

Routed Mode WanLink with WanPaths

Goal: Setup a Routed Mode WanLink with WanPaths.

In this test scenario, LANforge-ICE is used to filter traffic by IP address on a WanLink with the use of WanPaths.

- 1. Setup a Netsmith connection.
 - A. Go to the **Status** tab and click **Netsmith**

Control Beporting Windows Info Tests Chamber View Stop All Restart Manager Refresh HELI Status Port Mgr Layer-3 L3 Endps Layer 4-7 WanLinks Resource Mgr Alerts Messages Warnings Wifi-Messages + License Info Current Users *Admin from:127.0.1 gnuserver from:127.0.01 Download DB Show Progress Delete Name: Save Realm 0 Manager/Resource Realm 0 Admin Status View: Ports by Resource Admin Status View: Correl		LANforge Manager V	ersion(5.4.3)		\odot \otimes \otimes
Chamber View Stop All Restart Manager Refresh HELi Status Port Mgr Layer 4.7 WanLinks Resource Mgr Alerts Messages Warnings Wifr-Messages + License Info Current Users Saved Test Configurations Saved Test Configurations EACTORY_DFLT Load Support expires in: 656 days. * Admin from:127.0.0.1 Download DB Show Progress Delete Status View: Ports by Resource Name: Save Realm 0 Manager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imager/Resource I Imag	ontrol <u>R</u> eporting Wind <u>o</u> ws <u>I</u> nfo <u>T</u> est	5			
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Status View: Ports by Resource Save Realm 0 Manager/Resource 1 Imager Resource 1	Support expires in: 656 days.		Download DB	Show Progress	Delete
Realm 0 Manager/Resource 1 Manager/Resource 1 Netsmith 2 stations: 21 01	Status Vie <u>w</u> : Ports by Resource		Name:		Save
agged in to: localbast:4002 as: Admin 2 stations: 21 0 I	Realm 0	Manager/Resource	• 1		
	aged in to: localbost 4002 as: Admin				2 stations: 21 0I 00

B. Right-click in the Netsmith window and select New Connection



C. Accept defaults, Auto Create everything and click OK



D. Click Apply in the Netsmith window to create the connection



E. The Netsmith window after applying changes



2. Setup the WanLink.

A. Right-click the WanLink and select Modify WanLink



B. Setup the WanLink with values larger than what each of the WanPaths will use

			VRWL-1.1.00	0 - Cre	ate/I	4odify V	/anLin	k							0	
+ - All					D		Apply	у	ОК	Display	Wan	Link & Wa	anPaths		Cano	cel
Name: Presets:	WanLink Information VRWL-1.1.000 CUSTOM			.		2		War	nLink Infor Pass-Thro Coupled-M	mation ugh Iode		HW Pa	ass-Thro	bugh		
	Endpoint A		Endpoint B		R	esource:		1 (]	lf0350-10a	c)					-	
Port:	4 (rddVR0b)	-	6 (rddVR1b)	-	R	pt Timer:		fas	t (1 s	5)					-	
Transfer Rate:	T1 (1.544 Mbps)	•	T1 (1.544 Mbps)	-				Endp	point A		_	Endpoint	в			
Drop-Freq:	zero (0%)	-	zero (0%)	-	R	eorder-Fr	eq:	zero) (0%)) (0%)		▼ ▼	zero (O%)		•	
Jitter:	zero (0 us)	-	zero (O us)	-	D	rop Burst	:	min 1		max 1	۲	min 1	max	1		
Jitter-Freq:	zero (0%)	-	zero (0%)	-	R	eorder Ar	nt: •	min 1		max 20		min 1	max	20		
							[Scri	pt			Script			
0	Endpoin	t A W	AN Paths						En	dpoint B \	WAN	Paths				
Cre	ate-WP M	odify-	WP Dele	e-WP			Create-	WP		Modify	/-WP		D	elete-	WP	
Name	Tx Rate Disabled !		Filter Pattern	Del	ay A	Name	Tx R	late	Disabled			Filter Pat	tern		Del	ay

- A. WanPaths are subordinate to WanLinks. WanLinks, therefore, should be configured with sufficient bandwidth and buffering required by all of its WanPaths
- B. Click Apply and leave the Create/Modify WanLink window open

- 3. Setup the WanPaths.
 - A. Click $\ensuremath{\textbf{Create-WP}}$ on Entry Point A to create a new WanPath on this WanLink

•	Create/Modif	y WanPath fo	r E	indpoint: VRWL-1.	1.0	00-A	
Name:	ep-l			Backlog Buffer:		AUTO	*` _
PCAP Filter:						t	
Source IP/MAC:	172.1.1.100			Source Mask:		32	
Dest IP/MAC:	172.2.2.100			Dest Mask:		32	
Transfer Rate:	64 Kbps (64 Kbps	5)	•	Delay		zero (O us)	
Jitter	zero (O us)		-	Drop-Freq:		zero (0%)	•
Min Drop Burst:	1			Max Drop Burst:		1	
Min Reorder Amount:	1			Max Reorder Amoun	nt:	20	
Reorder-Freq:	zero (0%)		•	Dup-Freq:		zero (0%)	
Jitter-Freq:	zero (0%)		•	Test Manager:			
🗌 ICEcap Replay	Replay File:						▼ Dir
🔾 🔘 Disa	bled 🗾	Loop Replay		Replay Latency		Replay Loss	
Sam	e As WanLink 🛛	Replay Dup		🗹 Replay Bandwid	th [Use Pcap Filt	er
Inver	rse Match	Drop-Xth		Duplicate-Xth		Reorder-Xth	=
Corruption	#0	Cor	ru	otion #1		Corrup	tion #2
Rate: 0		Rate:		0	Rat	te:	0
Corruption: Rai	ndom Write 👻	Corruption:		Random Write 👻	Co	rruption:	Random Write 👻
Byte-to-Write: 0		Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset: 0		Min Offset:		0	Mir	n Offset:	0
Max Offset: 0		Max Offset:		0	Ma	x Offset:	0
Chain-to-Next	Do Checksum	Chain-to-Ne	ext	Do Checksum		Chain-to-Next	Do Checksum
Corruption	#3	Cor	rup	otion #4	, 	Corrup	tion #5
Rate: 0		Rate:		0	Rat	te:	0
Corruption: Ra	ndom Write 👻	Corruption:		Random Write 🔻	Co	rruption:	Random Write 👻
Byte-to-Write: 0		Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset: 0		Min Offset:		0	Mir	Offset:	0
Max Offset: 0		Max Offset:		0	Ма	x Offset:	0
Chain-to-Next	Do Checksum	Chain-to-Ne	ext	Do Checksum		Chain-to-Next	🗌 Do Checksum 👻
•							

- A. NOTE: In order to filter by specific IP address, use a Source and Dest Mask of 32 to exactly match the IP coming in on the Entry Point
- B. Click **OK** to create the WanPath

B. Click **Create-WP** on Entry Point B to create a new WanPath on this WanLink

	Create/Modif	y WanPath fo	or E	Indpoint: VRWL-1.	1.0	00-В	\odot \otimes \otimes
Name:	ep-2			Backlog Buffer:	3	AUTO	▼ ▲
PCAP Filter:			_				
Source IP/MAC:	172.2.2.100			Source Mask:		32	
Dest IP/MAC:	172.1.1.100			Dest Mask:		32	
Transfer Rate:	64 Kbps (64 Kbps	5)	Ŧ	Delay		zero (O us)	
Jitter	zero (O us)		•	Drop-Freq:		zero (O%)	•
Min Drop Burst:	1			Max Drop Burst:		1	
Min Reorder Amount:	1			Max Reorder Amount	t:	20	
Reorder-Freq:	zero (O%)		•	Dup-Freq:		zero (0%)	
Jitter-Freq:	zero (0%)		•	Test Manager:			
🗌 ICEcap Replay	Replay File:						▼ Dir
O Disa	abled 🛛	Loop Replay		Replay Latency	V	Replay Loss	
San	ne As WanLink 🕞	Replay Dup		Replay Bandwidt	h [Use Pcap Filt	er
🗌 Inve	erse Match	Drop-Xth		Duplicate-Xth		Reorder-Xth	=
Corruptio	n #0	Co	rru	ption #1		Corrup	tion #2
Rate: 0		Rate:		0	Rat	e:	0
Corruption: Ra	andom Write 👻	Corruption:		Random Write 👻	Cor	ruption:	Random Write 👻
Byte-to-Write: 0		Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset: 0		Min Offset:		0	Min	Offset:	0
Max Offset: 0		Max Offset:		0	Ma	x Offset:	0
Chain-to-Next	Do Checksum	Chain-to-N	ext	Do Checksum		Chain-to-Next	Do Checksum
Corruptio	n #3	Co	rru	ption #4	_	Corrup	tion #5
Rate: 0		Rate:		0	Rat	e:	0
Corruption: Ra	andom Write 🔻	Corruption:		Random Write 🔻	Cor	ruption:	Random Write 👻
Byte-to-Write: 0		Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset: 0		Min Offset:		0	Mir	Offset:	0
Max Offset: 0		Max Offset:		0	Ma	K Offset:	0
Chain-to-Next	Do Checksum	Chain-to-N	ext	Do Checksum		Chain-to-Next	🗌 Do Checksum 👻

A. NOTE: The Source and Destination IPs for this WanPath are the reverse of those for Entry Point A

B. Click **OK** to create the WanPath

C. Create a second WanPath for this WanLink using the next set of IP addresses

	Create/Modif	fy WanPath fo	or I	Endpoint: VRWL-1	1.0	00-A	\odot \otimes \otimes
Name:	ep-3			Backlog Buffer:		AUTO	
PCAP Filter:							
Source IP/MAC:	172.1.1.101			Source Mask:		255.255.255.0	
Dest IP/MAC:	172.2.2.101			Dest Mask:		255.255.255.0	
Transfer Rate:	64 Kbps		•	Delay		zero (O us)	
Jitter	zero (O us)		-	Drop-Freq:		zero (0%)	•
Min Drop Burst:	1			Max Drop Burst:		1	
Min Reorder Amou	nt: 1			Max Reorder Amour	nt:	20	
Reorder-Freq:	zero (0%)		•	Dup-Freq:		zero (0%)	
Jitter-Freq:	zero (0%)		-	Test Manager:			•
🗌 ICEcap Replay	Replay File:						- Dir
01	Disabled [Loop Replay		Replay Latency		Replay Loss	
۲	Same As WanLink	Replay Dup		Replay Bandwid	th [Use Pcap Filt	er
	Inverse Match	Drop-Xth		Duplicate-Xth		Reorder-Xth	=
Corrup	tion #0	Co	orru	ption #1	_	Corrup	tion #2
Rate:	0	Rate:		0	Rat	te:	0
Corruption:	Random Write 👻	Corruption:		Random Write 👻	Co	rruption:	Random Write 👻
Byte-to-Write:	0	Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset:	0	Min Offset:		0	Mir	Offset:	0
Max Offset:	0	Max Offset:		0	Ма	x Offset:	0
Chain-to-Next	Do Checksum	Chain-to-N	lext	Do Checksum		Chain-to-Next	Do Checksum
Corrup	tion #3	Co	orru	ption #4	-	Corrup	tion #5
Rate:	0	Rate:		0	Rat	te:	0
Corruption:	Random Write 👻	Corruption:		Random Write 👻	Co	rruption:	Random Write 👻
Byte-to-Write:	0	Byte-to-Write:		0	Byt	e-to-Write:	0
Min Offset:	0	Min Offset:		0	Mir	offset:	0
Max Offset:	0	Max Offset:		0	Ma	x Offset:	0
Chain-to-Next	Do Checksum	Chain-to-N	lext	Do Checksum		Chain-to-Next	Do Checksum
•					_		

D. Reverse the Source and Destination IPs for this corresponding WanPath

	Create/Modif	fy WanPath for	Endpoint: VRWL-	1.1.0	00-в	\odot
Name:	ep-4		Backlog Buffer:	1	AUTO	-
PCAP Filter:						
Source IP/MAC:	172.2.2.101		Source Mask:		255.255.255.2	255
Dest IP/MAC:	172.1.1.101		Dest Mask:		255.255.255.2	255
Transfer Rate:	64 Kbps		Delay		zero (O us)	
Jitter	zero (O us)	-	Drop-Freq:		zero (0%)	•
Min Drop Burst:	1		Max Drop Burst:		1	
Min Reorder Amour	nt: 1		Max Reorder Amo	unt:	20	
Reorder-Freq:	zero (O%)		Dup-Freq:		zero (O%)	
Jitter-Freq:	zero (0%)		Test Manager:			
🗌 ICEcap Replay	Replay File:					🔻 Dir
01	Disabled	Loop Replay	Replay Latend	ev [Replay Loss	
	Same As WanLink	Replay Dup	Replay Bandw	/idth [Use Pcap Filt	er
I	nverse Match	Drop-Xth	Duplicate-Xth	[Reorder-Xth	
Corrup	tion #0	Corr	uption #1		Corrup	otion #2
Rate:	0	Rate:	0	Ra	ite:	0
Corruption:	Random Write 👻	Corruption:	Random Write	Co	orruption:	Random Write 👻
Byte-to-Write:	0	Byte-to-Write:	0	Ву	te-to-Write:	0
Min Offset:	0	Min Offset:	0	Mi	n Offset:	0
Max Offset:	0	Max Offset:	0	Ma	ax Offset:	0
Chain-to-Next	Do Checksum	Chain-to-Ne	t 🔲 Do Checksum		Chain-to-Next	Do Checksum
Corrup	tion #3	Corr	uption #4		Corrup	otion #5
Rate:	0	Rate:	0	Ra	ite:	0
Corruption:	Random Write 👻	Corruption:	Random Write	Co	orruption:	Random Write 👻
Byte-to-Write:	0	Byte-to-Write:	0	Ву	te-to-Write:	0
Min Offset:	0	Min Offset:	0	Mi	n Offset:	0
Max Offset:	0	Max Offset:	0	Ma	ax Offset:	0
Chain-to-Next	Do Checksum	Chain-to-Ne	t 🗌 Do Checksum] Chain-to-Next	Do Checksum
4						

E. Verify that the WanPaths on this WanLink are setup correctly, then click **OK** on the Create/Modify WanLink window shown here

		VRWL-1.1.	.000 - Creat	e/Modify WanLi	nk		\odot
+ - All			13	App	oly OK Disp	lay WanLink & WanPaths	Cancel
Name: Presets:	WanLink Information VRWL-1.1.000 CUSTOM		_	2	WanLink Information Pass-Through Coupled-Mode	☐ HW Pass-Through ✔ Kernel-Mode	1
Port	Endpoint A	Endpoint B		Resource:	1 (lf0350-10ac)		-
Transfer Rate:	T1 (1.544 Mbps)	▼ T1 (1.544 Mbps	5) 🗸	Kpt filler:	fast (1 s)	Endpoint B	-
Delay:	zero (0 us)	▼ zero (0 us)	-	Reorder-Freq:	zero (0%)	▼ zero (0%)	-
Drop-Freq: Jitter:	zero (O us)	 ✓ Zero (0%) ✓ zero (0 us) 	•	Dup-Freq:	zero (0%)	▼ zero (0%)	-
Jitter-Freq:	zero (0%)	▼ zero (0%)	-	Reorder Amt:	min 1 max 1 min 1 max 20	min 1 max 20	
					Script	Script	
ລ	Endpoint	A WAN Paths			Endpoint	B WAN Paths	
Cre	ate-WP Mo	dify-WP De	elete-WP	Create	e-WP Mo	dify-WP Delet	e-WP
Name ep-1 6 ep-3 6	Tx Rate Disabled ! 4 K 4 4 K 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Filter Pattern Src: 172.1.1.100/32 Des Src: 172.1.1.101/24 Des	Delay st: 1 0 st: 1 0	▲ Name Tx ep-2 64 K ep-4 64 K	Rate Disabled !	Filter Pattern Src: 172.2.2.100/32 Dest: 1 Src: 172.2.2.101/32 Dest: 1	Delay 0 0

- 4. Setup the ports with IP addresses.
 - A. Right-click on the WanLink and select Toggle Wanlink



B. Right-click port rddVR0 and select Modify Port

🚱 Applications Places System 💝 🛜 🗃 🔤 🎃 🛛 📕		📳 828 MHz 📢 🖓 Fri Mar 12, 11:54:39
📷 🔚 Mate Terminal 🛛 🛃 LANforge Manager Ve 🥹 [LAN	rge-GUI User Gui 🛃 Netsmith configuration	
C LANforge Manager	/ersion(5.4.3) 💿 🔊 🛞	
Control Reporting Windows Info Tests	O Mate 1	Terminal 📀 🛞 🛞
Chamber View Stor	All Restart Manager Refresh HELP File Edit View Search Terminal Help	
Status Port Mgr Layer-3 L3 Endps Layer 4-7 WanLinks Resource	 Netsmith configuration for Resource: If0350-c8dc(1.1) Version: 5.4.3 	 Note
Lucense tipfo Lucense sepire 1::65 days. Support expires in: 656 days. Status View from 127.0.1 Realm 0	Virtual Routers and Connections	y 1)
Cogged in to: localhost:4002 as: Admin	rddvR0 vWu-1.1.000 rddvR1 Display WanLink & WanPaths Modify Toggle WanLink Modify Part Create Ports Sniff Port Pelite Ports Delete WanLink Delete	
	WanLinks Show Legend Prire PlanLink Names Port Names Prire Names Provide Apply Progress 100% Complete Poer WanLinks Parents Col. Domains PV6s Netsmith Status: OK	Close Cancel Apply

C. Setup an IP address that is on a different network than the WanPath entry points

			Port Status Info	ormation		
		Current:	LINK-UP PROBE-ERF	OR TSO UFO GSO GRO		
		Driver Info:	Port Type: Redirect	-Device Peer: rddVR0b	•	
			Port Configu	ables		
Enable —		General Ir	nterface Settings	1	Port Rates	Advert Rates
Set IF Down					O 10bt-HD	10bt-HD
Set MAC	Down	Aux-Mat			0 100bt-HD	10bt-FD
🗌 Set TX Q Len			DUCD Vender ID.	Nana	0 100bt-FD 0 1000-FD	100bt-HD
Set MTU	DHCP-IPV6	DHCP Release	DHCP Vendor ID:	None	0 10G-FD	100bt-FD
Set Offload	DHCP-IPv4	Secondary-IPs	DHCP Client ID:	None	O 40G-FD O Autonegotiate	1000-FD
Set PROMISC	DNS Servers:	BLANK	Peer IP:	NA	1 -	10G-FD
Set Rx-All/FCS	IP Address:	10.1.1.10/24	Global IPv6:	AUTO	Renegotiate	40G-FD
Set Bridge Info	IP Mask:	0.0.0.0	Link IPv6:	AUTO	Restart Xcvr	Flow-Contro
	Gateway IP:	0.0.0.0	IPv6 GW:	AUTO	PROMISC	1-
	Alias:		MTU:	1500	RX-ALL	Offload-
- Services	MAC Addr:	da:bf:f9:94:a6:4f	TX Q Len	1000	RX-FCS	TSO Enable
	Br Cost:	Ignore	Priority:	lanore	Bypass NOW!	UFO Enable
					Bypass Power-UP	GS0 Enable
RADIUS	Rpt Timer:	mealum (8 s)	WIFI Bridge:	INONE	Bypass Power-DOWN	LRO Enable
					Bypass Disconnect	GRO Enable
	-					·

D. Setup an IP address on port rddVR1 that is on the same network as rddVR0



For more information see LANforge-GUI User Guide: WanLinks

- 5. Add the Virtual Routers.
 - A. Right-click in the Netsmith window and select New Router



B. Accept the defaults or change the Virtual Router name and graphical size

Image: Auto Create New Name> Width: 100 Height: 100 e OSPF Multicast Routing Use OLSR RIPV2 RIP Dflt Route Xorp SHA IPv6 Router IPv6 RADV e Existing Cfg BGP Router BGP 4B AS BGP Reflector BGP Confideration BGP Damping Notes about this Virtual Router Notes about this Virtual Router 0 0.0.0.0 0.0.0.0 Confederation ID 0 0.0.0.0 Local AS 0 Cluster ID 0.0.0.0 Damping Reuse 3 Damping Suppress 3 Damping Max Suppress 3 0 Peer Flags Peer AS Peer ID Local face Nexthop Nexthop6 Hold Time Delay Open ctive Client Confed Ucast 0 0.0.0.0 0.0.0.0 10 5 0 ctive Client Confed Ucast 0 0.0.0.0 0.0.0.0 10 5 0 ctive Client Confed Ucast 0 0.0.0.0 0.0.0.0 10 5 0 ctive Client	imme: <auto create="" name="" new=""> Width: 100 Height: 100 Use OSPF Multicast Routing Use OLSR RIPv2 RIP Dflt Route Xorp SHA IPv6 Router IPv6 RADV Use Existing Cfg BGP Router BGP 4B AS BGP Reflector BGP Confederation BGP Damping Notes about this Virtual Router Notes about this Virtual Router 0.0.0.0 0.0.0.0 Confederation ID 0.0.0.0 Local AS 0 Cluster ID 0.0.0.0 Confederation ID 0 Damping Half Life 3 Damping Max Suppress 3 GP Peer Flags Peer AS Peer ID Local Iface Nexthop Nexthop6 Hold Time Delay Oper Active Client Confed Ucast 0 0.0.0.0 <</auto>			Creat	e/Modify	Virtual Rou	iter	N			
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C. Click the Apply button and repeat for the second Virtual Router



- A. NOTE: After making any changes to the Netsmith window, you must click Apply or your changes will NOT be implemented and could be lost
- B. NOTE: Clicking Sync makes sure any changes are synchronized with the current database
- D. Left-click rddVR0 and drag it inside Router R0(1)



E. Left-click rddVR1 and drag it inside Router R1(2)



F. Apply your changes in Netsmith



- 6. Setup the external interfaces.
 - A. Right-click port eth1 and select Modify Port



B. Setup eth1 with a valid IP address and IP mask that is on the same network as the WanPath entry points ep-1 and ep-3

		eth1 (lf0	350-10ac) Confi	gure Settings			\odot
	Current: LINK- Driver Info: Port	UP 1000bt-FD AUTO-N Type: Ethernet Drive	Port Status Info NEGOTIATE Flow-Co er: igb(5.4.0-k) Bu	ormation ontrol PROMISC is: 0000:02:00.0 Cur	n: 2.50	GT/s xl Max: 2.5GT/s xl	₽
			Port Configu	ables			
Enable Set IF Down	Down	General Inf	terface Settings		1	Port Rates	Advert Rates -
Set TX Q Len	DHCP-IPv6	DHCP Release	DHCP Vendor ID: DHCP Client ID:	None None	-	0 100bt-FD 0 100bt-FD 0 1000-FD 0 10G-FD 0 40G-FD	 ✓ 100bt-HD ✓ 100bt-FD
Set Offload Set Rate Info Set PROMISC	DNS Servers: IP Address:	BLANK 172.1.1.1/24	Peer IP: Global IPv6:	NA DELETED		Autonegotiate Renegotiate	✓ 1000-FD ☐ 10G-FD 40G-FD
Set Rx-All/FCS	IP Mask: Gateway IP: Alias:	255.255.255.0 0.0.0.0	Link IPv6: IPv6 GW:	DELETED DELETED		Restart Xcvr PROMISC	Flow-Control
Set Bridge Info	MAC Addr: Br Cost:	00:0d:b9:47:10:ad	TX Q Len Priority:	1000 Ignore		RX-ALL	TSO Enabled
	Rpt Timer: CPU Mask:	slower (30 s) 🔻	Watchdog:	0 NONE		Bypass NOW!	GSO Enabled
RADIUS						Bypass Disconnect	GRO Enable
	Print V	ew Details	Probe Sync	Apply	<u>0</u>	K <u>C</u> ancel	

C. Left-click port eth1 and drag it inside Router R0(1)



D. Setup eth2 with a valid IP address and IP mask that is on the same network as the WanPath entry points ep-2 and ep-4

		eth2 (IfO	Port Status Info	ormation		\$	
	Current: LINK-	UP 1000bt-FD AUTO-	NEGOTIATE Flow-Co	ontrol PROMISC			
	Driver Info: Port	Type: Ethernet Driv	er: igb(5.4.0-k) Bu	IS: 0000:03:00.0 CI	ur: 2.5	GT/s x1 Max: 2.5GT/s x1	
			Port Configu	rables			
		General In	terface Settings		1	Port Rates	Advert Rates
Set IF Down						O 10bt-HD	₽ 10bt-HD
Set MAC	Down	Aux-Mgt				O 100bt-HD	₽ 10bt-FD
Set TX Q Len	DHCP-IPv6	DHCP Release	DHCP Vendor ID:	None	-	0 1000t-FD 0 1000-FD	✓ 100bt-HD
Set MTU	DHCP-IPv4	Secondary-IPs	DHCP Client ID:	None	-	O 10G-FD O 40G-FD	✓ 100bt-FD
Set Offload	DNS Servers:	BLANK	Peer IP:	NA		Autonegotiate	▶ 1000-FD
Set Rate Info	IP Address:	172.2.2.1	Global IPv6:	DELETED		- Penegatista	10G-FD
	IP Mask:	255.255.255.0	Link IPv6:	DELETED			40G-FD
Set RX-All/FCS	Gateway IP:	0.0.0.0	IPv6 GW:	DELETED			Flow-Contro
_ Set Bypass	Alias:		MTU:	1500			Offload -
	MAC Addr:	00:0d:b9:47:10:ae	TX Q Len	1000			TSO Enable
Set CPU Mask	Br Cost:	Ignore 🗸 🗸	Priority:	Ignore	-		UFO Enable
	Rpt Timer:	medium (8 s) 🖵	Watchdog:	0	-		GS0 Enable
FTP	CPI I Mask	NO-SET	WiEi Bridge	NONE		Dupass Fower-OF	LRO Enable
RADIUS	or o mana		_ mir bridge.				GRO Enable
						C bypass bisconnect	
	Print Vi	ew Details	Probe Sync	Apply	0	K <u>C</u> ancel	

E. Drag eth2 inside Router R1(2) and Apply changes in Netsmith



For more information see LANforge-GUI User Guide: WanLinks

7. Run traffic to LANforge-ICE ports eth1 and eth2, then display results. Refer to the LANforge FIRE Cookbook to run traffic.

A. Right-click the WanLink and select Display Wanlink & WanPaths



B. The lower half of the WanLink display shows traffic passing on WanPath entry points ep-3 and ep-4 and other IP address are excluded from passing on the WanLink

Cross Connect: VRWL-1.1.000 Manager: 192.168.100.224 .										_ = ×		
	— Endpoir	nt: VRWL-1.1.0	00-A (1.1.5	.1) ——	Endpoint: VRWL-1.1.000-B (1.1.7.2) -							
0 B	WAN Speed	: 1544000	bps TX:	16202		WAN Speed	1: 1544000	bps TX:	16213	0 B		
	bps RX:	12160	TX Pkts:	51		bps RX:	12152	TX Pkts:	51			
	Dropped:	0	Duplicated	: 0		Dropped:	0	Duplicate	d: 0			
	Reordered:	0	TX Failed:	0		Reordered:	0	TX Failed:	0			
	4 GB				- 1				4 GB			
	64 KB -								- 64 KB			
	256 B -								- 256 B			
	Rx Bytes Dropped [Record-Dropped] Rx Bytes Dropped [Reco								0.6			
	in ones propped (record propped)											
	1.544 Mbps				- 1				1.544 N	lbps		
	1.158 Mbps -								- 1.158 N	lbps		
	386 Kbps -								- 386 Kbr	25		
10 KB Backlog	Rx Through	nput (Recorded	1		-u-	Rx Throug	hout (Record	ded]	0 bps	10 KB Backlog		
	T			is for Wa	nLink En	dpoint: VRWL	-1.1.000-A					
ep-1	1 X Rate 6400		172 1 1	-Addr 100/32	172.2.2	100/32	0	O C	KX Bytes D	ropped Du		
ep-3	6400		172.1.1.	101/32	172.2.2	.101/32	48	47 72672	71158	0		
•										•		
				hs for Wa	unLink En	dpoint: VRWL	-1.1.000-B					
Name	Tx Rate	Stop ! !!	Source	-Addr	Des	t-Addr	Tx Pkts Rx	Pkts TX Bytes	RX Bytes D	ropped Du		
ep-2	6400		172.2.2.	100/32	172.1.1	100/32	0	0 0	0	0		
ep-4	6400] 172.2.2.3	101/32	172.1.1	101/32	48	47 72672	71158	0		
										•		
Dis	play Selected	d Paths				Modify	Refre	esh C	lear	Close		

C. Select a WanPath and click Display Selected Paths in the lower left corner of the WanLink display window

🎒 War	Path: ep-3	WanLink:	VRWL-1.1.00	0-A _		×					
Endpoint ep-3-											
0 B	WAN Speed	64000	bps TX:	12170							
	bps RX:	12170	TX Pkts:	107							
	Dropped:	0	Duplicated:	0							
	Reordered:	0	TX Failed:	0							
	4 GB 16 MB -										
	64 KB -										
	256 B				_						
	Rx Bytes Di	ropped									
	1003-0094										
	64 Kbps				_						
1 KB	0 bps	ահա տոհ ւ	հաետոեստիս	I huld	սե						
Backlog	Rx Through	put									
<u>,</u>	Close										

For more information see LANforge-GUI User Guide: WanLinks

Candela Technologies, Inc., 2417 Main Street, Suite 201, Ferndale, WA 98248, USA www.candelatech.com | sales@candelatech.com | +1.360.380.1618