

DAG Basic Configuration Practice Guide

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Foreword

- This course is mainly:
 - Introduce Dinstar DAG series.
 - Guide how to access the DAG
 - Guide how to set network on DAG
 - Guide how to configure DAG with sip server

Course Objective

Through this course
you will be able to



HOW To Access The Device



How To SET Network On Device



How To Make Calls On DAG

Contents

- 1 Chapter One About Dinstar DAG series
- 2 Chapter Two How to access DAG
- 3 Chapter Three How to configure DAG

Chapter One

About Dinstar DAG series

01



Dinstar DAG IPPBX Series



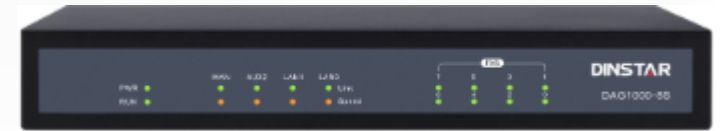
FXS VoIP Gateway



DAG1000-1/2S



DAG1000-4S



DAG1000-8S



DAG2000-16S



DAG2000-24S



DAG2000-32S

Dinstar DAG IPPBX Series

DINSTAR

FXS VoIP Gateway



DAG2500-48/72/96S



DAG3000-128/256/312

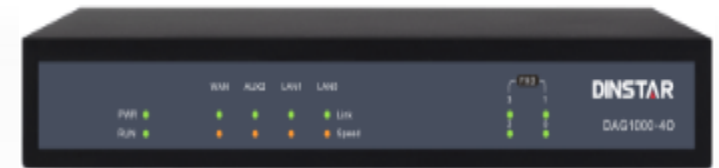
Dinstar DAG IPPBX Series

DINSTAR

FXO VoIP Gateway



DAG1000-20



DAG1000-40



DAG1000-80



DAG2000-160

Dinstar DAG IPPBX Series

DINSTAR

Hybrid VoIP Gateway



DAG1000-1S1O



DAG1000-2S2O



DAG1000-4S4O



DAG2000-8S8O



DAG3000-32S/O



DAG3000-128S/O

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Chapter Two

How to access DAG

02

1. Physical Connection
2. PC Settings
3. Access Device GUI

Physical Connection

DINSTAR

- DAG1000

Support Router and Bridge network mode

Default network mode **Router**

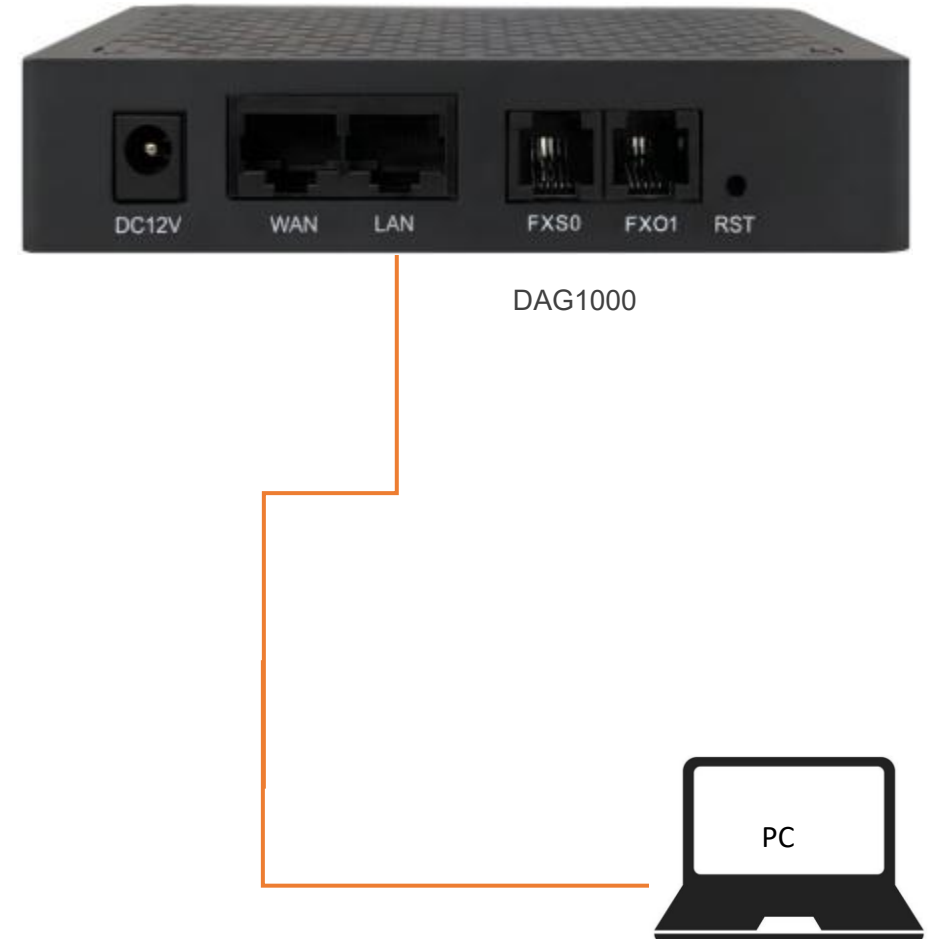
WAN Port DHCP, LAN Port---

192.168.11.1

Default username/password---

admin/admin

Service Port WAN and LAN



Physical Connection

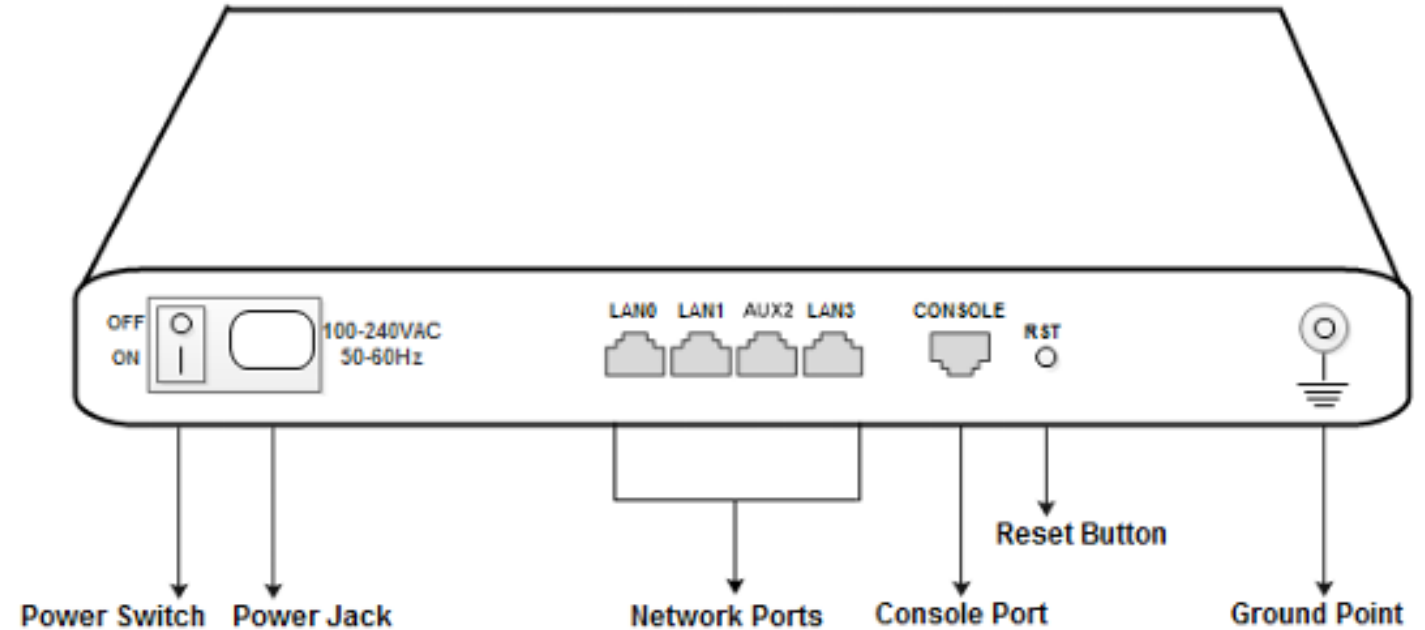
- DAG2000

Lan port--192.168.11.1

Default username/password---**admin/admin**

Ethernet Port LAN0 to LAN3

AUX2 port is reserved port, non-use



Physical Connection

- DAG2500

Support Gigabit Ethernet port

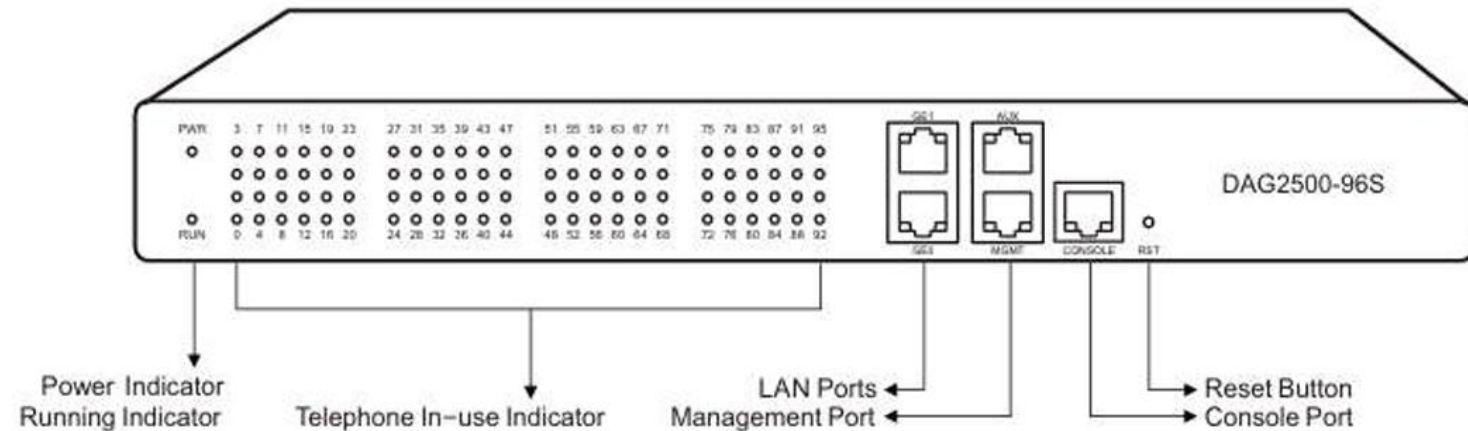
Management port MGMT--192.168.11.1

Default username/password---

admin/admin

Ethernet Port GE0 and GE1

AUX2 port is reserved port, non-use



Physical Connection

- DAG3000

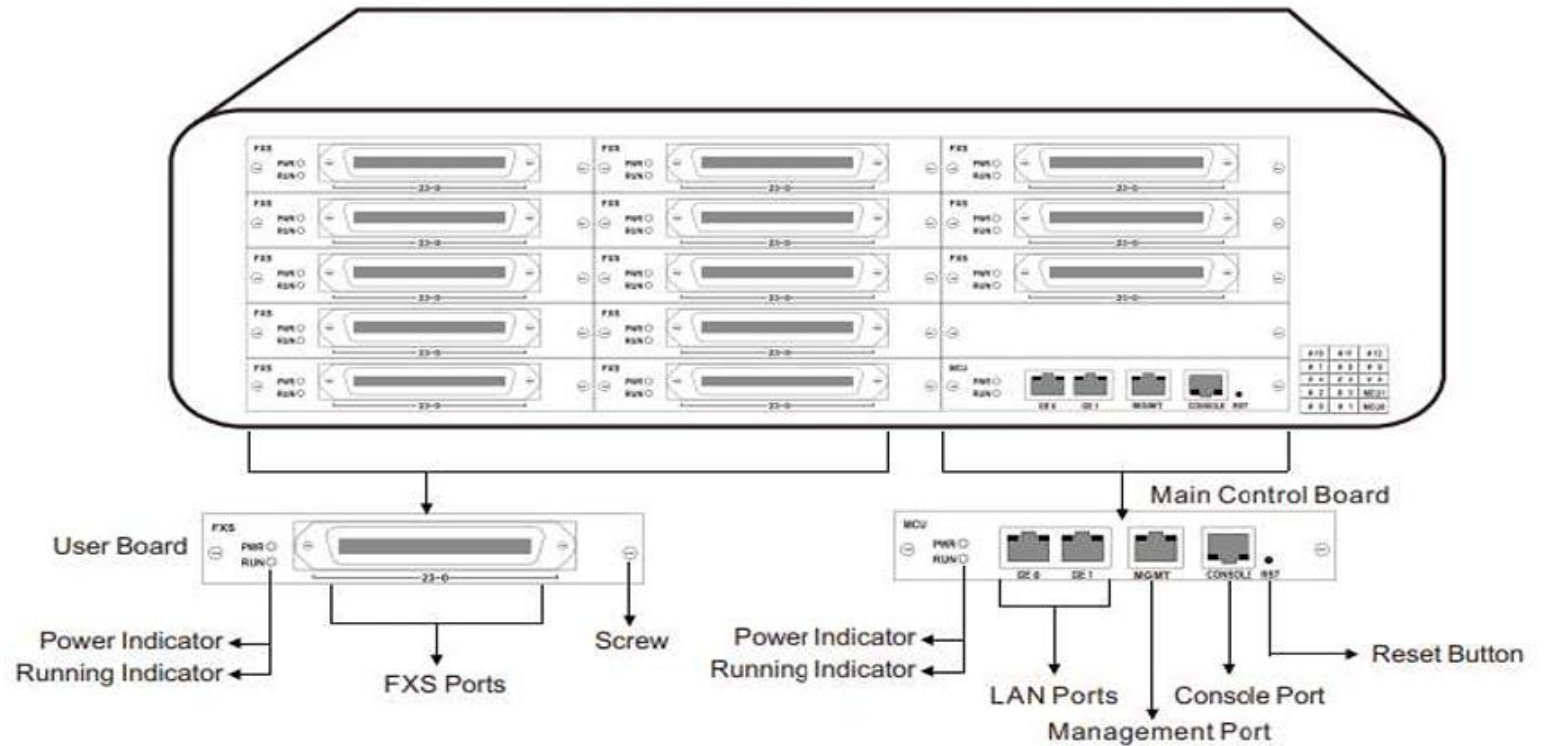
Support Gigabit Ethernet port

Management port MGMT--192.168.11.1

Default username/password---

admin/admin

Ethernet Port GE0 and GE1



PC Settings

- Add IP

Add 192.168.11.xxx/255.255.255.0 to access the

DAG

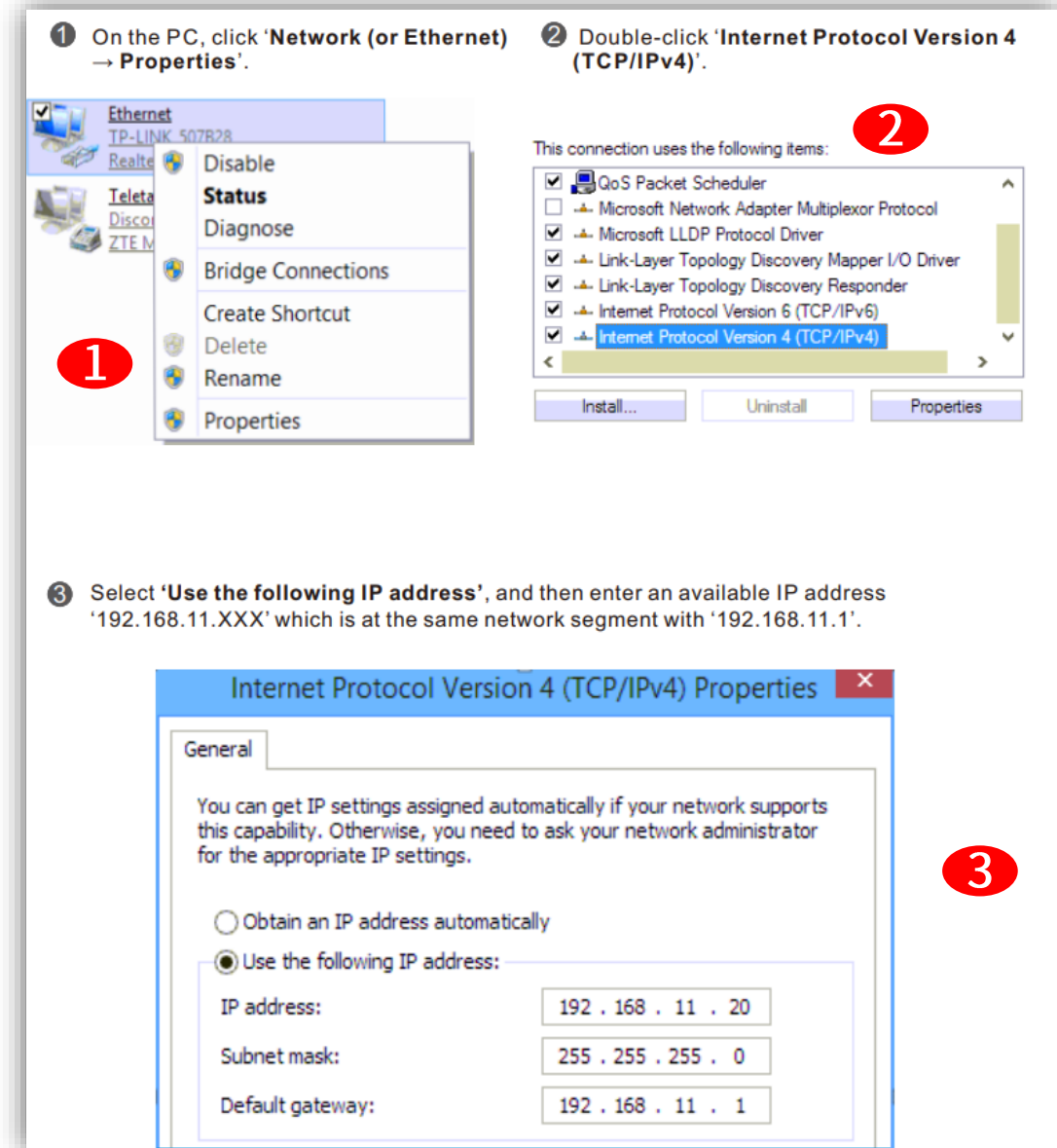
Note:

1. Optional IP range: 192.168.11.2-192.168.11.254
2. Set the IP address of the PC as shown in the figure on the right

1 On the PC, click 'Network (or Ethernet) → Properties'.

2 Double-click 'Internet Protocol Version 4 (TCP/IPv4)'.

3 Select 'Use the following IP address', and then enter an available IP address '192.168.11.XXX' which is at the same network segment with '192.168.11.1'.



The image shows two screenshots from a Windows operating system. The first screenshot shows the 'Network Connections' window with the 'Ethernet' adapter selected, and the 'Properties' menu open. The second screenshot shows the 'Internet Protocol Version 4 (TCP/IPv4) Properties' dialog box with the 'Use the following IP address' option selected. The IP address is set to 192.168.11.20, the subnet mask is 255.255.255.0, and the default gateway is 192.168.11.1.

Access Device GUI

- Access Device

Browser input <https://192.168.11.1> to login interface .

Input Username and Password:

[admin/admin](#),

Click [Login](#) to access the device.

A 'Web Login' form with a light gray background. It contains two input fields: 'Username' and 'Password'. Below the 'Password' field is a blue 'Login' button.

Access Device GUI

After logging in, you will see the status interface, as shown below



Web Management System

- + Status & Statistics
 - + Quick Setup Wizard
 - + Network
 - + SIP Server
 - + IP Profile
 - + Tel Profile
 - + Port
 - + Advanced
 - + Call & Routing
 - + Manipulation
 - + Management
 - + Security
 - + Tools

Device ID	da52-0708-6012-0122		
MAC Address	F8-A0-3D-21-BE-41		
Network Mode	Router		
WAN IP Address	172.19.211.101	255.255.0.0	Static
	172.19.1.1		
LAN Port	192.168.11.1	255.255.255.0	
DNS Server	114.114.114.114	4.4.4.4	
Cloud Register Status	Not Registered		
NMS Register Status	Not Registered		
System Uptime	114 h: 47 m: 48 s		
System Time	2025-2-19 10:29:20		
Traffic Statistics	Received 150167621 bytes Sent 19299371 bytes		
Usage of Flash	87 %(6971392 / 7929856) bytes		
Usage of Backup Flash	34 %(5042176 / 14680064) bytes		
Usage of RAM in Linux	41 %(24764416 / 60112896) bytes		
Usage of RAM in AOS	78 %(13180928 / 16769024) bytes		
Current Software Version	DAG1000-4S4O 2.83.13.03 PCB 3 LOGIC 0 BIOS 1, 2024-12-02 18:05:34		
Backup Software Version	DAG1000-4S4O 2.83.13.03 PCB 3 LOGIC 0 BIOS 1, 2024-12-02 18:05:34		
DSP Version	ARM_32_13 Jan 13 2022 17:39:22		
U-BOOT Version	25		
Kernel Version	29		
Root FS Version	24		
FS Version	23		

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Chapter Three

How To Configure DAG

03

- 1.DAG Connect With SIP Server by Register Mode
- 2.DAG Connect With SIP Server by Sip Trunk Mode

DAG Connect With SIP Server(Register Mode)

DINSTAR



1.Type username and password

default is admin/admin

2.Click Login

Web Management System

Web Login

Username

Password

Login

DAG Connect With SIP Server(Register Mode)

DINSTAR

Login Web
Page

Network
Setting

SIP Server
Configure

Port
Setting

Route
Setting

1. Click **Network->Local network**

2. Configure IP address

3. Save and restart the device

Local Network

IP Protocol: IPv4

Network Configuration

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address: 172.27.10.5

Subnet Mask: 255.255.0.0

Default Gateway: 172.27.1.1

☐ PPPoE

Account:

Password:

Service Name:

WAN MTU: 1500

Manage Address

IP Address:

Subnet Mask:

DNS Server

☐ Obtain DNS server address automatically

☒ Use the following DNS server address

Primary DNS Server: 8.8.8.8

Secondary DNS Server: 4.4.4.4

Note: The device must restart to take effect.

Save

DAG Connect With SIP Server(Register Mode)

DINSTAR

Login Web
Page

Network
Setting

SIP Server
Configure

Port
Setting

Route
Setting

1.Click **SIP Server**

2.Configure your Sip server's IP
address and port

3. Select SIP Transport Type

Web Management System

SIP Server

IP Protocol for SIP Stack: IPv4

SIP Server

② SIP Server: 172.27.10.14

SIP Server Port (Default: 5060): 5060

Registration Expires (Default: 300): 300 s

Heartbeat: ☐ Enable

Primary Outbound Proxy

Primary Outbound Proxy Address:

Primary Outbound Proxy Port: 5060

Secondary Outbound Proxy

Secondary Outbound Proxy Address:

Secondary Outbound Proxy Port: 5060

Registration

Re-registration Percent(Expires)(0: means random, range 25%-75%): 0

Retry Interval when Registration failed: 30 s

Registration Limit (counts/time, time: 0 means unlimited): 1 / 0 s

Send SIP Unregistration Request when the Device Restart: ☐ Enable

MOH

MOH Dial Number: ~mh~u

③ **SIP Transport Type**: UDP

Local SIP Port

Use Random Port: ☐ Enable

SIP UDP/TCP Local Port: 5060

DAG Connect With SIP Server(Register Mode)

DINSTAR

Login Web
Page

Network
Setting

SIP Server
Configure

Port
Setting

Route
Setting

1. Click **Port** and **add**
2. Choose the port number
3. Configure sip account and password which Sip server side provide
4. Save setting

The screenshot displays the 'Port Modify' configuration window in the DINSTAR web interface. On the left, a sidebar menu lists various settings, with 'Port' highlighted and circled in red with a '1'. The main configuration area contains several fields and checkboxes. A red box with a '2' highlights the 'Port' field, which is set to '0'. Another red box with a '3' highlights the 'Display Name', 'SIP User ID', 'Authenticate ID', and 'Authenticate Password' fields, all of which are set to '6005'. The 'Authenticate Password' field is masked with asterisks. Below these fields, there are checkboxes for 'Disable Port', 'Registration' (checked), 'DND(Do Not Disturb)', and 'Caller-ID' (checked). At the bottom of the window, there are 'Save' and 'Cancel' buttons, with the 'Save' button circled in red with a '4'.

DAG Connect With SIP Server(Register Mode)

DINSTAR

Login Web
Page

Network
Setting

SIP Server
Configure

Port
Setting

Route
Setting

1. Click **Call & Routing**

2. Add **IP->Tel Routing**

3. Select call source: IP Profile

4. If there are no restrictions on the prefix of the calling and called parties, fill in 'any'

5. Select the call destination as the corresponding port

Note:

FXS device registration mode can be configured without routing

IP->Tel Routing Add

Index	127
Description	out
Calls from	☐ IP Trunk Any ☒ IP Profile 0 <default>
Caller Prefix	any
Called Prefix	any
Calls to	☒ Port 0 ☐ Port Group

Save Reset Cancel

NOTES: 'any' in 'Called Prefix' or 'Caller Prefix' means wildcard string.

DAG Connect With SIP Server(Register Mode)

DINSTAR

Login Web
Page

Network
Setting

SIP Server
Configure

Port
Setting

Route
Setting

1. Click **Call & Routing**

2. add **Tel->IP/Tel Routing**

3. Select the call source as the corresponding port

4. If there are no restrictions on the prefix of the calling and called parties, fill in 'any'

5. Select call destination: IP Profile

Note:

FXS device registration mode can be configured without routing

1. Click **Call & Routing**

2. add **Tel->IP/Tel Routing**

3. Select the call source as the corresponding port

4. If there are no restrictions on the prefix of the calling and called parties, fill in 'any'

5. Select call destination: IP Profile

NOTES: any in Called Prefix or Caller Prefix means wildcard string.

DAG Connect With SIP Server(Trunk Mode)

DINSTAR



- 1.Type username and password
default is admin/admin
- 2.Click Login

Web Management System

Web Login

Username

Password

Login

1

2

DAG Connect With SIP Server(Trunk Mode)

DINSTAR

Login Web
Page

Network
Setting

IP Trunk
Configure

Port
Setting

Route
Setting

1.Click **Network->Local network**

2.Configure IP address

3.Save and restart the device

Local Network

IP Protocol: IPv4

Network Configuration

☐ Obtain an IP address automatically

☒ Use the following IP address

IP Address: 172.27.10.5

Subnet Mask: 255.255.0.0

Default Gateway: 172.27.1.1

☐ PPPoE

Account:

Password:

Service Name:

WAN MTU: 1500

Manage Address

IP Address:

Subnet Mask:

DNS Server

☐ Obtain DNS server address automatically

☒ Use the following DNS server address

Primary DNS Server: 8.8.8.8

Secondary DNS Server: 4.4.4.4

Note: The device must restart to take effect.

Save

DAG Connect With SIP Server(Trunk Mode)

DINSTAR

Login Web
Page

Network
Setting

IP Trunk
Configure

Port
Setting

Route
Setting

1.Click **Call & Routing**

2.Add **IP Trunk**

3.Configure your Sip server's IP
address and port

4.Save setting

The screenshot displays the DINSTAR web interface for configuring an IP Trunk. On the left, a sidebar menu lists various settings, with 'Call & Routing' (1) and 'IP Trunk' (2) highlighted. The main content area shows the 'IP Trunk Add' form. The form includes the following fields and values:

- Index: 311
- IP Profile: 0 <default>
- Description: pc
- Remote Address: 172.28.7.49
- Remote Port: 5060
- Heartbeat: ☐ Enable

At the bottom of the form, the 'Save' button (4) is highlighted, along with 'Reset' and 'Cancel' buttons.

DAG Connect With SIP Server(Trunk Mode)

Login Web
Page

Network
Setting

IP Trunk
Configure

Port
Setting

Route
Setting

1. Click **Port** and **add**
2. Choose the port number
3. Do not select registration
4. Configure sip account and password as need

The screenshot displays the 'Port Modify' configuration page in the DINSTAR web interface. The left sidebar contains a menu with the following items: Status & Statistics, Quick Setup Wizard, Network, SIP Server, IP Profile, Tel Profile, Port (highlighted with a red box and circled number 1), Advanced, Call & Routing, Manipulation, Management, Security, and Tools. The main configuration area includes the following fields and options:

- Port** (highlighted with a red box and circled number 2): A text input field containing '0'.
- Disable Port**: A checkbox.
- Registration** (highlighted with a red box and circled number 3): A checkbox labeled 'Enable'.
- IP Profile**: A dropdown menu showing '0 <default>'.
- Tel Profile**: A dropdown menu showing '0 <default>'.
- Display Name**: A text input field containing '6005'.
- SIP User ID**: A text input field containing '6005'.
- Authenticate ID**: A text input field containing '6005'.
- Authenticate Password**: A text input field with masked characters.
- Offhook Auto-Dial**: A text input field.
- Auto-Dial Delay Time**: A text input field containing '0' with a unit 's'.
- DND(Do Not Disturb)**: A checkbox labeled 'Enable'.
- Caller-ID**: A checkbox labeled 'Enable'.
- Number for CFU(Call Forwarding Unconditional)**: A text input field.
- Number for CFB(Call Forwarding Busy)**: A text input field.
- Number for CFNRy(Call Forwarding No Reply)**: A text input field.
- Call Waiting**: A checkbox labeled 'Enable'.
- Play Call Waiting Tone**: A checkbox labeled 'Enable'.
- Call Waiting Send CID**: A checkbox labeled 'Enable'.

At the bottom right, there are 'Save' and 'Cancel' buttons.

DAG Connect With SIP Server(Trunk Mode)



1. Click **Call & Routing**
2. Add **IP->Tel Routing**
3. Select call source: IP Trunk
4. If there are no restrictions on the prefix of the calling and called parties, fill in 'any'
5. Select the call destination as the corresponding port

IP->Tel Routing Modify

Index	127
Description	out
Calls from (3)	☒ IP Trunk 311 <pc> ☐ IP Profile 0 <default>
Caller Prefix (4)	any
Called Prefix (5)	any
Calls to	☒ Port 0 ☐ Port Group

Save Reset Cancel

NOTES: 'any' in 'Called Prefix' or 'Caller Prefix' means wildcard string.

DAG Connect With SIP Server(Trunk Mode)

Login Web
Page

network
setting

IP Trunk
Configure

Port
Setting

Route
Setting

1. Click **Call & Routing**
2. add **Tel->IP/Tel Routing**
3. Select the call source as the corresponding port
4. If there are no restrictions on the prefix of the calling and called parties, fill in 'any'
5. Select call destination: IP Trunk

Tel->IP/Tel Routing Add

Index	127
Description	in
Calls from	☒ Port 0
	☐ Port Group
Caller Prefix	any
Called Prefix	any
Calls to	☐ Port 0
	☐ Port Group
	☒ IP Trunk 311 <pc>
	☐ IP Profile 0 <default>

Save Reset Cancel

NOTES:'any' in 'Called Prefix' or 'Caller Prefix' means wildcard string.

Summary

- This course we already learn:
 - ▣ How to access the device .
 - ▣ How to set network on device .
 - ▣ How to make calls through device .



THANKS



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