# Configure Microsoft Teams

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## Microsoft Teams Direct Routing Configuration

Consult Microsoft documentation for detailed information on Direct Routing interface configuration guidelines, including the RFC standards and the syntax of SIP messages.

## Obtain IP Address and FQDN

Requirements for configuring the SBC in support of Teams Direct Routing include:

**Table 1:** SBC Requirements

| Requirement | How it is used |
|---|---|
| **Public IP address of NAT device (must be Static)*** <br><br> **Private IP address of the SBC** | Required for SBC Behind the NAT deployment. |
| **Public IP address of SBC** | Required for SBC with Public IP deployment. |
| **Public FQDN** | The Public FQDN must point to the Public IP Address. |

*NAT translates a public IP address to a Private IP address.

### Domain Name

For the SBC to pair with Microsoft Teams, the SBC FQDN domain name must match a name registered in both the **Domains** and **DomainUrlMap** fields of the Tenant. Verify that the correct domain name is configured for the Tenant as follows:

1. On the Microsoft Teams Tenant side, execute **Get-CsTenant**.
2. Review the output.
3. Verify that the Domain Name configured is listed in the **Domains** and **DomainUrlMap** attributes for the Tenant. If the Domain Name is incorrect or missing, the SBC will not pair with Microsoft Teams.

Users may be from any SIP domain registered for the tenant. For example, you can configure user **user@example.com** with the SBC FQDN name **sbc2.examplevoice.com**, as long as both names are registered for the tenant.

**Table 2:** Domain Name Examples

| Domain Name | Use for SBC FQDN | FQDN names - Examples | IPv4 Address |
|---|---|---|---|
| rbbn.com | ✅ | Valid names: <br> sbc1.rbbn.com | 203.0.113.100 |

| rbbnvoice.com | ✅ | Valid names:<br><br>• sbc2.rbbnvoice.com<br>• emea.rbbnvoice.com<br>• apac.rbbnvoice.com<br><br>Invalid name:<br><br>• sbc2.emea.rbbnvoice.com<br><br>(Requires registering domain name **emea.rbbnvoice.com** in "Domains" first) | - |

**Figure 1:** Configure Domain Names - Example
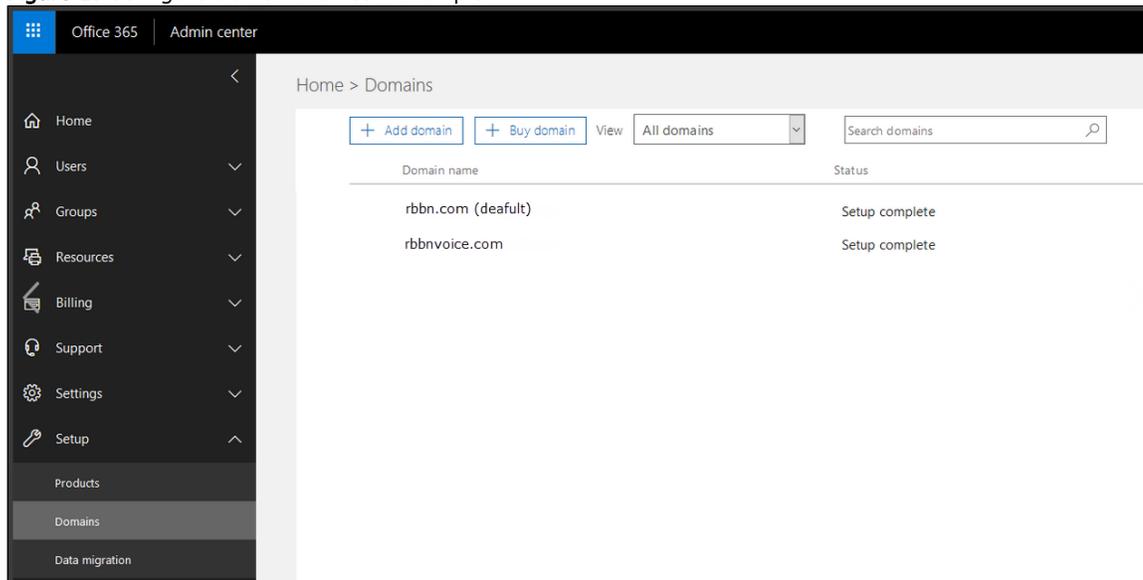


# Obtain a Certificate

## Public Certificate

The Certificate must be issued by one of the supported certification authorities (CA). Wildcard certificates are supported.

- Refer to Microsoft documentation for the supported CAs.
- Refer to Domain Name in Domain Name Examples for certificate common name formats.

## Configure and Generate Certificates on the SBC

Microsoft Teams Direct Routing allows only TLS connections from the SBC for SIP traffic with a certificate signed by one of the trusted certification authorities.

Request a certificate for the SBC External interface and configure it based on the example using GlobalSign as follows:

- Generate a Certificate Signing Request (CSR) and obtain the certificate from a supported Certification Authority.
- Import the Public CA Root/Intermediate Certificate on the SBC.
- Import the Microsoft CA Certificate on the SBC.
- Import the SBC Certificate.

The certificate is obtained through the Certificate Signing Request (instructions below). The Trusted Root and Intermediary Signing Certificates are obtained from your certification authority.

# Configure Office 365 Tenant Voice Routing

A Tenant is used within the Microsoft environment as a single independent enterprise that has subscribed to Office 365 services; through this tenant, administrators can manage projects, users, and roles. Access the Tenant configuration and configure as detailed below. For details on accessing the Tenant, refer to Microsoft Teams Documentation.

1. Create Online PSTN Gateway that points to the SBC:

a. Enter the **SBC FQDN** (find example below - sbc1.rbbn.com). The FQDN must be configured for the Tenant in both the **Domains** and the **DomainUrlMap** fields.
b. Enter the **SBC SIP Port** (find example below - SipPort5061).

```
New-CsOnlinePSTNGateway -Fqdn sbc1.rbbn.com -SipSignallingPort SipPort5061
-MaxConcurrentSessions <Max Concurrent Session which SBC capable handling> -Enabled
$true
```

2. Configure Teams usage for the user:
    a. Enter the User Identity (find example below - user1@domain.com)

```
Get-CsOnlineUser -Identity user1@domain.com Set-CsUser -Identity user1@domain.com -
EnterpriseVoiceEnabled $true -HostedVoiceMail $true -OnPremLineURI tel:+10001001008


Grant-CsOnlineVoiceRoutingPolicy -PolicyName "GeneralVRP" -Identity user1@domain.com


Grant-CsTeamsCallingPolicy -PolicyName AllowCalling -Identity user1@domain.com


Grant-CsTeamsUpgradePolicy -PolicyName UpgradeToTeams -Identity user1@domain.com
```