



Cloud PBX with Office 365

 Skype for Business



Topics

Overview

Cloud PBX

PSTN Calling

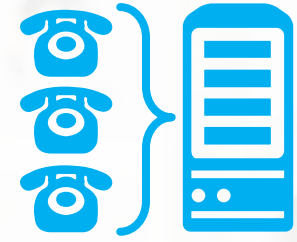
On-premises PSTN Connectivity



Online



Hybrid



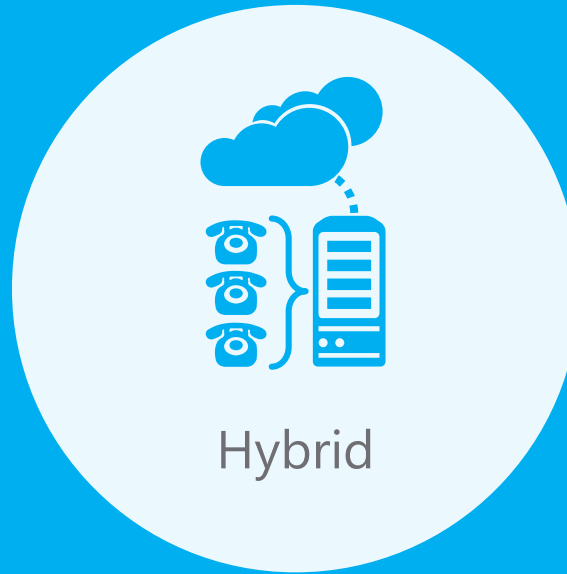
On Premises

Overview



Cloud PBX in
Office 365

PSTN services
provided by
Microsoft



Users online or
on-premises

Integration with
PSTN services
on-premises



End-user
features &
customer PSTN
services
integrated on-
premises

Modern Voice with Cloud PBX

**INCREASE AGILITY AND
CONSOLIDATE MANAGEMENT WITH
VOICE SERVICES IN OFFICE 365**



Online



Hybrid

Make, receive, and transfer business calls in the office, at home, or on the road using phone, PC and mobile.

End-user calling features & Tenant Admin controls for manageability.

PSTN Capability using Microsoft PSTN Calling service or On-premises PSTN Connectivity.

Worldwide availability in E5 suite or as an add-on.



PSTN Calling in Office 365



*Global calling for Office 365 customers
based on Microsoft PSTN Calling Plans*

PSTN Calling plans for Office 365.

International & Domestic calling
subscriptions available.

Includes DIDs and number porting.

Initially available in the US, followed by
additional countries in 2016.



Online

On-premises PSTN Connectivity

*Take advantage of calling services
from telco operators worldwide*

Enables users worldwide to use Office 365 voice features with existing carrier, contract & circuit.

Hybrid offer uses Skype for Business technology for interconnection to PSTN and PBX assets.



Hybrid



Cloud PBX



Cloud PBX

Complete call control in Office 365.



Two core parts always in the cloud:

- Cloud-based call control for end-users
- Tenant admin user experience for IT Pros

** Azure ExpressRoute for Office 365 strongly recommended for optimal experience

Cloud PBX: Calling Features

Call answer / initiate (by name & number)

Call hold / retrieve

Call History

Call Delegation & Call On-behalf

Call Transfer (Blind, Consult & Mobile)

Camp-on

Caller ID

Call Waiting

Call forwarding & simul-ring

Clients for PC, Mac & Mobile

Device switching

Distinctive ringing

Do-not-disturb routing & call blocking

Enterprise calendar call routing

Integrated dial-pad

Music on Hold

Qualified IP Desk Phones

Skype & Federated calling

Team calling

Video call monitor

Voice Mail

Cloud PBX: PSTN Interfaces

PSTN Calling add-on

First party offer from Microsoft available in specific countries as regulated utility.
Completely cloud-based with no required infrastructure on-premises.
Tightly integrated with Office 365 and Cloud PBX.

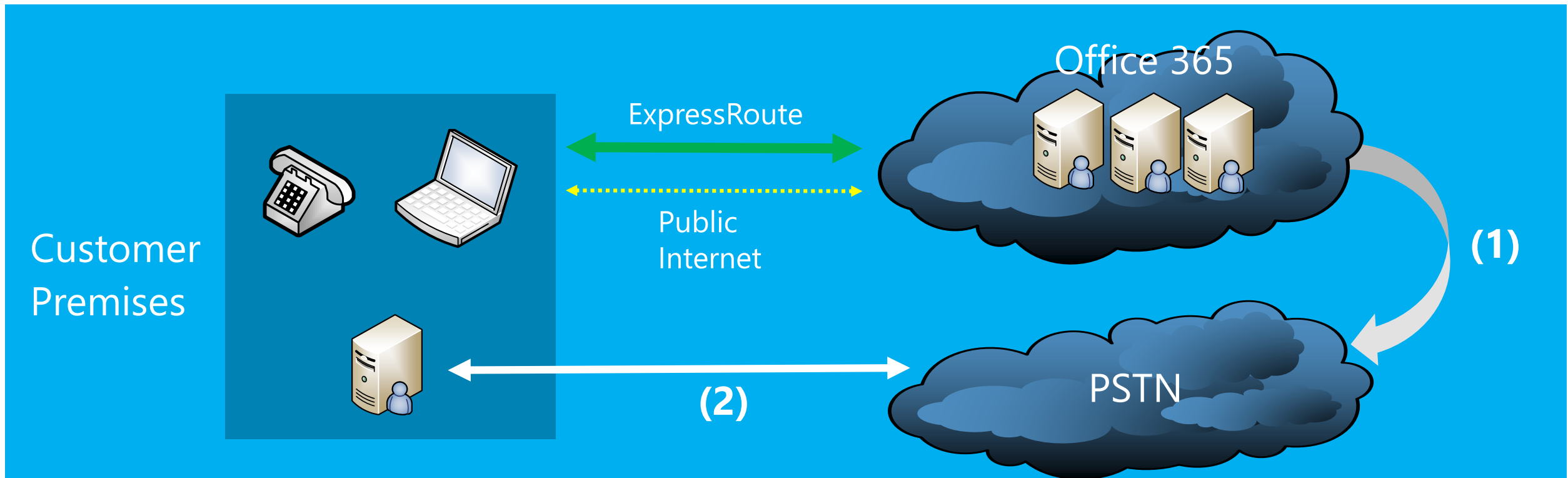
On-premises PSTN Connectivity

Connecting Office 365 with the customer's carrier, contract, & circuit.
Skype for Business Server software on-premises interoperates with legacy PBX.
Cloud Connector Edition* delivered as Packaged VMs for new customer deployments.

Cloud PBX: PSTN Options

PSTN Calling plans delivered by Microsoft ⁽¹⁾

On-Premises PSTN Connectivity ⁽²⁾



Cloud PBX: Hybrid Topologies

Users split between on-premises & online

Users with accounts located on-premises have Server experience & capability.
Office 365 users communicate with everyone on-premises.
Great way to easily move users to the cloud.

On-premises PSTN Connectivity

Skype for Business software on-premises interoperates with legacy PBX.
Leverages Split Domain as signaling and media paths.
Detailed configurations available for both existing & new customers.

Cloud PBX: Phones and Clients

Rich Clients

All supported PC & Mac clients in Office 365.

Mobile Clients

Skype for Business clients for iOS, Android & Windows Phone.

IP Phones

Lync Phone Edition: Polycom CX600, CX3000*; Mitel, HP, etc., w/latest firmware,
Polycom VVX201-VVX600 series with UCS 5.4.0A firmware 5.4.0.10182

Unsupported

VDI Plug-in, Lync Server Attendant, *PIN Auth

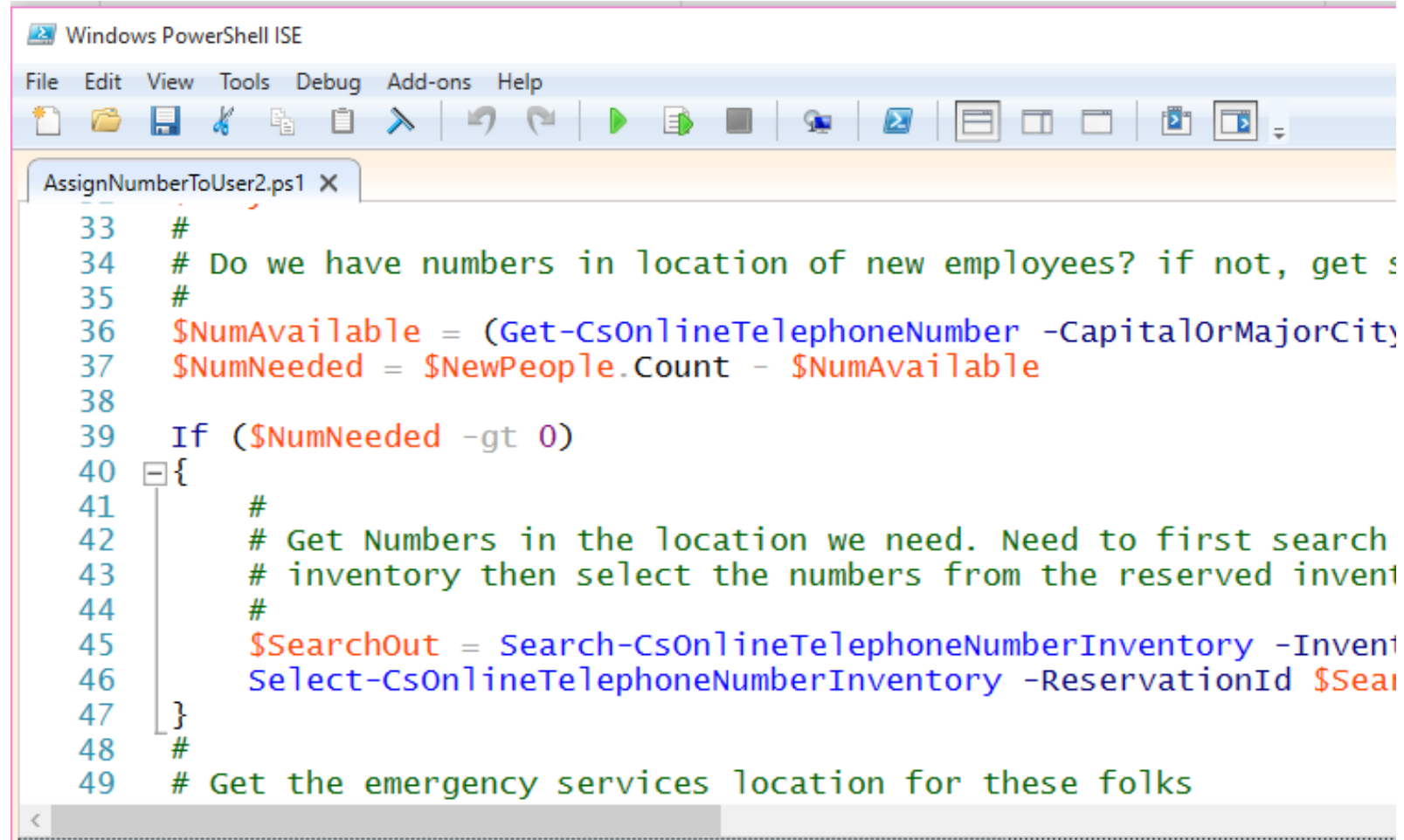
Cloud PBX: Administration Features

Operations

- Tenant Admin with PowerShell
- Call Detail Records
- Call Quality Dashboard

Admin features

- Multiple Emergency numbers
- Rate my Call Reporting
- Unassigned number handling



```
Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
AssignNumberToUser2.ps1 X
33 #
34 # Do we have numbers in location of new employees? if not, get s
35 #
36 $NumAvailable = (Get-CsOnlineTelephoneNumber -CapitalOrMajorCity
37 $NumNeeded = $NewPeople.Count - $NumAvailable
38
39 If ($NumNeeded -gt 0)
40 {
41     #
42     # Get Numbers in the location we need. Need to first search
43     # inventory then select the numbers from the reserved invent
44     #
45     $SearchOut = Search-CsOnlineTelephoneNumberInventory -Invent
46     Select-CsOnlineTelephoneNumberInventory -ReservationId $Seal
47 }
48 #
49 # Get the emergency services location for these folks
```

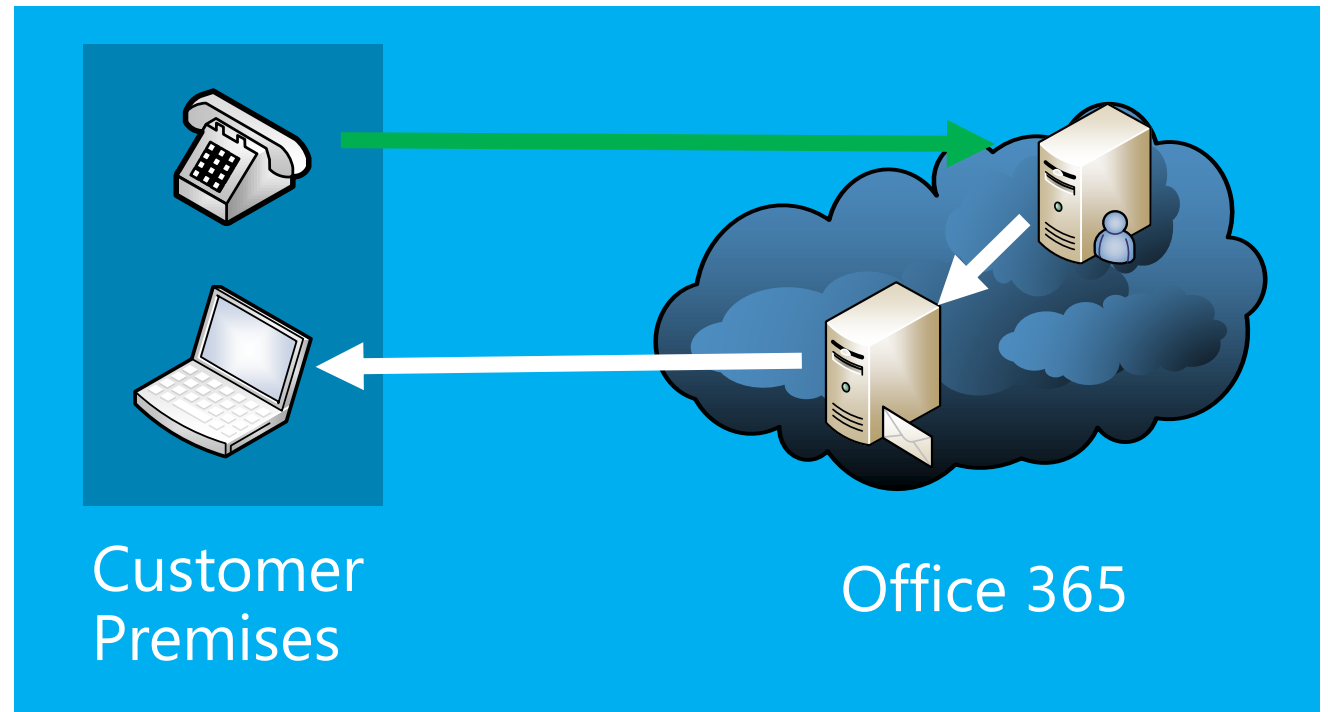
Deterministic Networking with Azure ExpressRoute

Cloud PBX: Voicemail

New voicemail service with no configuration required.
Exchange Online for deposit, compliance & archiving.

Features Include

- Personalized Greeting
- Message waiting indicator
- Reply to voicemail with call



Cloud PBX: Voicemail

23 Supported Languages

Language	Country/Region	Culture ID
Catalan	Spain	ca-ES
Chinese (Hong Kong)	China	zh-HK
Chinese (Simplified)	China	zh-CHS
Chinese (Traditional)	Taiwan	zh-TW
Danish	Denmark	da-DK
Dutch	Netherlands	nl-NL
English	Australia	en-AU
English	Canada	en-CA
English	India	en-IN
English	United Kingdom	en-GB
English	United States	en-US
Finnish	Finland	fi-FI
French	Canada	fr-CA

Language	Country/Region	Culture ID
French	France	fr-FR
German	Germany	de-DE
Italian	Italy	it-IT
Japanese	Japan	ja-JP
Korean	Korean	ko-KR
Norwegian (Bokmal)	Norway	nb-NO
Polish	Poland	pl-PL
Portuguese	Brazil	pt-BR
Portuguese	Portugal	pt-PT
Russian	Russia	ru-RU
Spanish	Spain	es-ES
Spanish	Mexico	es-MX
Swedish	Sweden	sv-SE

Cloud PBX: Conferencing

All Cloud PBX users are homed in Office 365.

User services include Presence & Meetings.

PSTN Dial-in and Dial-out through native
PSTN Conferencing service.*

User can also be serviced through ACP.

* Tolled Dial-in & Dial-out limited to protect against fraud & service abuse

Geographic Availability*

Cloud PBX & On-Premises PSTN Connectivity

Worldwide

PSTN Conferencing

Belgium, Canada, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States

PSTN Calling

United States

ACP Conferencing

Worldwide; dependent on partner availability

* Current plan for launch, subject to change

Countries*

PSTN Conferencing Dial-in Locations

Argentina

Australia

Austria

Belgium

Brazil

Canada

Chile

China

Colombia

Costa Rica

Czech Republic

Denmark

Estonia

Finland

France

Germany

Hong Kong

Hungary

India

Ireland

Israel

Italy

Japan

Mexico

Netherlands

New Zealand

Norway

Philippines

Poland

Portugal

Romania

Russia

Singapore

Slovak Republic

Slovenia

South Africa

South Korea

Spain

Sweden

Switzerland

Taiwan

Thailand

Turkey

United Kingdom

United States

* Current plan for launch, subject to change



PSTN Calling



PSTN Calling with Cloud PBX

PSTN connectivity provided directly by MSFT.

Focused on providing highest level of customer experience across end-user & admin.

Will meet legal requirements as necessary to participate in market.

Additional regions to be added over time.

PSTN Calling with Cloud PBX



PSTN Calling: Benefits

Cheaper and faster to get started.

Pay one bill for all your communications.

All the latest updates delivered automatically.

Pick new numbers or port what you have today.

No need for any server software on-premises.

Easier to administer.

PSTN Calling: Plans

PSTN Calling combines with Cloud PBX license

Option 1: Add PSTN Calling Plan license to E5 licensed users (includes Cloud PBX).

Option 2: Add PSTN Calling Plan license + Cloud PBX to Enterprise E3 licensed user.

Two introductory Calling Plans available

Domestic US: Calling covers area codes across all 50 States.

Domestic US + International: Calling supports 196 countries including landline & mobile

Minutes included in plans, pooled by Tenant

Limits for abuse, fraud and to protect service performance.

3000 minutes for Domestic calling; 600 minutes for International calling.

Overages charged through consumption billing.*

* Expected H1 2016

Calling Plan Coverage

Afghanistan	Belize	Comoros	Fiji	Hungary	Lesotho	Montenegro	Panama	Slovakia	Turks and Caicos
Albania	Benin	Congo, Democratic Republic of	Finland	Iceland	Libyan Arab Jamahiriya	Montserrat	Paraguay	Slovenia	Uganda
Algeria	Bermuda	Congo, People's Republic of	France	India	Liechtenstein	Morocco	Peru	South Africa	Ukraine
American Samoa	Bhutan	Costa Rica	French Guiana	Indonesia	Lithuania	Mozambique	Philippines	Spain	United Arab Emirates
Andorra	Bolivia	Cote D'Ivoire	French Polynesia	Iran	Luxembourg	Myanmar	Poland	Sri Lanka	United Kingdon
Angola	Bosnia & Herzegovina	Croatia	Georgia	Iraq	Macau	Namibia	Portugal	St. Pierre & Miquelon	Uruguay
Anguilla	Botswana	Cyprus	Germany	Ireland	Macedonia	Nepal	Perto Rico	Sudan	Uzbekistan
Antigua & Barbuda	Brazil	Czech Republic	Ghana	Israel	Malawi	Netherlands	Qataar	Suriname	Vatican City State
Argentina	Brunei Darussalam	Denmark	Gibraltar	Italy	Malaysia	Netherlands Antilles	Reunion	Swaziland	Venezuela
Armenia	Bulgaria	Djibouti	Greece	Jamaica	Mali	New Caledonia	Romania	Sweden	Viet Nam
Aruba	Burkina Faso	Dominica	Greenland	Japan	Malta	New Zealand	Russian Federation	Switzerland	Virgin Islands (British)
Australia	Cambodia	Dominican Republic	Grenada	Jordan	Marshall Islands	Nicaragua	Rwanda	Syrian Arab Republic	Virgin Islands (U.S.)
Austria	Cameroon	Ecuador	Guadeloupe	Kazakhstan	Martinique	Niger	Saint Kitts & Nevis	Taiwan	Wallis and Futuna Islands
Azerbaijan	Canada	Egypt	Guam	Kenya	Mauritius	Nigeria	Saint Lucia	Tajikistan	Yemen
Bahamas	Cape Verde	El Salvador	Guatemala	Korea, Republic of	Mayotte	Northern Mariana Islands	Saint Vincent & the Grenadines	Tanzania, United Republic of	Zambia
Bahrain	Cayman Islands	Equatorial Guinea	Guinea	Kuwait	Mexico	Norway	San Marino	Thailand	Zimbabwe
Bangladesh	Central African Republic	Eritrea	Guyana	Kyrgyzstan	Micronesia	Oman	Saudi Arabia	Togo	
Barbados	Chile	Estonia	Haiti	Lao	Moldova, Republic of	Pakistan	Senegal	Trinidad and Tobago	
Belarus	China	Ethiopia	Honduras	Latvia	Monaco	Palau	Serbia	Turkey	
Belgium	Colombia	Faroe Islands	Hong Kong	Lebanon	Mongolia	Palestinian Territory	Singapore	Turkmenistan	

Get New Numbers or Bring your own

New numbers acquisition designed for maximum simplicity

Search by state/area code for the numbers you want.

Add them to your organization's inventory.

You can acquire more numbers than licenses to have some head room for changes.

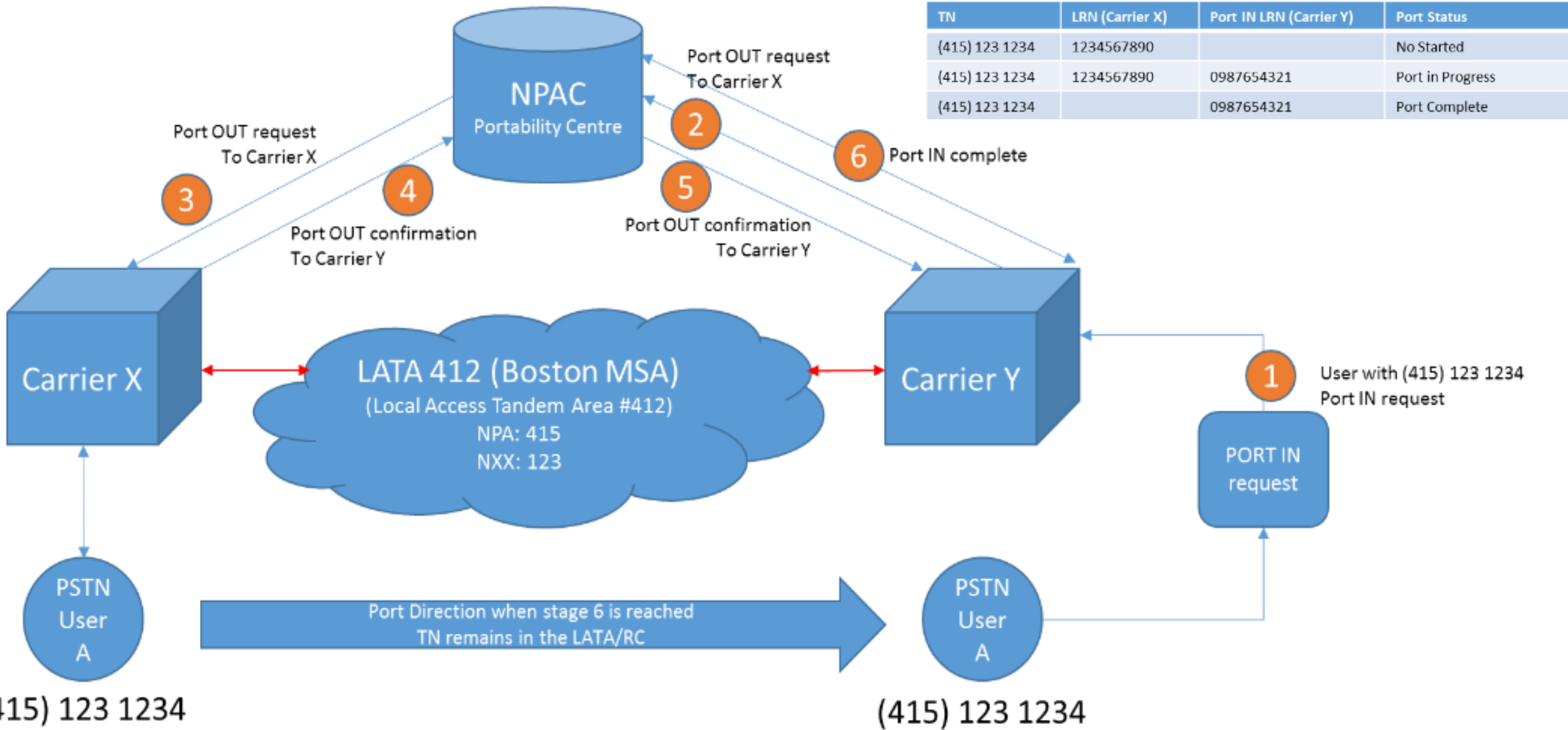
Telephone numbers will be available for area codes across the 50 states.

Number porting to move existing numbers into Skype for Business

FCC rules require that current carrier allows and provides a centralized body (NPAC) to transact moves.

Losing carriers set different requirements to approve a move – the process can be complex.

Bring Your Existing Numbers



Porting – Basics

Preparing to port

Do not disconnect service with current carrier.

Make sure there are no freezes on your account.

Turn off any special carrier side features for the numbers.
(e.g. Distinctive ring, Centrex service, ISDN/DSL lines).

Creating a port request

All numbers need to be from a single carrier (not part of any pending port requests & not residential).

Company name and address, matching exactly losing carrier file.

Billing Telephone Number (BTN), Account Number & PIN/Passcode (if required).

Letter of Authorization (LOA) signed by authorized party.

Choose Full Port (No numbers left behind) or Partial Port (Leaving some numbers with losing carrier).

Number Porting Example



Office 365

Admin

New Local Number Port Order

1. overview
2. account info
3. numbers
4. transfer date
5. letter of authorization
6. submit
7. finish

Enter the telephone numbers in the text field below; one number per line. For blocks of numbers, enter both the first and last number in the block separated with a dash (-).

Remember to include both country and area code. [Learn more](#)

Numbers to be transferred (max 999):

+14255551001
14255559988
14255552001-14255552100

☒ I am transferring all my numbers from my current carrier.

☐ I'm only transferring some of my numbers.

back

check number portability

cancel

Order details

Company:	Test Company
Account number:	1
PIN:	none
Billing telephone:	12125554433
Service Address:	123 Fake St Bellevue, WA, 98008

Types of Porting

Standard Porting	Project Porting	Complex Porting
Single order with <100 Telephone Numbers	Single order with more than >100 Telephone Numbers	Single order with >999 Telephone Numbers
Single BTN, single address, single losing Carrier and single rate center	Single BTN, single address, single losing Carrier and single rate center	Multiple BTNs, multiple addresses, single losing Carrier and multiple rate centers
Generally gets completed within 7 business days provided no rejections for the Port Order	Requires manual handling, generally gets completed within 3-4 weeks provided no rejections for the Port Order	Requires manual handling, generally gets completed within 3-4 weeks provided no rejections for the Port Order
Supported by Skype for Business Admin Center	Supported by Skype for Business Admin Center	Supported by Skype for Business Help Desk

For large moves: Do a standard port (e.g. 1 number) **early** in migration project to validate you have right information to get approval from losing carrier.

Emergency Services Dialing

Integrated E911 Calling

Integrates with E911 service provider & public safety access point (PSAP).

Location Required

Location must be defined when users are assigned a phone number.

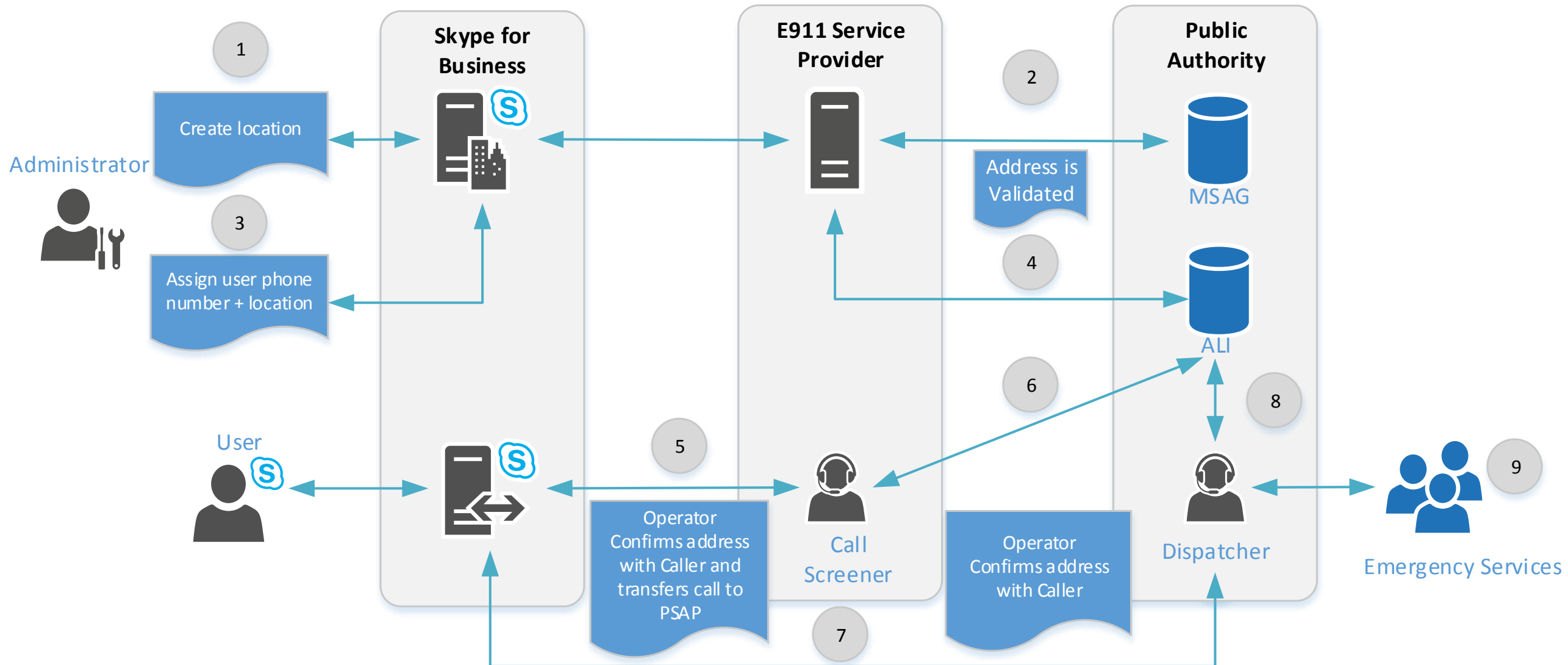
Create locations for all sites upfront and then assign when new users are added.

Clients

Rich clients: 911 calls sent to national screening center, caller location retrieved & transferred to PSAP.

Mobile clients: 911 calls will be sent through mobile carrier.

Emergency Services Dialing



Tenant Admin PSTN Calling Usage Reports

PSTN Usage Reports in Admin Console

Last 90 days usage

Date, time, duration, Orig TN, Dest TN, Call Type (inbound/outbound, call/conf)

Export to CSV for offline data analysis, graphing, retention

Built in protection from Microsoft to prevent fraudulent calling

Date/Time	User	Origination Tel / Destination Tel #	Call ID (reference for support)	Call Type	Location	Call Duration (HH:MM:SS)	Currency	Call Charge
12/17/14 2:40 PM	mikedav@contoso.com	+14257054301	CallID 1	PSTN Out	US	00:04:00	USD	0.00
12/17/14 3:40 PM	mikedav@contoso.com	+18005551212	CallID 2	PSTN Out	UK	00:04:00	USD	0.30
12/17/14 2:40 PM	kholmes@contoso.com	+14257054301	CallID 3	PSTN In	US	00:00:00	USD	0.00
12/17/14 3:40 PM	kholmes@contoso.com	+441189094799	CallID 4	PSTN Out	UK	00:04:00	USD	0.30
12/17/14 2:40 PM	rkuntz@contoso.com	+12525634478	CallID 5	Conf In	US	00:04:00	USD	0.15
12/17/14 3:40 PM	rkuntz@contoso.com	+14255561234	CallID 6	Conf Out	US	00:04:00	USD	0.15

PSTN Conferencing Licensing Options

For PSTN Conferencing only:

- Skype for Business Online Plan 2 + Skype for Business PSTN Conferencing
- Office 365 Business Essentials + Skype for Business PSTN Conferencing
- Office 365 Business Premium + Skype for Business PSTN Conferencing
- Office 365 Enterprise E1 + Skype for Business PSTN Conferencing
- Office 365 Enterprise E3 + Skype for Business PSTN Conferencing
- Office 365 Enterprise E5 + Skype for Business PSTN Conferencing for E5 without PSTN Conferencing Customers

PSTN Calling Licensing Options

For PSTN Domestic Calling only:

- Skype for Business Online Plan 2 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling
- Office 365 Enterprise E1 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling
- Office 365 Enterprise E3 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling
- Office 365 Enterprise E5 + Skype for Business PSTN Domestic Calling

For PSTN Domestic and International Calling only:

- Skype for Business Online Plan 2 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling
- Office 365 Enterprise E1 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling
- Office 365 Enterprise E3 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling
- Office 365 Enterprise E5 + Skype for Business PSTN Domestic and International Calling

PSTN Conferencing and Calling Licensing

For PSTN Domestic Calling and Conferencing:

- Skype for Business Online Plan 2 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E1 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E3 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E5 + Skype for Business PSTN Domestic Calling + Skype for Business PSTN Conferencing for E5 without PSTN Conferencing Customers

For PSTN Domestic and International Calling and Conferencing:

- Skype for Business Online Plan 2 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E1 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E3 + Skype for Business Cloud PBX + Skype for Business PSTN Domestic and International Calling + Skype for Business PSTN Conferencing
- Office 365 Enterprise E5 + Skype for Business PSTN Domestic and International Calling + Skype for Business PSTN Conferencing for E5 without PSTN Conferencing Customers

Important Considerations

When selling PSTN services, what are the taxes that need to be calculated and remitted?

Taxes imposed on PSTN services are considerably more complex in the United States than sales/use tax. Taxes that need to be calculated and remitted include:

- 911 fees
- Public Utility Commission Taxes
- License Taxes
- Telecom Excise Taxes
- Several other taxes and fees based on customer location

To simplify the partner experience in the United States, Microsoft chose to price PSTN services on a tax inclusive basis. Therefore, in the United States, a \$100 charge for PSTN services includes all applicable taxes that apply to the sale. These taxes are not separately charged as a line item on the applicable invoice to customers or partners. To indicate the tax inclusive nature of the PSTN services on the partner invoice, an asterisk is added to the invoice line items that include PSTN services. The asterisk references a footnote at the bottom of the invoice indicating that the line item is tax inclusive and includes reference to a website where particular state by state tax rate information can be found.

Additional Important Considerations

What do partners need to know when selling PSTN services?

- In the U.S. the price billed to Partners and paid by Partners to Microsoft for the PSTN services includes applicable taxes and fees.
- In the United States, if a Partner marks up the price of a Microsoft PSTN Service (PSTN Conferencing or PSTN Calling), the Partner may be responsible for calculating and remitting PSTN taxes.
- Partners should contact their tax and legal counsel to understand their specific situation with regard to PSTN services taxes and fees and their potential liabilities.

Minutes Detail

Per minute consumption is coming for both PSTN Conferencing and Dialing – More details in July!

Skype for Business PSTN Domestic Calling:

- Licensed users can call out to numbers located in the country where they are assigned in Office 365.
- Each user gets 3000 inbound calling minutes (including inbound calls originating from international locations) and outbound US domestic calling minutes. This monthly amount of minutes consists of both inbound calls originating from anywhere in the world and outbound US domestic calls.

Skype for Business PSTN Domestic and International Calling:

- Licensed users can call out to numbers located in the country/region where their Office 365 license is assigned to the user in the Office 365 admin center > **Assign License** > **Set user location**, and to international numbers in 196 countries/regions.
- Each user receives an amount of inbound calling minutes (including inbound calls originating from international locations) and outbound domestic calling minutes. This monthly amount of minutes consists of both inbound calls originating from anywhere in the world and outbound domestic calls. Each user also gets 600 international outbound calling minutes to 196 countries.

United States (U.S.)

- Domestic Calling - 3000 domestic minutes
- Domestic and International Calling - 3000 domestic minutes or 600 international minutes (whichever is reached first per calendar month)
- Minutes are pooled among users



On-premises PSTN Connectivity



Cloud PBX with On-premises PSTN Connectivity

Skype for Business software deployed on-premises.

Cloud Connector Edition* delivered as Packaged VMs for rapid deployment

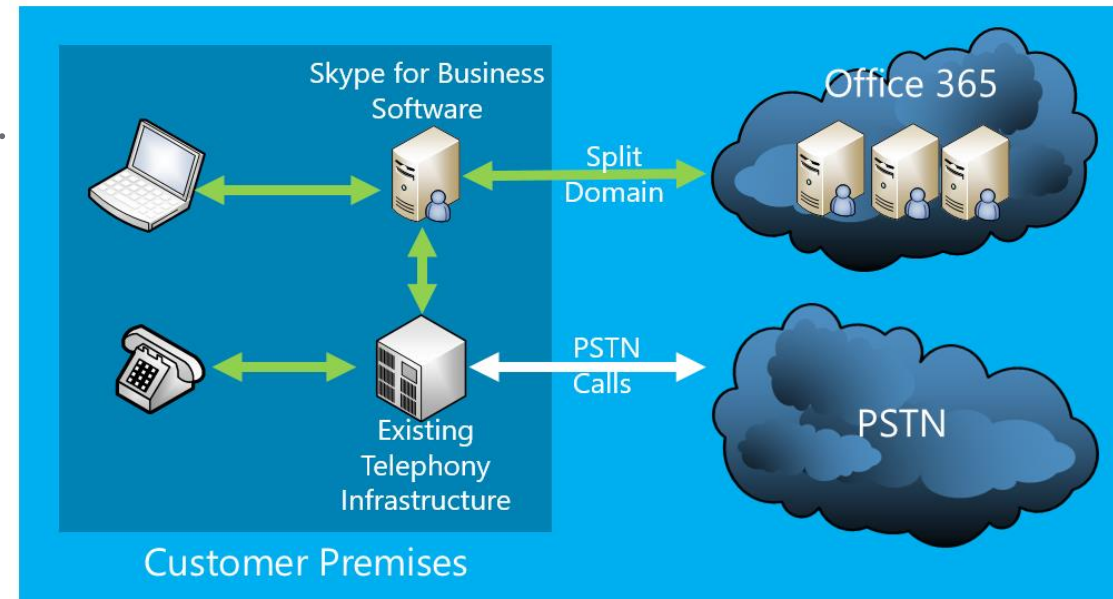
Current customers can use their existing topology / pool and reduce size of footprint.

Hybrid Offering

Deployment integrated with Office 365 using split domain.
Users log into Office 365, services delivered from cloud.

Media Path

PSTN calls connect through on-premises hardware.
Standard Direct SIP Connectivity to Next Hop SIP Peer
(Gateway/SBC/PBX).



**Cloud Connector Edition is in customer validation with our early adopter program and will be available in the coming months*

On-premises PSTN Connectivity: Benefits

Take advantage of existing comms infrastructure.

Retain your carrier contract.

Simply migrate users from on-premises to cloud.

Preserve customization in Server deployment.

Significantly smaller HW footprint onsite.

On-premises PSTN Connectivity

Multiple ways to implement this topology

Existing Customer Server Pool

Connect existing topology to Office 365 using Split Domain & migrate users to Cloud PBX.

Cloud PBX user's PSTN Traffic transits pool.

New Customer Server Pool

Deploy Skype for Business Server and connect it with Office 365.

Customers can operate additional services on-prem (VIS, etc.)

Cloud Connector Edition*

Packaged VMs on Customer Hardware provides PSTN connectivity components with Office 365.

Cloud PBX users PSTN Traffic transits VMs

Partner Appliance

Future offering where partner packages required Skype for Business Server software or VMs with SBC/Gateway

Cloud Connected Appliance

Future offering where PSTN connectivity is bundled with network management and quality of service telemetry for O365.

**Cloud Connector Edition is in customer validation with our early adopter program and will be available in the coming months*

Pre-requisites: Server Pool

Pool: Lync Server 2013 or Skype for Business 2015 Server Standard or Enterprise Edition

Edge: Lync Server 2013 or Skype for Business Server 2015

Mediation: Lync Server 2013 or Skype for Business Server 2015
Co-located or in a separate pool

Tested On-premises PSTN infrastructure

Active directory synchronization

Skype for Business Hybrid Organization configured

Pre-requisites: Packaged VMs

Requirements

No on-premises Skype For Business Deployment

Qualified next-hop SIP Peer: IP-PBX, SIP Trunk, SBC or Gateway

One Host system located in the DMZ

64 bit dual proc / quad core, 64 GB RAM, 2x RAID-1 10k RPM 72GB HDD, 2x 1Gbps network

Capacity

Stand-alone capacity estimated with 70% Internal Users, 30% External users

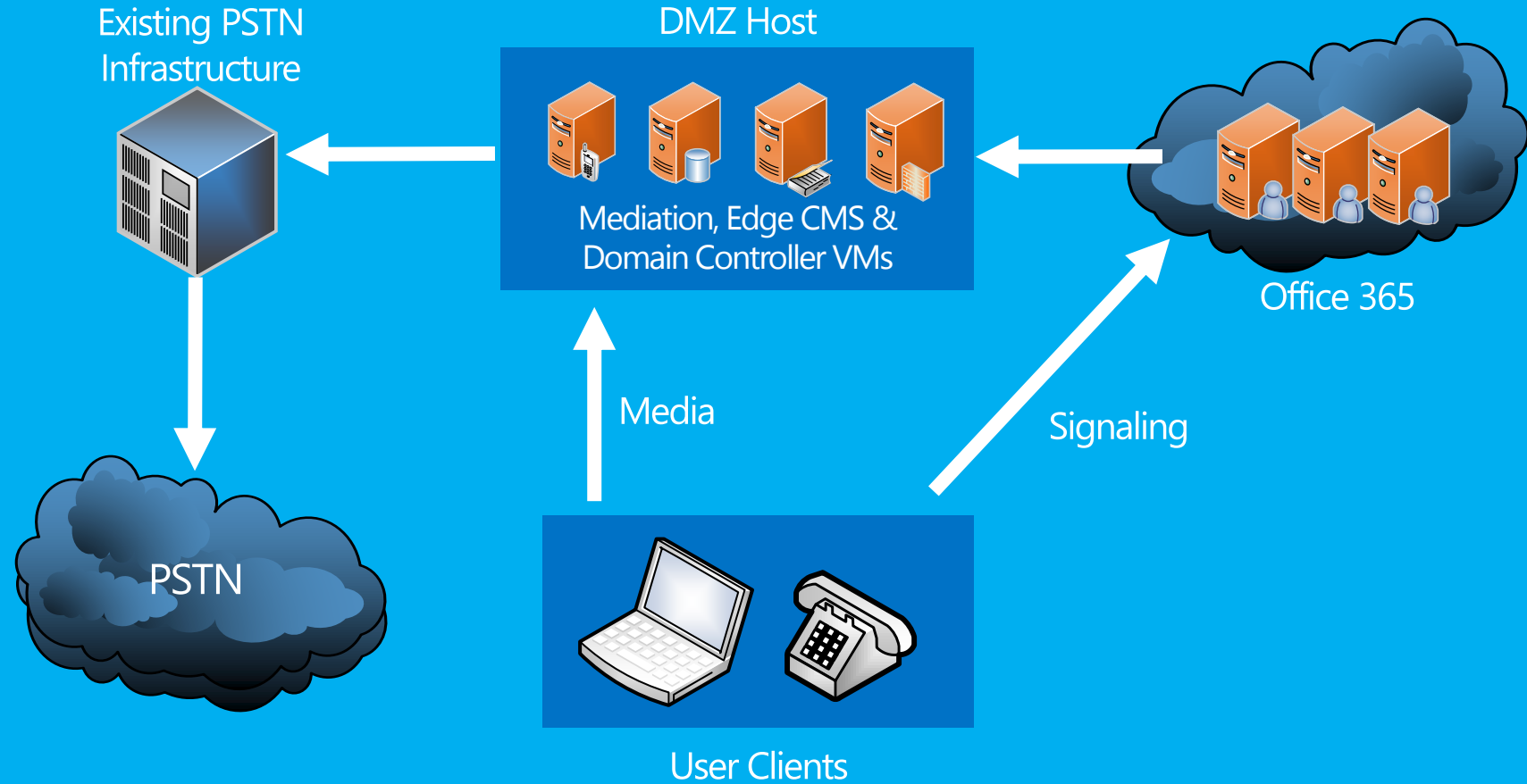
Media transcoding performed by Mediation can handle up to 500 calls

Multiple Packaged VM sets can be stacked for greater scale.

In customer validation for release after Cloud PBX launch

On premises PSTN Connectivity: Cloud Connector Edition

Dial Plan Assigned based on user location (set by admin)
Call routes created in on premises environment
DNS points at online Skype for Business
No co-existence with on premises deployment of Skype For Business
Media traffic always flows via Mediation server
No AD schema extension required
Users have to be created on-premises and synchronized online using AAD Connect



Call Routing Summary

Inbound call flow

User's Direct Inward Dial (DID) number terminates at PSTN gateway or PBX.

Call is routed to on-premises Skype For Business deployment.

User's Active Directory object indicates a different deployment locator.

Request is proxied through on-premises Edge proxy to Skype For Business Online.

Invite is routed to end user's logged-in endpoints.

If accepted, media is routed either locally or through the company's Edge Server or firewall.

If rejected, media is routed to Cloud PBX Voice Mail.

Outbound call flow

User instantiates a PSTN call.

Client normalizes number and sends invite to home server.

Voice policy enforcement and call authorization is performed on-premises.

Call is routed to PSTN via Mediation Server.

On premises PSTN Connectivity: Multi-site

An outgoing PSTN call request is placed by a user hosted on Skype For Business Online to Redmond Phone number

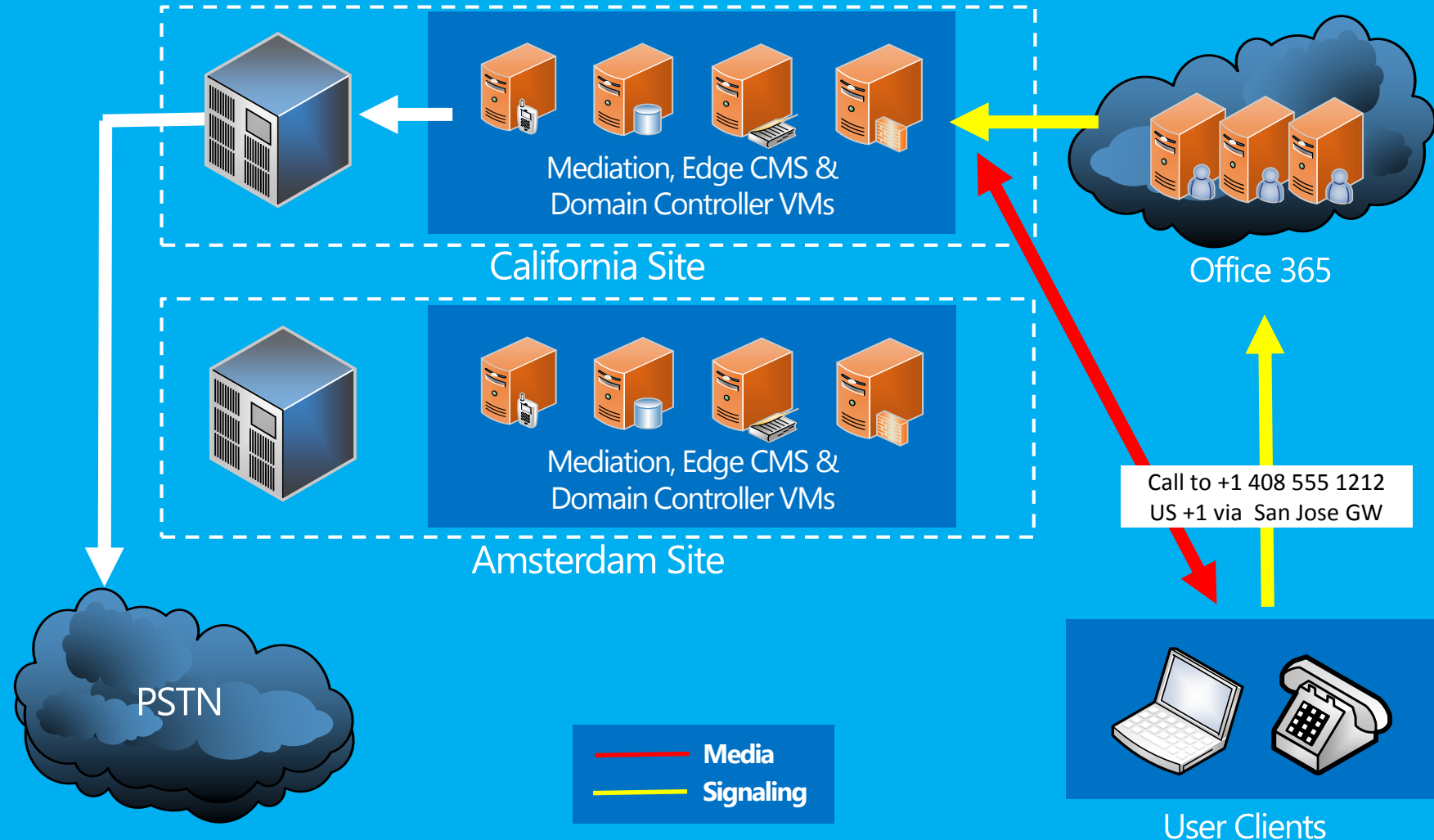
An RNL is performed and fails to associate a user

The request is assumed to be a PSTN/PBX call and is proxied to the on-premises Skype For Business Server (Redmond)

Outbound Voice policy enforcement and call authorization are performed on-premises

The call is routed to PSTN egress

Media flows using Edge Server specified for media



On premises PSTN Connectivity: Multi-site

An outgoing PSTN call request is placed by a user hosted on Skype For Business Online to Amsterdam Phone number

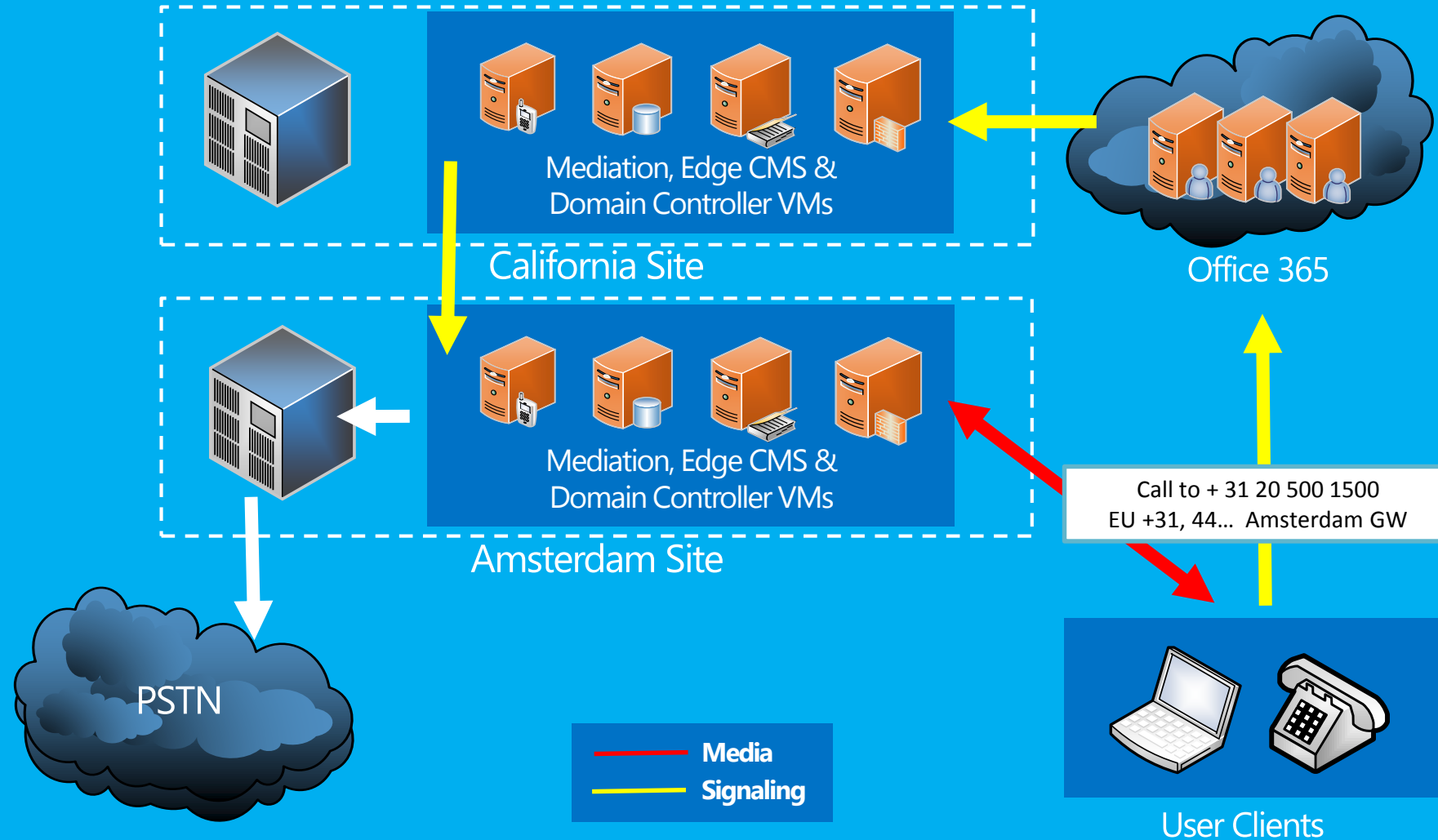
An RNL is performed and fails to associate a user

The request is assumed to be a PSTN/PBX call and is proxied to the on-premises Skype For Business Server (Redmond)

Outbound Voice policy enforcement and call authorization are performed on-premises

The call is routed to PSTN egress

Media flows using Edge Server specified for media



Manageability

Configuration

Firewall requirements identical to Skype for Business Server Access Edge & A/V Edge
On-premises settings are managed through Skype For Business Server Control Panel and PowerShell.
Cloud settings are managed through remote PowerShell cmdlets.

User management

The on premises Skype for Business Control Panel and Management shell enables configuration relevant to user with synchronization of the settings online

Monitoring

CDR are collected on premises.
QoE is reported online and exposed through Call Quality Dashboard

Topics

Overview

Cloud PBX

PSTN Calling

On-premises PSTN Connectivity

