Microsoft Teams Integration Guide

Yeastar P-Series Cloud Edition

Version: 1.0
Date: 2023-09-07

Contents

# Integrate Yeastar P-Series Cloud Edition with Microsoft Teams

By associating Teams users with SIP extensions of Yeastar P-Series Cloud Edition, the Teams App will work as a softphone that is registered to the PBX. In this way, you can keep your existing phone numbers and SIP devices, make and receive calls directly from the Teams App, and enjoy advanced PBX features including IVR, call queue, call routing, etc.

Background

The integration between Yeastar P-Series Cloud Edition and Microsoft Teams is based on the following test environment:

- The domain name of Yeastar P-Series Cloud Edition is **yeastardocs.cntest.yeastar-cloud.com**.

We provide a diagram to help you understand the integration in a better manner:
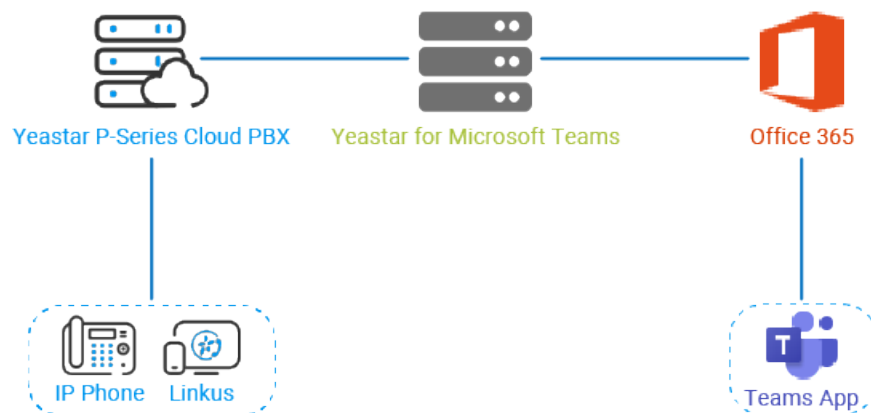
Prerequisites

Microsoft 365

- Get admin access to Microsoft 365 admin center.
- Your Microsoft service must meet the following requirements:

Microsoft 365 version	Requirements
Microsoft 365 Business Basic	Any one of the followings is required: ◦ "Common Area Phone" license ◦ "Phone System" license ◦ "Microsoft 365 Business Voice" add-on **Note:** Not all of them are available in all the countries, buy any one of them according to your country or region.
Microsoft 365 Business Standard	
Microsoft 365 Business Premium	
Office 365 E1	
Office 365 E3	
Microsoft 365 E3	
Office 365 E5	No additional requirements.
Microsoft 365 E5	

Yeastar for Microsoft Teams App

Purchase the [Yeastar for Microsoft Teams](#) license by your Microsoft 365 admin account; Activate the license when you receive an activation email.

Yeastar P-Series Cloud Edition

Get admin access to Yeastar P-Series Cloud Edition.

Microsoft Teams Integration Preparation

Before the integration, you need to create a PBX extension and disable video codecs of the PBX.

Create a SIP extension

1. Log in to PBX web portal, go to **Extension and Trunk > Extension**.
2. Click **Add** and select **Add** to create a SIP extension.
3. In the **User Information** section, configure user information as follows:
   - **First Name**: Enter the user's first name.
   - **Last Name**: Enter the user's last name.
   - **Email Address**: Leave it blank or configure it as needed.
   - **Mobile Number**: Leave it blank or configure it as needed.
   - **User Password**: Retain default value or configure it as needed.

- **User Role**: Retain default value or configure it as needed.

4. In the **Extension Information** section, configure extension information as follows:

   - **Extension Number**: Enter a desired extension number.
   - **Caller ID**: Retain default value or configure it as needed.
   - **Registration Name**: Retain default value or configure it as needed.
   - **Registration Password**: Retain default value or configure it as needed.
   - **Concurrent Registrations**: Select a value from the drop-down list. This option defines how many SIP phones are allowed to register with the extension.

     > **Note:**
     > The maximum number of concurrent registrations is 3.

5. Click **Advanced** tab, unselect the checkbox of **Qualify**.
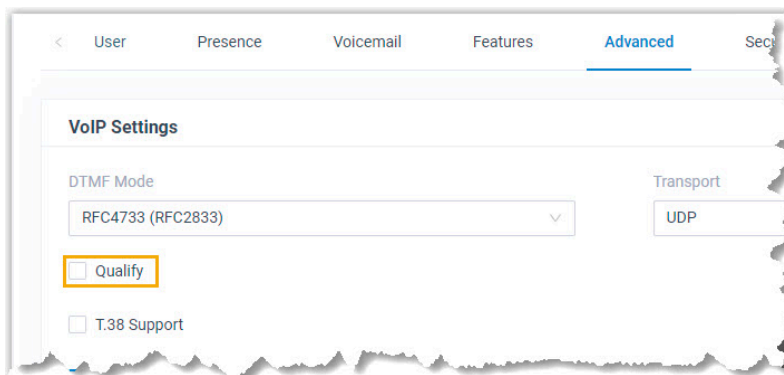
6. Click **Save** and **Apply**.

   > **Note:**
   > The following SIP credentials are required when you configure Teams users on the configuration portal.
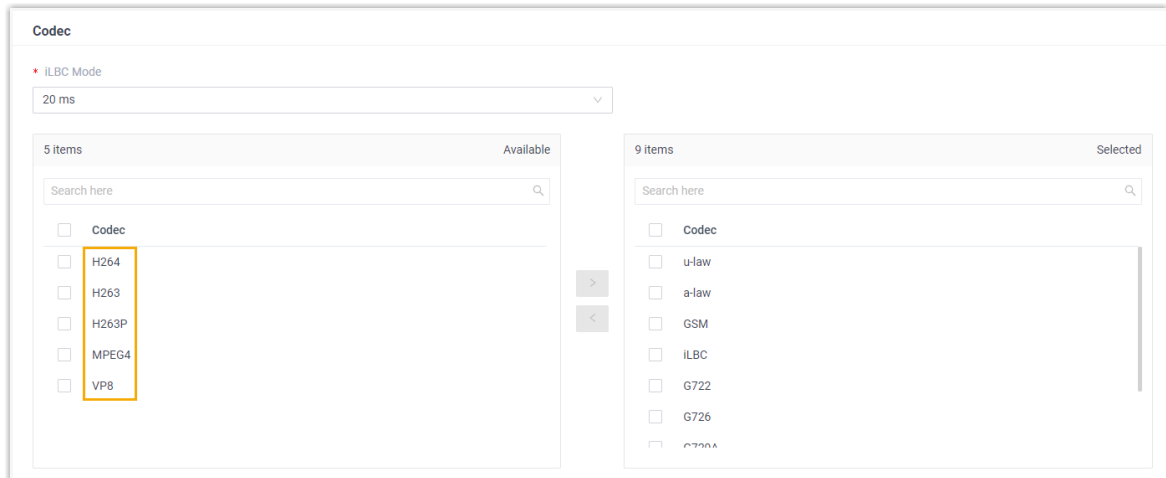   > - Extension number
   > - Registration name
   > - Registration password

Disable video codecs

Disable video codecs of the PBX, or Teams users may fail to receive calls.

1. Log in to PBX web portal, go to **PBX Settings > SIP Settings > Codec**.
2. In the **Codec** section, disable the following codecs:
   - H263

- H263P
- H264
- MPEG4
- VP8

3. Click **Save** and **Apply**.

Integrate Yeastar P-Series Cloud Edition and Microsoft Teams

After the preparation, log in to the [configuration portal](#) by your Microsoft 365 admin account to integrate Yeastar P-Series Cloud Edition and Microsoft Teams.

Step1. Check your tenant

Check if your Microsoft 365 tenant is ready for the integration.

1. On the top navigation bar, click **Getting Started** tab.
2. On the **Prerequisites** page, click **Check My Tenant**.

3. In the pop-up window, select your Microsoft 365 admin account.

   The configuration portal starts checking your Microsoft 365 tenant.

4. If your tenant is ready, click **Next** to set up PBX service.

Step2. Set up PBX service

1. On the **PBX/Trunk** page, click **PBX** tab.
2. Set up PBX service.

- **Start by selecting your PBX from the available templates**: Select **Yeastar Cloud PBX**.
- **Country**: Select your country.
- **SIP Domain**: Enter the domain name of your PBX. In this scenario, enter `yeastardocs.cntest.yeastarcloud.com`.

3. Click **Add PBX**.

   A green checkmark prompting "Service successfully enabled" appears. It automatically enters into **Teams** page to synchronize Yeastar P-Series Cloud Edition with Microsoft 365.

Step3. Synchronize Yeastar P-Series Cloud Edition with Microsoft 365

1. Click **Sync Now - Changes Queued** to synchronize Yeastar P-Series Cloud Edition with Microsoft 365.

It takes several minutes to proceed with the synchronization.

2. After the synchronization completes, click **Next** to associate Teams users with SIP extensions.

Step4. Associate a Microsoft Teams user with a SIP extension

To ensure that users can make and receive calls on Microsoft Teams using the PBX phone service, you need to associate Microsoft Teams users with SIP extensions.

1. On the **Users** page, complete the followings:

- **Select a User**: Select a Teams user from the drop-down list.

> ✏️ **Note:**
> Make sure the selected user has the required licenses of both [Microsoft](#) and [Yeastar for Microsoft Teams](#), or the user can NOT make or receive calls.

- **Phone Number**: Set the user's phone number.
- **SIP Username**: Enter the extension's **Extension Number**.
- **Auth Username**: Enter the extension's **Registration Name**.
- **Password**: Enter the extension's **Registration password**.

2. Click **Add User and Sync**.

A green checkmark prompting "Service user successfully added" appears.

If the user is successfully associated with the PBX, the Registration status shows ●.

User	Service Type	SIP User	Registration	Calls
			All	
▶ Nicholas	🏢 Standard User	2000	●	⬇⬆

Result

After integrating Yeastar P-Series Cloud Edition with Microsoft Teams, Teams users can make and receive internal calls from the PBX extensions.

What to do next

- To allow Teams users to make outbound calls through PBX's trunk, you need to [configure dial plans in Microsoft Teams](#).
- To allow Teams users to receive inbound calls through PBX's trunk, you need to make sure at least an inbound route is configured to reach the extensions that are associated with the Teams users.

Configure Dial Plans in Microsoft Teams

To allow Teams users to make outbound calls through PBX's trunk, you need to set up normalization rules of dial plan in Microsoft teams.

Background information

Microsoft Teams generates a dial plan rule named "Call2Teams" after you integrate Yeastar P-Series Cloud Edition with Microsoft Teams. The default rule with the pattern **^([*\#][*\#\d]+|[1-9]\d{0,5})$** only allows Teams users to dial numbers with maximum 6 digits, and start with digit 1-9.

Normalization rules

Normalization rules define how phone numbers expressed in various formats are to be translated. One or more normalization rules must be assigned to the dial plan and are matched from the top to bottom.

+ Add   ✎ Edit   ↑ Move up   ↓ Move down   🗑 Delete | **1** item   ⚙

	Rank	Name	Description	Pattern	Translation
✓	1	Call2Teams	Call2Teams	^([*\#][*\#\d]+|[1-9]\d{0,...	$1

Procedure

1. Log in to [Microsoft Teams admin center](#).
2. In the left navigation bar, click **Voice > Dial plans**.
3. Click the default dial plan **Global (Org-wide default)**.
4. In the **Normalization rules** section, click **+Add** to add a dial plan rule.
5. On the **Add new rule** page, set the rule.
   a. In the **Name** field, set a name for the rule.
   b. **Optional:** In the **Description** field, add a note to the rule.
   c. Select **Advanced**.
   d. Go to **If condition > The number dialed matches this regular expression**, enter `^(\d*)$`.

      Teams users can make outbound calls to any numbers.
   e. Go to **Then do this > Translate the number based on this regular expression**, enter `$1`, which means no translation, Microsoft Teams will send the dialed number out without any modification.
   f. Go to **Test this rule > Enter a phone number to test**, enter a phone number and click **Test** to test if the number matches the pattern.
   g. Click **Save**.
6. Change the rule's priority.

   > ✎ **Note:**
   > Microsoft Teams traverses the list of normalization rules from the top down, and uses the first rule that matches the dialed number. Move the rule to the top, or users may fail to call out.

   a. In the ✓ column, click the desired rule.
   b. On the menu bar, click **Move up** to move the rule to the top.

c. Click **Save**.

Result

Teams users can dial external numbers according to the dial pattern of PBX's outbound route.

To test phone calls, see Test Phone Calls on Microsoft Teams.

Test Phone Calls on Microsoft Teams

After the integration, you can test phone calls on Microsoft Teams.

Make a call

1. On the left navigation bar, click **Calls**.
2. Click **Make a call**.
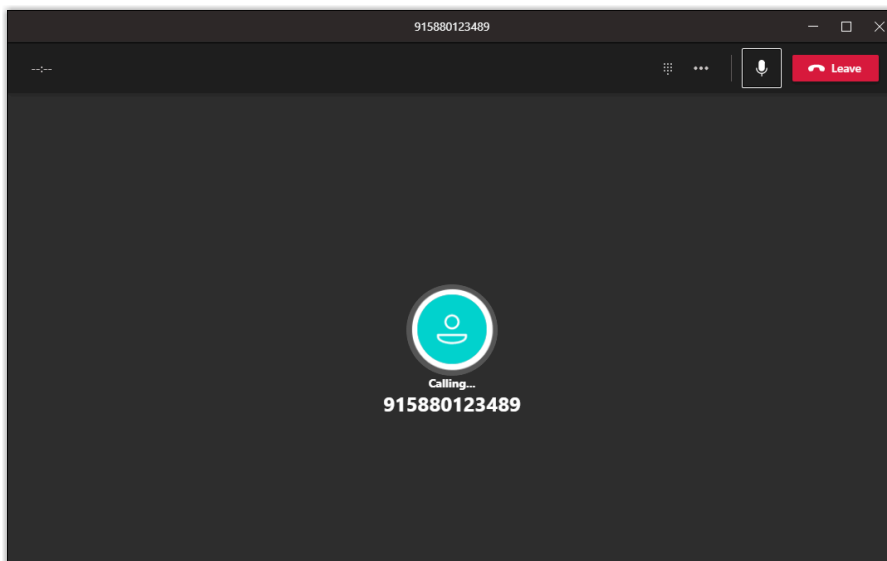3. On the dialpad, enter a desired number.

> ✏️ **Note:**
> Make sure the dialed number matches at least one outbound route on Yeas-
> tar P-Series Cloud Edition. For example, there is an outbound route on the
> PBX as follows. In this case, you need to dial 915880123489 in order to reach
> 15880123489.

Dial Pattern			
Dial Matching Settings			
* Pattern	Strip	Prepend	Operations
9.	1		🗑

4. Click **Call**.

Receive a call

When a call reaches a user's extension number, the user will receive a pop-up notification of an incoming call, and the user can decide whether to answer the call or not.