# **NETWORK**

Cie 2big NAS			LaCie 5b	ig NAS Pro	0			
LACIE 2big	NAS	0		<b>5</b> big	NAS Pro			0
Connection	Proxy Remote access Port forwarding		Co	nnections	Proxy Remote	access Port forwar	ding	0
		Edit						Link
Туре	Ethernet		Na	me	Туре	IP address	Status	Speed
Speed	1Gb/s		\star LA	N 1	Ethernet	192.168.10.169	۲	1Gb/s
IP configuration	Obtained by DHCP		LA	N 2	Ethernet	192.168.10.127	۲	1Gb/s
MAC address	00:D0:4B:92:72:2E							
IP address	192.168.0.20							
Subnet mask	255.255.255.0							
Default gateway	192.168.0.1				L	AN 1 LAN 2		
DNS server	89.2.0.1, 89.2.0.2							

## **CONNECTION TAB**

If your network is DHCP-enabled, your LaCie NAS will automatically be assigned an IP address and other values. The LaCie 2big NAS has a single LAN port while the LaCie 5big NAS Pro includes two LAN ports (see below). If you wish to review or modify the values of a LAN port:

- LaCie 2big NAS: Choose the **Edit** button.
- LaCie 5big NAS Pro: Select the configuration icon (pencil) then choose **Details** or **Edit**.

Connections	Proxy	Remote ac	cess Port forwar			
					Link	
Name	Туре	;	IP address	Status	Speed	
LAN 1	Ethe	rnet	192.168.10.127		1Gb/s 🥖	
LAN 2	Ethe	rnet	192.168.10.126	0	1Gb/s	Deta
						Edit
			N 1 LAN 2			

#### LAN 1 - Details

		-	
	•	,	
	38	C -	
~ 4		ъ.	

Name	LAN 1
Status	Connected
Туре	Ethernet
Speed	1Gb/s
IP Configuration	Obtained by DHCP
MAC address	7E:3D:7E:3B:07:D4
IP Address	192.168.10.62
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.2
DNS Server	192.168.10.1

#### LAN Details - 5big NAS Pro

Selecting **Edit** allows you to modify certain network parameters. You can manually adjust network values by choosing **Manual configuration** and give the LAN port a unique name (LaCie 5big NAS Pro only). Make certain to check the box next to **Default gateway** to enter or revise a gateway address. For the manual address to take effect, all fields (including Default Gateway and DNS Server) must be completed before selecting **Apply**. The LAN port will revert to automatic if a field is left blank.

0	Automatic network	configuration (DHCP)	
•	Manual configuration	on	
	IP Address	192.168.10	. 135
	Subnet Mask	255 . 255 . 255	. 🗖
	Default Gateway	🗹 1 92 . 168 . 10	. 254
	DNS Server	192.168.10.10 192.168.10.12 192.168.27.43	+
		Cancel	Ann
Cie	N 1 - Edit	Cancer	- the
Cie A am	N 1 - Edit		( ) P
A am C	N 1 - Edit N 1 - Edit Ne LAN 1 Onfiguration	configuration (DHCP)	
A am C	A 2big NAS N 1 - Edit N 1 -	configuration (DHCP)	
A am C	A 2big NAS N 1 - Edit N 1 -	configuration (DHCP)	163
A am C	A 2big NAS N 1 - Edit N 1 - Edit N 1 - Edit N 1 Onfiguration Automatic network of Manual configuration IP Address Subnet Mask	configuration (DHCP) on 192 . 168 . 10 . 255 . 255 . 255 .	163
A am C O	A 2big NAS N 1 - Edit N 1 - Edit N 1 Onfiguration Automatic network of Manual configuration IP Address Subnet Mask Default Gateway	Configuration (DHCP) on 192 . 168 . 10 . 255 . 255 . 255 . ☑ 192 . 168 . 10 .	163 0 254

#### LaCie 5big NAS Pro

**Important info on network addressing:** Changes to the IP address must be consistent with the values of the router and/or network. You can lose contact with your LaCie NAS by typing addresses that are not available on your network.

LaCie 2big NAS users: Skip to Proxy Tab.

### LaCie 5big NAS Pro Ethernet ports

	Connections	Proxy Remote	access Port forwar	ding	
	Name	Туре	IP address	Status	Speed
*	LAN 1	Ethernet	192.168.10.127		1Gb/s
	LAN 2	Ethernet	192.168.10.126		
			LAN 1 LAN 2		

Icons representing the two LAN ports on the *Connections* tab indicate connection to the network:

- Connected: a
- Not connected: b

### Port aggregation: multiple networks, load balancing, and fault tolerance

The LaCie 5big NAS Pro is equipped with two LAN ports for enhanced network performance. Review the instructions below to learn how to configure the LaCie 5big NAS Pro LAN ports for your network.

Two networks: Bridge the data on your LaCie 5big NAS Pro

The LaCie 5big NAS Pro can be shared by two separate networks.

- 1. Connect LAN 1 to the first network switch and LAN 2 to the second network switch.
- 2. Go to **Dashboard > Network** and choose the **Connections** tab.
- 3. If one or both LANs are not active, select the configuration icon to choose **Enable**.

LAN 1 LAN 2	Connections	Proxy Remote	access Port forwa	arding	
Name Type IP address Status Speed LAN 1 Ethernet 192.168.5.38 IGb/s					Link
I LAN 1 Ethernet 192.168.5.38  IGb/s	Name	Туре	IP address	Status	Speed
LAN 2 Ethernet - O - LAN Deta Edit Enat	LAN 1	Ethernet	192.168.5.38	٠	1Gb/s 🖋
LAN 1 LAN 2	LAN 2	Ethernet	-	0	- @
			LAN 1 LAN 2		

4. Once the LAN is enabled, it can receive a DHCP address from the router. Each LAN should have separate addresses to reflect connection to two separate networks. In the screenshot below, the subnets of the IP addresses (5 for LAN 1 and 1 for LAN 2) demonstrate that each LAN is connected to its own network.

Link Name Type IP address Status Speed LAN 1 Ethernet 192.168.5.38  LAN 2 Ethernet 192.168.1.13  IGb/s  LAN 1 LAN 2 LAN 1 LAN 2	Connections	Proxy Remote	access Port forwa	arding		
Name Type IP address Status Speed LAN 1 Ethernet 192.168.5.38  LAN 2 Ethernet 192.168.1.13  IGb/s  LAN 1 LAN 2 LAN 1 LAN 2					L	ink
LAN 1 Ethernet 192.168.5.38  IAN 2 Ethernet 192.168.1.13  IGb/s	Name	Туре	IP address	Status	Speed	
LAN 2 Ethernet 192.168.1.13   IGb/s	🚖 LAN 1	Ethernet	192.168.5.38		1Gb/s	0
LAN 1 LAN 2	LAN 2	Ethernet	192.168.1.13	۲	1Gb/s	Ó
		1	ų ų			

**IP Addressing:** You can manually configure the IP addresses for the LAN connections by selecting their respective configuration icons (pencil) and choosing **Edit**.

Load balancing: enhanced speed

Configure both Ethernet ports to act together for speeds up to 1.5 times faster than a single LAN connection. Additionally, you receive added security should one of the Ethernet cables or ports fail.

Before following the directions below, make certain that your switch or router supports link aggregation:

- 1. Connect LAN 1 and LAN 2 to the same switch or router.
- 2. Go to **Dashboard > Network** and choose the **Connections** tab.
- 3. If one LAN is listed as inactive:
  - Confirm that it is securely connected to the device and to your router.
  - Select its configuration icon (pencil) to choose **Enable**.

LAN 1 LAN 2	Connections	Proxy Remote	access Port forwa	arding	
Name     Type     IP address     Status     Speed       LAN 1     Ethernet     192.168.5.38     1Gb/s     Image: Comparison of the state of t					Link
r LAN 1 Ethernet 192.168.5.38 • 1Gb/s A LAN 2 Ethernet - O - LAN 2 LAN 1 LAN 2 LAN 1 LAN 2	Name	Туре	IP address	Status	Speed
LAN 2 Ethemet - O - A LAN 2 LAN 1 LAN 2	LAN 1	Ethernet	192.168.5.38	٠	1Gb/s 🖉
LAN 1 LAN 2	LAN 2	Ethernet	-	0	- @
			LAN 1 LAN 2		

4. With both LANs enabled, choose **Link**.

Name       Type       IP address       Status       Speed         ▲ LAN 1       Ethernet       192.168.10.27       ●       1Gb/s       ▲         LAN 2       Ethernet       192.168.10.83       ●       1Gb/s       ▲	Connections	Proxy Remote	access Port forwar	rding	
Name     Type     IP address     Status     Speed       ★ LAN 1     Ethernet     192.168.10.27     ●     1Gb/s     ●       LAN 2     Ethernet     192.168.10.83     ●     1Gb/s     ●					Link
LAN 1 Ethernet 192.168.10.27 • 1Gb/s	Name	Туре	IP address	Status	Speed
LAN 2 Ethernet 192.168.10.83  Grad Grad Grad Grad Grad Grad Grad Grad	🚖 LAN 1	Ethernet	192.168.10.27	۲	1Gb/s 🖋
LAN 1 LAN 2	LAN 2	Ethernet	192.168.10.83	۲	1Gb/s 🖋
			Q Q		

5. Select **Load balancing** then choose **Next**.

	1. Select mode	2. Select interfaces	3. Configure interface
se L	ink Aggregation to configure y	our Ethernet connections for le	oad balancing or fault tolerance.
elect	t mode:		
۲	Load balancing A bond that shares the same specification. Important: LAN cables must be co	ed and duplex settings across the lin nnected to the same switch.	nked connections. Uses the 802.3ad
0	Fault tolerance Active-backup policy: Only one co the active interface fails.	nnection in the bond is active. The l	backup connection becomes active wi

6. Check the boxes next to each LAN port then choose **Next**.

	1. Select mode	2. Select interfaces	3. Configure interface
ct	the connections to create a li	nk aggregation:	
•	LAN 1 IP address: 192.168.10.27 - Spe	ed: 1Gb/s	
1	LAN 2 IP address: 192.168.10.83 - Spe	ed: 1Gb/s	
		LAN 1 LAN 2	

7. You can name the LAN bonding as well as select how the paired Ethernet ports will receive a unified IP address (DHCP or Manual configuration). If you select *Manual configuration*, the IP address must be consistent with the values of your network. Choose **Finish** to complete the bonding.

1. Se	ect mode	2. Select interfaces	3. Configure interface	
lame 2xBond			,	
<sup>o</sup> configuration				
Automatic network	etwork configuration	on (DHCP)		
O Manual				
IP address	192 .	168 . 10 . 27		
Subnet ma	sk 255	255 255 0		
Default gat	eway 🔽 192 .	168 . 10 . 254		
DNS serve	r 192.10 192.10 192.10	58.10.10 + 58.10.12 - 58.27.43		

#### DHCP IP addressing

1. Select m	lode	2. Sele	ect interfaces	3. Configure	e interface
lame 2xBond					
<sup>o</sup> configuration					
O Automatic networ	rk configuration	(DHCP)			
Manual					
IP address	192 . 1	68 . 10 .	27		
Subnet mask	255 . 2	255 . 255 .			
Default gateway	✓ 192 . 1	68 . 10 .	254		
DNS server	192.168 192.168 192.168	.10.10 .10.12 .27.43	÷		

#### Manual/Static IP addressing

8. The two LAN ports are now listed as one.

8

Network				G
Connections	Proxy Remote ac	cess Port forwa	rding	
				Linl
Name	Туре	IP address	Status	Speed
2xBond	Load balancing	192.168.10.27	۲	2Gb/s
	LAI	N 1 LAN 2		

**Break the LAN bond:** If you no longer wish to link the two Ethernet ports, follow the steps below.

Connections	Proxy	Remote ac	cess	Port forwar	rding		
						Lir	ık
Name	Туре	9	IP	address	Status	Speed	
2xBond	Load	l balancing	193	2.168.10.27	•	2Gb/s /	2xBond Details Edit Remove
		LAN	N1 LAP	12			
		- 7	÷				

1. Choose on the configuration icon (pencil) to select **Remove link**.

- 2. Choose **Continue** at the prompt.
- 3. Removing the link may disable the secondary LAN interface. To reconnect the interface to the network, select the configuration icon for the secondary LAN to choose **Enable**.

Fault tolerance: failover protection

Configure fault tolerance to keep your LaCie 5big NAS Pro connected to the network even if one Ethernet port or cable fails. Before following the directions below, make certain that your network switch or router supports link aggregation.

- 1. Connect LAN 1 and LAN 2 to the same network switch or router.
- 2. Go to **Dashboard > Network** and choose the **Connections** tab.
- 3. If one LAN is not active, select its configuration icon (pencil) to choose **Enable**.

Connections	Proxy Remote	access Port forwa	arding	
				Link
Name	Туре	IP address	Status	Speed
LAN 1	Ethernet	192.168.5.38	٠	1Gb/s 🔊
LAN 2	Ethernet	-	0	- 0
				Deta Edit
		LAN 1 LAN 2		Enab

4. With both LANs enabled, choose **Link**.

Connections	Proxy Remote	access Port forward	rding	
				Li
Name	Туре	IP address	Status	Speed
LAN 1	Ethernet	192.168.10.27		1Gb/s
LAN 2	Ethernet	192.168.10.83	۲	1Gb/s
		ŶŶ		

5. Select **Fault tolerance** then choose **Next**.

	1. Select mode	2. Select interfaces	3. Configure Interface
se L	ink Aggregation to configure y	our Ethernet connections for lo	oad balancing or fault tolerance.
elec	ct mode:		
0	Load balancing A bond that shares the same spee specification. Important: LAN cables must be co	ed and duplex settings across the lin nnected to the same switch.	nked connections. Uses the 802.3ad
•	Fault tolerance Active-backup policy: Only one co the active interface fails.	nnection in the bond is active. The l	backup connection becomes active wh

6. Check the boxes next to each LAN port then choose **Next**.

-	1. Select mode	2. Select interfaces	3. Configure interface	
ect	the connections to create a I	ink aggregation:		
2	LAN 1 IP address: 192.168.5.38 - Spee	ed: 1Gb/s		
◙	LAN 2 IP address: 192.168.5.39 - Spee	ed: 1Gb/s		
		LAN 1 LAN 2		

7. Fault tolerance will switch to the secondary LAN if it cannot detect the primary LAN (see LAN Priority: Primary LAN Interface). Choose the the fault detection for the bond, physical (e.g. a bad Ethernet cable) or logical (e.g. contact with another IP address). For logical fault tolerance, enter the IP address that the LaCie 5big NAS Pro will ping to confirm the stability of the primary LAN and the frequency. The IP address should be for a separate server, a computer on the network, or another device that can manage the task. Choose Next.

ink aggregation setup			
1. Select mode	2. Select interfaces	3. Configure interfa	ace
Physical detection			
Logical detection			
Test the IP address	1		
Every (in seconds)	0		
		Cancel Ba	ick Ne

8. You can name the fault tolerance configuration as well as select how the Ethernet ports will receive a unified IP address (DHCP or Manual configuration). If you select *Manual configuration*, the IP address must be consistent with the values of your network. Choose **Finish** to complete the bonding.

	1. Select mode	2. Se	elect interfaces	3. Configure interface	-
Name Bor	nd_Protection				_
P configurat	ion				
<ul> <li>Automa</li> </ul>	tic network config	uration (DHCP)			
O Manual					
IP add	ress	92.168.5	. 38		
Subne	t mask	55 . 255 . 255	. 0		
Defaul	t gateway 🗹 1	92. 168. 5	. 1		
DNS s	erver	212.27.40.241 212.27.40.240	+ _		

9. The two LAN ports are now listed as one.

Type on Fault to	IF	<sup>2</sup> address	Ctatus	Lin
Type on Fault to	IF	Paddress	Ctature	
on Fault to			Status	Speed
	blerance 1	92.168.5.38	٠	1Gb/s
	LAN 1 LA	AN 2		
		LAN 1 L	LAN 1 LAN 2	LAN 1 LAN 2

**Break the Fault Tolerance:** If you no longer wish to keep Fault Tolerance, follow the steps below.

- 1. Select the configuration icon (pencil) to choose **Remove link**.
- 2. Choose **Continue** at the prompt.
- 3. Removing the link may disable the secondary LAN interface. To reconnect the interface to the network, select the configuration icon for the secondary LAN to choose **Enable**.

**Note on failover for bonding versus fault tolerance:** Both bonding and fault tolerance can save you from losing productivity in the event that a single LAN fails (e.g. port, router port, cable, etc.). While the bonded ports can adapt to the loss of one Ethernet signal, it can take a few minutes for the NAS to switch to single LAN mode. Fault tolerance will make the switch instantly, allowing for uninterrupted communication with the NAS.

#### LAN priority: primary LAN interface

The primary Ethernet port is marked by a star next to the LAN number. In the example below, LAN 1 is the primary Ethernet port.

Connections	Proxy Remot	e access Port forwa	arding	
				Link
Name	Туре	IP address	Status	Speed
LAN 1	Ethernet	192.168.10.22	۲	1Gb/s
LAN 2	Ethernet	192.168.10.39	۲	1Gb/s
		LAN 1 LAN 2		

The primary Ethernet port:

- Carries the data when the LaCie 5big NAS Pro is configured in Fault Tolerance
- Acts as the gateway to the internet when the LaCie 5big NAS Pro is connected to two separate networks

LAN interface and LaCie Network Assistant: LAN Port 1 must be enabled to use LaCie Network Assistant.

You can change the priority order by reassigning the role of primary port.

1. Select the configuration icon (pencil) for the port you wish to assign as the primary.

LAN 1 Ethernet 192.168.10.22 • 1Gb/s LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 LAN 2 LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Details Edit Define as pr Disable	LAN 1 Ethernet 192.168.10.22 • 1Gb/s LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Details Edit Define as prim Disable	Connections	Proxy	Remote access	Port forwar	ding		
Name       Type       IP address       Status       Speed         LAN 1       Ethernet       192.168.10.22       •       1Gb/s       IGb/s         LAN 2       Ethernet       192.168.10.39       •       1Gb/s       ILAN 2         LAN 1       LAN 2       Ethernet       192.168.10.39       •       IGb/s       IGb/s       IGb/s         LAN 2       Ethernet       192.168.10.39       •       IGb/s       IGb/s	Name       Type       IP address       Status       Speed         LAN 1       Ethernet       192.168.10.22       •       1Gb/s       IAN 2         LAN 2       Ethernet       192.168.10.39       •       1Gb/s       IAN 2         Details       Edit       0       0       0       0       0         LAN 1       LAN 2       0						Link	C
LAN 1 Ethernet 192.168.10.22 • 1Gb/s A LAN 2 Ethernet 192.168.10.39 • 1Gb/s LAN 2 Details Edit Define as pi Disable	LAN 1 Ethernet 192.168.10.22 • 16b/s LAN 2 Ethernet 192.168.10.39 • 16b/s LAN 2 Details Edit Define as prim Disable	Name	Туре	IP a	address	Status	Speed	
LAN 2 Ethernet 192.168.10.39 IGb/s LAN 2 Details Edit Define as pr Disable	LAN 2 Ethernet 192.168.10.39 IGb/s LAN 2 Details Edit Define as prim Disable	LAN 1	Ethernet	192	168.10.22	٠	1Gb/s	>
LAN 1 LAN 2	LAN 1 LAN 2 Disable							LAN 2 Details Edit Define as prima
				LAN 1 LAN	12			Disable

- 2. Choose **Define as primary**.
- 3. The star icon will move to the port to reflect the change.

	Connections	Proxy	Remote access	Port forwa	rding		
4						L	in
	Name	Туре	I	P address	Status	Speed	
	LAN 1	Etherne	t 1	92.168.10.22	۲	1Gb/s	0
ł	LAN 2	Etherne	t 1	92.168.10.39	۲	1Gb/s	1
				т			

## **PROXY TAB**

Internet access	
Internet access	
Proxy server         Port           .	
Proxy server         Port           .         .         .           .         .         .	
Authentication required	
Name	
Descuerd	
Password	
Apply	

A proxy server may be used to connect compatible network devices to the internet. If necessary, your LaCie NAS can be configured to use a proxy server. First, activate the feature by selecting the **Proxy server** option from the drop-down menu, then fill in the proxy server address, port, and optional authentication information. Choose **Apply** for your changes to take affect.

### **REMOTE ACCESS TAB**

See LaCie MyNAS.

## PORT FORWARDING TAB

Connections	Proxy	Remote access	Port for	warding		
port forwarding t Automatic port fo	to enable accorrection to enable accorrection of the second second second second second second second second se	ess to your 5big NAS	Pro via the I	nternet.*		
Service			NAS port	Router port	Status	
Web (HTTP)			80	80	۲	Ø
Web secure (HTT	PS)		443	443	۲	Ó
Download machir	1e		51413	51413	۲	Ø

Use this page to manage your LaCie NAS's port forwarding.

To access the internet, file and application services (e.g. HTTP, HTTPS, remote access (see <u>LaCie MyNAS</u>), download machine, and more) use port numbers on the LaCie NAS and the network router. As seen in the screenshot above, automatic port forwarding is turned on by default and the port numbers are the same for both the *NAS port* and *Router port* columns.

In most instances, automatic port forwarding should help you access services on the NAS. However, enterprise-level network security or port availability on your router can prevent access to ports. Therefore, it may be necessary to change the router port numbers manually for services. Before adjusting numbers in this tab, confirm that the ports you wish to use are available on your router. For example, if you intend to change download machine to router port number 8800, you must make certain that port 8800 is available on your router. Additionally, your router must be compatible with UPnP-IGD/NAT-PMP protocols. See your router's user manual for details.

To change the router port for a service on the NAS, choose its value in the **Router port** column.

			Port for	warding		
e port forwarding t	o enable acc	ess to your 5big NAS	Pro via the I	nternet.*		
Automatic port for	warding 🔵	Disable				
Service			NAS port	Router port	Status	
Web (HTTP)			80	8300	00	B
Web secure (HTT			443		00	B
Download machin	e		51413	51413		B

To disable port forwarding for a service, select its configuration icon (pencil) and then choose **Disable**.

**Note on Services in the Port Forwarding tab:** Download machine and other services will appear in this tab once they have been enabled.