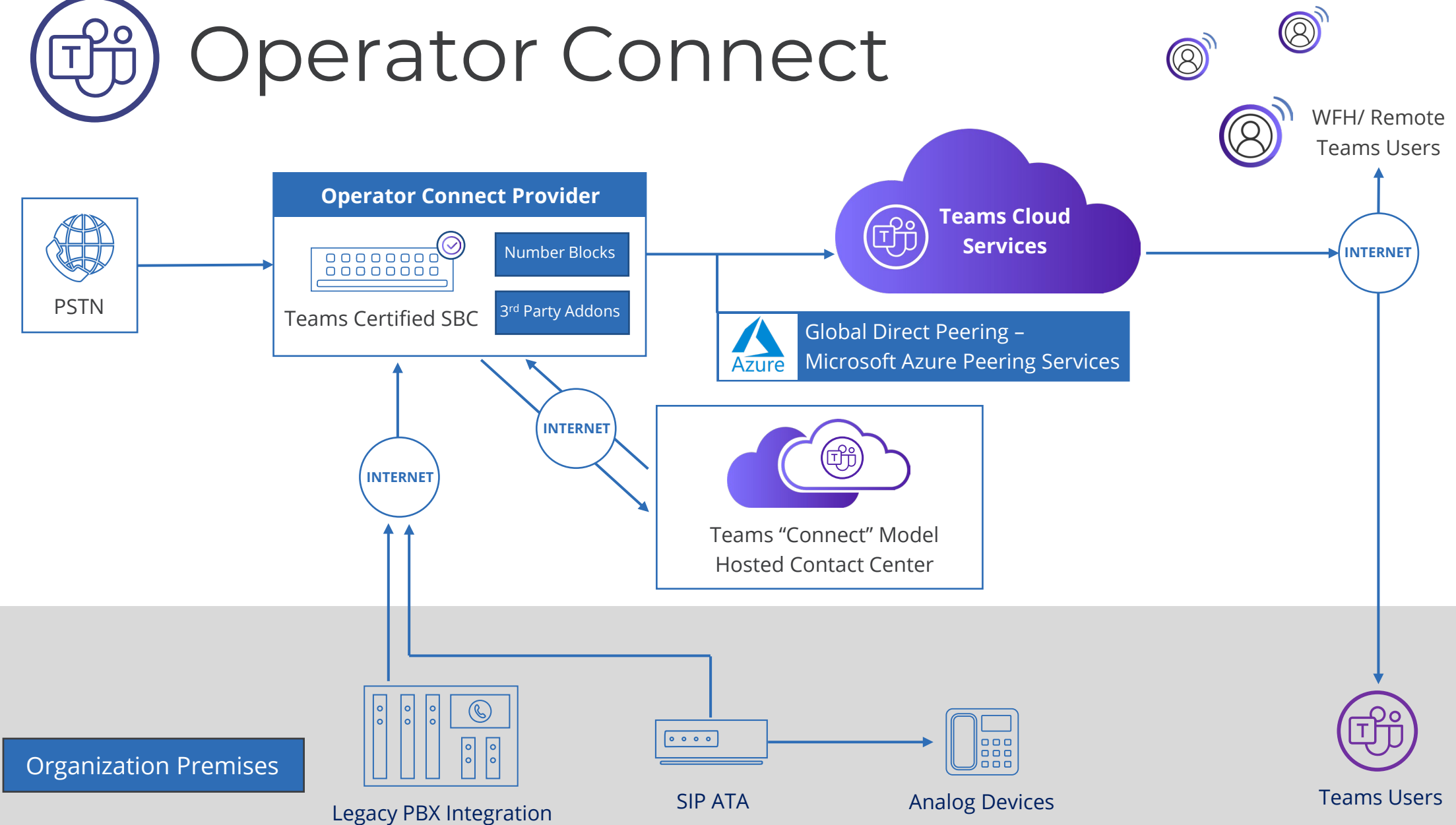
- Self Service Management of Phone Numbers and users through the Teams Admin Portal
- DID inventory management and assignment

For the Operator:

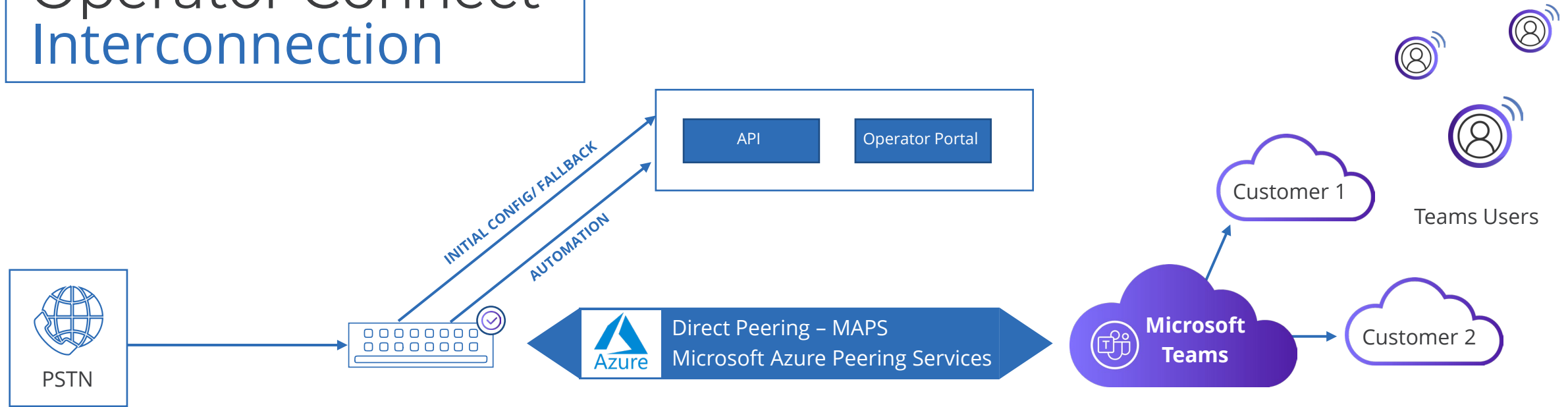
- Numbers show up in the Teams Admin Center
- Simple MACD changes through the portal



Operator Connect



Operator Connect Interconnection



Direct Peering through MAPS

For the Customer:

- Easy access to Operators for Calling Management
- Easily segregate access by Region/Geography/Calling areas per Operator



Provisioning APIs and Portal

For the Operator:

- No special permissions such as delegated admin permissions to manage Calling Services
- Single Point of Contact information for customer updates & maintenance
- End to End QOS from Client, to Microsoft's Cloud, and through the Operators Cloud
- Offer High Level SLA to the customer

The Difference between Microsoft Operator Connect and Direct Routing

	Operator Connect	Direct Routing
Program Type	• Programmatic Approach to Operator Provided Calling	• Not a Program. Core Functionality.
Interconnection	• Microsoft Azure Peering Service (MAPS) for Voice • Dedicated Portal/APIs for Trunk Setup and validation	• TLS/SRTP over internet • Carrier Tenant for setting up super trunk • Some Customer configuration required or delegated specifically
Number Provisioning	• Provisioning through APIs to facilitate automation	• None, need customer account or “admin on behalf” for executing PowerShell commands
Teams Admin Center	• Presence in the portal, customer can select the Operator for number provisioning / management, or assignment	• None
Customer Experience	• Number visualized in the portal as Operator numbers • IT Admin can assign numbers to users directly from the portal	• IT Admin or Operator needs to assign number through PowerShell • IT Admin or Operator needs to create/assign Voice Policies
Data Sharing	• CDR/CQD (QoS)/SLA data provided to Operators through API's • Joint CDR for customers reporting	• CDR/CQD data can be retrieved tenant by tenant using delegated access
Support / SLA	• Operator Tier 1 Support; Operator-Microsoft Model in place • Product Change Management and updates channel • Back-to-back SLA in place between Microsoft and Operator	• Operator Tier 1 Support • Escalations through M365 Support or Premier Support • No Back-to-back SLA in place
Management	• Dedicated Management capabilities in Operator Portal/API (at GA)	• Delegated Admin or Teams RBAC Access required from Customer
Total Cost of Ownership	• “As a Service” model delivered by the Operator	• SBC owned and operated by the Customer or Hosted/Managed by the Operator

Today's Snapshot Comparison

Features	Direct Routing	Operator Connect	MSFT Calling Plans
Native Teams Call Routing	✓	✓	✓
Shared Trunk / Call Path sharing plans	✓	✓	NA
eFax & traditional fax solutions	✓	✓	NA
SMS Integrations	✓	✓	NA
Dynamic Emergency Calling	Optional	Included	Included
Direct Connection to Microsoft via MAPS	ONLY through iPILOT Galaxy	Only Approved Carriers	NA
Carrier Level Forwarding	ONLY through iPILOT	ONLY through iPILOT	NA
Disaster Plans	ONLY through iPILOT	ONLY through iPILOT	NA
Automated Bulk Provisioning	ONLY through iPILOT	ONLY through iPILOT	Bulk via PowerShell
Converting DIDs between User & Service Number	ONLY through iPILOT	ONLY through iPILOT	via MSFT Ticket
Managing multiple carrier DIDs in 1 Portal	ONLY through iPILOT	ONLY through iPILOT	NA
Manage Direct Routing & Operator Connect DIDs in 1 Portal	ONLY through iPILOT	ONLY through iPILOT	NA
Department level access for phone number management	ONLY through iPILOT	ONLY through iPILOT	NA
Extension Dialing	ONLY through iPILOT	ONLY through iPILOT	NA