

Yeastar TE Gateway Integration Guide

Yeastar P-Series Cloud Edition

Version: 1.0

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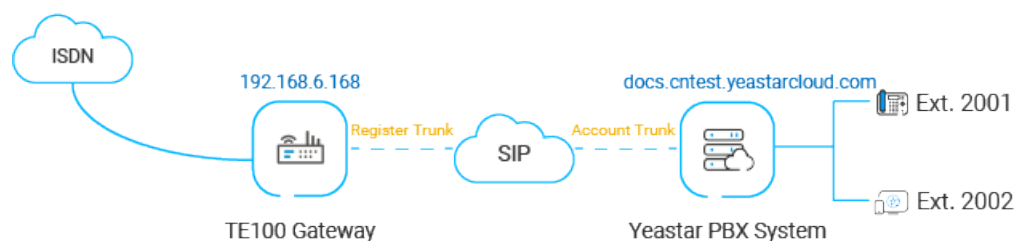
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Yeastar TE Gateway Integration Guide

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

Background information

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



Equipment	Firmware Version	IP Address/Domain Name
Yeastar P-Series Cloud Edition	84.10.0.30	docs.cntest.yeastarcloud.com
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 Cloud Edition 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 Cloud Edition and Yeastar TE100 Gateway

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

Requirements

The version of Yeastar P-Series Cloud Edition is 84.10.0.30 or later.

Procedure

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

Step 1. Create a SIP account 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.

The screenshot shows the 'Basic' and 'Detailed Configuration' sections of the trunk configuration form.

Basic Section:

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

Detailed Configuration Section:

- Trunk Type:** Account Trunk
- Transport:** UDP
- Username:** 6700
- Password:** (masked with asterisks)
- ☒ Use User Name as Account Trunk's Authentication Name

- **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 **Account Trunk**.
- **Transport:** Select **UDP**.
- **Username:** Specify a username for the trunk.



Note:

The username is regarded as the trunk number.

- **Password:** Specify a password that is associated with the username.
 - **Use User Name as Account Trunk's Authentication Name:** Enable this option to use the trunk's username for authentication.
3. Click **Save** and **Apply**.

Step 2. Create a SIP register 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:

- **Trunk Type:** Select **Trunk**.
 - **Provider Name:** Enter a name to help you identify it.
 - **Hostname/IP:** Enter the domain name of Yeastar PBX system and the SIP port. In this example, enter `docs.cntest.yeastarcloud.com` and the default SIP port 5060.
 - **Domain:** Enter the domain name of Yeastar PBX system. In this example, enter `docs.cntest.yeastarcloud.com`.
 - **User Name:** Enter the username provided by Yeastar PBX system. In this example, enter 6700.
 - **Authorization Name:** Enter the username provided by Yeastar PBX system. In this example, enter 6700.
 - **Password:** Enter the password provided by Yeastar PBX system.
3. Click **Save** and **Apply Changes**.

Result

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

Status	Name	Type	Hostname/Port	Username	Outbound Caller ID	Operations
	Connect-to-TE100-Gateway	Account Trunk		6700		

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

Status	Trunk Name	Type	User Name	Hostname/IP	Reachability
Registered	PCE	SIP	6700	docs.cntest.yeastarcloud.com	OK

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

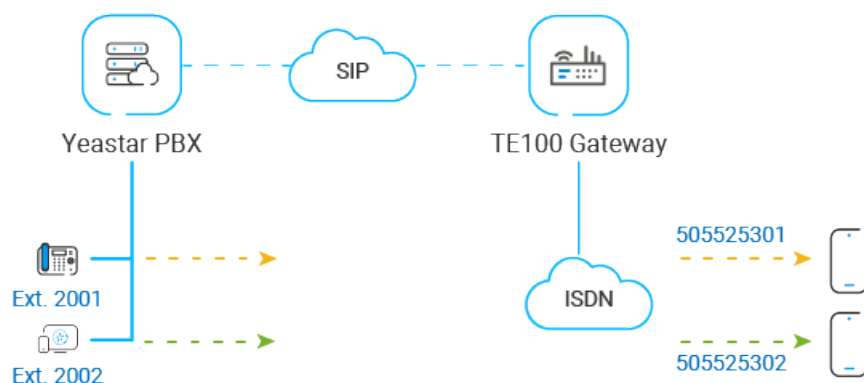
- To make outbound calls through the extended E1/T1/PRI trunk, see [Make Outbound Calls through the Extended E1/T1/PRI Trunk](#).
- To receive inbound calls through the extended E1/T1/PRI trunk, see [Receive Inbound Calls through the Extended E1/T1/PRI Trunk](#).

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

After connecting Yeastar P-Series Cloud Edition 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:



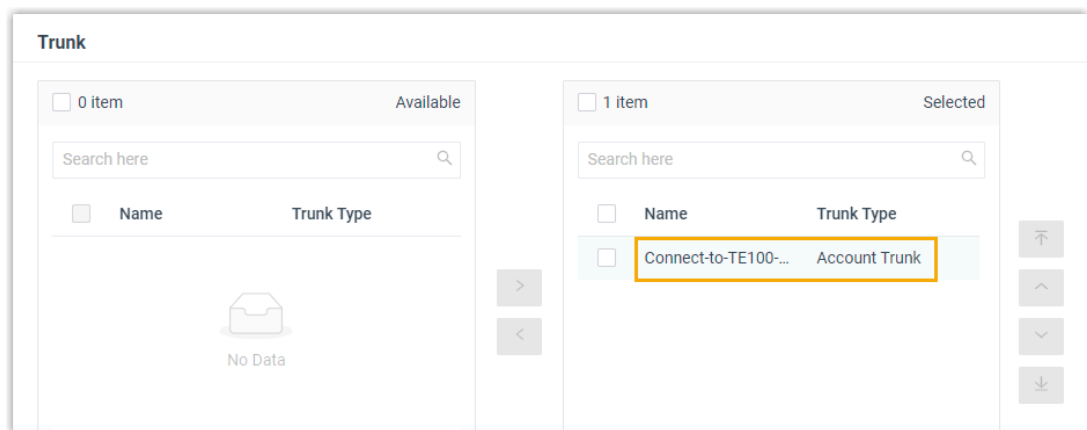
Procedure

- [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 account trunk that is connected to Yeastar TE100 gateway. 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.

13 items Available		1 item Selected	
Number	Name	Number	Name
<input type="checkbox"/> Extension Group	Sales	<input type="checkbox"/> Extension Group	ALL
<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		

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 account 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**.

Add Outbound Caller ID

* Create Method
Outbound Caller ID Range

* Outbound Caller ID Range
505525301 - 505525302

* Extension Range
2001 - 2002

Outbound Caller ID Name

Cancel 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.

The screenshot shows the 'New Route' configuration window. The 'Simple Mode' is set to 'Yes'. The 'Route name' is 'FromPCE'. Under 'Match Incoming Calls:', 'Call Comes in From' is set to 'Trunk -- PCE'. Under 'Handle Matched Incoming Calls:', 'Send Call Through' is set to 'Trunk -- E1Trunk1'. The 'Save' and 'Cancel' buttons are at the bottom.

- **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 **Trunk --PCE**.
 - **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:

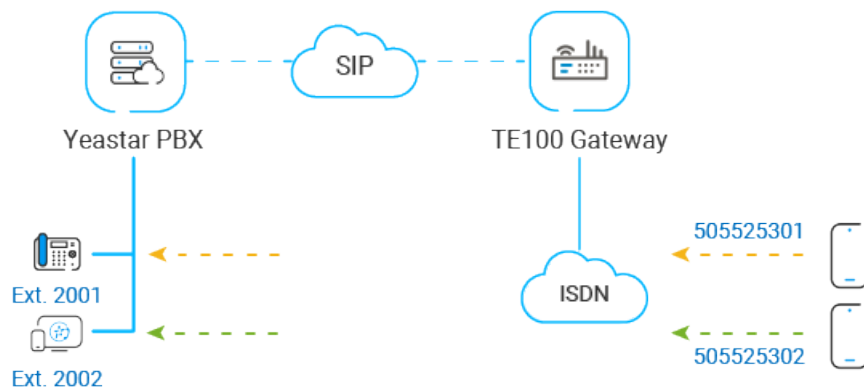
Extension 2001 calls to 1588035242, the user 1588035242 will ring, and caller ID "505525301" is displayed.

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

After connecting Yeastar P-Series Cloud Edition 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 X

Simple Mode : No ▾

Route name : ToPCE

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: ▾ Trunk -- PCE

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 **Trunk – PCE**.
3. Click **Save** and **Apply Changes**.

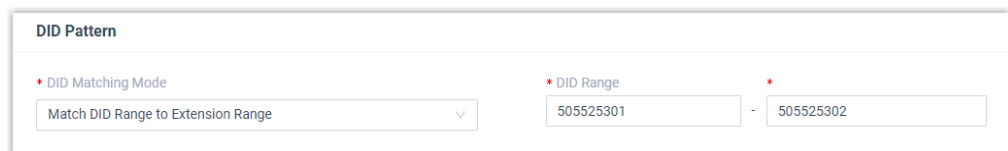
Step 2. Create an inbound route on Yeastar PBX system

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.

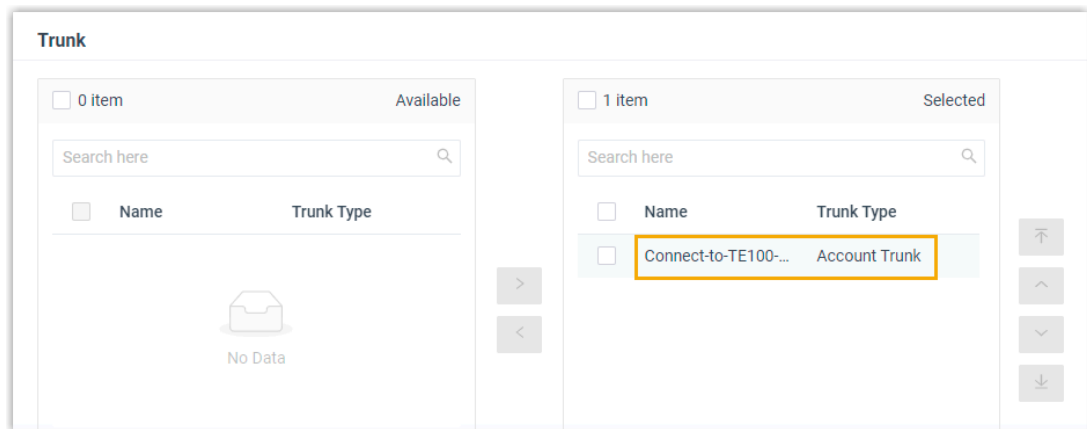


DID Pattern

• DID Matching Mode: Match DID Range to Extension Range

• DID Range: 505525301 - 505525302

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



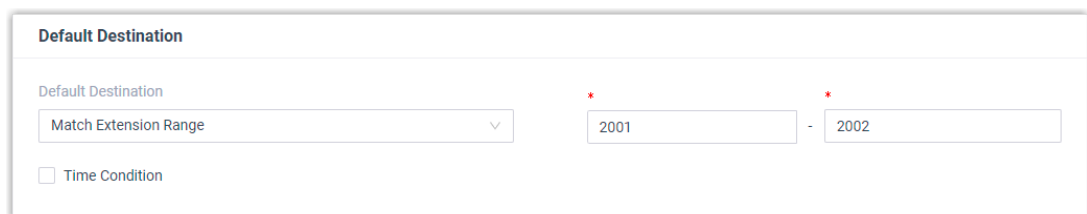
Trunk

Available: 0 item

Selected: 1 item

Name	Trunk Type
Connect-to-TE100-...	Account Trunk

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



Default Destination

Default Destination: Match Extension Range

2001 - 2002

☐ Time Condition

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

Step 3. Make a test call

Example:

Make a call to 505525301, extension 2001 will ring.