

Configuring Chassis Ports in the EN-4000

he EN-4000 is the newest member of Encore Networks' family of routers. It provides wireless and cabled connections to a local area network (LAN) and to peripheral devices and remote devices.

Follow the procedures in this discussion to configure the EN-4000.

Also see Configuring the EN-4000's Serial Ports.

Port Interfaces 5.1

Confer with your network administrator to get values for this configuration.

- 1 Select the **Network** management area.
- 2 Select the Interfaces configuration area.
 - The EN-4000 Interface Overview Screen is displayed (Figure 5-1).

Figure 5-1. EN-4000 Interface Overview Screen

Status System Network	Statistics Logout												
Interfaces Firewall Sta	tic Routes Load Sharing/Failover QoS	Diagnostics	Hostnames	DHCP and DNS	VPN	VRRP	Serial	_	_	_	_	_	_
terfaces													
Interface Overview													
Network	Status								А	ctions			
	Uptime: 0h 2m 22s												
LAN	MAC-Address: 00:A0:EB:03:59:1	5				474					E 10		
(ي الله الله	RX: 114.20 KB (1087 Pkts.)					ι.	Connect		Stop		Edit	×	Delete
br-lan	IPv4: 192.168.1.1/24												
	Uptime: 0h 2m 18s												
WAN	MAC-Address: 00:A0:EB:03:59:11	5				a	Constant		0		E da		Delete
2	RX: 174.36 KB (993 Pkts.) TX: 60.33 KB (380 Pkts.)					i9	Connect		Stop	2	Edit	*	Delete
ethu	IPv4: 192.168.101.51/24												

- To define a new interface, select Add New Interface. 3
 - The Screen to Create an Interface is displayed (Figure 5-2).

Figure 5-2. Screen to Create an Interface

											Unsave	d Changes: 24
enc	cor <mark>e•n</mark> etwork	(S										
St	atus System Network	Statistics	Logout									
In	terfaces DHCP and DNS	Hostnames	Static Routes	Firewall	Diagnostics	QoS	Configure Diagnostics	MAC Device Info Overrides	Multiwan			_
Cre	eate Interface											
	Name of the new interface				(@ Th	e allow	red characters are: A-Z, a	-z, 0-9 and _				
1	Protocol of the new interfa	ce			Stati	c addre	ess					
1	Create a bridge over multip	ole interfaces										
	Cover the following interfa	ce				Ethe Ethe Cust	rrnet Adapter: "eth0" (v rrnet Adapter: "eth1" (v com Interface:	van) an)				
	Back to Overview	_			_	_				_		Submit

- 4 Fill out the fields on the Screen to Create an Interface.
- **5** Select the **Submit** button (in the lower right corner of the screen) to add the interface.
- 6 Select the **Back to Overview** button (in the lower left corner of the screen) to return to the general network interfaces screen.
 - The EN-4000 Interface Overview Screen is redisplayed, showing the new interface.

5.2 Configuring a LAN Port

Confer with your network administrator to get values for this configuration.

- 1 Select the **Network** management area.
- 2 Select the Interfaces configuration area.
 - The EN-4000 Interface Overview Screen is displayed (Figure 5-3).

Figure 5-3. EN-4000 Interface Overview Screen

atus System Network	Statistics Logout												
nterfaces Firewall Static	Routes Load Sharing/Failover QoS	Diagnostics	Hostnames	DHCP and DNS	VPN	VRRP	Serial				_		
orfacor													
.erraces													
Interface Overview													
Network	Status								A	ctions			
	Uptime: 0h 2m 22s												
LAN	MAC-Address: 00:A0:EB:03:59:16					~		-					
(🛃) التي	RX: 114.20 KB (1087 Pkts.)					2	Connect		Stop		Edit	*	Delete
br-lan	IPv4: 192.168.1.1/24												
	Untime: 0h 2m 19a												
WAN	MAC-Address: 00:A0:EB:03:59:15												
<u>_</u>	RX: 174.36 KB (993 Pkts.)					2	Connect	8	Stop	2	Edit	×	Delete
eth0	TX: 60.33 KB (380 Pkts.)												
	IPV4: 192.168.101.51/24												

- **3** Select the **Edit** button in the **LAN** interface row.
- 4 If necessary, select the General Setup tab.
 - The LAN Interface General Setup Screen is displayed (Figure 5-4).

atus System Network Statistics	*
terfaces DHCP and DNS Hostnames Static R	Several Diagnostics OoS Configure Diagnostics MAC Device Info Overrides Multiwan
AN LAN	
erfaces - LAN	
this page you can configure the network interfaces	i. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separat VLANIR (e.g.: eth0.1).
Common Configuration	
General Setup Advanced Settings Physical Se	
Status	Untime: 4d 3h 41m 43s
	MAC-Address: 00:A0:EB:01:F1:30
	br-lan TX : 198.76 MB (202929 Pkts.)
D	IPV4. 192.100.1.1/24
Protocol	Static address
IPv4 address	192.168.1.1
IPv4 netmask	255.255.255.0
IPv4 gateway	
IPv4 broadcast	
Use custom DNS servers	*
Accept router advertisements	
Send router solicitations	V
IPv6 address	
IPv6 gateway	
, to gateria;	
DHCP Server	
General Setup Advanced Settings	
Ignore interface	Oisable DHCP for this interface.
Start	100 ② Lowest leased address as offset from the network address.
Limit	150
	Maximum number of leased addresses.
Leasetime	12h

- 5 After configuring the fields on the screen (including the General Setup items under the DHCP Server heading in the lower portion of the screen), select the Save & Apply button. Then select the Advanced Settings tab under the DHCP Server heading.
 - The LAN Interface DHCP Server Advanced Settings Screen is displayed (Figure 5-5).

Figure 5-5.	LAN Inte	erface DHCI	P Server	Advanced	Settings	Screen
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System Network Statistics Logout	
faces DHCP and DNS Hostnames Static Routes Fire	wall Diagnostics QoS Configure Diagnostics MAC Device Info Overrides Multiwan
LAN	
facos I AN	
Idces - LAN	
page you can configure the network interfaces. You can bi ces. You can also use VLAN notation INTERFACE.VLANNR (e.g	ridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separ : eth0.1).
nmon Configuration	
eral Setup Advanced Settings Physical Settings Fi	rewall Settings
tus	Uptime: 4d 3h 41m 43s
	MAC-Address: 00:A0:EB:01:F1:30 RX: 27.16 MB (162377 Pkts.)
	IPv4: 192.168.1.1/24
tocol	Static address
4 address	192.168.1.1
4 netmask	255.255.255.0
4 gateway	
4 broadcast	
custom DNS servers	
ept router advertisements	0
d router solicitations	V
6 address	
6 gateway	
CP Server	
Advanced Settings	
namic DHCP	🗹 🔕 Dynamically allocate DHCP addresses for clients. If disabled, only clients having static leases will be served.
ce	🗐 🕝 Force DHCP on this network even if another server is detected.
4-Netmask	
	Override the netmask sent to clients. Normally it is calculated from the subnet that is served.
LY-Options	O Define additional DHCP options, for example "6, 192.168.2.1, 192.168.2.2" which advertises different DNS servers to cliente

- 6 After configuring the fields for the Advanced Settings tab under the DHCP Server heading, select the Save & Apply button. Then select the Advanced Settings tab under the Common Configuration heading (in the top portion of the screen).
 - The LAN Interface Common Configuration Advanced Settings Screen is displayed (Figure 5-6).

Figure 5-6. LAN Interface Common Configuration Advanced Settings Screen

tatus Syste	m Network Statistic	s Logout		<u> </u>					
nterfaces	Firewall Static Routes	Load Sharing/Failover	QoS Diagnos	tics Hostnames	DHCP and DNS	VPN VRR	P Serial	_	
terfaces -	LAN								
this page yo aces. You can	ou can configure the netw a also use <u>VLAN</u> notation	vork interfaces. You ca INTERFACE.VLANNR (e.	an bridge several i g.: eth0.1).	nterfaces by ticki	ng the "bridge inter	faces" field a	and enter the n	ames of several n	etwork interfaces separated
Common Co	onfiguration								
General Setu	Advanced Settings	Physical Settings	Firewall Settings						
Bring up on I	boot		V	l					
Override MA	C address		00):A0:EB:03:59:16					
Override MTU	U		15	500					
Use gatewa	y metric		0						
DHCP Serve	sr								
General Setu	Advanced Settings								
Dynamic DHO	CP		<u>v</u>	Oynamically a	llocate DHCP address	es for clients.	If disabled, only	clients having stati	c leases will be served.
Force				Force DHCP or	n this network even if	another serv	er is detected.		
IPv4-Netmas	sk		e	Override the netr	mask sent to clients. N	lormally it is o	calculated from t	he subnet that is se	rved.
DHCP-Optior	ns		(2 se) Define additional rvers to clients.	DHCP options, for ex-	ample "6, 192	.168.2.1,192.	168.2.2" which adv	ertises different DNS

7 After configuring the fields for Advanced Settings under the Common Configuration heading, select the Save & Apply button. Then select the Physical Settings tab.

♦ The LAN Interface Physical Settings Screen is displayed (Figure 5-7).

	Chan
ncor <mark>e•n</mark> etworks	eku an
Auto Reiter	
Status System Network Statistics Lo	gent
Interfaces DHCP and DNS Hostnames State	c koutes Firewall Diagnostics QoS Conngure Diagnostics MAC Device Into Overnoes Multiwan
WAN LAN	
Interfaces - LAN	
On this page you can configure the network interfa spaces. You can also use <u>VLAN</u> notation INTERFACE.	ces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated b VLANUR (e.g.: ecto.1).
Common Configuration	
General Setup Advanced Settings Physical	Settings Firewall Settings
Bridge interfaces	🗹 🕼 creates a bridge over specified interface(s)
Enable STP	🗐 🙆 Enables the Spanning Tree Protocol on this bridge
Interface	Ethernet Adapter: "eth0" (wan) Ethernet Adapter: "eth1" (lan) Curdent information
DUCB Former	
Ceneral Seture	
Ignore interface	Disable DHCP for this interface.
Start	100 Lowest leased address as offset from the network address.
Limit	150 a Maximum number of leased addresses.
Leasetime	12h Expiry time of leased addresses, minimum is 2 Minutes (2m).
	🕲 Reset 🕲 Save 🚺 Save & App

Figure 5-7. LAN Interface Physical Settings Screen

8 After configuring the fields on the screen, select the **Save & Apply** button. Then select the **Firewall Settings** tab.

The LAN Interface Firewall Settings Screen is displayed (Figure 5-8).

Page	5-6
	~ ~

Figure 5-8.	LAN	Interface	Firewall	Settinas	Screen
J · · · ·					

rfaces DHCP and DNS Hostnames Static Routes Firewall	Diagnostics QoS Configure Diagnostics MAC Device Info Overrides Multiwan
LAN	
faces - LAN	
s page you can configure the network interfaces. You can bridge :	several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated
non Configuration	<i>y</i> .
neral Setun Advanced Settings Physical Settings Firewall	Sattings
eate / Assign firewall-zone	
	Ian: lan:
	🔘 wan: wan: 💻
	unspecified -or- create:
	Choose the firewall zone you want to assign to this interface. Select unspecified to remove the interface from the
	associated zone or fill out the create field to define a new zone and attach the interface to it.
CD Server	
neral Setup Advanced Settings	
nore interface	U 🕼 Disable DHCP for this interface.
art	100
•	
IIL	I SU
asetime	12h

9 After configuring the fields on the screen, select the **Save & Apply** button.

5.3 Configuring the WAN Port

Confer with your network administrator to get values for this configuration.

- 1 Select the **Network** management area.
- 2 Select the Interfaces configuration area.
 - The EN-4000 Interface Overview Screen is displayed (Figure 5-9).

Figure 5-9. EN-4000 Interface Overview Screen

status System Network	Statistics Logout													
interfaces Firewall Stati	c Routes Load Sharing/Failover	QoS	Diagnostics	Hostnames	DHCP and DNS	VPN	VRRP	Serial						
torfaces														
terraces														
Interface Overview														
Network	Status	tus								A	ctions			
LAN	Uptime: 0h 2m 22s	2.50.16												
ad (🖻)	RX: 114.20 KB (1087 Pkts.)	5:59:10					2	Connect	8	Stop		Edit	×	Delete
br-lan	TX: 717.86 KB (1278 Pkts.)													
	IPv4: 192.168.1.1/24													
WAN	Uptime: 0h 2m 18s	2.50.15												
<u>,</u>	RX: 174.36 KB (993 Pkts.)	5.59.15					2	Connect	8	Stop		Edit	*	Delete
eth0	TX: 60.33 KB (380 Pkts.)													
	IPv4: 192.168.101.51/24													

3 Select the **Edit** button in the **WAN** interface row.

♦ The WAN Interface General Setup Screen is displayed (Figure 5-10).

Figure 5-10. WAN Interface General Setup Screen

	Changes:
Status System Network Statistics Logout Interfaces DHCP and DNS Hostnames Static Routes Firewall Diag WAN LAN Interfaces - WAN	inostics QoS Configure Diagnostics MAC Device Info Overrides Multiwan
On this page you can configure the network interfaces. You can bridge sever spaces. You can also use VLAN notation INTERFACE, VLANIR (e.g., etcho.1). Common Configuration General Setup Advanced Settings Physical Settings Firewall Setti Status	al interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by Ings Uptime: 4d 1h 48m 8s Uptime: 4d 1h 48m 8s Impact: Address: 00:A0:EB:01:F1:2E RX: 27:27.77 MB (1235225 Pkts.) IFV4: 192.168.101.109/24
Protocol Hostname to send when requesting DHCP	DHCP client
Accept router advertisements	
	🙆 Reset 🧭 Save 🕻 Save & Apply

- **4** After configuring the fields on the screen, select the **Save & Apply** button. Then select the **Advanced Settings** tab.
 - The WAN Interface Advanced Settings Screen is displayed (Figure 5-11).

Figure 5-11. WAN Interface Advanced Settings Screen	n	
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Status System Network Statistics Logout	
Interfaces DHCP and DNS Hostnames Static Routes	irewall Diagnostics QoS Configure Diagnostics MAC Device Info Overrides Multiwan
NAN LAN	
terfaces - WAN	
Common Configuration	i bridge several interfaces by ucong the bridge interfaces held and enter the names of several network interfaces separate :: etb0.1).
General Setup Advanced Settings Physical Settings	Firewall Settings
Bring up on boot	
Use broadcast flag	🗏 🔕 Required for certain ISPs, e.g. Charter with DOCSIS 3
Use default gateway	🗹 🥥 If unchecked, no default route is configured
Use DNS servers advertised by peer	🗷 🇐 If unchecked, the advertised DNS server addresses are ignored
Use gateway metric	0
Client ID to send when requesting DHCP	
Vendor Class to send when requesting DHCP	
Override MAC address	00:A0:EB:01:F1:2E
Override MTU	1500

- 5 After configuring the fields on the screen, select the Save & Apply button. Then select the Physical Settings tab.
 - The WAN Interface Physical Settings Screen is displayed (Figure 5-12).

Figure 5-12. WAN Interface Physical Settings Screen

eı		n <mark>etwork</mark>	S Auto) Refresh: on						Changes: 0
	Status Sys	tem Network	Statistics	Logout						
	Interfaces	DHCP and DNS	Hostnames	Static Routes	Firewall Diagnostics	QoS	Configure Diagnostics	MAC Device Info Overrides	Multiwan	
	WAN LAN					_				
	nterfaces	- WAN								
	On this page y spaces. You ca	vou can configure an also use VLAN	the network notation INI	k interfaces. You c TERFACE.VLANNR (e	an bridge several inte .g.: eth0.1).	rfaces b	y ticking the "bridge inte	rfaces" field and enter the r	names of several net	work interfaces separated by
	Common (comiguration		Dhusiaal Cathia aa						
	Bridge inte	rfaces		Physical Settings	🔲 Firewali Secungs 🗌	creates	a bridge over specified inte	erface(s)		
	Interface					Etherr Etherr Custo	net Adapter: "eth0" (<u>wa</u> net Adapter: "eth1" (<u>lan)</u> m Interface:	<u>n</u>))		
									🙆 Reset	t Save Save Apply

- 6 After configuring the fields on the screen, select the **Save & Apply** button. Then select the **Firewall Settings** tab.
 - ♦ The WAN Interface Firewall Settings Screen is displayed (Figure 5-13).

Figure 5-13. WAN Interface Firewall Settings Screen

	Status System Network Statist	tics Logout				
	Interfaces DHCP and DNS Hostn	ames Static Routes	Firewall Diagnostic	s QoS Configure Diagnostics	MAC Device Info Overrides	Multiwan
rfaces - WAN is page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated s. You can also use VLAN notation INTERFACE.VLANIR (e.g.: etb0.1). mmon Configuration meral Setup Advanced Settings Firewall Settings eate / Assign firewall-zone Interfaces - WAN unspecified -or- create: Conserve the forwall zone wor want to axion to this interface. Select unspecified to genous the interface from the	WAN LAN					
is page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated s. You can also use VLAN notation INTERACE.VLANNE (e.g.: etb0.1). mmon Configuration meral Setup Advanced Settings Physical Settings eate / Assign firewall-zone Interfaces int	oterfaces - WAN					
a bage for an office of a set of the formation interfaces for an interface by using the unique interfaces and and encer the names of set of a factor interfaces separated mercal Setup Advanced Settings Physical Settings Firewall Settings eate / Assign firewall-zone	n this nade you can confidure the net	twork interfaces. You c	an bridge several int	erfaces by ticking the "bridge inte	orfaces" field and onter the n	amore of several network interfaces senarated
mmon Configuration meral Settings Physical Settings Firewall Settings eate / Assign firewall-zone	aces. You can also use VLAN notatio	on INTERFACE.VLANNR (e.	.g.: eth0.1).	enaces by ticking the bridge into	enaces nelo and encer che n	lanes of several network interfaces separated
mmon Configuration meral Setup Advanced Settings Physical Settings eate / Assign firewall-zone						
neral Setup Advanced Settings Physical Settings Firewall Settings eate / Assign firewall-zone vare: v						
eate / Assign firewall-zone eate / Assign firewall-zone Ian: Ian: Ian: Ian: Ian: Ian: Ian: Ian:	Common Configuration					
 wan: wan: interface unspecified -or- create: Choose the firstwall spon you want to assign to this interface. Select unspecified to compute the interface from the 	Common Configuration	Physical Settings	Firewall Settings			
 wan: wan: wan: mail unspecified -or- create: Choose the firswall some you want to assign to this interface. Select unspecified to campus the interface from the 	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	as Physical Settings	Firewall Settings	ian: Ian: 🖉		
unspecified -or- create: Choose the firswall zone you want to assign to this interface. Select unspecified to remove the interface from the	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	ps Physical Settings	Firewall Settings	lan: lan: 🗾		
Chonse the firswall zone you want to assign to this interface. Select unscherified to remove the interface from the	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	a Physical Settings	Firewall Settings	lan: lan: J		
Choose the firewall zone you want to assign to this interface. Select unconcritied to remove the interface from the	Common Configuration	Physical Settings	Firewall Settings	lan: lan:)		
	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	75 Physical Settings	Firewall Settings	Ian: Ian: 2 wan: wan: 2 unspecified -or- create:		
associated zone or fill out the create field to define a new zone and attach the interface to it.	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	gs Physical Settings	Firewall Settings	Ian: Ian: J wan: wan: J unspecified -or- create:	assian to this interface. Select	unspecified to remove the interface from the
	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	ps Physical Settings	Firewall Settings	lan: Jan: Jan: Jan: Jan: Jan: Jan: Jan: J		
dadded zone of the dreate field to define a new zone and dataen the interface to it.	Common Configuration General Setup Advanced Setting Create / Assign firewall-zone	gs Physical Settings	Firewall Settings	Ian: Ian: J wan: wan: J unspecified -or- create:	assign to this interface. Select	unspecified to remove the interface from the

7 After configuring the fields on the screen, select the **Save & Apply** button.