

Yeastar TG Gateway Integration Guide

Yeastar P-Series Software Edition

Version: 1.0

Date: 2025-09-03



Contents

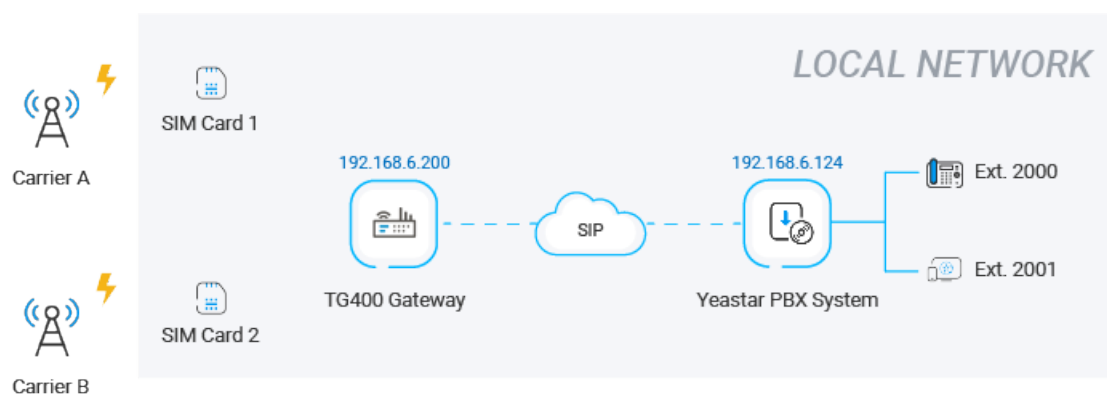
Yeastar TG VoIP 4G Gateway Integration Guide.....	1
Connect Yeastar P-Series Software Edition and Yeastar TG400 Gateway.....	2
Make Outbound Calls through a Designated 4G Trunk.....	4
Route Calls from Different Carriers to Different Destinations.....	8

Yeastar TG VoIP 4G Gateway Integration Guide

This guide provides a configuration example to show you how to extend 4G trunks for Yeastar P-Series Software Edition.

Background information

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



Equipment	Firmware Version	IP Address
Yeastar P-Series Software Edition	83.4.0.17	192.168.6.124
Yeastar TG400 VoIP 4G Gateway	91.3.0.21	192.168.6.200

There are two SIM cards installed in Yeastar TG400 VoIP 4G Gateway. The following table shows mobile number prefixes of the two carriers.

SIM Card	Carrier	Mobile Prefix
SIM Card 1	Carrier A	92
SIM Card 2	Carrier B	10

Objectives

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

- [Connect Yeastar P-Series Software Edition and Yeastar TG400 Gateway](#)

- [Make Outbound Calls through a Designated 4G Trunk](#)
- [Route Calls from Different Carriers to Different Destinations](#)

Connect Yeastar P-Series Software Edition and Yeastar TG400 Gateway

This topic describes how to connect Yeastar P-Series Software Edition and Yeastar TG400 gateway, so as to extend 4G trunks on the PBX.

Procedure

- [Step 1. Create a SIP peer trunk on Yeastar PBX system](#)
- [Step 2. Create a SIP peer trunk on Yeastar TG400 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	TG400
Trunk Status	Enabled
Select ITSP Template	General
Detailed Configuration	
Trunk Type	Peer Trunk
Transport	UDP
Hostname/IP	192.168.6.200
Port	5060
Domain	192.168.6.200

- **Name:** Enter a name to help you identify it. For example, TG400.
- **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 TG400 gateway. In this example, enter 192.168.6.200.
- **Port:** Enter the SIP port of Yeastar TG400 gateway. In this example, enter the default port 5060.

- **Domain:** Enter the IP address of Yeastar TG400 gateway. In this example, enter 192.168.6.200.
3. Click **Save** and **Apply**.


Step 2. Create a SIP peer trunk on Yeastar TG400 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 **Peer Trunk**.
 - **Type:** Select **SIP**.
 - **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



Status	Name	Type	Hostname/Port	Username	Outbound Caller ID	Operations
	TG400	Peer Trunk	192.168.6.200:5060			

- On TG400 gateway web interface (**Status > System Status > Trunk Status**), the trunk status displays "OK".

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

It is concluded that Yeastar PBX system is connected to Yeastar TG400 gateway; 4 4G trunks are extended on Yeastar PBX system.

What to do next

- To make outbound calls through the extended 4G trunk, see [Make Outbound Calls through a Designated 4G Trunk](#).
- To receive inbound calls through the extended 4G trunk, see [Route Calls from Different Carriers to Different Destinations](#).

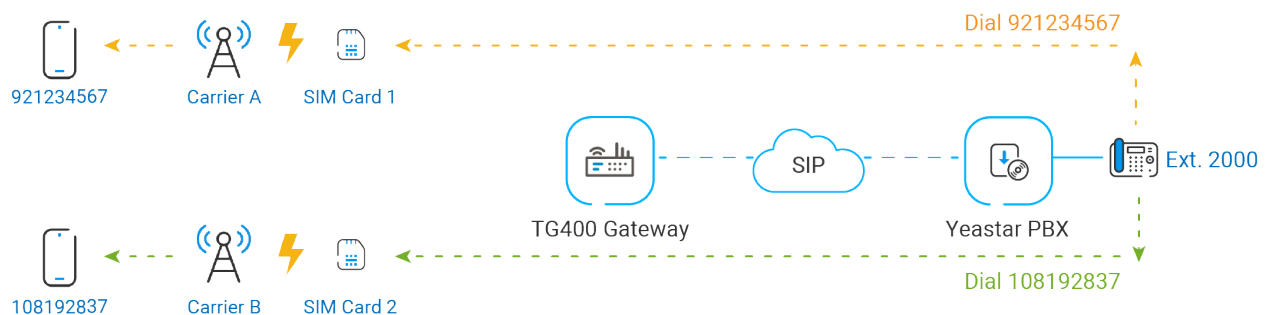
Make Outbound Calls through a Designated 4G Trunk

Many carriers have call plans that let you make free or low-cost calls between other numbers through the same carrier network. This topic describes how to make outbound calls through designated 4G trunks to save call charges.

Scenario

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

Outbound Number Format	Trunk	Carrier
Number with prefix 92	4G trunk 1	Carrier A
Number with prefix 10	4G trunk 2	Carrier B



Procedure

- [Step 1. Create an outbound route on Yeastar PBX system](#)
- [Step 2. Create two 'IP to Mobile' routes on Yeastar TG400 gateway](#)
- [Step 3. 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 PBX users to call through Yeastar TG400 gateway.

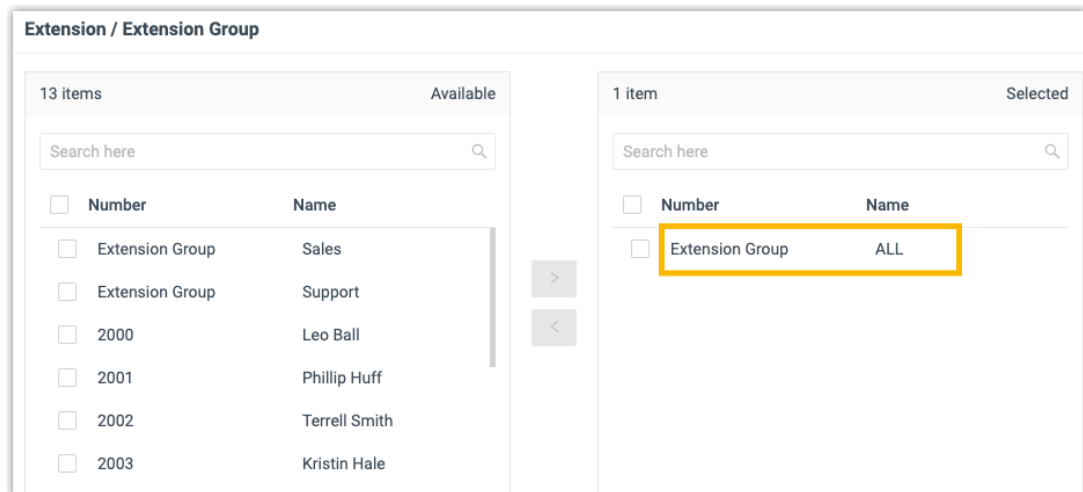
1. Log in to PBX web portal, go to **Call Control > Outbound Route**, click **Add**.
2. Configure the following settings for the outbound route and leave other settings as default.
 - **Name:** Enter a name to help you identify it.
 - **Dial Pattern:** Set the dial patterns according to your needs. In this example, set **Pattern** to **x.**, which means that users can dial any number without limitation.

* Pattern	Strip	Prepend
<input type="text" value="X."/>	<input type="text"/>	<input type="text"/>

- **Trunk:** Select the SIP peer trunk that is connected to the Yeastar TG400 gateway. In this example, select the trunk **TG400**.

Trunk																
<div>2 Items Available</div> <div>Search here</div> <table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>Name</th> <th>Trunk Type</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>slp_routein_DP</td> <td>Peer Trunk</td> </tr> <tr> <td><input type="checkbox"/></td> <td>slp_routein_EH</td> <td>Peer Trunk</td> </tr> </tbody> </table>	<input type="checkbox"/>	Name	Trunk Type	<input type="checkbox"/>	slp_routein_DP	Peer Trunk	<input type="checkbox"/>	slp_routein_EH	Peer Trunk	<div>1 item Selected</div> <div>Search here</div> <table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>Name</th> <th>Trunk Type</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>TG400</td> <td>Peer Trunk</td> </tr> </tbody> </table>	<input type="checkbox"/>	Name	Trunk Type	<input checked="" type="checkbox"/>	TG400	Peer Trunk
<input type="checkbox"/>	Name	Trunk Type														
<input type="checkbox"/>	slp_routein_DP	Peer Trunk														
<input type="checkbox"/>	slp_routein_EH	Peer Trunk														
<input type="checkbox"/>	Name	Trunk Type														
<input checked="" type="checkbox"/>	TG400	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.




3. Click **Save and Apply**.

Step 2. Create two 'IP to Mobile' routes on Yeastar TG400 gateway

On Yeastar TG400 gateway, create an 'IP to Mobile' route for carrier A, and create another one for carrier B. These two routes will match the dialed numbers from PBX, and send numbers out through designated 4G trunks.

1. Log in to gateway web interface, go to **Gateway > Route Settings > IP to Mobile**, click **Add IP to Mobile Route**.
2. In the pop-up window, configure the route, then click **Save and Apply Changes**.

The following table shows the required configurations for carrier A and carrier B.

Setting	Description	For Carrier A	For Carrier B
Simple Mode	To keep simple mode with basic settings or to expand more settings.	No	No
Route Name	Enter a name to help you identify it.	To-CarrierA	To-CarrierB
Call Source	Select the SIP trunk that is connected to Yeastar PBX system.	SPS – P_SE	SPS – P_SE
DID Number	Enter the pattern or number to match dialed numbers from Yeastar PBX system.	Enter 92. to allow the numbers with prefix 92.	Enter 10. to allow the numbers with prefix 10.
 Note:			


Setting	Description	For Carrier A	For Carrier B
	 If you want to match any incoming calls, you need to set DID Number to . (dot), or outbound calls would fail.		
Call Destination	Select the 4G trunk that will be used to call out.	Mobile – Trunk1	Mobile – Trunk2

Figure 1. 'IP to Mobile' route for carrier A

New Route X

Simple Mode ⓘ : No ▼

Route Name ⓘ : To-CarrierA

Match Incoming Calls:

Call Source SPS -- P_SE ▼

Inbound Caller Pattern ⓘ :

DID Number ⓘ : 92.

DID Associated Number ⓘ :

Enable Callback : No ▼ [Callback Settings](#)

Incoming Calls Processing:

Call Destination: Mobile -- Trunk1 ▼

Hotline:

Two Stage Dial : No ▼

Outbound Dial Pattern ⓘ :

Strip ⓘ : 0

Prepend these digits ⓘ : before dialing

Figure 2. 'IP to Mobile' route for carrier B

New Route

Simple Mode ⓘ : No

Route Name ⓘ : To-CarrierB

Match Incoming Calls:

Call Source SPS -- P_SE

Inbound Caller Pattern ⓘ :

DID Number ⓘ : 10.

DID Associated Number ⓘ :

Enable Callback : No [Callback Settings](#)

Incoming Calls Processing:

Call Destination: Mobile -- Trunk2

Hotline:

Two Stage Dial : No

Outbound Dial Pattern ⓘ :

Strip ⓘ : 0

Prepend these digits ⓘ : before dialing

Step 3. Make test calls from Yeastar PBX system

Examples:

- Dial number 921234567, the call will be made through 4G trunk1.
- Dial number 108192837, the call will be made through 4G trunk 2.

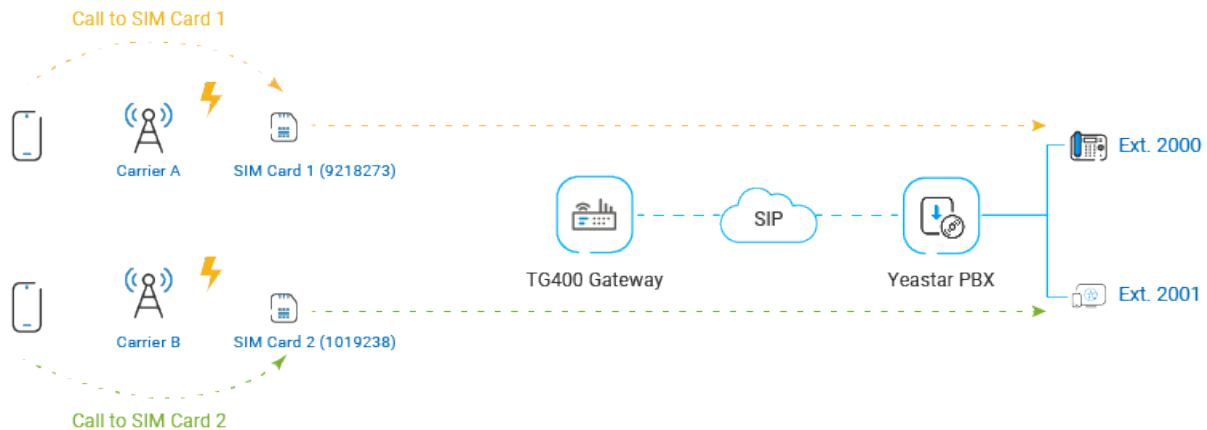
Route Calls from Different Carriers to Different Destinations

When external users call to 4G trunks of different carriers, the calls will reach different destinations. This topic describes how to route calls from different carriers to different destinations.

Scenario

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

Carrier	Trunk	Destination
Carrier A	4G trunk 1: 9218273	Extension 2000
Carrier B	4G trunk 2: 1019238	Extension 2001



Procedure

- [Step 1. Create two 'Mobile to IP' routes on Yeastar TG400 gateway](#)
- [Step 2. Create two inbound routes on Yeastar PBX system](#)
- [Step 3. Make test calls to the 4G trunks](#)

Step 1. Create two 'Mobile to IP' routes on Yeastar TG400 gateway

On Yeastar TG400 gateway, create an 'Mobile to IP' route for carrier A, and create another one for carrier B, so as to route incoming calls to Yeastar PBX system.

1. Log in to gateway web interface, go to **Gateway > Route Settings > Mobile to IP**, click **Add Mobile to IP Route**.
2. In the pop-up window, configure the route, then click **Save** and **Apply Changes**.

The following table shows the required configurations for carrier A and carrier B.

Setting	Description	For Carrier A	For Carrier B
Simple Mode	To keep simple mode with basic settings or to expand more settings.	Yes	Yes


Setting	Description	For Carrier A	For Carrier B
Route Name	Enter a name to help you identify it.	CarrierA-To-P_SE	CarrierB-To-P_SE
Call Source	Select which trunk the call comes from.	Mobile -- Trunk 1	Mobile -- Trunk 2
Call Destination	Select the SIP trunk that is connected to Yeastar PBX system.	SPS -- P_SE	SPS -- P_SE
Hotline	Enter a hotline number to avoid two-stage dialing. <div>  Note: The hotline number will be sent to the PBX as a DID number, which can be configured on PBX's inbound route to distinguish calls from different carriers. </div>	888888	999999

Figure 3. 'Mobile to IP' route for carrier A

New Route

Simple Mode ⓘ : Yes

Route Name ⓘ : CarrierA-To-P_SE

Match Incoming Calls:

Call Source Mobile -- Trunk1

Incoming Calls Processing:

Call Destination: SPS -- P_SE

Hotline ⓘ : 888888

Save

Cancel

Figure 4. 'Mobile to IP' route for carrier B

New Route

Simple Mode ⓘ : Yes

Route Name ⓘ : CarrierB-To-P_SE

Match Incoming Calls:

Call Source Mobile -- Trunk2

Incoming Calls Processing:

Call Destination: SPS -- P_SE

Hotline ⓘ : 999999


Save Cancel

Step 2. Create two inbound routes on Yeastar PBX system

On Yeastar PBX system, create two inbound routes to distinguish calls from carrier A and carrier B, and route calls to different destinations.

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, then click **Save** and **Apply**.

The following table shows the required configurations for carrier A and carrier B.

Setting	Description	For Carrier A	For Carrier B
Name	Enter a name to help you identify it.	From-CarrierA	From-CarrierB
DID Matching Mode	Select a mode according to the rule of DID numbers.	DID Pattern	DID Pattern
Pattern	Enter a DID number to match the incoming calls.	888888	999999
 Note: Enter the same hotline number that is set			


Setting	Description	For Carrier A	For Carrier B
	 on Yeastar TG400 gateway.		
Trunk	Select the SIP peer trunk that is connected to Yeastar TG400 gateway.	TG400	TG400
Default Destination	Select a destination for the inbound route.	Extension 2000	Extension 2001

Figure 5. 'IP to Mobile' route for carrier A

General


* Name Inbound Alert Info

DID Pattern

* DID Matching Mode

DID Pattern

Pattern

Operations 

Trunk

4 items Available

Search here

Name	Trunk Type
<input type="checkbox"/> sip_routein_DP	Peer Trunk
<input type="checkbox"/> sip_routein_EH	Peer Trunk

1 item Selected

Search here

Name	Trunk Type
<input checked="" type="checkbox"/> TG400	Peer Trunk

Default Destination

Default Destination

Extension

☐ Time Condition

Figure 6. Inbound route for carrier B

General

Name: From-CarrierB

Inbound Alert Info:

DID Pattern

DID Matching Mode: DID Pattern

Pattern: 999999

Trunk

4 items Available

Name	Trunk Type
sip_routein_DP	Peer Trunk
sip_routein_EH	Peer Trunk

1 item Selected

Name	Trunk Type
TG400	Peer Trunk

Default Destination

Default Destination: Extension 2001-Phillip Huff

Time Condition: ☐

Step 3. Make test calls to the 4G trunks

Examples:

- Dial the number of 4G trunk1 (9218273), the call will be routed to extension 2000.
- Dial the number of 4G trunk 2 (1019238), the call will be routed to extension 2001.