

AXXESSMARINE

# PEPWAVE MAX BR1 Pro LTEA

## **AXXESS MARINE**

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## **SUMMARY**

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## **PEPWAVE MAX BR1 PRO LTEA**

To access the **Pepwave MAX BR1 PRO LTEA** dashboard, type the Gateway on your browser and fill user/password to access the Peplink's main page. (Example: 192.168.50.1).

WAN Connection Status         Priority 1 (Highest)         Image: Connected to the state st	nges
Priority 1 (Highest)	?
Priority 2 Drag desired (Priority 2) connections here Disabled	ails
Disabled	
Displod	عناد
wi-Fi WAN Disabled Deta	ails
I AN Interface	
Router IP Address: 192.168.50.1	
	ans
Puerto Rico Dinited Stotes Virgin Islands Saint Borthélemy Saint Kitts and Nevis	°Ε
Antigua and Barbuda Montserrat	
Device Information         Model:       Pepwave MAX BR1 Pro         Firmware:       8.1.0 build 4941         Uptime:       9 days 5 hours 52 minutes         CPU Load:       12%	

#### **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	
<ul> <li>Network</li> <li>Settings</li> </ul>	This configuration is being managed by <u>InControl</u> .
<ul> <li>Port Settings</li> </ul>	LAN VLAN Network
<ul> <li>Captive Portal</li> </ul>	Untagged LAN None 192.168.50.1/24
WAN	
	New LAN
	Static Route Settings 🔗
	Static Route Destination Network Subnet Mask Gateway
	255.255.255.0 (/24) ▼ +
	DNS Proxy Settings
	Servers
	Local DNS Records
	E un
	3446
FEFWAVE	Dashboard SpeedFusion Cloud Network Advanced AP System Status Apply Changes
LAN	
<ul> <li>Network Settings</li> </ul>	LAN
<ul> <li>Port Settings</li> </ul>	IP Settings
<ul> <li>Captive Portal</li> </ul>	IP Address (?) 192.168.50.1 255.255.0 (/24) V
WAN	Network Settings
	Name
	Inter-VLAN routing
	Drop-In Mode Settings
	Enable O
	DHCD Some
	IP Range 192.168.50.10 -192.168.50.250 255.255.0.(/24) ▼
	Lease Time 1 Days 0 Hours 0 Mins
	DNS Servers Assign DNS server automatically
	BOOTP
	Extended DHCP Option Option Value
	No Extended DHCP Option
	DHCD Reconvotion
	Save Cancel

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.

PEPWAVE	Dashboard	SpeedFusion Cloud	Network	Advanced	АР	System	Status	Apply Ch	
Advanced									
<ul> <li>SpeedFusion</li> </ul>	Grouped	Networks							
<ul> <li>IPsec VPN</li> </ul>	Name		1	Vetworks					
<ul> <li>GRE Tunnel</li> </ul>				Add Gro	oup				
<ul> <li>Outbound Policy</li> </ul>									
• GP10									
<ul> <li>Grouped Networks</li> </ul>									

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.

PEPWAVE	Dashboard	SpeedFusion Clo	ud Network	Advanced	АР	System	Status		Changes	
Advanced										
<ul> <li>SpeedFusion</li> </ul>	Outboun	d Policy	mmmmmm		mm		mmmmm	mmmmmmm	?	
<ul> <li>IPsec VPN</li> </ul>	Custom	Custom								
<ul> <li>GRE Tunnel</li> </ul>										
Outbound Policy	Rules ( 👌	Drag and drop row	s by the left to	change rule o	order)				?	
<ul> <li>Port Forwarding</li> </ul>	Service		Algorithm	Source	,	Des	tination	Protocol / Port		
NAT Mappings	HTTPS	Persistence	Persistence (Sri	c) Anv		Anv		TCP	X	
QoS			(Auto)			(1.1.)		443		
<ul> <li>Bandwidth Control</li> </ul>	<u>Default</u>			Add R	ule	(Auto)				
<ul> <li>Application</li> </ul>										

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.



PEPWAVE	Dashboard	SpeedFusion Cloud	Network	Advanced	АР	System	Status	Apı	nly (
Advanced									
<ul> <li>SpeedFusion</li> </ul>	Outboun	d Policy							
IPsec VPN	Custom								
<ul> <li>GRE Tunnel</li> </ul>									
Outbound Policy	Add a l	New Custom Rule						3	1
<ul> <li>Port Forwarding</li> </ul>									-
NAT Mappings	Service	Name							Ì
QoS	Enable	1	<b>v</b>						
Bandwidth	Source	0	Any	~					
Control	Destina	ition ?	IP Network	~		Mask:			
<ul> <li>Application</li> </ul>		(	255.255.255	.0 (/24) 🛛 🗸					
Firewall	Protoco	N 🕐 🖸	Any 🗙 🗲 💠 I	Protocol Selec	tion :: •	•			
<ul> <li>Access Rules</li> </ul>	Algorith	im 🕜 🛛	Enforced	~					
<ul> <li>Content Blocking</li> </ul>	Enforce	d Connection 🛛 🔞	WAN: WAN	~					
Routing Protocols							_		-
OSPF & RIPv2							Save	Cancel	
BGP									

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.

PEPWAVE	Dashboard	SpeedFusion Cloud	l Network	Advanced	АР	System	Status			
Advanced										
<ul> <li>SpeedFusion</li> </ul>	Outboun	d Policy								
<ul> <li>IPsec VPN</li> </ul>	Custom									
<ul> <li>GRE Tunnel</li> </ul>										
Outbound Policy	Add a N	lew Custom Rule							×	
<ul> <li>Port Forwarding</li> </ul>									_	
NAT Mappings	Service	Name								
QoS	Enable									
<ul> <li>Bandwidth</li> </ul>	Source	?	Any	~						
Control	Destina	tion 🕜	IP Network	~		Mask:				
<ul> <li>Application</li> </ul>			255.255.255	5.0 (/24) 🛛 🗸						
Firewall	Protoco	1 ()	Any 🗙 🗲 ::	Protocol Select	ion ::	~				
<ul> <li>Access Rules</li> </ul>	Algorith	m 🕜 (	Enforced	*						
<ul> <li>Content Blocking</li> </ul>	Enforce	d Connection 🛛 ? [	WAN: WAN	~						
Routing Protocols			WAN: WAN WAN: A-Voda	phone EU					_	
<ul> <li>OSPF &amp; RIPv2</li> </ul>			WAN: Wi-Fi V	VAN			Save	Cance	L	
<ul> <li>BGP</li> </ul>										

This setting mean all the users in Grouped Network **XYZ** will be **enforced** to use the **WAN**. 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	Advance	d AP	System	Status		Apply Ch	
Advanced											
<ul> <li>SpeedFusion</li> </ul>	Outboun	d Firewall Rules	( 🖞 Drag	) and drop	rows by the	left to c	hange rule	e order)			?
<ul> <li>IPsec VPN</li> </ul>	Rule		Protoc	ol Sour	ce		Desti	nation		Action	
<ul> <li>GRE Tunnel</li> </ul>	Default		Any	Any		Dula	Any			<b>v</b>	
<ul> <li>Outbound Policy</li> </ul>					A00	Rule					
<ul> <li>Port Forwarding</li> </ul>	Inbound	Firewall Rules (	WDrag a	and drop r	ows by the le	eft to cha	ande rule i	order)			?
NAT Mappings	Rule		Protoc	ol WAN	Source		D	estinatio	n	Action	
QoS	<u>Defaul</u> t		Any	Any	Any		A	ny		•	
<ul> <li>Bandwidth Control</li> </ul>					Add	Rule					
<ul> <li>Application</li> </ul>	Internal	Network Firewa	all Rules	( WDrag a	nd drop rows	s by the	left to cha	inge rule o	order)		?
Firewall	Rule		Protoc	ol Sour	ce		Desti	nation		Action	
<ul> <li>Access Rules</li> </ul>	<u>Default</u>		Any	Any			Any			<b>O</b>	
<ul> <li>Content Blocking</li> </ul>					Add	Rule					
<b>Routing Protocols</b>	Intrusion	Detection and	DoS Pre	vention					mmmm		?
<ul> <li>OSPF &amp; RIPv2</li> </ul>	Disabled									(	
<ul> <li>BGP</li> </ul>											
Remote User	Local Se	rvice Firewall R	ules ( 🖤	Drag and (	drop rows by	the left	to change	rule orde	r)	0 eties	?
Mice Cottings	Default	-	Anv	æ		Anv		Anv	ce	ACTION	
<ul> <li>High Availability</li> </ul>			,		Add	Rule		1			
- migh Availability											
Edit a Firew	all Rule										
New Firewal	I Rule										
Rule Name		Block	Users	to Ship							
Enable											
Protocol		Any	<b>~ </b> € :	: Protoco	Selection	:: 🖌	]				
Source		Grou	ped Net	twork 🗸	User WIFI	Netwo	rks 🗸				
Destination		? Network	ork	~	IP:			1ask: 2	55.255.255	5.0 (/24)	~
Action		a O 🕥	llow 🧿	Deny							
Event Logging		2 🗆 EI	nable								
		Û	1						Save	Can	cel

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.\*

nflext.com

nflxvideo.net

nflxext.com

When available, mark **Manager** and **Guest** as **Exempted User Groups**, **Save** and click on **Apply Changes**.

PEPWAVE	Dashboard	SpeedFusion Cloud	l Network	Advanced	АР	System	Status	Арј	oly Ch	anges
Advanced										
<ul> <li>SpeedFusion</li> </ul>	Applicati	on Blocking								?
<ul> <li>IPsec VPN</li> </ul>	Please S	elect Application						~	[	+
<ul> <li>GRE Tunnel</li> </ul>										
Outbound Policy	Web Blo	Web Blocking								
<ul> <li>Port Forwarding</li> </ul>	Preset Ca	ategory								
NAT Mappings	OHigh	ate 🗌 Adware	!	🗆 Audi	o-Vide	90	🗆 File	e Hosting		
QoS	OLow	🗆 P2P/File	e sharing	🗆 Porn	iograp	ihy	□Up	date Sites		
<ul> <li>Bandwidth Control</li> </ul>	Content P	m Filtering Database Auto	?							
<ul> <li>Application</li> </ul>	Opdate	od Domains		_	_	_	_	_		
Firewall	Customiz	eu Domains							-	
<ul> <li>Access Rules</li> </ul>	nflximg.*	۶ 								×
Content	netflix.*									<b>X</b>
Blocking	nflext.co	m								<u>×</u>
Routing Protocols	nflxvideo	o.net							l	×
<ul> <li>OSPF &amp; RIPv2</li> </ul>	nflxext.c	om							[	+
BGP	Exempted	d Domains from Web Bl	ocking							?
Remote User Access									[	+
Misc. Settings	Exempte	d Subnets								?
<ul> <li>High Availability</li> </ul>	Network						Subnet	Mask		
<ul> <li>RADIUS Server</li> </ul>							255.25	5.255.0 (/24)	~	+
<ul> <li>Certificate Manager</li> </ul>				Save	e					



### **Bandwidth Control**

Using the Peplink you can define how much minimum bandwidth will be reserved to each user 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 do this, go to **Advanced**, **Bandwidth Control**, mark **Enable** and set the Download and Upload for your users. Example:

PEPWAVE	Dashboard Network Advanced AP System Status Apply Changes
Advanced	
<ul> <li>SpeedFusion</li> </ul>	Individual Bandwidth Limit
<ul> <li>IPsec VPN</li> </ul>	Enable
Outbound Policy	User Bandwidth Limit Download Upload
<ul> <li>Port Forwarding</li> </ul>	1 Mbps V 500 kbps V (0: unlimited)
NAT Mappings	
QoS	Save
<ul> <li>Bandwidth</li> <li>Control</li> </ul>	

These settings mean all the Users will be limited to use 1Mbps (Download) and 500kbps (Upload).

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

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
2021-01-08	0.16 GB	0.01 GB	0.17 GB
2021-01-07	0.21 GB	0.03 GB	0.24 GB
2021-01-06	0 GB	0.01 GB	0.01 GB
2021-01-05	0 GB	0 GB	0 GB
2021-01-04	0.23 GB	0.01 GB	0.24 GB
2021-01-03	0.12 GB	0.01 GB	0.13 GB
2021-01-02	0.21 GB	0.03 GB	0.24 GB
2021-01-01	1.15 GB	0.06 GB	1.22 GB
2020-12-31	0.35 GB	0.03 GB	0.38 GB
2020-12-30	0.06 GB	0.02 GB	0.08 GB
2020-12-29	0 GB	0.01 GB	0.01 GB
2020-12-28	0.01 GB	0.01 GB	0.01 GB
2020-12-27	0.03 GB	0.01 GB	0.04 GB

Curren	t Month		
Down		2.09	GB
Up		0.16	GB
Total		2.25	

\* If you want to make changes, we are here (Support Phone and <u>Portal</u>) 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.

