

AXXESSMARINE



# PEPWAVE MAX HD4 MEDIAFAST

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# SUMMARY

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# PEPWAVE MAX HD4 MEDIAFAST

To access the Pepwave MAX HD4 LTEA with MediaFast dashboard, type the Gateway on your browser and fill user/password to access the Peplink's main page. (Example: 192.168.50.1).

The screenshot displays the Pepwave MAX HD4 MediaFast dashboard with the following sections:

- Navigation Bar:** PEPWAVE, Dashboard (selected), SpeedFusion Cloud, Network, Advanced, AP, System, Status, Apply Changes.
- WAN Connection Status:**
  - Priority 1 (Highest): Three LTE-A connections (WAN 1, WAN 2, WAN 3) are all connected to LTE-A. Each has a 'Details' button.
  - Priority 2: A placeholder text 'Drag desired (Priority 2) connections here'.
  - Disabled: Four WAN connections (WAN 1, WAN 2, WAN 3, Wi-Fi WAN) are all disabled. Each has a 'Details' button.
- LAN Interface:** Router IP Address: 192.168.50.1. Wi-Fi AP is turned ON.
- Device Information:**
  - Model: Pepwave MAX HD4 MediaFast
  - Firmware: 8.1.0 build 4943
  - Uptime: 5 days 11 hours 57 minutes
  - CPU Load: 13%
  - Power Consumption: 13%
  - Temperature: 45.0 °C / 113.0 °F
  - DC Source A: No Cable Detected
  - DC Source B: Connected
  - DC Term. Block: No Cable Detected
  - Throughput: ↓ 22.0 kbps ↑ 133.0 kbps

## Network Settings

In this session, you can create and manage your Virtual LANs to define some settings and controls within your network.

Go to your Pepwave's webpage, click on **Network**, **Network Settings** and you can see your Virtual LANs.

**PEPWAVE** Dashboard SpeedFusion Cloud **Network** Advanced AP System Status Apply Changes

LAN

- Network Settings
- Port Settings
- Captive Portal

WAN

This configuration is being managed by [InControl](#).

LAN	VLAN	Network	
Untagged LAN	None	192.168.50.1/24	
Management VLAN	1	10.0.1.1/24	

[New LAN](#)

**Static Route Settings**

Static Route	Destination Network	Subnet Mask	Gateway	
		255.255.255.0 (/24)		

**WINS Server Settings**

Enable

**DNS Proxy Settings**

Enable

DNS Caching

Include Google Public DNS Servers

Local DNS Records

Host Name	IP Address	

**Bonjour Forwarding Settings**

Enable

Bonjour Service

Service Network	Client Network	

[Save](#)

**PEPWAVE** Dashboard SpeedFusion Cloud **Network** Advanced AP System Status Apply Changes

LAN

- Network Settings
- Port Settings
- Captive Portal

WAN

**LAN**

**IP Settings**

IP Address 192.168.50.1 255.255.255.0 (/24)

**Network Settings**

Name

Inter-VLAN routing

**Drop-In Mode Settings**

Enable

**DHCP Server**

DHCP Server  Enable

DHCP Server Logging

IP Range 192.168.50.10 - 192.168.50.250 255.255.255.0 (/24)

Lease Time 1 Days 0 Hours 0 Mins

DNS Servers  Assign DNS server automatically

WINS Servers  Assign WINS server

BOOTP

Extended DHCP Option

Option	Value	
<i>No Extended DHCP Option</i>		
<a href="#">Add</a>		

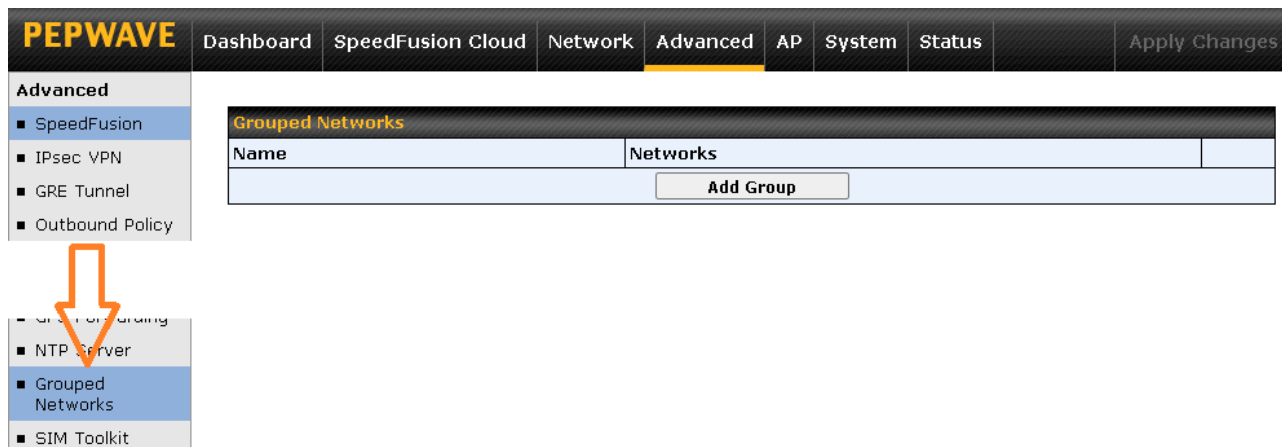
DHCP Reservation

Name	MAC Address	Static IP	
	00:00:00:00:00:00		

All changes must be **saved** and **applied**.

## Grouped Networks

In this session you can Add, Set and Edit your network groups to improve your management inside the internet in your Yacht. To do this, go to **Advanced**, scroll down and click on **Grouped Networks**, choose a name and the IP addresses that will participate in that group.



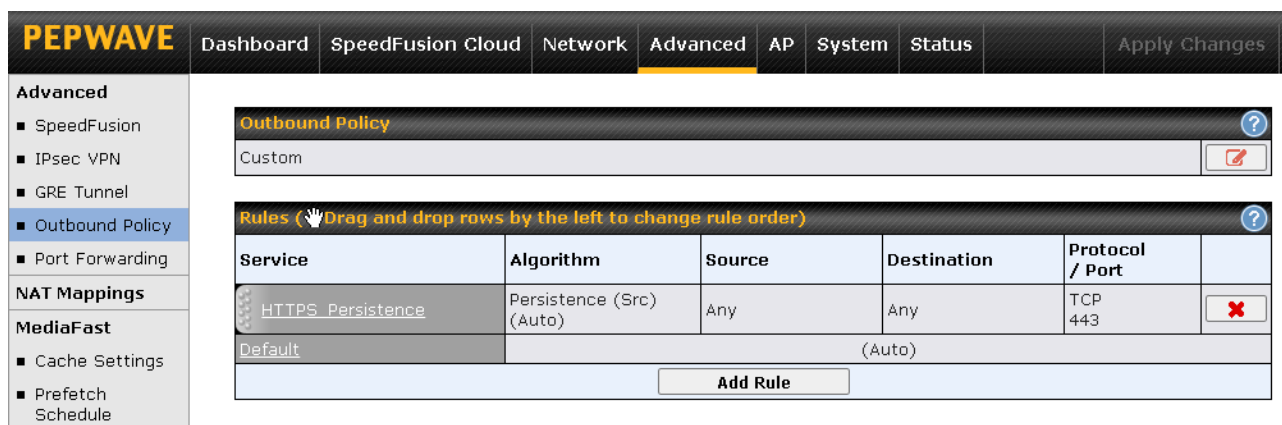
The screenshot shows the PEPWAVE web interface. The top navigation bar includes 'Dashboard', 'SpeedFusion Cloud', 'Network', 'Advanced' (highlighted), 'AP', 'System', 'Status', and 'Apply Changes'. The left sidebar shows the 'Advanced' menu with 'Grouped Networks' selected. The main content area is titled 'Grouped Networks' and contains a table with the following structure:

Name	Networks
Add Group	

All changes must be **saved** and **applied**.

## Outbound Policy

You can define customized rules to manage the outbound traffic behavior. The rule Default will be applied to traffic that does not match with any higher precedence rules.



The screenshot shows the PEPWAVE web interface. The top navigation bar includes 'Dashboard', 'SpeedFusion Cloud', 'Network', 'Advanced' (highlighted), 'AP', 'System', 'Status', and 'Apply Changes'. The left sidebar shows the 'Advanced' menu with 'Outbound Policy' selected. The main content area is titled 'Outbound Policy' and contains a table with the following structure:

Service	Algorithm	Source	Destination	Protocol / Port
HTTPS Persistence	Persistence (Src) (Auto)	Any	Any	TCP 443
Default	(Auto)			

Below the table is an 'Add Rule' button.

This table allows you to fine tune how the outbound traffic should be distributed to the WAN connections.

Click the Add Rule button to add a new rule or the existent rule to make changes.

The screenshot shows the PEPWAVE web interface with the 'Advanced' tab selected. A modal window titled 'Add a New Custom Rule' is open, allowing configuration of a custom rule. The fields are as follows:

Field	Value
Service Name	[Empty text box]
Enable	<input checked="" type="checkbox"/>
Source	Any
Destination	IP Network
Mask	255.255.255.0 (/24)
Protocol	Any
Algorithm	Enforced
Enforced Connection	WAN: WAN 1

Buttons for 'Save' and 'Cancel' are located at the bottom right of the dialog.

This field allows you to choose the WAN selection algorithm.

**Weighted Balance** - Traffic will be proportionally distributed among available WAN connections according to the specified load distribution weight;

**Persistence** - Traffic coming from the same machine will be persistently routed through the same WAN connection;

**Enforced** - Traffic will be routed through the specified connection regardless of the connection's health status;

**Priority** - Traffic will be routed through the healthy connection that has the highest priority;

**Overflow** - Traffic will be routed through the healthy WAN connection that has the highest priority and is not in full load. When this connection gets saturated, new sessions will be routed to the next healthy WAN connection that is not in full load;

**Least Used** - Traffic will be routed through the healthy WAN connection that is selected in the field Connection and has the most available downlink bandwidth;

**Lowest Latency** - Latency checking packets will be periodically sent to all selected healthy connections. Latency will then be determined by the response time of the second and third hops. New traffic will then be routed to a healthy connection with the lowest average latency during that detection period;

**Fastest Response Time** - Traffic will be duplicated and sent to all selected healthy connections. The connection with the earliest response will be used to send all further traffic from the session for the fastest possible response time. If there are any slower responses received from other connection afterwards, they will be discarded. As a result, this algorithm selects the most responsive connection on a per session basis.

The screenshot shows the Peplink web interface with the 'Network' tab selected. The 'Outbound Policy' section is active, displaying a table of custom rules. An 'Edit Custom Rule' dialog is open, showing the configuration for a rule named 'WAN: WAN 3 - VSAT Data'. The rule is set to be enforced for a 'Grouped Network' source, with 'Any' destination and protocol. The 'Enforced Connection' dropdown is open, showing options for WAN 1 through WAN 5 and Mobile Internet. The 'WAN: WAN 3' option is selected.

Service Name	Source	Destination	Protocol	Algorithm	Enforced Connection	Action
All Networks	WAN: WAN 3 - VSAT Data	Any	Any	Enforced	WAN: WAN 3 - VSAT Data	✘
HTTPS_Persistence	Persistence (Src) (Auto)	Any	Any	TCP 443		✘
Default				(Auto)		

This setting means all the users in Grouped Network XYZ will be **enforced** to use the **WAN 3**. This forces this network to use VSAT connections (for example).

## Access Rules

You can create rules to deny an internet group or a specifically person. To do this, go to **Advanced, Access Rules, Internal Network Firewall Rules** and click on **Add Rule**.

**PEPWAVE** Dashboard SpeedFusion Cloud Network **Advanced** AP System Status Apply Changes

- Advanced
  - SpeedFusion
  - IPsec VPN
  - GRE Tunnel
  - Outbound Policy
  - Port Forwarding
- NAT Mappings
- MediaFast
  - Cache Settings
  - Prefetch Schedule
- ContentHub
- MDM Settings
- QoS
  - User Groups
  - Bandwidth Control
  - Application
- Firewall
  - Access Rules**
  - Content Blocking
- Routing Protocols
  - OSPF & RIPv2

**Outbound Firewall Rules** (Drag and drop rows by the left to change rule order)

Rule	Protocol	Source	Destination	Action
Default	Any	Any	Any	✓

**Add Rule**

**Inbound Firewall Rules** (Drag and drop rows by the left to change rule order)

Rule	Protocol	WAN	Source	Destination	Action
Default	Any	Any	Any	Any	✓

**Add Rule**

**Internal Network Firewall Rules** (Drag and drop rows by the left to change rule order)

Rule	Protocol	Source	Destination	Action
Default	Any	Any	Any	✓

**Add Rule**

**Intrusion Detection and DoS Prevention**

Disabled ✎

**Local Service Firewall Rules** (Drag and drop rows by the left to change rule order)

Rule	Service	WAN	Source	Action
Default	Any	Any	Any	✓

**Add Rule**

**Edit a Firewall Rule** ✕

---

**New Firewall Rule**

Rule Name	Block Users to Ship		
Enable	<input type="checkbox"/>		
Protocol	Any	← :: Protocol Selection ::	
Source	Grouped Network	User WIFI Networks	
Destination	Network	IP: <input type="text"/>	Mask: 255.255.255.0 (/24)
Action	<input type="radio"/> Allow <input checked="" type="radio"/> Deny		
Event Logging	<input type="checkbox"/> Enable		

↑


This rule example means when its allowed, all users tagged with **User WIFI Networks** into the **Grouped Networks** will be unable to use internet.



## Content Blocking

Choose applications to be blocked from LAN/PPTP/PepVPN peer clients' access, except for those on the Exempted User Groups or Exempted Subnets defined below.

You can block Audio/Video Streaming, Pornography, Database, Email, File Sharing and others applications into the Pepwave. To do this, click on **Advanced, Content Blocking**, mark the applications and categories, mark or unmark the exempted users and/or groups.

To Block a specifically website, you should click on **Customized Domains**, fill with the domain. Examples: **facebook.\* youtube.\*** and click on .

All changes must be **saved** and **applied**.

Example: How to block **Netflix** to **Crew Network**:

Go to **Advanced, Content Blocking** and in the session **Customized Domains**, type:

nflximg.\*

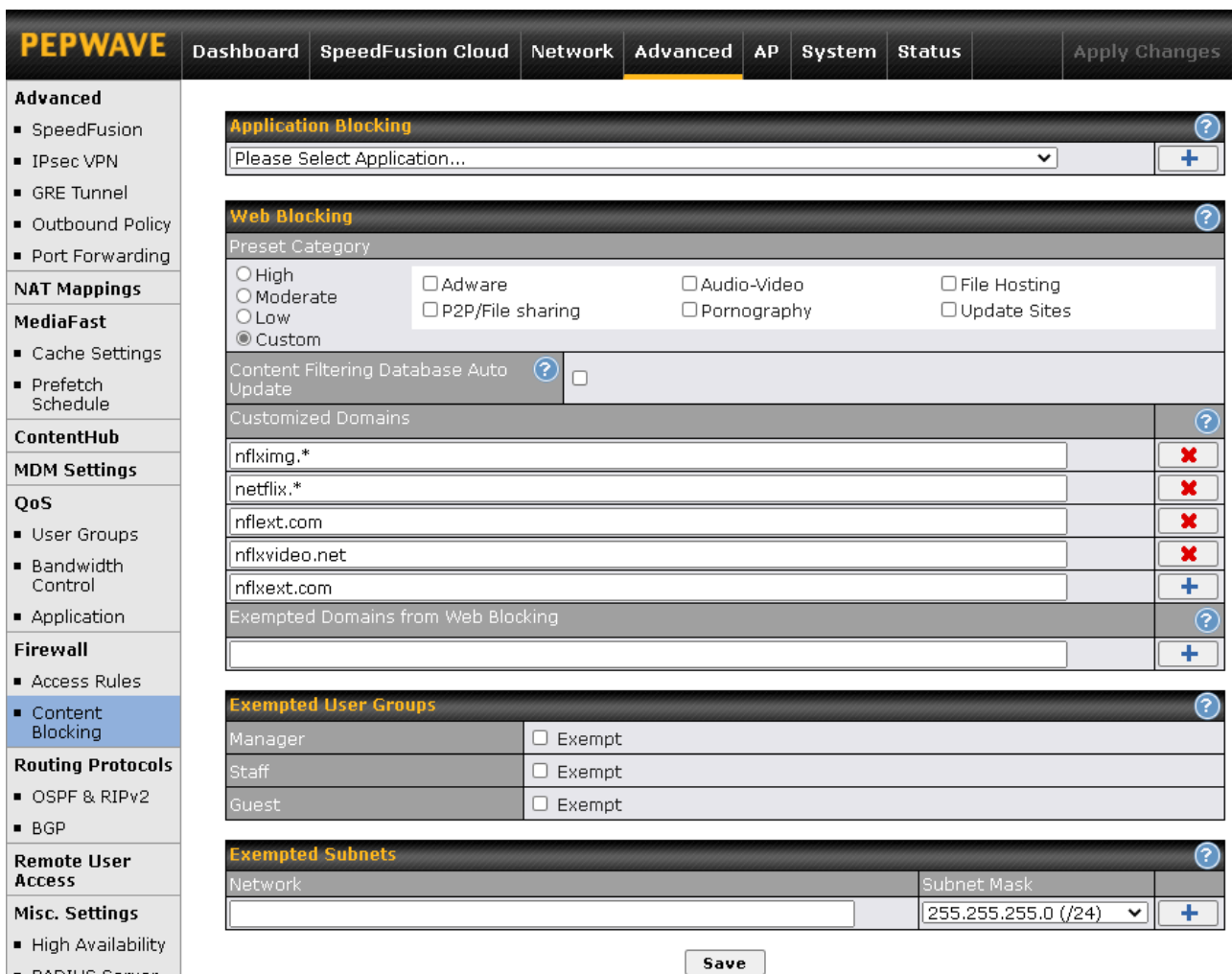
netflix.\*

nflxext.com

nflxvideo.net

nflxext.com

Mark **Manager** and **Guest** as **Exempted User Groups**, **Save** and click on **Apply Changes**.



**PEPWAVE** Dashboard SpeedFusion Cloud Network **Advanced** AP System Status Apply Changes

**Advanced**

- SpeedFusion
- IPsec VPN
- GRE Tunnel
- Outbound Policy
- Port Forwarding

**NAT Mappings**

**MediaFast**

- Cache Settings
- Prefetch Schedule

**ContentHub**

**MDM Settings**

**QoS**

- User Groups
- Bandwidth Control
- Application

**Firewall**

- Access Rules
- Content Blocking**

**Routing Protocols**


- OSPF & RIPv2
- BGP

**Remote User Access**

**Misc. Settings**

- High Availability
- RADIUS Server


**Application Blocking**


Please Select Application... 








**Web Blocking**


Preset Category

High  Adware  Audio-Video  File Hosting  
 Moderate  P2P/File sharing  Pornography  Update Sites  
 Low  
 Custom


Content Filtering Database Auto Update 



**Customized Domains** 

nflximg.*	
netflix.*	
nflxext.com	
nflxvideo.net	
nflxext.com	
Exempted Domains from Web Blocking 	
<input type="text"/>	

**Exempted User Groups** 

Manager	<input type="checkbox"/> Exempt
Staff	<input type="checkbox"/> Exempt
Guest	<input type="checkbox"/> Exempt

**Exempted Subnets** 

Network	Subnet Mask	
<input type="text"/>	255.255.255.0 (/24) 	

**Save**

## Bandwidth Control

Using the Peplink you can define how much minimum bandwidth will be reserved to each user group when a WAN connection is in full load **or/and** you can define a maximum download speed will be reserved for each WAN connection to Guest/Crew (owner no limit).

To do this, you need to know your VLANs and IP Addresses and go to **Advanced, User Groups, Add** and in **Grouped by** mark **Subnet** and fill the IP Address from Owner/Crew/Guest and mark as Manager/Staff/Guest respectively. Example:

The screenshot shows the Peplink PEPWAVE interface with the 'Advanced' tab selected. The 'QoS Clients' section is active, displaying a table with the following data:

QoS Clients	User Group
All DHCP reservation clients	Manager
Everyone	Manager

An 'Add' button is visible below the table. The left sidebar shows the navigation menu with 'User Groups' selected under the 'QoS' category.

These settings mean the IP addresses 0.0.0.0/24 will follow the bandwidth rules as **Manager** (Normally Owner - no limit by default).

After to defining all groups, click on **Bandwidth Control** and check the best option for you and change the settings according to your needs. Example:

The screenshot shows the Peplink PEPWAVE interface with the 'Bandwidth Control' section active. The 'Individual Bandwidth Limit' is checked. The settings are as follows:

Group Bandwidth Reservation	Enable
Group Bandwidth Reservation	<input type="checkbox"/>

Individual Bandwidth Limit	Enable								
Individual Bandwidth Limit	<input checked="" type="checkbox"/>								
User Bandwidth Limit	<table border="1"> <thead> <tr> <th>Download</th> <th>Upload</th> </tr> </thead> <tbody> <tr> <td>Manager: Unlimited</td> <td>Unlimited</td> </tr> <tr> <td>Staff: 0 Mbps</td> <td>0 Mbps (0: Unlimited)</td> </tr> <tr> <td>Guest: 0 Mbps</td> <td>0 Mbps (0: Unlimited)</td> </tr> </tbody> </table>	Download	Upload	Manager: Unlimited	Unlimited	Staff: 0 Mbps	0 Mbps (0: Unlimited)	Guest: 0 Mbps	0 Mbps (0: Unlimited)
Download	Upload								
Manager: Unlimited	Unlimited								
Staff: 0 Mbps	0 Mbps (0: Unlimited)								
Guest: 0 Mbps	0 Mbps (0: Unlimited)								

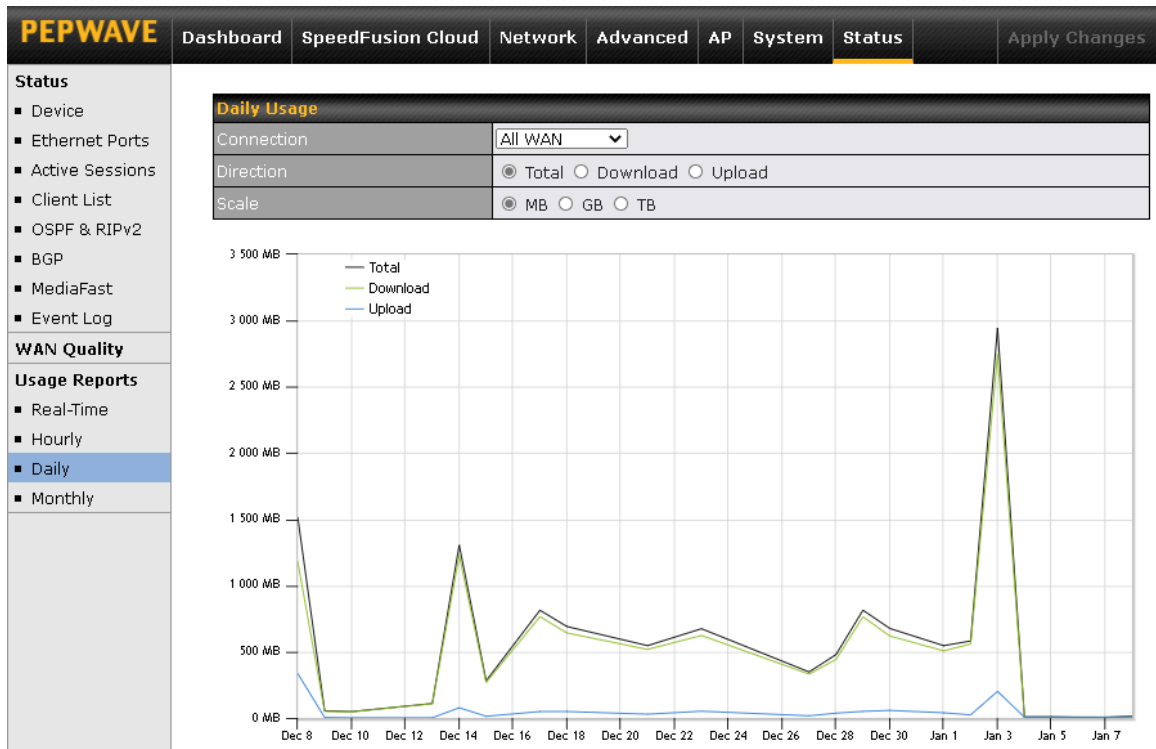
A 'Save' button is located at the bottom of the configuration area. The left sidebar shows 'Bandwidth Control' selected under the 'QoS' category.

All changes must be **saved** and **applied**.

## Usage Reports

Your Peplink is able to show you all the internet usage in different times (Real time, Hourly, Daily and Monthly). You can see how much download each user made in these different times. To see these informations, go to **Status** and click on **Real time**, **Hourly**, **Daily** or **Monthly**.

Example: You click in **Daily** and see a usage graph:



Scrolling down and you see the usage total per day (figure below left), clicking in a day, you can see details about this day (figure below right):

Date	Download	Upload	Total
<a href="#">2021-01-08</a>	0 GB	0.01 GB	0.01 GB
<a href="#">2021-01-07</a>	0 GB	0 GB	0.01 GB
<a href="#">2021-01-06</a>	0 GB	0 GB	0.01 GB
<a href="#">2021-01-05</a>	0 GB	0.01 GB	0.01 GB
<a href="#">2021-01-04</a>	0 GB	0.01 GB	0.01 GB
<a href="#">2021-01-03</a>	2.68 GB	0.2 GB	2.88 GB
<a href="#">2021-01-02</a>	0.54 GB	0.02 GB	0.57 GB
<a href="#">2021-01-01</a>	0.49 GB	0.04 GB	0.53 GB
<a href="#">2020-12-30</a>	0.6 GB	0.06 GB	0.66 GB
<a href="#">2020-12-29</a>	0.75 GB	0.05 GB	0.79 GB
<a href="#">2020-12-28</a>	0.43 GB	0.04 GB	0.47 GB
<a href="#">2020-12-27</a>	0.32 GB	0.02 GB	0.34 GB
<a href="#">2020-12-23</a>	0.61 GB	0.05 GB	0.66 GB
<a href="#">2020-12-21</a>	0.51 GB	0.03 GB	0.53 GB
<a href="#">2020-12-18</a>	0.63 GB	0.05 GB	0.67 GB
<a href="#">2020-12-17</a>	0.75 GB	0.05 GB	0.79 GB
<a href="#">2020-12-15</a>	0.26 GB	0.01 GB	0.27 GB
<a href="#">2020-12-14</a>	1.2 GB	0.08 GB	1.27 GB
<a href="#">2020-12-13</a>	0.1 GB	0 GB	0.11 GB
<a href="#">2020-12-10</a>	0.04 GB	0 GB	0.05 GB
<a href="#">2020-12-09</a>	0.05 GB	0 GB	0.05 GB
<a href="#">2020-12-08</a>	1.15 GB	0.33 GB	1.48 GB

Current Month	
Down	3.73 GB
Up	0.29 GB
<b>Total</b>	<b>4.02 GB</b>

*\* If you want to make changes, we are here (Support Phone and [Portal](#)) to help if you have problems. But also if you want to change something, you can always ask us and we can do it remotely.*