Configuring a BEC 8920NE Broadband Multiple-Service Gateway

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This 8920NE modem has a nice feature. It auto-senses the WAN interface type so there is no need to "EWAN" or change the Main Port to Ethernet. It does this on its own.

If the modem has a phone cord plugged into the DSL port and it syncs up on a port that is provisioned for ADSL it automatically sets the WAN interface to atm0.1. If it syncs up on a port that's provisioned for VDSL it automatically sets the WAN interface to ptm0.1.

If an Ethernet cable is plugged into the EWAN port and establishes a link the WAN interface automatically changes to the eth4.1 interface.

Setting Up the PC

Before you can get into your new BEC 8920NE Wireless modem, you will need to have the computer's Ethernet interface to be set up for DHCP, or you will have to set up a static IP address.

Use the following address information if setting up a static IP in the computer's Ethernet interface:

IP ADDRESS: **192.168.10.100** SUBNET MASK: **255.255.255.0** GATEWAY: **192.168.10.1**

PRIMARY DNS: 216.220.0.1 SECONDARY DNS: 216.220.30.1

Logging Into the BEC 8920NE

BEC		Triple WAN ADSL2+ Firewall Router	
Menu	Status		
▼ Status	▼ Device Information		
• Summary	Model Name		BEC 8920NE
• WAN	Host Name		home.gateway
Statistics	System Up-Time		0D 0H 16M 51S
Bandwidth Usage	Date/Time		Wed Apr 16 15:58:42 2014
· Route	Software Version		4.60h.rz11.1
• ARP	LAN IPv4 Address	Authentication	a Required
• DHCP	LAN IPv6 Address		
▶ Log	MAC Address		A username and password are being requested by http://162.244.232.5. The site says: "BEC 8920NE"
Quick Start	DSL PHY and Driver Version	1	
Configuration	Wireless Driver Version	User Name:	
►Advanced Setup		Password:	
	- WAN		OK Casel
	B0 Traffic Type		United Canter
	B0 Line Rate - Upstream (Kbps	s)	
	B0 Line Rate - Downstream (K	bps)	34499
	B1 Traffic Type		Inactive
	B1 Line Rate - Upstream (Kbps	5)	0
	B1 Line Rate - Downstream (K	bps)	0
	Default Gateway / IPv4 Address		ptm0.1 (DSL) / 162.244.232.5
	Connection Time		00:16:52
	Primary DNS Server		216.220.0.1
	Secondary DNS Server		216.220.30.1
	Default IPv6 Gateway / IPv6 Add	iress	

In order to log in, open a web browser (Internet Explorer works best for this), and in the address bar type in the following IP address.

192.168.10.1

After you input the IP address, press the "GO" button or press "ENTER" on your keyboard to access the page. If everything goes as anticipated, you will see a login screen prompting for username and password (Above).

At this point in the process, input the username and the password as follows:

USERNAME: admin PASSWORD: NEMONTadmin

After inputting the username and password, simply click the **"OK"** button. You will be redirected to the default home page of the modem.

Configuring Wireless

BEC	Triple WAN ADSL2+ Firewall Router									
Menu	Configuration									
Status	▼Basic									
Quick Start	Parameters									
Configuration	Wireless		Proble							
LAN	Hide SSID	- Enabl								
Wireless			Linable							
• Basic	Clients Isolation		Enable							
• Security	Disable WMM Advertise		- Enable							
MAC Filter	Wireless Multicast Forwarding (WMF)		Enable							
Vireless Bridge	SSID		Team Nemont							
Station Info	BSSID		00:04:ED:F5:62:8D							
Schedule Control	2 miles	00.04.20								
WAN	Country	UNITED								
System	Max Clients	16	16 [1-16]							
IP Tunnel	Wireless - Guest/Virtual Access Points									
Security	SSID	Hidden	Clients Isolation	Disable WMM Advertise	WMF	Hotspot	BSSID	Enable		
Quality of Service	wI0_Guest1					16	N/A			
NAT	wI0_Guest2					16	N/A			
dvanced Setup	wI0_Guest3					16	N/A			
	Apply Cancel									

After logging into the modem's home page, click on "**Configuration**" then "**Wireless**" on the left side of the page. Enter the "**SSID**" the customer would like to use. This is usually the customer's last name. Once entered, click the "**Apply**" button to save changes.

BEC	Triple WAN ADSL2+ Firewall Router					
Menu	Configuration					
► Status	▼ Security					
Quick Start	If Hide Access Point enabled or Mac filter list is empty with 'allow' chose	n, WPA2 will be disabled.				
▼Configuration	WPS Setup					
LAN	WPS	Disable (Current: Disable)				
Basic	Manual Setup AP					
Security	Select SSID	Team Nemont 🔻				
• MAC Filter	Network Authentication	Mixed WPA2/WPA-PSK V				
 Wireless Bridge 	WPA/WAPI passphrase	Click here to display				
Advanced						
Station Info	WPA Group Rekey Interval	3600 [0-2147483047]				
Schedule Control	WPA/WAPI Encryption	TKIP+AES V				
> System	Apply Cancel					
IP Tunnel						
Security						
Quality of Service						
▶ NAT						

To setup the wireless security click on the "Security" link on the left side of the page under "Wireless". The "Select SSID" should show the SSID you entered on previous page.

"WPA/WAPI passphrase" by default is the LAN MAC address (uppercase letters) which is listed on the underside of the modem on the MAC address label. However, the password can be changed to anything the customer would prefer to use. The only restriction is that the new key is at least eight or more characters in length. The current passphrase can be viewed by clicking on the "Click here to display" link to the right of the passphrase box.

After modifying the information above, click the "Apply" button to save these settings.

If the customer is DHCP you are done configuring the BEC 8920NE modem! The modem is now ready for DHCP authentication.

If the customer has a static IP address continue below...

Setup – Static IP

BEC		Triple WAN ADSL2+ Firewall Router											
enu	Configurati	ion											
tus	▼WAN Servi	ice											
k Start	ATM Interfa	се											
iguration	face	Description	Туре	VPI / VCI	Vlan8021p	VlanMuxId	Igmp	NAT	Firewall	IPv6	MId	Remove	Ean
N	atm0.1	ADSLData	IPoE	0/35	N/A	N/A	Disabled	Enabled	Enabled	Disabled	Disabled		Edit
reless	PTM Interfa	ce											<u> </u>
AN Service	Interface	Description	Туре		Vlan8021p	VlanMuxId	Igmp	NAT	Firewall	IPv6	MId	Remove	Edit
SL	ptm0.1	VDSLData	IPoE		N/A	N/A	Disabled	Enabled	Enabled	Disabled	Disabled		Edit
NR	ptm0.2	Video	Bridge		N/A	N/A	Disabled	Disabled	Disabled				Edit
stem	ETH Interfac	ce											
Funnel	Interface	Description	Type		Vlan8021p	VlanMuxId	lamp	NAT	Firewall	IPv6	MId	Remove	Edit
curity	eth4.1	FTTHData	IPoE		N/A	N/A	Disabled	Enabled	Enabled	Disabled	Disabled		Edit
ality of Service T	Add F	Remove											\smile
anced Setup													

To setup modem with a static IP, click the "Configuration", "WAN" and then "WAN Service" link at the left of the page.

If the service is ADSL click the "Edit" button for the atm0.1 interface.

If the service is VDSL then click the "Edit" button for the ptm0.1 interface. *The ptm0.2 interface is for IPTV only and should be left alone.

If the service is FTTP then click the "Edit" button for the eth4.1 interface.

		Triple WAN ADSL2+ I	Firewall Router		
Menu	Configuration				
Status	▼WAN Service				
Quick Start	Parameters				
✓Configuration	Туре	IP over Ethernet			
LAN Wireless	Description	VDSLData			
WAN	802.1P Priority	-1 [tagged: 0-7; untagged: -1]	802.1Q VLAN ID	-1 [tagged: 0-4094; untagged: -1]	
• WAN Service	Obtain an IP address automatically	Enable			
• DSL	Option 60 Vendor ID				
• SNR	Option 61 Client ID				
IP Tunnel	Option 125				
Security	Option 125	Disable - Enable			
Quality of Service	WAN IP Address	162.244.232.5			
NAT	WAN Subnet Mask	255.255.255.0			
Advanced Setup	WAN gateway IP Address	162.244.232.1			
	Primary DNS	216.220.0.1			
	Secondary DNS	216.220.30.1			
	IPv6 for this service	Enable			
	NAT	Enable	Fullcone NAT	C Enable	
	Firewall	Enable	IGMP Multicast	Enable	
	MTU	1500	MAC Spoofing		
	ONLY IF REQUIRED DISABLES NET	WORK ACCELERATION AND SOME SECURITY.			
	Apply				

The following procedure is identical for all WAN interfaces.

Next uncheck the "Enable" checkbox next to "Obtain an IP address automatically". Now enter the customer's static IP address in the "WAN IP Address" box. The subnet mask will go in the "WAN Subnet Mask" box and their gateway IP will go in the "WAN gateway IP Address Box".

Next the DNS information will need to be put in. Enter these in the "**Primary DNS**" and "**Secondary DNS**" boxes and then click the "**Apply**" button. The modem should now be setup with the static IP

At this time the "Primary DNS" is 216.220.0.1 and the "Secondary DNS" is 216.220.30.1

If you want to **bridge** the modem click the "**Type**" dropdown box and select "**Bridging**". Next click the "**Apply**" button. The modem is now bridged. One will also want to disable the LAN DHCP Server and the Wireless. See next page for those instructions.

Configuration Basic Parameters Vireless Ureless Uteless Uteless Vireless Vireles Virele	 ✓ Enat ✓ Enat ✓ Enat □ Enat □ Enat □ Enat 	ole	•							
Basic Vireless Ide SSID Vients Isolation Disable WMM Advertise Vireless Multicast Forwarding (WMF)	 ✓ Enat ✓ Enat ⊂ Enat ⊂ Enat ⊂ Enat ⊂ Enat 	ble Die Die	•							
Parameters Vireless de SSID Dients Isolation Disable WMM Advertise Vireless Multicast Forwarding (WMF)	 ✓ Enat ✓ Enat ⊂ Enat ⊂ Enat ⊂ Enat 	ole Ole Ole	•							
Vireless de SSID Dients Isolation Disable WMM Advertise Vireless Multicast Forwarding (WMF)	Enat Enat Enat Enat Enat Enat Enat Enat	ole ole ole	•							
ide SSID Dients Isolation Disable WMM Advertise Vireless Multicast Forwarding (WMF)	Enat Enat Enat Enat	ole ole								
Disclos Clients Isolation Disable WMM Advertise Vireless Multicast Forwarding (WMF)	Enat	ble ble								
Jienns isolation Jisable WMM Advertise Vireless Multicast Forwarding (WMF)	Enat	ble								
Disable WIMI Advertise Vireless Multicast Forwarding (WMF)	Enat	ble								
Vireless Multicast Forwarding (WMF)	Enat	ale.		Enable						
		Enable								
SSID		Team Nemont								
RSSID		00:04:ED:F5:62:8D								
	00.04.20									
country	UNITEL	UNITED STATES								
lax Clients	16	[1-16]								
Vireless - Guest/Virtual Access Points										
SSID	Hidden	Clients Isolation	Disable WMM Advertise	WMF	Hotspot	BSSID	Enable			
wI0_Guest1					16	N/A				
wI0_Guest2					16	N/A				
wI0_Guest3					16	N/A				
Vi	untry x Clients reless - Guest/Virtual Access Points SSID wl0_Guest1 wl0_Guest2 wl0_Guest3 Apply Cancel	untry UNITED x Clients 16 reless - Guest/Virtual Access Points 16 SSID Hidden wl0_Guest1 0 wl0_Guest2 0 wl0_Guest3 0	untry UNITED STATES x Clients 16 [1-16] reless - Guest/Virtual Access Points SSID Hidden Clients Isolation wl0_Guest1 wl0_Guest2 wl0_Guest3	untry UNITED STATES x Clients 16 [1-16] reless - Guest/Virtual Access Points Image: Clients Isolation Disable WMM Advertise SID Hidden Clients Isolation Disable WMM Advertise wl0_Guest1 Image: Clients Isolation Disable WMM Advertise wl0_Guest2 Image: Clients Isolation Image: Clients Isolation wl0_Guest3 Image: Clients Isolation Image: Clients Isolation	UNITED STATES x Clients 16 [1-16] reless - Guest/Virtual Access Points Hidden Clients Isolation Disable WMM Advertise WVF wl0_Guest1 I I III IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	UNITED STATES x Clients 16 (1-16) reless - Guest/Virtual Access Points Hidden Clients Isolation Disable WMM Advertise WMF Hotspot SSID Hidden Clients Isolation Disable WMM Advertise WMF Hotspot Wi0_Guest1 I	untry UNITED STATES x Clients 16 [1-16] reless - Guest/Virtual Access Points Iffed of Clients Isolation Disable WMM Advertise WMF Hotspot BSSID M0_Guest1 Image: Clients Isolation Image: Clients Isolatisolition Image:			

To disable the Wireless click on "Configuration" and "Wireless" on the left hand menu. Now uncheck the "Wireless" Enable box and click the "Apply" button

BEC		Triple WAN ADSL2+ Firewall Router
Menu	Configuration	
Status Quick Start	▼LAN Parameters	
Configuration ✓LAN	Group Name	Default V
Ethernet IPv6 Autoconfig	IP Address Subnet Mask	255.255.0
Interface Grouping Wireless	IGMP Snooping	
WAN System	LAN side firewall DHCP Server	Enable
IP Tunnel Security	DHCP Server	Disable
Quality of Service	IP Alias	Enable
Advanced Setup	IP Address	
	Apply Cancel	

To disable the LAN DHCP server click on "**Configuration**" and "**LAN**" on the left hand menu. Once there change the "**DHCP Server**" dropdown box to "**Disable**" and click the "**Apply**" button.

Finished

Congratulations! You are now done configuring your BEC 8920NE modem.