

Yeastar TE Gateway Integration Guide

Yeastar P-Series Appliance Edition

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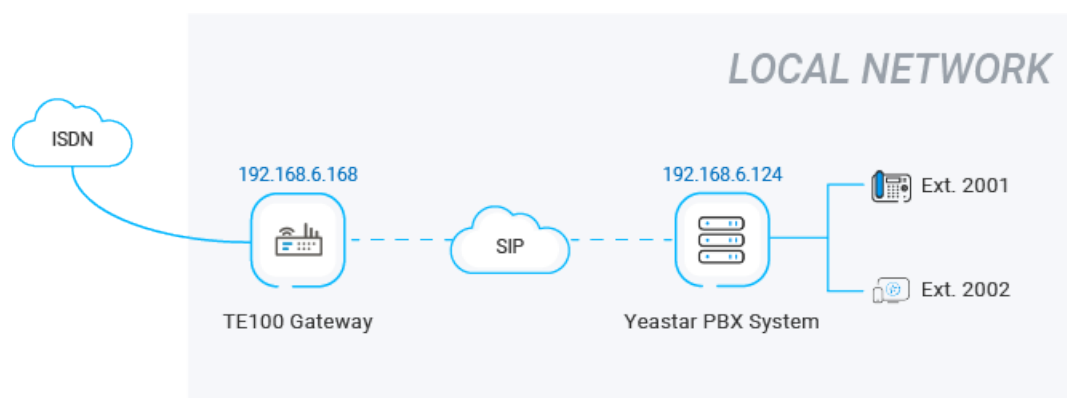
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Yeastar TE Gateway Integration Guide

This guide provides a configuration example to show you how to extend an E1/T1/PRI trunk for Yeastar P-Series PBX System.

Background information

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



Equipment	Firmware Version	IP Address
Yeastar P550 VoIP PBX	37.2.0.81	192.168.6.124
Yeastar TE100 Gateway	61.0.0.7	192.168.6.168

Objectives

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

- [Connect Yeastar P-Series PBX System and Yeastar TE100 Gateway](#)
- [Make Outbound Calls through the Extended E1/T1/PRI Trunk](#)
- [Receive Inbound Calls through the Extended E1/T1/PRI Trunk](#)

Connect Yeastar P-Series PBX System and Yeastar TE100 Gateway

This topic describes how to connect Yeastar P-Series PBX System and Yeastar TE100 gateway, so as to extend 1 E1/T1/PRI trunk on the PBX.

Procedure

- [Step 1. Create a SIP peer trunk on Yeastar PBX system](#)
- [Step 2. Create a SIP peer trunk on Yeastar TE100 gateway](#)

Step 1. Create a SIP peer trunk on Yeastar PBX system

1. Log in to PBX web portal, go to **Extension and Trunk > Trunk**, click **Add**.
2. Configure the trunk settings.

Basic	
Name	Connect-to-TE100-Gateway
Trunk Status	Enabled
Select ITSP Template	General

Detailed Configuration		
Trunk Type	Peer Trunk	
Transport	UDP	
Hostname/IP	Port	Domain
192.168.6.168	5060	192.168.6.168

- **Name:** Enter a name to help you identify it. For example, `Connect-to-TE100-Gateway`.
 - **Trunk Status:** Select **Enabled**.
 - **Select ITSP Template:** Select **General**.
 - **Trunk Type:** Select **Peer Trunk**.
 - **Transport:** Select **UDP**.
 - **Hostname/IP:** Enter the IP address of Yeastar TE100 gateway. In this example, enter `192.168.6.168`.
 - **Port:** Enter the SIP port of Yeastar TE100 gateway. In this example, enter the default port `5060`.
 - **Domain:** Enter the IP address of Yeastar TE100 gateway. In this example, enter `192.168.6.168`.
3. Click **Save** and **Apply**.

Step 2. Create a SIP peer trunk on Yeastar TE100 gateway

1. Log in to gateway web interface, go to **Gateway > VoIP Settings > VoIP Trunk**, click **Add VoIP Trunk**.
2. In the pop-up window, configure the trunk settings:

Add Service Provider

General Advanced

Trunk Type: Service Provider

Provider Name: P550

Hostname/IP: 192.168.6.124 : 5060

Save Cancel

- **Trunk Type:** Select **Service Provider**.
 - **Provider Name:** Enter a name to help you identify it.
 - **Hostname/IP:** Enter the IP address of Yeastar PBX system and the SIP port. In this example, enter 192.168.6.124 and the default SIP port 5060.
3. Click **Save** and **Apply Changes**.

Result

- On PBX web portal (**Extension and Trunk > Trunk**), the trunk status displays .

<input type="checkbox"/>	Status	Name	Type	Hostname/Port	Username	Outbound Caller ID	Operations
<input checked="" type="checkbox"/>		Connect-to-TE100-...	Peer Trunk	192.168.6.168:5060			

- On TE100 gateway web interface (**Status > System Status > IP Trunk Status**), the trunk status displays "OK".

Status	Trunk Name	Type	User Name	Hostname/IP	Reachability
OK (2 ms)	P550	SP-SIP		192.168.6.124	OK (2 ms)

It is concluded that Yeastar PBX system is connected to Yeastar TE100 gateway; 1 E1/T1/PRI trunk is extended on Yeastar PBX system.

What to do next

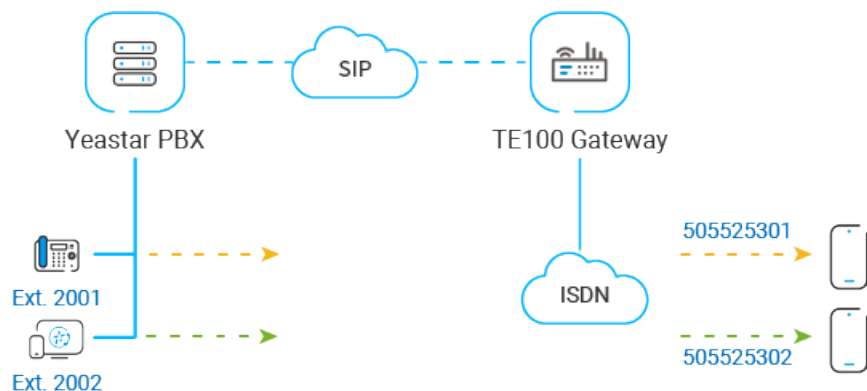
- To make outbound calls through the extended E1/T1/PRI trunk, see [Make Outbound Calls through the Extended E1/T1/PRI Trunk](#).
- To receive inbound calls through the extended E1/T1/PRI trunk, see [Receive Inbound Calls through the Extended E1/T1/PRI Trunk](#).

Make Outbound Calls through the Extended E1/T1/PRI Trunk

After connecting Yeastar P-Series PBX System and Yeastar TE100 gateway, you need to set up routes, so as to make outbound calls through the extended E1/T1/PRI trunk.

Scenario

The instructions provided in this topic are based on the following scenario:



Procedure

- [Step 1. Create an outbound route on Yeastar PBX system](#)
- [Step 2. Bind DOD numbers to PBX extensions on Yeastar PBX system](#)
- [Step 3. Create an outbound route on Yeastar TE100 gateway](#)
- [Step 4. Make test calls from Yeastar PBX system](#)

Step 1. Create an outbound route on Yeastar PBX system

On Yeastar PBX system, create an outbound route to allow users to reach Yeastar TE100 gateway.

1. Log in to PBX web portal, go to **Call Control > Outbound Route**, click **Add**.
2. Configure the following settings for the outbound route and leave other settings as default.

- **Name:** Enter a name to help you identify it.
- **Dial Pattern:** Set the dial pattern according to your needs. In this example, set **Pattern** to **x.**, users can directly dial target number as they normally do.
- **Trunk:** Select the SIP peer trunk that is connected to Yeastar TE100 gateway. In this example, select the trunk **Connect-to-TE100-Gateway**.

Trunk

7 items Available

Search here

<input type="checkbox"/>	Name	Trunk Type
<input type="checkbox"/>	BRI1-1	BRI
<input type="checkbox"/>	BRI1-2	BRI
<input type="checkbox"/>	FXO1-7	FXO
<input type="checkbox"/>	FXO1-8	FXO
<input type="checkbox"/>	5503301	Peer Trunk
<input type="checkbox"/>	Outbound_US	Peer Trunk

1 item Selected

Search here

<input type="checkbox"/>	Name	Trunk Type
<input type="checkbox"/>	Connect-to-TE100-Gateway	Peer Trunk

- **Extension/Extension Group:** Select the extensions that are allowed to make calls through this outbound route. In this example, select all the extensions.

Extension / Extension Group

13 items Available

Search here

<input type="checkbox"/>	Number	Name
<input type="checkbox"/>	Extension Group	Sales
<input type="checkbox"/>	Extension Group	Support
<input type="checkbox"/>	2000	Leo Ball
<input type="checkbox"/>	2001	Phillip Huff
<input type="checkbox"/>	2002	Terrell Smith
<input type="checkbox"/>	2003	Kristin Hale

1 item Selected

Search here

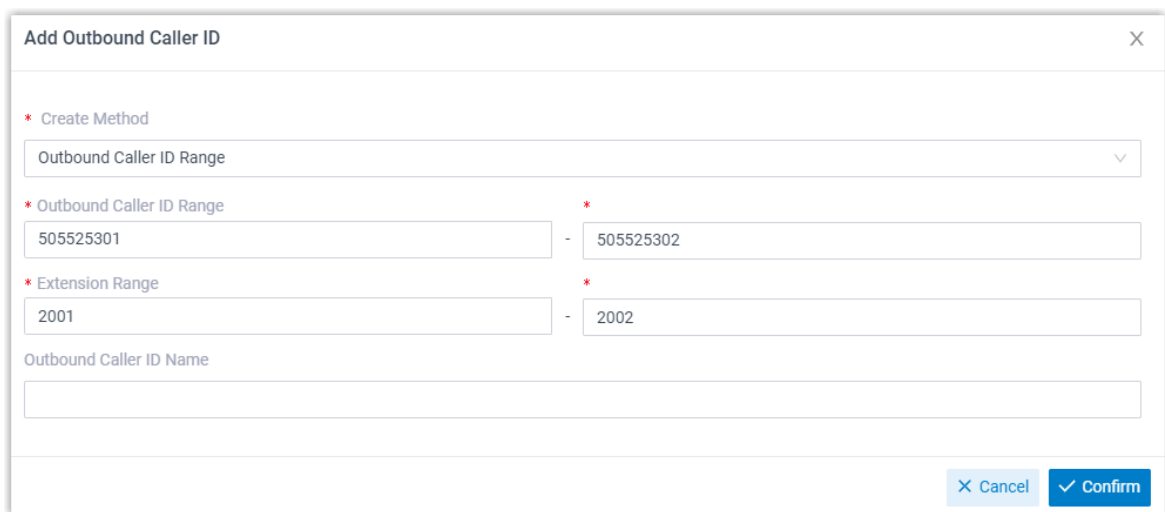
<input type="checkbox"/>	Number	Name
<input type="checkbox"/>	Extension Group	ALL

3. Click **Save and Apply**.

Step 2. Bind DOD numbers to PBX extensions on Yeastar PBX system

Bind DOD numbers to PBX extensions to distinguish calls made from different extensions. When PBX extension users call to an external number, the bound DOD number will be displayed on the called party.

1. Go to **Extension and Trunk > Trunk**, edit the SIP peer trunk that is connected to Yeastar TE100 gateway.
2. Click **Outbound Caller ID** tab.
3. In the **Outbound Caller ID List** section, click **Add**, complete the following settings, then click **Confirm**.



- **Create Method:** Select **Outbound Caller ID Range**.
 - **Outbound Caller ID Range:** Set 505525301–505525302.
 - **Extension Range:** Set 2001–2002.
4. Click **Save** and **Apply**.

Step 3. Create an outbound route on Yeastar TE100 gateway

On Yeastar TE100 gateway, create an outbound route to allow PBX users to make outbound calls through the E1/T1/PRI trunk.

1. Log in to gateway web interface, go to **Gateway > Route Settings > Route List**, click **Add New Route**.
2. In the pop-up window, configure the route.

New Route

Simple Mode: Yes

Route name: FromP550

Match Incoming Calls:

Call Comes in From: ServiceProvider -- P550

Handle Matched Incoming Calls:

Send Call Through: Trunk -- E1Trunk1

Save Cancel

- **Simple Mode:** Select **Yes**.
- **Route Name:** Enter a name to help you identify it.
- **Call Comes in From:** Select the SIP trunk that is connected to Yeastar PBX system. In this example, select the trunk **ServiceProvider -- P550**.
- **Send Call Through:** Select the E1/T1/PRI trunk that will be used to call out. In this example, select **Trunk--E1Trunk1**.

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

Step 4. Make test calls from Yeastar PBX system

Example:

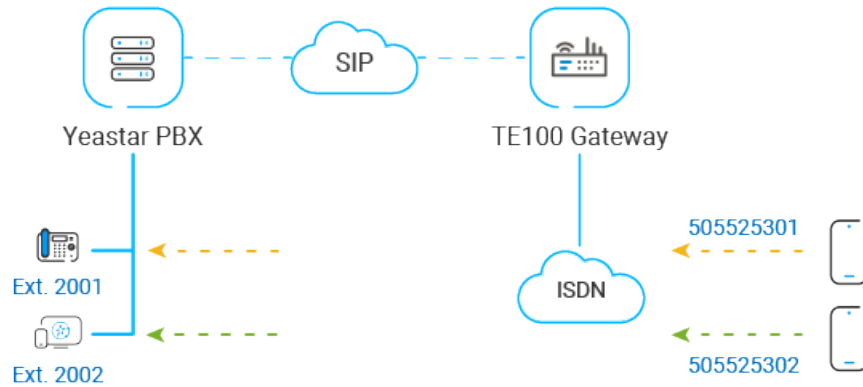
Extension 2001 calls to 1588035242, the user 1588035242 will ring, and caller ID "505525301" is displayed.

Receive Inbound Calls through the Extended E1/T1/PRI Trunk

After connecting Yeastar P-Series PBX System and Yeastar TE100 gateway, you need to set up routes, so as to receive inbound calls through the extended E1/T1/PRI trunk.

Scenario

Assume that you have applied 2 DID numbers (505525301-505525302) from the E1 service provider, you can assign the DID numbers to extension 2001-2002 respectively. When an external user dials a DID number, the user will reach the specific extension directly.



Procedure

- [Step 1. Create an inbound route on Yeastar TE100 gateway](#)
- [Step 2. Create an inbound route on Yeastar PBX system](#)
- [Step 3. Make a test call](#)

Step 1. Create an inbound route on Yeastar TE100 gateway

On Yeastar TE100 gateway, create an inbound route to route incoming calls to Yeastar PBX system.

1. Log in to gateway web interface, go to **Gateway > Route Settings > Route List**, click **Add New Route**.
2. In the pop-up window, configure the route.

New Route

Simple Mode: No

Route name: ToP550

Match Incoming Calls:

Call Comes in From: Trunk -- E1Trunk1

Inbound Caller Pattern:

DID Number: 505525301-505525302

DID Associated Number: 505525301-505525302

Handle Matched Incoming Calls:

Send Call Through: ServiceProvider -- P550

T.38 Support: No

Outbound Dial Pattern: X.

Strip: 0 digitals from front before dialing

Prepend these digitals: before dialing

Save Cancel

- **Simple Mode:** Select **No**.
 - **Route Name:** Enter a name to help you identify it.
 - **Call Comes in From:** Select the E1/T1/PRI trunk. In this example, select **Trunk--E1Trunk1**.
 - **DID Number:** DID number will be used to match the incoming calls. DID number should be the same as DOD number on Yeastar PBX system. In this example, enter 505525301-505525302.
 - **DID Associated Number:** DID associated number should be the same as DOD number on Yeastar PBX system. In this example, enter 505525301-505525302.
 - **Send Call Through:** Select the SIP trunk that is connected to Yeastar PBX system. In this example, select the trunk **ServiceProvider -- P550**.
3. Click **Save** and **Apply Changes**.

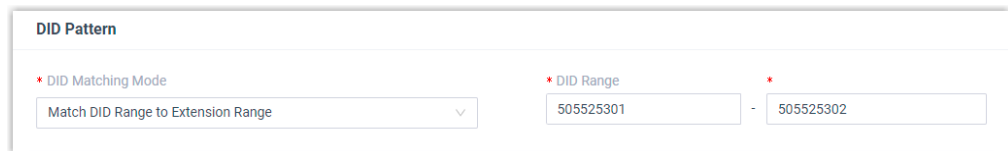
Step 2. Create an inbound route on Yeastar PBX system

On Yeastar PBX system, create an inbound route to accept incoming calls from Yeastar TE100 gateway.

1. Log in to PBX web portal, go to **Call Control > Inbound Route**, click **Add**.
2. Configure the following settings for the inbound route and leave other settings as default.

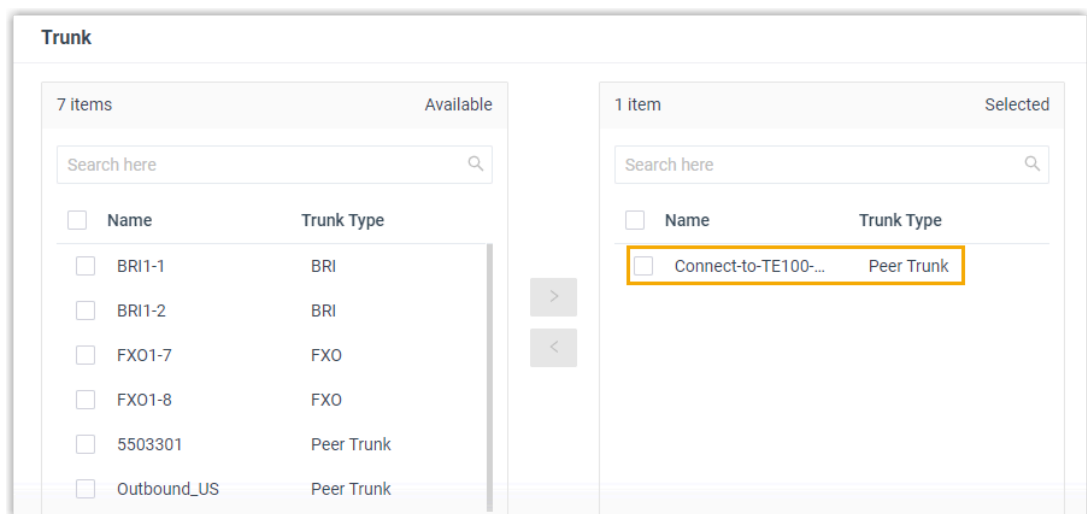
- **Name:** Enter a name to help you identify it.
- **DID Pattern:**
 - **DID Matching Mode:** Select **Match DID Range to Extension Range**.
 - **DID Range:** Enter the start number and the end number of the DID range.

In this example, enter 505525301 and 505525302.



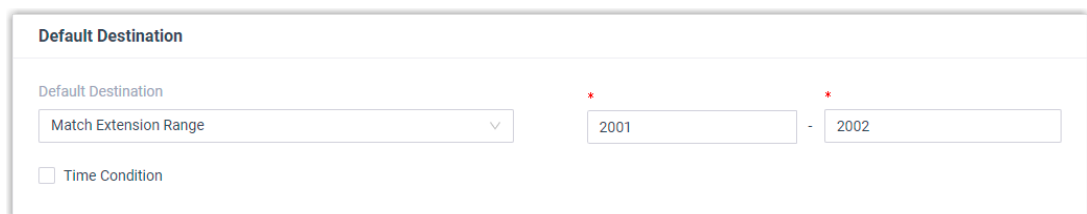
The screenshot shows the 'DID Pattern' configuration form. It has two main sections. The first section, 'DID Matching Mode', contains a dropdown menu with 'Match DID Range to Extension Range' selected. The second section, 'DID Range', contains two input fields: the first has '505525301' and the second has '505525302', separated by a hyphen.

- **Trunk:** Select the SIP trunk that is connected to Yeastar TE100 gateway. In this example, select the trunk **Connect-to-TE100-Gateway**.



The screenshot shows the 'Trunk' selection interface. It is divided into two panels: 'Available' and 'Selected'. The 'Available' panel on the left lists 7 items in a table with columns 'Name' and 'Trunk Type'. The items are BRI1-1 (BRI), BRI1-2 (BRI), FX01-7 (FXO), FX01-8 (FXO), 5503301 (Peer Trunk), and Outbound_US (Peer Trunk). The 'Selected' panel on the right shows 1 item, 'Connect-to-TE100-...', which is highlighted with a yellow box. Navigation arrows are between the two panels.

- **Default Destination:** Select **Match Extension Range**, and enter the extension range 2001 - 2002.



The screenshot shows the 'Default Destination' configuration form. It has a 'Default Destination' dropdown menu with 'Match Extension Range' selected. To the right, there are two input fields for the extension range: the first has '2001' and the second has '2002', separated by a hyphen. There is also a checkbox for 'Time Condition' which is currently unchecked.

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

Step 3. Make a test call

Example:

Make a call to 505525301, extension 2001 will ring.