HERA 600 Series User Guide

Document Reference: 8438

July 2017

Version: 2

Version Number	Date	Author	Changes
1	Feb 2017	Sam Smith	Updated from 8193 for the new Hera 604 router
2	Jul 2017	Sam Smith	Branding updated

Thank you for choosing the

Eseye™ Dataflex Hera600 Series Router

All Eseye Dataflex products are M2M-grade and utilise the AnyNet SIM globally managed cellular connectivity (eseye.com). Please note: there are so many different connected applications for which this router can be deployed that not all can be included all in this document. We do however regularly add to the suite of Hera600 Series user guides, and you need information that you do not find here please contact support@eseye.com .

This guide has been written for use by technically competent persons with a good understanding of the communications technologies used for 3G and Wi-Fi router products; and of the requirements for their specific application

This document is a companion to the *Quick Start guide* which came with your product and describes its features. Specifically, it will provide you with more information on how to configure your Hera600 Series device to work with your existing network infrastructure.

Eseye Dataflex Hera600 Series products are available in a range of form factors.
All models can be configured by command line (CLI), web interface (HTTP or HTTPS) or via an approved management system such as SNMP or a TR-069 platform.

Important

The contents of this document are subject to revision without notice due to continued developments in methodology, design, and manufacturing.

This document assumes that the Hera600 Series router is preloaded with configuration: 1032-4 Wi-Fi Secure, if this is not the case the default LAN IP address, username, password and other elements of may differ from this guide.

Make sure you are using the latest information by downloading the latest version of this document from www.eseye.com

Contents

1 Introduction

The Hera600 Series is a 2G, 3G, and 4G enabled Wi-Fi router with embedded Eseye AnyNet SIM card to provide resilient service and ensure connectivity worldwide.

Tough and durable, the Hera600 Series comes encased in rugged aluminium and is suitable for direct mounting and secure installations.

The router is encryption capable and adheres to Eseye Dataflex's strict quality assurance standards to ensure excellent data security, connection reliability and continuation of service. Your Hera600 Series connected equipment can be monitored, accessed and reconfigured remotely, without physically mobilising staff and resources to sites.

1.1 Out of the Box

The standard Hera600 Series product includes the following items:

1. HERA604 router
2. Mains adapter (dependent upon location)
3. RJ45 Ethernet cable
4. GSM antennae (sizes are dependent upon specification at purchase)
5. Wi-Fi Antennae (Wi-Fi units only)
6. SIM slot cover
7. Quick start guide

The package can be modified upon customer request.

1.2 What you need to configure your Hera600 Series router

All Hera600 Series routers are shipped preconfigured unless requested otherwise by the customer.

However should you wish to make changes please ensure you have the following available:

1. Username and password details for the router
2. Eseye or other Mobile Network provider APN details
3. SIM number(s) (starting with 89XXXXXXXX…)
4. Your LAN network details
5. Your IP Address (if working remote from the device)

1.3 Quick Start Guide

To configure the device use the *'Quick Start Guide'* supplied in the router box, for a soft copy of this guide navigate to: https://www.eseye.com/wp-content/uploads/8435-Hera-600-Series-Quick-Start-Guide.pdf.

The Quick Start Guide details the following additional information that has not been included in this user guide:

- Declaration of Conformity
- How to connect physical connectors (including external SIM cards)
- Installation limitations
- Front panel indicators (LED lights)
- Warnings
- Warranty information

1.4 Frequently asked Questions

1.4.1 How do I configure the router to use my SIM?

Section 3.5.4 of this manual details how to configure a cellular connection with your SIM.

Complete the following steps:

Up to three SIMs can be set up simultaneously.

1. Ensure the router is powered off
2. Insert your SIM card(s) noting which SIM is in which SIM slot
3. Power the router on
4. Using the GUI navigate to Basic Settings > Mobile Network > Connection
5. Enable the mobile connection
6. If required enable the diversity antenna
7. Unless you are planning to configure multiple WAN connections ie Ethernet, Metric can be left at default
8. For each SIM card, add and complete a cellular profile table row, ensuring the SIM slot noted earlier is selected, and the relevant APN, username and password are set according to the requirements of the cellular provider
9. Press Save

It is advisable to check the configuration of the Health Monitor (see 3.8.1) to avoid the Health Monitor failing its ping test following configuration changes.

1.4.2 How do I manually swap between two SIMs?

Section 3.5.1 of this manual details how to manually manage your cellular connections.

1. Using the GUI navigate to Basic Settings > Mobile Network > Connection
2. Use the Active column to select the desired SIM profile
3. Press Save

1.4.3 How do I set up the Health Monitor to monitor my cellular connection?

Section 3.8.1 of this manual details how to configure the Health Monitor application.

1. Using the GUI navigate to Diagnostics & Maintenance > Health Monitor > General Settings
2. Using section 3.8.1.1 as a guide complete the form
3. Press Save
4. Navigate to Diagnostics & Maintenance > Health Monitor > Settings for each WAN interface
5. Ensure that the Health monitoring switch is enabled
6. Press Save

The ping address must be accessible via the monitored cellular path. The standard Eseye configuration pings a server within the Eseye private network, this cannot be used if using another providers SIM card connectivity.

2 Interfaces

2.1 Wired Interfaces

The Hera600 Series products have four 10 / 100 Mb/s Ethernet connectors, these can be used to connect to other devices such as computers, video cameras and sensors. Each port is autosensing so either a straight or crossover CAT5 cable can be used.

These ports can be enabled to act as either an Ethernet switch or a VLAN switch. When using an Ethernet switch all the ports are effectively tied together internally. When using a VLAN switching, each port may be allocated a specific function such as a De-Militarised Zone (DMZ) uplink to an external WAN interface (e.g. DSL, satellite, fibre, etc).

Some Hera600 Series products may support serial connections for connection to industrial equipment and legacy devices. Further use cases and how to implement this function are found in other documents.

2.2 Wireless Interfaces

Hera600 Series products can be specified with a Wireless LAN (WLAN) capability to allow computers and telemetry devices to be wirelessly connected.

The wireless capability depends on the product within the Hera 600 series.

2.2.1 Hera 604 Wireless Interfaces

- 802.11a upto 54Mbps
- 802.11b upto 11Mbps
- 802.11g upto 54Mbps
- 802.11n upto 300Mbps
- 2.4Ghz & 5Ghz Non Concurrent

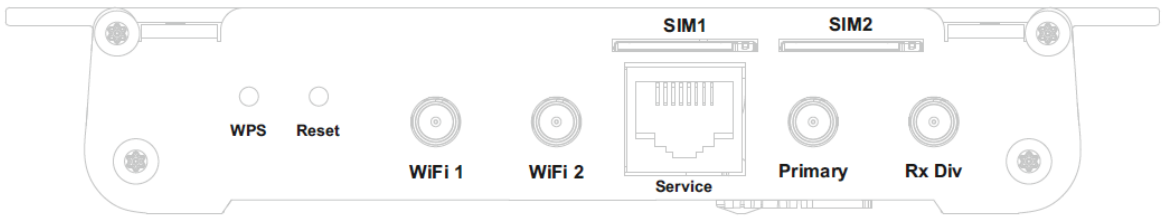
2.3 Mobile Interfaces

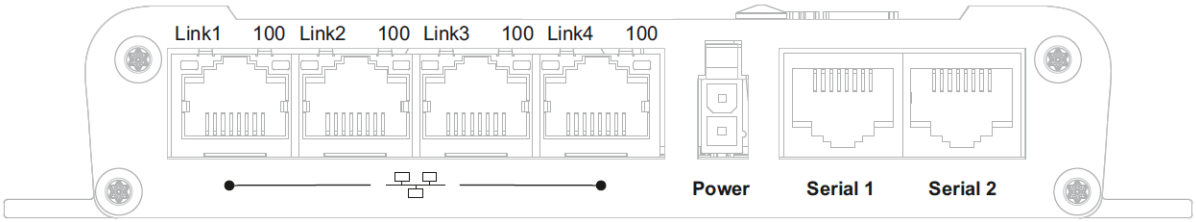
Hera600 Series products support a wide range of 2G/3G/4G/LTE cellular options. The following displays the current specifications of the products.

2.4 Physical Ports Connections

There are various connectors for different services and the type and quantity will vary depending on the product supplied to you.

Below are diagrams of the front and back of the HERA 604 router, a three SIM router (the third SIM is an embedded SIM).





2.4.1 Power Connector

It is important that only an approved power adapter is used.

2.4.2 Cellular SIM card slots

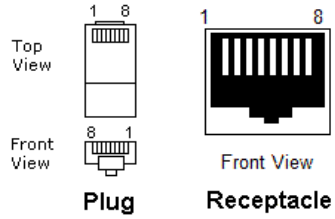
There are three SIM card options on the HERA604 router:

- Internal MFF AnyNet CHIP SIM
- SIM Slot 1, this fits a 2FF plastic SIM
- SIM Slot 2, this fits a 2FF plastic SIM

2.4.3 Service connection

On all router products there is a FCC-68 8p8c socket (V.28) used for service and diagnostics. The connector is specific to the product and it can be obtained from your supplier. It is recommended that only an approved connector adapter is used.

The Serial Console port supports the following signals:



Pin #	Direction	RS232 DCE	Description
1	N/C		
2	N/C		
3	OUT	RxD	Receive Data
4	GND	GND	Ground
5	N/C		
6	IN	TxD	Transmit Data
7	N/C		
8	N/C		

This port has the following specifications:

- At minimum 9600 baud shall be supported
- 8 data bit support
- 1 stop bit support
- No Parity will be supported
- No flow control will be supported

2.4.4 Data Connections

The FCC-68 8p8c LAN ports are 10/100Mbps auto-sense with the characteristics of a router/hub.

2.4.5 Wi-FI Connection

IAD supports a full Data Wireless Interface that supports 802.11.a/b/g/n specifications.

To connect computers, make sure that a wireless client adapter (WLAN client) is installed on each computer.

2.4.6 HERA604 LTE Models (EU & ROW)

LTE 800(B20)/900(B8)/1800(B3) /2100(B1)/2600(B7) Up to 100 Mbps Down Up to 50 Mbps Up

UMTS HSPA 850(B5)/900(B8)/1900(B2) /2100(B1) Up to 42 Mbps Down Up to 5.72 Mbps Up

GSM/GPRS/EDGE 850/900/1800/1900 Up to 236 Kbps

2.4.7 HERA604 LTE Models (USA)

LTE 700(B13)/700(B17)/AWS /850(B5)/900(B8)/1900(B2) /2100(B1) Up to 100 Mbps Down Up to 50 Mbps Up

UMTS HSPA AWS(B4)/850(B5)/900(B8) /1900(B2)/2100(B1) Up to 42 Mbps Down Up to 5.72 Mbps Up

CDMA 800(BC0)/1900(BC1) /1700(BC10) Up to 3.7 Mbps Down Up to 1.8 Mbps Up

GSM/GPRS/EDGE 850/900/1800/1900 Up to 236 Kbps

2.5 Other Interfaces

2.5.1 Wired Ethernet Uplink

It is possible to configure any one of the Ethernet ports as an uplink port (WAN). This can be configured on page Basic Settings > Ethernet WAN of the GUI 3.5.1.1 or through the configuration wizard at Setup Wizards > Network Connection in the GUI 3.4.1.

3 Configuration via Web Interface

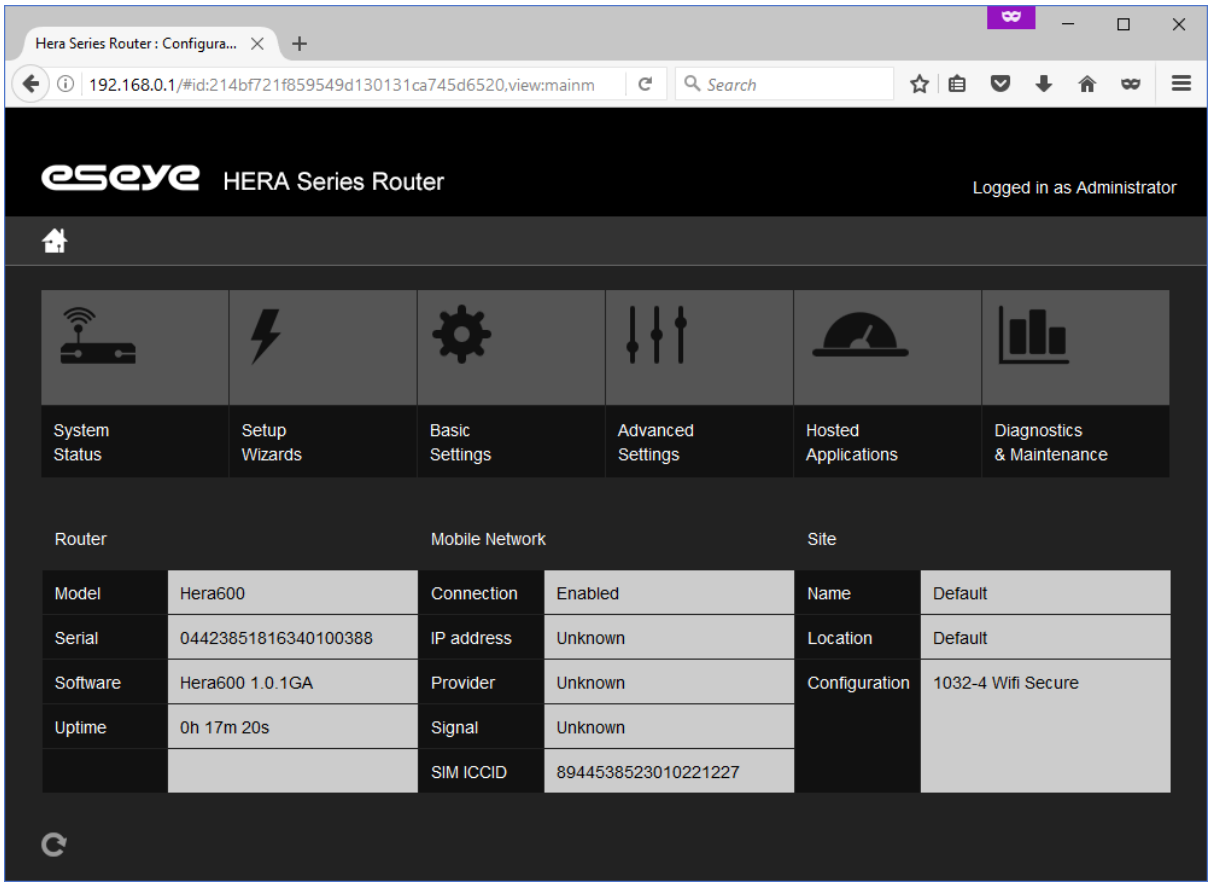
3.1 Homepage

After logging in you will be taken to the homepage. This page displays links to the following:

- System Status: contains status information for; the router, local area network, mobile network, and connected devices. 3.3
- Setup Wizards: contains easy to follow step-by-step configuration some functions and connections on the router 3.4
- Basic Settings: contains links to configure a router and its basic settings 3.5
- Advanced Settings: contains access to the configuration files 3.6
- Hosted Applications: contains configuration for any additional apps 3.7
- Diagnostics & Maintenance: contains links to the Health Monitor and file and user management 3.8

The homepage displays following read only information:

- Router: Model number
- Router: Serial number
- Router: Software version
- Router: Uptime
- Mobile Network: Cellular connection enabled state
- Mobile Network: Cellular IP address
- Mobile Network: Mobile Network Provider
- Mobile Network: Signal Strength
- Mobile Network: SIM ICCID
- Site: Name (editable at 3.5.1.2)
- Site: Location (editable at 3.5.1.2)
- Site: Configuration (editable at 3.5.1.2)



3.2 Frequently Used Buttons and Phrases

The following buttons will be displayed in the top right of the relevant pages:

- 'Save', displayed on editable pages, it is necessary to click 'Save' for any changes to take effect
- 'Reset', displayed on editable pages, click 'Reset' if you have made unsaved changes and wish to revert to the last saved version
- 'Help', displayed on all pages, click 'Help' to show possible actions on the page, and relevant definitions

The following button may appear on some pages:

- 'Refresh',  , displayed on all pages, click refresh to get the information displayed updated from the Hera.

Input areas can turn different colours:

- Blue, this input has been verified and is acceptable
- Orange this input has been verified and is not acceptable or if blank input is required before saving

3.3 System Status

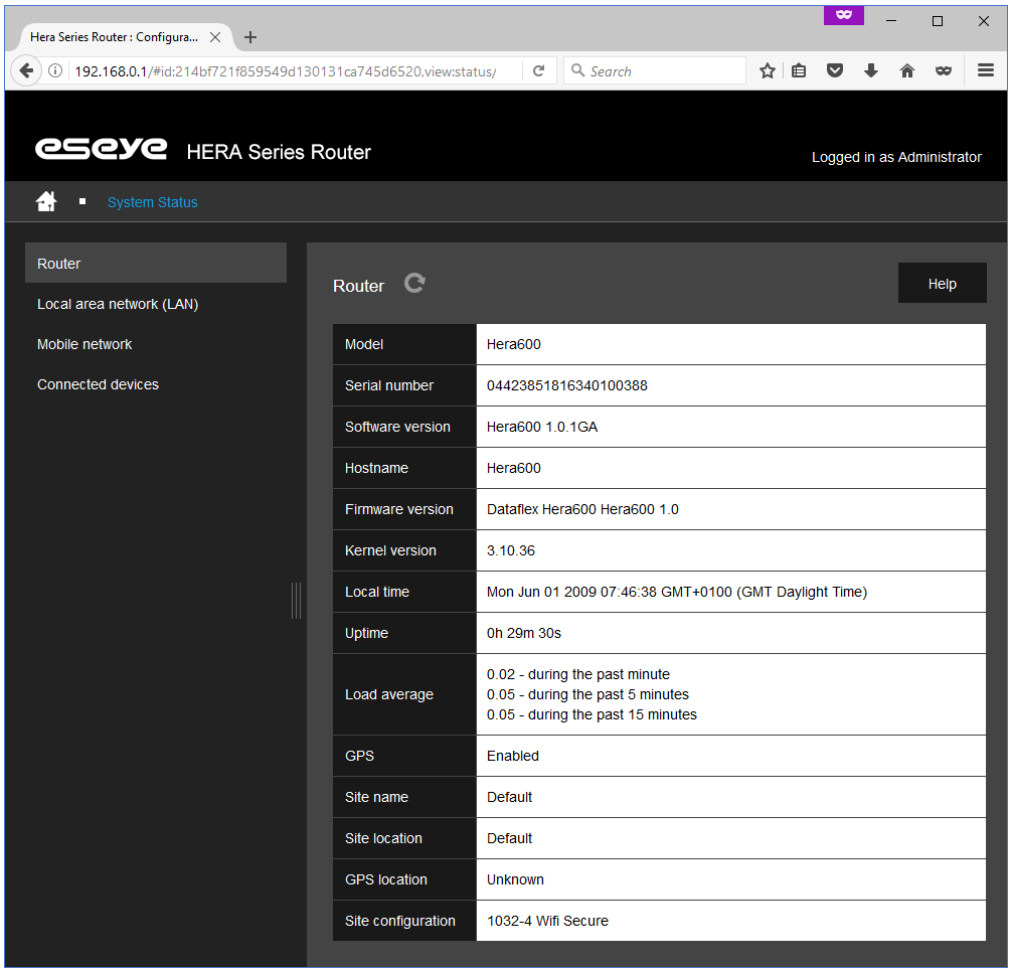
This page displays links to the pages for the following sections:

- Router 3.3.1
- Local area network (LAN) 3.3.2
- Mobile network 3.3.3
- Connected devices 3.3.4

3.3.1 Router

This page displays the following read only information:

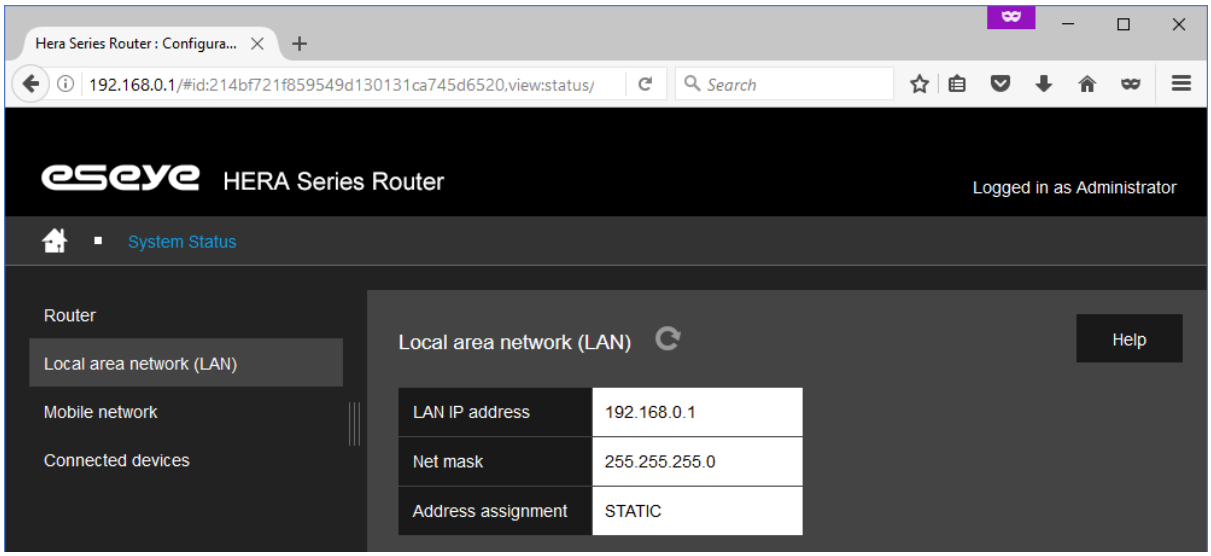
- Model (displays the router series)
- Serial number (is a long string of about 20 numbers, it is also found on the underside of the router on the label)
- Software version (displays the Eseye code for the current software)
- Hostname (displays the name given to the router)
- Firmware version (displays the Eseye code for the current firmware)
- Kernel Version (displays the Eseye code for the current kernel)
- Local time (the time at the device)
- Uptime (the amount of time elapsed since the router was last powered on)
- Load average (0 - 1)
    - during the past minute (this displays how busy the CPU was in the last minute)
    - during the past five minutes (this displays how busy the CPU was in the last five minutes)
    - during the past 15 minutes (this displays how busy the CPU was in the last fifteen minutes)
- GPS (shows whether Enabled or Disabled, editable at 3.5.1.2)
- Site name (set by the user for easy identification, editable at 3.5.1.2)
- Site location (set by the user for easy identification, editable at 3.5.1.2)
- GPS location (only visible when the GPS is enabled)
- Site configuration description (set by the user for easy identification of the current configuration, editable at 3.5.1.2)



3.3.2 Local Area Network (LAN)

This page displays the following read only information:

- LAN IP address (IPv4 address configuration is supported at 3.5.2.2)
- Netmask (IPv4 netmask)
- Address assignment (this displays how the address was assigned, static denotes manual configuration and DHCP denotes automatic configuration from a DHCP server on the LAN, editable at 3.5.2.2)

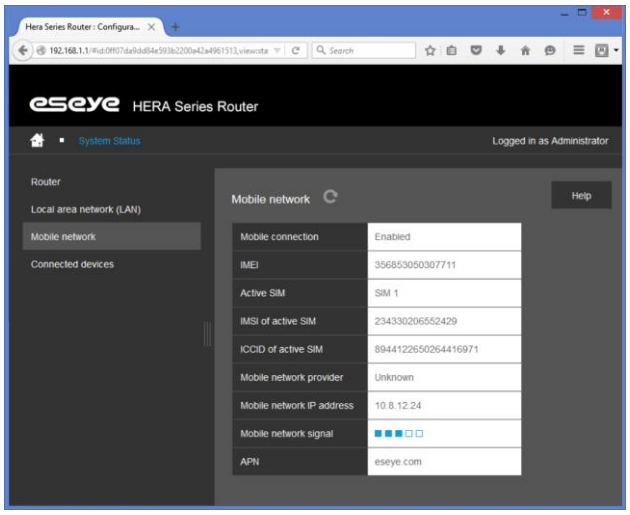


3.3.3 Mobile Network

This page displays the following read only information:

- Mobile connection (enabled or disabled)
- IMEI (the International Mobile Equipment Identity of the router, in a 15 or 17 digit string)
- Active SIM (displays which SIM card slot is active, CHIP, SIM 1, or SIM 2)
- IMSI of active SIM (the International Mobile Subscriber Identity and includes identifiers for the country and network currently used by the router, it is a 14 or 15 digit string)
- ICCID of active SIM (the Integrated Circuit Card Identifier a unique code for the SIM card, it is a string of about 20 digits)
- Mobile network provider (the network currently being used by the router)
- Mobile network IP address (the IPv4 Address of the router on the mobile network)
- Mobile network signal strength, (score out of five, for the exact dBm value hover mouse over the boxes)
- APN (this is the Access Point Name being used by the router)

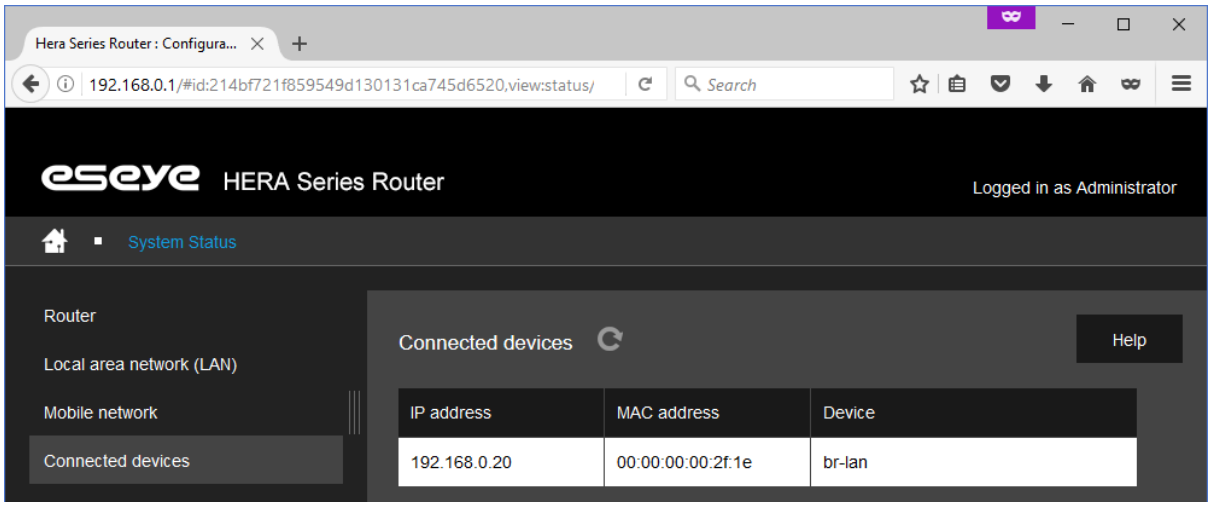
The details of the mobile connection are editable at 3.5.4.2.



3.3.4 Connected Devices

This page displays the following read only information:

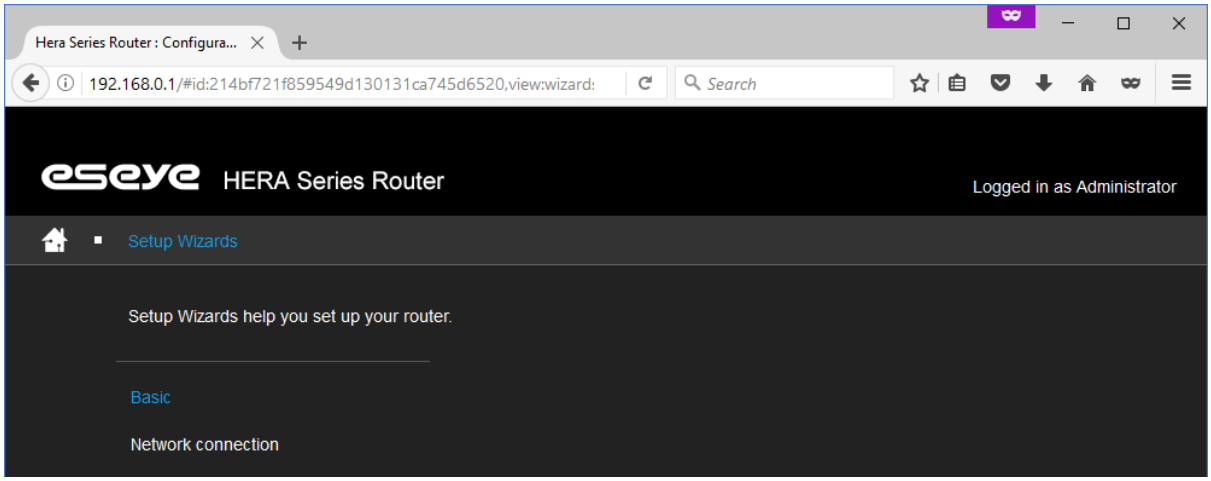
- IP address (this is the IPv4 address of the router on the mobile network)
- MAC address (this is the Media Access Control address of the connection)
- Device (this is the internal device name through which the connection is provided)



3.4 Setup Wizards

This page displays links to pages for the following sections:

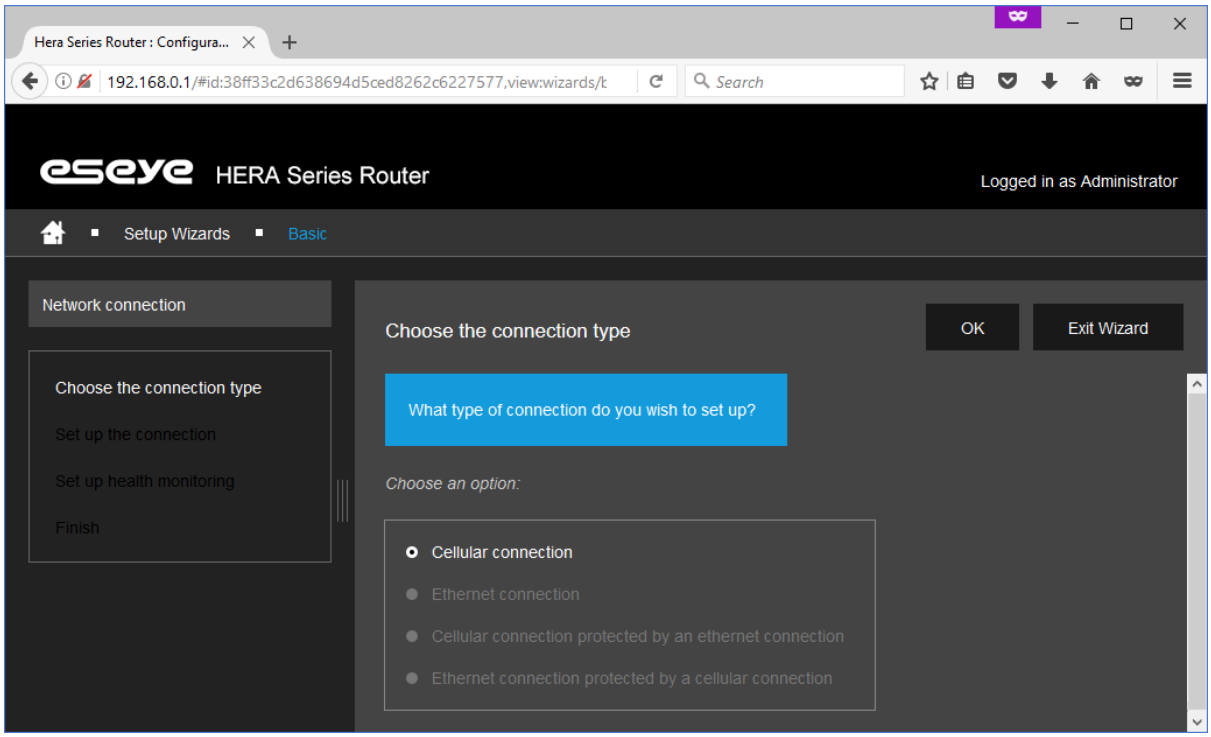
- Network Connection 3.4.1



3.4.1 Network Connection

For simple step by step instructions for configuring the network types listed below, follow the on-screen wizard:

- Cellular connection
- Ethernet connection
- Cellular connection protected by an Ethernet connection
- Ethernet connection protected by a cellular connection

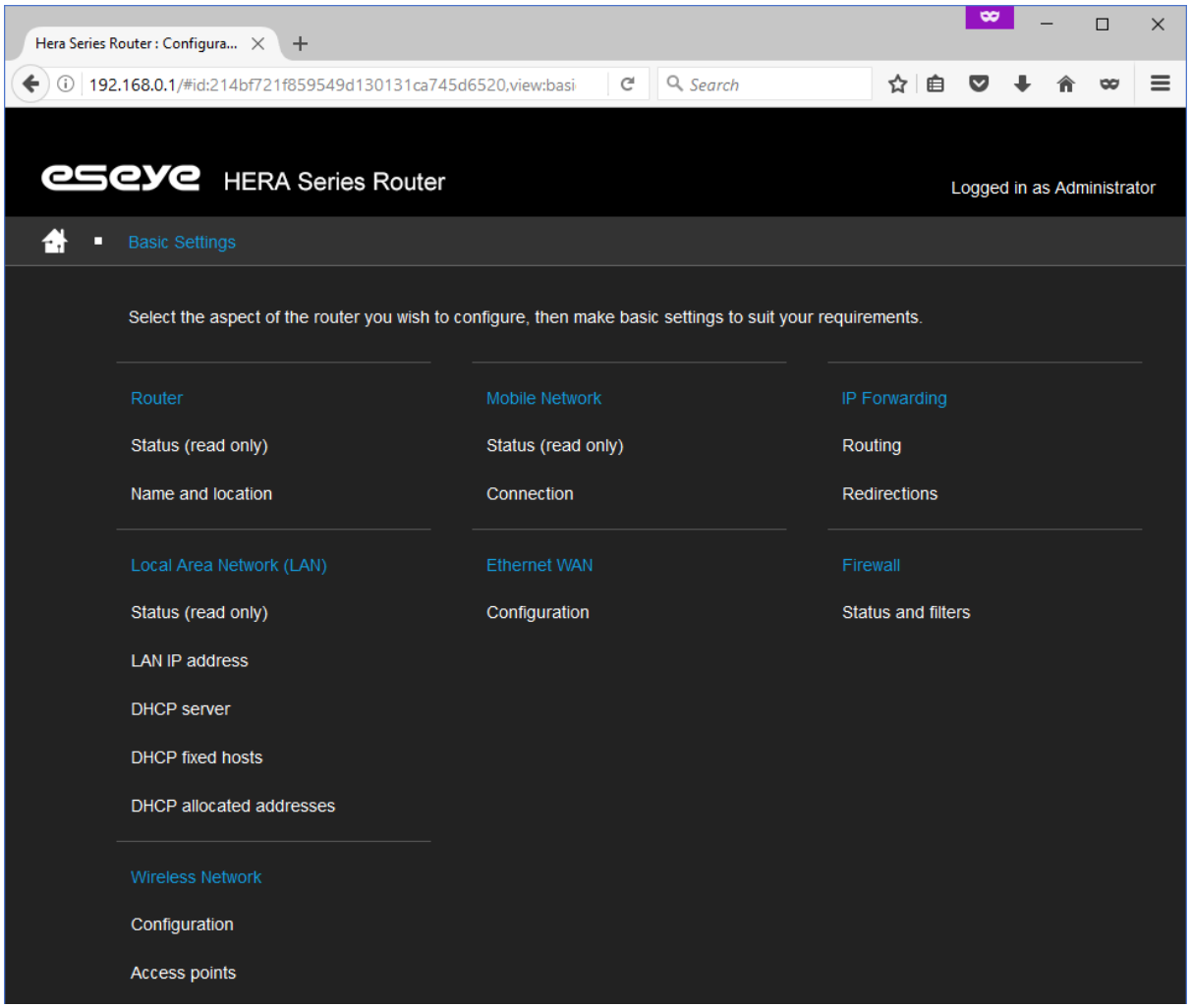


3.5 Basic Settings

This provides manual configuration options for commonly used settings.

The page displays links to pages for the following sections:

- Router 3.5.1
- Local Area Network 3.5.2
- Wireless Network 3.5.3
- Mobile Network 3.5.4
- IP Forwarding 3.5.5
- Firewall 3.5.6



3.5.1 Router

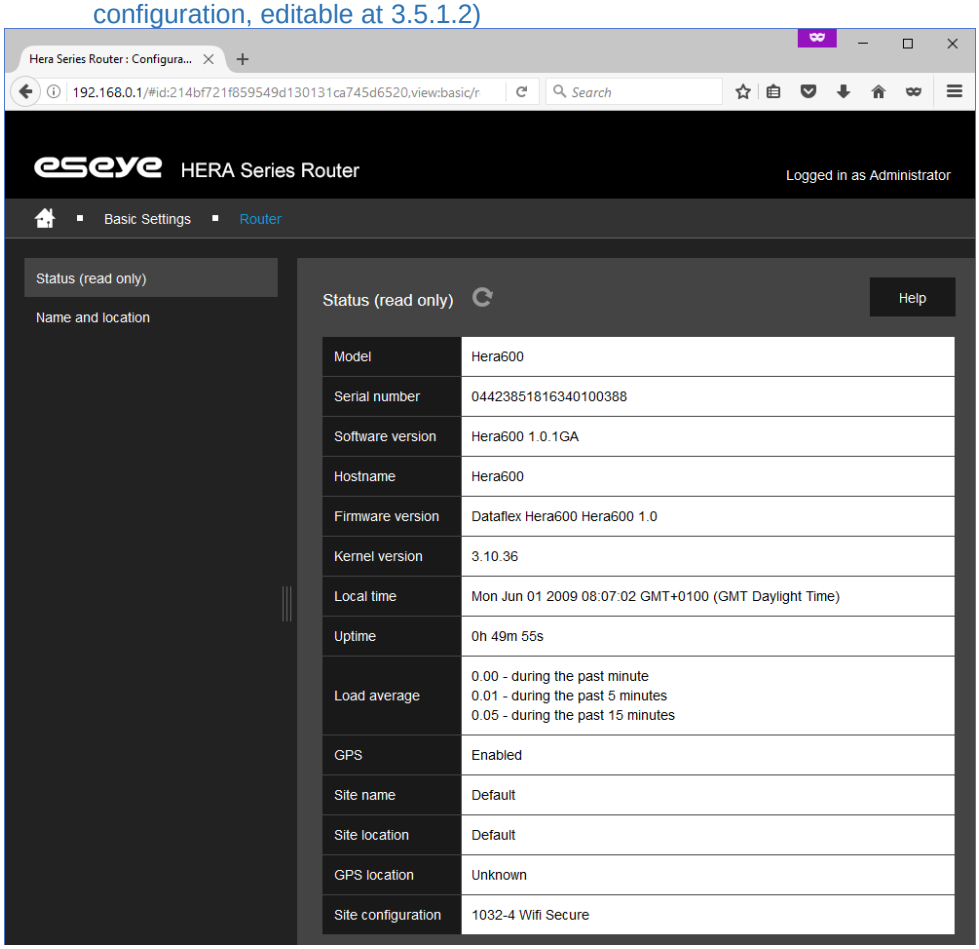
There are two linked pages under the router heading:

- Status 3.5.1.1
- Name and Location 3.5.1.2

3.5.1.1 Status (read only)

This page displays the following read only information:

- Model (displays the router series)
- Serial number (a long string of about 20 numbers, it is also found on the underside of the router on the label)
- Software version (displays the Eseye code for the current software)
- Hostname (displays the name given to the router)
- Firmware version (displays the Eseye code for the current firmware)
- Kernel Version (displays the Eseye code for the current kernel)
- Local time (time at the device)
- Uptime (amount of time elapsed since the router was last powered on)
- Load average (0 - 1)
    - during the past minute (displays how busy the CPU was in the last minute)
    - during the past five minutes (displays how busy the CPU was in the last five minutes)
    - during the past 15 minutes (displays how busy the CPU was in the last fifteen minutes)
- GPS (shows whether Enabled or Disabled, editable at 3.5.1.2)
- Site name (set by the user for easy identification, editable at 3.5.1.2)
- Site location (set by the user for easy identification, editable at 3.5.1.2)
- GPS location (only visible when the GPS is enabled)
- Site configuration description (set by the user for easy identification of the current configuration, editable at 3.5.1.2)

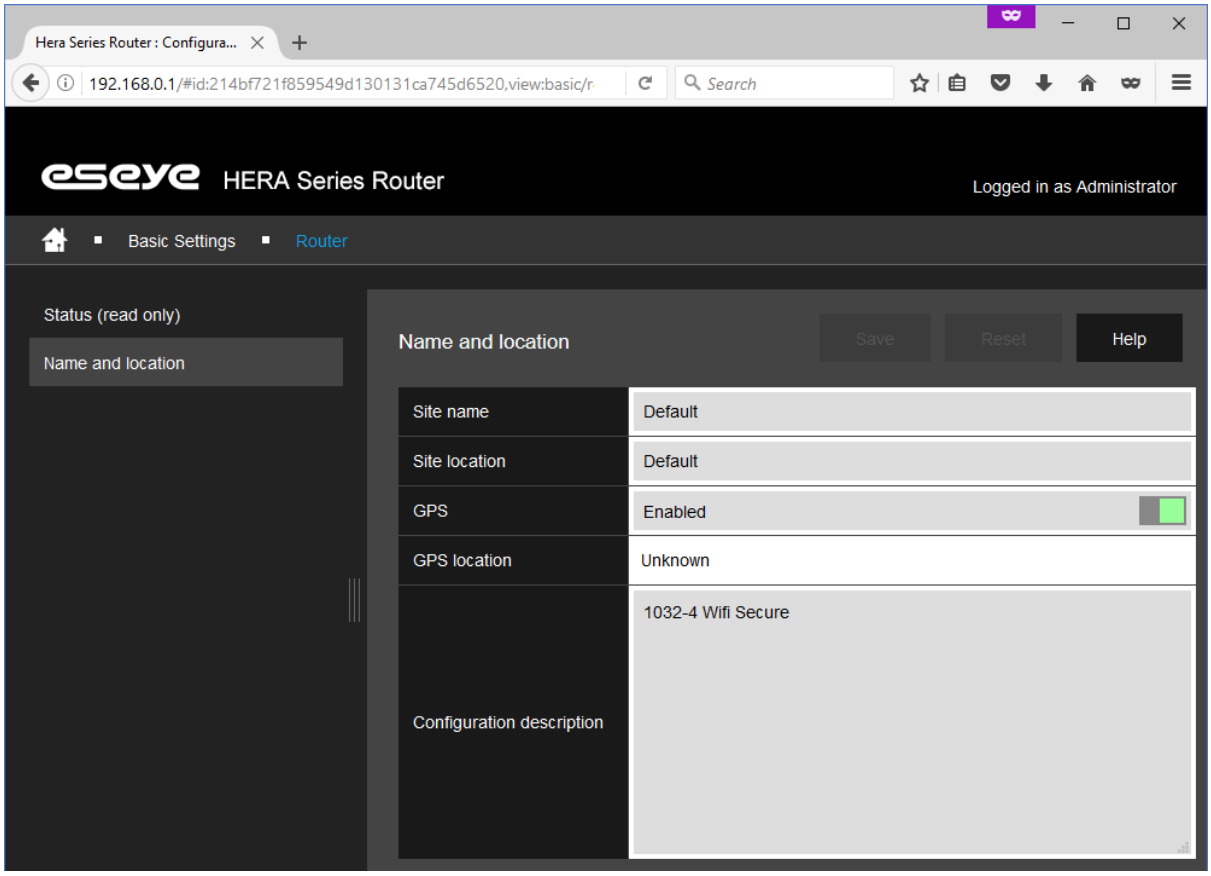


3.5.1.2 Name and Location

This page displays the following editable and read only information:

- Site name (text box, use for easy identification of the router)
- Site location (text box, use for easy identification of the router)
- GPS (switch, enabled or disabled)
- GPS location (read only, if fitted and enabled will display Latitude and Longitude)
- Configuration description (text box, use for easy identification of the configuration)

After editing click 'Save'.



3.5.2 Local Area Network (LAN)

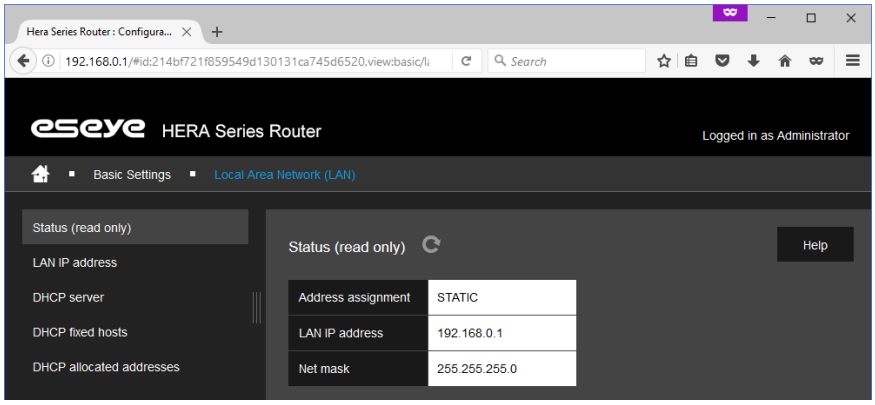
There are five linked pages under the Local Area Network (LAN) heading:

- Status (read only) 3.5.2.1
- LAN IP address 3.5.2.2
- DHCP server 3.5.2.3
- DHCP fixed hosts 3.5.2.4
- DHCP allocated addresses 3.5.2.5

3.5.2.1 Status (read only)

This page displays the following read only information:

- Address assignment (displays how the address was assigned, static denotes manual configuration and DHCP denotes automatic configuration from a DHCP server on the LAN)
- LAN IP address (IPv4 address configuration is supported at 3.5.2.2)
- Netmask (IPv4 netmask)

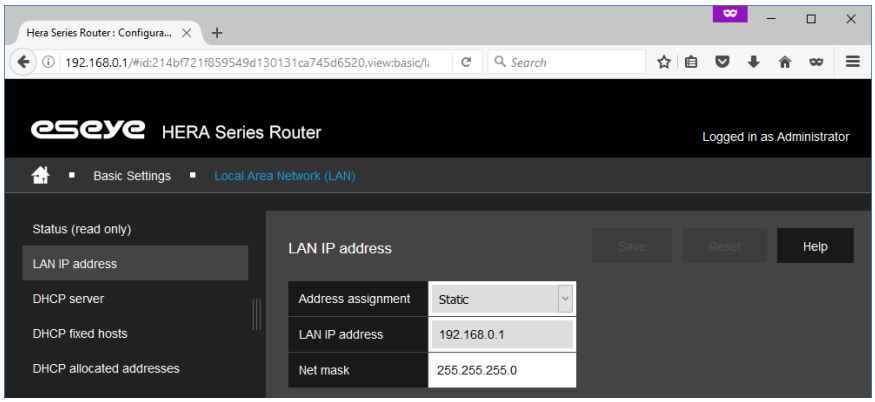


3.5.2.2 LAN IP address

This page displays the following editable information:

- Address assignment (displays how the address was assigned, static denotes manual configuration and DHCP denotes automatic configuration from a DHCP server on the LAN)
- LAN IP address (IPv4 address configuration is supported at 3.5.2.2)
- Netmask (IPv4 netmask)

After editing click ‘Save’.

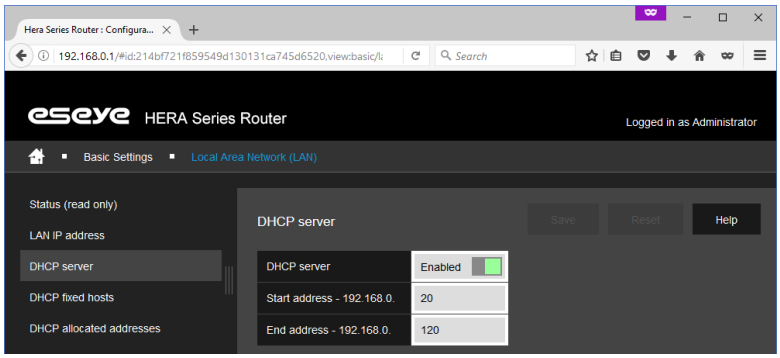


3.5.2.3 DHCP server

This page displays the following editable and read only information:

- DHCP server (switch, enabled or disabled)
- Start Address – 192.168.0. (text box, this defines the first number in the range that the DHCP server can assign)
- End Address – 192.168.0. (text box, this defines the last number in the range that the DHCP server can assign)

After editing click ‘Save’.

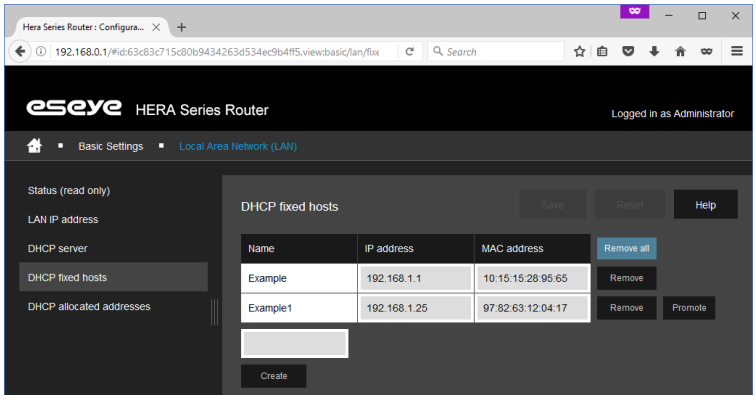


3.5.2.4 DHCP Fixed Hosts

This page displays the following editable and read only information, about every address saved for a specific device when using the DHCP server:

- Name (read only, use for easy identification of the connection)
- IP address (text box, the IPv4 address to be assigned to device with the specified MAC address)
- MAC address (text box, the MAC address of the device, note use : to separate the pairs of digits)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows)
- Create (text box, use to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click ‘Save’.

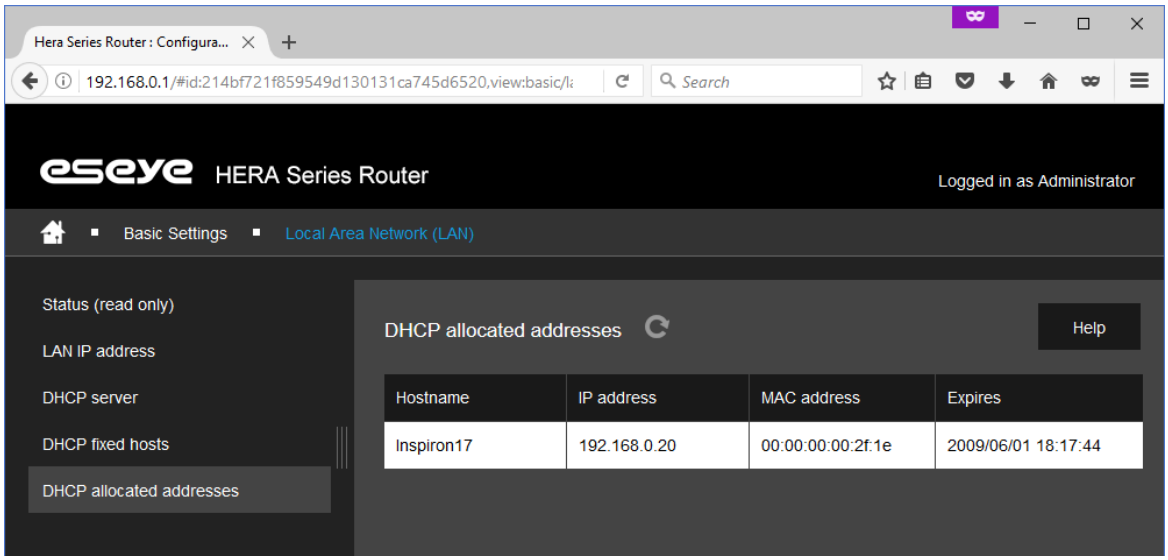


3.5.2.5 DHCP Allocated Addresses

This page displays the following read only information about addresses that have been automatically allocated by the router to connected devices:

- Hostname (this is the friendly name of the device)
- IP Address (this is the IPv4 Address assigned to the device)
- MAC Address (this is the MAC address of the device)
- Expires (this is how long the address remains assigned to the device before it is released for use by another device an extension to the address lease may be requested prior to expiry)

This will not list devices which use static addresses, to view all connected devices navigate to System Status > Connected devices 3.3.4



3.5.3 Wireless Network

There are two linked pages under the Wireless Network heading:

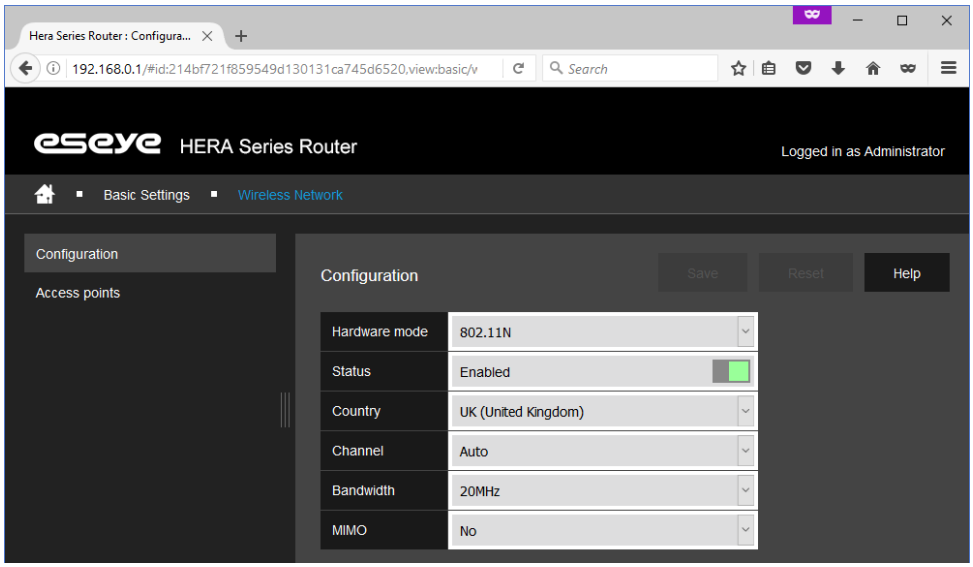
- Configuration 3.5.3.1
- Access Points 3.5.3.2

3.5.3.1 Configuration

This page displays the following editable information:

- Hardware mode (dropdown menu, 5GHz options are: 802.11A and 802.11NA, 2.4Ghz options are: 802.11B, 802.11G, 802.11N, 802.11BG, and 802.11NG)
- State (switch, enabled or disabled)
- Country (dropdown menu, all countries)
- Channel (dropdown menu, some channels are unavailable in some countries, options are: Auto or 1-13)
- Bandwidth (dropdown menu, only applies to 802.11N, 802.11NA and 802.11NG, options are: 20MHz, 40MHz-primary channel upper (HT 40-), or 40MHz-primary channel lower (HT 40+))
- MIMO (dropdown menu, only applies to 802.11N, 802.11NA and 802.11NG, options are: yes or no)

After editing click ‘Save’.

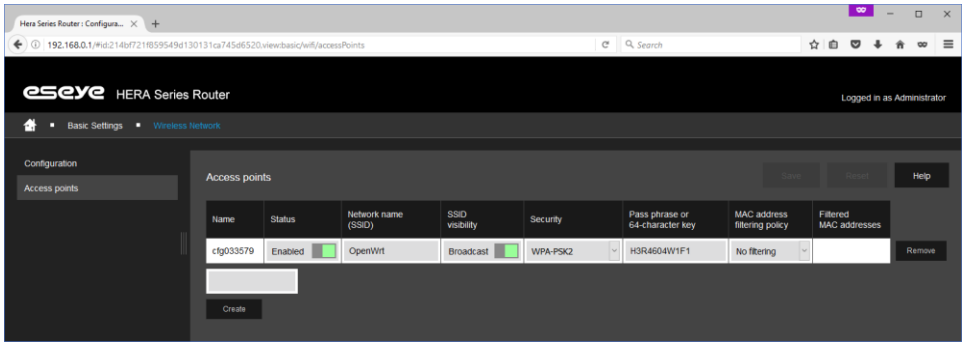


3.5.3.2 Access Points

This page displays the following editable and read only information:

- Name (read only, this is used for easy identification of the access point)
- Status (switch, enabled or disabled)
- Network name – SSID (text box, this is the Wi-Fi network name that other devices connect to)
- SSID visibility (switch, broadcast or hidden)
- Security (dropdown menu, options are: none, WEP-open system, WEP-shared key, WPA-PSK, or WPA-PSK2)
- Pass phrase or 64-character key (text box, unavailable if security is set to none, this is the password for the other devices connected)
- MAC address filtering policy (dropdown menu, options are: no filtering, white list, or black list)
- Filtered MAC addresses (text box, only available if MAC address filtering policy is set to white list or black list, MAC addresses entered are permitted or blocked depending upon it being white or black list)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows)
- Create (text box, used to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click ‘Save’.



3.5.4 Mobile Network

This page provides information on and the ability to configure the required settings to connect to a chosen cellular network provider. At minimum you should enable the cellular connection service and define at least one profile containing APN configuration details.

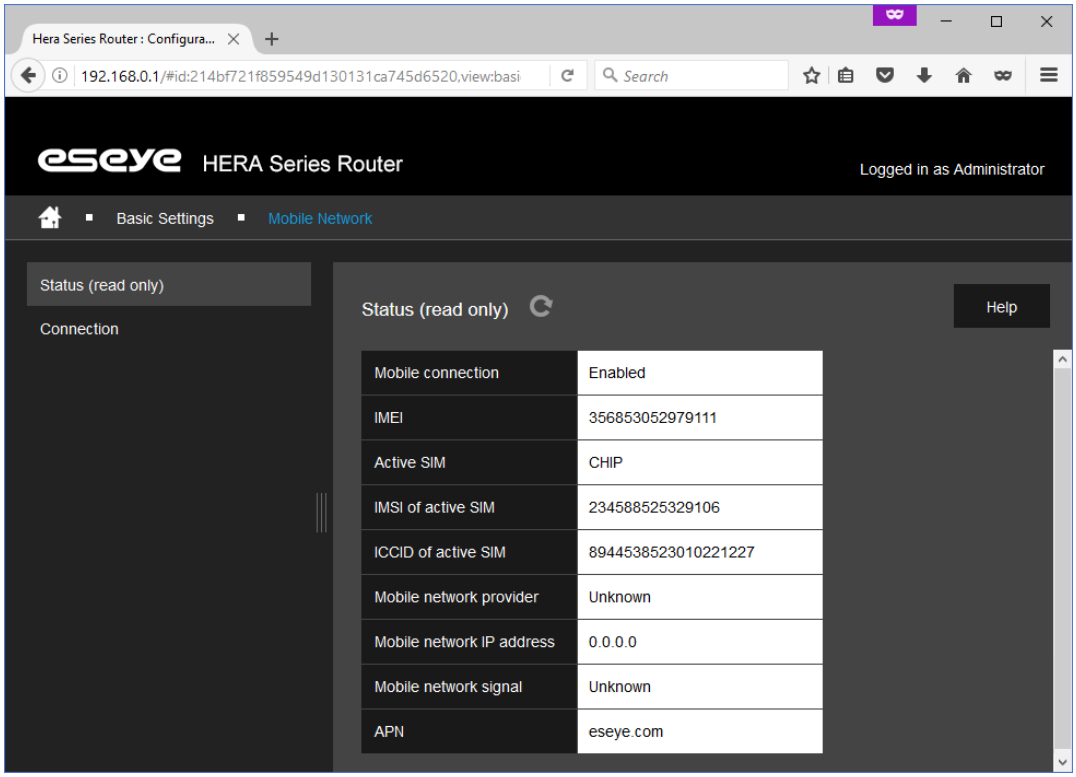
There are two linked pages under the Mobile Network heading:

- Status (read only) 3.5.4.1
- Connection 3.5.4.2

3.5.4.1 Status

This page displays the following read only information:

- Mobile connection (enabled or disabled)
- IMEI (this is the International Mobile Equipment Identity of the router, it is a 15 or 17 digit string)
- Active SIM (this displays which SIM card slot is active, CHIP, SIM 1, or SIM 2)
- IMSI of active SIM (this is the International Mobile Subscriber Identity and includes identifiers for the country and network currently used by the router, it is a 14 or 15 digit string)
- ICCID of active SIM (this is the Integrated Circuit Card Identifier a unique code for the SIM card, it is a string of about 20 digits)
- Mobile network provider (this is the network currently being used by the router)
- Mobile network IP address (this is the IPv4 Address of the router on the mobile network)
- Mobile network signal strength, (score out of five, for the exact dBm value hover mouse over the boxes)
- APN (this is the Access Point Name being used by the router)



3.5.4.2 Connection

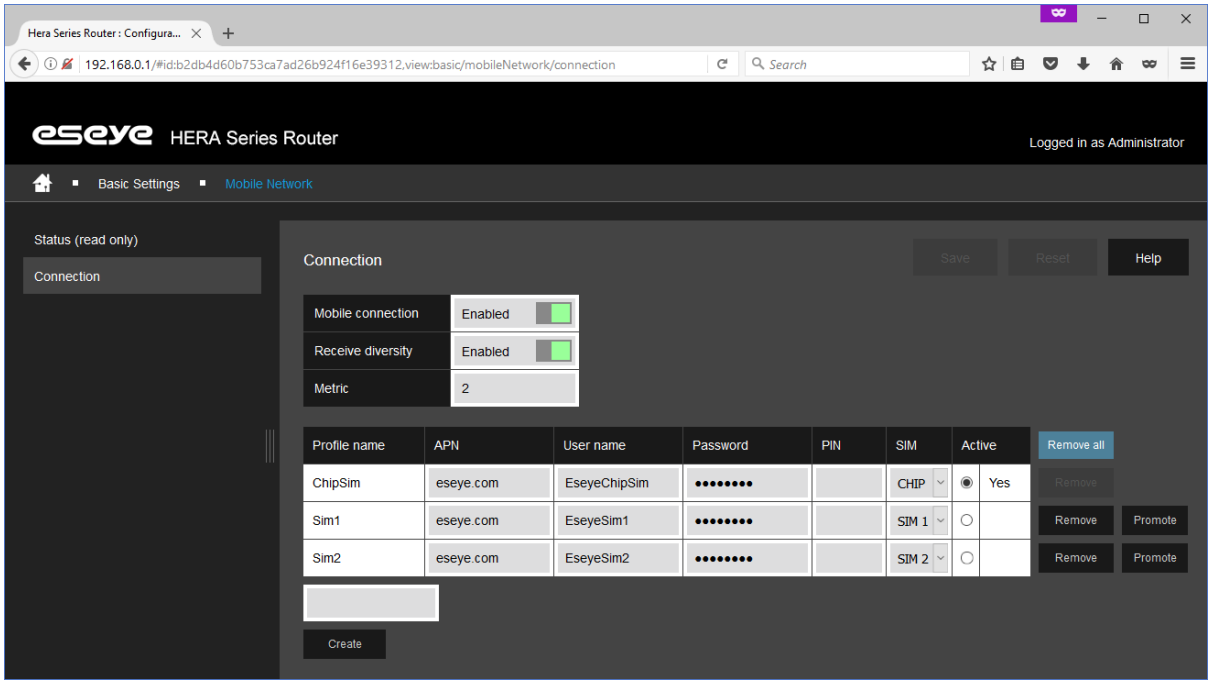
The top table on this page displays the following editable information:

- Mobile connection (switch, enabled or disabled)
- Receive diversity (switch, defines if the second receive only antenna is enabled or disabled)
- Metric (number, this is the cost or weighting to this link used when the Hera his trying to data, typically used when the cellular connection is used to protect an Ethernet WAN connection)

The lower table on this page displays the following editable information:

- Profile name (read only, this is used for easy identification of the profile)
- APN (text box, this is the Access Point Name for the SIM card used within this profile, default is eseye.com as this is correct for Eseye SIM cards)
- User name (text box, this is the username if required for the APN, this should be completed with any username when using Eseye SIM cards)
- Password (text box, this is the password if required for the APN, this should be completed with any username when using Eseye SIM cards)
- PIN (text box, this is the PIN if required for the SIM card, if it is PIN locked)
- SIM (dropdown menu, this is the slot associated with this profile, options are: CHIP, SIM 1 or SIM 2)
- Active (select, this shows which profile is active and allows manual selection of a profile)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows, this defines the preference order through which the Health Monitor will failover between profiles)
- Create (text box, used to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click 'Save'.



3.5.5 Ethernet WAN

There is one linked page under the Ethernet WAN heading:

- Configuration 3.5.5.1

3.5.5.1 Configuration

This page displays the following editable information:

- LAN port to be used as WAN (dropdown menu, options are None, Link1, Link2, Link3, or Link4) take care when selecting this port, if you are browsing over the port selected you will lose connection with the router.
- Address assignment (only viewable when LAN port is not set to None, dropdown menu, options are: Static, DHCP, PPPoE)

If LAN port is not set to None and Address assignment is set to Static:

- WAN IP address (text box, this is a configurable IPv4 address)
- Net mask (text box, this is a configurable Net mask)
- Gateway (text box, this is the IPv4 address to which packets forwarded through this interface will be routed by default)
- DNS addresses (text box, ensure each DNS is a separate line item, the IPv4 addresses of the DNS servers provided by this link)
- Metric (number, this is the cost or weighting to this link used when the Hera his trying to data, typically used when the cellular connection is used to protect an Ethernet WAN connection)

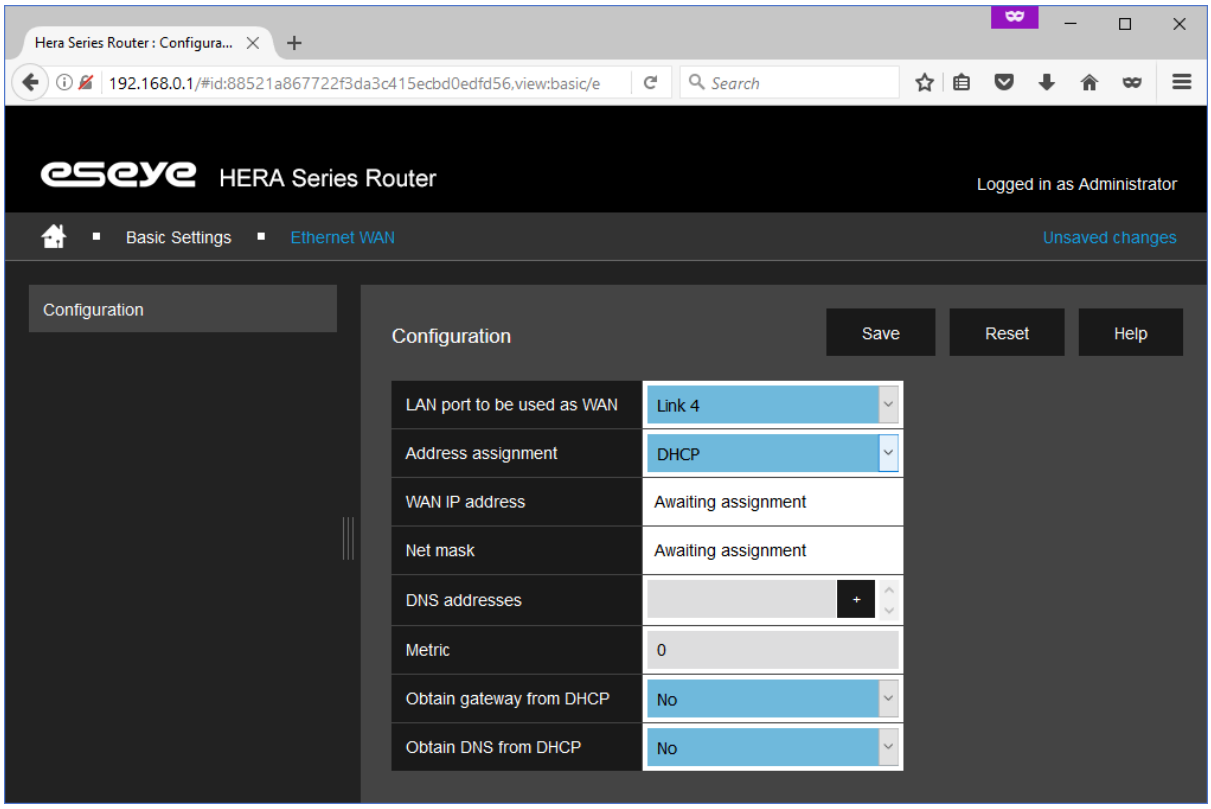
If LAN port is not set to None and Address assignment is set to DHCP:

- WAN IP address (read only, this is an automatically configured IPv4 address)
- Net mask (read only, this is an automatically configured Net mask)
- DNS addresses (text box, ensure each DNS is a separate line item , the IPv4 addresses of the DNS servers provided by this link, unless obtained by DHCP below)
- Metric (number, this is the cost or weighting to this link used when the Hera his trying to data, typically used when the cellular connection is used to protect an Ethernet WAN connection)
- Obtain gateway from DHCP (dropdown menu, options are Yes or No, this provides the default route for this interface)
- Obtain DNS from DHCP (dropdown menu, options are Yes or No)

If LAN port is not set to None and Address assignment is set to PPPoE:

- WAN IP address (read only, this is an automatically configured IPv4 address)
- Net mask (read only, this is an automatically configured Net mask)
- DNS addresses (text box, ensure each DNS is a separate line item, the IPv4 addresses of the DNS servers provided by this link)
- Metric (number, this is the cost or weighting to this link used when the Hera his trying to data, typically used when the cellular connection is used to protect an Ethernet WAN connection)
- Username (text box, used by the PPPoE connection to authenticate)
- Password (text box, used by the PPPoE connection to authenticate)

After editing click ‘Save’.



3.5.6 IP Forwarding

There are two linked pages under the IP Forwarding heading:

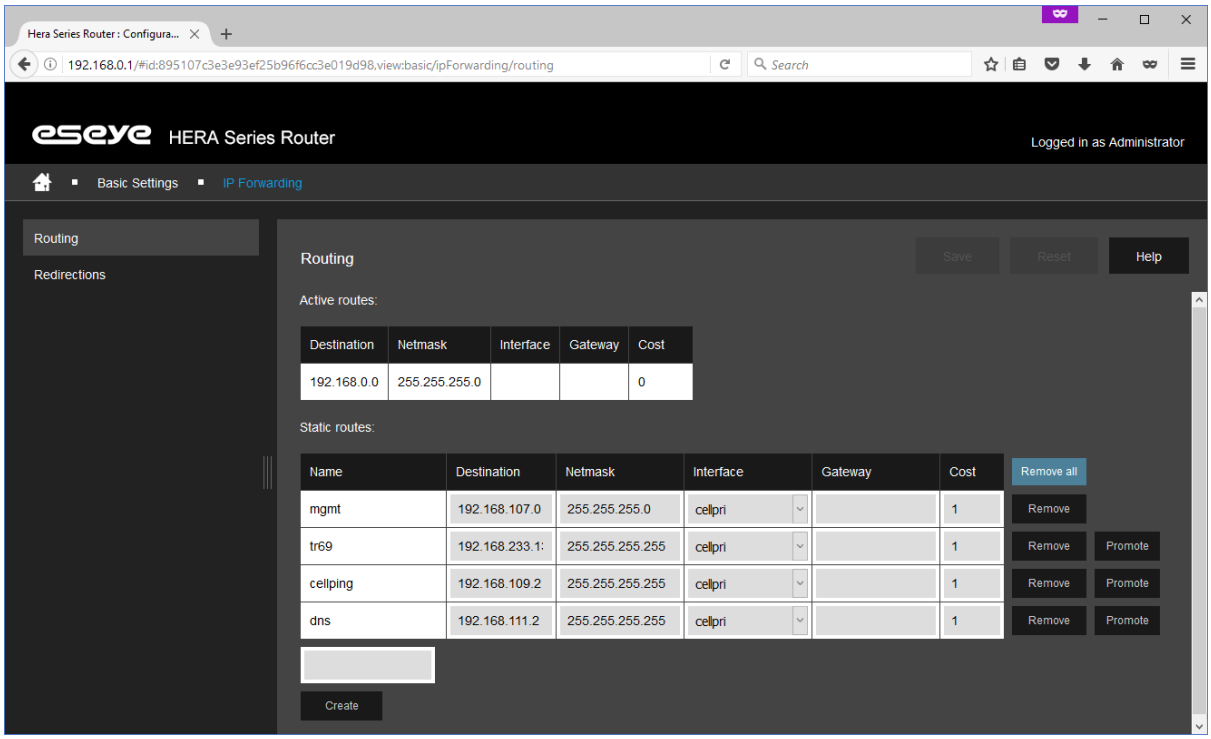
- Routing 3.5.6.1
- Redirections 3.5.6.2

3.5.6.1 Routing

This page allows the addition of manual IPv4 routes to the Hera, this page displays the following editable information:

- Name (read-only, this is used for easy identification of the routing rule)
- Destination (text box, this is the IPv4 address that the route will end)
- Netmask (text box, this is the netmask that the route will end)
- Interface (dropdown menu, options are loopback, lan, or cellpri)
- Gateway (text box, this is the IPv4 address to which packets in the route will be forwarded)
- Cost (text box, this defines the preferred route path)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows)
- Create (text box, used to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click ‘Save’.



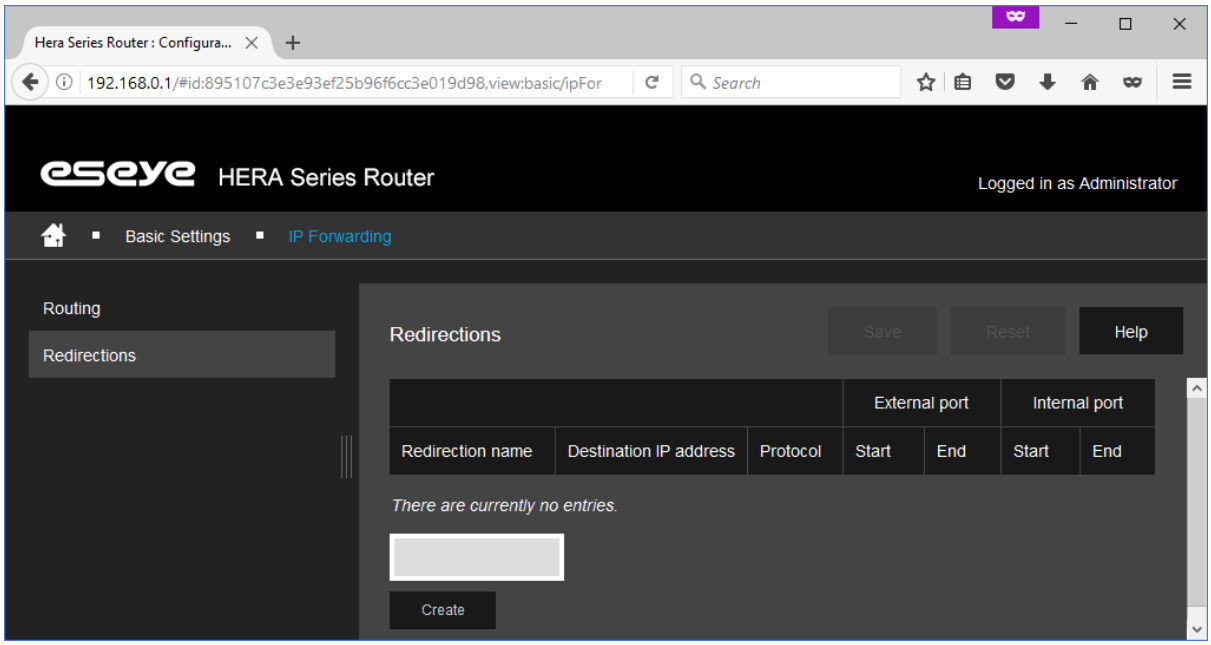
3.5.6.2 Redirections

This is also known as port forwarding, it allows new connections and associated data arriving on the WAN interface to be directed to a device on the LAN. This page displays the following editable and read only information:

- Redirection name (read only, this is used for easy identification of the profile)
- Destination IP address (text box, IPv4 address that the package will be delivered to)
- Protocol (dropdown menu, options are TCP or UDP)
- External port start (number, blank or in the range 1 to 65535, it is the first port in the range of receiving ports)
- External port end (number, blank or in the range 1 to 65535, it must be greater than or equal to the external port start, it is the last port in the range of receiving ports)
- Internal port start (number, blank or in the range 1 to 65535, it is the first port in the range of target ports on the LAN of the device)
- Internal port end (number, blank or in the range 1 to 65535, it must be greater than or equal to the internal port start, it is the first port in the range of target ports on the LAN of the device)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save, the active profile cannot be removed)
- Create (text box, used to create profile name for a new row, must start with a letter, and can only contain letters, numbers and underscores)
- Promote (button, use to re-order the rows)

To make either the External or Internal port ranges a singular port then enter both the start and end value as the same.

After editing click ‘Save’.



3.5.7 Firewall

This page provides configuration for inbound firewall rules (from the WAN) by default all outbound traffic is permitted. There is one linked page under the Firewall heading:

- Status and filters 3.5.7.1

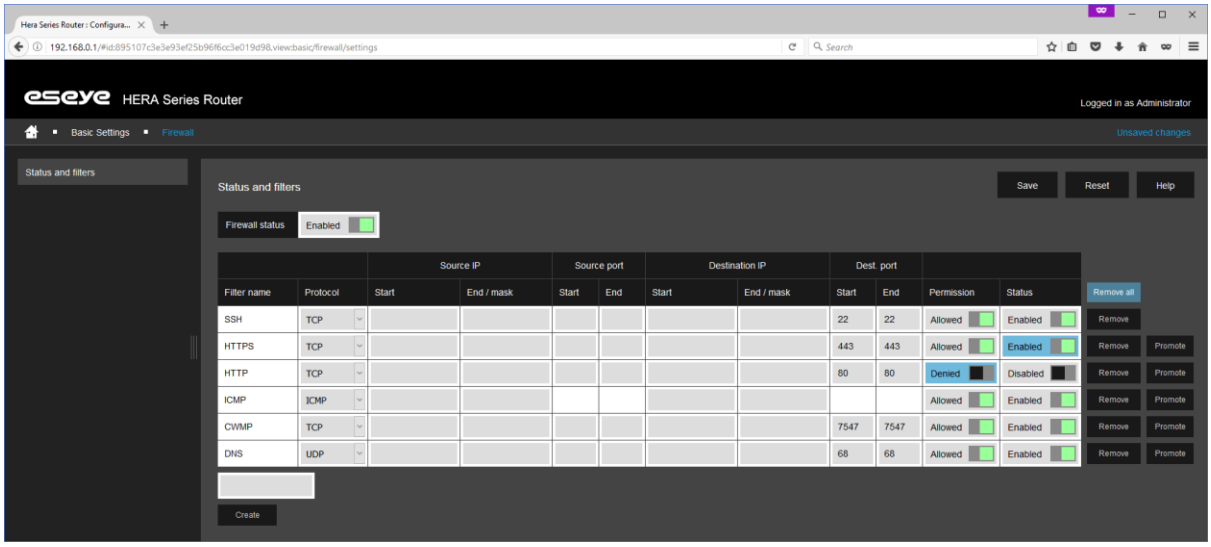
3.5.7.1 Status and Filters

This page displays the following editable and read only information:

- Firewall status (switch, enabled or disabled)
- Filter name (read only, this is used for easy identification of the filter)
- Protocol (dropdown menu, options are: ALL, AH, EGP, ESP, GRE, ICMP, IGMP, IP, IPIP, OSPF, RSVP, SCTP, TCP, UDP, UDP LITE, or TCP & UDP)
- Source IP Start (text box, the first source IPv4 address in the acceptable source IP range from which traffic is filtered at the WAN interface of the device)
- Source IP End / mask (text box, the last source IPv4 address in the acceptable source IP range or the netmask applied from which traffic is filtered at the WAN interface of the device)
- Source port Start (number, blank or in the range 1 to 65535, it is the first port in the range of permitted source ports from which traffic is filtered at the WAN interface of the device)
- Source port End (number, blank or in the range 1 to 65535, it must be greater than or equal to the source port start, it is the last port in the range of permitted source ports from which traffic is filtered at the WAN interface of the device)
- Destination IP Start (text box, the first destination IPv4 address in the acceptable destination IP range, most of the time this is blank as the device operates using NAT)
- Destination IP End / mask (text box, the last destination IP address in the acceptable destination IP range, most of the time this is blank as the device operates using NAT)
- Dest. port start (number, blank or in the range 1 to 65535, it is the first port in the range of permitted destination ports at the WAN of the device)

- Dest. port end (number, blank or in the range 1 to 65535, it must be greater than or equal to the destination port start, it is the last port in the range of permitted destination ports at the WAN of the device)
- Permission (switch, options are allowed or denied)
- Status (switch, options are enabled or disabled)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows)
- Create (text box, used to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click 'Save'.



3.6 Advanced Settings

The advanced settings tab provides access to the configuration files, to understand how to edit these information is found in other documents.

Many of the standard features use adaptations of openWRT services further advice and guidance may be sourced from https://openwrt.org/

These files should be treated with care as manually editing may render your router and the GUI described in this document inaccessible.

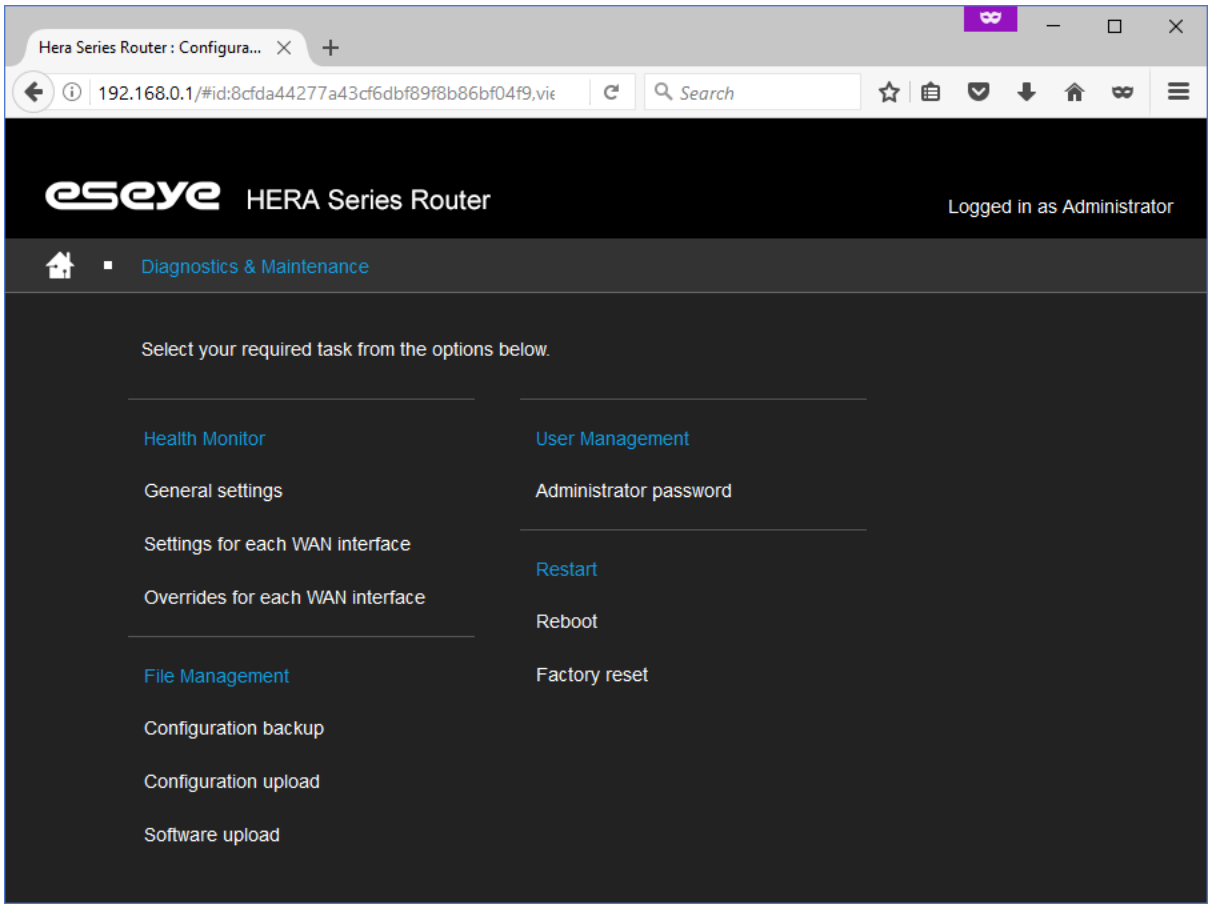
3.7 Hosted Applications

Coming soon.

3.8 Diagnostics & Maintenance

This page displays links to pages for the following sections:

- Health Monitor 3.8.1
- File Management 3.8.2
- User Management 3.8.3
- Restart 3.8.4



3.8.1 Health Monitor

The Heath Monitor is an application designed to continually check that a connection is performing as expected.

When the Heath Monitor detects a change in the performance of a connection the Health Monitor can alter the connectivity preferences to enable seamlessly self-managing failover.

There are three linked pages under the Health Monitor heading:

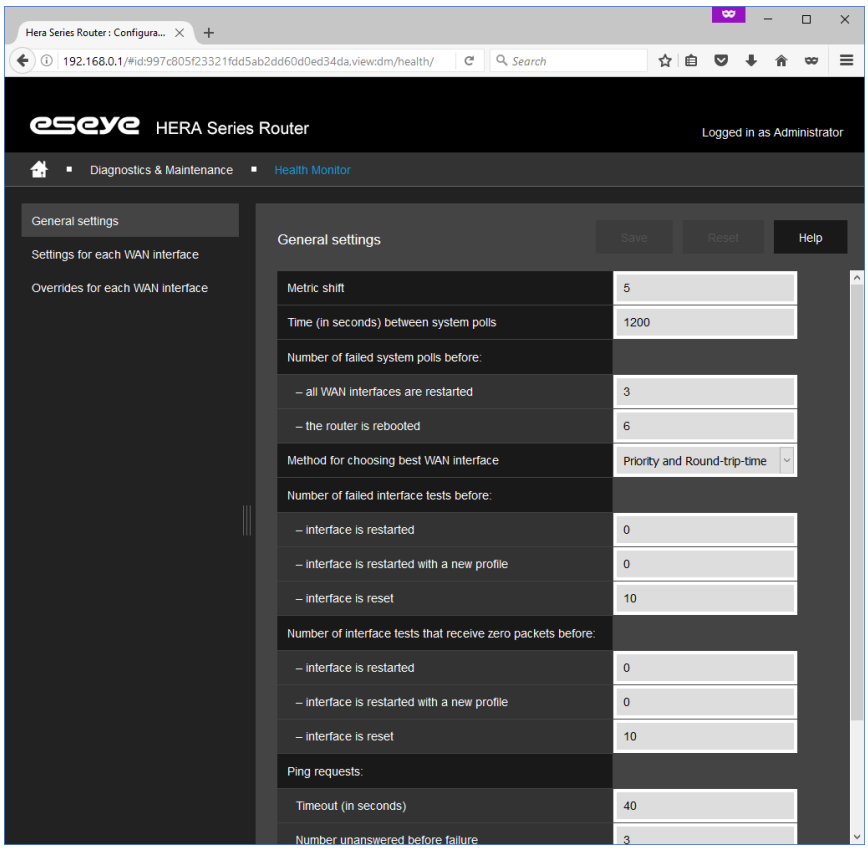
- General Settings 3.8.1.1
- Settings for each WAN interface 3.8.1.2
- Overrides for each WAN interface 3.8.1.3

3.8.1.1 General Settings

This page displays the following editable information:

- Metric shift (text box, this is the granularity of the adjustment made by the Health Monitor to the route cost when automatically adjusting due to a change in performance of the connection)
- Time (in seconds) between system polls by the Health Monitor (number)
- Number of failed system polls before: all WAN interfaces are restarted (number)
- Number of failed system polls before: the router is rebooted (number)
- Method for choosing the best WAN interface (dropdown menu, options are: Priority, Round trip time, or Priority and Round trip time)
- Number of failed interface tests before: interface is restarted (number)
- Number of failed interface tests before: interface is restarted with a new profile (number)
- Number of failed interface tests before: interface is reset (number)
- Number of interface tests that receive zero packets before: interface is restarted (number)
- Number of interface tests that receive zero packets before: interface is restarted with a new profile (number)
- Number of interface tests that receive zero packets before: interface is reset (number)
- Ping requests: Timeout (in seconds) (number)
- Ping requests: Number unanswered before failure (number)
- DNS requests: Timeout (in seconds) (number)
- DNS requests: Number unanswered before failure (number)

After editing click ‘Save’.

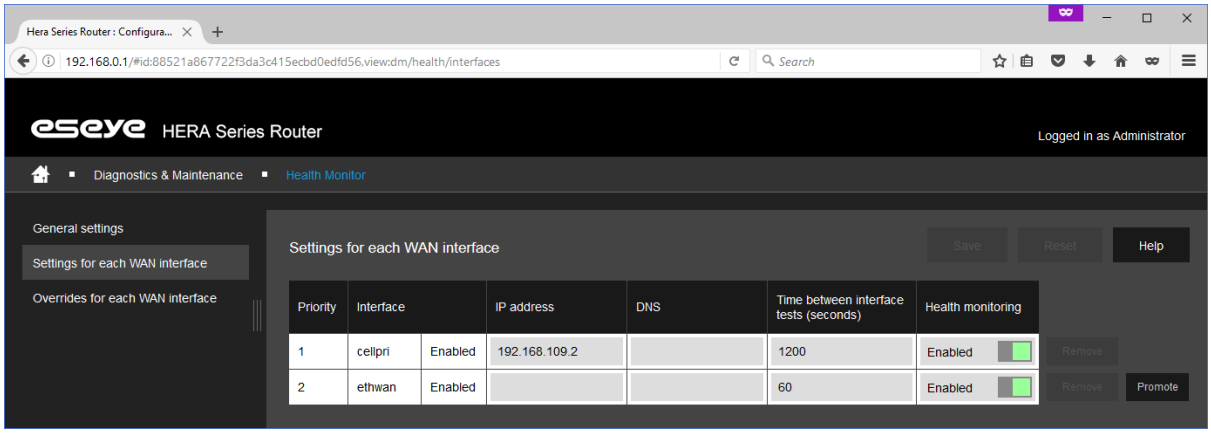


3.8.1.2 Settings for Each WAN Interface

This page displays the following editable and read only information:

- Priority (read only, order of preference for these settings to run)
- Interface (read only, displays the name of the interface on which the tests are performed and if testing is currently enabled)
- IP address (text box, IPv4 address used as the destination for the ping tests via this interface)
- DNS (text box, this is the URL which is resolved using DNS during Health Monitor test via this interface)
- Time between interface tests (seconds) (number)
- Health monitoring (switch, enabled or disabled)
- Remove (button, use to delete the row, will change to Reinstate after use, and will only remove the row from view after clicking Save)
- Promote (button, use to re-order the rows)
- Create (text box, used to create Name for a new row, must start with a letter, and can only contain letters, numbers and underscores)

After editing click 'Save'.

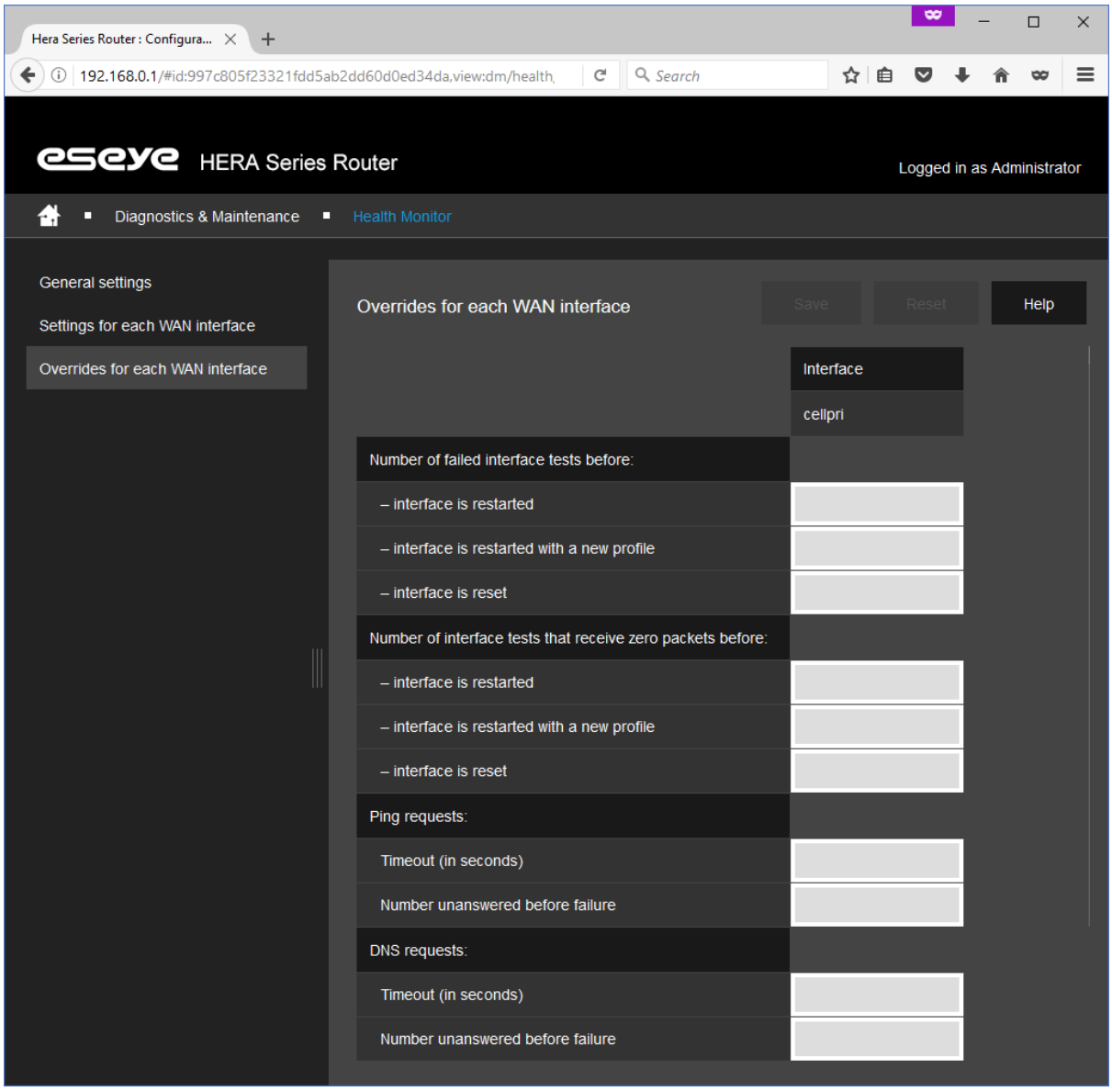


3.8.1.3 Overrides for Each WAN Interface

This page displays the following editable and read only information:

- Interface (read only, this is the interface to which these overrides apply)
- Number of failed interface tests before: interface is restarted (number)
- Number of failed interface tests before: interface is restarted with a new profile (number)
- Number of failed interface tests before: interface is reset (number)
- Number of interface tests that receive zero packets before: interface is restarted (number)
- Number of interface tests that receive zero packets before: interface is restarted with a new profile (number)
- Number of interface tests that receive zero packets before: interface is reset (number)
- Ping requests: Timeout (in seconds) (number)
- Ping requests: Number unanswered before failure (number)
- DNS requests: Timeout (in seconds) (number)
- DNS requests: Number unanswered before failure (number)

After editing click 'Save'.



3.8.2 File Management

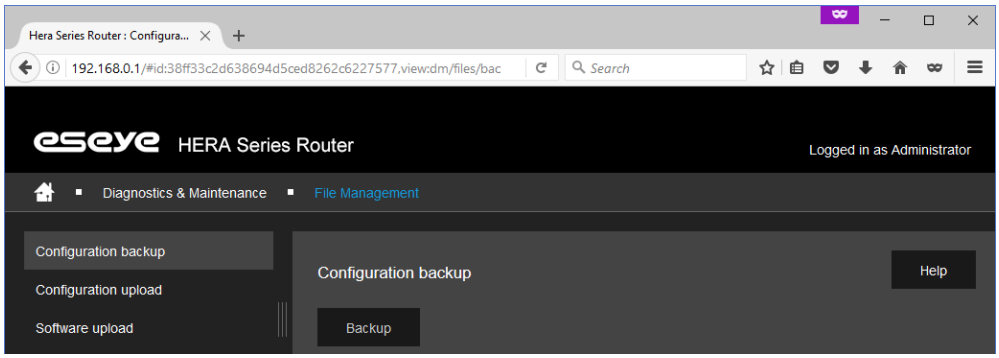
There are three linked pages under the File Management heading:

- Configuration backup 3.8.2.1
- Configuration upload 3.8.2.2
- Software upload 3.8.2.3

3.8.2.1 Configuration Backup

This page displays the following option:

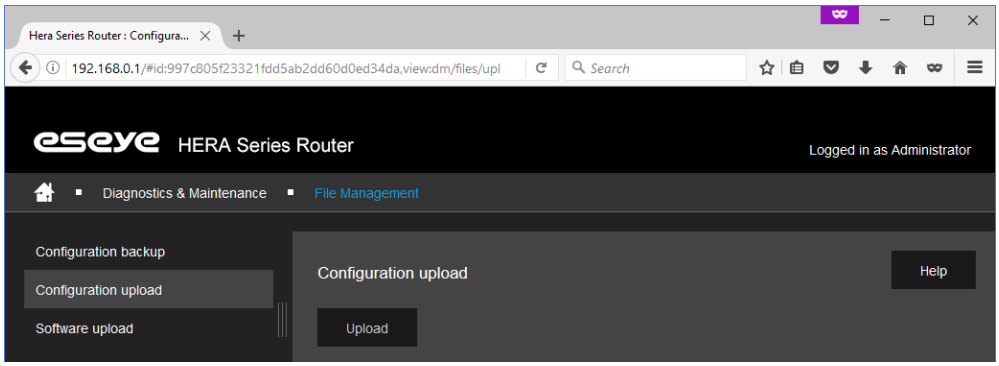
- Backup (button, press to download a file of the current configuration used by the router)



3.8.2.2 Configuration Upload

This page displays the following option:

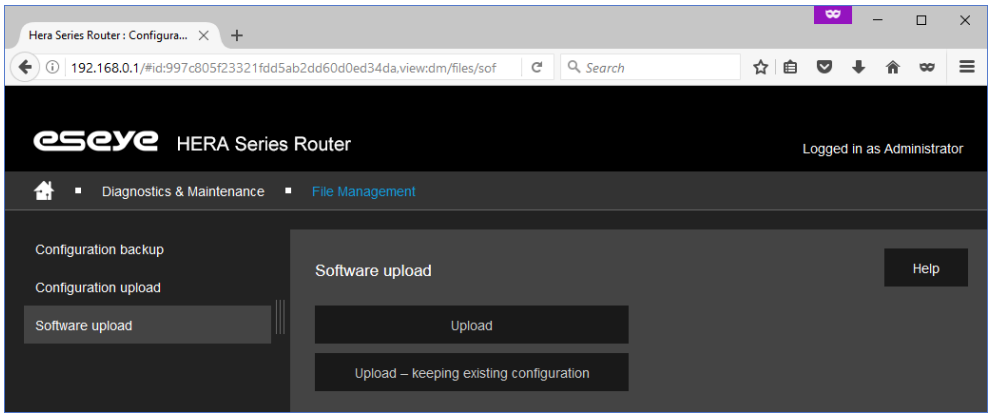
- Upload (button, press to upload a configuration file to be used by the router, browse to the file and click OK)



3.8.2.3 Software Upload

This page displays the following options:

- Upload (button, to overwrite existing configuration files)
- Upload – keeping existing configuration (button, to keep existing configuration files)



3.8.3 User Management

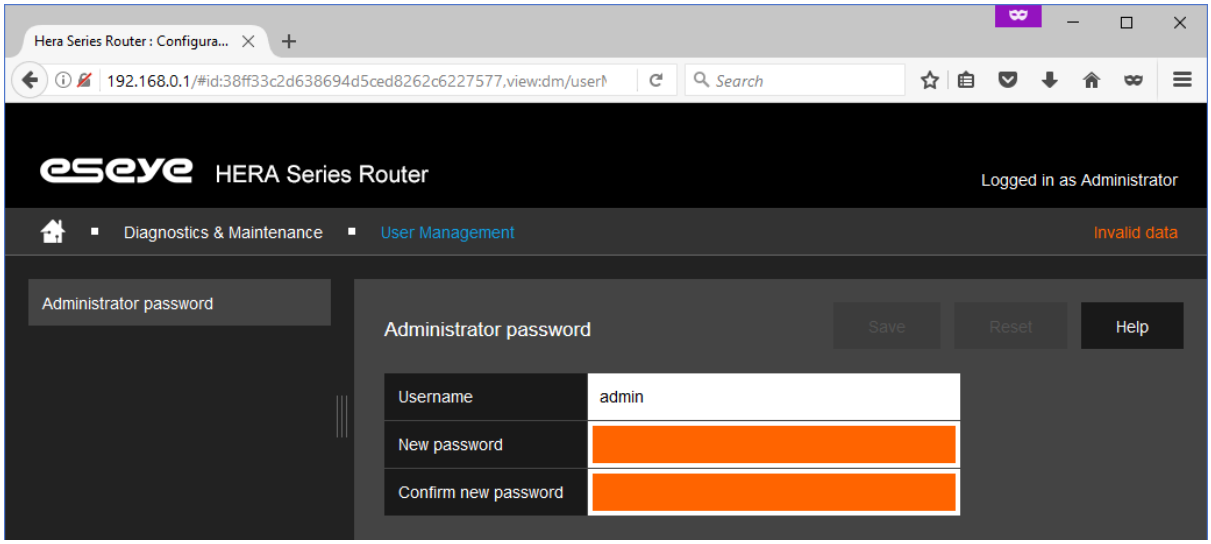
There is one linked page under the User Management heading:

- Administrator password 3.8.3.1

3.8.3.1 Administrator Password

This page displays the following editable and read only information:

- Username (read only, username of the login to the router)
- New password (text box, must be over four characters in length, it is advised that this is changed to a secure unique password at first install)
- Confirm new password (text box, must be identical to the New password entry)



3.8.4 Restart

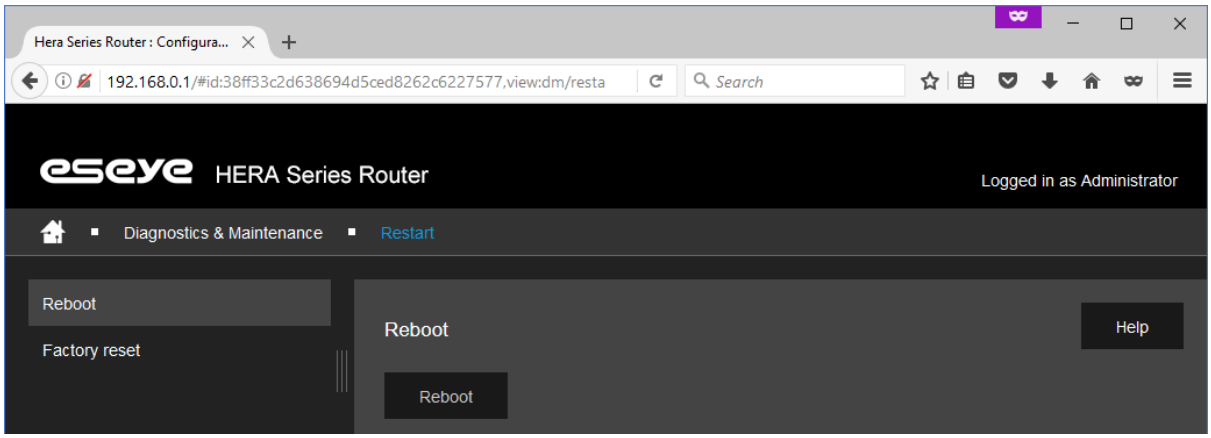
There are two linked pages under the Restart heading:

- Reboot 3.8.4.1
- Factory reset 3.8.4.2

3.8.4.1 Reboot

This page displays the following option:

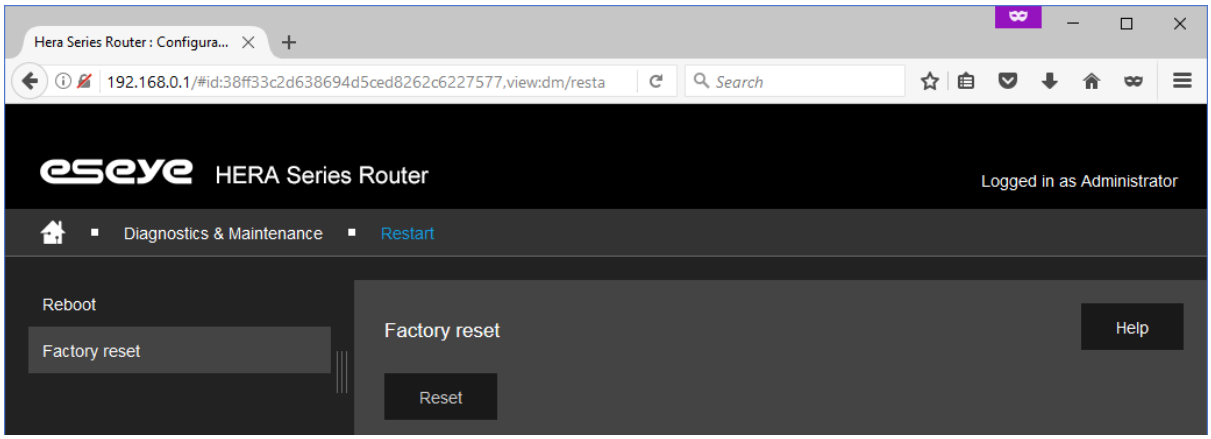
- Reboot (button, press to reboot the router)



3.8.4.2 Factory Reset

This page displays the following option:

- Reset (button, press to reset the router to its initial factory settings)



4 Technical Support

If you need help with your Hera600 Series router please contact Eseye Dataflex technical support, using one of the options below:

Email: support@eseye.com

Telephone:

- Australia: +61 8 9551 5200
- France: +33 9 87 67 53 37
- UK: +44 1483 802 503
- USA: + 1 484-935-3130

Raise a Ticket: https://eseye.zendesk.com/hc/en-us/requests/new

The support team will most likely ask you for the following information

- **Serial number** (the ESN code on the back of the router)
- **Product part number**
- **Current configuration**
- If possible, please have a saved version of your current configuration ready to send

If you are using AnyNet connectivity please also have ready the

- **SIM number** (starting with 89XXXXXXXX…)
- **IP address**, if this is known