



CAPSOLControl Hardware Install

v14.1

Quick Start Instruction Guide

Prepared for:

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CAPSOLSuite

1. Definition

CAPSOLSuite is a scalable and flexible Intelligent Mass Notification Solution.

The CAPSOLSuite consists of three product platforms.

- CAPSOL® is a cloud-based data monitoring and analytics system.
 - Includes:
 - Multiple data feeds
 - Map View with Geo-location
 - Advanced Rules Engine (ARE)
 - Reports
 - Push Notification
 - Instant Mobile Alerting (IMA™)
 - DRMessenger™
- CAPSOLNotes™ cloud based mobile applications
 - Includes:
 - S4S™
 - F4S™
- CAPSOLControl™ Enterprise Notification
 - On Site Local Computer Based Application includes:
 - Ethernet control of LED Text Signs and outputs using LED Sign Controller
 - Ethernet input capability from LED Text Signs and LED Sign Controller
 - Single point of Integration
 - Optional Radio Control of outputs and LED Text Signs
 - Optional Radio Input capability
 - IPAWS Integration
 - EAS, WEA, NWEM
 - NOAA Weather

These three platforms and modules operate independently as feature rich applications, but when used together, seamlessly integrate into a powerful intelligent mass notification solution.

CAPSOLControl Stand Alone

2. CAPSOLControl Stand Alone

- A. CAPSOLControl can operate in a limited stand-alone configuration when used to activate LED Text Displays only. Unlocking all the other features require the CAPSOLControl program module.
- B. Used as a stand-alone LED Display system, an LEDControl-SA is required for interfacing with the LED Text Displays. The LEDController will communicate with up to 1,000 LED Displays of either model.
- C. The LED Controller has 12 dry contact inputs and two relay outputs. The 12 inputs are used to activate up to 12 different messages. Relay #1 is programmed to trip on system or sign trouble. This contact can be monitored by a fire alarm control panel to indicate LED sign integrity. Relay #2 is not usable in a stand-alone configuration.
- D. The controller should be powered from 24 VDC and should be connected to a supply with backup capability.
- E. When used to indicate FIRE when connected to a fire alarm control panel, the fire alarm input should be connected to input #1.

To unlock all the features of CAPSOLControl, the LED Controller must be connected to the CAPSOLControl program module.

CAPSOLControl Program

3. CAPSOLControl Program

- A. CAPSOLControl is an On-Premise IP Based Operator Terminal for providing user friendly platform for performing CAPSOLControl functions. On-Premise allows local control regardless of internet connection
- B. CAPSOLControl is much more than messaging or alerting. The CAPSOLControl program gives the user the options of :
 - 1. Automatic or manual messaging to LED Displays
 - 2. Interfacing with IMA or DRMessenger for push notification
 - 3. Utilizing IPAWS for NOAA Weather alerts or sending emergency messages such as Amber Alerts.
 - 4. Sending email or text messages
 - 5. Message on computer desktops with Emergency Computer Messaging (ECM)
 - 6. Text To Speech of message being transmitted
 - 7. Activation of relays to turn on or off other systems
 - 8. Door Locking or Door Release
 - 9. Closing or opening of gates
 - 10. Raising or lowering guards or bollards
 - 11. Monitoring of inputs
 - 12. Integration with the Advanced Rules Engine (ARE) allowing CBE programming
 - 13. Interface with radio for messaging
- C. Features and Benefits of CAPSOLControl™
 - 1. Ease of Use: The dashboard and user interface is simple and easy to use
 - 2. Scalable: Being scalable keeps cost in line. System can be expanded as needs change.
 - 3. Flexible: Can be installed on a stand-alone server or shared on an existing server installation.
 - 4. Audible Notification: An available Text-To-Speech module or embedded audio can be incorporated to audibly alert the message being sent.
 - 5. Customizable: Standard product which can be deployed to meet customer specific needs

Stand-Alone Hardware

4. CAPSOLControl Stand-Alone Hardware

- A. For a stand-alone installation, the CAPSOLControl Hardware consists of two primary devices. These are:
 - 1. LED Text Display
 - a. LED-01
 - b. LEDM-01
 - 2. Controller
 - a. LEDControl - SA
- B. To begin programming, connect to the first device. The computer used for configuration must have an IP address and subnet mask assigned within the same network as the sign and controller such as 192.168.111.10 / 255.255.255.0.
- C. If you are unfamiliar with assigning an IP Address or do not have the proper credentials to do so, please get with the network system administrator.
- D. Both Signs and Controllers are default set to IP 192.168.111.111
- E. Please install one device (sign or controller) at a time, navigating to this IP address to find the Login page. Change the device IP address as found later in the Network Settings.
- F. When turning on the sign, the sign will display a sign name. Record that information for use in programming.

5. LED Sign Programming

A. Sign Login

1. Connecting to the controller, open a browser and navigate in browser window to URL of sign, which is "http://" plus the IP Address of the sign plus "/my/" (ie: "http://192.168.100.1/my/")
2. Default credentials are Username: admin , Password: admin , Click Submit when done.



Sign in

* Username:

* Password:

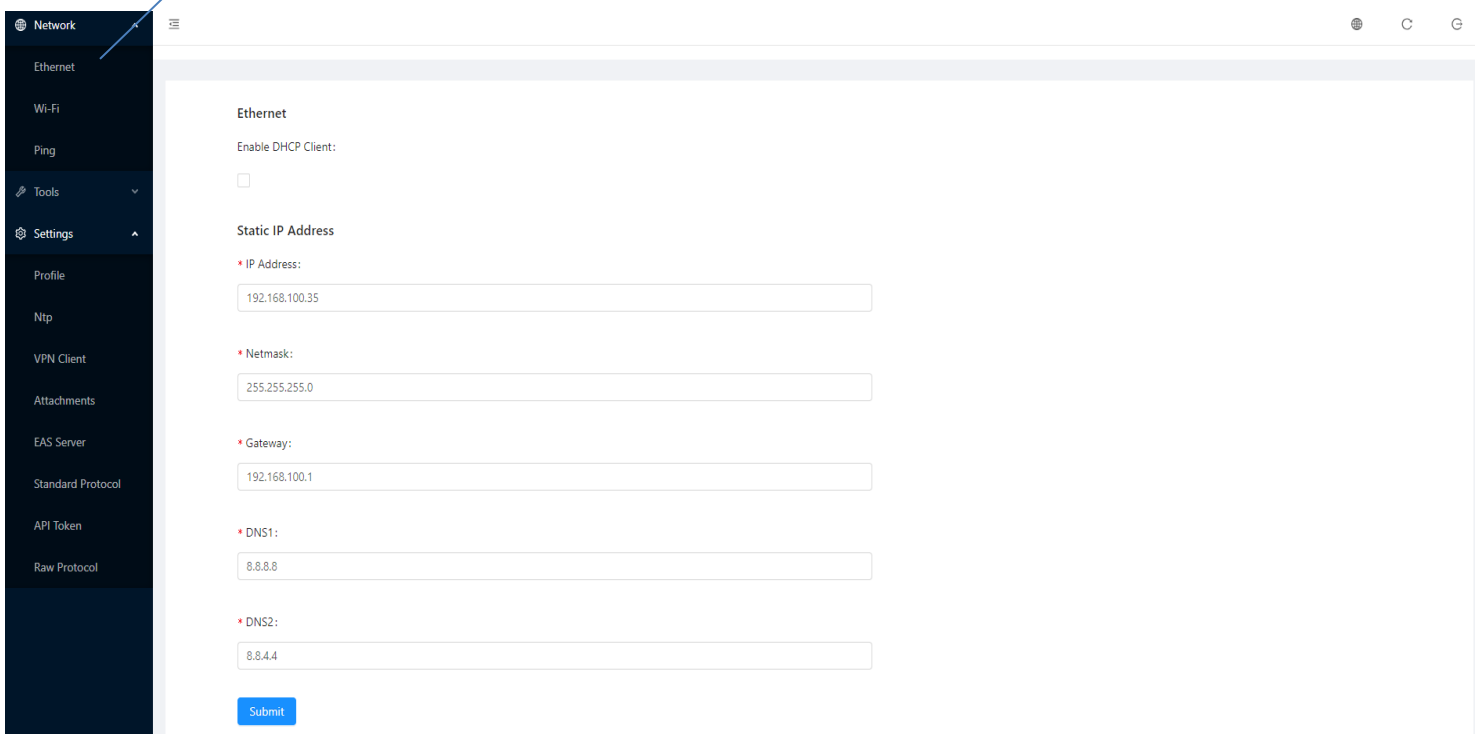
Submit

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5. LED Sign Programming

B. Sign Network

1. Click on Ethernet on the left vertical navigation bar.
2. Enter the sign's static IP Address, subnet mask, gateway, and DNS fields as required. Click Submit to save.



The screenshot displays the 'Ethernet' configuration page within a web application. The left sidebar contains a navigation menu with options: Network, Ethernet, Wi-Fi, Ping, Tools, Settings, Profile, Ntp, VPN Client, Attachments, EAS Server, Standard Protocol, API Token, and Raw Protocol. The 'Ethernet' option is selected, and a blue arrow points from it to the 'Ethernet' section header in the main content area. The main content area has a title 'Ethernet' and a checkbox for 'Enable DHCP Client' which is unchecked. Below this is the 'Static IP Address' section with five input fields: 'IP Address' (192.168.100.35), 'Netmask' (255.255.255.0), 'Gateway' (192.168.100.1), 'DNS1' (8.8.8.8), and 'DNS2' (8.8.4.4). A blue 'Submit' button is at the bottom of the form.

Ethernet

Enable DHCP Client: ☐

Static IP Address

* IP Address:

* Netmask:

* Gateway:

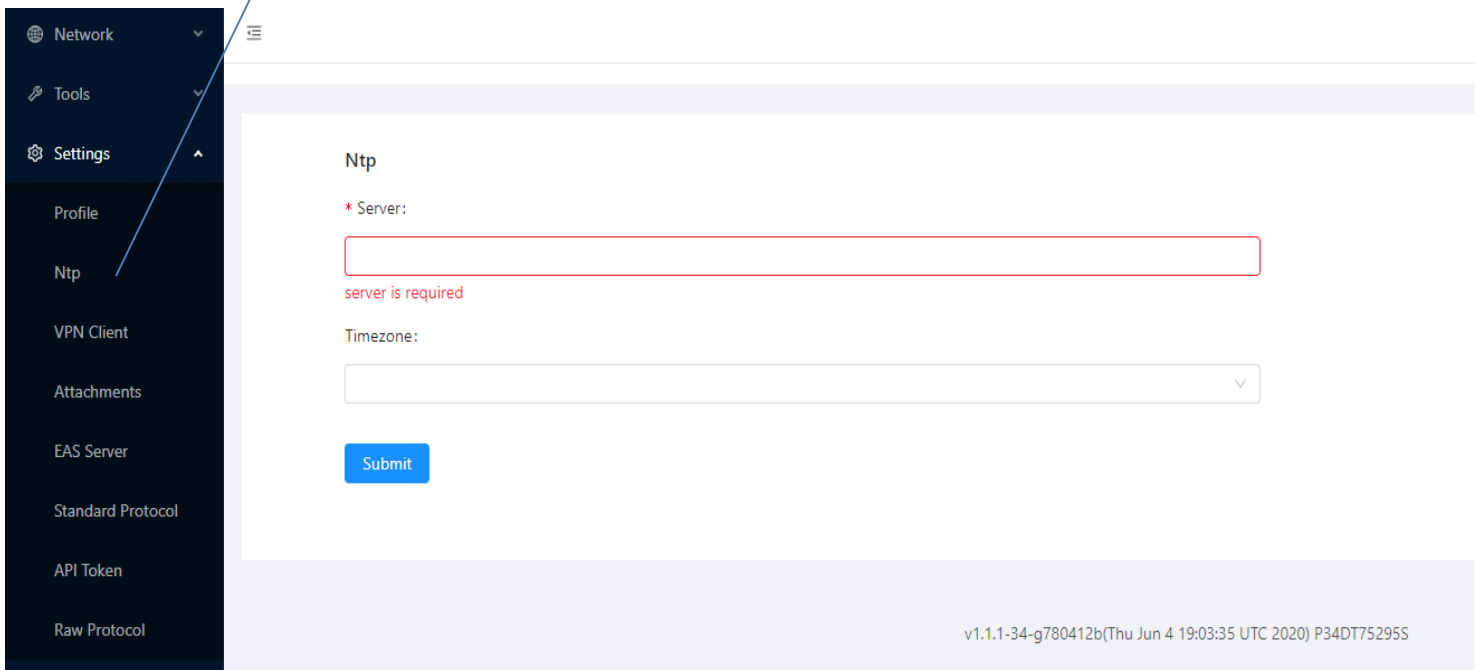
* DNS1:

* DNS2:

5. LED Sign Programming

C. Sign NTP

1. Click on Ntp on the left vertical navigation bar.
2. Enter the sign's NTP server address (ie: "1.pool.ntp.org").
3. Select the Timezone in the drop-down list. Click Submit to save.



The screenshot shows a web interface for configuring an LED sign's NTP settings. On the left is a dark blue vertical navigation bar with icons and labels for 'Network', 'Tools', 'Settings', 'Profile', 'Ntp', 'VPN Client', 'Attachments', 'EAS Server', 'Standard Protocol', 'API Token', and 'Raw Protocol'. A blue line points from the 'Ntp' option in the navigation bar to the main content area. The main content area has a light gray header with the title 'Ntp'. Below the title, there is a red asterisk followed by the label '* Server:'. Underneath is a red-outlined text input field. Below the input field, the text 'server is required' is displayed in red. Further down is the label 'Timezone:' followed by a white drop-down menu with a downward arrow. At the bottom of the form is a blue 'Submit' button. The footer of the page is a light gray bar containing the version and timestamp information: 'v1.1.1-34-g780412b(Thu Jun 4 19:03:35 UTC 2020) P34DT75295S'.

Ntp

* Server:

server is required

Timezone:

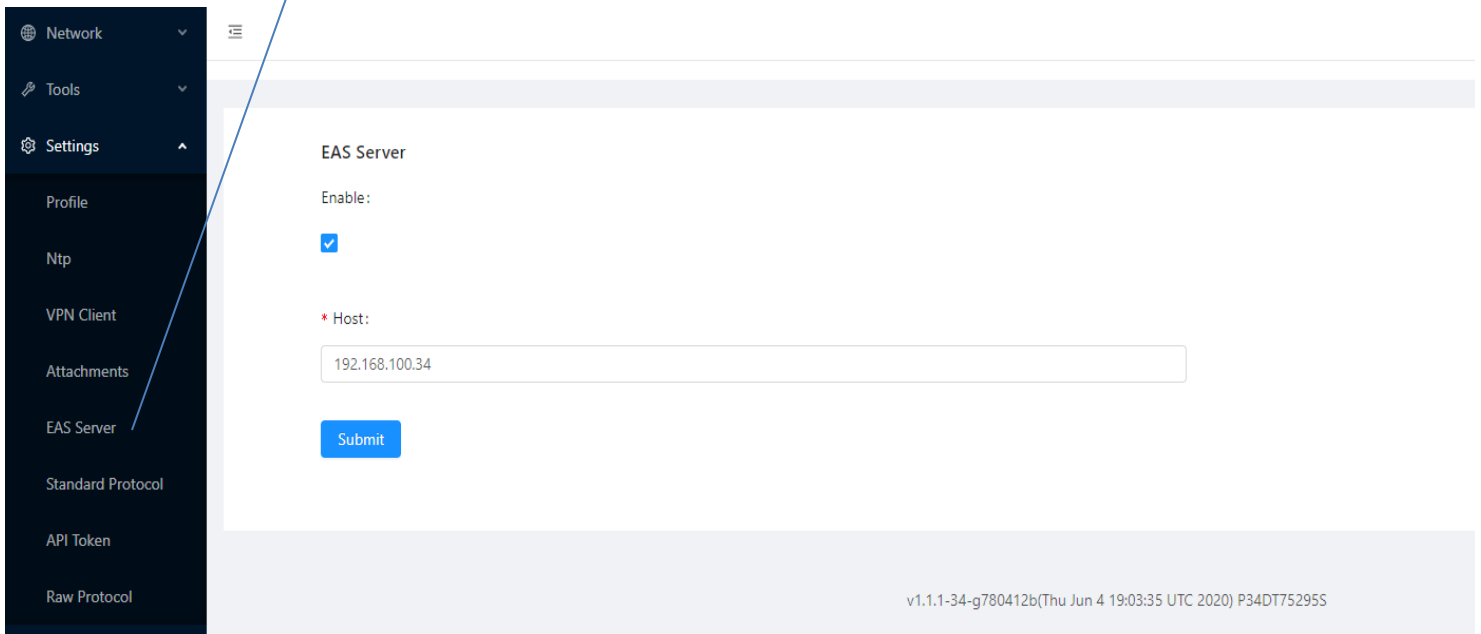
Submit

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5. LED Sign Programming

D. Sign EAS Server

1. Click on EAS Server on the left vertical navigation bar.
2. Click checkbox for Enable.
3. Enter the IP Address of the controller this sign will be bound to. Click Submit to save.



The screenshot displays the 'EAS Server' configuration page. On the left, a dark sidebar contains a navigation menu with items: Network, Tools, Settings, Profile, Ntp, VPN Client, Attachments, EAS Server (highlighted), Standard Protocol, API Token, and Raw Protocol. A blue arrow points from 'EAS Server' in the sidebar to the 'Host' input field in the main content area. The main content area has a light gray header and footer. The header contains the title 'EAS Server'. Below it, the 'Enable' checkbox is checked. The 'Host' field is labeled with a red asterisk and contains the IP address '192.168.100.34'. A blue 'Submit' button is located below the 'Host' field. The footer contains the version string 'v1.1.1-34-g780412b(Thu Jun 4 19:03:35 UTC 2020) P34DT75295S'.

EAS Server

Enable:

☒

* Host:

192.168.100.34

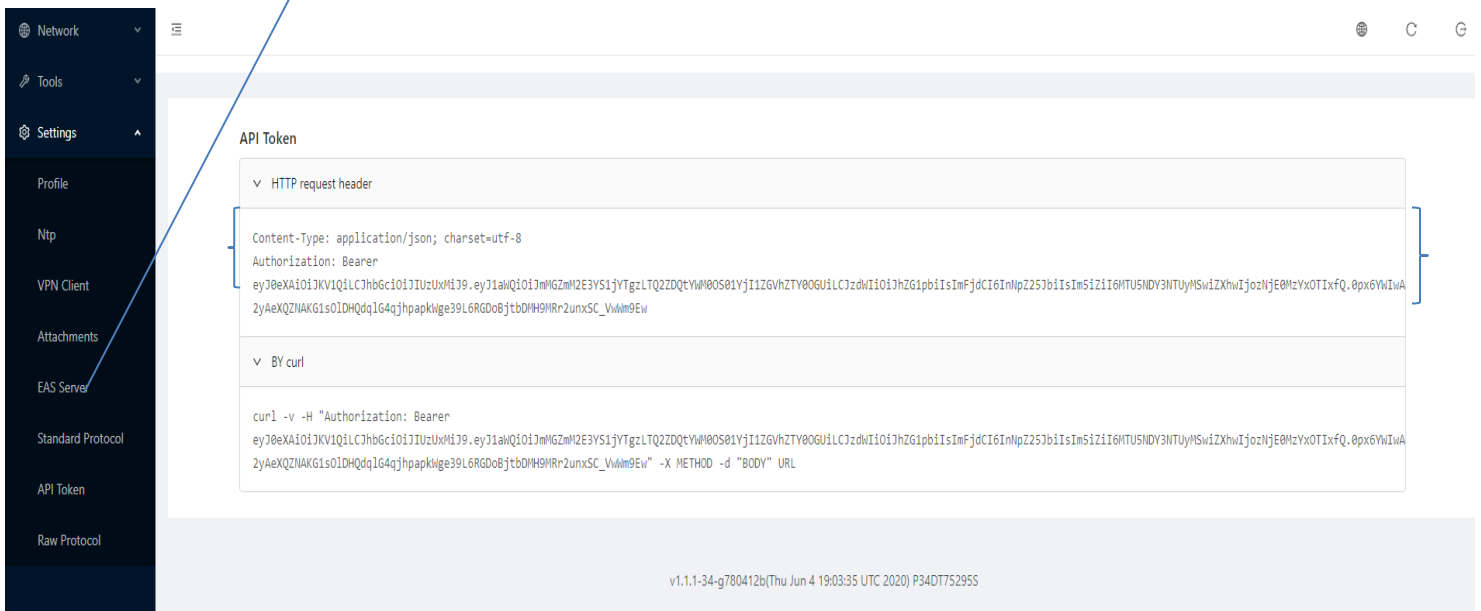
Submit

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5. LED Sign Programming

E. Sign API Token

1. Click on API Token on the left vertical navigation bar.
2. Copy the Token inside the “HTTP request header” panel. The Token is the long string of variable characters that start after the line containing “Authorization: Bearer”.
3. Store the Token in a document for later reference for this individual sign.



6. Controller Programming

F. Controller Login

1. Navigate in browser window to URL of controller, which is “http://” plus the IP Address of the controller plus “/my/” (ie: “http://192.168.100.1/my/”)
2. Default credentials are Username: admin , Password: admin , Click Submit when done.



Sign in

* Username:

* Password:

Submit

v1.1.1-34-g780412b(Thu Jun 4 19:03:35 UTC 2020) P34DT75295S

6. Controller Programming

G. Controller Network

1. Click on Ethernet on the left vertical navigation bar.
2. Enter the controller's static IP Address, subnet mask, gateway, and DNS fields as required. Click Submit to save.

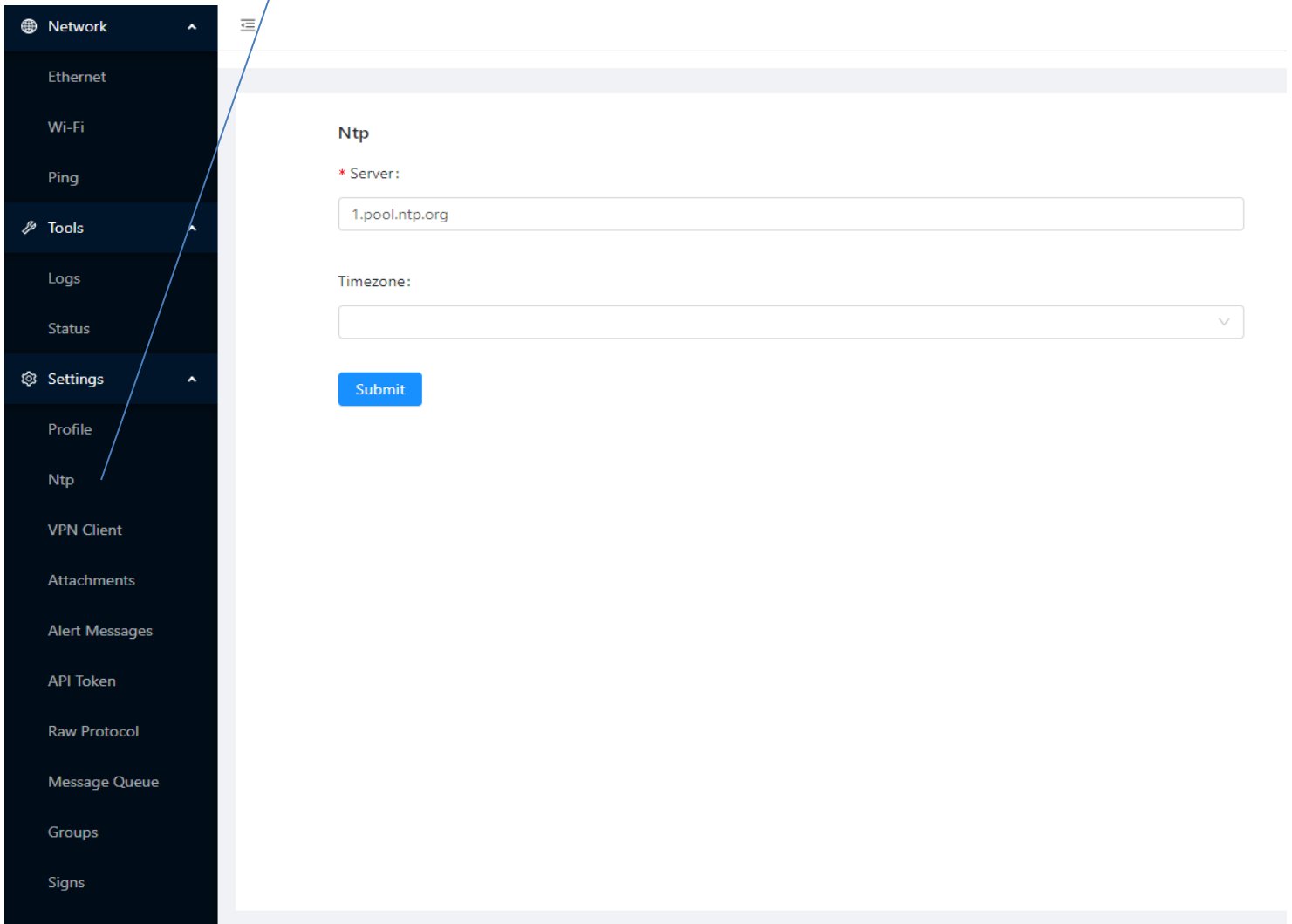
The screenshot displays the 'Network' configuration page in a web interface. On the left, a dark sidebar contains a navigation menu with 'Network' at the top, followed by 'Ethernet', 'Wi-Fi', and 'Ping'. Below these are 'Tools' and 'Settings', each with a dropdown arrow. A blue arrow points from the 'Ethernet' option in the sidebar to the 'Ethernet' section in the main content area. The main content area has a light gray header with the title 'Ethernet'. Below the header, there is a section titled 'Ethernet' containing the following fields:

- Enable DHCP Client:** A checkbox that is currently unchecked.
- Static IP Address:** A section with five required fields, each marked with a red asterisk:
 - * IP Address:** A text input field containing '192.168.100.34'.
 - * Netmask:** A text input field containing '255.255.255.0'.
 - * Gateway:** A text input field containing '192.168.100.1'.
 - * DNS1:** A text input field containing '8.8.8.8'.
 - * DNS2:** A text input field containing '8.8.4.4'.
- Submit:** A blue button located at the bottom of the form.

6. Controller Programming

H. Controller NTP

1. Click on Ntp on the left vertical navigation bar.
2. Enter the controller's NTP server address (ie: "1.pool.ntp.org").
3. Select the Timezone in the drop-down list. Click Submit to save.



The screenshot shows a web interface for configuring NTP. On the left is a dark navigation bar with a list of menu items: Network, Ethernet, Wi-Fi, Ping, Tools, Logs, Status, Settings, Profile, Ntp, VPN Client, Attachments, Alert Messages, API Token, Raw Protocol, Message Queue, Groups, and Signs. The 'Ntp' item is highlighted with a blue line pointing to the main content area. The main content area has a title 'Ntp' and two fields: 'Server:' with a text input containing '1.pool.ntp.org' and 'Timezone:' with a dropdown menu. A blue 'Submit' button is located below the fields.

Network

Ethernet

Wi-Fi

Ping

Tools

Logs

Status

Settings

Profile

Ntp

VPN Client

Attachments

Alert Messages

API Token

Raw Protocol

Message Queue

Groups

Signs

Ntp

* Server:

1.pool.ntp.org

Timezone:

Submit

6. Controller Programming

I. Controller Alert Messages

1. Click on Alert Messages on the left vertical navigation bar.
2. Select “Button 1” from Button drop-down list.
3. Uncheck the “Send messages immediately” Click Submit to save.
4. Repeat from step a for all remaining Buttons 2- 32 from Button drop-down list.

The screenshot shows the CAPSOL web interface. On the left, a dark navigation bar contains the following items: Network, Ethernet, Wi-Fi, Ping, Tools, Logs, Status, Settings, Profile, Ntp, VPN Client, Attachments, Alert Messages (highlighted), API Token, Raw Protocol, Message Queue, Groups, Signs, and Routers. The main content area is titled 'Alert Messages' and contains the following form fields:

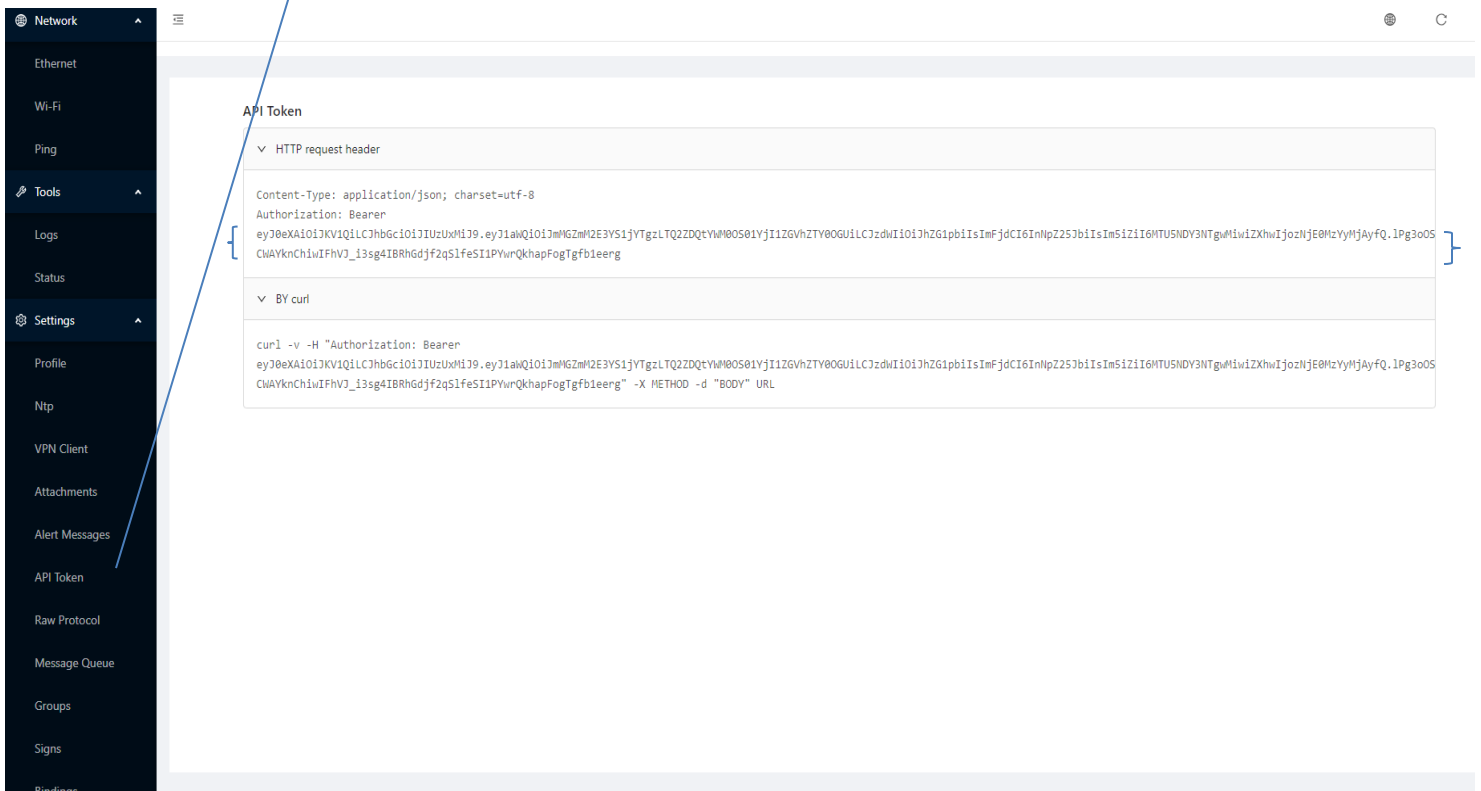
- * Button: A dropdown menu with a downward arrow.
- * Title: A text input field.
- * Body: A large text area with a small icon in the bottom right corner.
- Filename: A dropdown menu with a downward arrow.
- * To: A dropdown menu with a downward arrow.
- ☒ Send message immediately
- Submit: A blue button.

Blue lines from the instructions point to the 'Alert Messages' menu item, the 'Button' dropdown, the 'Send message immediately' checkbox, and the 'Submit' button.

6. Controller Programming

J. Controller API Token

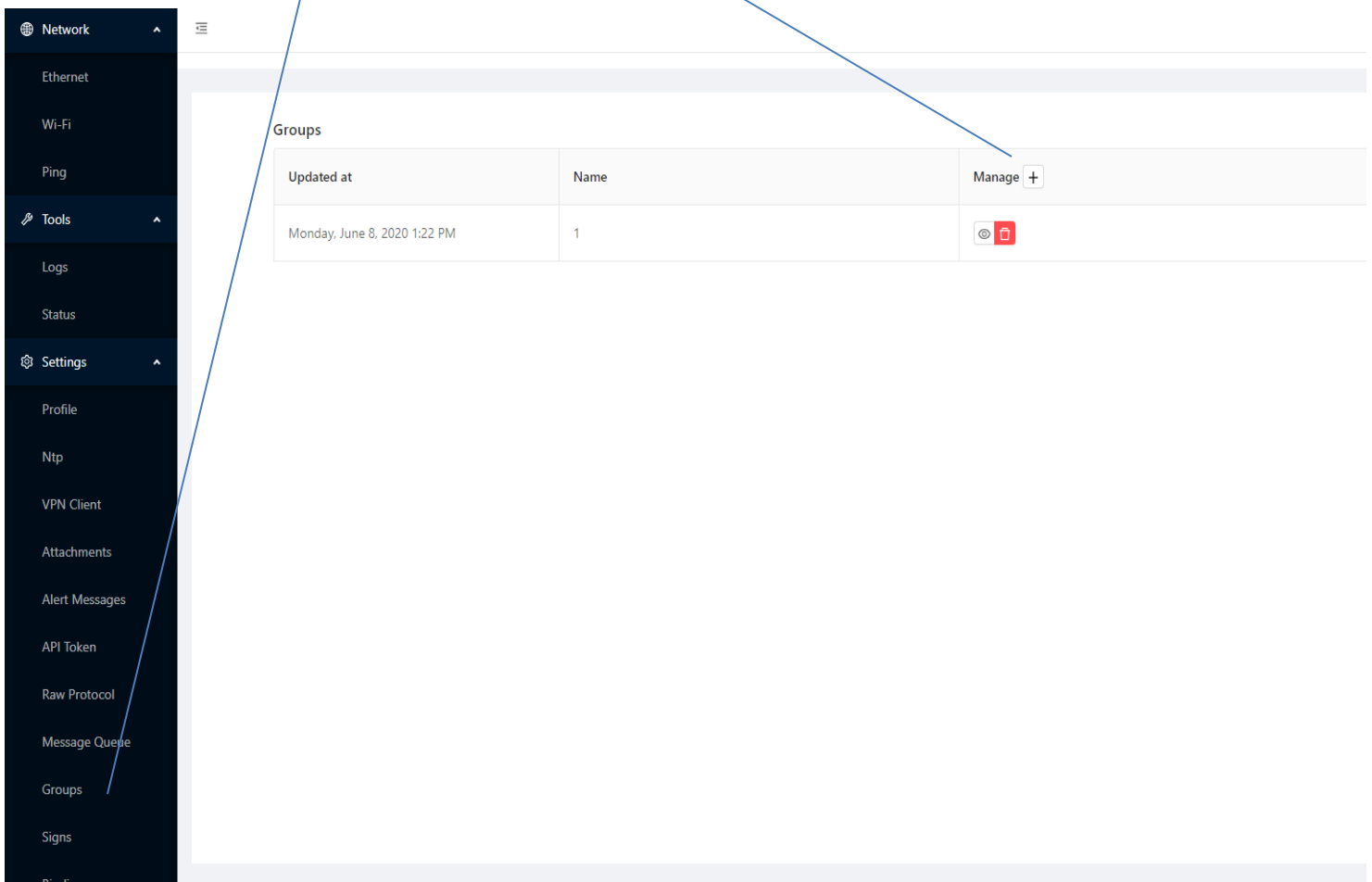
1. Click on API Token on the left vertical navigation bar.
2. Copy the Token inside the “HTTP request header” panel. The Token is the long string of variable characters that start after the line containing “Authorization: Bearer”.
3. Store the Token in a document for later reference for this individual controller.





6. Controller Programming

K. Controller Groups

- Click on Groups on the left vertical navigation bar.
- Here you can view, create, and delete sign Groups
- Give each Group a name unique on that controller, and which is an integer (i.e.: 1, 2, 3, etc.)



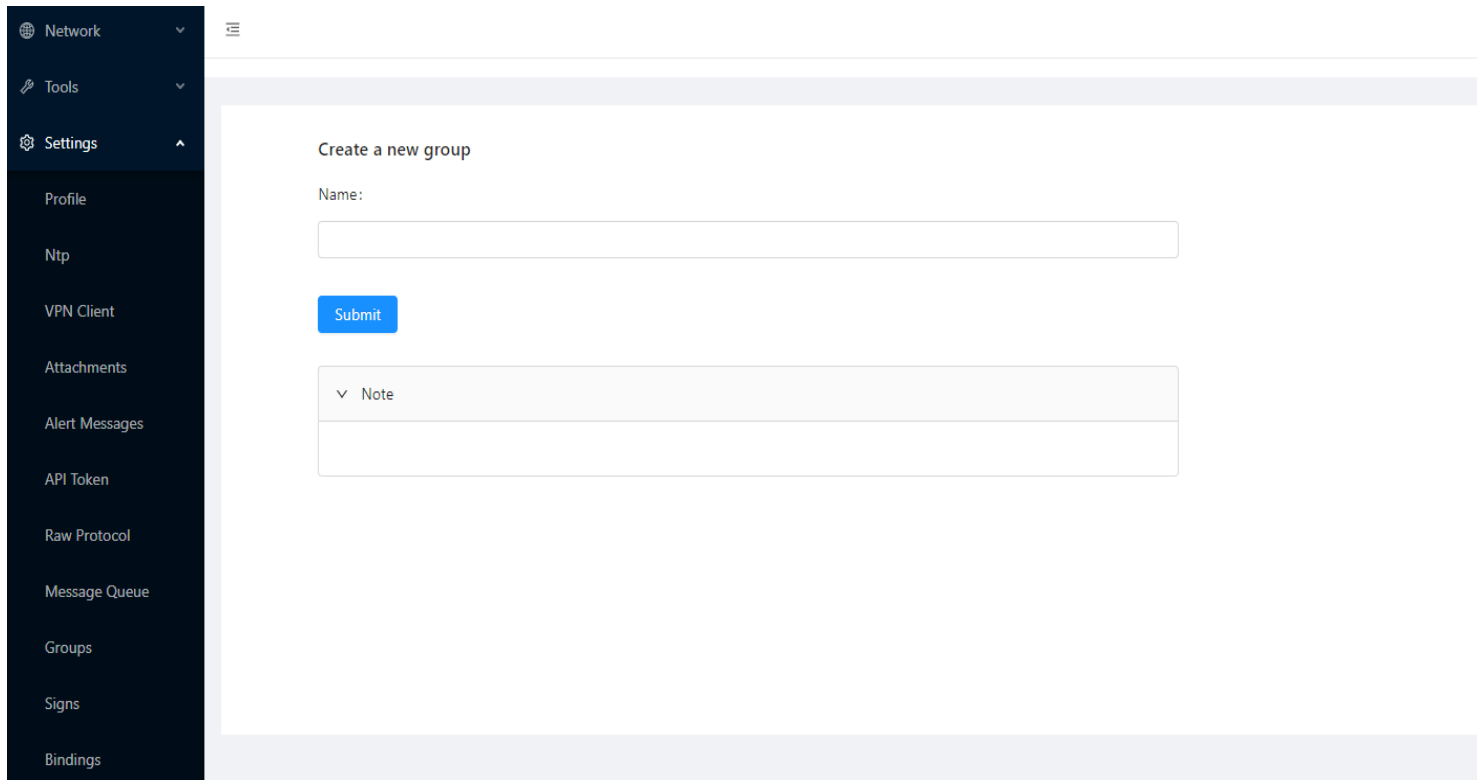
The screenshot displays the Capsol web interface. On the left, a dark navigation sidebar contains a list of menu items: Network, Ethernet, Wi-Fi, Ping, Tools, Logs, Status, Settings, Profile, Ntp, VPN Client, Attachments, Alert Messages, API Token, Raw Protocol, Message Queue, Groups, Signs, and Bindings. The 'Groups' item is selected and highlighted. The main content area, titled 'Groups', contains a table with the following data:

Updated at	Name	Manage
Monday, June 8, 2020 1:22 PM	1	 

6. Controller Programming

L. Controller Create Group

1. After clicking to create a new Group this screen is visible.
2. Give the Group a name unique on that controller, and which is an integer (i.e.: 1, 2, 3, etc.). Click “Submit” to save.





The screenshot shows a web application interface for creating a new group. On the left is a dark sidebar with a menu containing: Network, Tools, Settings (expanded), Profile, Ntp, VPN Client, Attachments, Alert Messages, API Token, Raw Protocol, Message Queue, Groups, Signs, and Bindings. The main content area is titled 'Create a new group' and contains a 'Name:' label followed by a text input field. Below the input field is a blue 'Submit' button. At the bottom of the form is a 'Note' section with a dropdown arrow and the word 'Note'.

6. Controller Programming

M. Controller Signs

1. Click on Signs on the left vertical navigation bar.
2. Here you can view, and delete signs bound to this controller
3. Clicking the “eye” for a sign will display which Group on this controller that sign has already been assigned.
4. Each sign will have the sign’s Name display here on each row (i.e.: “REACT-V3-78C07D”).
5. Store the sign Name in a document for later reference for each sign, with each respective previously stored sign Token.

Signs

Updated at	Name	Host	Manage
Monday, July 13, 2020 4:31 PM	REACT-V3-78C07D	192.168.100.35	 

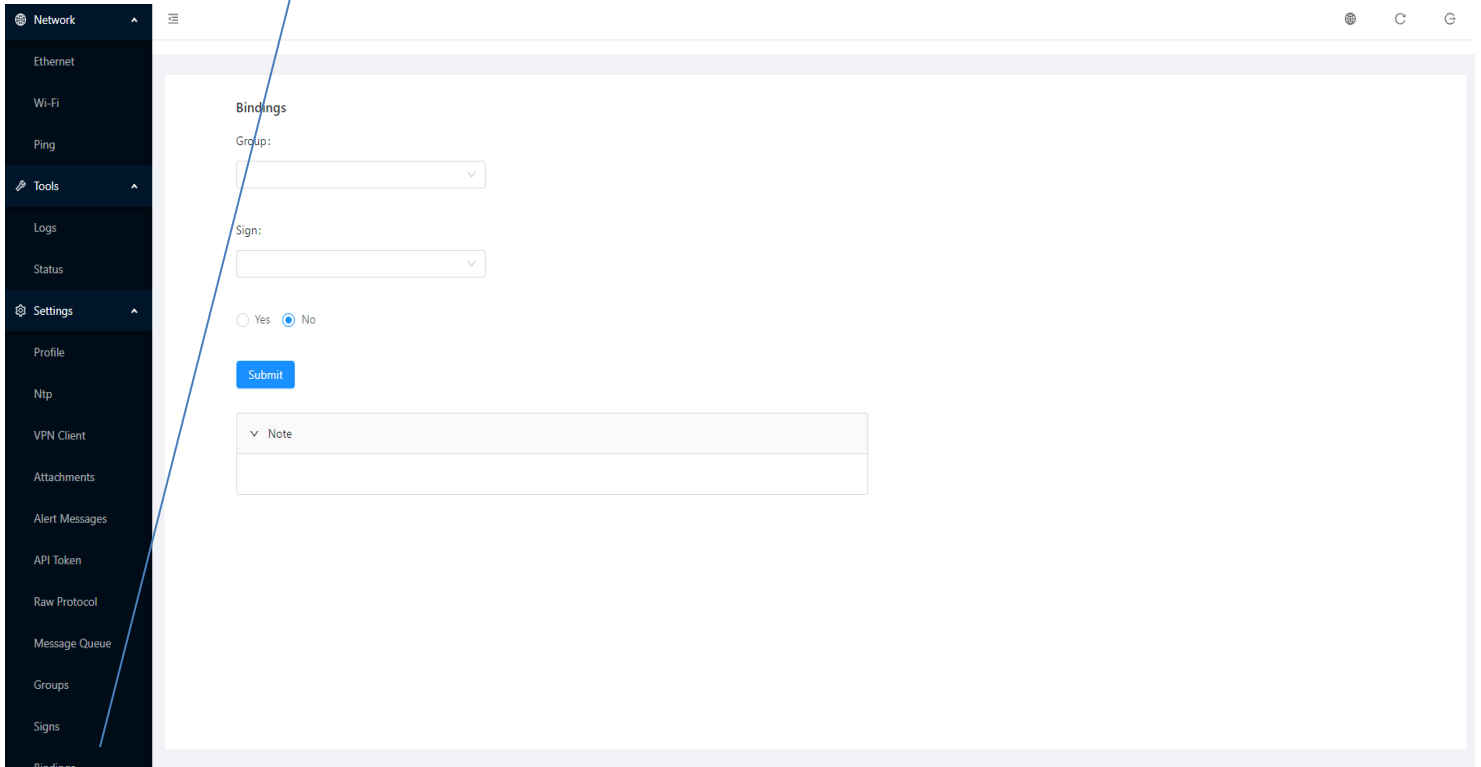
< 1 >

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6. Controller Programming

N. Controller Bindings

1. Click on Bindings on the left vertical navigation bar.
2. Here you bind this controller's associated Signs to this controller's created Groups.
3. Select a group from the Group drop-down list.
4. Select a sign from the Sign drop-down list.
5. Select the "Yes" radio button. Click "Submit" to save.



The screenshot displays a web-based configuration interface for a network device. On the left is a dark vertical navigation bar with the following menu items: Network, Ethernet, Wi-Fi, Ping, Tools, Logs, Status, Settings, Profile, Ntp, VPN Client, Attachments, Alert Messages, API Token, Raw Protocol, Message Queue, Groups, and Signs. The 'Settings' menu item is expanded, and the 'Bindings' section is selected. The main content area is titled 'Bindings' and contains the following fields: a 'Group:' dropdown menu, a 'Sign:' dropdown menu, two radio buttons labeled 'Yes' and 'No' (with 'No' selected), a blue 'Submit' button, and a 'Note' section with a dropdown arrow and a text input field. A blue line from the second step of the instructions points to the 'Sign:' dropdown menu.

CAPSOLControl

CAPSOLControl is a powerful and flexible system.

As a stand-alone system, CAPSOLControl can integrate with multiple dry contact type inputs such as panic buttons or fire alarm activation.

As a complete integrated platform, CAPSOLControl provides unparalleled flexibility. Integrating to other third-party systems is possible and further expands CAPSOLControl's capabilities.

For API Integration, contact CAPSOL for features or development costs that may apply.

For assistance, please give us a call.

CAPSOL

1-913-203-1110



CAPSOL is a See Something – Say Something Partner

