WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP

Configuration and Operation Manual

v2.0.0

Contents

Acronyms and Abbreviations

The following acronyms and abbreviations are commonly used throughout the document:

Acronyms	Definitions
ADA	Americans with Disabilities Act
ANSI	The American National Standards Institute a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.
AUX	Auxiliary Input/Output. An Auxiliary Input accepts a contact closure from an external device, such as a Vehicle Detector, Door Switch, Scream Alert™, and card swipe. An auxiliary output produces a contact closure to an external device, such as a strobe light and motorized garage gate.
BABT	British Approvals Board of Telecommunications
CSA	Canadian Standards Association
CE	The CE marking certifies that a product has met EU consumer safety, health or environmental requirements.
DHCP	Dynamic Host Configuration Protocol — protocol for assigning dynamic IP addresses to devices on a network.
DNS	Domain Name Server
FCC	Federal Communications Commission
FTP	File Transfer Protocol
GUI	Graphical User Interface
IE	Internet Explorer
IETF	The Internet Engineering Task Force (IETF) develops and promotes Internet standards.
PCBA	Printed Circuit Board Assembly
PoE	Power over Ethernet, IEEE 802.3af standard.
QoS	Quality of Service is of particular concern for the continuous transmission of high-bandwidth video and multimedia information.
TIA	Telecommunications Industry Association
UL	Underwriters Laboratories

1. Introduction

1.1. Overview of the Manual

This manual provides detailed instructions for the configuration and operation WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP Communication Modules. It is recommended to read this instructional manual completely before performing any configuration.

1.2. Intended Audience

This manual is targeted towards systems administrators, or any person who would configure and maintain WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP Communication Modules. Fundamental knowledge in computer technologies is recommended for understanding this manual.

1.3. Objective

This manual provides a detailed examination of the features included in WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP Communication Modules. It guides an administrator through the configuration and optimization of paging features. While configuration of WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP Communication Modules is covered in detail, configuration of other peripheral VoIP network elements is beyond the scope of this document.

1.4. Typographic Conventions

The following guidelines are used as typographic conventions in this user manual:

Item	Convention	Sample
Acronyms	All uppercase	SIP
Chapter titles	Title caps	See Chapter 3 Getting Started
Command-line commands and options (switches)	All lowercase, bold	**ifconfig** command **/a** option
Device names	All uppercase	WEBS-CM-2
Directories	All lowercase	/flash
Error message names	Initial caps	Update failed
File names	Title caps (internal caps in short file names are acceptable for readability)	MainLogFile.txt BackupLogFile.txt
Menu names	Bold; title caps	**Insert** menu
Programs and applications	Usually title caps	**HyperTerminal**
Toolbar button names	Usually title caps (follow the interface); bold	**Apply** **Reset**
URLs	All lowercase; break long URLs before a forward slash, if necessary to break; do not hyphenate.	http://www.talkaphone.com/

Item	Convention	Sample
User input	Usually title caps; bold	**Enter Password**

1.5. Related Documents

WEBS-CM2 Quick Installation Guide, v1.4

WEBS-Contact Configuration and Operation Manual, v1.4

1.6. Technical Support / Help Desk

For technical assistance beyond the scope of this document, contact your distributor or Talk-A-Phone Technical Support for further information.

Talk-A-Phone Co.

7530 North Natchez Avenue

Niles, Illinois 60714

Phone: 773.539.1100

Fax: 773.539.1241

E-mail: support@talkaphone.com

Web: www.talkaphone.com

2. Overview

2.1. WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP

The WEBS-CM2 is an outdoor-rated WEBS® Communication Module that can be used for a wide variety of applications to provide line level audio output.

The WEBS-PA-2-IP is an outdoor-rated WEBS® Paging Unit is an outdoor-rated broadcast device that can provide audio coverage to a wide area.

The WEBS-PA-1 is an indoor-rated WEBS® Paging Unit that can be used audio coverage of indoor spaces.

Some of the functionality described below may not be available depending on the device. The rest of the document may use the term "Communications Module" to refer to the "WEBS-CM-2, WEBS-PA-1, or WEBS-PA-2-IP".

3. Getting Started

3.1. Pre-requisites

Prior to configuring a communications module, ensure the unit is powered on and connected to the network.

The Communications Module can be configured from a computer with either a TCP/IP network connection or a DB-9 Serial port. The communications module supports straight-through serial connections for basic programming. For access to the full configurable feature set, a modern web browser will be required.

The communications module currently supports access from:

- Internet Explorer 8 or greater
- Firefox 3.5 or greater

3.2. Configuration Using the Web GUI

1. Ensure both the communications module and your PC are connected to the Local Area Network. A direct connection to the communications module will require the use of a crossover network cable.

    WEBS-CM-2, WEBS-PA-1 and WEBS-PA-2-IP are pre-configured with the following default settings:

IP Address:	192.168.1.10
Username:	admin
Password:	admin@123

2. Configure the IP address of your PC to be on the same subnet as the communications module. For example, 192.168.1.3

3. Open a supported web browser and direct it to the IP address of the communications module. For example, enter the following URL: http://192.168.1.10.

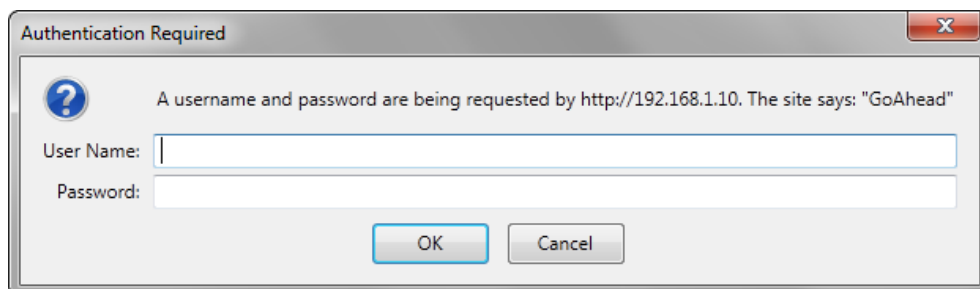   The browser prompts for authentication:

Figure 1 Authentication Required

4. Enter the default Username and Password. After authentication is successful, you are redirected to the Home page.

5. Further configuration of the communications module settings are examined in Section 4: Using the Web GUI.

3.3. Configuration Using the Serial Console

Basic settings can be configured on the communications module through a serial console connection. Knowledge of Linux shell commands is recommended for serial console configuration.

Most commonly, the serial console connection can be used to set the IP address, as described below.

1. Connect a straight-through serial cable (DB9 Male to DB9 Female) from the serial port on the communications module to an available COM port on the PC, noting which port was utilized.

2. Open your preferred serial console application (e.g., HyperTerminal or TeraTerm) on the PC and specify the following settings:

Communications Port:	<Determined in Step 1>
Baud rate (bits per second):	115200
Data bits:	8
Parity:	None
Stop bits:	1
Flow control:	None

3. Once connected, you will be presented with the following prompt:

   root:/>

4. The /flash directory contains persistent files. It is highly recommended to switch to the /flash directory by entering the following command, and pressing **Enter**.

   Note the space between 'cd' and '/flash':

   root:/> cd /flash

5. Create a file where configuration parameters can be entered. For example, we create the config.txt file by entering the following command, and pressing **Enter**.

   Note the space between 'vi' and 'config.txt':

   root:flash/> vi config.txt

6. While in the vi application, press **i** to force vi into "Insert Mode."

7. The body of the config.txt file can now be created.

   To set a new static IP address enter the following data:

   NetworkMode = 3

   IPAddress = <IP address, e.g. 192.168.1.10>

   Netmask = <netmask, e.g. 255.255.255.0>

   Gateway = <default gateway, e.g. 192.168.1.1>

8. Once the configuration options are entered, save the changes and exit vi by pressing **Escape**, then entering **:wq**

   To exit without saving changes press **Escape**, then enter **:q!**

9. With the configuration file created, the final step is to apply these settings to the communications module. Enter the following command, and press **Enter**.

   root:flash/> configApp admin admin@123 config.txt

10. A reboot is required after serial console configuration. Enter the following command, and press **Enter**.

    root:flash/> reboot

11. All configurable options are available in Appendix C: Sample Serial Configuration File.

4. Using the Web GUI

This section describes various configurable options available from the Web Interface of the communications module. It is the primary interface for configuring and monitoring the communications module. You must assign an IP address (Refer to 4.4.1 IP Settings) before configuring the features of the communications module.

4.1. Web GUI Layout

This section describes the layout of the Web GUI.
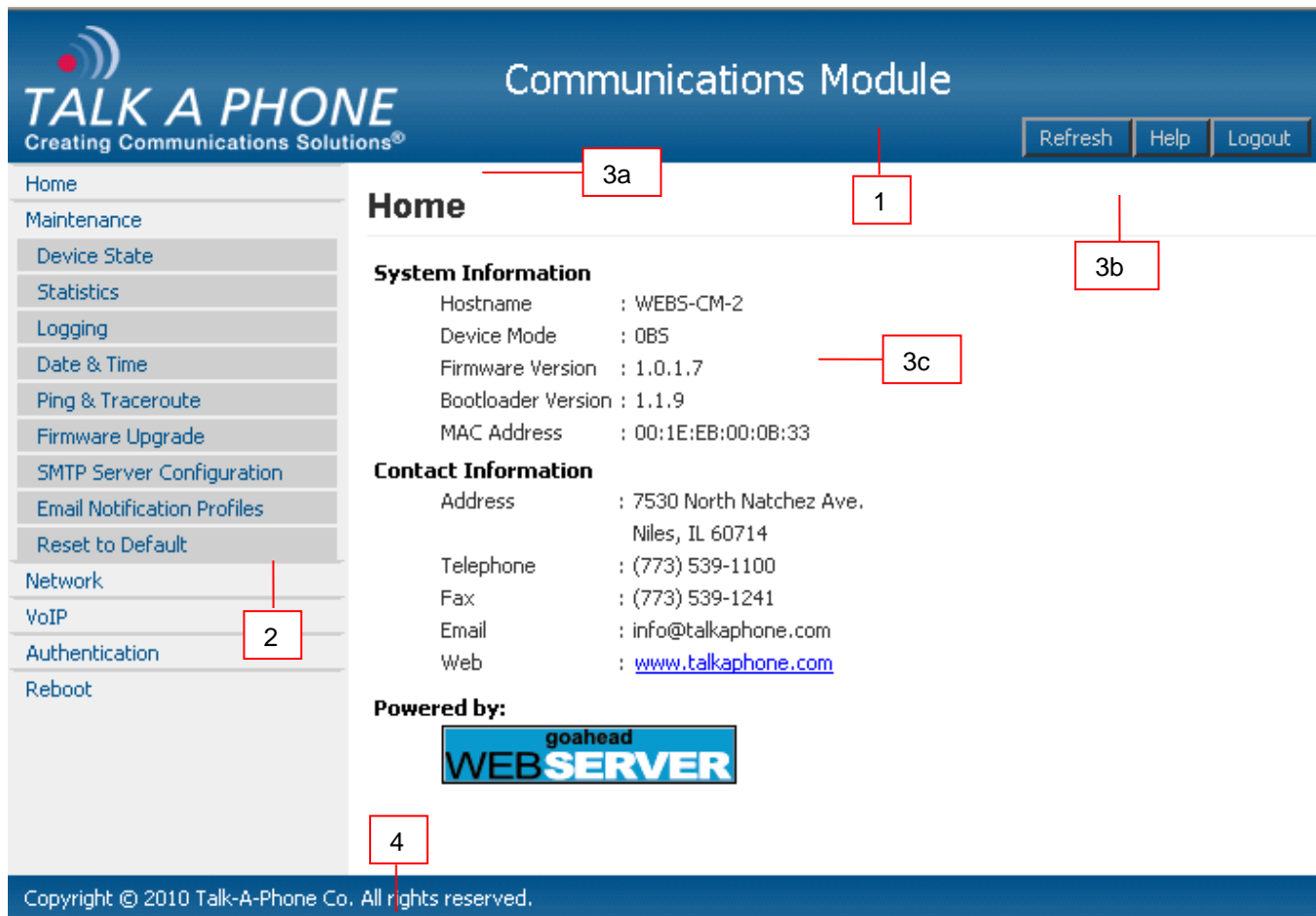
Figure 2 Using Web GUI

The Web GUI layout is divided into four sections:

1. **Header:** The Header section displays Talk-A-Phone Logo and product title "Communications Module". The right side of the header has the Refresh, Help, and Logout buttons. The Refresh button is used to reload the content section. The Help button provides help content from the Talk-A-Phone website. The Logout button logs out the user. The Apply button will not be grayed out if the content pane (3) contains configurable parameters. The Apply button is used to save configuration changes to communications module.

2. **Menu:** The menu page provides links to different menus and submenus available on the communications module.

3. **Content:** The top part of the content section is used for Page Title (3a) and Status (3b) for any operation. Bottom part of content pane (3c) is used for displaying configurable fields when a menu or a submenu is selected. All the fields (text boxes/dropdown) display allowed field ranges.

4. **Footer:** The Footer section displays the Talk-A-Phone copyright statement.

To update the communications module configuration, the user must press the **Apply** button. After clicking **Apply** the status will be displayed in the "Status" section of the Content section (3b).

Note: When a configuration change is in the process of being applied, an ⁂ **Updating...** message appears.

An ✓ **Updated.** message appears for the successful update.

An ✗ **Update failed.** message appears if the input is incorrect. Incorrect inputs are marked with red.

4.2. Web Application Menu

This section provides a preview of the communications module's Web Menu hierarchy/organization.

Figure 3 Application Menu

4.3. Home

The Home page displays communications module information and contact information for Talk-A-Phone.

Login → Home
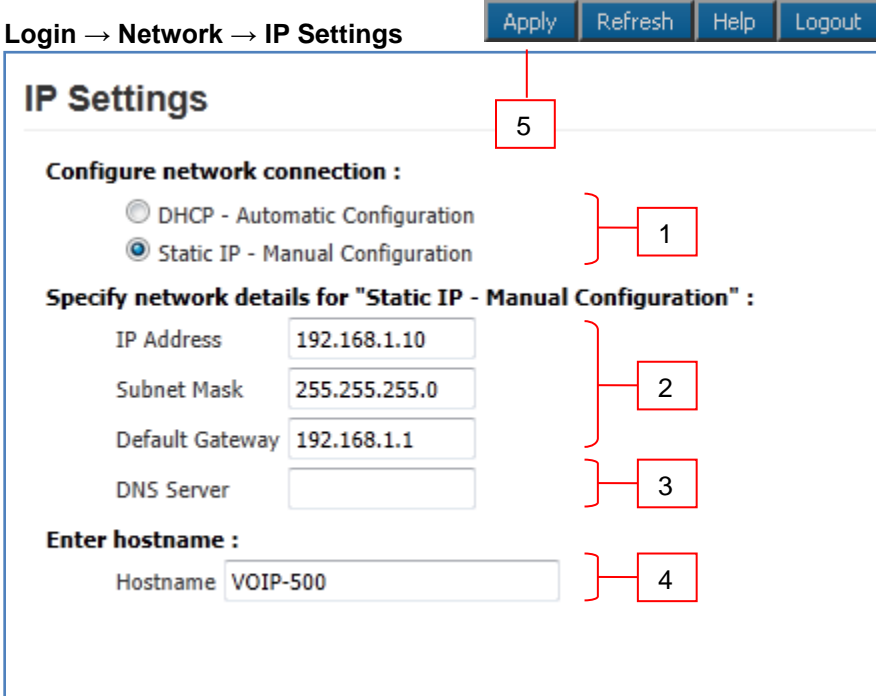
Figure 4 Home

Field Name	Description
Device Mode	This indicates WEBS-CM-2 for all three variations, WEBS-CM-2, WEBS-PA-1, and WEBS-PA-2-IP.
Firmware Version	Indicates the version of the communications module's firmware
Bootloader version	Indicates the version of the bootloader that is used during startup (booting) of the communications module. The bootloader version is independent of the firmware version.
MAC Address	Indicates the number assigned as the communications module's unique MAC address.

4.4. Network

4.4.1. IP Settings

The IP Settings page allows you to configure the IP settings and the hostname of the communications module.

Login → Network → IP Settings

Figure 5 IP Settings

To set IP settings:

1. Select DHCP – **Automatic Configuration** OR **Static IP - Manual Configuration**.

2. Enter network details **IP Address**, **Subnet Mask**, **Default Gateway** of your network for **Static IP - Manual Configuration**.

3. Enter **DNS Server** to resolve domain names.

4. Enter **Hostname**. Use unique identifier for each device on the network.

5. Click **Apply** to save settings.

4.5. VoIP

4.5.1. Paging Settings

The communications module can be used as a paging device by a WEBS Contact® Server. The page can be output through either the built-in hands-free speaker or the line level output, depending on the specific device.
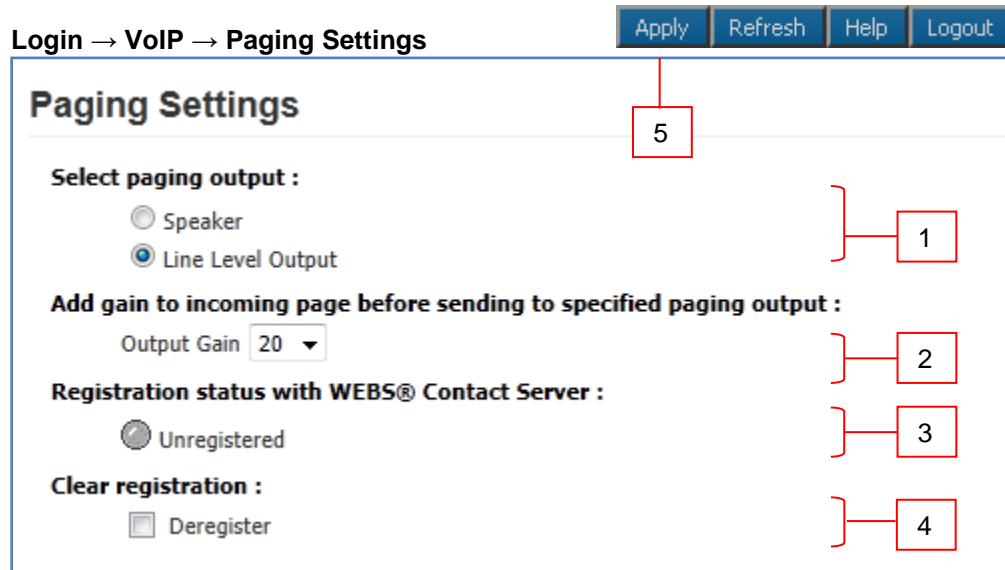
Figure 11 Paging Settings

To configure paging settings:

1. Select **Speaker** or **Line Level Output** to send the incoming audio page to the built-in hands-free speaker or the line level output. The speaker option is only available for the WEBS-PA-1.

2. Click the drop-down menu to adjust the **Output Gain** for all incoming pages before sending to the selected audio paging output. Each level adjustment corresponds to approximately 3dB.

3. The communications module displays Unregistered or Registered @ <WEBS_Contact_Server_IP_Address> for Registration Status on the WEBS Contact® Server.

4. If it deregistration is required from the WEBS Contact® Server in error situations where the WEBS Contact® Server is unable to deregister the device, select **Deregister** check box to clear the registration status.

5. Click **Apply** to save settings.

4.6. Authentication

The Authentication page allows the administrator to change the user credentials used to access the communications module through the Web interface or SSH.
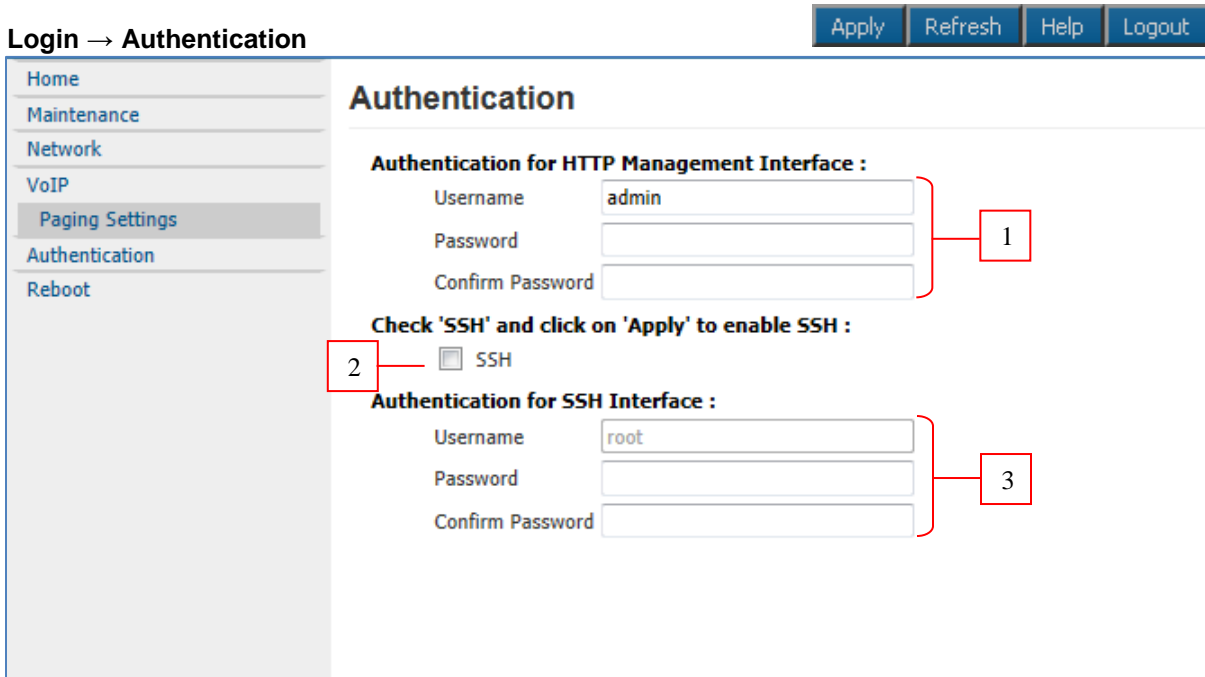
Figure 22 Authentication

To configure the authentication details:

1. Enter the user credentials to access the Web interface:

   - **Username**[1] accepts alphanumeric and special characters (e.g., underscore "_" and period ".").

   - **Password**[2] accepts alphanumeric values and special characters (except "&").Configure the Key Code sequence to be used by the Local User for deactivation of the corresponding Auxiliary Output.

   - **Confirm password** requires you to type the password again for reconfirmation.

2. Check/uncheck the check box to Enable **SSH** access to the communications module.

3. Enter **Username** and **Password** to configure/modify Authentication for SSH user.

4. Click **Apply** to save settings.

---

[1] The maximum number of characters in username is 30.
[2] The maximum number of characters in password is 30.

4.7. Maintaining the Communications Module

4.7.1. Device State

The Device State page displays the current state of the devices that are attached to the communications module. If the status indicator is green the device is active, otherwise grey indicates that the device is inactive.

Login → Maintenance → Device State
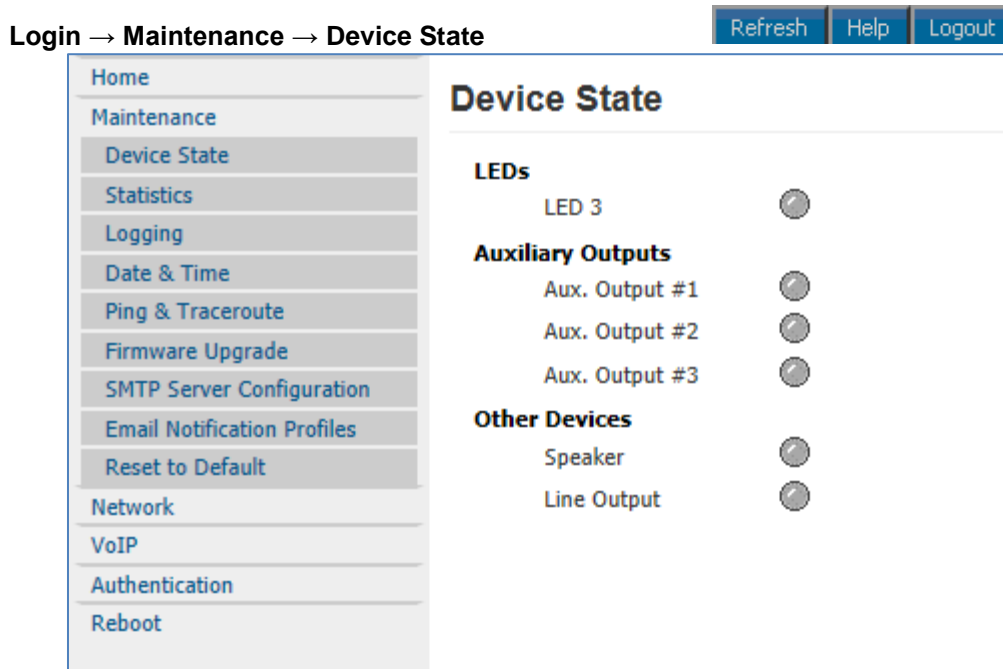
Figure 23 Device state

Note The contents of this page will vary depending on the device mode.

4.7.2. Statistics

The Statistics page allows you to manage and maintain the details of the current state of the communications module, call statistics, call details, and auxiliary details. It also allows you to clear the statistics and provides a link to download the statistics to a text file.

Login → Maintenance → Statistics
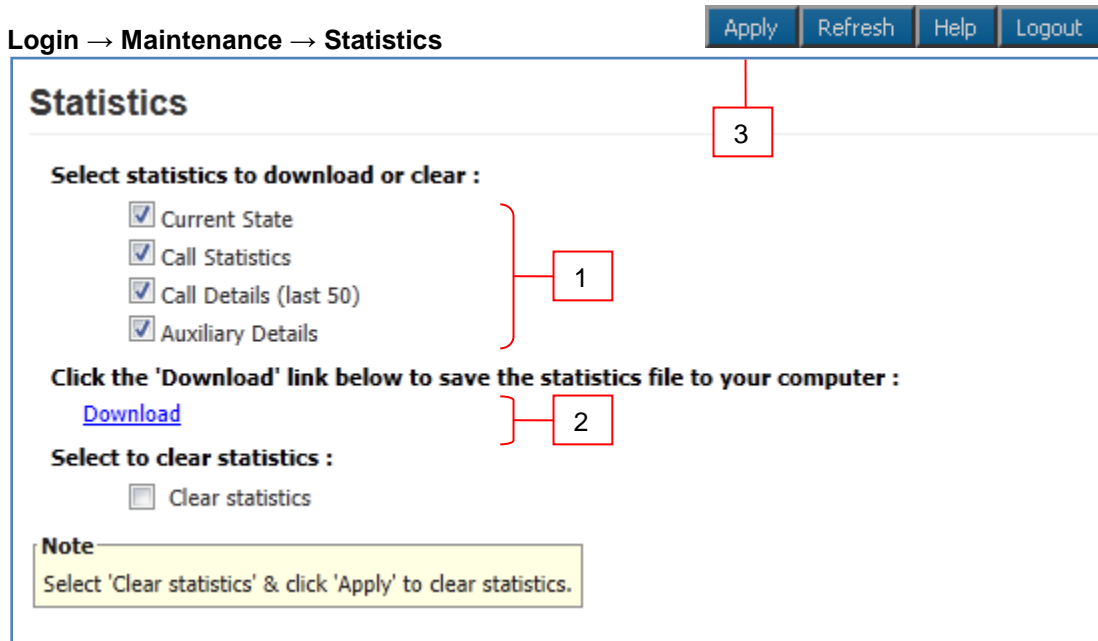
Figure 24 Statistics

To download the statistics file:

1. Select or unselect a specific category of statistics. By default, all options are selected.

2. Click the Download link to download the statistics file to the local computer. A prompt should appear requesting to "save or open" the Statistics File. Click the **Save** option to save the file on the local PC.

3. Click **Apply** to save settings.

Note To clear statistics, check the checkbox next to "Clear statistics" and click **Apply**. Executing the "Clear statistics" option will erase all of the selected statistics from the communications module.

Description of Fields in the Statistics File:

Call Statistic Fields:

Field	Description
Outgoing Calls	
Total outgoing call attempts	Count of outgoing call attempts made from Buttons, Keypad, and Auxiliary Input activations.
Total unanswered outgoing calls	Count of unsuccessful calls unanswered by the remote side.
Total failed outgoing calls	Count of failed calls due to events such as remote side is busy, network issues, or unreachable destination.

Field	Description
Total outgoing call duration	Total duration of the successful outgoing calls (hh:mm:ss) between call answer and call termination events.
Incoming Calls	
Total incoming call requests	Total number of incoming call request from the remote side.
Total missed calls	Counts the missed calls (calls that are not answered).
Total failed calls	Counts the total number of failed calls (e.g., rejecting an incoming call when an Emergency Call is in progress).
Total incoming call duration	Total duration (hh:mm:ss) of successful incoming calls between call answer and call termination events.
Incoming Pages	
Total incoming page requests	Count of total number of incoming page requests from a WEBS Contact® Server.
Total unsuccessful pages	Count of unsuccessful page requests to the communications module (e.g., rejecting a page request when an Emergency Call is in progress and has a higher operation mode priority over paging).
Total voice page time	Total duration (hh:mm:ss) of successful pages.

Call Logs Fields:

Field	Description
Date	mm:dd:yyyy hh:mm:ss The starting time of a call event or a page event.
Type	Indicates whether the event was an incoming call, outgoing call, or a page.
Status	Displays the status of the call/page (i.e. whether the call/page was completed successfully or not).
Originator	The interface on the communications module which initiated the call. The valid entries are: Button #1/Button #2/Button #3/Button #4 AuxIn #1/AuxIn #2/AuxIn #3 Keypad Remote For paging, the Originator is always Remote.
Source URL	URL of the source of the call (maximum of 30 characters).
Destination URL	URL of the destination of the call (maximum of 30 characters).
Duration	hh:mm:ss This indicates how long (in seconds) the call event or page event lasted. This field is only valid for successful calls/pages.
Voice Codec Used	The voice codec being used for a given call. The valid entries are:

Field	Description
	G.723, G.729, G.711 A law, and G.711 U law
	This field is only valid for successful calls/pages.
Mode	The VoIP protocol used for a particular call (SIP).
Fail Code	The reason code for the failure of a particular call/page.
	This field is only valid for unsuccessful calls.

Aux Logs Fields:

Field	Description
Date	mm:dd:yyyy hh:mm:ss
	The date and time for an Auxiliary activation/deactivation.
Aux Type	Aux Input 1/2/3 or Aux Output 1/2/3
Aux State	Displays the status of an Aux Input or Aux Output (Activated/Deactivated).

4.7.3. Logging

Log messages generated by the communications module can be captured for review. Enabling the "DEBUG" option may degrade the communications module's performance. It is recommended to not use this option unless required.

Login → Maintenance → Logging
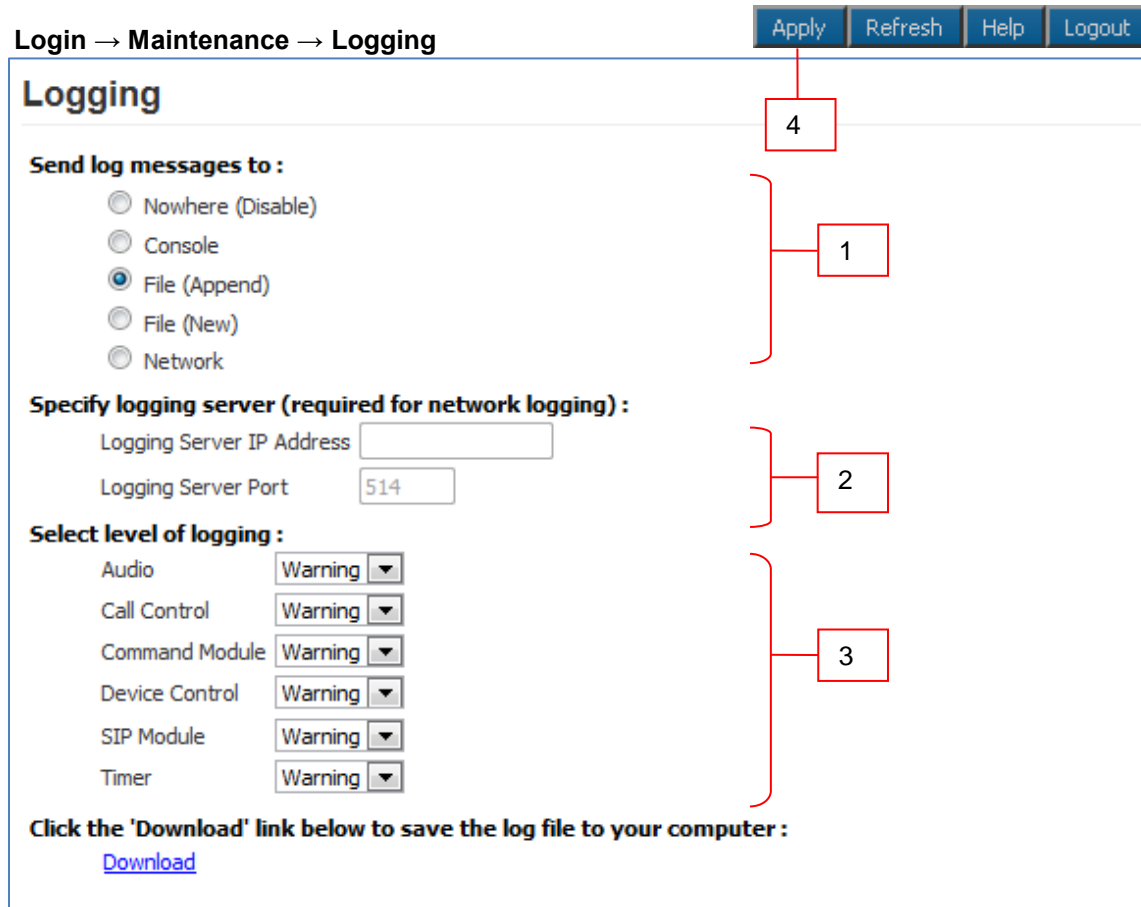
Figure 25 Logging

To configure logging over the network:

1. Select the **Network** option. This option enables **Logging Server** fields.

2. Enter the **Logging Server IP Address** and the **Logging Server Port**.

3. Select the log levels for different modules from the drop-down menu.

4. Click **Apply** to save the settings.

Note To disable logging, select **Nowhere (Disable)**

Note To download and save the log file on the computer, click the Download link.

Note A maximum of 500 KB of logging data can be collected. On exceeding this limit, the older 250 KB of logging data are purged from the log file.

4.7.4. Date and Time

The Date and Time page allows you to set the date and time of the communications module.
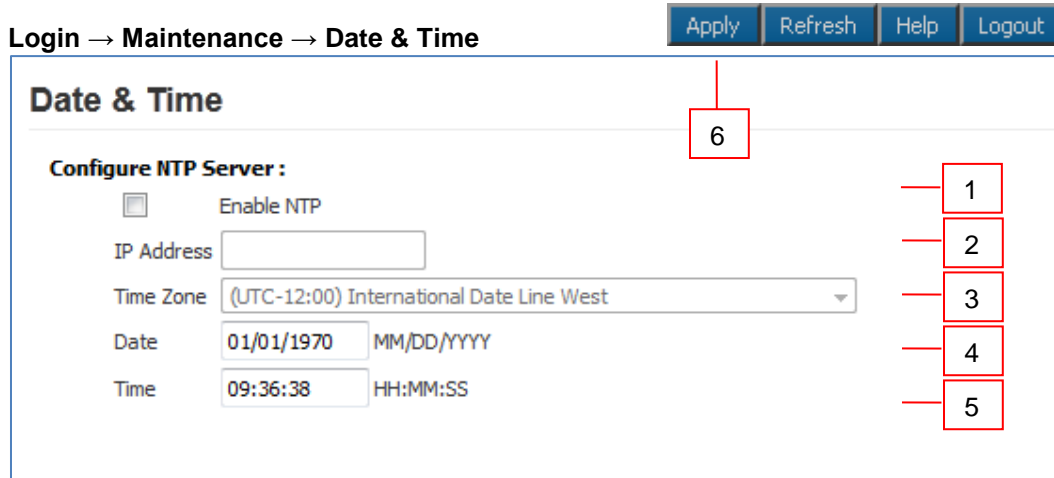
Figure 26 Date and Time Setting

To set the date and time:

1. Select **Enable NTP** to set the communications module to use Network Time Protocol.

2. If using NTP, enter the **IP Address** of the NTP Server.

3. If using NTP, select the **Time Zone** from the drop-down menu.

4. If manually entering the date and time, enter the **Date** in MM/DD/YYYY format.

5. If manually entering the date and time, enter the **Time** in HH:MM:SS 24-hour format.

6. Click **Apply** to save settings. NTP settings will automatically update the date / time.

4.7.5. Ping and Traceroute

The Ping and Traceroute page is used to perform connectivity tests. The Ping command can be used to determine whether a destination is reachable from the communications module or not. Traceroute helps in determining intermediate hops to the destination IP address.

Login → Maintenance → Ping and Traceroute
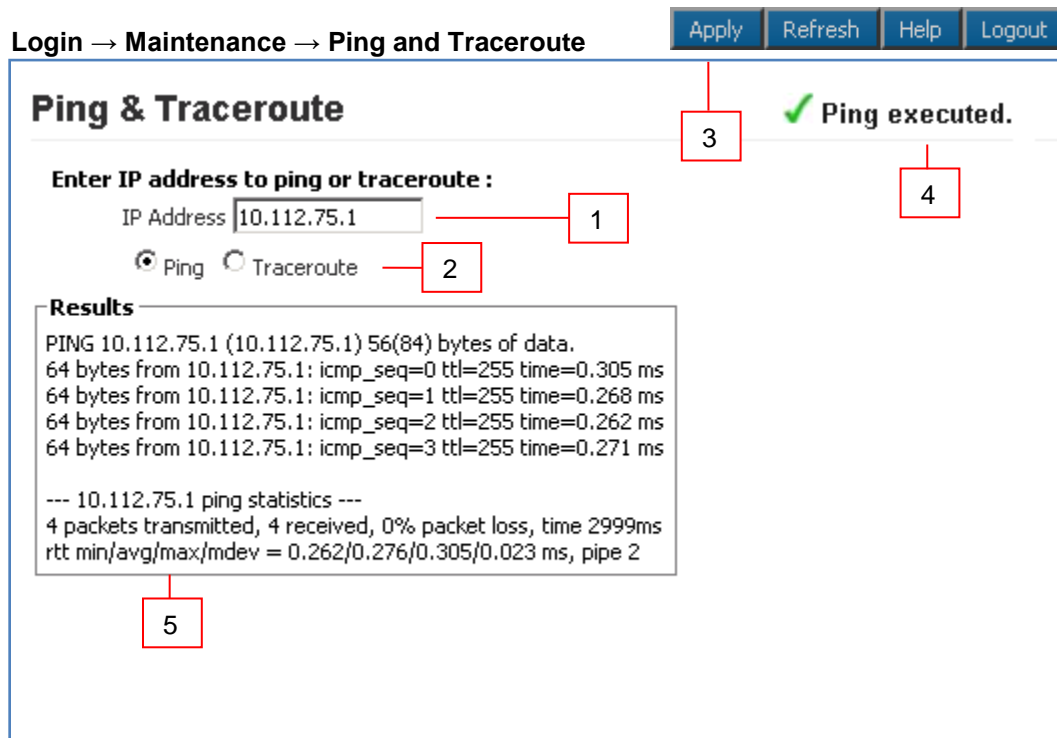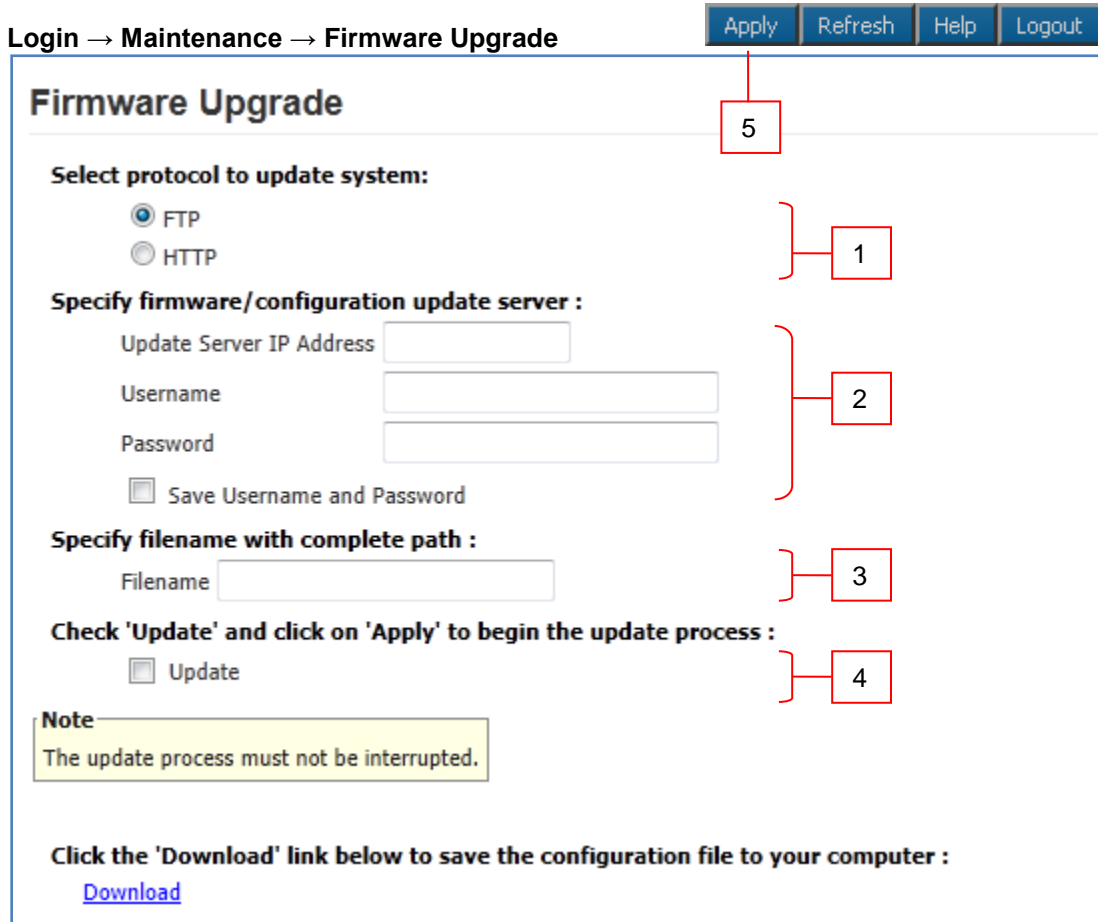
Figure 27 Ping and Traceroute

To ping or traceroute:

1. Enter an **IP Address**.

2. Select **Ping** or **Traceroute**.

3. Click **Apply**.

4. The status bar indicates the command executed.

5. The **Results** section displays the results of the executed command.

4.7.6. Firmware Upgrade

The Firmware Upgrade page is used to update communications module to new firmware releases.

Login → Maintenance → Firmware Upgrade

Figure 28 Firmware Upgrade

To upgrade the firmware:

1. Select either the **FTP** or **HTTP** protocol to download the firmware image.

2. Enter the **Server IP Address**, **Username**[3], and **Password**[4] for authentication. If the username and password is preferred to be retained for a future upgrade, select the **Save Username and Password** check box.

3. In the **Filename** box, enter the filename with its complete path. The filename is generally in the format of (EVP_A_B_C_D). This filename needs to be prefixed with directory relative to the HTTP or FTP root directory. For example, /tftpboot/EVP_images/EVP_1_0_0_0). Consult the Administrator for FTP/HTTP settings.

4. Select the **Upgrade** check box.

5. Click **Apply**. One of the following progress messages is displayed:

---

[3] The maximum number of characters in username is 30.
[4] The maximum number of characters in password is 30.

Page **24** of **53**

- **Firmware upgrade initiated. Do not reboot...**: The firmware upgrade has been initiated; the firmware upgrade request is processed only when communications module is in an idle state. For example, a call is in progress and administrator requests for a firmware upgrade through the Web GUI. The communications module checks for an active call every five seconds and starts the process once the active call is terminated.

  The following are considered to be idle communications module states: no active call, no dialing, no voice message is being played, and the Auxiliary Output is deactivated.

- **Firmware upgrade in progress. Do not reboot...**: The firmware upgrade is in progress. The process generally takes around 1-2 min to complete.

- **Firmware upgrade done. Going to reboot...**: The firmware upgrade is complete and a reboot has been initiated. After approximately one minute, the communications module will be accessible once again.

4.7.7. SMTP Server Configuration

The SMTP Server Configuration page is used to configure the mail settings for email notifications.
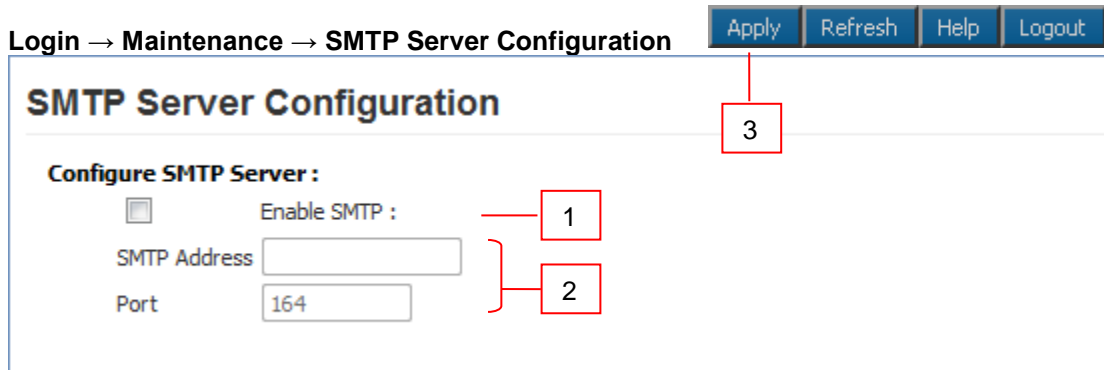
Figure 29 SMTP Server Configuration

To setup SMTP:

1. Check the **Enable SMTP** check box.

2. Enter the **SMTP Address** and **Port** where emails should be sent.

3. Click **Apply** to save settings.

4.7.8. Email Notification Profiles

The Email Notification Profiles page is used to create email notification profiles and select the events that will trigger an email message being sent.
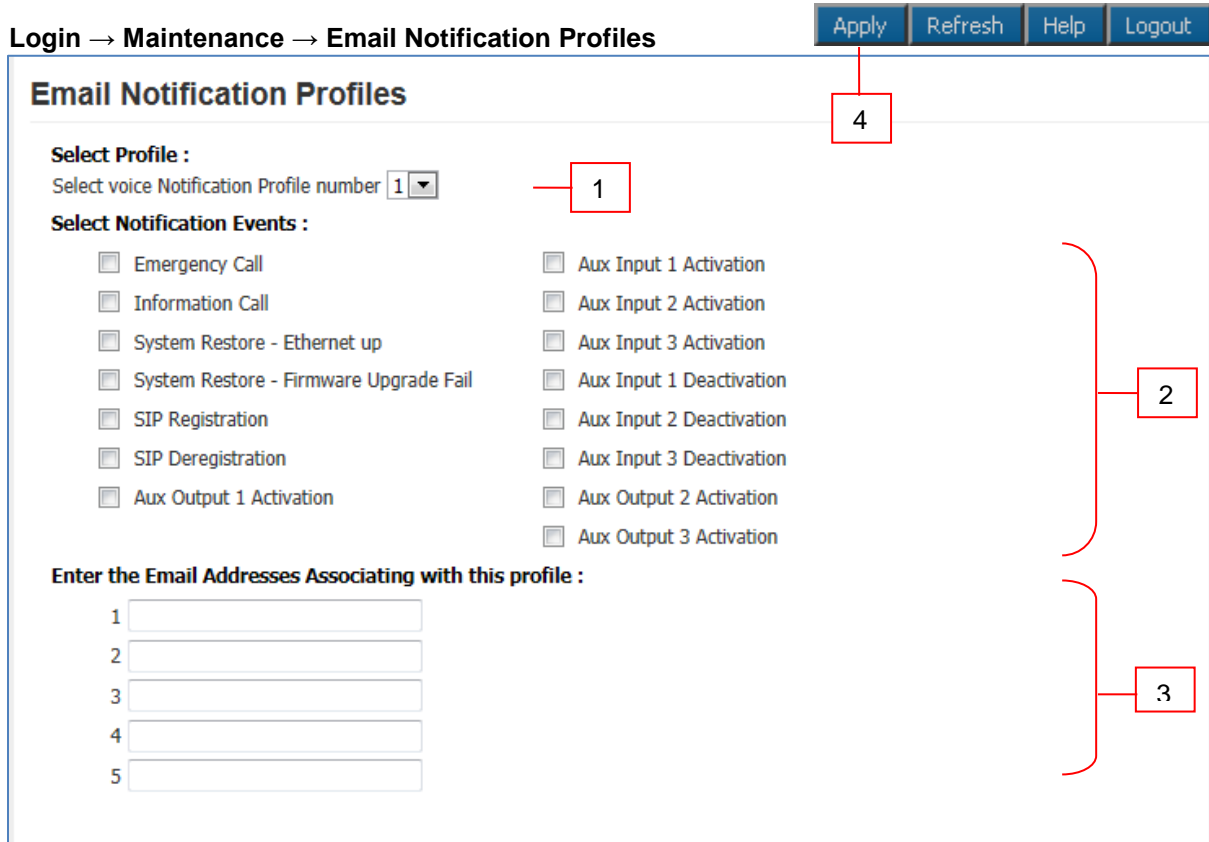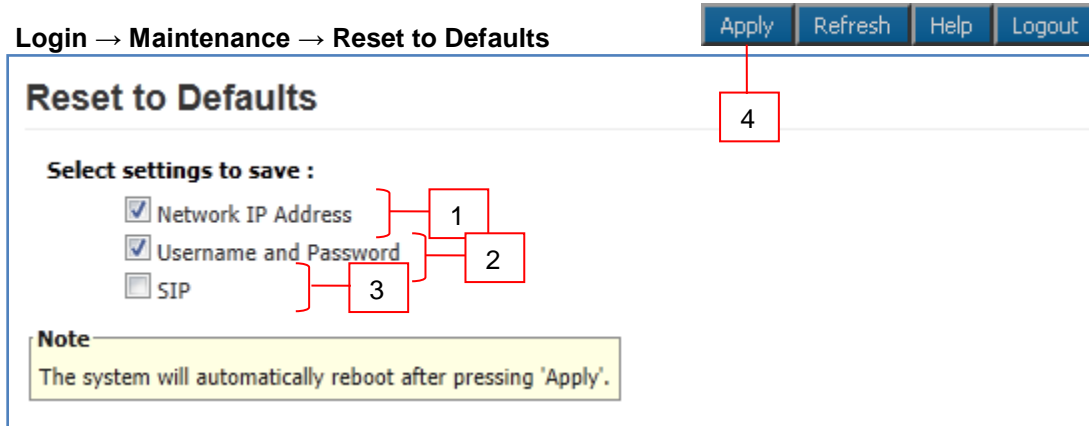
Figure 30 Email Notification Profiles

To setup an Email Notification Profile:

1. Check the **Notification Profile Number** you wish to modify. A total of 3 profiles are available.

2. Check the box for each **Notification Event** that should trigger an email notification being sent.

3. Enter the **Email Addresses** that the email notification should be sent to.

4. Click **Apply** to save settings.

4.7.9. Reset to Defaults

The Reset to Defaults page allows the communications module configuration parameters to be set to their default values. It also provides an option to retain the IP address and/or the username and password.

Login → Maintenance → **Reset to Defaults**

Figure 31 Reset to Defaults

To reset to defaults:

1. Select **Network IP Address**, if the IP address of the communications module needs to be retained. If this option is not selected the IP address of the communications module will default to 192.168.1.10.

2. Select **Username and Password** if the Web Interface credentials need to be retained. If the option is not selected the username will default to admin and the password will default to admin@123.

3. Select **SIP** if the SIP settings need to be retained. If this option is not selected the SIP Settings will be deleted.

4. Click **Apply**. The communications module automatically reboots with the default settings.

4.8. Reboot

The reboot page allows the device to be rebooted via the GUI.
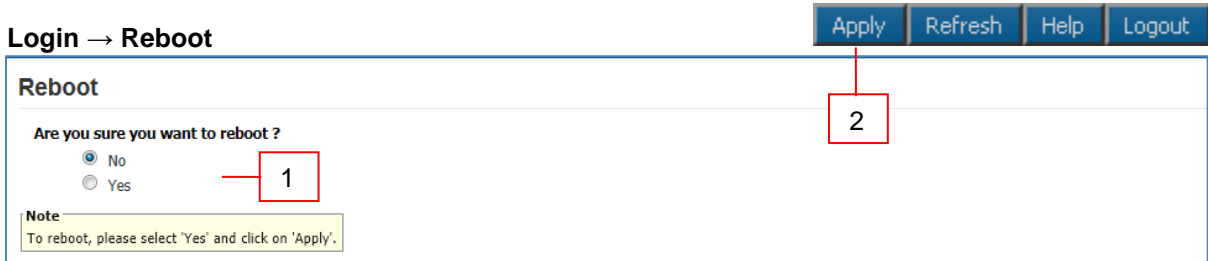
Figure 32 Reboot

To reboot the device:

1. Select **Yes**.

2. Click **Apply**. The communications module automatically reboots with the default settings.

5. Operations

The communications module takes approximately one minute to boot. While the first and second LEDs are flash, the unit is still booting (Refer to Figure 1 Front View). After all LEDs clear, wait for an additional twenty seconds before initiating a call.

The communications module needs to be programmed in accordance with the instructions provided in Chapter 4 (Refer to 4 Using the Web GUI).

5.1. Activating/Deactivating Auxiliary Outputs

To provide additional visible or audible alerts upon an event, the communications module is equipped with 3 Auxiliary Outputs. The Auxiliary Outputs can be used to connect devices such as a siren, a strobe light, a PTZ camera, etc. These devices can then be activated and deactivated locally or remotely (Refer to 4.6.6 Auxiliary Outputs).

5.2. Paging Operation

The communications module can receive one-way paging messages from the WEBS Contact® server either on the line level output or on the built-in hands-free speaker. The communications module must be registered with the WEBS Contact® server in order to receive incoming pages.

5.3. Rebooting the Communications Module

The communications module can be rebooted using the Reset button on the communications module. Pressing the Reset button once will reboot the communications module. The communications module can also be rebooted via the Web GUI (Refer to 4.8 Reboot).

5.4. Factory Default Settings

The communications module can be reset to factory settings using the Reset button. Press and hold the Reset button for 10 seconds. The communications module will reboot with factory default settings.

Note: All data including IP address and username/password will be reset to factory defaults.

Appendix A: Troubleshooting & Maintenance

Problem	Possible Causes & Corrective measures
Unable to access the communications module's Web GUI	1. The IP address being used in the Web browser is incorrect. Connect the serial console and check the communications module's IP address. 2. IP address of the communications module is conflicting with another network device. Reassign a new IP address to the communications module. 3. The communications module's Web server is not responding. Reboot the communications module.
Unable to login to the communications module's Web GUI	1. The communications module's database is corrupt. Reset to factory default settings using the **Reset** button (Refer to **Error! Reference source not ound. Error! Reference source not found.**).IP address of the communications module is conflicting with another network device. Reassign a new IP address to the communications module.

Appendix B: Frequently Asked Questions

2. How do I determine the IP address of the communications module?

To determine the IP address:

    i. Connect a computer to the communications module in question using a serial port and serial console.

    ii. Open HyperTerminal or similar console application on the connected computer.

    iii. At the command prompt, enter the ifconfig command. The IP address of the communications module will be displayed.

To determine the IP address through the Web GUI:

    i. Follow the directions under Section 4.4.1 IP Settings.

    ii. The IP Address field will display the IP Address of the communications module.

3. The communications module is not receiving paging requests from the WEBS Contact® server. How do I fix this?

    i. Refer to Section 4.5.1 Paging Settings.

    ii. Check the Registration status with the WEBS Contact® server.

    iii. If the status is Unregistered then you will need to contact the Administrator of the WEBS Contact®

Note It is not recommended to use the deregister option as it deregisters the communications module with the WEBS Contact® Server. Communications module will stop sending events to WEBS Contact® Server.

Appendix C: Sample Serial Configuration File

```
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ This Configuration file has all the default and allowed values for
++ configurable attributes.
++ Admin/Programmer can modify the values as per permissible value/range for
++ defined parameters as described in comments given for each parameter.
++
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : VoIPProtocol
++ Description     : Protocol to be used for originating calls
++ Valid values   : VoIPProtocol = 1 for SIP (Default Value)
++              VoIPProtocol = 2 for H.323
++ Note           : Changing this value will cause the phone to reboot.
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

VoIPProtocol = 1


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : AutoAnswer
++ Description     : Enables/disable auto answer mode of phone operation.
++ Valid values   : AutoAnswer = 0 - Disable
++              AutoAnswer = 1 - Enable (Default Value)
++ Note           : None
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AutoAnswer = 1


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : OperationPriority
++ Description     : Operation Priority between Phone and Paging operations.
++ Valid values   : OperationPriority = 1 Phone Mode has priority over Paging
++              Mode(Default)
++              OperationPriority = 2 Paging Mode has priority over Phone
++              Mode
++ Note           : None
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

OperationPriority = 1


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : CallerIDPresentation
++ Description     : Caller ID presentation to the Remote party.
++ Valid values   : CallerIDPresentation = 0 - Disable
++              CallerIDPresentation = 1 - Enable (Default Value)
++ Note           : None
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

CallerIDPresentation = 1


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : CallerID
```

++ Description   : Caller ID to be present to Remote Party.
++ Valid values   : 30 chars long, a-z,A-Z,*,0-9,.,- , No spaces allowed.
++   Default value is VOIP-500
++ Note   : This will be sent when CallerIDPresentation = 1
++

CallerID = VOIP-500

++
++ Field name   : AudioCodec
++ Description   : Preferred Audio Codec to be used for Outgoing Calls.
++ Valid values   : AudioCodec = 1 - G.711 PCM A Law
++   AudioCodec = 2 - G.711 PCM u Law (Default Value)
++   AudioCodec = 3 - G.729a
++   AudioCodec = 4 - G.723.1a
++ Note   : None
++

AudioCodec = 2

++
++ Field name   : AEC
++ Description   : Enable/Disable Acoustic Echo Cancellation.
++ Valid values   : AEC = 1 - Enable (Default Value)
++   AEC = 0 - Disable
++ Note   : None
++

AEC = 1

++
++ Field name   : VAD_CNG
++ Description   : Enable/Disable Voice Activity detection/generation of
++   Silence packets.
++ Valid values   : VAD_CNG = 1 - Enable (Default Value)
++   VAD_CNG = 0 - Disable
++ Note   : None
++

VAD_CNG = 1

++
++ Field name   : AGC
++ Description   : Enable/Disable Automatic Gain Control
++ Valid values   : AGC = 0 - Disable (Default Value)
++   AGC = 1 - Enable
++ Note   : None
++

AGC = 0

++
++ Field name   : JitterBuffer
++ Description   : Size of Jitter buffer (millseconds)
++ Valid values   : 0 (Default Value), 30, 60, 90 , 120

```
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

JitterBuffer = 30

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : LineLevelOutputGain
++ Description    : Line level output gain to be used during Recording or
++               Amplifying.
++ Valid values   : 1 to 20, Default value is 16
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

LineLevelOutputGain = 16

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : Speaker
++ Description    : Enable/disable Speaker state, applicable to both Handset
++               and Handsfree
++ Valid values   : Speaker = 0 - Disabled
++               Speaker = 1 - Enabled (Default value)
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Speaker = 1

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : SpeakerGain
++ Description    : Speaker gain, applicable to both Handset and Handsfree.
++ Valid values   : 1 to 20, Default value is 12
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

SpeakerGain = 12

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : Mic
++ Description    : Enable/disable Mic state, applicable to both Handset
++               and Handsfree
++ Valid values   : Mic = 0 - Disabled
++               Mic = 1 - Enabled (Default value)
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Mic = 1

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : MicGain
++ Description    : Mic gain, applicable to both Handset and Handsfree.
++ Valid values   : 1 to 20, Default value is 12
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

MicGain = 12
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : CallProgressTones
++ Description    : Enable/Disable Call Progress Tones (Dial tone,Ringback
++               tone, Ringing tone, Busy Tone etc)
++ Valid values   : CallProgressTone = 0 - Disabled
++               CallProgressTone = 1 - Enabled (Default Value)
++ Note          : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

CallProgressTones = 1

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : KeyToAnswer
++ Description    : Key to be pressed by Remote party for answering the call.
++ Valid values   : 0-9, *, #, disable (default value)
++ Note          : Only applicable for Outbound Round Robin calls.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

KeyToAnswer = Disable

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : KeyToDisconnect
++ Description    : Key to be pressed by Remote party to disconnect the call
++               from remote.
++ Valid values   : 0-9, *, # (default value), disable.
++ Note          : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

KeyToDisconnect = #

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : WelcomeTone
++ Description    : Enable/disable playing of Welcome Tone to remote party.
++ Valid values   : WelcomeTone = 0 - To not play
++               WelcomeTone = 1 - To Play (Default Value)
++ Note          : Only played when AutoAnswer = 1.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

WelcomeTone = 1

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : TimerNetResponse
++ Description    : Network Response Timer
++ Valid values   : 5 - 20 sec, in increment of 1 sec.
++               Default value is 5 secs
++ Note          : Only applicable to Outbound Round Robin Calls
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

TimerNetResponse = 5

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : TimerRinger
++ Description    : Ringer Timer in number of rings.
++ Valid values   : 1 - 12. Default value is 5 rings
++ Note          : Only applicable to Outbound Round Robin Calls
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

TimerRinger = 5


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : TimerHangup
++ Description     : Hangup Timer
++ Valid values   : 0.5 - 3.0 seconds, in increment of 0.1 second.
++                  Default value is 0.5 secs
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


TimerHangup = 0.500000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : TimerInterDigitLocal
++ Description     : Local Inter digit timer, used during dialing numbers.
++ Valid values   : 5 - 20 seconds, in increment of 1 sec
++                  Default value is 5 secs
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


TimerInterDigitLocal = 5


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : TimerInterDigitRemote
++ Description     : Remote Inter digit timer, used during Remote DTMF
++                  operations
++ Valid values   : 5 - 20 secs, in increment of 1 sec
++                  Default value is 5 secs
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


TimerInterDigitRemote = 5


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : CallConversation
++ Description     : Used for limiting Call Conversation time.
++ Valid values   : CallConversation = 0 , Calls lasts indefinite
++                  CallConversation = 1 Calls lasts for definite time
++
++ Field name     : TimerCallConversation
++ Description     : Call Conversation time, call only lasts for this time,
++                  applicable when CallConversation = 1
++ Valid values   : 1 - 360 minutes in increments of 1 minute.
++                  Default value is 12 minutes
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


CallConversation = 1
TimerCallConversation = 12


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : RingBackBusy
++ Description     : Enable/Disable Ringback Busy Timer.
```

```
++ Valid values   : RingBackBusy = 0 , Call waits for indefinite
++              RingBackBusy = 1 Calls waits for definite time before
++              switching to next number
++
++ Field name      : TimerRingBackBusy
++ Description     : Ringback busy time, call switch to next number after
++              waiting for this time, applicable when RingBackBusy = 1
++ Valid values   : 1 - 60 seconds in increments of 1 sec.
++              Default value is 15 seconds
++ Note           : Only applicable to Outbound Round Robin Calls
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

RingBackBusy = 1
TimerRingBackBusy = 15


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : HangupOnSilence
++ Description     : Enable/Disable Hanging of call on silence
++ Valid values   : HangupOnSilence = 0 - Disable
++              HangupOnSilence = 1 - Call disconnect on silence.
++
++ Field name      : TimerHangupOnSilence
++ Description     : Duration after which call disconnects automatically, if no
++              voice received.
++ Valid values   : 10 - 360 seconds, in increments of 1 second.
++              Default value is 30 seconds
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

HangupOnSilence = 1
TimerHangupOnSilence = 30


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : PagingOut
++ Description     : Output device for Paging messages.
++ Valid values   : PagingOut = 1 - To Handsfree Speaker
++              PagingOut = 2 - To Line Level Out (Default Value)
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 PagingOut = 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : PagingOutGain
++ Description     : Paging output gain.
++ Valid values   : 1 - 20, Default value is 20
++ Note           : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 PagingOutGain = 20


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : SIPPhoneNum
++ Description     : This parameter is used to define phone number for the
++              purpose of receiving incoming calls.
```

++ Valid values   : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed
++   Default is VOIP-500
++ Note   : Mandatory Parameter
++

 SIPPhoneNum = VOIP-500

++
++ Field name   : SIPDomainName
++ Description   : This parameter is used to define domain to which this
++   phone belongs to.
++ Valid values   : 30 chars long, a-z,A_Z,*, 0-9,., No spaces allowed
++   Default is voip500.local
++ Note   : Mandatory Parameter
++

 SIPDomainName_p = voip500.local
 SIPDomainName_s = voip500.local
 SIPDomainName_t = voip500.local

++
++ Field name   : SIPRegister
++ Description   : This parameter is used to define Phone SIP Registration.
++   If enable then Phone will try to register at given
++   registrar.
++ Valid values   : SIPRegister = 0 - Disable SIP Registration (Default Value)
++   SIPRegister = 1 - Enable SIP Registration
++ Note   : For Cases when SIPRegister = 1 configure following
++   parameters.
++
++ Field name   : SIPRegistrarIP
++ Field name   : SIPRegistrarPort
++ Field name   : SIPReregistrationTime
++ Description   : SIPRegistrarIP - Registrar IP address
++   SIPRegistrarPort - Registrar Port
++   SIPReregistrationTime - Registration Refresh time
++ Valid Values   : SIPRegistrarPort : 1024 - 49151, 5060 (Default value)
++   SIPReregistrationTime : 10 - 14400 secs, 3600 (Def value)
++
++ Field name   : SIPRegistrarUserName
++ Field name   : SIPRegistrarUserPassword
++ Description   : Optional parameters, required when using authenticating
++   Registrar.
++ Valid values   : 30 chars long, a-z,A-Z,*,0-9,.,- , No spaces allowed
++ Note   : Only used when using authenticating Registrar.
++

SIPRegister = 0
SIPRegistrarIP_p = 0
SIPRegistrarIP_s = 0
SIPRegistrarIP_t = 0
SIPRegistrarPort= 5060
SIPReregistrationTime = 3600
SIPRegistrarUserName_p = 0
SIPRegistrarUserName_s = 0

```
SIPRegistrarUserName_t = 0
SIPRegistrarUserPassword_p = 0
SIPRegistrarUserPassword_s = 0
SIPRegistrarUserPassword_t = 0


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : SIPOutBoundProxyIPAddress & SIPOutBoundProxyPort
++ Description     : Optional parameters. Used when using Outbound Proxy.
++ Valid values    : SIPOutBoundProxyPort : 1024 - 49151, 5060 (Default value)
++
++ Field name      : SIPOutBoundProxyUserName
++ Field name      : SIPOutBoundProxyUserPassword
++ Description     : Optional parameters, required when using authenticating
++               proxy.
++ Valid values    : 30 chars long, a-z,A-Z,*,0-9,.,- , No spaces allowed
++ Note          : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

SIPOutBoundProxyIPAddress_p = 0
SIPOutBoundProxyIPAddress_s = 0
SIPOutBoundProxyIPAddress_t = 0
SIPOutBoundProxyPort = 5060
SIPOutBoundProxyUserName_p = 0
SIPOutBoundProxyUserName_s = 0
SIPOutBoundProxyUserName_t = 0
SIPOutBoundProxyUserPassword_p = 0
SIPOutBoundProxyUserPassword_s = 0
SIPOutBoundProxyUserPassword_t = 0


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : H323gkip & H323gkmode & H323gkport
++ Description     : Whether u are using gatekeeper or not ,if yes its ip and port
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 H323gkip =
 H323gkmode = 1
 H323gkport = 1719


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : isReg
++ Description     : used for correct Gui behaviour
++ Valid values    : 0 and 1
++
++ Field name      : H323loginid & H323passwd
++ Description     : H323 gatekeeper login id and password
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 isReg = 0
 H323loginid = VOIP-500
 H323passwd =


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : H323re_reg_time
++ Description   : Re-Registration Timer time
 ++ Valid values : 0 -       14400 seconds
```

```
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 H323re_reg_time = 3600


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : H323username
++ Description    : This parameter is used to define phone number for the
++                 purpose of receiving incoming calls.
++ Valid values   : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed
++                 Default is VOIP-500
++ Note           : Mandatory Parameter
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

 H323username =


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : NumberList
++ Description    : Numbers to dial be dialed on press of Emergency and Info
++                 Buttons and also on on Activation of Auxiliary Inputs.
++ Valid values   : Max 30 chars, for IP Addresses, Analog Numbers, Aliases
++                 and URLs
++                 Example:
++                   NumberList1CN1 = 10.112.71.85
++                   NumberList1CN2 = 100@10.112.71.82
++                   NumberList1CN3 = 1005
++                   NumberList1CN4 = test@example.com
++                   NumberList1CN5 =
++                   NumberList1CN6 =
++ Note           : Admin can similarly configure Number List 2 to Number
++                 List 7
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

NumberList1CN1 =
NumberList1CN2 =
NumberList1CN3 =
NumberList1CN4 =
NumberList1CN5 =
NumberList1CN6 =

NumberList2CN1 =
NumberList2CN2 =
NumberList2CN3 =
NumberList2CN4 =
NumberList2CN5 =
NumberList2CN6 =

NumberList3CN1 =
NumberList3CN2 =
NumberList3CN3 =
NumberList3CN4 =
NumberList3CN5 =
NumberList3CN6 =

NumberList4CN1 =
NumberList4CN2 =
```

NumberList4CN3 =
NumberList4CN4 =
NumberList4CN5 =
NumberList4CN6 =

NumberList5CN1 =
NumberList5CN2 =
NumberList5CN3 =
NumberList5CN4 =
NumberList5CN5 =
NumberList5CN6 =

NumberList6CN1 =
NumberList6CN2 =
NumberList6CN3 =
NumberList6CN4 =
NumberList6CN5 =
NumberList6CN6 =

NumberList7CN1 =
NumberList7CN2 =
NumberList7CN3 =
NumberList7CN4 =
NumberList7CN5 =
NumberList7CN6 =


```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : Button1CallList
++ Description    : List of numbers to be dialed from a specific List.
++ Valid values   : 1 - 7. 1 (Default value)
++
++ Field name    : Button1CallNetworkPriority
++ Description    : Network priority to priortize the Emergency Traffic.
++ Valid values   : 1 - 63. 46 (Default value)
++ Note        : This field is only valid for phones having atleast 1
++            button.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

Button1CallList = 1
Button1CallNetworkPriority = 46


```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : Button2Type
++ Description    : Type of Button.
++ Valid values   : Button2Type = 1 - As AutoDial
++            Button2Type = 2 - As Hookswitch (Default Value)
++
++ Field name    : Button2CallList
++ Field name    : Button2CallPriority
++ Field name    : Button2CallNetworkPriority
++ Description    : Required when Button programmed as AutoDial.
++ Description    : Required when Button programmed as AutoDial.
++ Valid values   : Button2CallPriority : 2 - 10 , 2 (default value)
++            Button2CallNetworkPriority: 1 - 63. 46 (Default value)
```

++ Note   : This field is only valid for phones having more than 1
++   buttons.
+++

Button2Type = -2
Button2CallList = 1
Button2CallPriority = 2
Button2CallNetworkPriority = 46

+++
++ Field name   : AuxIn1CallList
++ Description   : List of numbers to be dialed from a specific List.
++ Valid values   : 1 - 7, none (Disable)
++   AuxIn1CallList = 1 (Default value)
++
++ Field name   : AuxIn1CallPriority
++ Description   : Call priority for the call originated on activation
++   of AuxIn 1.
++ Valid values   : 2 - 10. 2 (Default Value)
++
++ Field name   : AuxIn1NetworkPriority
++ Description   : Network priority to be used for packets of the call. Used
++   for prioritizing the traffic.
++ Valid values   : 1 - 63. 46 (Default value)
++ Note   : Admin can similarly program values for AuxIn2 and AuxIn3
+++

AuxIn1CallList = 1
AuxIn1CallPriority = 2
AuxIn1NetworkPriority = 46

AuxIn2CallList = 1
AuxIn2CallPriority = 2
AuxIn2NetworkPriority = 46

AuxIn3CallList = 1
AuxIn3CallPriority = 2
AuxIn3NetworkPriority = 46

+++
++ Field name   : AuxOp1ActOnAuxIn1Act, AuxOp1ActOnAuxIn2Act ,
++   AuxOp1ActOnAuxIn3Act, AuxOp1ActOnAuxIn1DeAct,
++   AuxOp1ActOnAuxIn2DeAct & AuxOp1ActOnAuxIn3DeAct
++
++ Description   : Auxiliary Output activation on Activation/Deactivation of
++   Auxiliary Inputs
++
++ Valid values   : 0 - 1
++   0- Disable
++   1- Aux Activation when Auxiliary Input is activated or
++   deactivated
++
++   AuxOp1ActOnAuxIn1Act = 0 (Default value)
++

++ Note   : Admin can similarly program values for AuxOutput 2 and 3
++

AuxOp1ActOnAuxIn1Act = 0
AuxOp1ActOnAuxIn2Act = 0
AuxOp1ActOnAuxIn3Act = 0

AuxOp1ActOnAuxIn1DeAct = 0
AuxOp1ActOnAuxIn2DeAct = 0
AuxOp1ActOnAuxIn3DeAct = 0

AuxOp2ActOnAuxIn1Act = 0
AuxOp2ActOnAuxIn2Act = 0
AuxOp2ActOnAuxIn3Act = 0

AuxOp2ActOnAuxIn1DeAct = 0
AuxOp2ActOnAuxIn2DeAct = 0
AuxOp2ActOnAuxIn3DeAct = 0

AuxOp3ActOnAuxIn1Act = 0
AuxOp3ActOnAuxIn2Act = 0
AuxOp3ActOnAuxIn3Act = 0

AuxOp3ActOnAuxIn1DeAct = 0
AuxOp3ActOnAuxIn2DeAct = 0
AuxOp3ActOnAuxIn3DeAct = 0

++
++ Field name   : AuxOp1ActOnRemoteKeyCode, AuxOp2ActOnRemoteKeyCode,
++   AuxOp3ActOnRemoteKeyCode
++
++ Description   : Auxiliary Output activation on specified remote keycode
++
++ Valid values   : Disable,
++   Max 4 chars containing 0-9, * and #.
++   Default values are *11*, *12*, *13* correspondingly
++
++   AuxOp1ActOnRemoteKeyCode = *11* (Default value)
++   AuxOp2ActOnRemoteKeyCode = *12* (Default value)
++   AuxOp3ActOnRemoteKeyCode = *13* (Default value)
++
++ Note   : None
++

AuxOp1ActOnRemoteKeyCode = *11*
AuxOp2ActOnRemoteKeyCode = *12*
AuxOp3ActOnRemoteKeyCode = *13*

++
++ Field name   : AuxOp1ActOnLocalKeyCode,AuxOp2ActOnLocalKeyCode,
++   AuxOp3ActOnLocalKeyCode
++
++ Description   : Auxiliary Output activation on specified local keycode
++

```
++ Valid values   : Disable, Max 8 chars containing 0-9, * and #.
++
++          AuxOp1ActOnLocalKeyCode = Disable (Default value)
++          AuxOp2ActOnLocalKeyCode = Disable (Default value)
++          AuxOp3ActOnLocalKeyCode = Disable (Default value)
++
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AuxOp1ActOnLocalKeyCode = Disable
AuxOp2ActOnLocalKeyCode = Disable
AuxOp3ActOnLocalKeyCode = Disable


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : AuxOp1DeActOnRemoteKeyCode, AuxOp2DeActOnRemoteKeyCode,
++          AuxOp3DeActOnRemoteKeyCode
++
++ Description   : Auxiliary Output deactivation on specified remote keycode
++
++ Valid values   : Disable,
++          Max 4 chars containing 0-9, * and #.
++          Default values are *21*, *22*, *23* correspondingly
++
++          AuxOp1DeActOnRemoteKeyCode = *21* (Default value)
++          AuxOp2DeActOnRemoteKeyCode = *22* (Default value)
++          AuxOp3DeActOnRemoteKeyCode = *23* (Default value)
++
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AuxOp1DeActOnRemoteKeyCode = *21*
AuxOp2DeActOnRemoteKeyCode = *22*
AuxOp3DeActOnRemoteKeyCode = *23*


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : AuxOp1DeActOnLocalKeyCode,AuxOp2DeActOnLocalKeyCode,
++          AuxOp3DeActOnLocalKeyCode
++
++ Description   : Auxiliary Output deactivation on specified local keycode
++
++ Valid values   : Disable, Max 8 chars containing 0-9, * and #.
++
++          AuxOp1DeActOnLocalKeyCode = Disable (Default value)
++          AuxOp2DeActOnLocalKeyCode = Disable (Default value)
++          AuxOp2DeActOnLocalKeyCode = Disable (Default value)
++
++ Note         : None
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AuxOp1DeActOnLocalKeyCode = Disable
AuxOp2DeActOnLocalKeyCode = Disable
AuxOp3DeActOnLocalKeyCode = Disable


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : AuxOp1DeActOnBut1Call & AuxOp1DeActOnBut2Call
```

```
++
++ Description    : Auxiliary Output 1 deactivation on call through Button #1
++              or through Button #2.
++
++ Valid values   : 0 - 3
++          0- Disable
++          1- Aux Deactivation when call is initiated through Button
++          2- Aux Deactivation when call initiated through Button is
++            connected
++          3- Aux Deactivation when call initiated through Button is
++            disconnected
++
++          AuxOp1DeActOnBut1Call = 0 (Default value)
++
++ Note        : Admin can similarly program values for AuxOutput 2 and 3
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AuxOp1DeActOnBut1Call = 0
AuxOp1DeActOnBut2Call = 0

AuxOp2DeActOnBut1Call = 0
AuxOp2DeActOnBut2Call = 0

AuxOp3DeActOnBut1Call = 0
AuxOp3DeActOnBut2Call = 0



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : AuxOp1DeActOnAuxIn1Act, AuxOp1DeActOnAuxIn2Act ,
++          AuxOp1DeActOnAuxIn3Act, AuxOp1DeActOnAuxIn1DeAct,
++          AuxOp1DeActOnAuxIn2DeAct & AuxOp1DeActOnAuxIn3DeAct
++
++ Description    : Auxiliary Output deactivation on Activation/Deactivation of
++          Auxiliary Inputs
++
++ Valid values   : 0 - 1
++          0- Disable
++          1- Aux Deactivation when Auxiliary Input is activated or
++            deactivated
++
++          AuxOp1DeActOnAuxIn1Act = 0 (Default value)
++
++ Note        : Admin can similarly program values for AuxOutput 2 and 3
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AuxOp1DeActOnAuxIn1Act = 0
AuxOp1DeActOnAuxIn2Act = 0
AuxOp1DeActOnAuxIn3Act = 0

AuxOp1DeActOnAuxIn1DeAct = 0
AuxOp1DeActOnAuxIn2DeAct = 0
AuxOp1DeActOnAuxIn3DeAct = 0

AuxOp2DeActOnAuxIn1Act = 0
AuxOp2DeActOnAuxIn2Act = 0
```

AuxOp2DeActOnAuxIn3Act = 0

AuxOp2DeActOnAuxIn1DeAct = 0
AuxOp2DeActOnAuxIn2DeAct = 0
AuxOp2DeActOnAuxIn3DeAct = 0

AuxOp3DeActOnAuxIn1Act = 0
AuxOp3DeActOnAuxIn2Act = 0
AuxOp3DeActOnAuxIn3Act = 0

AuxOp3DeActOnAuxIn1DeAct = 0
AuxOp3DeActOnAuxIn2DeAct = 0
AuxOp3DeActOnAuxIn3DeAct = 0


```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : VMActionOnBut1CallInit, VMActionOnBut2CallInit ,
++                  VMActionOnInboundCallsAns, VMActionOnAuxIn1Act,
++                  VMActionOnAuxIn2Act & VMActionOnAuxIn3Act
++
++ Description     : Configured VM will be played to the user upon call
++                  initiation by the specified button
++
++ Valid values   : 1 - 5,Disable
++                  Disable - Disable the field
++                  1 - 5 Specifies the number of the VM to be played to the
++                        user.
++
++                  VMActionOnBut1CallInit = Disable (Default value)
++
++ Field name     : VMActionOnInboundCallsAns
++
++ Description     : Configuring the specified VM to start playing or stop
++                  playing when the inbound calls are answered.
++
++ Valid values   : 1 - 10, Disable
++                  Disable - Disable the field
++                  1 - 5 Specifies the number of the VM to be played to the user.
++                  6 -  Stops the VM #1(if playing)
++                  7 -  Stops the VM #2(if playing).Similarly the values 8 to 10
++                       can be configured to stop the VM #3 TO VM #5
++
++ Note        : Admin can similarly program values for VMActionOnAuxIn1Act,
++                  VMActionOnAuxIn2Act & VMActionOnAuxIn3Act on the guidelines
++                  for the VMActionOnInboundCallsAns
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : VM1PlayOnRemoteKeyCode, VM1StopOnRemoteKeyCode
++
++ Description     : The specified VM will be played/stopped to the user upon
++                  dialing the configured keycode from the remote side.
++
++ Valid values   : Disable, Combination of 0-9,*,# with maximum of 4 characters
```

```
++              Disable - Disable the field
++              *12#   - can be used to either start or stop VM #1 play to
++                       user when dialed from the remote side.
++
++              VM1PlayOnRemoteKeyCode = Disable(Default value)
++
++ Field name      :  VM1PlayOnLocalKeyCode,VM1StopOnLocalKeyCode
++
++ Description    : The specified VM will be played/stopped to the user upon
++              dialing the configured keycode from the local keypad.
++
++ Valid values   : Disable, Combination of 0-9,*,# with maximum of 8 characters
++              Disable - Disable the field
++              *123456# - can be used to either start or stop VM #1 play to
++                       user when dialed from the local keypad.
++
++              VM1PlayOnLocalKeyCode = Disable(Default value)
++
++ Note        : Admin can similarly program values for VM #2 to VM #5
++              Avoid using the same keycode for start and stop of the same
++              VM.
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

VM1PlayOnRemoteKeyCode = Disable
VM1PlayOnLocalKeyCode = Disable
VM1StopOnRemoteKeyCode = Disable
VM1StopOnLocalKeyCode = Disable

VM2PlayOnRemoteKeyCode = Disable
VM2PlayOnLocalKeyCode = Disable
VM2StopOnRemoteKeyCode = Disable
VM2StopOnLocalKeyCode = Disable

VM3PlayOnRemoteKeyCode = Disable
VM3PlayOnLocalKeyCode = Disable
VM3StopOnRemoteKeyCode = Disable
VM3StopOnLocalKeyCode = Disable

VM4PlayOnRemoteKeyCode = Disable
VM4PlayOnLocalKeyCode = Disable
VM4StopOnRemoteKeyCode = Disable
VM4StopOnLocalKeyCode = Disable

VM5PlayOnRemoteKeyCode = Disable
VM5PlayOnLocalKeyCode = Disable
VM5StopOnRemoteKeyCode = Disable
VM5StopOnLocalKeyCode = Disable


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name      : VM1PlayToUserInLoop
++
++ Description    : The VM #1 will be played to the user in loop
++
++ Valid values   : 0 - 1
```

```
++          0- Disable, the VM play in loop
++          1- Enable, the VM play in loop
++
++          VM1PlayToUserInLoop = 0 (Default value)
++
++ Note     : Admin can similarly program values for VM #2 to VM #5
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

VM1PlayToUserInLoop = 0
VM2PlayToUserInLoop = 0
VM3PlayToUserInLoop = 0
VM4PlayToUserInLoop = 0
VM5PlayToUserInLoop = 0


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name     : VMActionOnOutboundCallsAns
++
++ Description    : The specified VM will be played to the guard, once the call
++                 is being answered by the the guard.
++
++ Valid values   : Disable 1 - 5
++          Disable - Diable the option of playing the VM
++          1 - 5 Specifies the number of the VM which needs to be
++              played to the guard phone, when the call is being
++              answered by guard.
++
++          VMActionOnOutboundCallsAns = Disable (Default value)
++
++ Field name     : VM1PlayToGuardOnRemoteKeyCode, VM1StopToGuardOnRemoteKeyCode
++
++ Description    : The VM #1 will be played/stopped to the guard, once the
++                 configured key is dialed by the the guard.
++
++ Valid values   : Disable, Combination of 0-9,*,# with maximum of 4 characters
++          Disable - Disable the field
++          *12# - can be used to either start or stop VM #1 play to
++              guard when dialed from the remote side.
++
++          VM1PlayToGuardOnRemoteKeyCode = Disable (Default value)
++          VM1StopToGuardOnRemoteKeyCode = Disable (Default value)
++
++ Note       : Admin can similarly program values for VM2 to VM5.
++          Avoid using the same keycode for start and stop of the same
++          VM.
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

VMActionOnOutboundCallsAns = Disable
VM1PlayToGuardOnRemoteKeyCode = Disable
VM1StopToGuardOnRemoteKeyCode= Disable
VM2PlayToGuardOnRemoteKeyCode = Disable
VM2StopToGuardOnRemoteKeyCode= Disable
VM3PlayToGuardOnRemoteKeyCode = Disable
VM3StopToGuardOnRemoteKeyCode= Disable
VM4PlayToGuardOnRemoteKeyCode = Disable
VM4StopToGuardOnRemoteKeyCode= Disable
```

VM5PlayToGuardOnRemoteKeyCode = Disable
VM5StopToGuardOnRemoteKeyCode= Disable

+++
++ Field name   : VM1PlayToGuardInLoop
++
++ Description   : The VM #1 will be played to the guard in loop
++
++ Valid values   : 0 - 1
++   0- Disable, the VM play in loop
++   1- Enable, the VM play in loop
++
++   VM1PlayToGuardInLoop = 0 (Default value)
++
++ Note   : Admin can similarly program values for VM #2 to VM #5
+++

VM1PlayToGuardInLoop = 0
VM2PlayToGuardInLoop = 0
VM3PlayToGuardInLoop = 0
VM4PlayToGuardInLoop = 0
VM5PlayToGuardInLoop = 0

+++
++ Field name   : KeypadMode
++ Description   : Mode of keypad to be used for dialing.
++ Valid values   : KeypadMode = 1 - Normal dial (Default Value)
++   KeypadMode = 2 - Speed dial
++ Note   : If Keypad is in speed dial, then Admin should configure
++   the speeddial numbers (Max 30 chars) .
++   Admin can configure IP Addresses, Analog Numbers, Aliases
++   and URLs. (Max 30 chars)
+++

KeypadMode = 1
SpeedDialKey0 =
SpeedDialKey1 =
SpeedDialKey2 =
SpeedDialKey3 =
SpeedDialKey4 =
SpeedDialKey5 =
SpeedDialKey6 =
SpeedDialKey7 =
SpeedDialKey8 =
SpeedDialKey9 =

+++
++ Field name   : Led3
++ Description   : Admin can configure Led3 Mode for specific purposes
++ Valid values   : Led3 = 1 - Help on The Way
++   Led3 = 2 - Out Of Service
++
++ Note   : For Options 1 and 3, Configure following parameters
++
++ Field name   : Led3SwitchOn

++ Description   : Admin can configure Led3 to switch on when remote user
++   enters specific key sequence.
++ Valid values   : Max 8 chars containing 0-9, * and #.
++   Default is *98*
++ Note   : None
++
++ Field name   : Led3DurationType
++ Description   : Admin can configure Led3 duration of activation.
++ Valid values   : Led3Duration = 1 - For Entire Call (Default Value)
++   Led3Duration = 2 - For indefinite duration
++   Led3Duration = 3 - For Custom duration
++ Note   : If Led3Duration = 3 then configure duration time.
++
++ Field name   : Led3Duration
++ Valid values   : 1 - 3600 sec,in increments of 1 sec. 10 (Default Value)
++
++ Field name   : Led3SwitchOff
++ Description   : Admin can configure key sequence to switch off when remote
++   Admin enters specific key sequence.
++ Valid values   : Max 8 chars containing 0-9, * and #.
++   Default is *97*
++ Note   : None
+++

Led3 = 3
Led3SwitchOn = *98*
Led3DurationType = 1
Led3Duration = 10
Led3SwitchOff = *97*

+++
++ Field name   : GuardAccessCode
++ Description   : Admin can set the guard access code using this field.
++ Valid values   : Maximum length 8 digits(0-9).
++   GuardAccessCode = *4** (Default Guard access code)
++   It will accept the values in the following format.
++   *4*<xxxxxxxx>* , x can be 0-9 or blank
++ Note   : None
+++

GuardAccessCode = *4**

+++
++ Field name   : AuthVolAdjust , AuthSpkrMicCtrl, AuthVoiceMessage ,
++   AuthAuxOPOperation , AuthLED3Operation
++ Description   : Admin can configure the authetication for different
++   operations.
++   a. Volume Adjustment During Call
++   b. Speaker and Microphone Control During Call
++   c. Voice Messages
++   d. Aux o/p Activation Deactivation
++   e. Help on the way LED activation and deactivation
++ Valid values   : 0 - To disable Authentication
++   1 - To enable Authentication
++ Note   : None

+++

AuthVolAdjust = 0
AuthSpkrMicCtrl = 1
AuthVoiceMessage = 1
AuthAuxOPOperation = 1
AuthLED3Operation = 0

+++
++ Field name   : NetworkMode
++ Description   : It configures the Phone IP address Type.
++ Valid values : NetworkMode = 1 - DHCP
++   NetworkMode = 3 - STATIC (Default Value)
++ Note   : If NetworkMode = 3, must configure following
++ Field name   : IPAddress
++ Field name   : Netmask
++ Field name   : DNSServerIP
++
++ Description   : IPAddress   - Phone IP Address - mandatory
++   Netmask   - The Subnet Mask Address - mandatory
++   Gateway   - The Default Gateway address - mandatory
++   DNSServerIP - The DNS Server IP Address - optional
++   Example:
++   NetworkMode = 3
++   IPAddress = 192.168.1.10 (Default)
++   Netmask = 255.255.255.0 (Default)
++   Gateway = 192.168.1.1 (Default)
++   DNSServerIP = (Default blank)
++
++ Note   : NetworkMode = 3 (Static) should not applied in bulk update.
++   If applied then all phones will have same Network
++   Settings.
+++

NetworkMode = 3
IPAddress = 192.168.1.10
Netmask = 255.255.255.0
Gateway = 192.168.1.1
DNSServerIP =

+++
++ Field name   : Hostname
++ Description   : It configures the unique indetifier of the phone at
++   network level
++ Valid Values   : 30 chars long, a-z,A-Z,*,0-9,.,-, No space allowed.
++   Default Value is VOIP-500.
++ Note   : This Parameter should not be applied in bulk update.
++   If applied then all phones will have same hostname.
+++

Hostname = WEBS-CM-2

+++
++ Field name   : LogRedirection
++ Field name   : LogServerIP

```
++ Field name    : LogServerPort
++ Description    : Admin can enable the logging, and route to specific
++               location.
++ Valid values   : LogRedirection = 0 - To Disable Logging
++            LogRedirection = 1 - To Console
++            LogRedirection = 2 - To Network
++            LogRedirection = 3 - To File (Append)(Default Value)
++            LogRedirection = 4 - To File (New)
++ Note       : If LogRedirection = 2 must configure LogServerIP &
++            LogServerPort
++            Example:
++                LogRedirection = 2
++                LogServerIP = 10.112.71.35
++                LogServerPort = 514
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

LogRedirection = 3
LogServerIP =
LogServerPort =


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++ Field name    : LogLevel
++ Description    : Admin can configure the log levels of following modules
++            of EVP
++             a. AudioLogLevel      - For Audio Module
++             b. CallControlLogLevel - For Call Control Module
++             c. CommandModLogLevel  - For Webs Contact Client Module
++             d. DevCtrlLogLevel     - For Device Control Module
++             e. H323LogLevel        - For H323 Module
++             f. SIPLogLevel        - For SIP Module
++             g. TimerLogLevel      - For Timer Module
++
++ Valid values   : 1  - Error
++            3  - Error + Warning (Default value)
++            7  - Error + Warning + Info
++            15 - Error + Warning + Info + Debug
++ Note       : None
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

AudioLogLevel = 3
CallControlLogLevel = 3
CommandModLogLevel = 3
DevCtrlLogLevel = 3
H323LogLevel = 3
SIPLogLevel = 3
TimerLogLevel = 3


+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++
++ End Of the File
++
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

Appendix D: Network Port Requirements

The network for communications module Series communications modules should allow the following:

- IPv4 enabled
- Allow the following protocols:
  - RTP
  - HTTP/HTTPS
  - SMTP
- Routed network
- DHCP Server (Optional)

Network elements:

- Layer-2 Switch
- WEBS Contact Server

Ports:

The following ports needs to be enabled on the communications module Series communications modules and allowed across the firewall and routers in the network.

Service/Module	Port	Port Type	Mode
HTTP	80	TCP/UDP	Inbound
FTP	21	TCP	Inbound
SSH	22	TCP	Inbound
Paging	5000	UDP	Inbound
STUN	3478	UDP	Inbound/Outbound
WEBS Contact Port	3001	UDP	Inbound/Outbound
SMTP Server Port	25	TCP/UDP	Inbound/Outbound