



MS TEAMS CONNECTOR

Self-Deployment Process

Quick Reference Guide

MOMENTUM

T E L E C O M

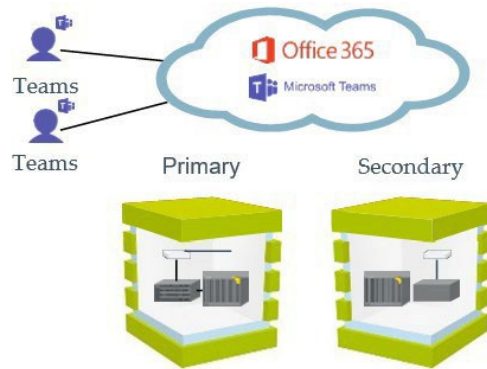
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Overview

Momentum Telecom offers integrations of MS Teams™ with our UCaaS phone system that can be completed quite quickly. This document provides an *overview* of the MS Teams customer or third-party vendor task requirements in preparation for deployment, options for completing the deployment process, and offers useful setup and management task instructions.

MOMENTUM WITH MICROSOFT TEAMS

Momentum’s unique architecture allows you to take advantage of your Microsoft Teams *and* fully integrate it into the Momentum voice platform so that your users get the amazing collaborative benefits of Microsoft Teams, plus the UC Enterprise features that just are not available with Microsoft Teams alone. These premium UCaaS products include applications for Call Centers, Call Recording, Call Reporting, and much more, providing a complete solution that really works for you.

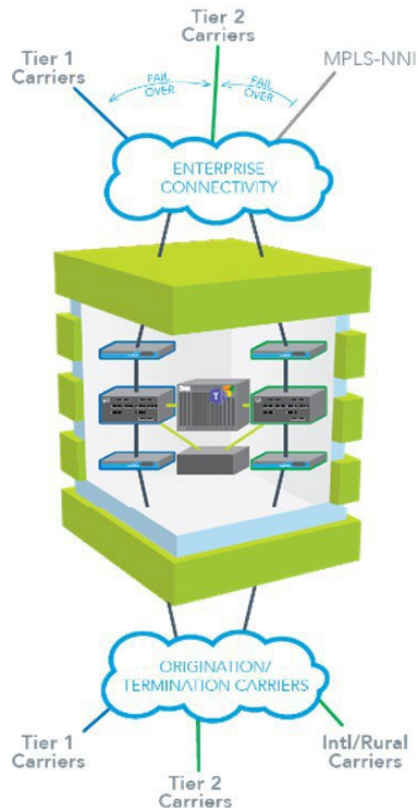


Momentum’s Philadelphia Data Center

Momentum’s Atlanta Data Center

MOMENTUM’S REDUNDANT NETWORK

Momentum’s redundant, high availability, multi-tenant infrastructure offers the secure and flexible solution your business requires... It is next level + reliability.



Deployment Options

Momentum Telecom offers two (2) options for MS Teams Deployments:

Option 1. Integrated Self-Service Deployment

Customers have the option to choose the integrated self-service deployment process where the customer's staff completes all required license procurement, setup, and assignment preparation tasks (reference the [Deployment Steps](#)), provides the Momentum Telecom Implementation Project Manager with Administrator level access credentials and the information needed to turn up the tenant and complete the back-end preparations that will allow the customer's MS Office 365/MS Teams Administrators to perform the remaining setup, scripting, and management tasks for Teams connector deployment. Momentum provides some guidance through the process from a Project Manager, and the task instructions referenced below in the Deployment Steps section if performing tasks manually.

Option 2. Momentum Professional Services Assisted Deployment

This option is perfect for customers who wish to have assistance from Momentum Telecom Professionals for the final PowerShell scripting tasks required to complete the call routing deployment tasks and then the customer's Teams Admin will take over management of related Teams instance maintenance tasks for users once it is deployed. When this option is purchased, customers may take advantage of Momentum's experts for assistance in completing the **final scripting steps to deploy. The customer first completes all required license procurement, SBC setup, and user assignment preparation tasks in their MS Teams Portal for their account, and provides the information needed to turn up the tenant along with the Administrator-level credentials for access to their Microsoft Office 365 (and related customer accounts and services) to the Momentum Telecom Professionals who will then ensure work is completed for the remaining deployment scripting tasks.

(Additional Fees Apply)

After deployment is completed (using either deployment option), the customer's MS Teams Admin will then take over maintenance and management of their MS Teams users and any MS Teams services the organization elects to use.

* The tasks and deployment options are subject to change.

** Please note that Momentum Telecom is not responsible for the provisioning or setup of Microsoft Teams-based services and features such as MS Teams Hunt Groups, MS Teams Auto Attendants, or MS Teams Calling Queues. [Visit this Helpful Link](#).

Deployment Prep

Here are some links to helpful assessment tools that will help to determine how well MS Teams will work in your environment:



[Microsoft Teams Network Assessment Tool](#)

[Microsoft 365 Network Connectivity Test](#)

Ref: [Related Resources](#)

Deployment Steps

This section covers the basic steps, useful/relevant information, licensing requirement options, and the access required to set up and manage deployment with the MS Teams connector:

Basic Deployment Steps	Customer's Tasks	
	Option 1 Self-Service Deploy	Option 2 Assisted Deploy
Procure All Needed MS Teams User Licenses for your company (ref. license requirements)	✓	✓
Setup O365 SBC Domains and Validate Domain Ownership	✓	✓
Create O365 Temporary Users	✓	✓
Provide Admin-level Access Credentials to Momentum PM for O365 account	✓	✓
Set up Derived Routing (PowerShell)	✓	
Enable Direct Routing for User/Services (PowerShell)	✓	

1. Procure and Assign Proper Office 365 User Licenses

a. The **customer** must purchase and assign all needed Office 365 user licenses and update their Momentum Telecom contact when complete. This step is required to be completed prior to enabling Derived Routing.

The customer must procure one or more of the following O365 license levels for each user in place to successfully enable the MS Teams Connector with Derived Routing.

- ❖ Microsoft 365 Business Basic + Teams Phone Standard
- ❖ Microsoft 365 Business Standard + Teams Phone Standard
- ❖ Microsoft 365 Business Premium + Teams Phone Standard
- ❖ Microsoft Apps for business + Teams Phone Standard
- ❖ Microsoft Apps for enterprise + Teams Phone Standard
- ❖ Microsoft 365 F1 + Teams Phone Standard
- ❖ Office 365 F1 + Teams Phone Standard
- ❖ Microsoft 365 and Office 365 Education A1 or A3 + Teams Phone Standard
- ❖ Microsoft 365 Nonprofit Business Basic + Teams Phone Standard
- ❖ Microsoft 365 Nonprofit Business Standard + Teams Phone Standard

The following licenses may be combined with either Teams Phone Standard or Phone System Licensing:

- ❖ Microsoft 365 and Office 365 Nonprofit E1, E3
- ❖ Office 365 E1
- ❖ Office 365 E3
- ❖ O365 E5 or A5 Licensing is a stand-alone license that is Routing ready. (No Teams Phone Standard add-on license needed)

Note: All Microsoft licenses must be purchased by the customer through a certified Microsoft CSP.

Existing Business Voice customers will be able to continue using their Business Voice licenses until the date their subscription expires.

For additional licensing resources and further details on the Teams Phone Standard please visit this [Helpful Link](#).

b. Notify your Momentum contact/PM when all user licenses for Teams have been purchased and assigned.

2. Set Up Office 365 SBC Domains

Task Time: +/- 60 minutes. Customer to add two (2) domains to their Office 365 Tenant and validate once Momentum notifies the system is ready. Momentum will use these domains as Fully Qualified Domain Names (FQDNs) for the Primary and Secondary SBCs that must be implemented.

Important Note: Customer MUST inform Momentum of any existing SBCs that could interfere and their current active/inactive status as those may affect the ability to enable the new Primary and Secondary SBCs that are required.

- a. Customer must use the O365 **Add New Domain** setup wizard to add the two domains to their Office 365 Tenant.

The following Domain information format must be implemented:

- **Primary SBC domain:** [RPX_ID].atl01.teams.mymtm.us
 - **Secondary SBC domain:** [RPX_ID].phl02.teams.mymtm.us
- Example: 308766235.atl01.teams.mymtm.us

- b. Gather the TXT Record and TXT DNS Record Value to provide to Momentum.

Example: **TXT Record:** 308766235-ATL01

TXT DNS Record Value: MS=ms57865131

- c. Provide Momentum with the created DNS *subdomains* for the primary and secondary SBCs and the TXT DNS records. Momentum will setup the tenant and pair the primary and secondary SBCs to the Tenant and the DNS subdomains. Reference the information at this [Helpful Link](#)
- d. When Momentum provides the update, return to the **Add New Domain** setup wizard and **Validate** domain ownership.

3. Create Office 365 Temporary Users

Task Time: +/- 60 minutes. Once the setup for the Domains and Subdomains is completed by the Customer and Momentum provides notification that the Tenant and FQDNs have been created, the customer must create temporary users on each domain utilizing the domain as the host portion of their username:

- a. Create One (1) USER on the Office 365 account with Primary Domain as the host portion of the username and a valid license assignment.

Example: tempuser1@308766235.atl01.teams.mymtm.us

- b. Create One (1) USER on the Office 365 account with Secondary Domain as the host portion of their username and a valid license assignment.

Example: tempuser2@308766236.phl02.teams.mymtm.us

Note: These temporary licenses can be unassigned or reassigned AFTER both SBCs are set up as gateways for Derived Routing.

- c. Notify your Momentum Telecom contact/PM when complete.

At this time *Deployment Option 2* customers must also provide the Office 365 Administrator-level account access for *MS Teams (Service Admin)* and *Skype for Business (Admin)* to their Momentum Telecom contact. Note: These credentials are secured.

WAIT 24 HOURS FOR REPLICATION ACROSS THE SYSTEM

The gateways for Derived Routing cannot be created until the temp users have been created and replication is completed.

For Option 1 Integrated Self-Service Deployments, the customer will perform steps 4 - 7.

4. Set Up Call Routing

Task Time: +/- 60 minutes. Use the following instructions and script examples to perform necessary tasks for Derived Routing deployment. Note: Items highlighted in red within the example scripts identify variables that (in most cases) will be replaced by customer-specific details. Should an error occur, please communicate with your Momentum contact and every effort will be made to assist.

- a. For customer that are new to Microsoft Teams, please download and Install the Teams PowerShell module from:

<https://docs.microsoft.com/en-us/microsoftteams/teams-powershell-install>

For customers migrating from Skype for Business Online Connector to the Teams PowerShell module please download and install using this link: <https://docs.microsoft.com/en-us/microsoftteams/teams-powershell-move-from-sfbo>

- b. Connect to Skype for Business Online using PowerShell.

Regular Deployment:

```
Import-Module MicrosoftTeams
$credential = Get-Credential
$Connect-MicrosoftTeams -Credential $credential -OverrideAdminDomain "customerDomain.onmicrosoft.com" Import-PSSession
$sfbSession -AllowClobber
Import-Module MicrosoftTeams
$sfbSession = Connect-MicrosoftTeams
Connect-MicrosoftTeams -Credential $credential
```

Using Two-Factor Authentication:

```
Import-Module MicrosoftTeams
$sfbSession = Connect-MicrosoftTeams
Connect-MicrosoftTeams -Credential $credential
```

For Hybrid Deployment:

Please use the **-OverrideAdminDomain** parameter with the default domain that was included with your Office 365 subscription.

```
Import-Module MicrosoftTeams
$credential = Get-Credential
$sfbSession = Connect-MicrosoftTeams -Credential $credential -OverrideAdminDomain"customerDomain.onmicrosoft.com"
Import-PSSession $sfbSession -AllowClobber
```

- c. Create PSTN Usage:

```
Set-CsOnlinePstnUsage -Identity 'Momentum_Global' -Usage @{Add="Global"}
```

- d. Create Primary route to SBC in ATL and assign it to 'Momentum-Global' PSTN Usage:

```
New-CsOnlineVoiceRoute -Identity "Route_Momentum_ATL" -NumberPattern "." -OnlinePstnGatewayList 308766235-
atl01.teams.myntm.us -Priority 1 -OnlinePstnUsages "Momentum-Global"
```

- e. Create Secondary route to SBC in PHL and assign it to 'Momentum-Global' PSTN Usage:

```
New-CsOnlineVoiceRoute -Identity "Route_Momentum_PHL" -NumberPattern "." -OnlinePstnGatewayList 308766235-
phl02.teams.myntm.us Priority 2 -OnlinePstnUsages "Momentum-Global"
```

- f. Create Voice Routing policy and assign it to 'OnlinePstnUsage':

```
New-CsOnlineVoiceRoutingPolicy "Momentum_VoicePolicy" -OnlinePstnUsage' "Momentum_Global"
```

Note: Please replace the RPX ID (**1234567890**) in the following script examples with the actual RPX ID

5. Enable Direct Routing for Users

- Use PowerShell to connect to Skype for Business Online.
- Configure user's phone number and enable enterprise voice and voicemail. Example:

```
Set-CsPhoneNumberAssignment -Identity adamfowler@contoso.com -PhoneNumber +18005551212 -PhoneNumberType DirectRouting
```

- Assign the voice routing policy to the user.

```
Set-CsPhoneNumberAssignment -Identity "username" -EnterpriseVoiceEnabled $true
```

6. Enable International Dialing for Users

Complete the following steps to set up International dialing rules for users:

- Use PowerShell to connect to Skype for Business Online.
- Create the international dialing translation rule:

```
New-CsTeamsTranslationRule -Identity 'Momentum_International' -Pattern '^+((?!1)[0-9]\d*)$' -Translation '011$1'
```

- Assign the rule to the Momentum gateways:

```
Set-CsOnlinePSTNGateway -Identity '1234567890-atl01.teams.mytm.us' -OutboundPSTNNumberTranslationRules 'Momentum_International', 'StripPlus1'
```

```
Set-CsOnlinePSTNGateway -Identity '1234567890-phl01.teams.mytm.us' - OutboundPSTNNumberTranslationRules 'Momentum_International', 'StripPlus1'
```

- Run a quick check on the gateway configurations to ensure the rules are assigned correctly to "OutboundPSTNNumberTranslationRules" for both:
These changes may take up to 48 hours to propagate.

```
Get-CsOnlinePSTNGateway -Identity '1234567890-atl01.teams.mytm.us' Get-CsOnlinePSTNGateway - Identity '1234567890-phl02.teams.mytm.us'
```

- To speed up propagation, one can disable and then enable gateways in the Teams Admin Center or via PowerShell using the following commands:

```
Set-CsOnlinePSTNGateway -Identity '1234567890-atl01.teams.mytm.us' -Enabled $false
Set-CsOnlinePSTNGateway -Identity '1234567890-phl02.teams.mytm.us' -Enabled $false
```

Note: As a precaution consider running these 'disable' commands after hours. Live calls will not drop but new calls will be prevented from using the gateway while it is disabled.

Wait a few minutes and then send the following to enable the gateways.

```
Set-CsOnlinePSTNGateway -Identity '1234567890-atl01.teams.mytm.us' -Enabled $true
Set-CsOnlinePSTNGateway -Identity '1234567890-phl02.teams.mytm.us' -Enabled $true
```

Note: Should an error occur, please communicate with your Momentum PM and every effort will be made to assist.

Additional User Management Tasks

To Disable Call Routing for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Disable Enterprise Voice and Voicemail and remove phone number from a user.

```
Set-CsUser -Identity "username" -EnterpriseVoiceEnabled $False -HostedVoiceMail $False -OnPremLineURI $null
```

3. Remove routing policy from the user.

```
Grant-CsOnlineVoiceRoutingPolicy -Identity "username" -PolicyName $null
```

To Modify a Phone Number for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Configure user's phone number and enable enterprise voice and voicemail.

```
Set-CsUser -Identity "username" -OnPremLineURI tel:+1234567890
```

To Remove Int'l Dialing Rules From the Gateways for a User

1. Use PowerShell to connect to Skype for Business Online.
2. Set the Gateways to stop using translation rules for International dialing and/or Extension dialing:

```
Set-CsOnlinePSTNGateway -Identity '1234567890-at101.teams.mytm.us' -OutboundPSTNNumberTranslationRules $null
```

```
Set-CsOnlinePSTNGateway -Identity '1234567890-ph102.teams.mytm.us' -OutboundPSTNNumberTranslationRules $null
```


Related Resources

The following information sources may be useful to Voice Engineers and/or Office 365 (O365) | MS Teams Admins:

Direct Routing Setup

<https://docs.microsoft.com/en-us/microsoftteams/direct-routing-configure>

Cloud Voice in Microsoft Teams

<https://docs.microsoft.com/en-us/microsoftteams/cloud-voice-landing-page>

Media Quality and Network Connectivity Performance

<https://docs.microsoft.com/en-us/SkypeForBusiness/optimizing-your-network/media-quality-and-network-connectivity-performance>

Monitoring and Troubleshooting Direct Routing

<https://docs.microsoft.com/en-us/microsoftteams/direct-routing-monitor-and-troubleshoot>

Office 365 Network Connectivity Principles

<https://docs.microsoft.com/en-us/office365/enterprise/office-365-network-connectivity-principles>

Implement QoS and Monitor Call Quality in Microsoft Teams

<https://docs.microsoft.com/en-us/MicrosoftTeams/monitor-call-quality-qos>

MS Teams Call Analytics and Call Quality Dashboard

<https://docs.microsoft.com/en-us/MicrosoftTeams/difference-between-call-analytics-and-call-quality-dashboard>

MS Teams Auto-Attendant and Call Queue Set Up

<https://docs.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant>

MS Teams PowerShell Move from SFBO

<https://docs.microsoft.com/en-us/microsoftteams/teams-powershell-move-from-sfbo>

Microsoft Diagnostic Media Logs

<https://docs.microsoft.com/en-us/microsoftteams/log-files#media-logs>

Microsoft Teams Network Assessment Tool

<https://docs.microsoft.com/en-us/microsoft-365/enterprise/office-365-network-mac-perf-score?view=o365-worldwide>

Microsoft 365 Network Connectivity Test

<https://connectivity.office.com/>