Connecting VoxSBC to Microsoft Teams Direct Routing Enterprise Model

Version 1.0

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1. Introduction

This document describes how to connect Microsoft Teams to Voxtelesys using our cloud based Session Border Controller, VoxSBC. This document is intended for IT or telephony professionals.

1.1 About Teams Direct Routing

Microsoft Teams Direct Routing lets you connect a Session Border Controller (SBC) to Microsoft Phone System. This capability allows for interconnection to the Public Switched Telephone Network (PSTN) through virtually any telephony trunk.

By using Direct Routing you are able to use the carrier of your choice and keep your existing phone numbers without the need to port the numbers to Microsoft or purchase new numbers from Microsoft. You will also save on costs associated with Microsoft's expensive Calling Plans, where you pay a per user licensing fee for both domestic and international calling and do not get unlimited minutes.

1.2. About VoxSBC

VoxSBC is a cloud based switching infrastructure that offers SBC grade functionality with little to no configuration requirements. VoxSBC eliminates any licensing fees, hardware or hosting costs, support contracts, and saves you from configuration headaches associated with traditional SBCs. Furthermore, VoxSBC integrates directly to Microsoft Teams, 3CX, and other industry leading phone systems giving you the capability to interconnect virtually any phone system.
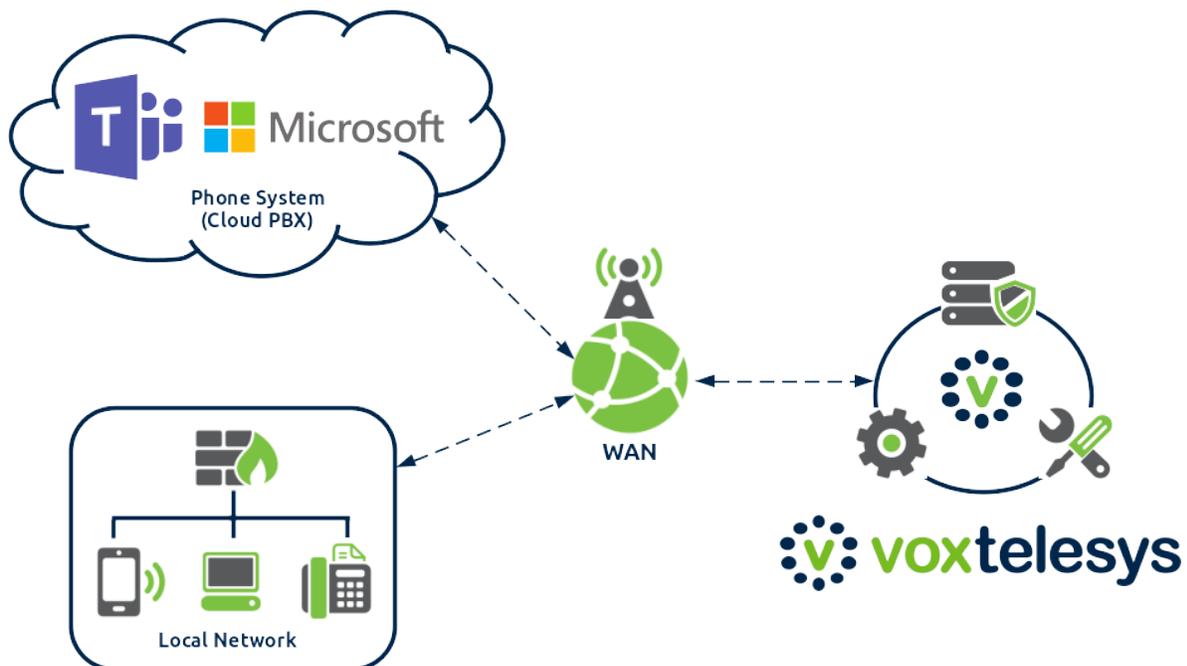
2. Configuring Microsoft Teams

This section demonstrates how to configure Microsoft Teams for Direct Routing.

2.1 Prerequisites

Before you begin the Microsoft Teams configuration, you will need to obtain a valid domain from Voxtelesys by contacting our support team. The provided domain will match the ***.sip.voxtelesys.net** SAN.

2.2 Domain Setup

To utilize the provided Voxtelesys domain in Microsoft Teams, you will need to register the domain to your Microsoft account. To do so, you will need to sign in to the Microsoft 365 admin center as a Global Administrator. To validate the role you have, please sign in to the Microsoft 365 admin center (https://portal.office.com), go to **Users** > **Active Users**, and then verify that you have a **Global Admin** role.

Once you have verified your role, you can register your Voxtelesys domain:

1. In the Microsoft 365 admin center, go to **Settings** > **Domains** > **Add domain**.

2. Enter your Voxtelesys domain and click **Use this domain**.

3. To validate the provided domain, you will need to contact our support team with the **TXT value** provided by Microsoft. You may alternatively add the TXT value via our portal (https://portal.voxtelesys.net). After the TXT value has been added to your domain, click **Verify**.

Verify you own this domain

Sign in to your DNS hosting provider and add this record to your example.sip.voxtelesys.net domain.

Don't worry, adding this record won't affect your existing email or other services and it can be safely removed at the end of setup.

Your host is **Your DNS host** ✏

Step-by-step instructions are found here.

TXT record   MX record

TXT name
example.sip (or skip if not supported by provider)

TXT value
MS=ms64975662

TTL
3600 (or your provider default)

[Back]   [Verify]

4. On the next menu, select **I'll add the DNS records myself** and click **Next**.

5. On the next menu, leave all of the check boxes **unchecked**, as your domain will not be utilized for any online services. Click **Next**.

6. Finally, click **Finish** to exit the domain setup wizard.

2.3 Domain Activation

After you register your domain name, you will need to activate it by adding at least one user and assigning a SIP address with the FQDN portion of the SIP address matching your Voxtelesys domain.

You can do this by creating a new user under your Voxtelesys domain:

1. In the Microsoft 365 admin center, go to **Users** > **Active users** > **Add a user**.

2. Enter the required information for the new user, making sure to select your Voxtelesys domain. Click **Next**.

3. Assign the required licensing to the user. The user will require at least Office 365 E1 + Microsoft 365 Phone System. You will later be able to remove the licensing after the domain has been activated, if desired. After licensing has been added, click **Next**.

4. In the next menu, click **Next**.

5. Finally, click **Finish adding** to complete the domain activation.

After adding a user to your Voxtelesys domain, the activation process usually take 5-10 minutes for Microsoft to complete.

You can validate that the domain has been activated via Microsoft PowerShell:

1. Open a new PowerShell window.

2. Check if a Registrar pool has been assigned to your newly created SBC user by executing the **Get-CsOnlineUser** command. When the user has been activated you will see populated data in the RegistrarPool output.

```
PS C:\Windows\system32> Get-CsOnlineUser -Identity "sbc02@          .sip.voxtelesys.net" | fl RegistrarPool

RegistrarPool : sippoolwu0an103.infra.lync.com
```

Once you have validated that Microsoft has activated your Voxtelesys domain, you may now remove any licensing that was added for activation purposes.

2.4 Direct Routing Configuration

The last step in the Microsoft configuration is to configure direct routing to use VoxSBC. You will need to use PowerShell for this step, as Microsoft currently does not support creating voice routes for carrier managed SBCs via their graphical interface.

Create a voice route for your Voxtelesys domain:

1. Open a new PowerShell window.

2. Add a voice route by executing the **New-CsOnlineVoiceRoute** command. You can either specify a PSTN usage record with the *-OnlinePstnUsage* property, or add a PSTN usage record later via the Microsoft Teams admin center.

```
PS C:\Windows\system32> New-CsOnlineVoiceRoute -Identity "VoxSBC" -NumberPattern ".*" -OnlinePstnGatewayList          .sip.voxtelesys.net
WARNING: No PSTN usage specified. Users granted this voice policy will not be able to make outbound PSTN calls.


Identity             : VoxSBC
Priority             : 2
Description          :
NumberPattern        : .*
OnlinePstnUsages     : {}
OnlinePstnGatewayList : {          .sip.voxtelesys.net}
Name                 : VoxSBC
```