



Isotropic™

**PROGRAMMING THE
GRANDSTREAM ATA**

PROGRAMMING THE CISCO SPA122

- 1 Connect power to the ATA. Connect an Ethernet cable from the Internet port to a network device (switch or router) behind the iDirect modem. The Internet light will turn green when the ATA has been connected properly.



- 2 Connect an Ethernet cable from the Ethernet port to your PC. Make sure that your PC is set to automatically receive an IP address.



- 3 Log in to the ATA by typing **192.168.15.1** into the address bar of your internet browser. Enter the default credentials (shown below) and click on **Log In**.

Username: admin

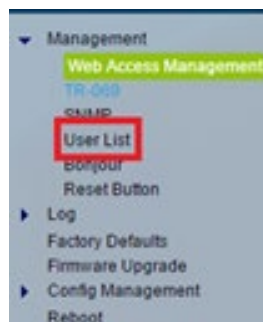
Password: admin



- 4 Click on the **Administration** tab.




- A Click on **User List**.



i Click on the **Pencil Icon** next to the username **admin**.

User List	
Username	Level
admin	Admin
cisco	User



ii Enter the following information:

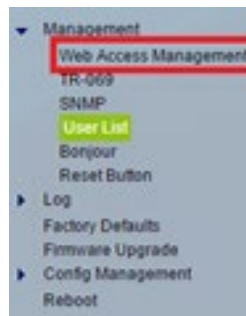
Old Password: admin

New Password: C0nn3cT1ng Th3 Pl8n3t

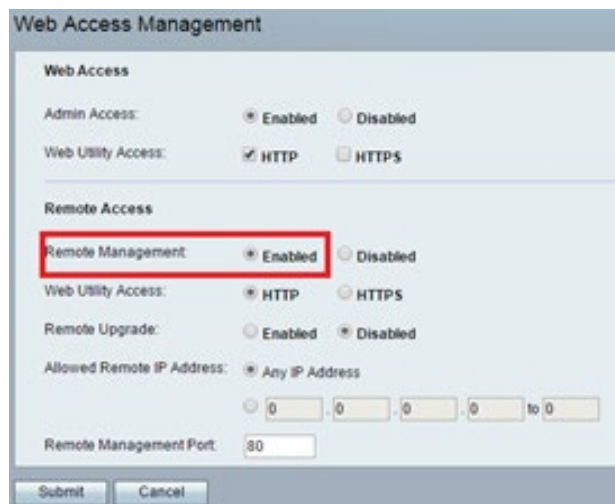
Confirm New Password: C0nn3cT1ng Th3 Pl8n3t



B Click on **Web Access Management**.



i Under **Remote Access**, change **Remote Management** to **Enabled** and then click **Submit**.



5 Click on the **Voice** tab



A Click on **SIP**



i Under **SIP Timer Values (sec)**

1. Change **SIP T1** to read **3**
2. Change **SIP T4** to read **8**
3. Change **Reg retry long interval** to **30**

SIP Timer Values (sec)	
SIP T1:	3
SIP T4:	8
SIP Timer F:	16
SIP Timer D:	32
INVITE Expires:	240
Reg Mn Expires:	1
Reg Retry Intvl:	30
Reg Retry Random Delay:	0
SIP T2:	4
SIP Timer B:	32
SIP Timer H:	32
SIP Timer J:	32
ReINVITE Expires:	30
Reg Max Expires:	7200
Reg Retry Long Intvl:	30
Reg Retry Long Random Delay:	0

ii Under **RTP Parameters**

Change the **RTP Packet Size** to read **.020**

RTP Parameters	
RTP Port Min:	16384
RTP Packet Size:	0.020
Max RTP ICMP Err:	0
No UDP Checksum:	no
RTP Port Max:	16482
RTP Tx Packet Size Follows Remote SDP:	yes
RTCP Tx Interval:	0
Stats In BYE:	yes

B Click on **Provisioning**



i Under **Configuration Profile**

1. Change the **Resync Error Retry Delay** to read **30**
2. Change the **Resync Periodic** to read **7200**
3. Change the **Forced Resync Delay** to read **5**

Configuration Profile

Provision Enable:	yes ▼
Resync Random Delay:	2
Resync At Random Delay:	600
Resync Error Retry Delay:	30

Resync On Reset:	yes ▼
Resync At (HHmm):	
Resync Periodic:	7200
Forced Resync Delay:	5

C Click on **Line 1**



i Under **Network Settings**

Change the **Network Jitter Level** to read **Very High**

Network Settings

SIP ToS/DiffServ Value:	0x68	SIP CoS Value:	3 [0-7]
RTP ToS/DiffServ Value:	0xb8	RTP CoS Value:	6 [0-7]
Network Jitter Level:	very high ▼	Jitter Buffer Adjustment:	yes ▼

ii Under **Proxy and Registration**

1. Enter the **Proxy** to read **162.255.244.66**
2. Change **Ans call without reg** to **Yes**
3. Change **Make call without reg** to **Yes**

Proxy and Registration

Proxy:	162.255.244.66
Outbound Proxy:	
Use Outbound Proxy:	no ▼
Register:	yes ▼
Register Expires:	3600
Use DNS SRV:	no ▼
Proxy Fallback Intvl:	3600
Mailbox Subscribe URL:	
Use OB Proxy In Dialog:	yes ▼
Make Call Without Reg:	yes ▼
Ans Call Without Reg:	yes ▼
DNS SRV Auto Prefix:	no ▼
Proxy Redundancy Method:	Normal ▼
Mailbox Subscribe Expires:	2147483647

iii Under **Subscriber Information**

1. For **Display Name**, enter the extension number (**see next page**)
2. For **User ID**, enter the extension number (**see next page**)
3. For **Password**, copy the SIP password (**see next page**)

Subscriber Information	
Display Name:	120
Password:	34io57yhwhFh
Auth ID:	
SIP URI:	

User ID:	120
Use Auth ID:	no
Resident Online Number:	

iv Under **Supplementary Service Subscription**

1. Change all **Cfwd Services** to **No**
2. Change the **Call Back Service** to **No**

Supplementary Service Subscription	
Call Waiting Serv:	yes
Block ANC Serv:	yes
Cfwd All Serv:	no
Cfwd No Ans Serv:	no
Cfwd Last Serv:	no
Accept Last Serv:	yes
CID Serv:	yes
Call Return Serv:	yes
Call Back Serv:	no
Three Way Conf Serv:	yes
Unattn Transfer Serv:	yes
VMWI Serv:	yes
Secure Call Serv:	yes
Feature Dial Serv:	yes
Reuse CID Number As Name:	yes
Block CID Serv:	yes
Dist Ring Serv:	yes
Cfwd Busy Serv:	no
Cfwd Sel Serv:	no
Block Last Serv:	yes
DND Serv:	yes
CWCID Serv:	yes
Call Redial Serv:	yes
Three Way Call Serv:	yes
Attn Transfer Serv:	yes
MWI Serv:	yes
Speed Dial Serv:	yes
Referral Serv:	yes
Service Announcement Serv:	no
CONFCID Serv:	yes

v Under **Audio Configuration**

Change the **Preferred Codec** to read **G729a**

Audio Configuration	
Preferred Codec:	G729a
Third Preferred Codec:	G729a
Use Remote Pref Codec:	no
G729a Enable:	yes
G726-32 Enable:	no
Second Preferred Codec:	G729a
Use Pref Codec Only:	no
Codec Negotiation:	Default
Silence Supp Enable:	no
Silence Threshold:	medium

D If configuring a second Line, click on the **Line 2** tab and repeat steps under 5c.

E Click **Submit** when all steps have been completed.

	Extension	Password	Phone Number
Line 1			
Line 2			

- To check a line's voicemail dial *97 from that line and enter the password: 1234
- Using the IVR for Administration:
 1. Connect an analog phone to the Phone port of the ATA.
 2. Press the star key four times: ****
 3. After the greeting plays, press the keys on the phone keypad to select your options.
 4. Enter the code for the desired action. See the IVR Actions list below for commands:
 - Check Internet Connection: 100
 - Set Internet Connection Type: 101
 - DHCP: 0
 - Static IP: 1
 - PPPoE: Press 2
 - PPPoE, DHCP: Press 3
 - DHCP, PPPoE: Press 4
 - Check Internet IP Address (WAN port): 110
 - Set Static IP Address (WAN): 111
 - Enter the IP address by using numbers on the telephone keypad.
 - Use the * (star) key when entering a decimal point.

Note: This option is available only after you choose Static IP as the Internet Connection Type, through option 101

- Check Network Mask: 120
- Set Network Mask: 121
 - To enter the value, press numbers on the telephone keypad. Press the *(star) key to enter a decimal point. Note: This option is available only after you choose Static IP as the Internet Connection Type, through option 101.
- Check Gateway IP Address: 130
- Set Gateway IP Address: 131
 - To enter the value, press numbers on the telephone keypad. Press the *(star) key to enter a decimal point. Note: This option is available only after you choose Static IP as the Internet Connection Type, through option 101.
- Check MAC Address: 140
- Check Firmware Version: 150
- Check Primary DNS Server Setting: 160
- Set Primary DNS Server: 161
 - To enter the value, press numbers on the telephone keypad. Press the *(star) key to enter a decimal point. Note: This option is available only after you choose Static IP as the Internet Connection Type, through option 101.
- Check Internet web server port: 170
- SPA122 only: Check LAN IP address (Ethernet port): 210
- Announce Line 1 SIP Transport: 1910
- Set Line 1 SIP Transport: 1911
 - 0: UDP
 - 1: TCP
 - 2: TLS

- Check Line 2 SIP Transport 1920
 - Set Line 2 SIP Transport1921
 - 0: UDP
 - 1: TCP
 - 2: TLS
 - Exit IVR3948
 - Allow or prevent WAN access to the administration web server7932
 - 1: Enable
 - 0: Disable
 - Factory Reset of Unit. WARNING: All non-default settings will be lost. This includes network and service provider data: 73738 RESET
 - When prompted, press 1 to confirm, or press * (star) to cancel. After you hear "Option successful," hang up the phone. The ATA reboots.
 - Reboot of Voice System: 732668 REBOOT
 - After you hear "Option successful," hang up the phone. The ATA reboots.
 - User Factory Reset of Unit. WARNING: All user-changeable non-default settings will be lost. This may include network and service provider data: 877778
 - When prompted, press 1 to confirm, or press * (star) to cancel. After you hear "Option successful," hang up the phone. The ATA reboots.
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