

Yeastar TA1600/2400/3200 FXS Gateway Integration Guide

Yeastar P-Series Appliance Edition

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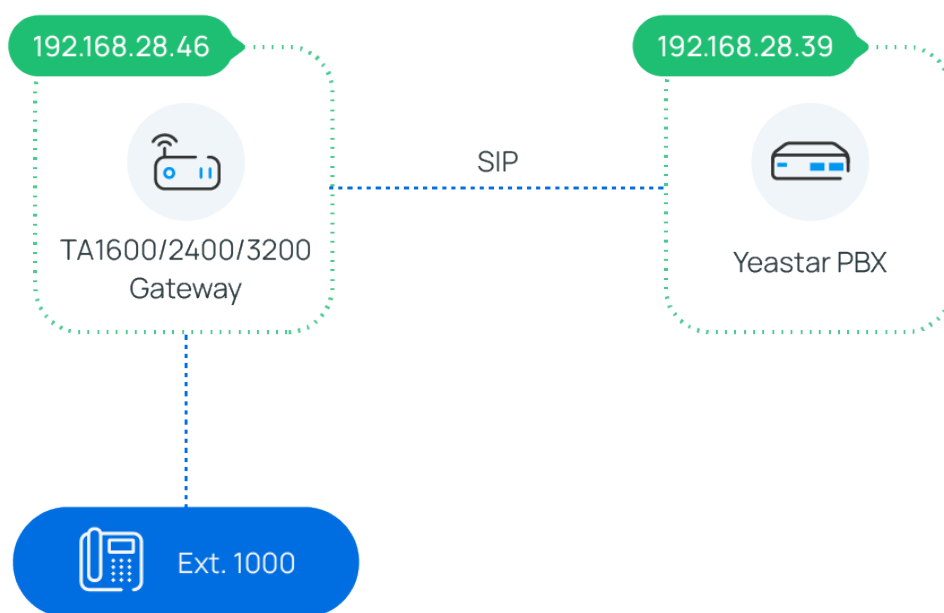
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Yeastar TA1600/2400/3200 FXS Gateway Integration Guide

This guide provides a configuration example to describe how to extend analog phones for Yeastar P-Series PBX System.

Test environment

The instructions provided in this guide are based on the following test environment:



Equipment	Firmware Version	IP Address
Yeastar P550 VoIP PBX	37.12.0.23	192.168.28.39
Yeastar TA1600/2400/3200 FXS Gateway	47.0.0.54	192.168.28.46

Objectives

This guide provides instructions based on the above test environment to help you achieve the following objectives:

- [Connect Yeastar P-Series PBX System and Yeastar TA1600/2400/3200 FXS Gateway](#)
- [Make Outbound Calls from an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway](#)
- [Receive Inbound Calls on an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway](#)

Connect Yeastar P-Series PBX System and Yeastar TA1600/2400/3200 FXS Gateway

This topic describes how to connect Yeastar P-Series PBX System and Yeastar TA1600/2400/3200 FXS gateway, so as to extend analog phones for the PBX.

Procedure

- [Step 1. Create an extension on Yeastar PBX](#)
- [Step 2. Set up a VoIP Server on Yeastar TA1600/2400/3200 FXS gateway](#)
- [Step 3. \(Optional\) Customize a Dial Pattern Template on Yeastar TA1600/2400/3200 FXS gateway](#)
- [Step 4. Register the extension with FXS port on Yeastar TA1600/2400/3200 FXS gateway](#)

Step 1. Create an extension on Yeastar PBX

On Yeastar P-Series PBX System, create an extension for an FXS port on the gateway.

1. Log in to PBX web portal, go to **Extension and Trunk > Extension**.
2. Click **Add** to create an extension. In this example, create extension 1000.

Basic	
Extension Type SIP Extension	
User Information	
First Name 1000	Last Name
Email Address	Mobile Number
* User Password *****	
Job Title	
Extension Information	
* Extension Number 1000	* Caller ID 1000
* Registration Name TE2Cx2H8kk	* Registration Password *****
IP Phone Concurrent Registrations 1	

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

Step 2. Set up a VoIP Server on Yeastar TA1600/2400/3200 FXS gateway

On Yeastar TA1600/2400/3200 FXS gateway, set up Yeastar PBX as VoIP server.

1. Log in to gateway web interface, go to **Gateway > VoIP Settings > VoIP Server Settings**, edit a VoIP Server.
2. In the pop-up window, configure the following settings:

The screenshot shows a configuration window titled "Edit VoIP Server - VoIPServer1". It has two tabs: "General" and "Advanced". The "General" tab is selected. The configuration fields are as follows:

- Server ID: 1
- Server Name: PSeries
- Type: SIP
- Transport: UDP
- Hostname/IP: 192.168.28.39
- Port: 5060
- Domain: 192.168.28.39
- ☐ Enable Outbound Proxy Server
- Failover Hostname/IP:
- Port: 5060
- Register Mode: Port Register

At the bottom, there are "Save" and "Cancel" buttons.

- **Server Name:** Enter a name to help you identify the VoIP Server.
- **Type:** Select **SIP**.
- **Transport:** Select **UDP**.
- **Hostname/IP:** Enter the IP address of your PBX and the SIP registration port.
- **Domain:** Enter the IP address of your PBX.
- **Register Mode:** Select **Port Register**.

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

Step 3. (Optional) Customize a Dial Pattern Template on Yeastar TA1600/2400/3200 FXS gateway

On Yeastar TA1600/2400/3200 FXS gateway, there are default Dial Pattern Templates with the dial pattern set as `.*`, allowing users to dial any number out. If you want to customize the dial pattern, go to **Gateway > VoIP Settings > Dial Pattern Template** to edit a desired template.

In this example, we use "DialPatternTemplate1" and retain the default settings.

Template ID	Name	Dial Patterns
1	Edit Dial Pattern Template - DialPatternTemplate1	X
2	Template ID: 1	
3	Template Name: DialPatternTemplate1	
4	Dial Pattern	
5	Strip	
6	Prepend	
7	Add	
8	Save	Cancel
9		

Step 4. Register the extension with FXS port on Yeastar TA1600/2400/3200 FXS gateway

On Yeastar TA1600/2400/3200 FXS gateway, register an FXS port as a PBX extension.

1. On gateway web interface, go to **Gateway > Port List > Port List**, edit an FXS port.
2. In the pop-up window, configure the following settings:

Edit FXS Port - 1

General | Other Settings

General

Caller ID Name: 1000 Caller ID Number: 1000

VoIP Server Template

VoIP Server: PSeries(1) ▼

User Name: 1000 Authentication Name: TE2Cx2H8kk

Password: From User:

Route Settings

Dial Pattern Template: DialPatternTemplate1(1) ▼

DID Number: 1000

Hotline

Enable Hotline: No ▼

Hotline Number: Delay Dial: 2 s

Flash

Send Hook Flash Event: No ▼

Min Flash Time: 100 ms Max Flash Time: 200 ms

Call Duration Setting

Max Call Duration: 6000 s

Echo Cancellation Setting

Enable Echo Cancellation: Yes ▼

Save Cancel

- **Caller ID Name:** Enter a name to help you identify the FXS port.
 - **Caller ID Number:** Enter the extension number.
 - **VoIP Server:** Select the VoIP Server that you have configured in [Step 2](#).
 - **User Name:** Enter the extension number.
 - **Authentication Name:** Enter the extension's registration name.
 - **Password:** Enter the extension's registration password.
 - **Dial Pattern Template:** Select the Dial Pattern Template that will applied to the FXS port.
 - **DID Number:** Enter the extension number.
3. Click **Save** and **Apply Changes**.

Result

- The extension is successfully registered with the FXS port. You can check the registration status on PBX web portal and gateway web interface.

- On PBX web portal, go to **Extension and Trunk > Extension** to check the extension status. If the registration is successful, the extension status will display



<input type="checkbox"/>	Online Status	Presence ▾	Extension Number	Caller ID Name	User Role	Email Address ▾	Mobile Number ▾	Operations ▾
<input type="checkbox"/>			1000	1 1000				

- On gateway web interface, go to **Status > System Status > FXS Port Status** to check the FXS port status. If the registration is successful, the port status will display "OK".

FXS Port Status					
Port	UP/Down/Break	Name	Status	Voice Mail(New/Old)	Off-hook/On-hook
1	Up	1000	OK	—	On Hook

- Now the analog phone connected to the FXS port can be used to make and receive internal calls.

What to do next

- To make outbound calls from the analog phone, see [Make Outbound Calls from an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway](#).
- To receive inbound calls on the analog phone, see [Receive Inbound Calls on an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway](#).

Make Outbound Calls from an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway

After connecting Yeastar P-Series PBX System and Yeastar TA1600/2400/3200 FXS gateway, you can set up an outbound route on PBX to allow users to make outbound calls from the connected analog phone using PBX trunk.

Procedure

- [Step 1. Create an outbound route on Yeastar PBX](#)
- [Step 2. Make a test call from the analog phone](#)


Step 1. Create an outbound route on Yeastar PBX

On Yeastar P-Series PBX System, create an outbound route and assign permission to the extension that has been registered with an FXS port on the gateway.

1. Log in to PBX web portal, go to **Call Control > Outbound Route**, click **Add**.
2. Configure the following settings.

- **Name:** Enter a name to help you identify the outbound route.
- **Dial Pattern:** Set the dial pattern according to your needs.

In this example, set **Pattern** to 9., and set **Strip** to 1. Users should dial prefix 9 before the target number. For example, to call number 15880123456, users should dial 915880123456.

* Pattern	Strip	Prepend	Operations
9.	1		

- **Trunk:** Select a trunk.
- **Extension / Extension Group:** Select the extension(s) that are allowed to make outbound calls via this route. In this example, select extension 1000.

Extension / Extension Group

☐ 7 items

Available

Search here

☐ Extension Number

Caller ID Name

☐ Extension Group

Default_All_Extensions

☐ 1001

1001

☐ 1002

1002

☐ 1003

1003

☐ 1004

1004

☐ 1005

1005

—

>

<

☐ 1 item

Selected

Search here

☐ Extension Number

Caller ID Name

☐ 1000

1000

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

Step 2. Make a test call from the analog phone

For example, dial 915880123456 on the analog phone, the user 15880123456 will ring.

Receive Inbound Calls on an Analog Phone Connected to Yeastar TA1600/2400/3200 FXS Gateway

After connecting Yeastar P-Series PBX System and Yeastar TA1600/2400/3200 FXS gateway, you can set up an inbound route to allow users to receive inbound calls from PBX trunk on the connected analog phone.

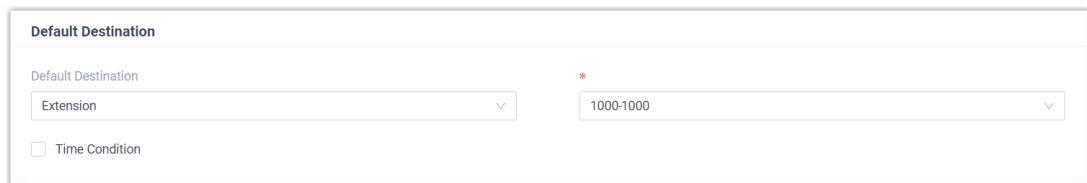
Procedure

- [Step 1. Create an inbound route on Yeastar PBX](#)
- [Step 2. Make a test call to the analog phone](#)

Step 1. Create an inbound route on Yeastar PBX

On Yeastar P-Series PBX System, create an inbound route and set the destination to the extension that has been registered with the FXS port on the gateway.

1. Log in to PBX web portal, go to **Call Control > Inbound Route**, click **Add**.
2. Configure the following settings.
 - **Name:** Enter a name to help you identify the inbound route.
 - **Trunk:** Select a trunk.
 - **Default Destination:** Select a destination for the inbound route. In this example, select extension 1000.



Default Destination

Default Destination

Extension

1000-1000

☐ Time Condition

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

Step 2. Make a test call to the analog phone

For example, make a call to the trunk, the analog phone with extension 1000 registered will ring.