



Carrier Tenant

MS TEAMS CONFIGURATION GUIDE

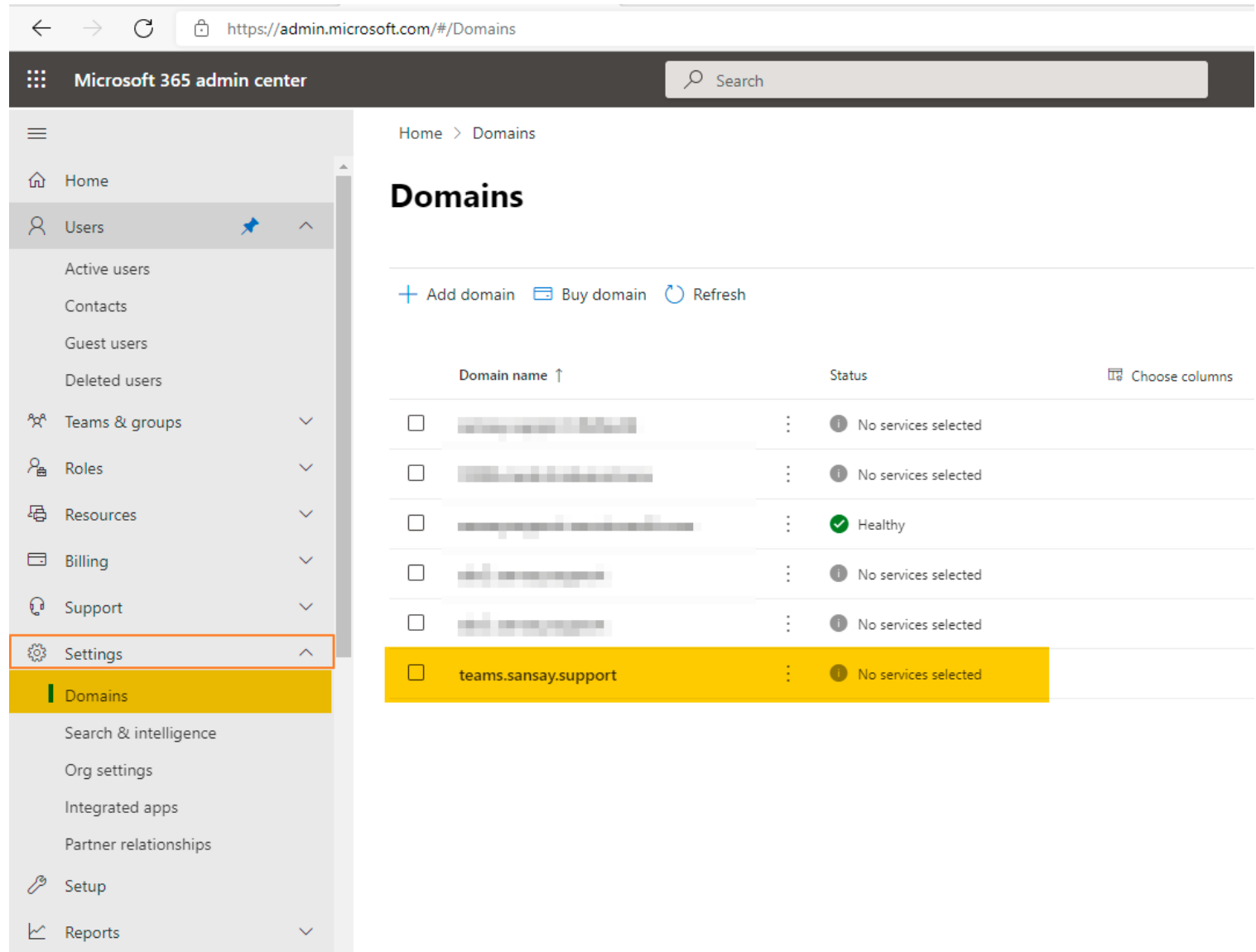
O365 Configuration

Step 1:

Register your Carrier Tenant domain. For the purpose of this guide the carrier tenant fqdn used is teams.sansay.support

Go to:
<https://admin.microsoft.com>

Setting -> Domains -> add Domains



The screenshot shows the Microsoft 365 admin center interface. The left sidebar has the 'Settings' menu item highlighted with a red box, and the 'Domains' sub-menu item is highlighted in yellow. The main content area shows the 'Domains' page with a table of domains. The 'teams.sansay.support' domain is highlighted in yellow at the bottom of the table.

Domain name ↑	Status	Choose columns
<input type="checkbox"/> [blurred]	No services selected	
<input type="checkbox"/> [blurred]	No services selected	
<input type="checkbox"/> [blurred]	Healthy	
<input type="checkbox"/> [blurred]	No services selected	
<input type="checkbox"/> [blurred]	No services selected	
<input type="checkbox"/> teams.sansay.support	No services selected	

O365 Configuration

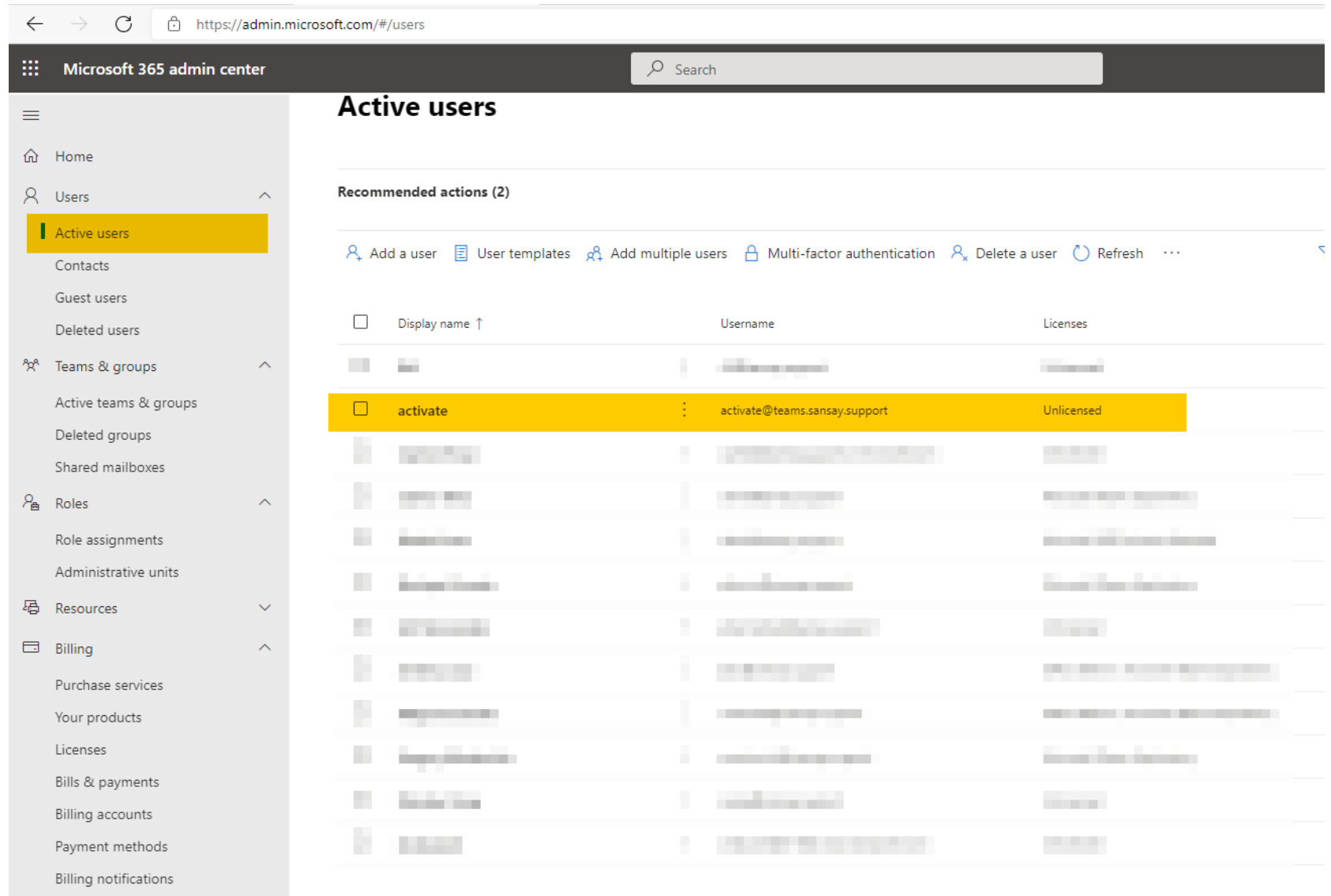
Step 2:

Create new user using recently added domain. This is required so Microsoft activates the new Domain name.

Go to:

<https://admin.microsoft.com>

User -> Active Users -> Add a user



The screenshot shows the Microsoft 365 Admin Center interface. The left-hand navigation pane is visible, with 'Active users' selected. The main content area displays the 'Active users' page, which includes a search bar, a list of recommended actions, and a table of active users. The user 'activate' is highlighted in yellow. The table columns are 'Display name', 'Username', and 'Licenses'.

Display name	Username	Licenses
activate	activate@teams.sansay.support	Unlicensed



O365 Configuration

Step 3:

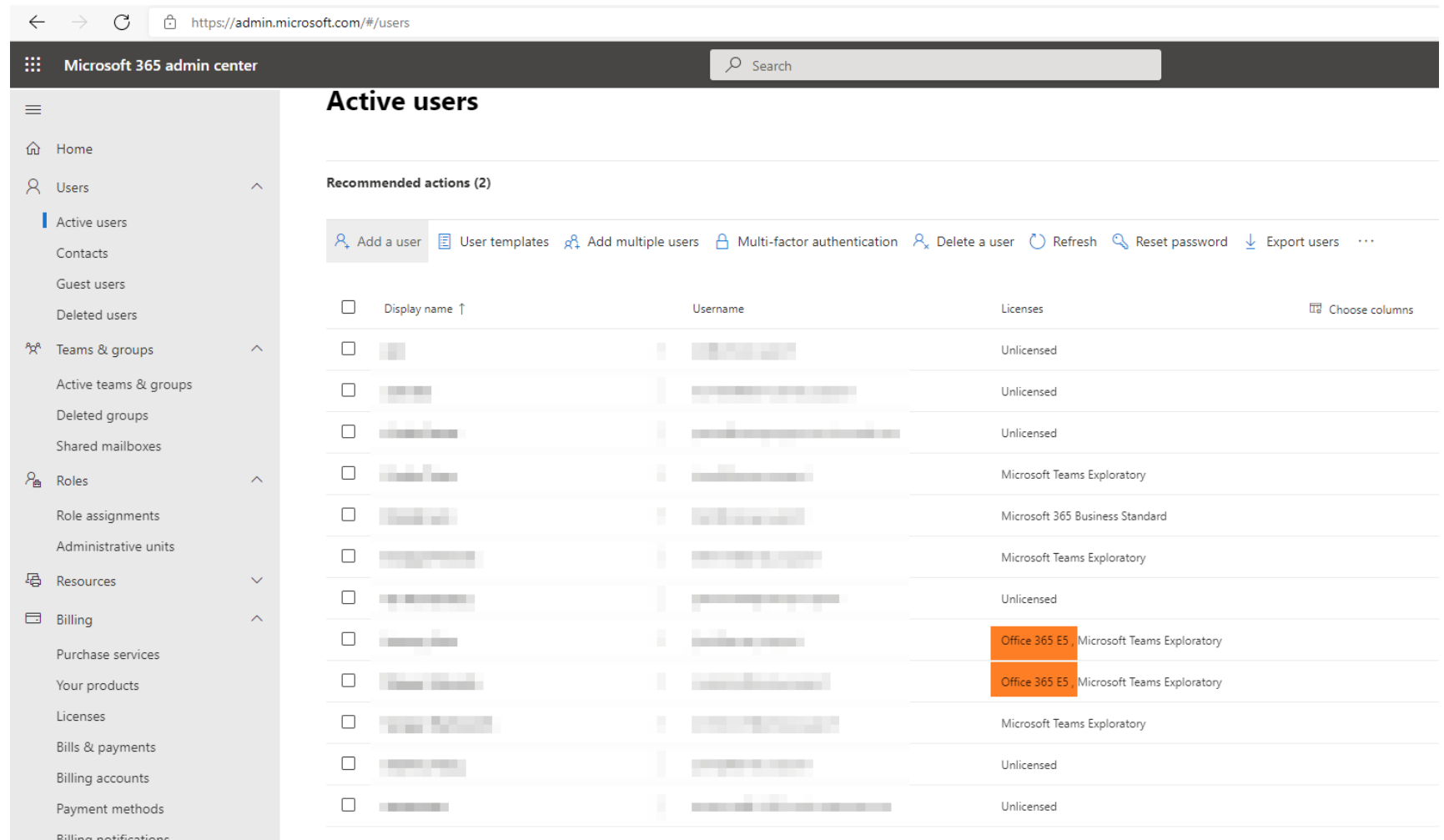
Assign valid license to the user that will be linked with Direct Routing feature to route Calls. If there will be no Teams user in the carrier tenant this step can be ignored.

Go to:

<https://admin.microsoft.com>

User -> Active Users

Under User Options select Manage Product license and assign valid licence (E5 or E3 + Phone System)



The screenshot shows the Microsoft 365 Admin Center interface. The left sidebar contains navigation options: Home, Users, Active users, Contacts, Guest users, Deleted users, Teams & groups, Roles, Resources, Billing, Purchase services, Your products, Licenses, Bills & payments, Billing accounts, Payment methods, and Billing notifications. The main content area is titled 'Active users' and shows a table of users. The table has columns for 'Display name', 'Username', and 'Licenses'. Two rows are highlighted with orange boxes, indicating they have 'Office 365 E5, Microsoft Teams Exploratory' licenses. The table also includes a 'Recommended actions (2)' section with options like 'Add a user', 'User templates', 'Add multiple users', 'Multi-factor authentication', 'Delete a user', 'Refresh', 'Reset password', and 'Export users'.

Display name	Username	Licenses
[Redacted]	[Redacted]	Unlicensed
[Redacted]	[Redacted]	Unlicensed
[Redacted]	[Redacted]	Unlicensed
[Redacted]	[Redacted]	Microsoft Teams Exploratory
[Redacted]	[Redacted]	Microsoft 365 Business Standard
[Redacted]	[Redacted]	Microsoft Teams Exploratory
[Redacted]	[Redacted]	Unlicensed
[Redacted]	[Redacted]	Office 365 E5, Microsoft Teams Exploratory
[Redacted]	[Redacted]	Office 365 E5, Microsoft Teams Exploratory
[Redacted]	[Redacted]	Microsoft Teams Exploratory
[Redacted]	[Redacted]	Unlicensed
[Redacted]	[Redacted]	Unlicensed

O365 Configuration

Step 4:

Create a new SBC's under Carrier Tenant Direct Routing config.

Go to:
<https://admin.microsoft.com>

Voice -> Direct Routing -> SBC

+Add new SBC.

Microsoft Teams admin center

Direct Routing

Direct Routing lets you connect a supported Session Border Controller (SBC) to Teams calling features. You can add, edit, and view information about your SBCs, voice routes, and voice routes.

Direct routing summary

5	8	5
Total SBCs	Voice routes	SBCs with issues

SBCs | Voice routes

+ Add | Edit | Delete | items

SBC	Network effectiveness	Average call duration	TLS connectivity status	SIP Options status	Concurrent calls capacity	Enabled
teams.sansay.support	0% (0)	0 seconds (0)	Active	Active	Within limits	On

Direct Routing \ Add SBC

teams.sansay.support

You must use the SBC's FQDN that has the host name registered in DNS. For example, if your organization owns **contoso.com** then **sbc.contoso.com** is good name for the SBC, but **sbc.contoso.onmicrosoft.com** isn't. [Learn more](#)

SBC settings

When you are adding this SBC, you can turn on or off the SBC and change settings that are specific to the SBC.

Enabled	Off
SIP signaling port	5061
Send SIP options	On
Forward call history	Off
Forward P-Asserted-Identity (PAI) header	Off
Concurrent call capacity	24
Failover response codes	408, 503, 504
Failover time (seconds)	10
SBC supports PIDF/LO for emergency calls	Off

PowerShell Command

```
New-CsOnlinePSTNGateway -Identity teams.sansay.support -SIPsignalingPort 5061 -ForwardPAI $true -Enabled $true
```

MS Teams Configuration

Step 5:

Create a new Voice Routing Policy.

Go to:
<https://admin.teams.microsoft.com>

Voice -> Voice routing policy

Add new Voice Route Policy
- Assign a new PSTN usage record to it. (This usage record will be used when we proceed to create the Voice Route later on)

The screenshot shows the Microsoft Teams admin center interface. The left sidebar is expanded to the 'Voice' section, with 'Voice routing policies' highlighted at the bottom. The main content area is titled 'Voice routing policies' and includes a summary card showing 1 Default policy and 7 Custom policies. Below this is a table of existing policies.

Name	Description	PSTN usage records
VP_SANSAY		Usage_SANSAY

MS Teams Configuration

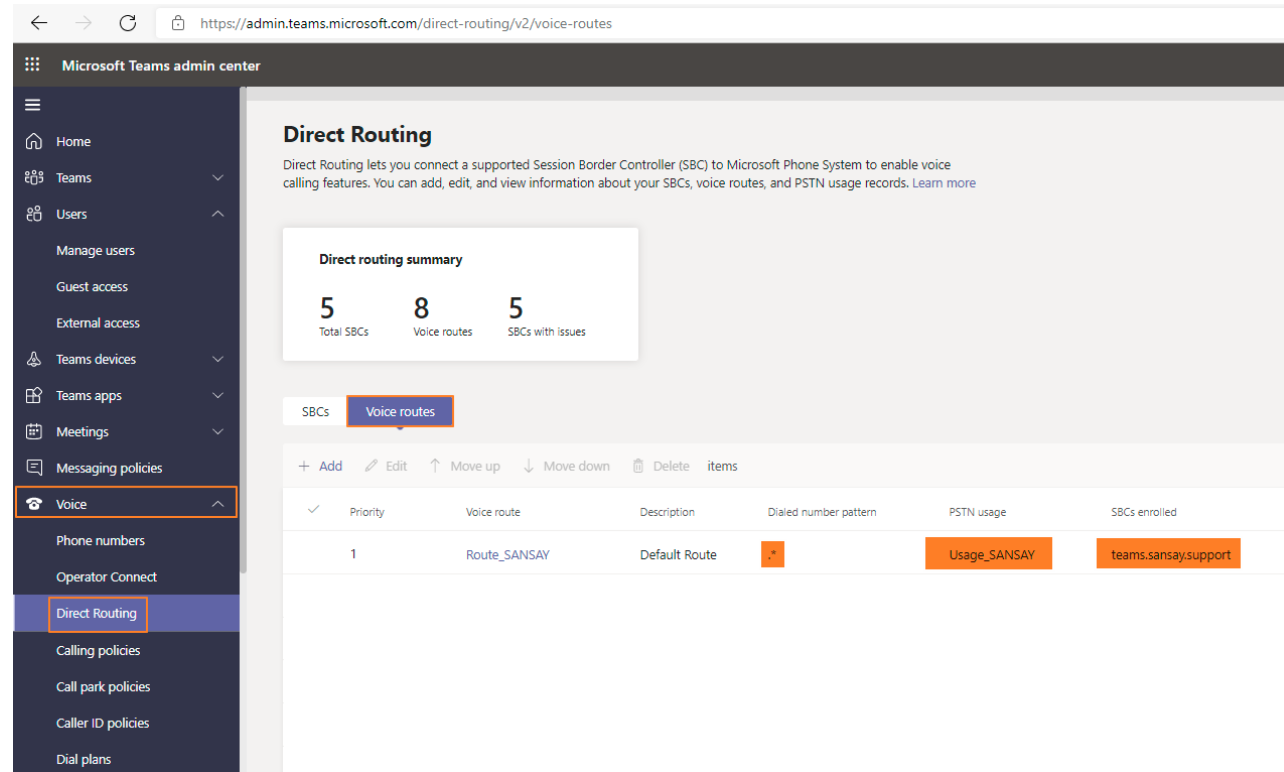
Step 6: Create a new Voice Route

Link the new SBC with the new Voice Route and set a valid dialed number pattern. This example uses .* as default route.

PowerShell Command:

```
$tenant_domain = "teams.sansay.support"  
$Route = "Route_SANSAY"  
$PSTNUsage = "Usage_SANSAY"  
$NumPattern = ".*"
```

```
New-CsOnlineVoiceRoute -Identity $Route -NumberPattern $NumPattern -OnlinePstnGatewayList $tenant_domain -Priority 0  
-OnlinePstnUsages $PSTNUsage
```



The screenshot shows the Microsoft Teams admin center interface. The left sidebar is expanded to the 'Voice' section, with 'Direct Routing' highlighted. The main content area is titled 'Direct Routing' and includes a summary card showing 5 Total SBCs, 8 Voice routes, and 5 SBCs with issues. Below the summary, there are tabs for 'SBCs' and 'Voice routes'. The 'Voice routes' tab is active, displaying a table with the following data:

Priority	Voice route	Description	Dialed number pattern	PSTN usage	SBCs enrolled
1	Route_SANSAY	Default Route	.*	Usage_SANSAY	teams.sansay.support



The image shows how it should look after command execution. Please notice Microsoft can take some minutes to update info.

MS Teams Configuration

Step 7:

Assign user to the new Voice Route Policy

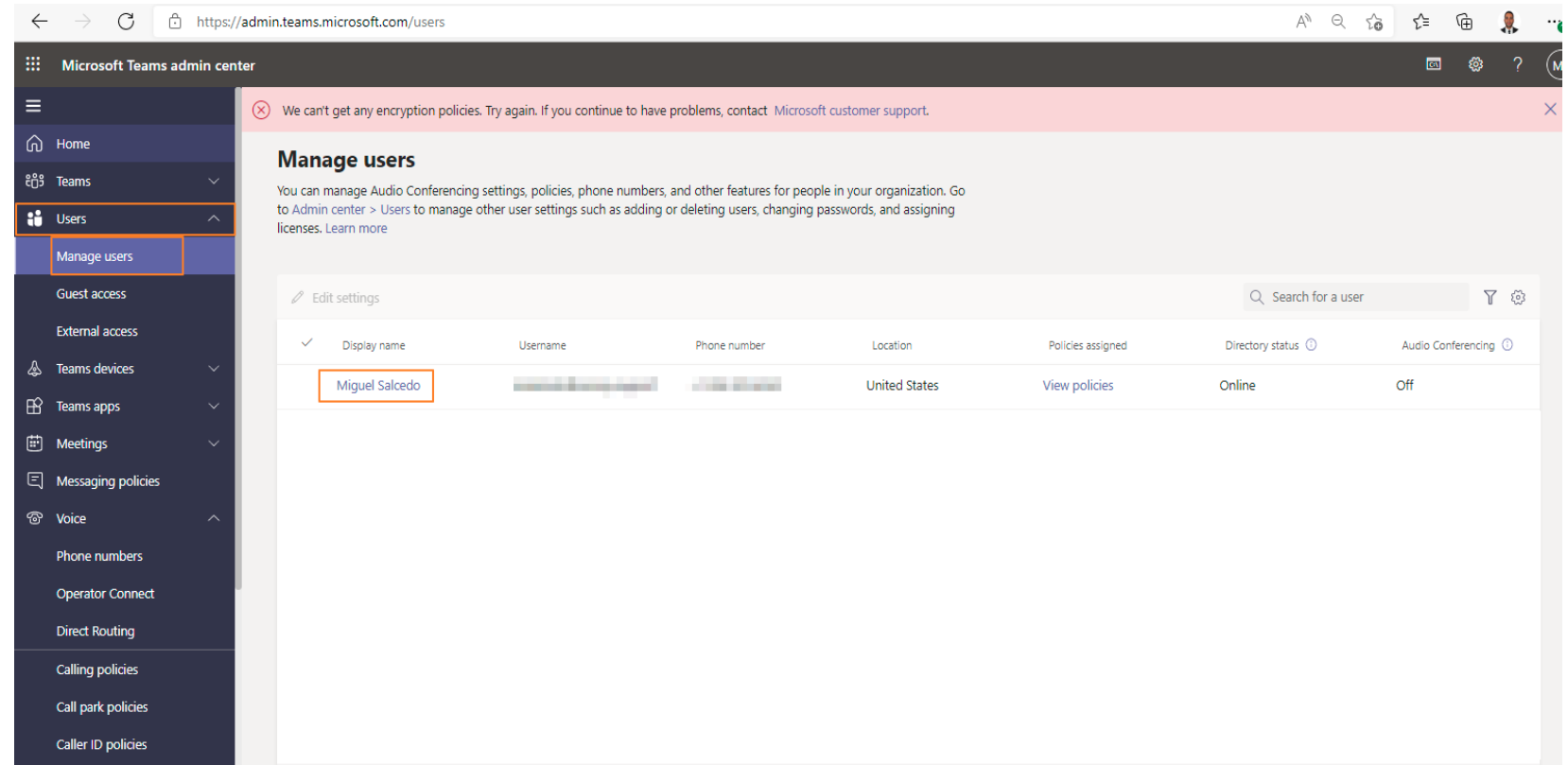
Go to:

<https://admin.teams.microsoft.com>

Users -> Manage Users

Click User -> Policies -> Edit -> Change Voice Routing policy to new Voice Route policy created on previous step.

Add new Voice Route Policy - Assign a new PSTN usage record to it. (This usage record will be used when we proceed to create the Voice Route later on)



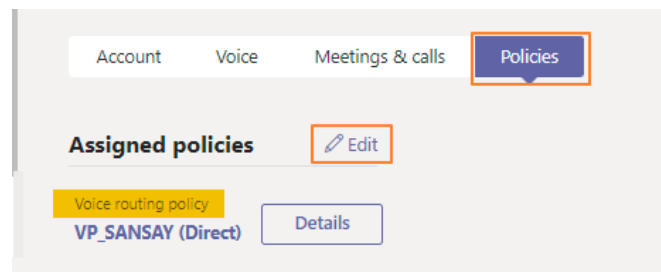
Microsoft Teams admin center

Manage users

You can manage Audio Conferencing settings, policies, phone numbers, and other features for people in your organization. Go to Admin center > Users to manage other user settings such as adding or deleting users, changing passwords, and assigning licenses. [Learn more](#)

Edit settings

Display name	Username	Phone number	Location	Policies assigned	Directory status	Audio Conferencing
Miguel Salcedo	[REDACTED]	[REDACTED]	United States	View policies	Online	Off



Account Voice Meetings & calls Policies

Assigned policies [Edit](#)

Voice routing policy
VP_SANSAY (Direct) [Details](#)

PowerShell Command

```
$USER = "msalcedo@sansay.support"  
$VoicePolicy = "VP_SANSAY"  
Grant-CsOnlineVoiceRoutingPolicy -Identity $USER -PolicyName $VoicePolicy
```

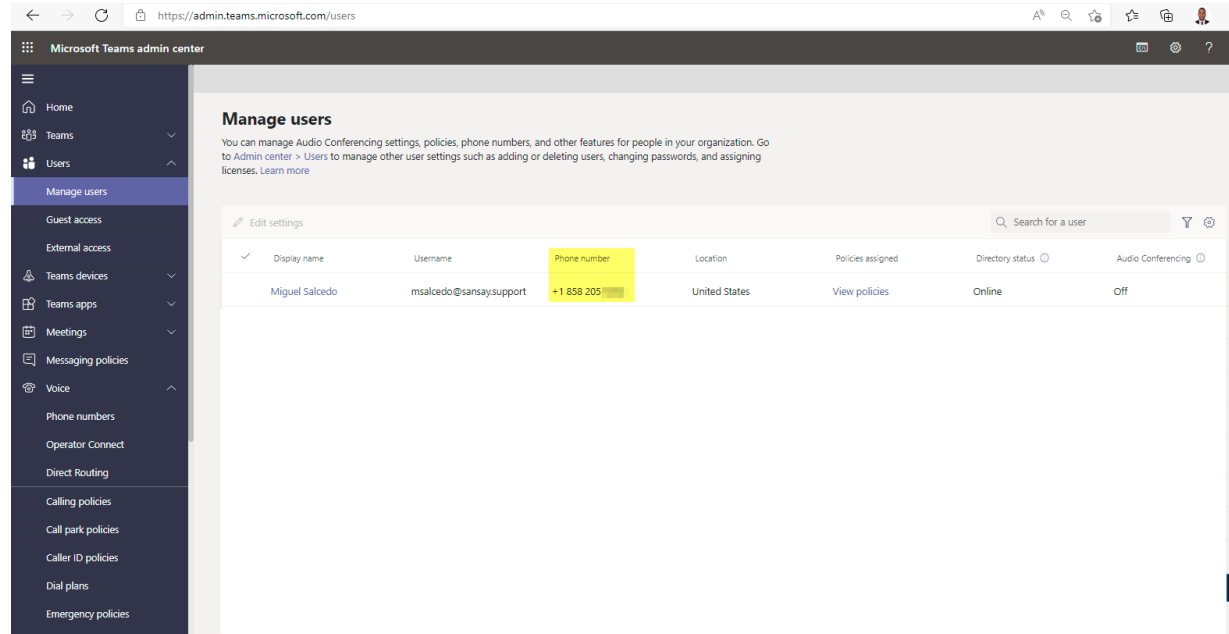

MS Teams Configuration

Step 8:
Assign a DID to the user

This action must be executed through Microsoft PowerShell (check how to connect at the end of the slides)

Connect to PowerShell

Execute Set-CsUser command to assign DID and enable EnterpriseVoice to user



```
Set-CsUser -Identity msalcedo@sansay.support -EnterpriseVoiceEnabled $true -OnPremLineURI tel:+1858205XXXX
```

or

```
Set-CsPhoneNumberAssignment -Identity msalcedo@sansay.support -EnterpriseVoiceEnabled $true -PhoneNumber tel:+1858205XXXX -PhoneNumberType DirectRouting
```



The image shows how it should look after command execution. Please notice Microsoft can take some minutes to update info.

MS Teams Configuration

NEW USER SETTING CONSIDERATIONS

Steps from 1 to 6 are required only once per Organization. Once this configuration is done, you don't need to redo the configuration.

Voice Routes can be reused across all the existing users within the Organization.

For every new user where Direct Routing will be enabled only steps 6 and 7 must be run.

MS Teams Configuration

Using the following commands, you can review Microsoft existing configuration:

VALIDATION COMMANDS:

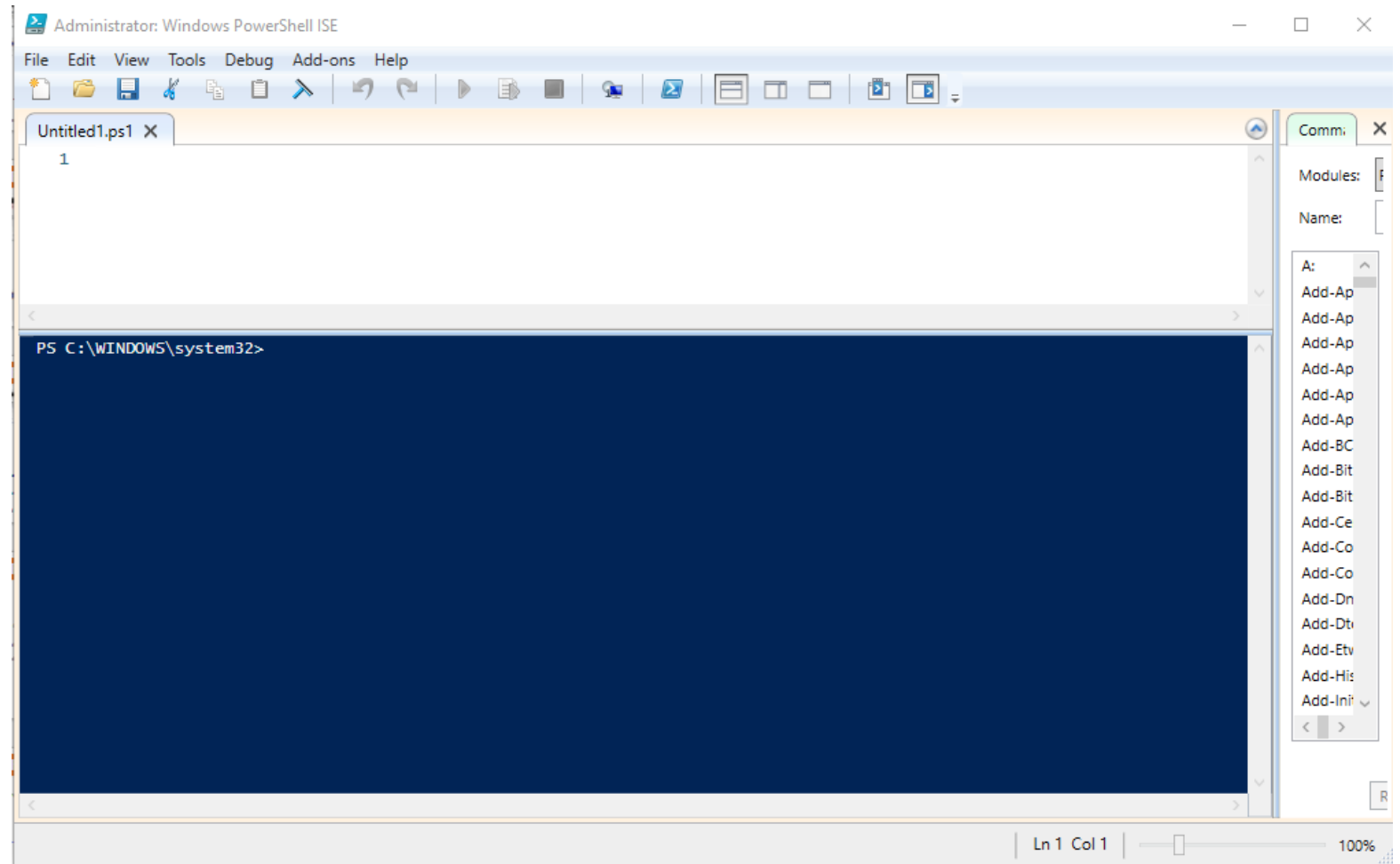
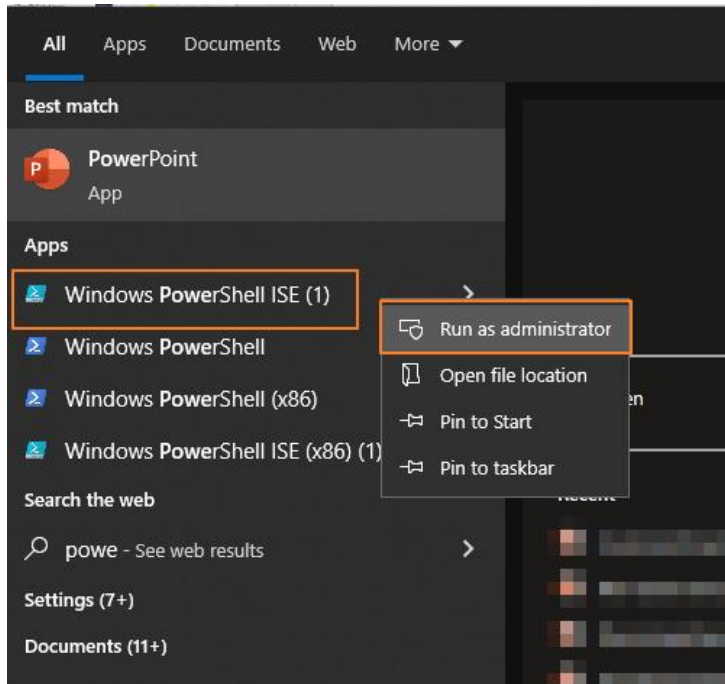
```
Get-CsOnlinePstnUsage  
Get-CsOnlineVoiceRoutingPolicy  
Get-CsOnlineVoiceRoute  
Get-CsOnlineUser "user@domain" | select EnterpriseVoiceEnabled,HostedVoiceMail,OnPremLineURI,OnlineVoiceRoutingPolicy
```

Microsoft PowerShell

To interact with Microsoft Teams using Microsoft PowerShell you will need to install MicrosoftTeams module first.

Step 1:

Open Windows PowerShell ISE with Administrative Privileges.

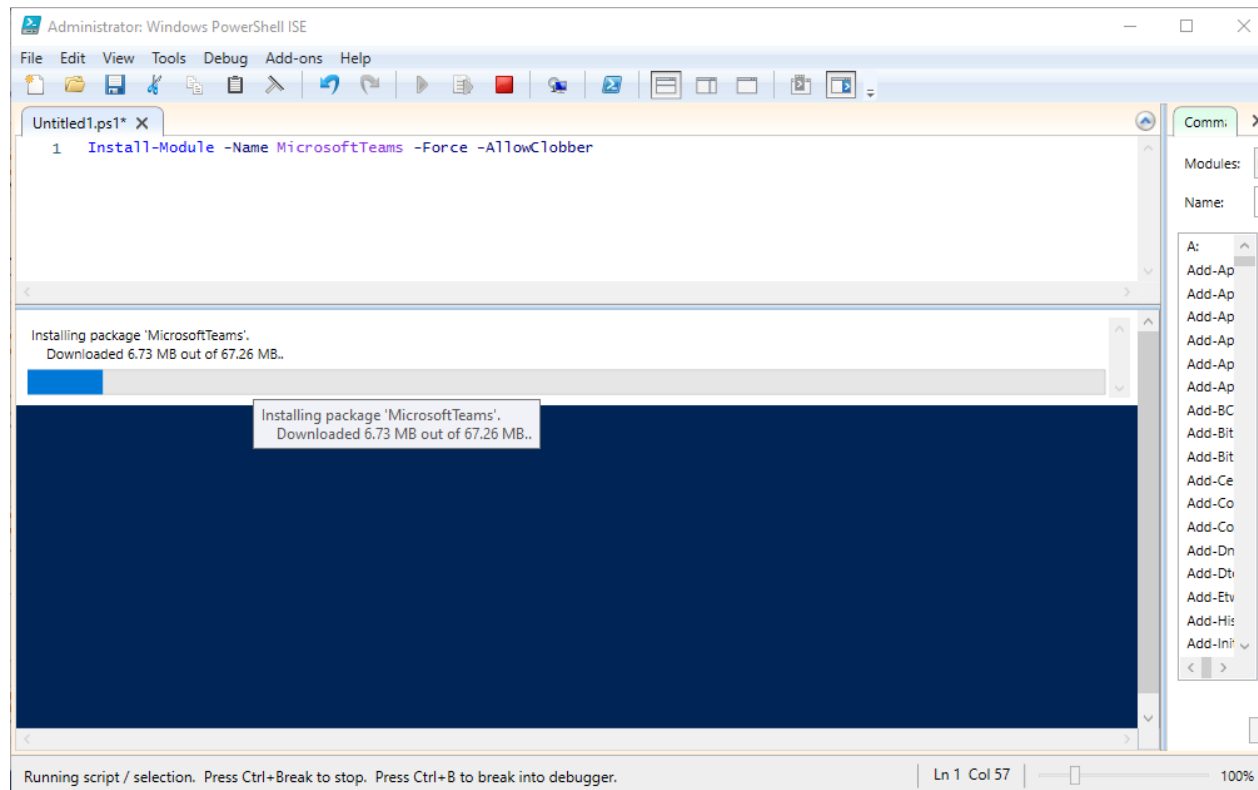


Microsoft PowerShell

Step 2:

Run the following command to install Microsoft Teams Module

```
Install-Module -Name MicrosoftTeams -Force -AllowClobber
```



Microsoft PowerShell

Step 3:
Connect to your Tenant using MS Teams admin user credentials

Connect-MicrosoftTeams

