

UC Common Function Configuration Guide (3)



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Foreword

This course is mainly:

- Introduce How to Assigning an extension to IP Phone

- Introduce How to configure Busytone Learning

- Introduce How to configure Routing

- Introduce how to custom User Agent

Course Objective

Through this course
you will be able to



Learn Auto Provision Logic and how to
assigning an extension to phone



Learn how to configure Busytone
Learning and routing



custom User Agent

Contents

- 1 Auto Provision
- 2 Busytone Learning
- 3 Routing Configuration
- 4 User Agent Configuration

Auto Provision

01

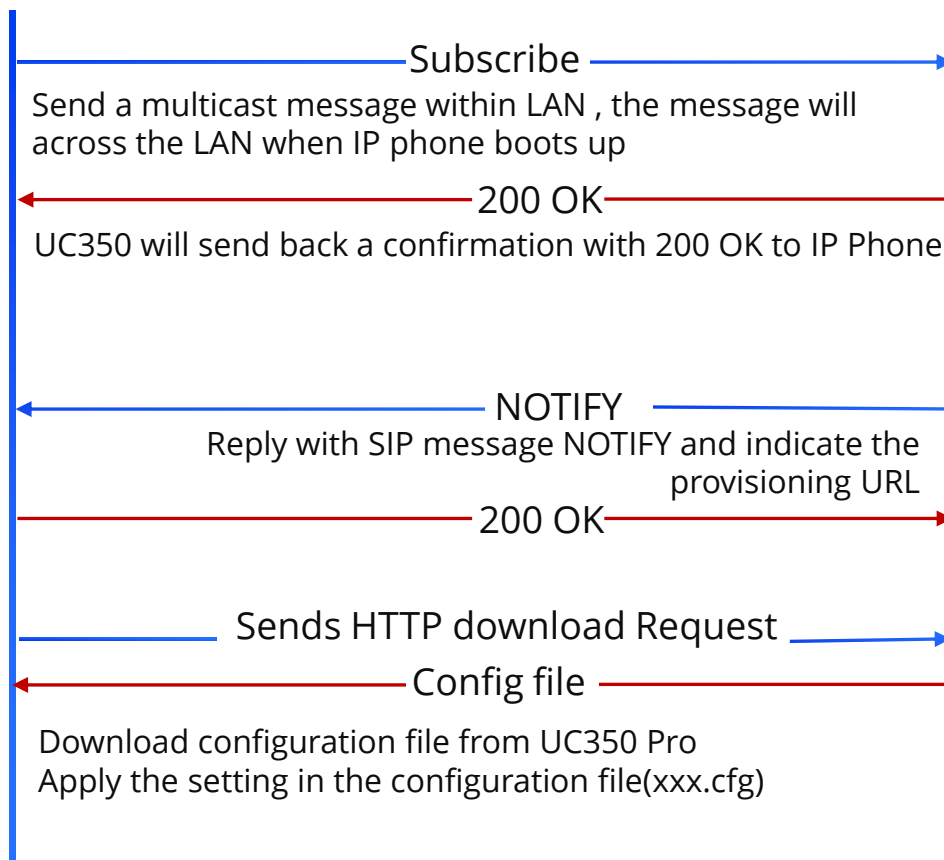
1. Auto Provision Logic

2. Assigning an extension to phone

Auto Provision Logic



IP Phone



IPPBX

Assigning an extension to phone

IP Phone connected to the network

1. Click **Extension & Call Group-> Phones**, view the online IP Phones who send subscribe to UC
2. Select the IP Phone
3. Choose add Ext or Assign Ext
4. Create an extension number or select an existing extension number

The screenshot shows the 'Phones' management interface. On the left sidebar, 'Phones' is selected under 'Extension & Call Group'. The main area has a table of IP phones. The 'Add Ext.' button is circled in red with a '3' next to it. A row in the table is highlighted in blue and circled in red with a '2' next to it.

Extension	Vendor	Model	Firmware Version	Name	Password	IP	MAC
	Dinstar	C62S	2.62.11.0.2			172.28.51.53	F8A03D675578
	Dinstar	C62S	2.62.11.0.2			172.28.51.141	F8A03D6755D0
3000	Dinstar	C62S	2.62.11.0.2	3000	*****	172.28.51.101	F8A03D6755A8
	Dinstar	C62S	2.62.11.0.2			172.28.51.103	F8A03D6755AA
	Dinstar	C61S	2.61.6.12.12			172.28.11.60	F8A03D660290
	Dinstar	C62S	2.62.11.0.2			172.28.4.133	F8A03D675550

The screenshot shows a dialog box titled 'Assign phone to extension'. It has a dropdown menu labeled 'Choose Extension' with the option 'SIP Extension / 2000 / 2000' selected. The dropdown is circled in red with a '4' next to it. There are 'Done' and 'Cancel' buttons at the bottom right.

Assigning an extension to phone

Click **Extension & Call Group-> Phones** , users can view the binding of the phone to the extension

Phones

[Phones](#) [Config File](#) [Template File](#) [Phone Firmware Management](#) [PIN Code](#)

[Add Phone](#) [Edit Ext](#) [Add Ext](#) [Assign Ext](#) [Delete](#) [Reprovision](#) [Phone UI](#)

Extension	Vendor	Model	Firmware Version	Name	Password	IP	MAC
	Dinstar	C62S	2.62.11.0.2			172.28.51.53	F8A03D675578
	Dinstar	C62S	2.62.11.0.2			172.28.51.141	F8A03D6755D0
3000	Dinstar	C62S	2.62.11.0.2	3000	*****	172.28.51.101	F8A03D6755A8
	Dinstar	C62S	2.62.11.0.2			172.28.51.103	F8A03D6755AA
2000	Dinstar	C61S	2.61.6.12.12	2000	*****	172.28.11.60	F8A03D660290
	Dinstar	C62S	2.62.11.0.2			172.28.4.133	F8A03D675550
	Dinstar	C62S	2.62.11.0.2			172.28.51.29	F8A03D675560
	Dinstar	C62S	2.62.11.0.2			172.28.51.95	F8A03D6755A2
	Dinstar	C62S	2.62.11.0.2			172.28.51.79	F8A03D675592

Assigning an extension to phone (PIN Code) DINSTAR

1. Click **Extension & Call Group** ->
SIP Extension

2. Select an extension and
Configure PIN code

3. After saving, check if the
extension pin code has been
successfully configured

The screenshot displays the 'Edit SIP Extension' configuration page in the Dinstar PBX web interface. The left sidebar shows the navigation menu with 'SIP Extension' highlighted (1). The main content area shows the 'SIP Extension' tab with various settings. The 'PIN Code' field is highlighted (2) and contains the value '2205'. At the bottom, a 'More Info' dropdown is open, showing a list of settings. The 'PIN Code : 2205' is highlighted (3). On the right side of the table, a 'More' button is highlighted (3).

Edit SIP Extension		
SIP Extension	User Info	SIP Phone
Voicemail	☒	
Area Call Permission	☐ Internal ☐ Local ☐ Domestic ☐ International	
Call In Filter	Off	
Call Out Filter	Off	
PIN Code	2205	
Daily Call Limit	Off	
Expire Days	Permanent	
No Login For x Consecutive Days Is Automatically Disabled	Disable	

More Info

- Max Concurrent Register : 1
- Max Concurrent Call : 1
- Ring Timeout(s) : 50
- Original Called Number Location(Send INVITE) : Off
- Register User Agent : Any
- Call Pickup : Ring Group
- Call Waiting : Off
- Do Not Disturb : Off
- Call Forward Unconditional : Off
- Call Forward Unregister : Off
- Call Forward Busy : Off
- Call Forward No Reply : Off
- Call In Filter : Off
- NAT : Off
- Call Out Filter : Off
- Speed Dial : Off
- Allow Being Monitored : Off
- Monitor Mode : Disable
- Voicemail : Off
- Recording Profile : Off
- Phones1 : /
- PIN Code : 2205

Any 1-< GE0_Default > Enabled More Edit More >le

Assigning an extension to phone (PIN Code) DINSTAR

4. Click **Extension & Call Group**->
Phones

5. View Config File

6. Activate pin code

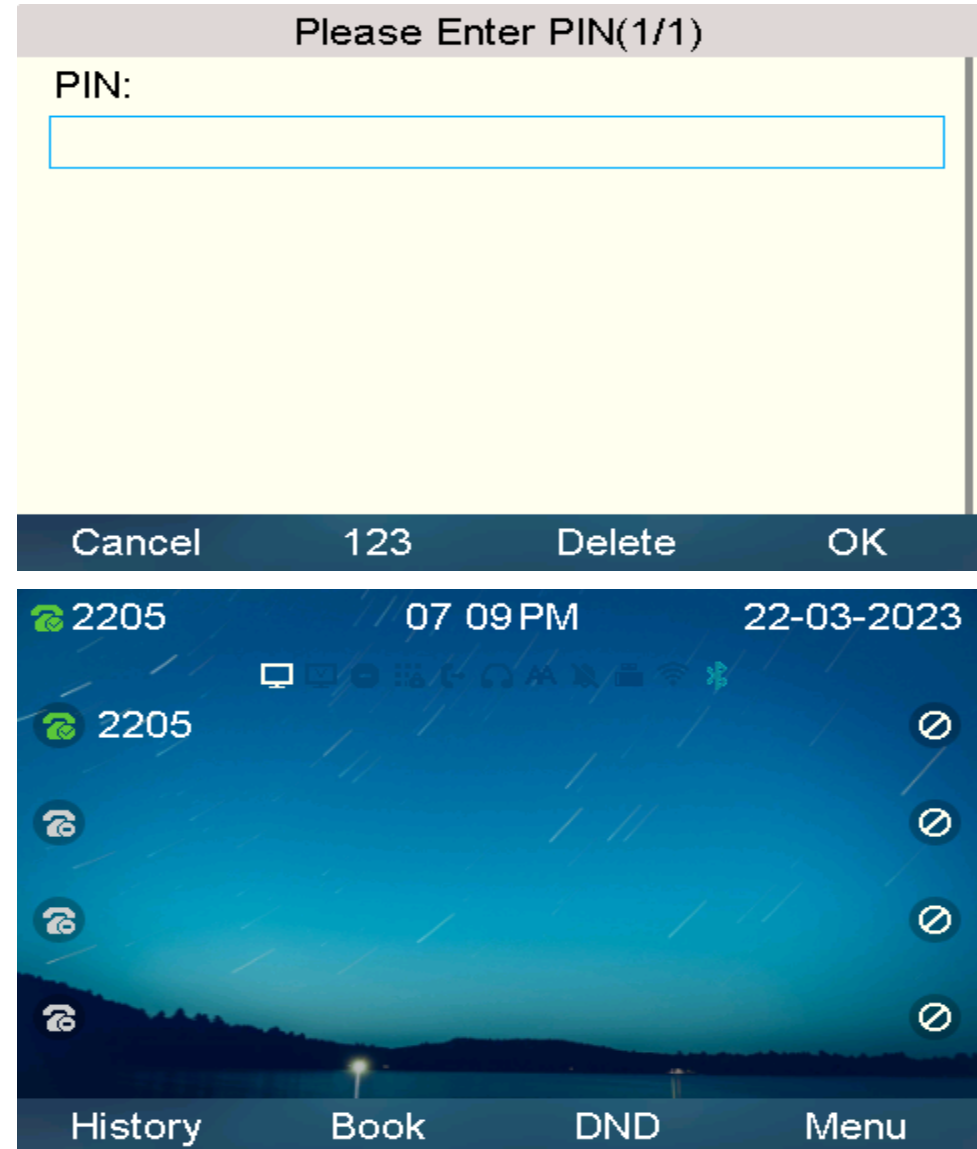
The image displays two screenshots of the Dinstar web interface, illustrating the steps to assign a PIN code to a phone.

Top Screenshot: The left sidebar shows the navigation menu with 'Extension & Call Group' expanded and 'Phones' selected (marked with a red box and a circled 4). The main content area is titled 'Phones' and has tabs for 'Phones', 'Config File', 'Template File', 'Phone Firmware Management', and 'PIN Code'. The 'Config File' tab is active, showing a table with columns: MAC/PIN, Create Time, Last Access Time, and Last Access IP. The table contains two rows: one for MAC/PIN '2205' (Create Time: 2025-03-21 10:09:16, Last Access Time: 2025-03-21 10:09:13, Last Access IP: 172.28.51.61) and another for 'general' (Create Time: 2025-03-21 10:09:14, Last Access Time: 2025-03-21 10:09:13, Last Access IP: 172.28.51.61). The '2205' row is highlighted with a red box and a circled 5.

Bottom Screenshot: The left sidebar shows the navigation menu with 'Extension & Call Group' expanded and 'Phones' selected. The main content area is titled 'Phones' and has tabs for 'Phones', 'Config File', 'Template File', 'Phone Firmware Management', and 'PIN Code'. The 'PIN Code' tab is active, showing a 'Status' section with a toggle switch (currently turned on) and a 'Save' button. The toggle switch and 'Save' button are highlighted with a red box and a circled 6.

Assigning an extension to phone (PIN Code) DINSTAR

- When the phone prompts “Please Enter PIN”, enter the file name(For example 2205)
- The file will be downloaded from the UC, and the configuration will take effect in the phone



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Busytone Learning

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How To Configure Busytone Learning

1. Click **Trunk &Route->FXO**
2. Select busytone learning
3. Choose an online FXO port
4. Enter the destination number or use the default destination number, click start

The screenshot shows the DINSTAR configuration interface. On the left, a sidebar menu has 'Trunk & Route' expanded, and 'FXO' is selected (marked with a red box and circled 1). The main panel is titled 'FXO' and has three tabs: 'FXO', 'Automatch Impedance', and 'Busytone Learning' (marked with a red box and circled 2). Under the 'Busytone Learning' tab, there are several fields: 'FXO' (marked with a red box and circled 3), 'Slot 1/Port 0/ONLINE' (a dropdown menu), 'Current Candence' (a bar chart showing '360,340,0,0,0,0,0'), 'Destination Number' (a text field containing '1234567890#' marked with a red box and circled 4), 'Original Candence' (a bar chart), and 'Automatch Optimum Candence' (a text field). A blue 'Start' button (marked with a red box and circled 4) is located to the right of the 'Destination Number' field.

How To Configure Busytone Learning

- 5. It takes about 30-60 seconds to learn the busy tone. After completing the learning, the progress bar will display 100
- 6. Click save

FXO

FXO Automatch Impedance Busytone Learning

FXO Slot 1/Port 0/ONLINE

Current Cadence 360,340,0,0,0,0,0,0

Destination Number 1234567890# Start

Busytone learning success

100%

Original Cadence 360,340,360,340,360,340,360,340

Automatch Optimum Cadence 360,340,0,0,0,0,0,0

5

Save 6

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Routing Configuration

03

1. How To Configure Routing

2. Use Case

How To Configure Routing

1. Click Trunk & Route->Route

2. Custom route name

3. Select call source

4. Select call Destination

The screenshot shows the 'New Route' configuration page in the DINSTAR interface. The left sidebar contains a menu with 'Trunk & Route' expanded, and 'Route' selected (marked with a red box and '1'). The main area is divided into sections: 'Condition' and 'Action'. In the 'Condition' section, the 'Name' field is highlighted with a red box and '2', and the 'Source' dropdown is highlighted with a red box and '3'. The 'Source' dropdown is open, showing a list of extensions (72141 to 72144) with 'Local Extension' selected. In the 'Action' section, the 'Destination' dropdown is highlighted with a red box and '4', and it is set to 'SIP Trunk / test'. Other fields include 'Priority' (298), 'Number Matching' (Off), 'Caller Number Prefix', 'Called Number Prefix', 'Time Profile' (Any), 'Callback' (On), 'Distinctive Ringtone(Alert-Info)' (None), 'Manipulation' (Off), and 'Password Type' (Off).

How To Configure Routing

- **Parameters- Source**

users can choose from local extension, SIP extension, SIP trunk, FXO trunk, e1/t1 trunk, and any

New Route

Condition

Source

Select All
Source list 0/99

- ☐ Any
- ☐ Local Extension
- ☐ SIP Trunk / test
- ☐ E1/T1 Trunk / Slot 3
- ☐ FXO Trunk / Slot 0 /
- Port 0
- ☐ SIP Extension / 72139 /

Select All
Target list 0/0

> <

↑ ↓

How To Configure Routing

- **Parameters- Destination**

users can choose from local extension, SIP extension, SIP trunk, FXO trunk, e1/t1 trunk, ring group, call queue, intercom/paging group and IVR

The screenshot displays a configuration interface with a sidebar on the left and a main content area on the right. The sidebar contains several menu items: 'Action', 'Callback', 'Distinctive Ringtone(Alert-Info)', 'Manipulation', 'Destination', and 'Password Type'. The 'Destination' item is highlighted with a red rectangular border. The main content area features a search bar at the top with the placeholder text 'Search...'. Below the search bar is a list of destination options: 'SIP Trunk / test', 'E1/T1 Trunk / Slot 3', 'FXO Trunk / Slot 0 / Port 0', 'Ring Group / ring', and 'Call Queue / 队列'. The 'Ring Group / ring' option is currently selected and highlighted with a light gray background. Below the list is a dropdown menu showing 'SIP Trunk / test' with an upward arrow. At the bottom of the main content area is another dropdown menu set to 'Off' with a downward arrow.

Use Case 1

Outbound route:

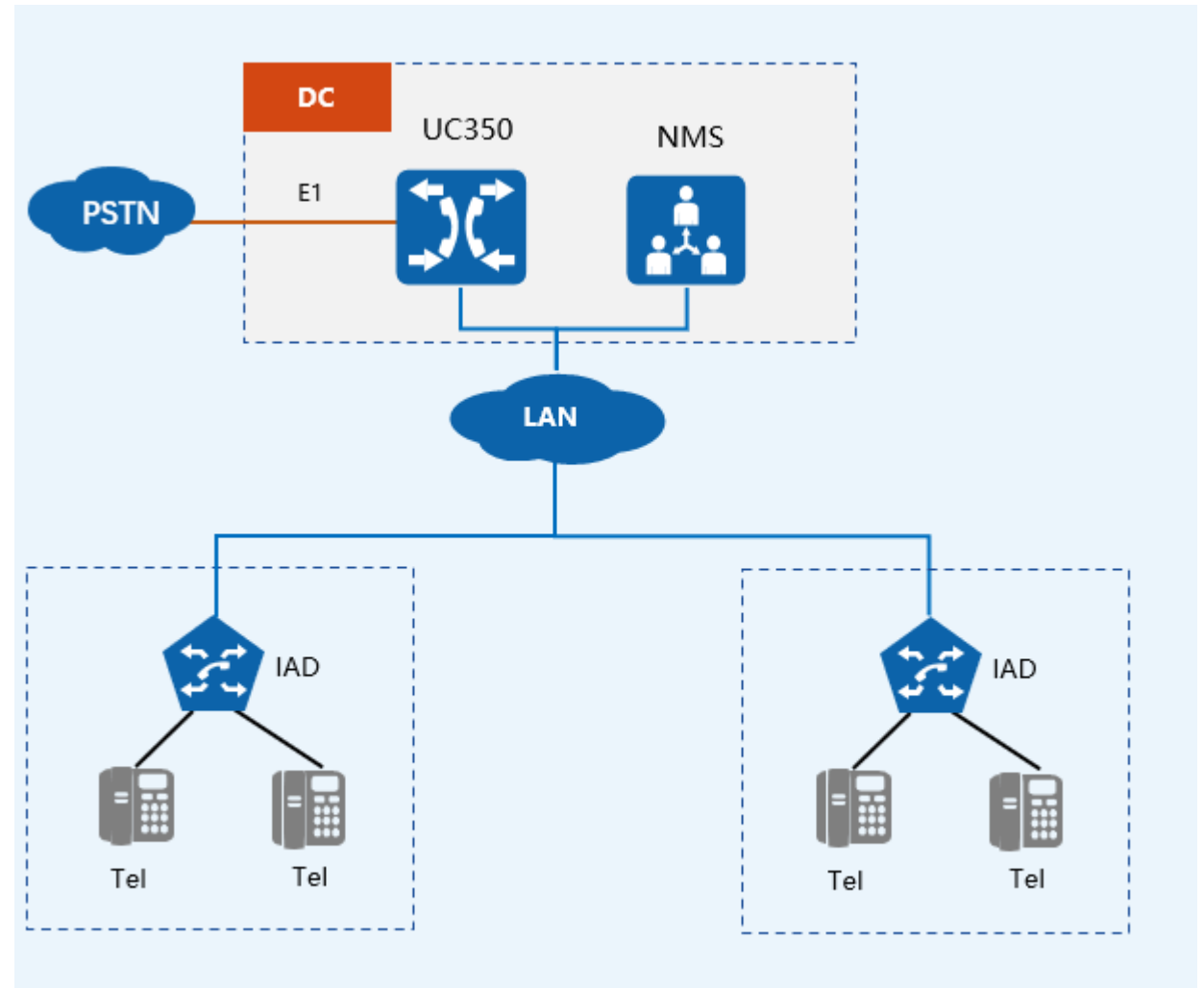
Route->Source: SIP trunk/IAD

Route->Destination: E1/T1 trunk

Inbound Route:

Route->Source: E1/T1 trunk

Route->Destination: SIP trunk/IAD



Use Case 2

Route 1:

Route->Source: SIP trunk/FXO

Called Number Prefix: 6

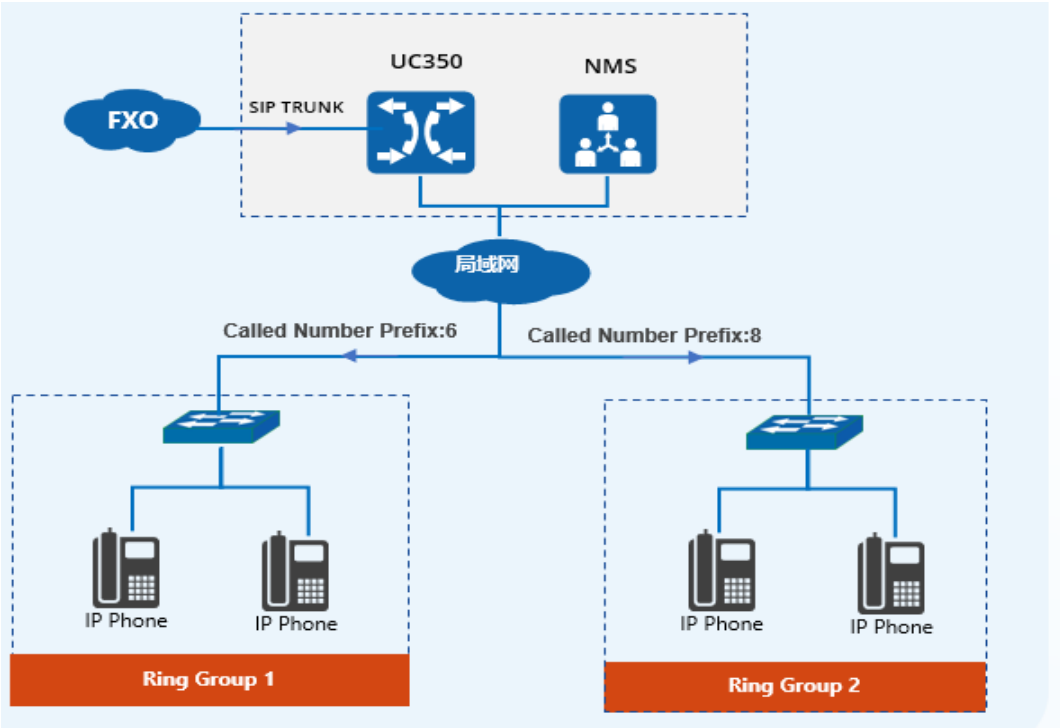
Route->Destination: ring group 1

Route 2:

Route->Source: SIP trunk/FXO

Called Number Prefix: 8

Route->Destination: ring group 2



Route

Route								
Route Group								
Priority	Name	Source	Num Match	Caller Prefix	Called Prefix	Time	Action: Manipulation/Dest	Failover: Manipulation/Dest
297	route 2	FXO	Off	Any	8	Off	Off / Ring Group / ring group 2	Not Config
298	route 1	FXO	Off	Any	6	Off	Off / Ring Group / ring group 1	Not Config

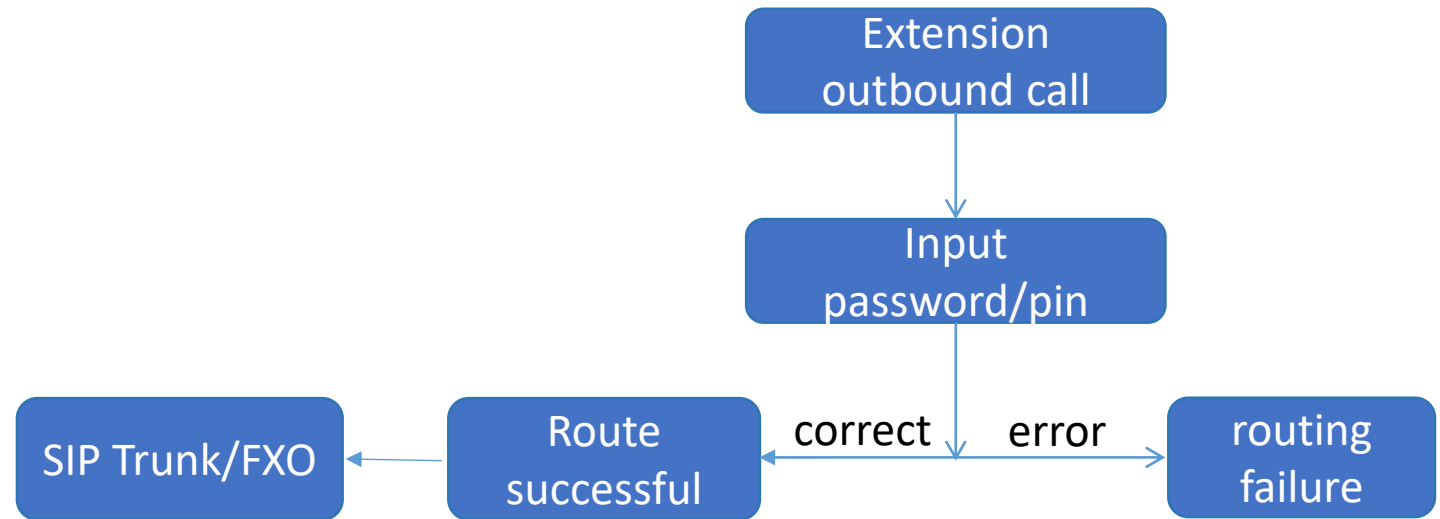
Use Case 3

Route->Source: local extension

Route->Destination: SIP trunk/FXO

Password Type : select Single

Password / PIN List



	Action
Number Matching	
Manipulation	Callback ☒
Route	Distinctive Ringtone(Alert-Info) None
Emergency Number	Manipulation Off
PIN List	Destination SIP Trunk / FXO
Blocked/Allowed Numbers	Password Type Single Password
AutoCLIP	...

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User Agent Configuration

How To Set User Agent

1. Click **PBX Global Setting->SIP Stack**

2. Select custom user agent and fill in the custom name

The screenshot displays the 'Edit SIP Profile' configuration page in the Dinstar PBX system. On the left, a sidebar menu lists various settings: Status, Trunk & Route, Extension & Call Group, Advanced Service, PBX Global Settings (expanded), SIP Stack (highlighted with a red box and a circled '1'), Codec, FXS/FXO, Voice, Feature Code, Address Book, and CDR & Recording. The main content area is titled 'Edit SIP Profile' and contains several settings: Proxy Media(SIP to SIP) (toggle on), Ignore ACK (toggle on), BLF (toggle on), CID Header (dropdown set to 'Off'), Pickup Caller Refresh Method (dropdown set to 'Off'), QoS (toggle on), User Agent (dropdown set to 'Custom', highlighted with a red box), and two timer fields: Timer T1(ms) set to 500 and Timer T2(ms) set to 4000. The 'User Agent' dropdown is also highlighted with a red box and a circled '2', and the 'Dinstar IPPBX' option is visible below it.

Setting	Value
Proxy Media(SIP to SIP)	On
Ignore ACK	On
BLF	On
CID Header	Off
Pickup Caller Refresh Method	Off
QoS	On
User Agent	Custom
Timer T1(ms)	500
Timer T2(ms)	4000

How To Set User Agent

In the packet capture file,
users can see whether the
user agent has been
successfully modified

1111	2025-03-20 11:37:24.465425	172.19.211.141	172.28.7.49	SIP	502 Request: OPTIONS sip:Heartbeat@172.28.7.49
1117	2025-03-20 11:37:24.579063	172.28.7.49	172.19.211.141	SIP	518 Status: 200 OK (OPTIONS)
1126	2025-03-20 11:37:25.103965	172.28.7.49	172.28.99.99	SIP/SDP	889 Request: INVITE sip:123@172.28.99.99
1127	2025-03-20 11:37:25.105442	172.28.99.99	172.28.7.49	SIP	355 Status: 100 Trying
1590	2025-03-20 11:37:31.029838	172.28.8.98	sip.mcast.net	SIP	788 Request: SUBSCRIBE sip:F8A03D287D57@224.0.1.75:5060
1701	2025-03-20 11:37:33.448216	172.28.54.8	sip.mcast.net	SIP	784 Request: SUBSCRIBE sip:F8A03D080A22@224.0.1.75:5060
1761	2025-03-20 11:37:34.458621	172.19.211.141	172.28.7.49	SIP	502 Request: OPTIONS sip:Heartbeat@172.28.7.49
1770	2025-03-20 11:37:34.571551	172.28.7.49	172.19.211.141	SIP	518 Status: 200 OK (OPTIONS)
1863	2025-03-20 11:37:35.610853	172.28.8.78	sip.mcast.net	SIP	788 Request: SUBSCRIBE sip:F8A044242009@224.0.1.75:5060
1954	2025-03-20 11:37:37.462714	172.28.74.210	sip.mcast.net	SIP	796 Request: SUBSCRIBE sip:F8A03D20C0F6@224.0.1.75:5060

>	Frame 1127: 355 bytes on wire (2840 bits), 355 bytes captured (2840 bits) on interface \Device\NPF_{99925503-7DAC-4FAA-8322-88D8AB263245}, id 0
>	Ethernet II, Src: DinstarT_71:8f:27 (f8:a0:3d:71:8f:27), Dst: 16:47:33:76:38:42 (16:47:33:76:38:42)
>	Internet Protocol Version 4, Src: 172.28.99.99 (172.28.99.99), Dst: 172.28.7.49 (172.28.7.49)
>	User Datagram Protocol, Src Port: sip (5060), Dst Port: sip (5060)
▼	Session Initiation Protocol (100)
>	Status-Line: SIP/2.0 100 Trying
▼	Message Header
>	Via: SIP/2.0/UDP 172.28.7.49:5060;branch=z9hG4bK-d87543-fa7ace268354bf23-1--d87543-;rport=5060
>	From: <sip:1000@172.28.99.99>;tag=c50ed36
>	To: "123" <sip:123@172.28.99.99>
>	Call-ID: OT1hNTIyYjVmZjF1YjdmOTE5NDhhODQ4Yjk1Mz1kMmQ.
>	[Generated Call-ID: OT1hNTIyYjVmZjF1YjdmOTE5NDhhODQ4Yjk1Mz1kMmQ.]
>	CSeq: 1 INVITE
>	User-Agent: Dinstar IPPBX
>	Content-Length: 0



THANKS



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