

MTG Basic Configuration Practice Guide

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Foreword

- This course is mainly:
 - Guide how to access the MTG and set network on MTG
 - Guide how to connect PRI with MTG
 - Guide how to connect SS7 with MTG

Course Objective

Through this course
you will be able to



HOW To Access The Device



How To SET Network On Device



How To Configure PRI/SS7 On MTG

Contents

- 1 Chapter One How to access MTG Series
- 2 Chapter Two How to set network on MTG
- 3 Chapter Three How to configure MTG

Chapter One

How to access the MTG Series

01

Physical Connection

- MTG Series

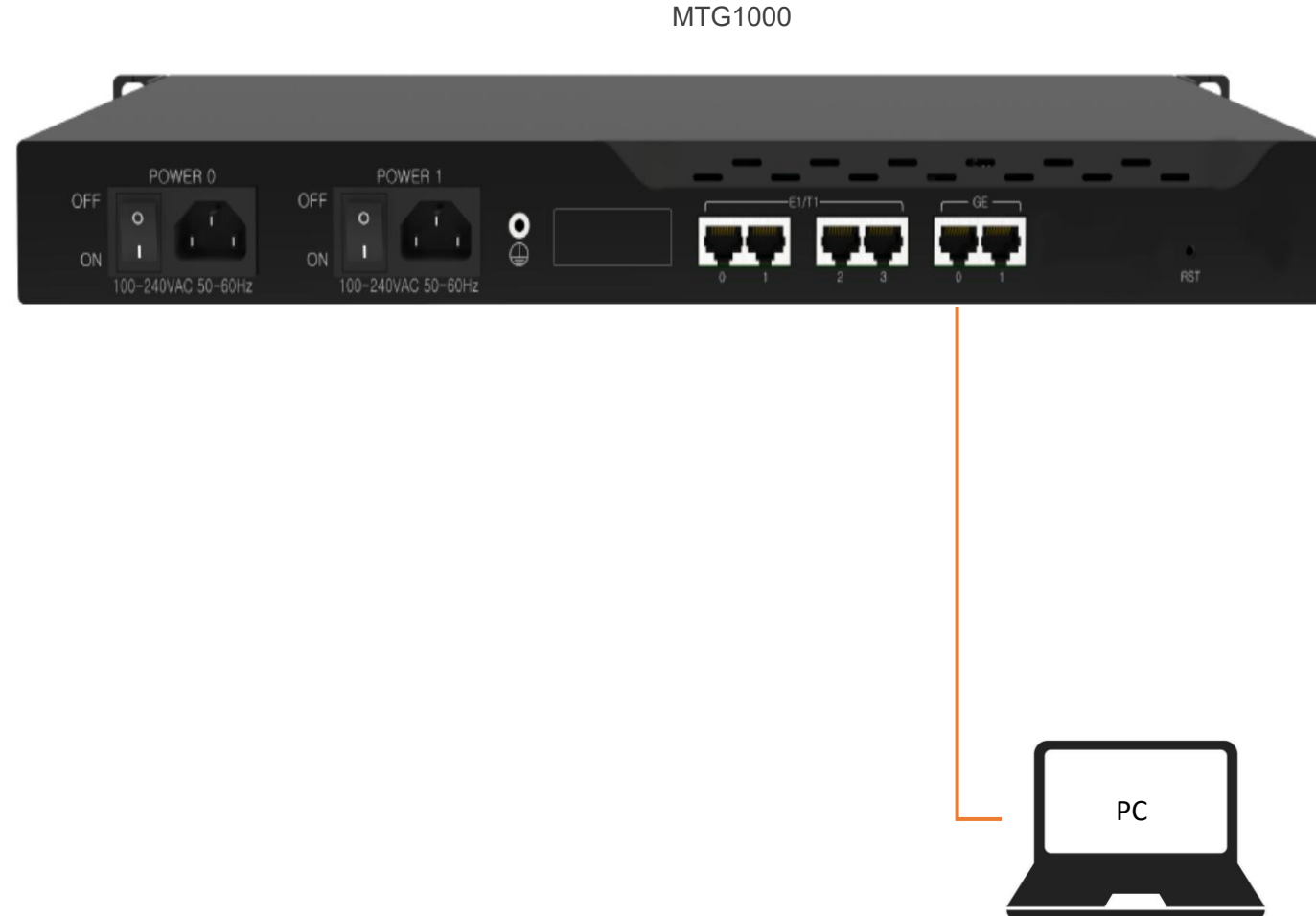
The GE support **10/100/1000 MB**

GE1 Port---**192.168.1.111**, GE0 Port---

192.168.11.1

Default username/password---

admin/admin@123#



PC Settings

- Add IP

Add 192.168.11.xxx/255.255.255.0 to access the MTG's GE0 Port

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 'General' tab selected. In the 'General' tab, the 'Use the following IP address' radio button is selected, and the IP address, subnet mask, and default gateway are entered as 192.168.11.20, 255.255.255.0, and 192.168.11.1 respectively.

Access Device GUI

- Access Device

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

Input Username and Password:

admin/admin@123#,

Click Login to access the device.



Access Device GUI

After login, then will into the Status page, as shown below



Web Management System

- Status & Statistics
 - System Information
 - DTU Status
 - E1/T1 Status
 - PSTN Trunk Status
 - IP Trunk Status
 - SIP Registration Status
 - Call Info Status
 - PRI Call Statistics
 - SS7 Call Statistics
 - R2 Call Statistics
 - SIP Call Statistics
 - Radius Statistics
 - Record Statistics
- + Network Param Config
 - + PRI Config
 - + SS7 Config
 - + R2 Config
 - + PSTN Group Config
 - + SIP Config
 - + IP Group Config
 - + Number Filter
 - + Call Routing
 - + Number Manipulation
- Voice & Fax
- + Maintenance
- + Management

System Information

General			
CPU ID	E4-61-8C-A7-C3-0B-46-2E		
CPU Temperature	44°C	Usage(60s)	6%
Userboard CPU Temperature	[57°C 54°C] [0°C 0°C] [0°C 0°C] [0°C 0°C] [0°C 0°C]		
GE1 MAC-Work Mode	F8-A0-3D-40-E8-0C	1000M/Full-duplex	
GE0 MAC-Work Mode	F8-A0-3D-40-E8-0D	down	
Service Ethernet Interface(GE1)	172.19.211.133	255.255.0.0	172.19.1.1
Management Ethernet Interface(GE0)	192.168.11.1	255.255.255.0	192.168.11.1
DNS Server	114.114.114.114 8.8.8.8		
Device ID	dc12-0211-0013-0001		
Cloud Server Register Status	Not Registered	SS7 Share	Master TG
System Time	2025-4-6 21:51:18		
System Uptime	30 d 22 h 12 m 49 s		
License	Official		
GE1 Network Speed(Kbit/s)	Received	7	Sent 14
GE0 Network Speed(Kbit/s)	Received	0	Sent 0

Version			
Device Model	MTG2000	Work Mode	Mixed Mode
Hardware Version	PCB 04.01, BackBoardID 1, LogicID 0, FlashID 0		
Boot Version	17	Kernel Version	21
Software Version	02.06.11.26 p1T3	Web Version	02.06.11.26 p1T3
Time Built	2025-01-02 , 17:43:42		

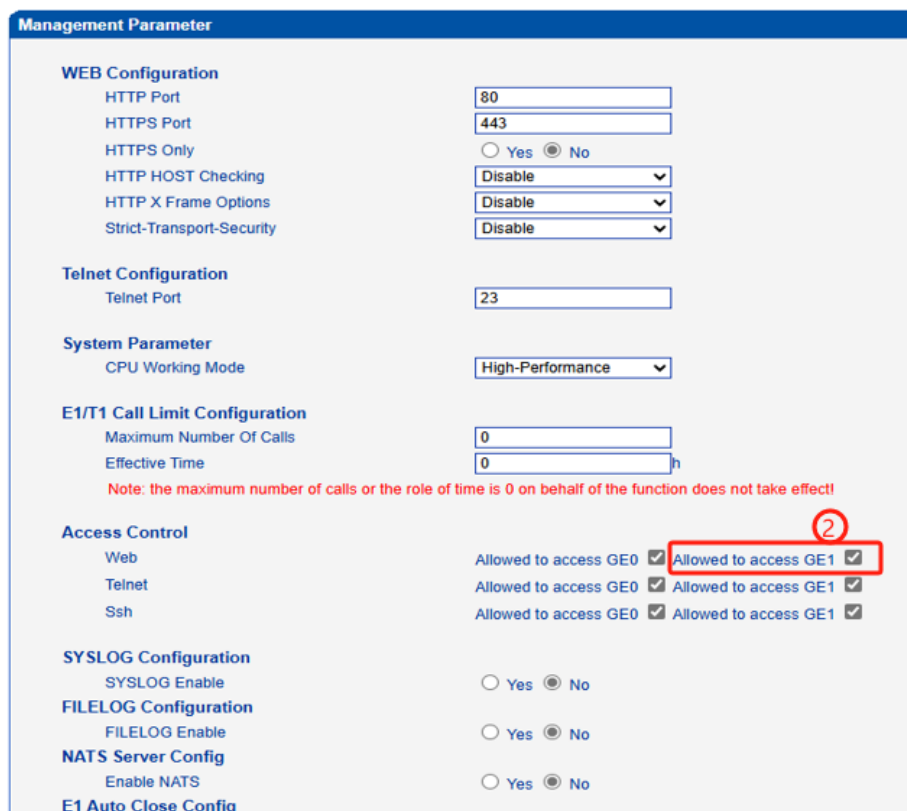
Refresh

Access Device GUI

1. Click **Management**--->**Management Parameter**,

2. choose Access control, enable Allowed to access GE1

After enable it, you can access the MTG by GE0/GE1's IP address



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- 2 Chapter Two How to set network on MTG
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Chapter Two

How to set network on MTG

02

Set network on MTG and enable web access

- Network config

1. Click **Network Param Config**---

Network Config

2. Configure the GE0 and GE1's IP and then restart MTG

Note:

The GE1 port and GE0 port's IP can't be same network segment

The screenshot displays the 'Network Configuration' page of the MTG2000 web interface. The left sidebar contains a menu with 'Network Param Config' highlighted by a red circle labeled '1'. The main content area shows the configuration for two Ethernet interfaces: 'Service Ethernet Interface (GE1)' and 'Management Ethernet Interface (GE0)'. A red circle labeled '2' encompasses the configuration fields for both interfaces. For GE1, the IP address is 172.19.211.133, subnet mask is 255.255.0.0, and default gateway is 172.19.1.1. For GE0, the IP address is 192.168.11.1, subnet mask is 255.255.255.0, and default gateway is 192.168.11.1. Both interfaces have 'Auto Negotiation' selected for their work mode. Below these, the 'DNS Server' section shows 'Obtain DNS server address automatically' selected, with 'Master DNS Server' set to 114.114.114.114 and 'Secondary DNS Server' set to 0.0.0.0. At the bottom, the 'Default Gateway' is set to GE1, and the 'System Parameter' section shows the hostname as MTG2000. A 'Save' button is located at the bottom right.

Service Ethernet Interface (GE1)	
Obtain IP address automatically	☐
Use the following IP address	☒
Description	GE1
IP Address	172.19.211.133
Subnet Mask	255.255.0.0
Default Gateway	172.19.1.1
Work Mode	Auto Negotiation
Ethernet Port Bond	Disable

Management Ethernet Interface (GE0)	
Description	GE0
IP Address	192.168.11.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.11.1
Work Mode	Auto Negotiation

DNS Server	
Obtain DNS server address automatically	☐
DNS Server	☒
Master DNS Server	114.114.114.114
Secondary DNS Server	0.0.0.0

Default Gateway	
Interface	GE1

System Parameter	
Hostname	MTG2000

Save

NOTE: The device must restart to take effect.

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Chapter Three

How to configure MTG

03

1. How to configure the PRI on MTG
2. How to configure the SS7 on MTG

Configure MTG with PRI

Login web page

Configure PRI trunk

Configure SIP trunk

Route setting

1.Type username and password

default is admin/admin@123#

2.Click Login



Configure MTG with PRI

Login web page

Configure PRI trunk

Configure SIP trunk

Route setting

1. Click **PRI Config**---->**PRI trunk**

2. Configure PRI trunk (Trunk name, Channel ID, E1/T1 Port No., Protocol, Switch side)

Note:

Channel ID, Protocol, Switch side need configure same as the operator side provide

The screenshot displays the DINSTAR web interface. On the left is a dark blue sidebar with a menu. The 'PRI Config' section is expanded, and 'PRI Trunk' is highlighted with a red box and a circled '1'. To the right, the 'PRI Trunk Modify' dialog box is open. It contains several input fields: 'Trunk No.' (0), 'Trunk Name' (pri), 'Channel ID' (0), 'D-Channel' (Enable), 'E1/T1 Port No.' (0), 'Protocol' (ISDN), 'Switch Side' (User Side), and 'Alerting Indication' (ALERTING). The 'Trunk Name', 'Channel ID', 'E1/T1 Port No.', 'Protocol', and 'Switch Side' fields are grouped by a red box and a circled '2'. At the bottom of the dialog are 'OK', 'Reset', and 'Cancel' buttons.

PRI Trunk Modify	
Trunk No.	0
Trunk Name	pri
Channel ID	0
D-Channel	Enable
E1/T1 Port No.	0
Protocol	ISDN
Switch Side	User Side
Alerting Indication	ALERTING

OK Reset Cancel

Configure MTG with PRI

Login web page

Configure PRI trunk

Configure SIP trunk

Route setting

1. Click **SIP Config**--->**SIP Trunk**

2. Select network port

3. Configure Trunk name、

Remote address、 Protocol、

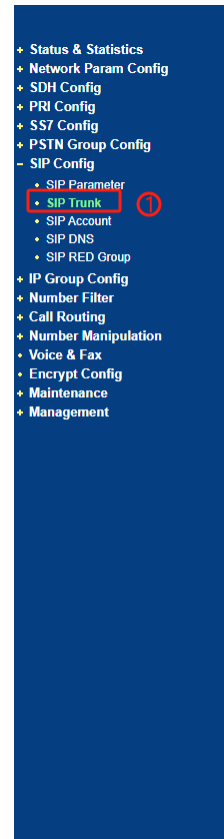
Remote port

Note:

the Remote address、 Protocol、

Remote port depends on your

SIP Server



A screenshot of the 'SIP Trunk Modify' configuration form. The form contains various settings for a SIP trunk. The following fields are highlighted with red boxes and numbered:

- Field 2: Trunk No. (Value: 0)
- Field 3: Trunk Name (Value: GE1)
- Field 3: Remote Address (Value: 172.28.33.236)
- Field 3: Protocol Type (Value: UDP)
- Field 3: Remote Port(UDP) (Value: 5060)

Other visible fields include Remote Port(TCP/TLS), Outbound Proxy, Outbound Proxy Protocol Type, Outbound Proxy Port(UDP), Outbound Proxy Port(TCP/TLS), From Header, PPID, Local Domain, Support SIP-T, Get Callee from, Get Caller from, Register to Remote, Incoming SIP Authentication Type, Rport, Dynamic Nat, Static Nat, Outgoing Calls Restriction, Incoming Calls Restriction, Incoming Time Restriction, Heartbeat Bound, Detect Trunk Status, Heartbeat Username, Enable SIP Trunk, Early Alerting, No Prack for Incoming Call, User to User(callee/caller), Request Add Port, OPTIONS Only Detects 200OK, Passthrough Sip Error Code, Heartbeat Bound PSTN Group, and From Display Name. At the bottom of the form are buttons for OK, Reset, and Cancel.

Configure MTG with PRI

Login web page

Configure PRI trunk

Configure SIP trunk

Route setting

1. Click **Call Routing**--->**PSTN->IP**

Routing

2. Configure route name

3. Select the routing source and destination, and fill in the callee and caller prefix

Note:

if no limit, can configure "." in callee prefix and caller prefix, it means not limitation in here.

Route PSTN->IP Modify

Index	511
Description	123123
Source Type	Trunk
PSTN Trunk	0 <pri>
Callee Prefix	.
Caller Prefix	.
Destination Type	Trunk
Trunk Type	SIP
IP Trunk No.	1 <172.28.29.178>
Filter Profile ID	255 <None>

OK Reset Cancel

NOTE: '.' in 'Callee Prefix' or 'Caller Prefix' field means wildcard string.

Configure MTG with PRI

Login web page

Configure PRI trunk

Configure SIP trunk

Route setting

1. Click **Call Routing**--->**IP-**

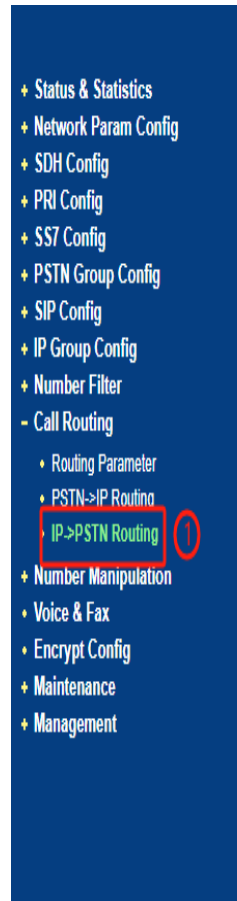
>PSTN Routing

2. Configure route name

3. Select the routing source and destination, and fill in the callee and caller prefix

Note:

if no limit, can configure "." in callee prefix and caller prefix, it means not limitation in here



NOTE: '.' in 'Callee Prefix' or 'Caller Prefix' field means wildcard string.

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure SS7
CIC

Configure SIP
Trunk

Route
setting

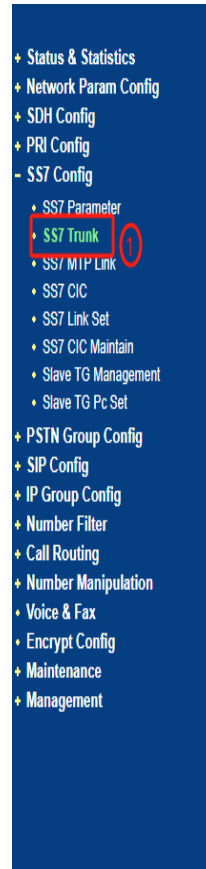
1. Click **SS7 Config**---->**SS7 trunk**

2. Configure trunk name

3. Config Protocol、Protocol type、
OPC、DPC)

Note:

OPC、DPC need configure same as
the operator side provide.



A screenshot of the 'SS7 Trunk Add' configuration window. The window contains several fields for configuring a new SS7 trunk. Red boxes and numbers highlight specific fields: a red box with a circled '2' around the 'Trunk Name' field, and a red box with a circled '3' around the 'Protocol' and 'Protocol Type' fields. The fields and their values are: Select Trunk No. (0), Trunk Name (ss7), Protocol (ITU-CHINA), Protocol Type (ISUP), SPC Format (24bits(8-8-8)), OPC (8-8-8), DPC (0-0-0), Support APC (Disable), Network Indicator (National Network), Sending SLTM (Enable), and Link Set No. (None). At the bottom of the window are three buttons: OK, Reset, and Cancel.

Field	Value
Select Trunk No.	0
Trunk Name	ss7
Protocol	ITU-CHINA
Protocol Type	ISUP
SPC Format	24bits(8-8-8)
OPC	8-8-8
DPC	0-0-0
Support APC	Disable
Network Indicator	National Network
Sending SLTM	Enable
Link Set No.	None

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure SS7
CIC

Configure SIP
Trunk

Route
setting

1. Click **SS7 Config**---->**SS7 MTP Link**

2. Select trunk number

3. Select the E1/T1 port and channel number where the link is located

Note:

E1/T1 port and channel number need configure same as the operator side provide.



A screenshot of the SS7 MTP Link Add configuration window. The window has a title bar 'SS7 MTP Link Add'. It contains several fields and dropdown menus. The fields are: No. (2), Trunk No. (2 <ss7>), Link No. (0), Signaling Link Code (0), E1/T1 Port No. (2), Channel No. (16), Caller Type (Not Configured), Callee Type (Not Configured), OrgCallee Type (Not Configured), Numbering Plan (ISDN), Calling Presentation (Allowed), Screening Indicator (User Provided), Called Stop sending (Disable), Calling Stop sending (Disable), Link Mode (Default), and Binding Slave TG (None). The fields are arranged in two columns. At the bottom, there are three buttons: OK, Reset, and Cancel. Red circles with numbers 2 and 3 are placed next to the Trunk No. and Signaling Link Code fields respectively.

NOTES: Each SS7 trunk could add maximum 8 items with different 'Link No.'.

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure SS7
CIC

Configure SIP
Trunk

Route
setting

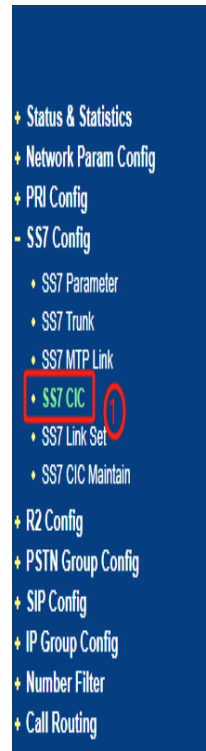
1. Click **SS7 Config**---->**SS7 CIC**

2. Select trunk number、 start and end E1/T1 ports

3. Config the star CIC No.

Note:

star CIC No. need configure same as the operator side provide.



NOTES: 1. When option 'ITU' or 'ITU-CHINA' has been selected in 'Protocol' of sub-menu SS7 Trunk, the 'Start CIC No.' must be less than 4096.
2. When option 'ANSI' has been selected in 'Protocol' of sub-menu SS7 Trunk, the 'Start CIC No.' must be less than 16384.
3. When batch add, "Start Channel" is automatically set to 0, "Count" is automatically set to 32, "Start CIC No." corresponds to the timeslot 0 of Start port No..
4. Reference value of Start CIC No.:
0, 32, 64, 96, 128, 160, 192, 224, 256, 288, 320, 352, 384, 416, 448, 480, 512, 544, 576, 608, 640, 672, 704, 736, 768, 800, ...

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure
SS7 CIC

Configure SIP
Trunk

Route
setting

1. Click **SIP Config**--->**SIP Trunk**
2. Select network port
3. Configure Trunk name、 Remote address、 Protocol、 Remote port
4. Need to register MTG on the server, select 'Yes' to register to remote

Note:

the Remote address、 Protocol、 Remote port、 Registration or not depends on your SIP Server

SIP Trunk Add

Trunk No.	5
Trunk Name	Bl
Remote Address	172.27.10.14
Protocol Type	UDP
Remote Port(UDP)	5060
Remote Port(TCP/TLS)	5060
Outbound Proxy	
Outbound Proxy Protocol Type	UDP
Outbound Proxy Port(UDP)	5060
Outbound Proxy Port(TCP/TLS)	5060
From Header	Local Domain
PPID	Disable
Local Domain	Disable
Support SIP-T	Disable
Get Callee from	Request-line
Get Caller from	User Name
Register to Remote	Yes
Outgoing Call Mode	Peer
Redundancy Mode	No
Account Select Mode	Default
Account Auth Mode	Auth ID
Display Name by	Caller
Contact Username by	Default
Incoming SIP Authentication Type	IP Address
Rport	Disable
Dynamic Nat	Disable
Static Nat	Disable
Outgoing Calls Restriction	No
Incoming Calls Restriction	No

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure
SS7 CIC

Configure SIP
Trunk

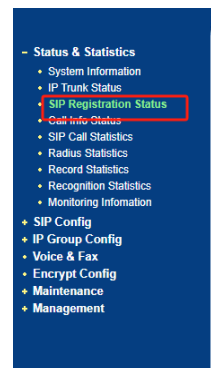
Route
setting

5. Click **SIP Config**--->**SIP Account**

6. Select SIP trunk and customize
account name

7. Configure username and
password

8. Click **Status & Statistics**--->**SIP
Registration Status**, Check if the
account has been successfully
registered



A screenshot of the 'SIP Account Add' form. Fields are numbered 6 through 10: 6 (SIP Account ID), 7 (Description), 8 (Binding PSTN Group), 9 (SIP Trunk No.), and 10 (Username). Other fields include Authenticate ID, Password, Confirm Password, Expire Time, Max Calls, and Enable Account.

SIP Registration Status Stat		
SIP Account Count	Registered Fail Count	Registered Succ Count
1	0	1

Filter Condition

Registration Status: All Filter Refresh

SIP Account Registration Status						
ID	Account Name	Trunkno	User Name	Max calls	Curr calls	Registration Status
0	6001	0 <pbx>	6001	65535	0	Established

Total: 1 | Page 1

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure
SS7 CIC

Configure
SIP Trunk

Route
setting

1. Click **Call Routing**--->**PSTN->IP**

Routing

2. Configure route name

3. Select the routing source and destination, and fill in the callee and caller prefix

Note:

if no limit, can configure "." in callee prefix and caller prefix, it means not limitation in here.

Navigation Menu:

- Status & Statistics
- Network Param Config
- PRI Config
- SS7 Config
- R2 Config
- PSTN Group Config
- SIP Config
- IP Group Config
- Number Filter
- Call Routing
 - Routing Parameter
 - PSTN->IP Routing** ①
 - PSTN->PSTN Routing
 - IP->PSTN Routing
 - IP->IP Routing
- Number Manipulation
- Voice & Fax
- Maintenance
- Management

Route PSTN->IP Modify

Index	511
Description	123123
Source Type	Trunk
PSTN Trunk	2 <ss7>
Callee Prefix	.
Caller Prefix	.
Destination Type	Trunk
Trunk Type	SIP
IP Trunk No.	5 <pbx>
Filter Profile ID	255 <None>

Buttons: OK, Reset, Cancel

NOTE: '.' in 'Callee Prefix' or 'Caller Prefix' field means wildcard string.

Configure MTG with SS7

Configure SS7
Trunk

Configure SS7
MTP Link

Configure
SS7 CIC

Configure
SIP Trunk

Route
setting

1. Click **Call Routing**--->**IP->PSTN**

Routing

2. Configure route name

3. Select the routing source and destination, and fill in the callee and caller prefix

Note:

if no limit, can configure "." in callee prefix and caller prefix, it means not limitation in here.

IP->PSTN Routing Modify

Index	511
Description	12312
Source Type	Trunk
Trunk Type	SIP
Trunk No.	5 <pbx>
Callee Prefix	.
Caller Prefix	.
Destination Type	Trunk
PSTN Trunk	2 <ss7>
Filter Profile ID	255 <None>

OK Reset Cancel

NOTE: '.' in 'Callee Prefix' or 'Caller Prefix' field 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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