

# **Quick Note 022**

# Configuring Wireless LAN security and DHCP server on Transport Routers

**UK Support** 

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## Contents

1	Vers	sion	. 3
		nfiguration	
		Configure an Ethernet port	
	2.2	Configure DHCP	. 4
	2.3	Configure Wi-Fi	. 6

# 1 VERSION

Version Number	Status
1.0	Published
1.1	Updated for new GUI

## 2 CONFIGURATION

#### 2.1 Configure an Ethernet port

#### Configuration - Network > Interfaces > Ethernet > ETH 3

▼ ETH 3		
Description:		
<ul><li>Get an IP address automatica</li><li>Use the following settings</li></ul>	ally using DHCP	
IP Address:	192.168.1.1	
Mask:	255.255.255.0	
Gateway:		
DNS Server:		
Secondary DNS Server:		
Changes to these parameters m	ay affect your br	owser connection

#### Configuration - Network > Interfaces > Ethernet > ETH 3 > Advanced

$\ \square$ Respond to ARP requests only if the requestor is of this network		
☐ Enable IGMP on this interface		
☑ Enable Bridge on this interface Bridge Instance: o ▼		
Generate Heartbeats on this interface		
Generate Ping packets on this interface		

Input the IP Address and for the Bridge option select 'on'. Click OK (at the bottom of the page) to save the settings.

Parameter	Setting	Description
IP Address	192.168.1.1	Sets the IP address of ETH 3
Enable Bridge on this interface	Checked	Enable bridging on this interface
Bridge instance	0	Bridges the ETH 3 port with the Wi-Fi module

#### 2.2 Configure DHCP

**Configuration - Network > DHCP Server > DHCP Server for Ethernet 3** 

▼ DHCP Server for Ethernet 3			
✓ Enable DHCP Server			
IP Addresses:	192.168.1.2	to	192.168.1.20
		to	
		to	
Mask:	255.255.255.	0	
Gateway:	192.168.1.1		
DNS Server:	192.168.1.1		
Secondary DNS Server:			
Domain Name:			
Lease Duration:	14 days	0 hr	s 0 mins
■ Wait for 0 milliseconds ■ Only send offers to Wi-Fi clie		ng DHC	P offer reply
<b>DHCP Relay</b> Forward DHCP requests to:			

The lowest assignable IP address needs to be set, as does the subnet mask, default gateway IP address and DNS server IP address. Click OK at the bottom of the page to save the settings.

Parameter	Setting	Description
Enable DHCP Server	Checked	Enable DHCP Server for Ethernet 3
IP Addresses	192.168.1.2 to 192.168.1.20	Sets IP address range that will be assigned by the DHCP server.
Mask	255.255.255.0	Sets the Subnet mask that the DHCP client machines will receive.
Gateway address	192.168.1.1	Sets the default gateway IP address that will be assigned.
DNS Server	192.168.1.1	Sets the DNS server IP address that will be assigned

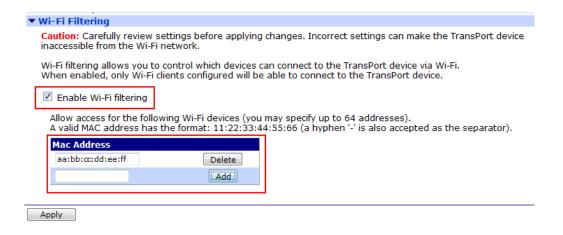
#### 2.3 Configure Wi-Fi

#### Configuration - Network > Interfaces > Wi-Fi > Global Wi-Fi settings

<u>Configuration - Network &gt; Interfaces &gt; Wi-Fi &gt; Global Wi-Fi settings</u>				
▼ Global Wi-Fi settings				
Country: United Kingdom				
Network Mode: B/G ▼				
Channel: Auto ▶				

Parameter	Setting	Description
Country	Select correct country	Sets the Wi-Fi channels available for use
Network Mode	B/G	Sets Wi-Fi to B/G mode
Channel	Number/Auto	Sets the channel ID for use.

#### Configuration - Network > Interfaces > Wi-Fi > Global Wi-Fi settings > Wi-Fi Filtering



The option above is used to enter MAC addresses of wireless adaptors which are allowed to connect to the wireless LAN.

Parameter	Setting	Description
Mac Address	aabbccddeeff	Sets a MAC address that is allowed to connect to the wireless LAN.

#### Configuration – Network > Interfaces > Wi-Fi > Wi-Fi 0

Enable this Wi-	Fi interface
Description:	My Access Point
SSID:	My_SSID
Mode:	Access Point 💌
interface	data to and from this Wi-Fi interface, it must be bridged with at least one Ethernet
This Wi-Fi interfa	ace is a member of Bridge instance o and therefore bridged to the following interface
Ethernet  Wi-Fi  Ethernet   Ethernet	0
▼ Hide SSID	
☑ Enable statio	on isolation
Wi-Fi Security	
Use the following	g security on this Wi-Fi interface:
◎ None ◎ WE	EP
<b>WPA-PSK Se</b>	ttings
	WPA Encryption: ○ TKIP ● AES (CCMP)
	WPA pre-shared key: ••••••• (8 - 63 chars)
С	Confirm WPA pre-shared key:
4	""

Parameter	Setting	Description
Enable this interface	Enabled	Enables Wi-Fi
Description	Free text field	Friendly name
SSID	SSID text	Sets the SSID for the access point
Mode	Access Point	Sets the mode of the Wi-Fi
Wi-Fi interface bridge instance	Drop down list	Sets membership of Bridge instance (table below allows management of this bridge instance)
Hide SSID	Enabled	Stops the SSID being broadcast
Isolation	Enabled	Keeps Wi-Fi clients isolated from each other
Security	WPA2-PSK	Sets the security method

Parameter	Setting	Description
WPA Encryption	AES	Sets the WPA encryption type
WPA pre-shared key	Password	Sets the pre-shared key

Please note: In order to maximise the security of the wireless connection the use of a long pseudorandom shared key is recommended.

Wi-Fi configuration is now complete