



User Guide

Release 1

Release History

<i>Release</i>	<i>Release Date</i>	<i>Description of Changes</i>
1	8/19/2024	Initial Release

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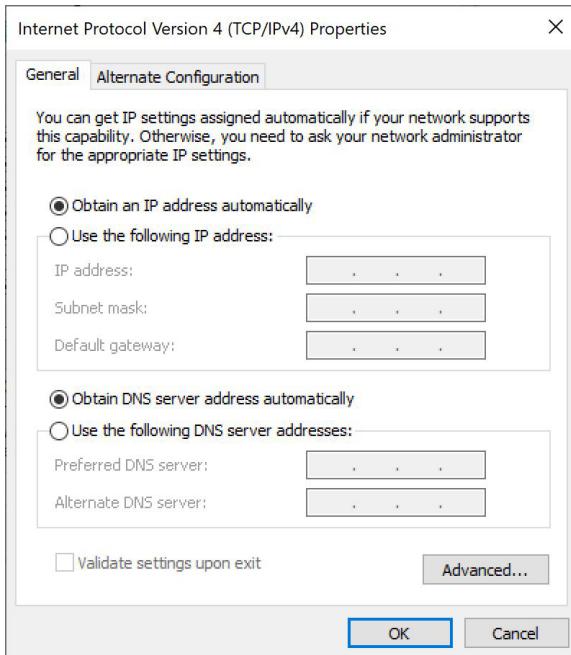
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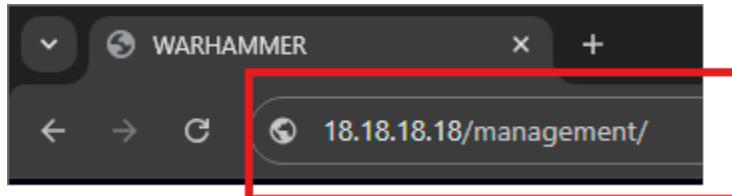
Login

To access the WARHAMMER user interface:

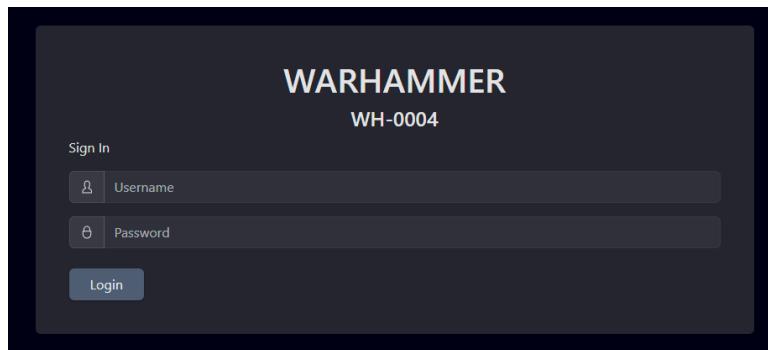
1. Apply power to WARHAMMER unit via the provided power supply.
2. Connect an Ethernet cable from your computer to either of the WARHAMMER's ports.
3. Set wired interface to "Obtain an IP Address Automatically".



4. Open an internet browser and navigate to the following: **18.18.18.18/management**



5. Login with the provided credentials:



Note: If you are not a user with administrative privileges, you can skip the next section.

Configuration

The Configuration page is divided into two sections titled *Update WARHAMMER* and *User Management*. This page allows a user with administrative privileges to perform any one or more of the following actions:

1. Software Update
2. Add/Delete User
3. Change Password

The screenshot shows the WARHAMMER Configuration interface. On the left, a sidebar lists options: WARHAMMER Network, Cellular, Location, Diagnostics, and Configuration. The main area has a title bar "WH-0004" and a timestamp "35.545834_81.004125".

Software Update: A form titled "Update WARHAMMER" contains fields for "Choose File" (with "No file chosen"), "Optional enter checksum", and a "Update" button.

User Management: A table titled "User Management" lists users with columns: Username, Active, Role, Last Login, and Actions. It shows two entries: "admin" (Active, admin, last login 8/18/2024, 1:36:23 PM) and "warhammer" (Active, user, last login 8/18/2024, 1:14:23 PM). The "Actions" column for each row includes "Change Password", "Deactivate", and "Delete".

At the bottom, there are "User Guide" and "Logout" buttons, and a note "Powered by CTG".

Software Update

If a software update is required, select “Choose File”, select the appropriate update file, then select “Update”. After approximately 10 seconds, logout and refresh your browser. The update will be applied upon the next user login.

User Management

This section allows the admin user to add/delete users and change passwords. Selecting “Change Password” will prompt the user to enter the current password, followed by the new password. These changes will take effect upon the next login session.

The screenshot shows the "User Management" table from the Configuration page. The columns are: Username, Active, Role, Last Login, and Actions.

Username	Active	Role	Last Login	Actions
admin	Yes	admin	8/18/2024, 1:36:23 PM	<button>Change Password</button>
warhammer	Yes	user	8/18/2024, 1:14:23 PM	<button>Change Password</button> <button>Deactivate</button> <button>Delete</button>

WARHAMMER Network

The WARHAMMER Network page acts as both a dashboard and the primary location to control your network settings. It's divided into two sections titled Network Interfaces and WARHAMMER Network Peers.

The screenshot shows the WARHAMMER Network dashboard. On the left, a sidebar menu includes 'WARHAMMER Network' (selected), 'Cellular', 'Location', 'Diagnostics', and 'Configuration'. Below the sidebar are 'User Guide' and 'Logout' buttons. The main content area is titled 'WH-0004'. It displays 'Network Interfaces' with three entries: 'Static' (IP 18.18.18.18), 'Bridged Ethernet' (IP 10.4.100.1), and 'WARHAMMER Network' (IP 44.44.44.4). There are 'Add Address' and 'Remove Address' buttons. To the right is a section titled 'WARHAMMER Network Peers' listing nodes: WH-0001, WH-0002, WH-0003, WH-0004, WH-0105, and X-Relay-Node, each with a timestamp. A 'Disable VPN' button is at the top of this section. At the bottom right is a 'Powered by CTG' logo.

Network Interfaces

The default network interface configuration bridges the two ethernet ports. This allows the user the ability to get to the user interface via both ethernet ports.

This is the suggested configuration if utilizing the cellular radio to access the WARHAMMER Network. If accessing the WARHAMMER Network via ethernet, simply click the “Disable Ethernet Bridge” and connect the internet servicing ethernet cable into port 1 of the WARHAMMER.

The screenshot shows the 'Network Interfaces' table. It has three rows: 'Static' (IP 18.18.18.18), 'Bridged Ethernet' (IP 10.4.100.1), and 'WARHAMMER Network' (IP 44.44.44.4). To the right of the table are 'Add Address' and 'Remove Address' buttons. A 'Disable Ethernet Bridge' button is located above the table.

Bridged Ethernet (Default)

The screenshot shows the 'Network Interfaces' table. It has five rows: 'Static' (IP 18.18.18.18), 'Port 1' (IP 192.168.38.73), 'Port 2' (IP 10.100.100.1), and 'WARHAMMER Network' (IP 44.44.44.100). To the right of the table are 'Add Address' and 'Remove Address' buttons. An 'Enable Ethernet Bridge' button is located above the table.

Unbridged Ethernet

To add an IP address to the Bridged Ethernet or Port 2, click on the “Add Address” button. This will open a dialog box that will allow you to enter an IP address. It is necessary to add IP addresses to the WARHAMMER so that they are in the same network as the LAN. You can add multiple IP addresses.

The removal of IP addresses from the Bridged Ethernet or Port 2, select “Remove Address” and then select the IP address you'd like to remove and select “Remove”.

WARHAMMER Network Peers

WARHAMMER Network Peers		Disable VPN
WH-0001	8/18/2024, 7:13:14 AM	▼
WH-0002	8/18/2024, 7:12:57 AM	▼
WH-0003	8/17/2024, 7:21:08 PM	▼
WH-0004	8/17/2024, 7:19:07 PM	▼
WH-0105	8/18/2024, 12:57:08 PM	▼
X-Relay-Node	8/5/2024, 10:56:57 PM	▼

This section offers a quick reference for all currently connected WARHAMMERS on the network. It displays each WARHAMMER's name and the date/time it first joined. Only active connections are shown, and the list automatically updates within a few seconds when a WARHAMMER disconnects.

Route Status

To view existing routes, click on any WARHAMMER peer to expand its details. From there, you can manage routes or access the web interface of a remote peer.

WH-0001	
Demo	192.168.1.0/24
Route Name	Network
Warhammer UI - WH1	44.44.44.1/32
WH1	10.1.100.0/24

Add/Remove Route

To add a route to WARHAMMER, enter a name, input the route IP address in CIDR notation (e.g., 192.168.1.0/24), and click "Add Route." The new route will then appear in the route status. You can enable or disable the route using the toggle switch. To remove it, click the red trash can icon.

WARHAMMER Network Peers		Disable VPN
WH-0001	8/18/2024, 7:13:14 AM	▲
<input type="text"/> Network Name	<input type="text"/> CIDR Range or Address	Add Route
Route Name	Network	Enabled
Demo	192.168.1.0/24	<input checked="" type="checkbox"/>
Warhammer UI - WH1	44.44.44.1/32	<input checked="" type="checkbox"/>
WH1	10.1.100.0/24	<input checked="" type="checkbox"/>

Cellular

This page is divided into two sections to help you manage your cellular network settings. The first section provides detailed information about your current cellular connection, while the second section allows you to view and configure Access Point Name (APN) settings.

Status

This section provides key information about your cellular connection, including its current status, Radio Access Technology (e.g., GSM, LTE), signal quality, and mobile network operator. The connection can be in one of four states:

The screenshot shows the WARHAMMER Network management interface. The top navigation bar includes links for WARHAMMER Network, Cellular, Location, Diagnostics, and Configuration. The main title is "WH-0004". The left sidebar has a "Status" section with details like Phone Number (+1 754 801 8878), IMEI (862636051174645), IMSI (310280069108739), State (CONNECTED), Technology (LTE), Operator Name (AT&T), and Signal Strength (-99 dBm). Below this is a "Connections" section with a table:

Name	Connection Status	State	Type
att	CONNECTED	activated	GSM
fi	NOT CONNECTED		GSM

At the bottom, there is a form for adding a new connection with fields for Name, APN, Username, and Password, along with "Add Connection" and "Cancel" buttons. The footer includes "User Guide" and "Logout" links, and a note "Powered by CTG".

- SIM Missing:** This occurs when the device does not detect a SIM card in the slot or if the SIM card is not properly recognized.
- Registering:** The device is in the process of connecting to the mobile network after detecting a valid SIM card.
- Registered:** The device has successfully connected to the mobile network and is ready for communication.
- Connected:** The device is fully connected and actively transmitting and receiving data over the mobile network.

Connections

This section shows a list of manually added APN configurations. Each entry represents a unique set of settings that your device needs to connect to the internet through a specific cellular network.

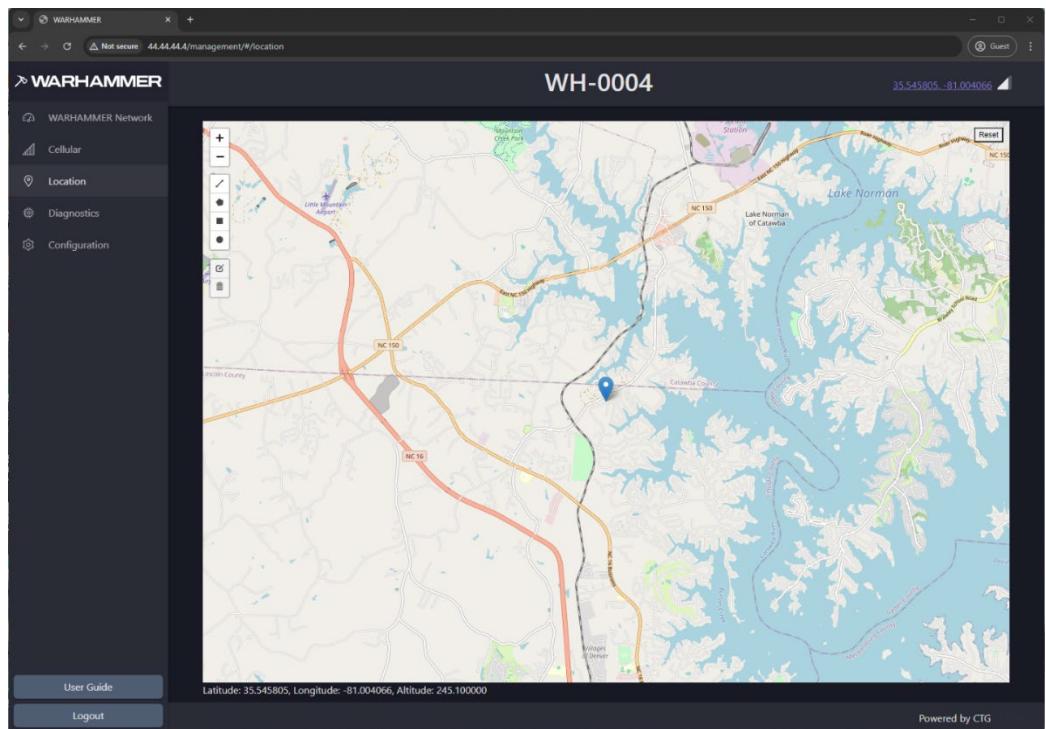
Manual APN Entry

To configure your cellular network connection, enter a name in the "Name" field and the correct APN for the inserted SIM card. Then, click "Add Connection." Note that not all cellular providers require a Username and Password. If your provider does not require these, simply leave those fields blank.

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Location

This page displays the current location of your local device and updates every 5 seconds. This information is available only if the WARHAMMER can detect Global Positioning System (GPS) satellites.



Diagnostics

The WARHAMMER Network Test feature allows users to measure the data transfer speed between WARHAMMERS, helping evaluate network performance and data transmission capabilities. To begin, select a peer device from the drop-down list and click the "Run" button.

Timestamp	Sun, 18 Aug 2024 21:39:19 GMT
Remote Host	44.44.44.2
Number of Streams	1
Test Duration	10s
Throughput	8.92 Mbit/s 10.14 Mbit/s

The test will run for 10 seconds, measuring data transfer between your device and the selected peer. After completion, results will be displayed on the screen, including both download and upload speeds. This information aids in assessing network efficiency and identifying potential bandwidth issues. Keep in mind that speed test results can vary due to network conditions and capabilities.