# Algo IP Devices + Microsoft Teams

**Configuration**Quick Reference



**ALGO** 



## Microsoft Teams Configuration with Algo IP Devices

Algo IP endpoints are certified for native compatibility with the Microsoft Teams SIP Gateway. Applications such as IP paging, emergency alerting, and handsfree visitor communication can be implemented using both Microsoft Teams and Algo IP endpoints.

This SIP registration guide will outline how to integrate Algo IP endpoints with Microsoft Teams.

For additional information on Microsoft SIP registration, see the Microsoft documentation Configure SIP Gateway.

This guide only outlines configuration details for registering Algo IP endpoints to Microsoft Teams. For additional information on device configuration, see the user guide for your specific Algo product.

#### Considerations

In most cases, only one Algo IP endpoint will require a SIP registration to Microsoft Teams. Algo IP endpoints can use multicast to scale the integration to any number and combination of endpoints.

To register an Algo IP Endpoint with Microsoft Teams, there must be an associated Microsoft account. This is typically done with a Shared Device License, although it may instead be associated with a full user license.

Only one Microsoft Teams SIP extension may be registered to any given Algo endpoint using firmware 5.4 or earlier. Devices using firmware 5.5 or later can have more than one account registered.

For applications requiring two-way communication (e.g., an IP intercom deployed for visitor communication and secure door entry), each endpoint will require its own Microsoft Teams Shared Device License.

#### Requirements

The following items are required to register an Algo Device to the Microsoft Teams SIP Gateway:

- Access to Algo's web interface
  - Firmware 5.3.4 or higher
  - Microsoft Teams support must be enabled in the Algo firmware
  - Device certificate installed. See the tab System → About on the device web interface. Any Algo endpoint shipped in 2019 or later will have the certificate installed from the factory. If the certificate is not installed, please contact Algo's support team.
- Microsoft SIP Gateway must be enabled through the Teams Admin Center
- A Microsoft Teams License available in the Teams Admin Center
- Microsoft Teams production environment must support Algo devices

#### Configuration Steps

The steps outlined below imply that the endpoints will be set up for public announcements. However, Algo devices may support different types of extensions, accommodating different applications, such as loud ringing or emergency alerting.

For information on registering different types of extensions to Microsoft Teams, please contact Algo support.



#### Register an Algo IP Endpoint in Microsoft Teams

To register an Algo IP Endpoint to Microsoft Teams, ensure the Microsoft Teams SIP Gateway is enabled. Follow the instructions provided here.

To add a user to the Microsoft 365 Admin Center:

- 1. Go to the Microsoft 365 Admin Center
- 2. Navigate to Users → Active Users.
- 3. Click Add a user and enter the information required under Basics.
- 4. Under Product licenses, assign licenses as required. Typically, only a Teams Shared Device License is required. For more details, refer to the Considerations section above.

- 5. Proceed through the next steps to finish adding the account.
- 6. Verify that the user has been created successfully.

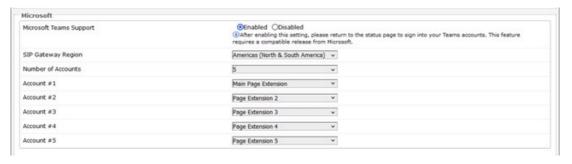


7. Ensure that a DID (phone number) is associated with the recently created account. Further configuration cannot be completed without a valid DID associated with the account.

The configuration on the Microsoft 365 Admin Center is finished.

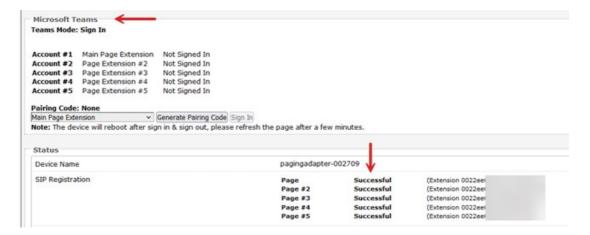
#### Enable Microsoft Teams Support in Algo IP Endpoint

- 1. Go to Advanced Settings → Admin.
- 2. Enable Microsoft Teams Support near the bottom of the page.
- 3. Select the SIP Gateway Region based on the region where the Algo endpoint is deployed.
- 4. Select the Number of Accounts to be registered with the device and where each account should be provisioned to. This is only available for devices with firmware 5.5 or higher.



- 5. Save and reboot if prompted. (devices using firmware 5.4 or lower must reboot). The device reboot may take up to 5 minutes to complete.
- 6. Go to the Status tab on the web interface.

  There will be a Microsoft Teams section and the SIP registration status will show as successful.

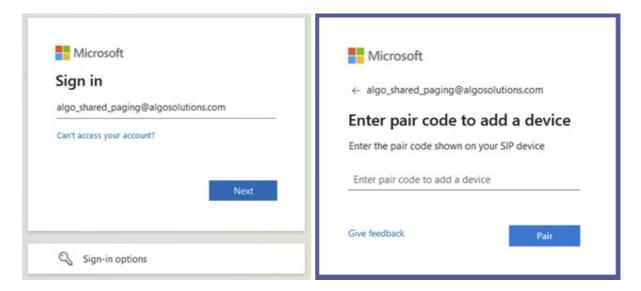


7. To use emergency alert extensions with an account, go to Additional Features → Emergency Alerts and enable the required extension lines.

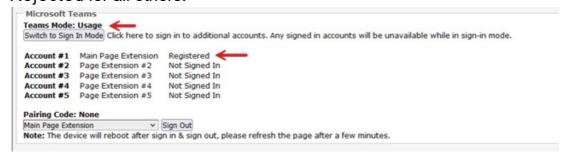
#### Pairing an Algo IP Endpoint with Microsoft Teams

A pairing code will be required to associate the Microsoft Teams account with this endpoint.

- 1. On the Status tab of the Algo web interface, select the account to generate a pairing code for, then click Generate Pairing Code.
- 2. Click Sign In to open a new browser for the Microsoft Login Portal and enter the credentials (email and password) to log in.



- 3. After signing in, enter the pairing code provided on the Algo device web interface. The device will automatically reboot if the sign in is successful. If the pairing is not accepted, regenerate the code and enter again. The pairing code expires after a few minutes. If that happens, a new code may be regenerated by clicking Generate New Pairing Code.
- 4. Wait approximately 2 minutes and then refresh the Algo web interface page. The Microsoft Teams section should now display Registered for the paired account and the Teams Mode will say Usage. The SIP Registration will appear as Successful for the signed-in account and Rejected for all others.



- 5. If registering more than one account, switch the Teams Mode back to Sign In and repeat steps 1 through 4.
- To ensure the successful pairing of the device to Microsoft Teams, call the DID (phone number) associated with the account. In the default settings, the Algo IP endpoint will auto-answer and open a one-way audio path.

refer to the Multicast Guide for more information.

#### **Troubleshooting**

The following sections highlight how to resolve common configuration challenges. Please go through the information carefully and ensure everything is configured according to this guide. If further assistance is required, please contact Algo support.

#### **Provisioning Failure**

Users using firmware 5.4 or earlier will be prompted to reboot their devices after enabling Microsoft Teams. This process takes approximately five minutes. The provisioning process likely failed if the Algo device boots back up in under two minutes.

If this is the case, check the Status tab in the Algo device web interface. If a Microsoft Teams section has not appeared the process failed.

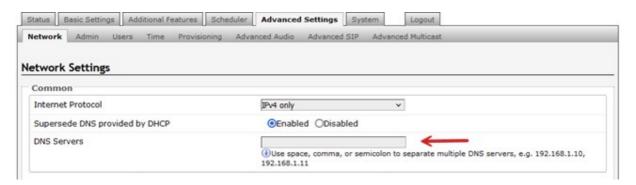
Check the following items to troubleshoot the problem:

- Check the Algo device has access to the internet. If not, it may be due to local network settings. If there are VLANs or subnets, make sure there is external network access to the server the Algo device is deployed to.
- If the Algo device has been configured with a static IP address, ensure a DNS address has been configured. Locate this setting in Advanced Settings à Network tab.
- Make sure the Algo device is not behind a proxy. Ensure that http/s traffic bypasses any corporate http/s proxy.
- Check the firewall rules blocking traffic. Ensure all ports and addresses listed in Microsoft's documentation below are open.
  - https://learn.microsoft.com/en-us/microsoft-365/enterprise/urlsand-ip-address-ranges?view=o365-worldwide

 https://learn.microsoft.com/en-us/microsoftteams/sip-gatewayconfigure

#### Cannot generate a pairing code

If a pairing code cannot be generated or if the Teams section does not show up on the Status page, there may be a problem with DNS. If you configured static network settings under Advanced Settings → Network, make sure a valid DNS server was provided.



#### Device does not reboot after entering the pairing code

An Algo device failing to reboot may be caused by a missing DID (phone number) associated with the Teams account. Please ensure a DID is associated and try again.

### Failure to reboot after entering the pairing code in Microsoft Portal

Please investigate the items below for potential causes:

- The Microsoft SIP Gateway has not been enabled in your Teams Admin Center. See the link below for more information.
  - https://learn.microsoft.com/en-us/microsoftteams/sip-gatewayconfigure
- The Teams user account has no PSTN (DID) assigned. To use the SIP Gateway, Teams users must have a phone number that has PSTN calling enabled.
- Microsoft 365 conditional access policies block the registration request.
   Please refer to the link above for more information.

- Firewall rules blocking traffic. Ensure all ports and addresses listed in Microsoft's documentation below are open.
  - https://learn.microsoft.com/en-us/microsoft-365/enterprise/urls-and-ip-address-ranges?view=o365-worldwide