

OT-ATA200SP+ 1 FXS + 1 PSTN SIP/IAX ATA User Manual

OverTek

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1 OT-ATA200SP+Features

1.1 Appearance



- **PWR**: power connection status
- SYS: server registration status . registered: on , gliting , not-registered , off
- WAN: WAN port connectiong , contected , on , offline : off
- LAN: LAN port connectiong , contected , on , offline : off
- **PSTN**: light on when PSTN call come in/out
- VoIP: light on when VoIP call come in/out, The default status when pick up the call is VoIP call out

1.2 Interface



Power: Output Power:12VDC,500mA.

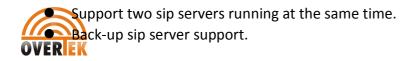
Port: RJ11 port. Connect to handset or the Lifeline accessory.

- WAN: RJ45 port.
- LAN: RJ45 port.

1.3 Electricity characteristic

- **Speciality of electric**: output the 12V 500mA DC
- The network connects: 2 RJ45 connect, a WAN, a LAN
- FXS: 2 port

1.4 Software



- NAT, Firewall.
- DHCP client and server.
- Support PPPoE, (used for ADSL, cable modem connecting).
- Support major G7.xxx CODEC.
- VAD,CNG.
- G.165 compliant 16ms echo cancellation
- Tone generation and Local DTMF re-generation according with ITU-T
- E.164 dial plan and customized dial rules
- Support Lifeline.
- Hotline.
- Speed Dial
- Call Forward, Call Transfer, 3-way conference calls
- Caller ID display
- DND(Do Not Disturb), Black List, Limit List
- Upgrade firmware through FTP or HTTP.
- Web management.
- Reverse polarity
- Telnet remote management.
- Voice prompt
- adjustable user password and super password

1.5 Standard and Protocols

- IEEE 802.3 /802.3 u 10 Base T / 100Base TX
- PPPoE: PPP Protocol over Ethernet
- DHCP Client and Server: Dynamic Host Configuration Protocol
- G.711 u/a; G729 audio Codec
- SIP RFC3261, RFC 2543
- IAX2
- TCP/IP: Internet transfer and control protocol
- RTP: Real-time Transport Protocol
- RTCP: Real-time Control Protocol
- VAD/CNG save bandwidth
- Telnet: Internet's remote login protocol
- DNS: Domain Name Server
- TFTP: Trivial File Transfer Protocol
- HTTP: Hyper Text Transfer protocol
- FTP: File Transfer protocol
- RFC3362: T.38 protocol

1.6 Compliant Standards

- CE: EN55024,EN55022
- FCC part15
- comply with ROHS in EU
- comply with ROHS in China





Explanation:

The letter "e" is the first letter of "environment: and "electronic", The rim is a round with two arrow, stands for recycle. The number 20 stands for the years of environment protection. Please note the years of environment protection is not discarding year nor usage life

1.7 Operating requirement

- Operation temperature: 0 to 40° C (32° to 104° F)
- Storage temperature: -30° to 65° C (-22° to 149° F)
- Humidity: 10 to 90% no dew

1.8 Package

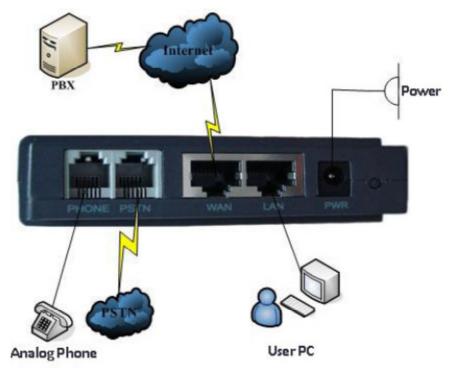
- Size 128 x 85 x 30 mm
- Packing List
 - ✓ OT-ATA200SP+ ATA
 - ✓ Power adaptor (12v, 500mA)
 - ✓ Manual CD



1.9 Installation

Use Ethernet cable to connect OT-ATA200SP+'s LAN port and your computer. Set your computer's ip to the network 192.168.10.x or using dynamic obtain IP. Open your web browser and key in 192.168.10.1. Then you will see the logon pageof OT-ATA200SP+, the default username and password is **admin/admin** for administrator and **guest/guest** for guest.

Set up page for VoIP use only:



2 Web Configuration

2.1 Access Web setting page

Enter OT-ATA200SP+ IP address in the web browser and press ENTER to go to the log on page, and key in the username and password to access OT-ATA200SP+ setting page.

Default username and password is:

Administrator:	Username: admin	password: admin
User:	Username: guest	Username: guest



Username:	
Password:	
Logon	

2.2 Current state

		В	ASIC					
:	DADIO -							
ORK	STATUS WIZARD							
	Network							
IE	WAN		LAN					
	Connect Mode	РРРОЕ	IP Address		192.168.10.1			
ITENANCE	MAC Address	00:09:90:13:1f:90	DHCP Serv	er	ON			
JRITY	IP Address	116.25.175.196						
	Gateway	116.25.175.196						
OUT	Phone Numbe	r						
	SIP LINE 1	3016@sip.stephen-tele.com :50	60	Registered				
	SIP LINE 2	@ :5060		Unapplied				
	IAX2	@:4569		Unapplied				
		Version: VOIP Gateway V1.0.201.16						

This page shows OT-ATA200SP+'s running state.

Network : shows the WAN and LAN port connecting state and current settings.

VoIP : show the default protocol, the working state of SIP and IAX2, you can see whether OT-ATA200SP+ has

registered the public sip server and IAX2 server.

Phone Number shows the public sip server, the private sip server and the IAX2 server phone numbers.



2.3 Network

2.3.1 Wan Config

BASIC	NETWORK							
NETWORK	WAN LAN QOS SERVICE PORT DHCP SERVER NTP							
VOIP	WAN Status							
PHONE	Active IP	116.25.175.196						
THOME	Current Netmask	255.255.255.255						
MAINTENANCE	Current Gateway	116.25.175.196						
SECURITY	MAC Address	00:09:90:13:1f:90						
LOCOUT	Get MAC Time 20110401							
LOGOUT	WAN Setting							
	Static 🔘	DHCP ©	PPPOE Connected					
	PPPOE Server	ANY						
	Username	Username sz8898848@163.gd						
	Password ······							
		APPLY						

WAN port network setting page.

Support static IP, dynamic obtain IP and PPPoE.

Configure Static IP:

- ----Enable Static;
- ----Set OT-ATA200SP+'s IP address in the IP Address;
- ----Set net mask in the Net mask field;
- ----Set router IP address in the Gateway;
- ----DNS Domain:
- ----Set local DNS server in the Preferred DNS and the Alternate DNS

Configure to dynamic obtain IP

----Enable DHCP;

If there is DHCP server in your local network, OT-ATA200SP+ will automatically obtain WAN port network information from your DHCP server.

Configure PPPoE:

- ----Enable PPPoE
- ----PPPoE server: Enter "ANY" if no specified from your ITSP.
- ----Enter PPPoE username and pin in the username and password.

OT-ATA200SP+ will automatically obtain WAN port network information from your ITSP if PPPoE setting and the setup are correct.

Notice: If user accesses the gateway through WAN port. He should use the new IP address to access the gateway when the WAN port address was changed.



2.3.2 LAN Config

BASIC	NETWORK							
NETWORK	WAN LAN QOS SERVICE PORT DHCP SERVER NTP	WAN LAN QOS SERVICE PORT DHCP SERVER NTP						
VOIP	LAN Set	LAN Set						
PHONE	LAN IP 192.168.10.1							
MAINTENANCE	Netmask 255.255.255.0							
MAINTENANCE	DHCP Service							
SECURITY	NAT							
LOGOUT	Bridge Mode							
	APPLY							

Bridge Mode: Enable this option to switch to bridge mode. Gateway won't assign IP for its LAN port in bridge mode and its LAN and WAN port will be in the same network. (This setting won't take effect unless you save the config and reboot the device)

IP Netmask: Set the IP and Netmask for the LAN DHCP Server: Enable DHCP service in LAN port NAT: Enable NAT.

2.4 VOIP

2.4.1 SIP Config

BASIC		VOIP							
NETWORK	SIP IAX2 ST	SIP IAX2 STUN DIAL PEER							
VOIP	SIP Line Select	SIP Line Select							
PHONE	SIP 1 -	SIP 1 V Load							
MAINTENANCE	Basic Setting	Basic Setting							
SECURITY	Register Status	Registered	Display Name	3016					
LOGOUT	Server Name	CHIMA	Proxy Server Address						
LUGUUT	Server Address	sip.stephen-tele.com	Proxy Server Port						
	Server Port	5060	Proxy Username						
	Account Name	3016	Proxy Password						
	Password	••••	Domain Realm						
	Phone Number	3016	Enable Register						
		APPLY							
		Advanced Set							

Setting page of public SIP server:

Register Server Addr: Register address of public SIP server

Register Server Port: Register port of public SIP server

Register Username: Username of your SIP account (Always the same as the phone number)

Register Password: Password of your SIP account.

Proxy Server Addr: IP address of proxy SIP server (SIP provider always use the same IP for register server and proxy server, in this case you don't need to configure the proxy server information.)

Proxy Server Port: Signal port of SIP proxy

Proxy Username: proxy server username

Proxy Password: proxy server password



Domain Realm: SIP domain, enter the sip domain if any, otherwise OT-ATA200SP+ will use the proxy server address as sip domain.

Local SIP port: Local SIP register port, default 5060

Phone Number: Phone number of your SIP account

Register Expire Time: register expire time, default is 600 seconds. OT-ATA200SP+ will auto configure this expire time to the server recommended setting if it is different from the SIP server.

Detect Interval Time: Co-work with the Auto Detect Server, if Auto Detect Server is enable, OT-ATA200SP+ will periodically detect if the SIP server is available according this setting.

RFC Protocol Edition: Current OT-ATA200SP+ SIP versions. Set to RFC 2543 if the gate need to communicate to devices (such as CISCO5300) using the SIP 1.0. Default is RFC 3261.

Enable Register: Enable/Disable SIP register. OT-ATA200SP+ won't sent register info to SIP server

DTMF Mode: DTMF signal sending mode: support RFC2833, DTMF_RELAY (inband audio) and SIP info **Auto Detect server:** co-work with Server Auto Swap and Detect Interval Time. Enable this option, OT-ATA200SP+ will periodically detect whether the public SIP server is available, if the server is unavailable, the OT-ATA200SP+ will switch to the back-up SIP sever, and continue detecting the public sip server. OT-ATA200SP+ will switch back

to the primary SIP server if the server is available again.

Server Auto Swap: Please refer to Auto Detect server for detail.

Enable Via rport: config the supporting for RFC 3581

SIP(Default Protocol): Setting for the default protocol of SIP

BASIC		VOIP						
NETWORK	SIP IAX2 STUN DIAL PE	SIP IAX2 STUN DIAL PEER						
VOIP	IAX2							
PHONE	Register Status U	napplied						
	IAX2 Server Addr							
MAINTENANCE	IAX2 Server Port 4	569						
SECURITY	Account Name							
LOGOUT	Account Password							
	Phone Number							
	Local Port 4	569						
	Voice Mail Number							
	Voice Mail Text	ail						
	Echo Test Number							
	Echo Test Text	cho						
	Refresh Time 6	0 Seconds						
	Enable Register							
	Enable G.729							
	IAX2(Default Protocol)]						
		APPLY						

2.4.2 lax2 Config

Setting page of public IAX server:

IAX Server Addr: Register address of public IAX server

IAX Server Port: Register port of public IAX server, default port is 4569

Account Name: Username of your SIP account (Always the same as the phone number) Account Password:Password of your IAX account. Local port: Signal port of local, default port is 4569

Phone Number: Phone number of your IAX account



Voice mail number: If the IAX support voice mail, but your username of the voice mail is letters which you can not input with the ATA , then you use the number to stand for your username **Voice mail text:** if IAX support voice mail, config the domain name of your mail box here.

Echo test number: If the platform support echo test , and the number is test form , the config the test number to replace the text format The echo test is to test the woring status of terminals and platform

Echo test text: echo test number in text format

Refresh time: IAX refresh time

Enable Register: enable or disable register

IAX(Default Protocol): Set IAX 2 as the default protocol , if not the system will choose SIP as default **Enable G.729:** Using G.729 speech coding mandatory consultations

2.5 Advance

		NETWORK								
		WA	N LAN QO	S SERVIC		RT DHCP SERV	ER	NTP		
BASIC	DHCP Leased Table									
NETWORK		Leased IP Address Client Hardware Address								
VOIP		DHC	P Lease Table	e						
PHONE		Name	Start IP	End IP		Lease Time		Netmask	Gateway	DNS
MAINTENANCE		lan	192.168.10.2	192.168.10	0.30	1440		255.255.255.0	192.168.10.1	192.168.10.1
SECURITY		DHC	P Lease Tabl	e Setting						
LOGOUT		Lease	e Table Name							
		Start IP			<u></u>					
		End IP								
		Lease Time			(minute)					
		Netmask								
		Gatev	vay							
		DNS								
		Add								
		DHCP Lease Table Delete								
		Lease Table Name lan 💌		lan 👻				Delete		
		DNS	relay Setting							
		DNS F	Relay 🗵					PLY		

2.5.1 DHCP Server

DHCP server manage page.

User may trace and modify DHCP server information in this page.

Update Mode: Using DHCP updated model ,None expressed are not updated, Update firmware update firmware is used to DHCP. Update file is used to configure DHCP updated configuration files.

Tftp Server: Addresses using TFTP server upgrade.

DNS Relay: enable DNS relay function.

User may use below setting to add a new lease table.

Lease Table Name: Lease table name.

Lease Time: DHCP server lease time.

Start IP: Start IP of lease table.

End IP: End IP of lease table. Network device connecting to the OT-ATA200SP+ LAN port can dynamic obtain the



IP in the range between start IP and end IP.Netmask: Netmask of lease table.Gateway: Default gateway of lease tableDNS: default DNS server of lease table.

Notice: This setting won't take effect unless you save the config and reboot the device

2.5.2 NAT

BASIC	SECURITY							
NETWORK	MMI FILTER FIREWALL NAT VPN							
VOIP	Protocol Set							
PHONE	IPSec ALG IPSec ALG IPSec ALG IPSec ALG							
MAINTENANCE	APPLY							
SECURITY	NAT Table							
LOGOUT	Inside IP Inside TCP Port Outside TCP Port							
LOGOUT	Inside IP Inside UDP Port Outside UDP Port							
	NAT Table Option							
	Transfer Type TCP Outside Port							
	Inside IP Inside Port							
	Add Delete							

Advance NAT setting. Maximum 10 items for TCP and UDP port mapping.

IPSec ALG: Enable/Disable IPSec ALG;

FTP ALG: Enable/Disable FTP ALG;

PPTP ALG: Enable/Disable PPTP ALG;

Transfer Type: Transfer type using port mapping.

Inside IP: LAN device IP for port mapping.

Inside Port: LAN device port for port mapping.

Outside Port: WAN port for port mapping.

Click Add to add new port mapping item and Delete to delete current port mapping item.

2.5.3 Net Service

BASIC	NETWORK				
NETWORK	WAN LAN QOS SERVICE PORT DHCP SERVER NTP				
VOIP	Service Port				
PHONE	HTTP Port 8686				
MAINTENANCE	RTP Initial Port 10000				
	RTP Port Quantity 200				
SECURITY	APPLY				
LOGOUT	If modify HTTP port, you'd better set it more than 1024, then restart.				

HTTP Port: configure HTTP transfer port, default is 80.User may change this port to enhance system's security. When this

port is changed, please use http://xxx.xxx.xxx.xxx/ to reconnect. **Telnet Port:** configure telnet transfer port, default is 23.



RTP Initial Port: RTP initial port.

RTP Port Quantity: Maximum RTP port quantity, default is 200 **Notice:**

Settings in this page won't take effect unless save and reboot the device.

If you need to change telnet port or HTTP port, please use the port greater than 1024, because ports under 1024 is system remain ports.

HTTP service if HTTP is set to 0.

2.5.4 QoS settings

BASIC	NETWORK	
NETWORK	WAN LAN QOS SERVICE PORT DHCP SERVER NTP	
VOIP	QoS Set	
PHONE	🗌 VLAN Enable	
	☑ VLAN ID Check Enable VoIP/Other VLAN differentiated	
MAINTENANCE	DiffServ Enable DiffServ Value 0x b8	
SECURITY	VoIP Data 802.1P Priority 0 (0 - 7) Other Data 802.1P Priority 0 (0 - 7)	
LOGOUT	VoIP Data VLAN ID 256 (0 - 4095) Other Data VLAN ID 254 (0 - 4095)	
	APPLY	

OT-ATA200SP+ implement QoS based on 802.1p, The QoS is used to mark the network communication priority in the data link/MAC sub-layer. OT-ATA200SP+ will sorted the packets using the QoS and sends it to the destination.

- 1. Voice 802.1p Priority --- Configure the priority of the voice packets in 802.1p protocol.
- 2. VLAN Enable --- Disable/Enable VLAN function
- 3. Voice VLAN ID --- configure the Voice/signaling VLAN ID
- 4. DiffServ Enable --- Disable/Enable Diffserv service

5. DiffServ Value --- Configure Diffserv parameter. The value range : value range :

0x28,0x30,0x38,0x48,0x50,0x58,0x68,0x70,0x78,0x88,0x90,0x98,0xb8.default is 0xb8 ,oxb8 stands for best fast transmission; 28-30 is guaThrantee for the transmission priority for the 1st rank , 48-58 is guarantee for the transmission priority for the 2nd rank, 68-78 is guarantee for the transmission priority for the 3rd rank, 88-98 is guarantee for the transmission priority for the 4th rank.

6. Data VLAN ID--- Assign VLAN id for data stream.

7. Data 802.1P Priority --- Configure the priority of the data packets (non-voice/signaling data) in 802.1p protocol.

8. Data/Voice DiffServ differentiated --- undifferentiated for Date and voice VLAN is not distinction VLAN tag, Tag differentiated for Date and Voice VLAN is distinction VLAN tag, Date untagged for Date VLAN is distinction VLAN tag tag

Please refer to VLAN implement for detail.



2.5.5 Advance SIP settings

BASIC	VOIP			
NETWORK	SIP IAX2 ST	UN DIAL PEER		
VOIP	SIP Line Select			
PHONE	SIP 1 💌	Load		
MAINTENANCE	Basic Setting	Basic Setting		
SECURITY	Register Status	Registered	Display Name	3016
LOGOUT	Server Name	СНІМА	Proxy Server Address	
	Server Address	sip.stephen-tele.com	Proxy Server Port	
	Server Port	5060	Proxy Username	
	Account Name	3016	Proxy Password	
	Password	••••	Domain Realm	
	Phone Number	3016	Enable Register	
	APPLY			
	Advanced Set			

This page is used to set the private sip server, stun server, and back up sip server information. STUN Server setting:

STUN Server Addr: configure stun server address;

STUN Server Port: configure stun server port default 3478

STUN Effect Time: stun detect NAT type circle, unit: minute.

Enable SIP STUN: enable/disable stun.

Please refer to sip conf for the setting for how to set the public alter server.

Private Server Type: The particular Private service system supplier carries out the sign and speeches to encrypt, default is common. User can register two sip servers: public sip server and private sip server. these two sip servers are independent from each other and running in the same time.

For how to configure private sip server. Please refer to <u>sip configuration</u>.

2.5.6 Digital Map

BASIC	PHONE	
NETWORK	DSP CALL SERVICE DIGITAL MAP	
VOIP	Digital Map Set	
PHONE	End With "#"	
MAINTENANCE	Fixed Length 11	
MAINTENANCE	Image: Time Out 5 (330)	
SECURITY	APPLY	
LOGOUT	Digital Rule table	
	Rules:	
	"*"	
	Add * Del	

Digit map is a set of rules to determine when the user has finished dialing.

OT-ATA200SP+ support below digital map:

Digital Map is based on some rules to judge when user end their dialing and send the number to the server. OT-ATA200SP+ support following digital map:



----End With "#": Use # as the end of dialing.

----Fixed Length: When the length of the dialing match, the call will be sent.

----Timeout: Specify the timeout of the last dial digit. The call will be sent after timeout

----Prefix: User define digital map:

[] represents the range of digit, can be a range such as [1-4], or use comma such as [1,3,5], or use a list such as [234]

x represents any one digit between 0~9

Tn represents the last digit timeout. n represents the time from 0~9 second, it is necessary. Tn must be the last two

digit in the entry. If Tn is not included in the entry, we use T0 as default, it means system will sent the number immediately

if the number matches the entry.

Example:

[1-8]xxx All number from 1000 to 89999 will be sent immediately.

9xxxxxx 8 digits numbers begin with 9 will be sent immediately.

911 Number 911 will be sent will be immediately

99xT4 3 digits numbers begin with 99 with be sent after four seconds.

BASIC			PHONE	
NETWORK	DSP CALL SERVICE	DIGITAL MAP		
VOIP	Call Service Setting			
PHONE	Hot Line		Warm Line Time	0 (0~9 seconds)
MAINTENANCE	P2P IP Prefix		No Answer Time	20 (0~60 seconds)
MAINTENANCE	Do Not Disturb		Accept Any Call	V
SECURITY	Enable Call Transfer		Ban Outgoing	
LOGOUT	Enable Three Way Call		Enable Call Waiting	
			APPLY	
	Black List			
			Black List	
		Add		Delete
	Limit List		· · ·	
			Limit List	
		Add		Delete

2.5.7 Call Service Settings

User configure the value add service such as hotline, call forward, call transfer, 3-way conference call .etc in this page

Hotline: configure hotline number. OT-ATA200SP+ immediately dials this number after hook-off if it is set. **Call Forward:** Please refer to <u>value add service</u> for detail.

No Disturb: DND, do not disturb, enable this option to refuse any calls.

Ban Outgoing: Enable this to ban outgoing calls.

Enable Call Transfer: Please refer to value add service for detail.

Enable Three Way Call: Please refer to value add service for detail.

Enable Call Waiting: Enable/disable Call Waiting

Accept Any Call: If this option is disable, OT-ATA200SP+ refuse the incoming call when the called number is different from OT-ATA200SP+'s phone number.



No Answer Time: no answer call forward time setting. **Black List:** incoming call in these phone numbers will be refused.

Limit List: outgoing calls with these phone numbers will be refused

2.5.8 MMI Filter

BASIC	SECURITY
NETWORK	MMI FILTER FIREWALL NAT VPN
VOIP	MMI Filter Table
PHONE	Start IP End IP Option
MAINTENANCE	MMI Filter Table Set
SECURITY	Start IP End IP Add
LOGOUT	MMI Filter Table Set
	MMI Filter APPLY

MMI filter is used to make access limit to OT-ATA200SP+ Gateway.

When MMI filter is enable. Only IP address within the start IP and end IP can access OT-ATA200SP+ gateway.

2.5.9 Audio Settings

BASIC	PHONE			
NETWORK	DSP CALL SERVIC	E DIGITAL MAP		
VOIP	DSP Configuration	1		
PHONE	First Codec	g711Ulaw64k 💌	Second Codec	g711Alaw64k 💌
MAINTENANCE	Third Codec	g729 💌	Fourth Codec	g726-32 💌
MAINTENANCE	Output Volume	1 (1-5)	Dtmf Payload Type	101 (96-127)
SECURITY	G729 Payload Length	20ms 💌	Signal Standard	China 💌
LOGOUT	CallerID Tx Mode	Bellcore FSK(US) -	Fax Mode	T.38 •
	Flashhook Min Time	200 (>=50ms)	Flashhook Max Time	800 (<=1000ms)
	VAD			
		ΑΡ	PLY	

CODEC: select the prefer CODEC; support ulaw, alaw and G729 Signal Standard: Support CHINA, Japan and USA standard Input Volume: Handset in volume. Output Volume: Handset out volume. G729 Payload Length: G729 payload length VAD: Enable/disable Voice Activity Detection

FAX Mode: select the FAX Mode



2.5.10 VPN

BASIC	SECURITY
NETWORK	MMI FILTER FIREWALL NAT VPN
VOIP	VPN IP
PHONE	0.0.0.0
MAINTENANCE	VPN Mode
SECURITY	L2TP O PPTP Enable VPN
LOGOUT	L2TP
	VPN Server Addr VPN User Name
	VPN Password
	рртр
	PPTP Server Addr PPTP User Name
	PPTP Password
	APPLY

this page is VPN setting page , the Gateway support the VPN with UDP and L2TP protocol .The parameters is as below

VPN IP: After VPN registered successfully, VPN server will give an IP aggress to the terminal . If there is a IP address shown on terminal (except for 0.0.0.0) ,it means your VPN has registered UDP Tunnel

VPN Server Addr: register to the address of VPN server.

VPN Server Port: Register to the port of VPN server

Server Group ID: the group ID of UDP VPN

Server Area Code: the are code of VPN server

L2TP VPN Server Addr: register to the address of VPN server

VPN User Name: L2TP VPN username

VPN Password: L2TP VPN password

VPN Mode			
◎ L2TP	© РРТР	Enable VPN	

UDPTunnel: use the UDP to visit VPN L2TP: use the L2TP to visit VPN

Enable VPN: Enable the VPN server, you must choose UDP or L2TP type in advance



2.6 Dial-Peer Settings

BASIC	VOIP		
NETWORK	SIP IAX2 STUN DIAL PEER		
VOIP	Dial Peer Table		
PHONE	Number Destination Port Mode Alias Suffix Del Length		
MAINTENANCE	*T 0.0.0.0 0 LIFELINE no alias no suffix 0		
SECURITY	Add Dial Peer		
	Phone Number		
LOGOUT	Destination (optional)		
	Port(optional)		
	Alias(optional)		
	Call Mode		
	Suffix(optional)		
	Delete Length (optional)		
	Submit		
	Dial Peer Option		
	TT Delete Modify		

Please refer to "how to use dial rule?" for detail.

2.6.1 Config Manage

Save Config: save current settings. Clear Config: restore to default settings.

Notice: clear config in admin mode, all settings restores to factory default; clear config in guest modem, all settings except

sip, advance sip restore to factory default.

2.7 Update

2.8.1 Web Update:

update gateway's settings or firmware. Firmware file is .dlf extension when configure file is .cfg extension, OT-ATA200SP+ will auto select configure update or firmware update according the extension.

2.8.2 FTP Update:

back up the configure file to FTP or TFTP server. Or auto update configure file from your auto update server. Back up configure file to your FTP/TFTP server.

BASIC	MAINTENANCE
NETWORK	AUTO PROVISION SYSLOG CONFIG UPDATE ACCOUNT REBOOT
VOIP	Web Update
PHONE	Select file 选择文件 (*.z,*.txt,*.mmiset) Update
MAINTENANCE	FTP Update
SECURITY	Server
LOGOUT	Username
	Password
	File Name
	Type Application update 💌
	Protocol FTP 💌
	APPLY



* configure use .cfg extension.

2.8.3 Auto update:

OT-ATA200SP+ gateway support FTP and TFTP auto update. The gateway will auto obtain the configure file from your update server if configured. To obtain the original configure file, you can use the FTP/TFTP back up as describe above. Configure file using module structure, user may remain the concerned modules and remove other modules. Put the configure file in the root directory of update serve when finish editing.

BASIC	MAINTENANCE
NETWORK	AUTO PROVISION SYSLOG CONFIG UPDATE ACCOUNT REBOOT
VOIP	Auto Update Setting
PHONE	Current Config Version 2.0002
	Server Address 0.0.0.0
MAINTENANCE	Username user
SECURITY	Password ····
LOGOUT	Config File Name
	Config Encrypt Key
	Protocol Type FTP 💌
	Update Interval Time I Hour
	Update Mode Disable 🔹
	Enable DHCP OPTION 66
	APPLY

Current Version: the system will display the current version number.

Server Address: FTP/TFTP server address

Username: FTP server user name

Password: FTP server password

Config File Name: The name of configuration file

Config Encrypt Key: The encrypt key of confirmation file

Protocol Type: The protocol type that used for upgrading

Update Interval Time: The interval time that the terminals search for new configuration file.

Update Mode: auto provision mode; Disable: not auto update,

Update after reboot:auto update after reboot,

Update at time interval:auto update after a certain time

Configure file version was in the <<VOIP CONFIG FILE>> and <GLOBLE CONFIG MODULE> ConfFile Version For instance:

Gateway original version is: <<<VOIP CONFIG FILE>>Version:1.0000

<GLOBLE CONFIG MODULE> ConfFile Version: 6

User may edit the configure file version to: <<VOIP CONFIG FILE>>Version:1.0007

<GLOBLE CONFIG MODULE> ConfFile Version: 7



2.8 System Manage

2.8.1 Account Manage

BASIC	MAINTENANCE
NETWORK	AUTO PROVISION SYSLOG CONFIG UPDATE ACCOUNT REBOOT
VOIP	User Set
PHONE	User Name User Level
	admin Root
MAINTENANCE	guest General
SECURITY	Add User
LOGOUT	User Name
	User Level Root 💌
	Password
	Confirm
	Submit
	Account Option
	admin Delete Modify

Set web access account or keypad password of OT-ATA200SP+.

2.8.2 Syslog Config:

BASIC		MAINTENANCE					
NETWORK	AUTO PROVISION SYSLOG	CONFIG UPDATE ACCOUNT REBOOT					
VOIP	Syslog Set						
PHONE	Server IP	0.0.0					
MAINTENANCE	Server Port	514					
MAINTENANCE	MGR Log Level	None 🔽					
SECURITY	SIP Log Level	None 💌					
LOGOUT	IAX2 Log Level	None 💌					
	Enable Syslog						
		APPLY					

Server IP: set the syslog server address Server Port: set the syslog server port MGR Log Level: set the MGR log level SIP Log Level: set the SIP log level IAX2 Log Level: set the IAX2 log level Please click "apply" after setting



2.8.3 Time Set:

BASIC		NETWORK
NETWORK	WAN LAN QOS	S SERVICE PORT DHCP SERVER NTP
VOIP	NTP Time Set	
PHONE	Server	209.81.9.7
MAINTENANCE	Time Zone	(GMT+08:00)Beijing,Chongqing,Hong Kong,Urumqi
MAINTENANCE	Time Out	60 (seconds)
SECURITY	NTP	
LOGOUT		APPLY

Server: type the ip address of time server Time zone: select correct time zone in list box Timeout: longest response time for SNTP Manual Time set: The time setting Daylight: Daylight Saving time

2.8.4 Logout & Reboot

Reboot Gateway, some setting needs to reboot to make it works. Please always save config before reboot, otherwise the setting will return to previous setting.

BASIC	MAINTENANCE
NETWORK	AUTO PROVISION SYSLOG CONFIG UPDATE ACCOUNT REBOOT
VOIP	Reboot Phone
PHONE	Press the "Reboot" button to reboot Phone !
MAINTENANCE	Reboot
MAINTENANCE	
SECURITY	
LOGOUT	





3 IVR setting

User may pre-config OT-ATA200SP+ gateway using a normal phone connecting to OT-ATA200SP+. please refer the below

command:

Notice: all command below can be end with # to speed response.

```
"#****" /*reboot gateway*/
"#*000" /*clear settings*/
"#*100" /*set the IP type to static ip */
"#*101" /*set IP type to DHCP */
"#*102" /*set IP type to PPPoE*/
```

"#*111" /*prompt gateway ip*/ "#*222" /* prompt phone number*/

Below setting need reboot to take effect "#*103" /*change to bridge mode*/ "#*104" /*change to router mode*/

"#*50192.168.1.117" set WAN port IP address "#*51192.168.1.1" set default gateway IP "#*52202.112.10.37" set dns server "#*53255.255.255.0" set netmask, use 255.255.255.0 if no be set



4 Telnet Console

4.1 Introduce

4.1.1 Basic structure

User may use telnet command to access and manage gateway. OT-ATA200SP+ adopts tree structure for telnet. Every node contains its sub-nodes or local command. User can type "help" or "?" whenever to see sub-nodes and all local command under current node. Besides local command, there are some global commands can be used in each node.

4.1.2 Basic command

Logout: exit telnet mode. Write: save current settings.

Type sub-nodes name in current node to switch to sub-node. Type "!" or "exit" in current node to return to parent-node.

Type "help" or "?" can see all sub-nodes and all local command under current node, every help item has comments such as <command> or <node> to distinguish sub-nodes and local command. Type "help" or "?" in command can see all parameters using in this command.

When typing node name or command, user no need to key the full name, use TAB button will make it more efficient. There are two types in command parameters: optional and required. "required" parameter use "-" as prefix and "optional" use "_" as prefix. User may type "-" or "_" then press TAB button for complementarily.

4.2 Global Command

Global command is available under all nodes, OT-ATA200SP+ support following commands:

Command	Function	Example
exit	Return to parent-node	#exit
logout	Exit	#logout
ping	Ping command, use to check network	<pre>#ping www.stephen-tele.com</pre>
write	Save setting to flash	#write

4.3 Tree Structure

4.3.1 Debug (Level 0~7)
path: <debug>#
show debug setting ---show
[disable]enable debug all modules ---[no] all xxx
[disable]enable debug app module ---[no] app xxx
[disable]enable debug cdr module ----[no] cdr xxx
[disable]enable debug sip module ----[no] tel xxx
[disable]enable debug dsp module ----[no] dsp xxx

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4.3.2 reload usage: #reload Reboot system

4.3.3 show system running info
basic
path: <show>#
show network status
Example: #<show>#basic

Show ip packets Stat. Example:#<show>#ip ip

Show RTP packets Stat. Example:#<show>#ip rtp

Show TCP packets Stat. Example:#<show>#ip tcp

path: <show># show gateway memory Example:#<show>#memory \geq nat path: <show># show NAT information Example:#<show>#nat \geq uptime path: <show># show running time Example:#<show># uptime \geq version path: <show># show gateway version Example:#<show># version

4.3.4 telnet and logout
Usage: #telnet -target -port
Login:xxx
Password:xxx
#
#logout



4.3.5 tracert trace network path info usage: #tracert –host **Example:**#tracert www.google.com

5 Network Diagnosis

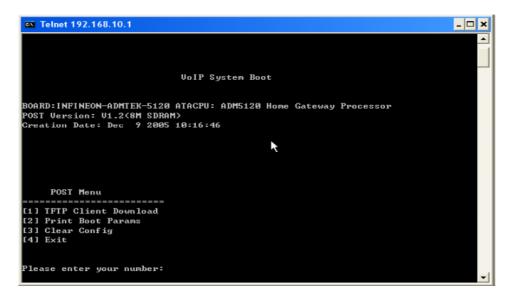
There are some telnet commands for checking your network. Now Listing below for your information

Command	Function	Example
ping	Check if the destination is accessible	<pre>#ping www.stephen-tele.com</pre>
tracert	Show network path info	#tracert www.stephen-tele.com
Show basic	Show network settings	#show basic
Show ip route	Show route table	#show ip route
Show ip arp	Show arp table	#show ip arp
telnet	Telnet to another device	#telnet 192.168.1.2

6 Restore to factory default

#setdefault clear gateway settings expect network part #setdefault all clear all settings.

7 POST Mode(safe mode)



OT-ATA200SP+ provide safe mode. When there is booting problem because of setting problem or firmware problem. User can restore the factory setting or upgrade to a new firmware to solve this problem.

How to enter safe mode?

In the OT-ATA200SP+ booting procedure, it use the static ip 192.168.1.179 (WAN port IP) for a short time, user can telnet to this ip address in this occasion to enter the save mode.(remember to change your PC into the network 192.168.1.xx) Then user can according the guide in post mode to clear the settings or upgrade the firmware.

8 FAQ

How many SIP servers may OT-ATA200SP+ register simultaneously?

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OT-ATA200SP+ support 2 SIP servers and 1 IAX server. The Default server is SIP. If you want to use the IAX server you must set IAX as default protocol in the IAX config page. IAX and SIP can register simultaneously but not work simultaneously. If you set 2 SIP servers in the SIP setting page, you can choose the route (server) by dialing plan which is edited by you. Please see<u>"How to use the dial rule?</u>" for detail.

How can I know the OT-ATA200SP+'s IP address?

Pick up the handset and then dial "#*111#", and the OT-ATA200SP+ will promote you its IP address.

How to use OT-ATA200SP+'s Lifeline function?

OT-ATA200SP+ supports Lifeline function, you can use the same handset to place PSTN and VoIP calls. First, you need to set up the Lifeline with the accessory send with the OT-ATA200SP+, connect this accessory to OT-ATA200SP+'s FXS port, and then connect the handset to the accessory's phone port, connect the landline to the accessory's line port. You can receive PSNT and VoIP calls simply with configuration. To place the PSTN call, you need to set up as follow:

----Add a new dial rule in the Dial-Peer setting: set the phone number to *T, and choose the Lifeline as the Call mode.----Add new Digital map item in the Advance _Digital Map: set Prefix Number to and *, and the length to 1. Then when you want to place a PSTN calls, you can first press * to switch to the PSTN line and then place your call as you normal do.

Why the settings vanish after reboot?

Please go to Config Manage_Save Config to save your setting always

How to use the dial rule?

OT-ATA200SP+ provide flexible dial rule, with different dial-rule configure, user can easily implement the following function:

- ----Replace, delete or add prefix of the dial number.
- ----Make direct IP to IP call
- ----Place the call to different SIP server according the prefix.

----Make PSTN calls use Lifeline function (Please refer <u>"How can use the Lifeline function of OT-ATA200SP+?"</u>). You can click "Add" to add a new dial rule. Below is the detail setting of the dial-rule:

Phone Number: The Number suit for this dial rule, cam be set as full match or prefix match. Full match means that if the number user dialed is completely the same as this number, the call will use this dial-rule. Prefix match means that if prefix of the number that the user dials is the same as the prefix, the call will use this dial-rule, to distinguish from the full match case, you need to add "T" after the prefix number in the phone number setting.

Call Mode: support SIP and Lifeline, SIP means the call will use sip protocol, Lifeline means the call will use the

PSTN line.

Destination (optional): call destination, can be IP or domain. Default is 0.0.0.0, in this case the call will be routed to the Public SIP server. If you set the destination to 255.255.255.255, then the call will be routed to the private SIP server. Also you can key other address here to make direct IP calls

Port (optional): Configure the port of the destination, default is 5060

Alias (optional):Set up the Alias. We support four Alias as below. Alias need to co-work with the Del Length:

add:xxx, add prefix to the phone number, can set to reduce the dial length.



- all: xxx, replace the phone number with the xxx, can use as speed dial function.
- del, delete the first N numbers. N is set in the Del Length
- rep:xxx,

replace the first N numbers. N is set in the Del Length. For Example: Use wants to place a call 8610-62281493, then you can set the phone number in the dial rule as 010T, and set the Alias as rep:8610, and set the Del Length to 3. Then all calls begin with 010 will be changed to 8610 xxxxxxx.

Suffix (optional): Configure suffix, show no suffix if not set Instance:

BASIC					VOII	0		
NETWORK		SIP IAX2	STUN DIAL PE	ER				
VOIP		Dial Peer Table						
PHONE		Number	Destination	Port	Mode	Alias	Suffix	Del Length
		*т	0.0.0	0	LIFELINE	no alias	no suffix	0
MAINTENANCE	Add Dial Peer							
SECURITY		Phone Number	[
LOGOUT		Destination (or	otional)					
		Port(optional)						
		Alias(optional)	ſ					
		Call Mode	[LIFELIN	E			
		Suffix(optional)					
		Delete Length	(optional)					
				DIAL PEER DIAL PEER Don Port Mode Alias Suffix Del Length				
		Dial Peer O	ption					
		*T 💌			Delete Mo	dify		

2T rule: If the call starts with 2, the first 2 will be deleted, and the rest number will be sent to private server. **3T rule:** If the call starts with 3, the first 3 will be deleted, and the rest number with be sent to public server. **123 rule:** Dial 123 and will send 8675583018049 to your server. Used as speed dial function.

OT rule: If the calls is begin with 0, the first 0 will be replace by 86. Means that if you dial 075583018049 and OT-ATA200SP+ will send 8675583018049 to your server.

***T rule:** Dial the * and the line with switch to PSTN. Note that you need to set another rule "Prefix Number: *; Length: 1" in the Digital Map. (Refer "<u>How to use OT-ATA200SP+'s Lifeline Function?</u>")

179 rule: when you dial 179, the call with send to 192.168.1.179, suit for LAN application without set up a sip server.

How to use speed dial function?

Please refer to <u>"How to use dial rule?</u>".

How to configure digital map?

Please refer digit map settings.

How to use Call Forward, Call Transfer and 3-way Conference calls?

User may set up the configuration in the Call Service page to use these value add service.



		PHONE		
DSP CALL SERVICE	DIGITAL MAP			
Call Service Setting				
Hot Line		Warm Line Time	0	(0~9 seconds)
P2P IP Prefix		No Answer Time	20	(0~60 seconds)
Do Not Disturb		Accept Any Call		
Enable Call Transfer		Ban Outgoing		
Enable Three Way Call		Enable Call Waiting		
		APPLY		
Black List				
		Black List		
	Add		(Delete
Limit List				
		Limit List		
	Add		(Delete

Call Forward:

----Forward when busy: select Busy in the Call Forward Field, and Key in the destination phone number in the Forward Number. If some one calls you when you having a call, the caller will be forwarded to the destination number.

----Forward no answer: Select No Answer in the Call Forward Field, and Key in the destination phone number in the Forward Number, fill the time in the No Answer Time. If some one calls you and no one answer the caller during the No Answer Time, the call will be forward to the destination number.

----Forward Always: Select Always in the Call Forward Field, and Key in the destination phone number in the Forward Number, then any one calls this gateway will be forward to the destination number.

Call Transfer:

Check the Enable Call Transfer.

If A is the OT-ATA200SP+ user, and B calls and talking with A through VoIP. A can **press the Hook-Flash** to hold the call with B, and then press * and then **enter C's number**. B will be transferred to C and can talk with C.

- 3-Way Conference Calls
- Check Enable Three Way Call

Only sip protocol support this function .Assume A is the OT-ATA200SP+ user, and B calls and talking with A through VoIP. A can **press Hook-Flash** to hold the call with B, then **enter C's number** to talk with C, and then **press Hook-Flash** again switch back to user B, then A can press * to make 3-way conference calls.

Notice: A can press **Hook-Flash** to switch between B and C. or press # to cancel the current call and switch to the other user.

VLAN implement

OT-ATA200SP+ support rich 802.1Q/P protocol and Diffserv configuration. Through its flexible VLAN function, you can set the voice/signaling and data packets in different VLAN via different VLAN id.

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Different implement of VLAN function:

1: if "Data/Voice VLAN differentiated" is undifferentiated. Device will set the same vlan ID for voice and data. As show below

NETWORK							
WAN LAN QOS SERVICE PORT DHCP SERVER NTP							
QoS Set	QoS Set						
		I 1	/LAN Enable				
VLAN ID Check Enable			VoIP/Other VL	AN differentiated	Undiffer	entiated 👻	
☑ DiffServ Enable			DiffServ Value		0x b8		
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802	2.1P Priority	0	(0 - 7)	
VoIP Data VLAN ID	256	(0 - 4095)	Other Data VL/	AN ID	254	(0 - 4095)	
APPLY							

Or

NETWORK

WAN LAN QOS SERVICE PORT DHCP SERVER NTP							
QoS Set	QoS Set						
	VLAN Enable						
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Undiffer	entiated 💌		
DiffServ Enable			DiffServ Value	0x b8			
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)		
VoIP Data VLAN ID	256	(0 - 4095)	Other Data VLAN ID	254	(0 - 4095)		
APPLY							

2. if "Data/Voice VLAN differentiated" is Tag differentiated but the DiffServ is disable. Device won't distinguish the voice, signaling and data stream. It will add the same data vlan id to them. As below:

NETWORK								
WAN LAN QOS SERVICE PORT DHCP SERVER NTP								
QoS Set	QoS Set							
VLAN Enable								
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Differen				
DiffServ Enable			DiffServ Value	Undiffere Different				
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)			
VoIP Data VLAN ID	256	(0 - 4095)	Other Data VLAN ID	254	(0 - 4095)			
APPLY								

Or



NETWORK						
WAN LAN QOS SERVICE PORT DHCP SERVER NTP						
QoS Set	QoS Set					
		V 1	/LAN Enable			
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Different	tiated 💌	
DiffServ Enable			DiffServ Value	0x b8		
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)	
VoIP Data VLAN ID 256 (0 - 4095) Other Data VLAN ID 254 (0 - 4095)					(0 - 4095)	
APPLY						

3. if "Data/Voice VLAN differentiated" is Tag differentiated and diffServ are both enable. Then device will distinguish the voice, signaling and data stream to VLAN ID setting. As below:

NETWORK						
WAN LAN QOS	SERVICE	PORT DHCP SI	ERVER NTP			
QoS Set						
VLAN Enable						
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Differen	tiated 💌	
DiffServ Enable			DiffServ Value	0x b8		
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)	
VoIP Data VLAN ID 256 (0 - 4095) Other Data VLAN ID 254 (0 - 4095)					(0 - 4095)	
APPLY						

Or

NETWORK									
WAN LAN QOS SERVICE PORT DHCP SERVER NTP									
QoS Set									
VLAN Enable									
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Differentiated 💌					
DiffServ Enable			DiffServ Value	0x b8					
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)				
VoIP Data VLAN ID	256	(0 - 4095)	Other Data VLAN ID	254	(0 - 4095)				
APPLY									

4. if "Data/Voice VLAN differentiated" is Date untaged and diffServ are both enable. Then device will undistinguish the date to VLAN ID setting. As below:



NETWORK									
WAN LAN QOS SERVICE PORT DHCP SERVER NTP									
QoS Set									
VLAN Enable									
VLAN ID Check Enable			VoIP/Other VLAN differentiated	Undifferentiated 🗸					
☑ DiffServ Enable			DiffServ Value	0x b8					
VoIP Data 802.1P Priority	0	(0 - 7)	Other Data 802.1P Priority	0	(0 - 7)				
VoIP Data VLAN ID	256	(0 - 4095)	Other Data VLAN ID	254	(0 - 4095)				
APPLY									

5. if VLAN is disable. Device won't add any vlan ID to the stream. In this case, if the Diffserv is enable, the DiffServ value response to the voice/signaling stream.

6. When VLAN function is enable. If "VLAN ID check" is enable, OT-ATA200SP+ will have strict requirement on the VLAN, it won't handle any packets with different VLAN ID. If "VLAN ID check" is disable, OT-ATA200SP+ will handle the packets even from different vlan ID. Please notice that VLAN ID check is enable in default.

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