

MMTG200 Trunk Gateway User Manual V2.0



Dinstar Technologies Co., Ltd.

Address: Floor 6 Guoxing Building Changxing Road Nanshan District Shenzhen China 518052

- **Telephone:** 86-755-26456664
- **Fax:** 86-755-26456659
- Email: sales@dinstar.com, support@dinstar.com
- Website: www.dinstar.com

File Name	MTG200 Trunk Gateway User Manual
Document Version	2.0
Firmware Version	1/2.01.04.03
Date	17/04/2014
Revised by	Technical Support Department

Revision Records

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1. Product Introduction

1.1 Overview

MTG200 T1/E1 trunk gateway provide the ability to terminate (or originate) T1/E1 circuits directly into IP telephony system or call center, Asterisk-based distributions such as Elastix, FreePBX, etc., or Freeswitch.

MTG200 trunk gateway provides 1/2/4 T1/E1 interfaces in a small box and also easy to install and configure. It provides the ability to handle 120 concurrent calls maximum with G711 codec and 64 concurrent calls with G729. Moreover, it's support ISDN PRI, SS7 and R2 signaling so that provide good connectivity to different PBXs system. MTG200 includes following models:

- MMTG200-1E1: single port E1/T1 trunk gateway
- MMTG200-2E1: two ports E1/T1 trunk gateway
- MMTG200-4E1: four ports E1/T1 trunk gateway

Notes: MMTG200 support ISDN PRI by default, need to apply new license to enable SS7/R2 if necessary.

1.2 Equipment Structure

1.2.1 Rear View



Figure 1-2-1 MTG200 Rear View

Table 1-2-1 MTG200 Rear View Description

Interface	Description
PWR	The power interface. DC12V.1A

Port0-Port3	E1/T1 Port. There are 4E1 options.
FEO	The Service Ethernet Interface, standard 10/100BASE-TX Ethernet interfaces. Default IP
FEU	address is 192.168.1.111, default subnet mask is 255.255.255.0
FE1	Management Ethernet Interface. Default IP address is 192.168.11.1, default subnet mask is
LET	255.255.2

1.2.2 Front View

Figure 1-2-2 MTG200 Front View



Table 1-2 -2	MTG200	Front View	Description

LED	Function	Color	Work Status	
	Dower status indicator	Green	Off: Power is off	
POWER	Power status indicator		On: Power is on	
DUN	Pogistor indicator	Crean	Slow blinking: Unregister	
KUN	Register mulcator	Green	Fast blinking: Register	
AL N 4	The failure of device	Vallow	Off: Normal	
ALIVI	indicator	renow	On: Failed	
RST	Reset button, it is used to restart the device			
	RS232 console port: it can be used to debug and configure the device. The baud rate is 115200			
CONSOLE	bps.			
			Off: E1/T1 port connection normal	
F1/T1	Indicating the connection	Green	On: E1/T1 port connection and sending/ receiving	
	state of device E1/T1.	Green	message normal	
			Flash:E1/T1 port connection failed	
	Indicating the connection	Green	Off: Network connection failed	
LINK	state of the network		On: Network connection normal, and 0 indicates FE0	
			and 1 indicates FE1	
	Indicating the network	Vollow	Off:10Mbps bandwidth	
SPEED	bandwidth	Tellow	On:100Mbps bandwidth	

1.2.3 RJ-48c Line sequence

RJ-48 Pin (on T1/E1 PIC) (Data numbering form)	RJ-48 Pin (Data numbering form)	Signal
1	1	RX, Ring, -
2	2	RX, Tip, +
4	4	TX, Ring, -
5	5	TX, Tip, +
3	3	Shield/Return/Ground
6	6	Shield/Return/Ground
7	No connect	No connect
8	No connect	No connect

MTG200 trunk gateway adopts standard RJ-48C interface and impedance value is 120Ω . Connected end device by cross lines sequence.

1.3 Functions and Features

1.3.1 Protocol standard supported

- Standard SIP /PRI protocol
- Dynamic Host Configuration Protocol (DHCP)
- Point-to-Point Protocol over Ethernet (PPPoE)
- Hypertext Transfer Protocol (HTTP)
- Domain Name System (DNS)
- ITU-T G.711A-Law/U-Law、G.723.1、G.729AB、iLBC (optional)

1.3.2 System Function

- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Adaptive (Dynamic) Jitter Buffer (DJB)
- DTMF mode: RFC 2833, SIP INFO and INBAND
- T.38/ Pass-Through FAX over IP
- HTTP/Telnet configuration
- Firmware upgrade by TFTP/Web

1.3.3 Industrial standards supported

- Stationary use environment: EN 300 019: Class 3.1
- Storage environment: EN 300 019: Class 1.2
- Transportation environment: EN 300 019: Class 2.3

- Acoustic noise: EN 300 753
- CE EMC directive 2004/108/EC
- EN55022: 2006+A1:2007
- EN61000-3-2: 2006,
- EN61000-3-3: 1995+A1: 2001+A2: 2005
- EN55024: 1998+A1: 2001+A2: 2003
- Certifications: FCC, CE

1.3.4 General hardware specification

- Power supply: 12VDC, 1A
- Temperature: 0~40 °C (operational),-20~70 °C (storage)
- Humidity: 10%~90%, no condensation
- Max power consumption: 15W
- Dimension (mm): 210*150*38
- Net weight: 0.75kg

2. Parameter setting

2.1 Login

below.

First, device FEO port connect PC with string, and then fill FEO IP address in browser, FEO default IP address is 192.168.1.111. It will request customer to input user name and password. Default user name and password are "admin".

If customer modified the default IP or forgot the IP, that can't enter the configuration page. Please connect PC and device serial with the serial line. Enter the CLI to view or modify the equipment IP. Here IP is set to 172.16.33.60. In addition, hold down the RST button to restart the device, customer can regain the port's default IP. Then enter the IP address of device in the browser address bar. Customer will see the following page.

🔕 Authen	tication Required
de la companya de la	A username and password are being requested by http://172.16.33.60. The site says: "GoAhead"
User Name: Password:	
	Cancel OK

The default user name and password is "admin". To guarantee the system safety, when login for the first time. The system will prompt the user to modify the password. The interface is shown as

Figure 2-1-2	Modify	Password
--------------	--------	----------

Password Modification	
Old Password New Password Confirm Password	
	Save

After inputting the old password, input a new password and confirm it by inputting it again.

Figure 2-1-1 Login Interfaces

2.2 Status & Statistics

Users through to traverse the left navigation tree, and can complete view, edit and configuration device in the right configuration interface.

TG configuration flow chart below:



2.2.1 System Information

This configuration page includes general information and version information.

Figure 2-2-1 System Information

Web Management System				
Status & Statistics System Information EI/T1 Status PSTN Trunk Status IP Trunk Status	Caution: The password current used is a default password, please change to a new password for system securit System Information General MAC Address 00-1D-E6-78-89-12 Sonico Etherest Mide state	ty.		
PRI Call Statistics SS7 Call Statistics SIP Call Statistics Network PRI Config SS7 Config	Service Ethemet Inderface(FE0) 172.16.88.26 255.255.0.0 172.16.1.1 Management Ethemet Interface(FE1) 192.168.1.1 255.255.0.0 172.16.1.1 DNS Server System Time 2014.7-14 10.58:26 255.255.0.0 172.16.1.1 System Time 2014.7-14 10.58:26 255.255.0.0 172.16.1.1 Traffic Statistics Received 521,779 bytes			
R2 Config PSTN Group Config SIP Config IIP Group Config	Sent 383,570 bytes Version Device Model TG200-2E1			
Voice & Fax Haintenance	Hardware Version PCB 01 DSP Version 3.0 Web Version 2.01.04.03 Software Version 2.01.04.03 Time Built 2013-10-10, 15:09:24			
	Refresh			

Table 2-2-1 Description of System Information

MAC address	Hardware address of FE0 port
Service Ethernet Mode	Network mode of FEO, include: static and DHCP.
Service Ethernet Interface	Include: IP address, subnet mask, FEO port default gateway
Management Ethernet Interface	Include IP address subnet mask of FE1
DNS	DNS server IP address
System Up Time	Time elapsed from device power on to now
Traffic Statics	Total bytes of message received and sent by FEO port
Equipment Type	Equipment type; this equipment is: MTG200
Hardware Version	Hardware version of device
DSP Version	Digital signal processing chip driver version
Web Version	Version of current WEB interface of device
Software Version	Software version of device running currently
Built Time	The build time of current software version

2.2.2 E1/T1 Status

Figure 2-2-2 E1/T1 Status



Status	Frame-Sync	Idle	Signal	Busy	Fault	Disable	L-blocked	R-blocked	B-blocked
Color									
Totalize	2	60	2	0	0	64	0	0	0
	NOTES	L Blooked	Local Blocked	D Blocked	Domoto Plaska	d D Dlaskad	Dath Cideo Di	alkad	

NOTES: L-Blocked -- Local Blocked, R-Blocked -- Remote Blocked, B-Blocked -- Both Sides Blocke

Table 2-2-2 Description of E1/T1 status

	1. LOS Alarm: Signal loss alarm, this alarm is created when receiving is lost; please check
	the physical connection whether disconnected.
	2. RAI Alarm: Receive remote alarm indication, it is a signal transmitted in the outgoing
	direction when a terminal determines that it has lost the incoming signal. Receiving
	remote alarm indication (RAI) means the far-end equipment over the T1 line has a
	problem with the signal it is receiving from the upstream equipment.
	3. AIS Alarm: The Alarm Indication Signal (AIS) failure is declared when an AIS defect is
E1/T1 Port Status	detected at the input and the AIS defect still exists after the Loss of frame failure which is
	caused by the unframed nature of the 'all-ones' signal is declared. The AIS failure is
	cleared when the Loss Of Frame failure is cleared.
	4 . Disable: Means that this E1/T1 is not used.
	5. ISDN/SS7 Signal Alarm: Means physical connection is normal, signaling link has
	problem.
	6. Active-OK: Means that physical connection and signaling link are normal.
	1.Frame-Sync: Non voice channel, which used as a synchronization channel
	2.Idle: Means this channel is idle, when the channel is enabled and the cable is
	connected OK.
	3.Signal: Signal channel
	4.Busy: Means this channel is occupied by voice
	5. Fault: The channel is enabled but the cable is not connected.
E1/T1Channel Status	6.Disable: Have not use this E1/T1 trunk
	7.L-blocked:
	Local blocked, means that communication can only be initiated from local
	8.R-blocked:
	Remote blocked, means that communication can only be initiated from remote
	9.B-blocked:
	Both Sides blocked, means that the two sides cannot communication

2.2.3 PSTN Trunk Status

Figure 2-2-3 PSTN Trunk Status

PRI Link Status			
PRI Trunk No.	Trunk Name	E1/T1 Port No.	Link Status
0	pri0	0	Established
1	pri1	1	Established

Table 2-2-3 Description of PSTN Trunk Status

PRI Trunk No	The number of PRI trunk, each trunk corresponds to a PRI link
Trunk Name	Used to identify the name of the trunk
E1/T1Port No	Indicate the E1/T1 line occupied by the PRI trunk.
Link Status	Indicate whether the PRI link is established.

2.2.4 IP Trunk Status

Figure 2-2-4 IP Trunk Status

SIP Trunk Statu	5				
Trunk No	Trunk Name	Trunk Mode	Username	Incoming Authentication Type	Link Status
0	3cx.sip	Access	333	IP Address	Established
1	elastix.sip	Peer		IP Address	Established
2	dag.sip	Peer		IP Address	Established

Refresh

Table 2-2-4 Description of IP Trunk Status

SIP Trunk No	The number of SIP trunk
Username	When SIP trunk is under registered mode, change the value in the configuration shown in
	the account registration, If SIP trunk is under non-registered mode, the value is
	meaningless, as ''
Trunk Mode	Peer and Access two modes
Register Status	Indicate the status of SIP trunk (access mode), register or unregister, when is under peer to
	peer mode, the values is meaningless, as ''
Link Status	Established and Fault status.

2.2.5 PRI Call Statistics

Figure 2-2-5 PRI Trunk Call Statistics

PRI Trunk Call Statistics				
PRI Trunk No.	Trunk Name	Current Calls	Accumulated Calls	ASR
0	pri0	0	0	100%
1	pri1	0	0	100%

Release Cause Statistics		
Normal Call Clearing	0	
Call Reject	0	
User Busy	0	
No User Response	0	
No Circuit Available	0	
Unassigned Number	0	
Normal, Unspecified	0	
Others	0	

Refresh

Table 2-2-5 PRI Description of PRI call statistics

PRI Trunk No	The number of PRI trunk
Trunk Name	The name used to describe the PRI trunk
Current Calls	Number of lines that are being called currently
Accumulated Calls	Total number of calls from running start of system to current time.
ASR	The percent of calls completed in total calls.

This statistics page show the reasons for release of the call, including: Normal Call Clearing, Call Rejected, User Busy, No User Response, No Circuit Available, Unassigned Number, Normal Unspecified and others. Statistical information in an intuitive would be reflected on the pie char.

2.2.6 SIP Call Statistics

Figure 2-2-6 SIP Trunk Call Statistics

SIP Trunk Call Statistics		
SIP Trunk No.	Trunk Name	Current Calls
0	3cx.sip	0
1	elastix.sip	0
2	dag.sip	0
	Refresh	

Table 2-2-6 Description of SIP Call Statistics

SIP Trunk No	The number of SIP trunk
Trunk Name	The name used to describe the PRI trunk
Current Calls	Number of lines that are being called currently

2.3 Network

work Configuration		
Service Ethernet Interface(FE0)		
Obtain IP address automatic	ally	
Ose the following IP address	3	
IP Address	172.16.33.60	
Subnet Mask	255.255.0.0	
Default Gateway	172.16.1.5	
© PPPoE		
Account	guest	
Password	*****	
Service Name		
Management Ethernet Interface//		
IP Address	192.168.11.1	
Subnet Mask	255.255.255.0	
DNS Server		
Obtain DNS server address :	automatically	
ONS Server		
Primary DNS Server	172.16.1.5	
Percendery DNP Perver		

Figure 2-3-1 Network Configuration



Table 2-3-1 Description of Network Configuration

	Obtain IP address	If Selected, the TG will obtain IP address via DHCP
Service Ethernet	Use the following IP address	If Selected ,Set a static IP for Service Ethernet Interface .Need to fill the IP address, Subnet Mask, and Default Gateway
Interface (FEU)	PPPoE	If users approach the net via PPPoE, please Select it and fill your account and password.
Management	IP address	Fill the IP address of FE1
Interface	Subnet mask	Fill the subnet mask of FE1
	Obtain DNS server address automatically	If selected, the TG will obtain DNS server IP address via DHCP
Divo Server	Use the following DNS server addresses	If selected, you need fill Primary DNS server addresses, the secondary DNS Server is optional.

Ntoe: FEO port IP and FE1 port IP should be set in different segments. After configure the network address, and restart the gateway configuration to take effect.

2.4 PRI Config

2.4.1 PRI Parameter

PRI Parameter		
Calling Party Numbering Plan	ISDN/Telephony numbering plan	-
Calling Party Number Type	Unknown	•
Screening Indicator for Displaying Caller Number	User provide,no shield	•
Screening Indicator for No Displaying Caller Number	User provide,no shield	•
Called Party Numbering Plan	ISDN/Telephony numbering plan	•
Called Party Number Type	Unknown	-
Information Transfer Capability	Speech	•
Reset to default configuration	Reset	

Figure 2-4-1 PRI Parameter

Save

	Provide six plans: Unknown, ISDN/Telephony numbering plan, data
Colling Party Numbering Plan	numbering plan, telegraph numbering plan, national standard numbering
	plan, private numbering plan. The default is ISDN/Telephony numbering
	plan.
	Six optional types are provided for calling party: Unknown, International
Calling Party Number Type	number, National number, Network special number, User number, Short
	code dialing. The default option is Unknown.
Scrooning Indicator for Displaying	Four options available: User provider, no shield; User provide, check and
	send; User provide, check and having failure; Network provide. The
	default option is: User provider, no shield.
Screening Indicator for No Displaying	Four options available: User provider, no shield; User provide, check and
	send; User provide, check and having failure; Network provide. The
	default option is: User provider, no shield.
	Provide six plans: Unknown, ISDN/Telephony numbering plan, data
Called Party Numbering Plan	numbering plan, telegraph numbering plan, national standard numbering
	plan, private numbering plan. The default is ISDN/Telephony numbering
	plan.
	Six optional types are provided for called party: Unknown, International
Called Party Number Type	number, National number, Network special number, User number, Short
	code dialing. The default option is Unknown.
Information Transfer Capability	Support speech and 3.1khz audio. The default option is speech.

Table 2-4-1 Description of PRI Parameter

2.4.2 PRI Trunk

				Figure 2-4-	2 PRI Trunk			
PRI Tr	runk							
	Trunk No.	Trunk Name	Channel ID	D-Channel	E1/T1 Port No.	Protocol	Switch Side	Alerting Indication
	0	pri0	0	Enable	0	ISDN	User Side	ALERTING
	1	pri1	0	Enable	1	ISDN	Network Side	ALERTING
				Add D	elete Modify			

Click "Add" to add a PRI Trunk. If user want to delete or modify a PRI Trunk, please select the PRI Trunk user want to do.

Figure	2-4-3	PRI	Trunk Add
--------	-------	-----	-----------

I Trunk Add	
Trunk No.	0
Trunk Name	
Channel ID	
D-Channel	Enable
E1/T1 Port No.	0
Protocol	ISDN 🗨
Switch Side	User Side
Alerting Indication	ALERTING
PSTN Profile ID	0 <default> ▼</default>

OK Reset

Table 2-4-2 Description of Add PRI Trunk

Cancel

	The number of PRI trunk; when user add PRI trunk, 0~7 number will appear in the
	pull-down menu to be selected (the number here depends on E1/T1 physical port
Trunk No	number actually existed in equipment). After trunk number is established, filling in
	corresponding port number in "E1/T1 Port No.", so as to assign E1/T1 to designated
	trunk; Each PRI trunk corresponds to a E1/T1 port.
Trunk Name	Description of PRI trunk
Channel ID	Channel ID of E1/T1 ports, this number definition generally starts from 0.
D-channel	Indicate whether E1/T1 supports D channel, the default is Yes.
	E1/T1 port number is numbered according to the physical position of E1/T1, it generally
E1/11 PORT NO	starts from 0.
Drotocol	Interface type of PRI. There are two types are available: ISDN and QSIG; the default is
Protocol	ISDN.
	Indicate PRI network property of E1/T1, it is divided into: "User side" and "Network
Switch Side	side". When PRI loopback is carried out, the network properties of E1/T1 port at both
	receiving and sending sides must be different.

Alerting Indication The ring signal include Alerting and Progress

2.6 SS7 Config (optional)

SS7 configuration includes: SS7trunk, SS7 MTP Link, SS7 CIC and SS7 CIC Maintain.

Figure 2-6-1 Add PRI Trunk
- SS7 Config
SS7 Trunk
 SS7 MTP Link
SS7 CIC
SS7 CIC Maintain

2.6.1 SS7 Trunk

Figure 2-6-2 SS7 Trunk

\$\$7	Trunk								
	Trunk No.	Trunk Name	Protocol	Protocol Type	SPC Format	OPC	DPC	Network Indicator	Sending SLTM
				Add	Delete Mo	dify			

Figure 2-6-3 SS7 Trunk Add

7 Trunk Add		
Select Trunk No.	3	▼
Trunk Name		
Protocol	ITU	•
Protocol Type	ISUP	•
SPC Format	Hex	•
OPC		
DPC		
Network Indicator	National Network	•
Sending SLTM	Enable	-

SS7 is a standard protocol to initiate a calling connection with SPC exchange.

Notes:

1. "Trunk No." is a shared data, therefore, SS7 "Trunk No." can't be the same as PRI "Trunk No."

2. SPC length is 24bits when option "ANSI" or "ITU-CHINA" is selected in item "Standard Type".

3. SPC length is 14bits when option "ITU" is selected in item "Standard Type".

4. SPC Length represents the structure of OPC/DPC. SPC View Mode indicates which input format is selected for OPC/DPC structure.

5. When SPC length is 24bits and 'Hex' are selected, the structure is like xyz, and x,y,z must be hex number between 00-FF. eg., 33AA55.

6. When SPC length is 14bits and 'ITU Pointcode Structure' are selected, the structure is like x-y-z, and x,z must be decimal number between 0-7, and y must be decimal number between 0-255. eg., 6-222-3.

7. When SPC length is 14bits and 'Hex' are selected, the structure is like xyz, and x/z is a 3 bit hex number, y is a 8 bit hex number. eg., $202E(100\ 00000101\ 110)$.

	The number of SS7 trunk. Generally, a DPC will establish a SS7 trunk number
Select Trunk No	respectively, SS7 trunk number cannot be conflict with PRI trunk number. After
	SS7 trunk is established, assign E1/T1 to SS7 trunk in "SS7 Circuit" option.
Trunk Name	Name of trunk, it can be edited to any name user want.
Protocol	SPC types: ITU-T (14 bit), ANSI (24 bit), ITU-CHINA (24 bit)
Protocol Type	Supported two protocol types: ISUP and TUP
SDC Format	Signaling Point Code format includes hexadecimal system and ITU pointcode
SPC Format	structure (decimal system)
OPC	Original Point Code
OPC DPC	Original Point Code Destination Point Code
OPC DPC Service Type	Original Point Code Destination Point Code SS7 service types: ISUP (ISDN User Part) and TUP (Telephone User Part).
OPC DPC Service Type	Original Point Code Destination Point Code SS7 service types: ISUP (ISDN User Part) and TUP (Telephone User Part). Indicate the network property of SS7, including International Network,
OPC DPC Service Type	Original Point Code Destination Point Code SS7 service types: ISUP (ISDN User Part) and TUP (Telephone User Part). Indicate the network property of SS7, including International Network, International Spare, National Network, National Spare; the default is "National
OPC DPC Service Type Network Indicator	Original Point Code Destination Point Code SS7 service types: ISUP (ISDN User Part) and TUP (Telephone User Part). Indicate the network property of SS7, including International Network, International Spare, National Network, National Spare; the default is "National Network" (this type is used in China, USA, and Japan), "International
OPC DPC Service Type Network Indicator	Original Point CodeDestination Point CodeSS7 service types: ISUP (ISDN User Part) and TUP (Telephone User Part).Indicate the network property of SS7, including International Network,International Spare, National Network, National Spare; the default is "NationalNetwork" (this type is used in China, USA, and Japan), "InternationalNetwork" is generally used in inter-office switch room; others will be selected

SS7	trunk	add
-----	-------	-----

Note:

1. If protocol standard chose 'ANSI' or 'ITU-CHINA', and then the SPC length is 24 bits.

2. If protocol standard chose'ITU', and then the SPC length is 14 bits.

3. SPC length performance on the OPC/DPC structure; SPC pattern instructions of the different structure OPC/DPC input formats.

- 4. When the SPC length is 24 bits, and chosen ITU, OPC/DPC structure format is :x-y-z; x_yy_z is a number of 0-255, such as: 22-222-77
- 5. When the SPC length is 24 bits, and chosen Hex, OPC/DPC structure format is :xyz; x, y, z must be Hex number of 00-FF, such as: 33AA55
- 6. When the SPC length is 24 bits, and chosen ITU, OPC/DPC structure format is : x-y-z; x, z must be decimal value; y is decimal number 0-255, such as: 6-222-3
- 7. When the SPC length is 24 bits, and chosen Hex, OPC/DPC structure format is :xyz; x_x z must be three bitts hex value; y is 8 bitts hex value, such as: (202E) 100 00000101 110

2.6.2 SS7 MTP Link

Figure 2-6-4 SS7 MTP Link

Figure 2-6-5 SS7 MTP Link Add

SS7 MTP Link Add			
Trunk No.			•
Link No.		0	•
Signaling Link Code			
E1/T1 Port No.		0	•
Channel No.		16	
	OK R	eset Cancel	

NOTES: Each SS7 trunk could add maximum 2 items with different 'Link No.'.

Trunk No	It is consistent with foregoing "Trunk No" of SS7 trunk.
	Equipment maximum support 2 signaling links, these two links share workload, when one
Link No	link fails, the other link will take over the load until restore from failure, and then they
	will share the load again.
Signaling Link Code	If a signaling point has established several signaling links, then the code of each signaling
Signaling Link Code	link will begin from 0.
E1/T1 D- # N-	Indicate which E1/T1 this link is established on, it is stipulated that such numbering is
EI/II Port No	carried out according to the physical position of E1/T1.
Channel Ne	Indicate time slot that link is established on. It is assigned to 1 or 16 for time slot, the
Channel No	default is 16 time slot.

SS7 MTP link description

2.6.3 SS7 Circuit

SS7 Circuit					
	Trunk No.	E1/T1 Port No.	Start Channel	Start CIC No.	Count

Figure 2-6-5 SS7 Circuit

Add	Delete	Modify

Figure 2-6-6 SS7 Circuit description

SS7 Circuit Add							
Trunk No							
E1/11 port No.		0	•				
Start Channel							
Start CIC No.							
Count							
OK Reset Cancel							

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.

CIC (circuit identification code) is an important parameter of SS7 circuit. It should be confirmed

with service provider. If the CIC is mismatched, it will result in one-way voice communication.

SS7 Circuit Add

Trunk No	The "Trunk No." here corresponds to the "Trunk No." of SS7 trunk.
E1/T1 port No	Fill in the port number of E1/T1. Assign E1/T1 to selected SS7 trunk.

Start Channel	The start of SS7 channel trunk
Start CIC No	An initial circuit number to this E1/T1 matches by both parties
Count	A total of 32 channels

2.6.4 SS7 Circuit Maintain

According to the different operating modes, 7 circuit maintenance objects into two categories: ports and channel.



Notes: L-Blocked -- Local Blocked, R-Blocked -- Remote Blocked, B-Blocked -- Both Sides Blocked

Figure 2-6-7 SS7 Circuit Maintain-E1/T1

SS7 Circuit Maintain-E1/T1 description

Operation Mode	There are port operation and channel optional
Port No	Display the port number
Protocol Type	TUP or ISUP
Status	There are 16 status with ports, each state corresponds to a color: activated, disable, fault, RAI
	Alarm, ISDN/SS7 Signal Alarm, Frame-Sync, Idle, Signal, Busy, L-blocked, R-blocked,
	B-blocked, Blocking, Unblocking and Resetting.

These ports can work in many ways: Select All, Invert, Clear, Block, Unblock, Reset and

Cancel.

SS7 Circui	t Maiı	ntain														
Operation Mode							(Char	nnel		•					
Current Port Status Protocol Type undefine									lefine	d						
Channel	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CIC No.																
Status																
Channel	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
CIC No.																
Slect Invert Clear Block Unblo Reset Cance																
Actived	Dis	F	ault	RAI	A	AIS A	M	ISDN	/SS7	Sig						
				_												
Frame	Idle	Si	gnal	Bu	isy	L-blo)	R-blo	E	-blo.	BI	ock	. Ur	ıbl	Res	se

Figure 2-6-8 SS7 Circuit Maintain-Channel

If user wants to manage the channel, please select operation mode to channel.

Select current port, use will see port status and protocol type. The following will show the slot and

channel status. There are 16 kinds of channel states and each state corresponds to a color

2.7 R2 Config(optional)

2.7.1 R2 Param

R2	R2 Param											
	Param ID	Description	CDbits	Req Next DNIS	Request Next ANI	Request Category	DNIS End	ANI End	Adress Complete	Answer Signal		
	0	ITU	01	A-1	A-5	A-5	I-15	I-15	A-3	Call with charge		
	1	Argentina	01	A-1	A-5	A-5	INVALID	I-12	A-3	Call with charge		
	2	Brazil	01	A-1	A-5	A-5	INVALID	I-15	A-3	Call with charge		
	3	China	11	A-1	A-1	A-6	INVALID	I-15	A-3	Call with charge		
	4	Czech	01	A-1	A-5	A-5	I-15	I-15	A-3	Call with charge		
	5	Colombia	01	A-1	A-5	A-5	I-15	I-15	A-3	Call with charge		
	7	Mexico	01	A-1	INVALID	INVALID	I-15	I-15	INVALID	Call with charge		
	8	Philippines	01	A-1	A-5	A-5	INVALID	I-15	A-3	Call with charge		
	9	Venezuela	01	A-1	A-9	A-5	INVALID	I-15	A-3	Call with charge		
	11	Bolivia	01	A-1	A-5	A-5	I-15	I-15	A-3	Call with charge		
	14	India	01	A-1	A-4	A-5	INVALID	I-10	A-3	Call with charge		
	15	Indonesia	01	A-1	A-6	A-6	I-15	I-15	A-3	Call with charge		
	16	Korea	01	A-1	A-5	A-5	INVALID	I-15	A-3	Call with charge		
	17	Malaysia	01	A-1	A-6	A-6	I-15	I-15	A-3	Call with charge		
	18	Panama	01	A-1	A-5	A-5	INVALID	I-15	A-3	Call with charge		
	19	Singapore	01	A-1	A-6	A-6	I-15	I-15	A-3	Call with charge		
	20	Thailand	01	A-1	A-1	A-6	I-15	I-15	A-3	Call with charge		

Figure 2-7-1 R2 Parameter

It is the default configuration for MTG200. Description says the state name, means the different countries supported R2 parameters standards. According to demands add R2 parameters of user countries.

R2 Param Add		
Config Mode	Typical	-
Param ID	6	-
Description		
CDbits	00	-
Calling Party Category	National subscriber	-
Answer tone	Call with charge	-
Seize Timer (ms)	5000	
Protect Timer (ms)	300000	
Receive Timer (ms)	5000	
Wait Response Timer (ms)	3000	
MF Off Timer (ms)	3000	
Wait Release Timer (ms)	3000	
Course b		
DNIS and flag	1.15	
Divis end hay	1-10	
ANI end flag	1-15	•
Group A:		
Group A:	[
Address Complete	A-3	-

Address Complete	A-3	•	
Request next DNIS	A-1	Ŧ	
Request next ANI	A-5	Ŧ	
Request category	A-5	•	
Request Change to Group C	INVALID	Ŧ	
Request Last Digit Again	A-8	•	
Repeat All DNIS Digit	A-8	•	

Group B:

Unallocated number	B-5	•
User busy	B-3	•
Line out of order	B-2	•

Group C (for Mexico):

Request Next ANI	C-1 💌	
Request All DNIS and change to Group A	C-2]
Address Complete	C-3	
Network Congestion	C-4	
Request next DNIS and change back to Group A	C-5]
Request Last DNIS and change back to Group A	C-6]

Figure 2-7-2 R2 Parameter Add

Parameter Desc	ription
Param ID	Identification parameter group
Description	Description parameter information, Points out which countries standard the parameters are.
CDbits	C, Dbit value of A, B, C, Dbit in R2 lines of signaling.
Request Next	The rear party notices the front party ahead called number has received, and each other can
DNIS	send a next number.
Request Next ANI	The rear party notices the front party ahead callee number has received, and each other can send a next number.
Request category	Means KA request code of R2 lines signaling
DNIS end flag	The front party notices the rear party that the called numbers send completely.
ANI end flag	The front party notices the rear party that the callee numbers send completely.
Address Complete	The rear party notices the front party that the called and the callee numbers received completely.
Answer Tone	The general calls is free of charge or not.

2.7.2 R2 Trunk

R2 Trun	ık			
	Trunk No.	Trunk Name	E1 Port No	Paramid
	0	R2	0	3 <china></china>
	1	R2	1	0 <itu></itu>
	2	R2	2	3 <china></china>

Delete Figure 2-7-3 R2 Trunk

Modify

Add

R2 Trunk Add	
Trunk No	3
Trunk Name	
E1 Port No	3
Protocol Param	0 <itu></itu>
	OK Reset Cancel

Figure 2-7-4 R2 Trunk Add

R2 trunk description

Trunk No	The unique identifiers of R2 trunk; system customs eight relay index number.
Trunk Name	Used to identify and describe R2 trunk
E1 Port No	According to T1 / E1 port position sequence sort, usually starting from 0
Protocol Param	Select R2 parameter group.

2.8 PSTN Group Config

2.8.1 E1/T1 Parameter

E1/T1 Pa	rameter					
		E1/T1 (Clock Source	Remote	•	
	Port No.	Work Mode	PCM Mode	Frame Mode	Line Code	Line Built Out
	0	E1	A LAW	CRC-4	HDB3	Short Haul,(-10DB)
	1	E1	A LAW	CRC-4	HDB3	Short Haul,(-10DB)
				Modify		

Figure 2-8-1 E1/T1 Parameter

Modify the E1/T1 parameters:

Figure 2-8-2 E1/T1 Parameter

E1/T1 Parameter Modify	
Port No	0
Portino.	
Work Mode	E1 💌
PCM Mode	A LAW
Frame Mode	CRC-4
Line Code	HDB3
Line Built Out	Short Haul(-10 DB)
	Short Haul(-10 DB)
	Long Haul(E1:-43DB,T1:-36DB)
OK Re	Cancel

NOTE: The device must restart to take effect.

Table 2-8-1 Description of Modify E1/T1 Parameter

Work Mode	E1 or T1, the default is E1
PCM Mode	PCM mode: A LAW and Mu LAW, the default is A LAW
Frame Mode	The frame modes of E1/T1 are: DF, CRC-4, CRC4_ITU, the default is CRC-4; the frame
	modes of T1 are: F12, F4, ESF, F72, the default is F4
Line Code	Line codes of E1/T1 are: NRZ, CMI, AMI, HDB3, the default is HDB3. The line codes of T1
	are: NRZ, CMI, AMI, B8ZS, the default is B8ZS
Line Built Out	Cable length. E1 lines docking, the environment will affect the E1 line signal strength,
	signal strength according to (DB value) to select the long-term or short-term.

2.8.2 Coder Group

der Group	Coder Group ID	0(default setting	g) 🔻	
Coder	Payload Type Value	Packetization Time(ms)	Rate(kbps)	Silence Suppression
1st G711A	▼ 8	20 👻	64	Disable 👻
2nd G711U	v 0	20 👻	64	Disable 👻
3rd G729	→ 18	20 👻	8	Disable 👻
4th G723	- 4	30 👻	6.3	Disable 👻
5th	-	-		-
6th	-	-		

Table 2-8-2 Description of Coder Group

Save

	ID standard for Voice ability, total with 8 groups, where 0 is the default group ID
Coder Group ID	number, the codec that equipment supports in the grouping will be displayed in 0
	group. Default value cannot be modified.
Coder	Support 3 kinds of voice codec: G.711A/U/G.729/G.723
Payload Type Value	Each codec has a unique value, refer to RFC3551
Desketization Time(ms)	Voice Codec packetization time, user can define different kinds of coding
Packetization Time(ms)	and decoding minimum packetization time.
Rate(kbps)	Show the voice data flow rate.
Cilonee Suppression	It is disabled by default. During talking, the bandwidth occupied by voice transmission
silence suppression	will be released automatically for silence party or when talk is paused.

2.8.3 Dial Plan

Figure 2-8-4 Dial Plan				
Dial Plan				
		Dial Plan ID 0		
	Index	Prefix	Min Length	Max Length
	0		0	30
				Total: 1 Page 1 💌
		Add Delete	Modify	

Dial plan used for configuring the receiving number, user can configure different prefix number, these rules can be divided into 5 groups with a dial plan ID, where 0 is the default setting. **Notes**:

1. In order to ensure each rule can take effect, long matching numbers (prefix) rule dial plan index value need smaller.

2. Maximum length is 30, this value is the number of the total length and including the prefix length.

Dial Plan ID	The number to identify a dial plan
Index	Dial plan priority rules take effect in accordance with dial plan index size, and not
Index	according to the maximum number received.
Prefix	Match number, "." representative of any number
	The minimum receiving Number length (0 to 30). If receiving a number equal to the
	minimum length greater than, less than equal to the maximum length, the number will
Minlongth	be used to continue the call. If the maximum length determine the number to receive a
	complete, will no longer receive a new number, and immediately began to number
	analysis. If there are numbers continue to be received, the system will give up these
	numbers.
Max Length	The largest received number length (0 to 30)

Click "Add" to add dial plan, configuration page as follow:

Table 2-8-3 Description of Dial Plan

2.8.4 Dial Timeout

Figure 2-8-4 Dial Timeout

Dial Tir	meout				
	Dial Timeout ID	Description	Max Time for Collecting Prefix(s)	Time to Reach Min Length (s)	Time to Reach Max Length (s)
	0	Default	20	10	10
					Total: 1 Page 1 💌
			Add Delete	Modify	

Figure 2-8-5 Dial Timeout Add

ial Timeout Add			
Dial Timeout ID	1	•	
Description			
Max Time for Collecting Prefix		s	
Time to Reach Min Length(after Prefix)		s	
Time to Reach Max Length(after Min Length)		s	

OK Reset Cancel

NOTE: If Max length equals to Min length in Dial Plan, Time to Reach Max Length can be any value.

Table 2-8-4 Description Dial Timeout Add

Dial Time ID	The number to identify a dial timeout rule
Description	Description of dial timeout
Max Time for Collecting Prefix	Generally refer to the time from user dial first digit to
	harvest in prefix number.

Time to Reach Min Length(after Prefix)	After receiving prefix number, the number has not yet
	reached the length of the minimum receiving number,
	the length of timeout
Time to Reach Max Length(after Min Length)	After receiving number, the number has reached the
	minimum length, but not reached the maximum length
	of the dial timeout

2.8.5 PSTN Profile

PSTN profile is used to configure PSTN call number rules and parameter.

PSTN	Profile											
	PSTN Profile ID	Description	Coder Group ID	RFC2833 Payload	DTMF Tx PR 1	DTMF Tx PR 2	DTMF Tx PR 3	Overlap Receiving	Dial Plan ID	Dial Timeout ID	Remove CLI	Play Busy Tone to PSTN
	0	Default	0	101	RFC2	SIP IN	Inband	Disable	0	0 <default></default>	Not remove	No
											Т	otal: 1 Page 1 💌
					ŀ	Add	Delete	Modify				

Figure 2-8-7 PSTN Profile Add

PSTN Profile Add		
PSTN Profile ID	1	-
Description		
Coder Group ID	0	•
RFC2833 Payload Type	101	
DTMF Tx Priority 1st	RFC2833	
DTMF Tx Priority 2nd	SIP INFO	
DTMF Tx Priority 3rd	Inband	•
Overlap Receiving	Disable	
Remove CLI	Not remove	
Play Busy Tone to PSTN	No	•

OK Reset

Cancel

Table 2-8-5 Description of Add PSTN Profile

PSTN Profile ID	The number to PSTN Profile
Description	Description of the PSTN Profile
Code Group ID	Refer to "Coder Group"
RFC2833 Payload Type	The item is 101 by default
1st And Ard Ty DIME Option	There are three ways to send DTMF: RFC2833/SIP INFO/ INBAND, in
	accordance with the priority choice to send the configuration mode
Overlap Receiving	Not enabled by default, only enable this feature, "Dial plan" and "Dial
	timeout" have the meaning
Remove CLI	Default does not remove CLI
Play busy tone to PSTN	Equipment will play busy tone from IP to PSTN

2.9 SIP Config

2.9.1 SIP Parameter

Local SIP Port	5060	
Local Domain		

Figure 2-9-1 SIP Parameter

SIP port number and domain name would be allowed to set to different ports and domain name.

2.9.2 SIP Trunk

Trunk									Outaoina		Detect		
No.	Name	Remote Address	Remote Port	Local Domain	Support SIP-1	F Get Calle	ee from	Register to Remote	Call Mode	Incoming Authentication Type	Trunk Status	Enable SIP Trunk	IP Profile
							-						
													Total: (
						Add	Delete	Modify	1				i utal. u
							2000		_				
					Fig	ure 2-9)-3 SIF	Trunk A	dd				
ID T-		J											
PI	αυκ ασ	a											
Tru	unk No.						0			-			
Tru	unk Nam	e								-			
Re	emote Ad	dress											
Re	emote Po	ort					506	0		_			
Lo	cal Dom	ain					Dis	able		-			
Ge	t Callee	from					Red	quest-line		•			
Re	gister to	Remote					No			•			
IP I	Profile IE)					0 <	Default>		•			
Inc	coming S	IP Authentic	ation T	уре			IP A	ddress		-			
IP 1	to PSTN	Calls Restri	iction				No			-			
	TN to IP	Calls Restri	ction				No			-			
PS		Time Restri	ction				Dis	able		-			
PS IP 1	to PSTN	11110 1100011											
PS IP 1 De	to PSTN etect Trur	nk Status					Yes			-			

Table 2-9-1 Description of Add SIP Trunk			
Trunk No	The range of trunk number is 0-1		
Trunk Name	Description the trunk		
Remote Address	IP address of remote SIP platform i		
Remote Port	Q.931 port of SIP of remote platform interfacing with this TG, the		
	default is 5060		
Local Domain	Refer to SIP parameter		
Get Callee from	Received the called number from request domain or "To header"		
	filed		
Register to Remote	Defined by IETF work group RFC3372, it is a standard used to		
	establish remote communication between SIP and ISUP; the		
	default is "Yes"; if SIP trunk does not support, then set it to "No".		
IP Profile ID	Refer to IP Group Config->IP Profile-IP Profile ID		
Incoming SIP Authentication Type	There are two modes: IP address and Password. If user selects		
	"password", then password will be filled.		
IP to PSTN Call Restriction	IP to PSTN side of the limitation on the number of calls; the range		
	is 0 $^{\circ}$ 65535, the default is no limitation; If Yes is selected, then		
	input limitation number of calls in the edit box appeared.		
PSTN to IP Call Restriction	PSTN to IP side of the limitation on the number of calls; the range		
	is 0~65535, the default is no limitation; If Yes is selected, then		
	input limitation number of calls in the edit box appeared		
IP to PSTN Time Restriction	The default setting is disabled. If Enabled is selected, then user can		
	edit the start and stop time of prohibition time interval. Within this		
	time interval, all calls from IP to PSTN are prohibited. (Calls from		
	PSTN to IP are not limited)		
Detect Trunk Status	Detect the status of SIP trunk. If select it, the equipment will send		
	HEARTBEAT message to peer to make sure the link status is OK.		
Enable SIP Trunk	A switch used to enable this SIP trunk or not; user can select "Yes"		
	or "No", when "No" is selected, this SIP trunk is invalid.		

2.10 IP Group Config

2.10.1 IP Profile

Figure 2-10-1 IP Profile

	P Profile							
	IP Profi ID	le Description	Declare RFC2833 in SDP	Support Early Media	Ringback Tone to PSTN Originated from	Ringback Tone to IP Originated from	Wait for RTP Packet from Peer	T.30 Expanded Type in SDP
[0	Default	Yes	Yes	Local	Local	No	X-Fax
						То	tal: 1 Page 1 👻	
				Add	Delete Mod	ify		

Figure 2-10-2 IP Profile Add

IP Profile ID 1 Description	Profile Add			
Description Declare RFC2833 in SDP No Support Early Media Ringback Tone to PSTN Originated from Local	IP Profile ID	1	-	
Declare RFC2833 in SDPNoSupport Early MediaYesRingback Tone to PSTN Originated fromLocalRingback Tone to IP Originated fromLocal	Description			
Support Early Media Yes Ringback Tone to PSTN Originated from Local Ringback Tone to IP Originated from Local	Declare RFC2833 in SDP	No	•	
Ringback Tone to PSTN Originated from Local Ringback Tone to IP Originated from Local	Support Early Media	Yes	•	
Ringback Tone to IP Originated from Local	Ringback Tone to PSTN Originated from	Local	•	
	Ringback Tone to IP Originated from	Local	•	
Wait for RTP Packet from Peer No	Wait for RTP Packet from Peer	No	•	
T.30 Expanded Type in SDP X-Fax	T.30 Expanded Type in SDP	X-Fax	•	

OK

Reset Cancel

Table 2-10-1 Description of Add IP Profile

IP Profile ID	The number to mart the IP Profile	
Description	Description of the PSTN Profile	
Declare RFC2833 in SDP	Support by default	
Support Early Media	Whether support Early Media(183)	
Ringback Tone to PSTN	IP-> PSTN call ring back tone player side, if set to local, it will play from the	
originated from	equipment and set to IP , it will play by the called	
Ringback Tone to IP originated	PSTN->IP call ring back tone player side, if set to local, it will play from the	
from	equipment and set to PSTN, it will play by the called	
Wait for PTP Dacket from Deer	If set to No, will auto send RTP packets during the call, if set to Yes, will wait	
	the RTP packet was sent by the opposite end first ,then send out RTP packets	
T.30 Expanded Type in SDP	T30 extended types in SDP: Huawei/ZTE	

2.11 Voice & Fax

Figure 2-11-1 Voice & Fax Configuration

Voice & Fax Configuration	
Voice Parameter	
Disconnect call when no RTP packet	🖲 Yes 🔘 No
Period without RTP packet	60 s
Gain from PSTN	-1dB 💌
Gain to PSTN	2dB 💌
Timeout of No Answer	
Call from PSTN	60 s
Call from IP	60 s
Fax Parameter	
Fax Mode	T.38
Fax Tx Gain	0 db 💌
Fax Rx Gain	0 db 🗨
Packet time	20ms
Redundant frame in packet	3 🔹
Data & Fax Control	
Data	Disable
Fax	Disable 💌
DTMF Parameter	
Continuous time	60ms
Signal interval	60 ms
Threshold for detection	-27 dbm0

Save

	Disconnect Call when no RTP	When selected "Yes", detected call's silence time		
	packet	longer than silence timeout that for a long time		
Voice Parameter		not received RTP packets, then hangup the call.		
	Period without RTP packet	The maximum time length of silence		
	PSTN in Gain	Incoming PSNT gain		
	IP in Gain	Incoming IP gain		
Timeout of no	Call from PSTN	Call timeout of no answer from PSTN		
answer	Call from IP	Call timeout of no answer from IP		
	Fay Mada	Two modes are provided: T.38/Pass-through;		
Fax Parameter		default option is T.38.		
	Fax Tx Gain	Gain of sending a fax		

Table 2-11-1 Description of Voice & Fax

	Fax Rx Gain	Gain of receiving a fax	
	Packet time	Data packing duration	
	Redundant frame in packet	The length of frame in RTP packet	
Data & Fay Control	Data	Whether to allow the control of voice data	
	Fax	Whether to allow the control of fax	
	Continuous time	The level of a frequency duration	
DTME Deremeter	Signal interval	The time interval between two different	
DTMF Parameter	Signal Interval	frequency signals	
	Threshold for detection	Frequency detection threshold	

2.12 Maintenance

2.12.1 Management Parameter

Management Parameter	
WEB Configuration	
WEB Port	80
Teinet Configuration	
Telnet Port	23
Syslog Configuration	
Syslog Enable	🖲 Yes 🔘 No
Server Address	
Syslog Level	NONE
Send CDR	© Yes ◉ No
Qos	
Qos Type	None
NTP Configuration	
NTP Enable	● Yes ◎ No
Primary NTP Server Address	64.236.96.53
Primary NTP Server Port	123
Secondary NTP Server Address	18.145.0.30
Secondary NTP Server Port	123
Sync Interval	604800 s
Time Zone	GMT+8:00 (Beijing, Singapore, Taipei)

Figure 2-12-1 Management Parameter

Table 2-12-1 Description of Management Parameter

WEB Port	Listening port of local WEB service, the default is 80.
Telnet Port	Listening port of local Telnet service, the default is 23.
Syslog Enable	The default is "No". If select "Yes", users will set syslog server address and syslog level.
Server Address	Address for saving system log

Syslog Level	None, Debug, Notice, Warning, Error. Please choose the file you want to output
	information level.
Send CDR	Whether send Call Detail Record through syslog
Qos Type	There are three options: none, TOS and DS. TOS only supports IPv4.
NTP Enable	Simple Network Management Protocol is enabled or not; the default is Yes.
Primary NTP server	The Primary IP address of SNMP management host computer. The host computer of
Address	the IP address will carry out monitoring and management to equipment.
Primary NTP server	The port that managed device provides trap message (it is generally alarm message) to
Port	SNMP management host computer, the default is 123.
Secondary NTP server	The Secondary IP address of SNMP
Address	
Secondary NTP server	The port of the Secondary IP address of SNMP
Port	
Sync Interval	Time interval of check
Time Zone	The time zone of local

2.12.2 Data Restore

Figure 2-9-2 Data Backup

Data Backup	
Click 'Backup' to download database file to your computer.	Backup
Click 'Backup' to download dialplan file to your computer.	Backup
Click 'Backup' to download exception file to your computer.	Backup

Table 2-12-2 Description of Data Backup

database	Click the Backup , and save the database in your PC	
dialplan	Click the Backup , and save the dialplan in your PC	
exception	Click the Backup , and save the exception in your PC	

2.12.3 Data Restore

Figure 2-12-3 Data Restore

Data Restore	
Database	Browse Restore
Dialplan	Browse Restore

Table 2-12-3 Description of Data Restore		
Database	Click "Browse" to select the Database file, and then click "Restore".	
Dialplan	Click "Browse" to select the Dialplan file, and then click "Restore".	

2.12.4 Version Information

Version Information			
File Type	Version	Date Built	Time Built
Software	2.01.04.03	2013-10-10	15:09:24
Database	2.03.01	2013-06-17	19:32:00
Web	2.01.04.03	2013-10-08	15:56:21

Here users can view software, database and web version information.

2.12.5 Firmware Upload



Firmware Upload	
Software	Browse Upload
Web	Browse Upload

The process of firmware upload:

- 1) Click "Firmware Upload"
- 2) Browse files and choose the loading program (Name the file extension. ldf)
- 3) Click "Upload", the upload process will last about 60s and device can automatically restart after

uploading. (The firmware update process don't shut off the power).

2.12.6 Password Modification

Figure 2-9-6 Password Modification

The configuration items are used to change the login password of web configuration.

2.12.7 Device Restart

Figure 2-9-7	Device	Restart
--------------	--------	---------

Device Restart	
	Click the button below to restart the device

Restart

Some configuration need to restart device to take effect. Click "Restart" to restart the device.

3. Glossary

PRI: Primary rate interface

- FMC: Fixed Mobile Convergence
- SIP: Session Initiation Protocol
- DTMF: Dual Tone Multi Frequency
- PSTN: Public Switched Telephone Network
- STUN: Simple Traversal of UDP over NAT
- DMZ: Demilitarized Zone
- SS7: Signaling System No. 7
- ISDN: Integrated Services for Digital Network
- SNMP: Simple Network Management Protocol
- DSCP: Differentiated Services Code Point
- **OPC: Original Signaling Point Code**
- **DPC: Destination Signaling Point Code**
- NGN: Next Generation Network
- PBX: Private Branch Exchange
- RTP: Real-time Transport Protocol
- **RTCP: Real-time Transport Control Protocol**
- STP: Signaling Transfer Point
- TDM: Time Division Multiplex