Yeastar TE Gateway Integration Guide

Yeastar P-Series Appliance Edition

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Contents

Connect Yeastar P-Series PBX System and Yeastar TE E1/T1/PRI Gateway

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

Background

The instructions provided in this guide are based on the following test environment.
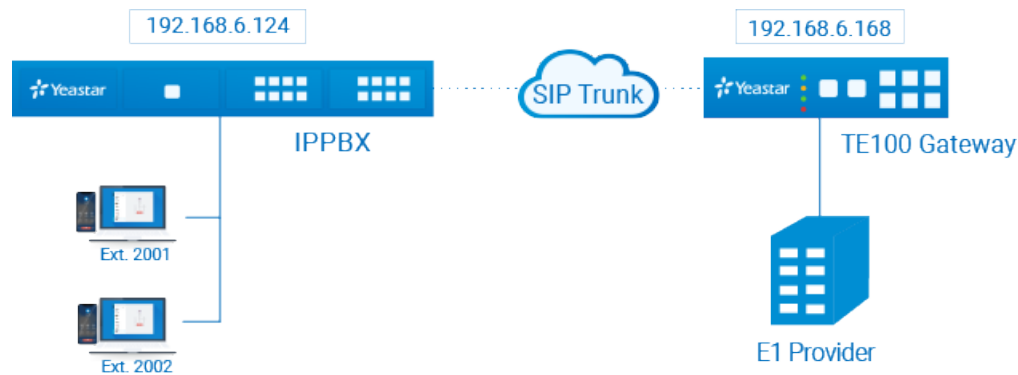
Equipment	Firmware Version	IP Address
Yeastar P550 PBX System	37.2.0.81	192.168.6.124
Yeastar TE100 Gateway	16.18.0.2	192.168.6.168

Objectives

This guide provides guidance 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 introduces the steps to connect Yeastar PBX system and Yeastar TE100 via SIP peer trunks. After the two devices are connected, 1 E1/T1/PRI trunk is extended on the Yeastar P-Series PBX System.

Step1. Create a SIP peer trunk on Yeastar PBX System

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

Basic

* Name	* Trunk Status
Connect-to-TE100-Gateway	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

3. Click **Save** and **Apply**.
4. Wait for seconds and check the trunk status on the **Trunk** page.

   If the status shows ⊘, Yeastar PBX system is connected to the Yeastar TE100 gateway.

	Status	Name ⇕	Type ⇕	Hostname/Port ⇕	Username ⇕	Outbound Caller ID ⇕	Operations
☐	⊘	Connect-to-TE100-...	Peer Trunk	192.168.6.168:5060			✎ 🗑

Step2. Create a SIP peer trunk on Yeastar TE100 Gateway

1. Log in to the gateway web interface, go to **Gateway > VoIP Settings > VoIP Trunk**, click **Add VoIP Trunk**.

2. In the pop-up window, configure the following settings:
    - **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**.
4. Wait for seconds and check the trunk status on the **Status > System Status > IP Trunk Status** page.

   If the status shows "OK", Yeastar TE100 gateway is connected to the Yeastar PBX system.

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

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

After the connection, you can make outbound calls through the extended E1/T1/PRI trunk.

Scenario

The application scenario is shown as the following figure.
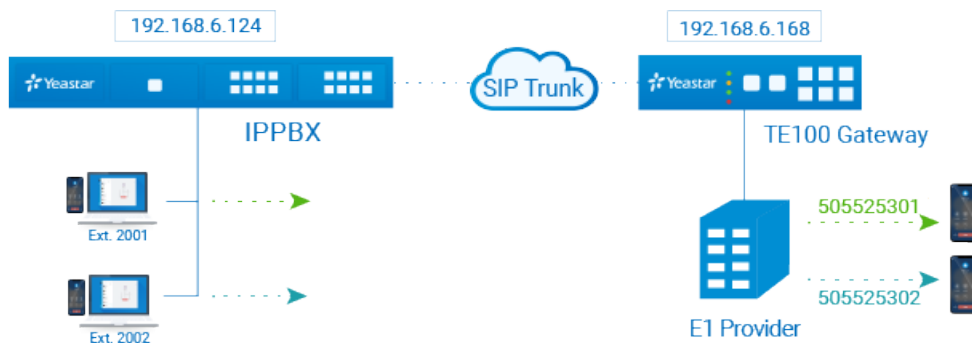
Procedure

1. On Yeastar PBX system, create an outbound route to allow users to reach Yeastar TE100 gateway.
   a. Log in to the PBX management portal, go to **Call Control > Outbound Route**, click **Add**.
   b. Configure the following settings for the outbound route and leave other settings as default.
      - **Name**: Enter a name to help you identify it. For example, `TO-TE100`.
      - **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. In this example, select the trunk **Connect-to-TE100-Gateway**.
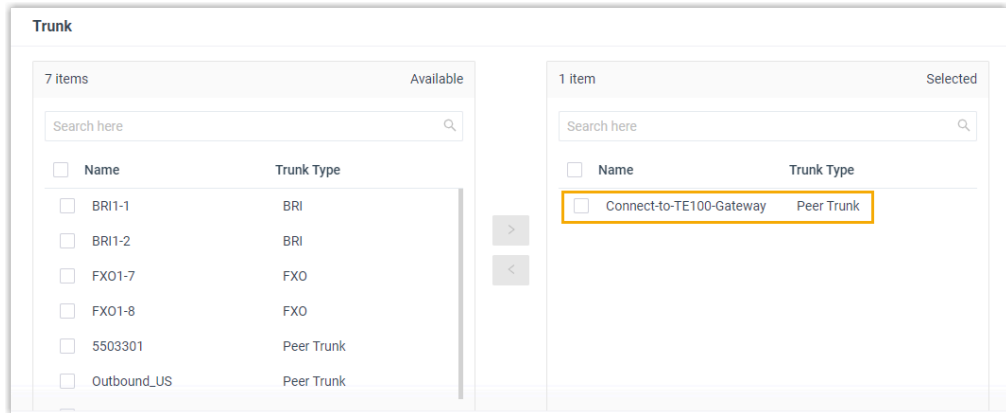
- **Extension/Extension Group**: Select the extensions that are allowed to make calls through this outbound route. In this example, select all the extensions.
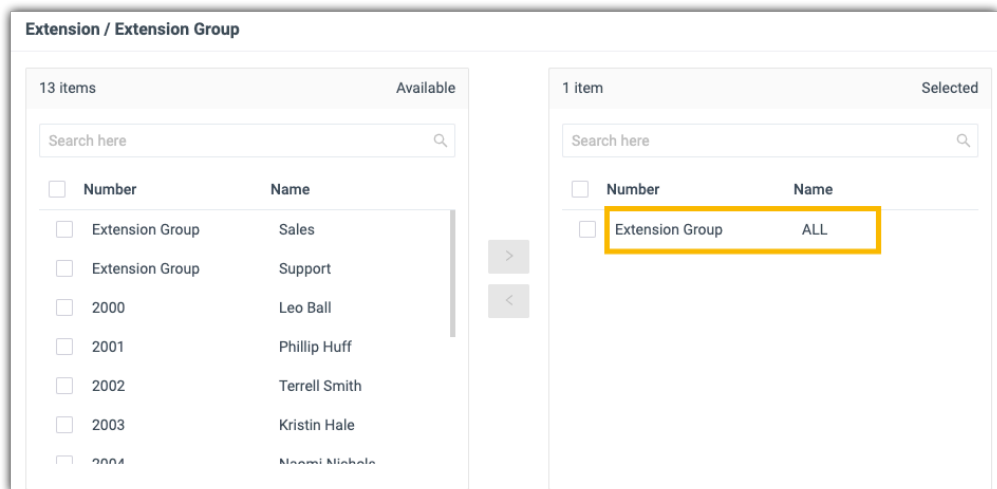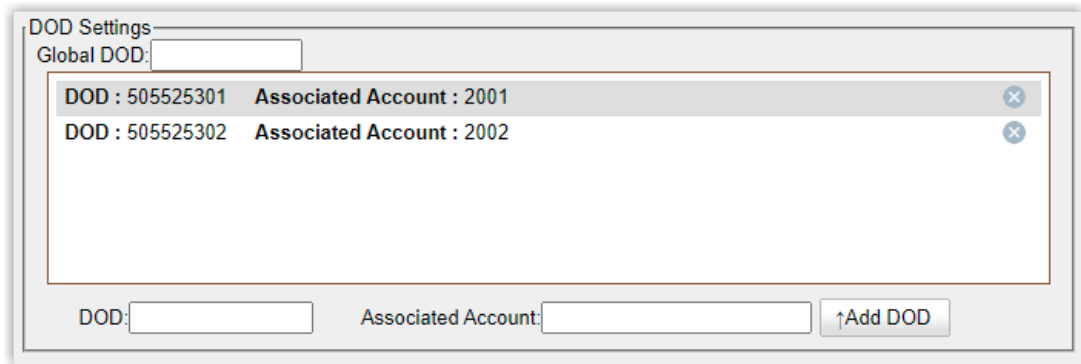

   c. Click **Save** and **Apply**.

2. On Yeastar TE100, bind extension numbers with DOD numbers.

When PBX extension users make calls to external users, the bound DOD numbers will be displayed on the callees' phone.

   a. Log in to the gateway web interface, go to **Gateway > Digital Trunk > E1/T1**, edit the E1 trunk.

   b. Bind the PBX extensions to DOD numbers.

   In this example, bind extensions 2001-2002 with DOD numbers 505525301-505525302.

c. Click **Save** and **Apply Changes**.

3. On Yeastar TE100, create a route to allow PBX users to make outbound calls through E1 trunk.

    a. Log in to the gateway web interface, go to **Gateway > Route Settings > Route List**, click **Add New Route**.

    b. In the pop-up window, configure the route.

- **Simple Mode**: 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**.
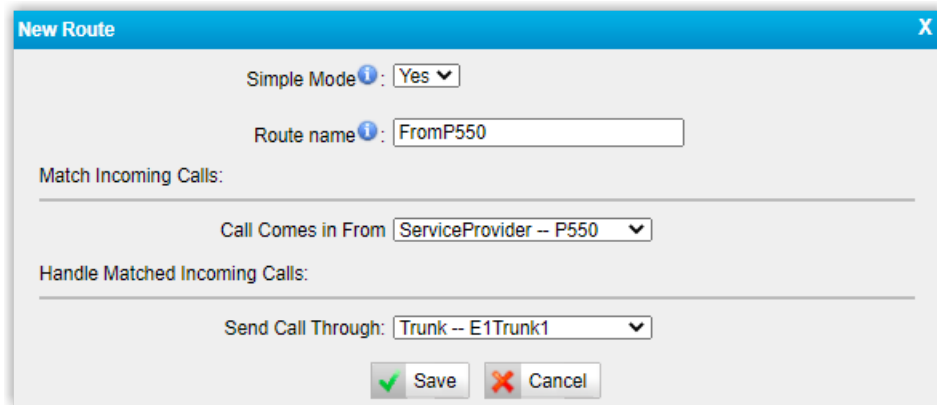
c. Click **Save** and **Apply Changes**.

4. Make a test call from a PBX extension.

For 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 the connection, you can 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.
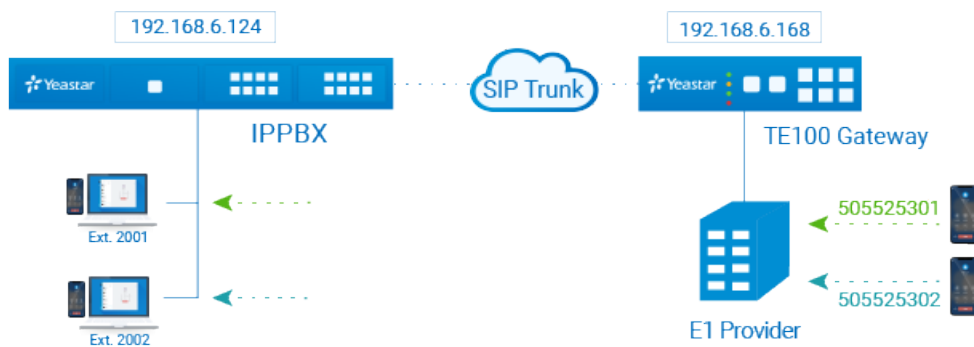

Procedure

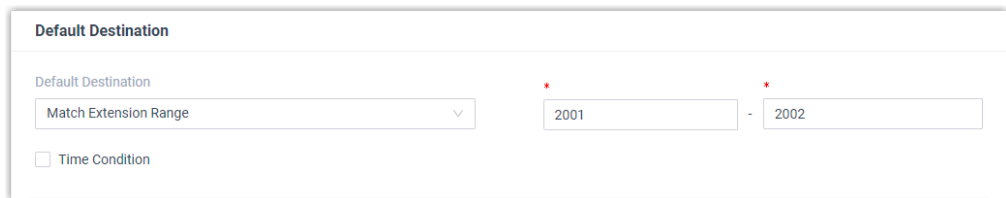1. Create an inbound route on Yeastar PBX system to accept incoming calls from Yeastar TE100.
    a. Log in to the PBX management portal, go to **Call Control > Inbound Route**, click **Add**.
    b. Configure the following settings for the inbound route and leave other settings as default.
        • **Name**: Enter a name to help you identify it. For example, `From-TE100`.
        • **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`.

        • **Trunk**: Select the SIP peer trunk that is connected to Yeastar TE100. In this example, select the trunk **Connect-to-TE100-Gateway**.
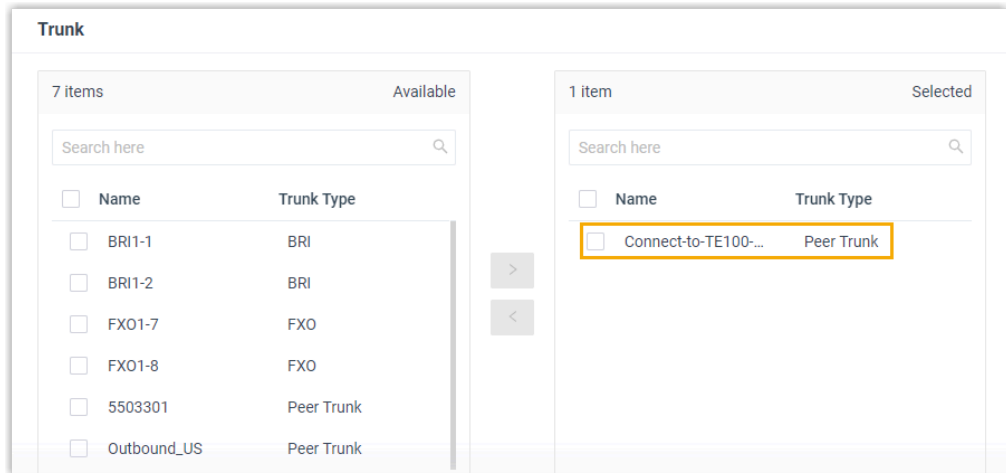
- **Default Destination**: Select **Match Extension Range**, and enter the extension range `2001 - 2002`.

    c. Click **Save** and **Apply**.

2. Create a route on Yeastar TE100 gateway to route incoming calls to Yeastar PBX system.

    a. Log in to the gateway web interface, go to **Gateway > Route Settings > Route List**, click **Add New Route**.

    b. In the pop-up window, configure the route.

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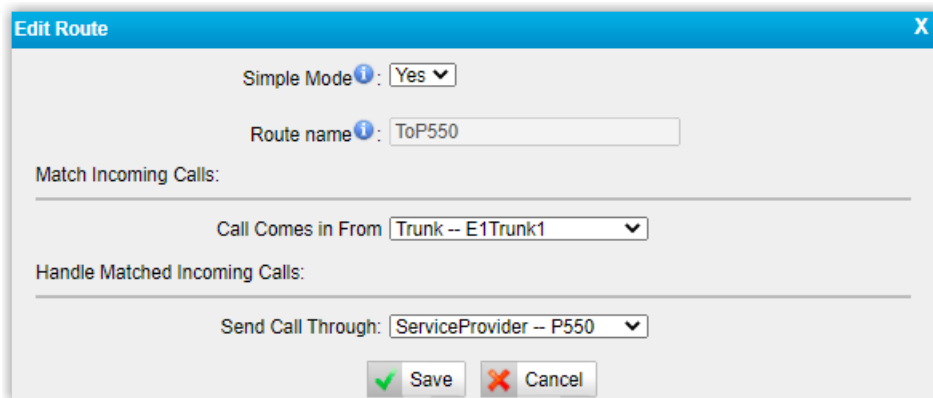
3. Make a test call.

   For example, make a call to 505525301, extension 2001 will ring.