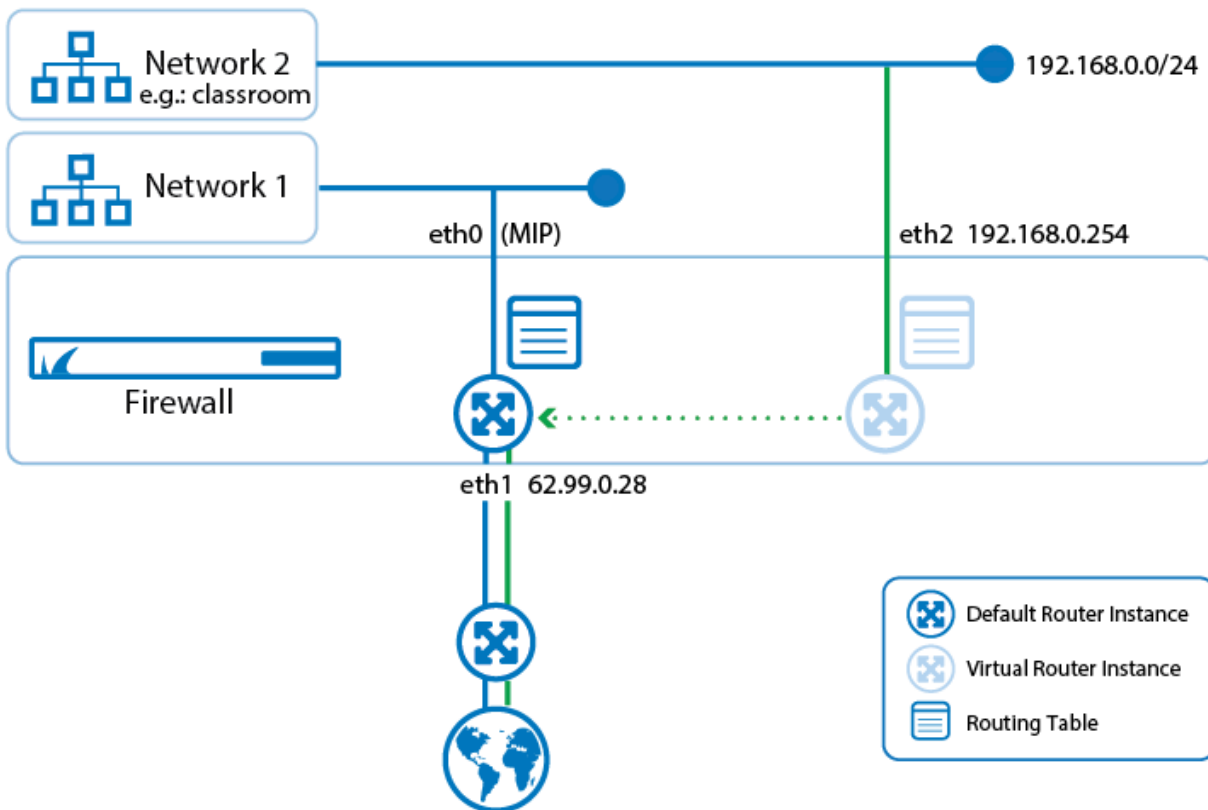


## How to Redirect Traffic between Multiple Virtual Router Instances

<https://campus.barracuda.com/doc/77400014/>

Virtual routers handle traffic on network paths that are isolated from paths handled by other routers. In certain situations, however, you might need to redirect traffic from one virtual router to another. You can redirect traffic by modifying the access rule that is directly associated with the corresponding virtual router instance.

The following example demonstrates how to redirect requests originating from the private network 192.168.0.0/24 (eth2) handled by the virtual router VR01 to the interface that is connected to the Internet (e.g., eth1) and handled by the default router. To do so, the existing access rule that forwards traffic from eth2 to eth3 must be modified.

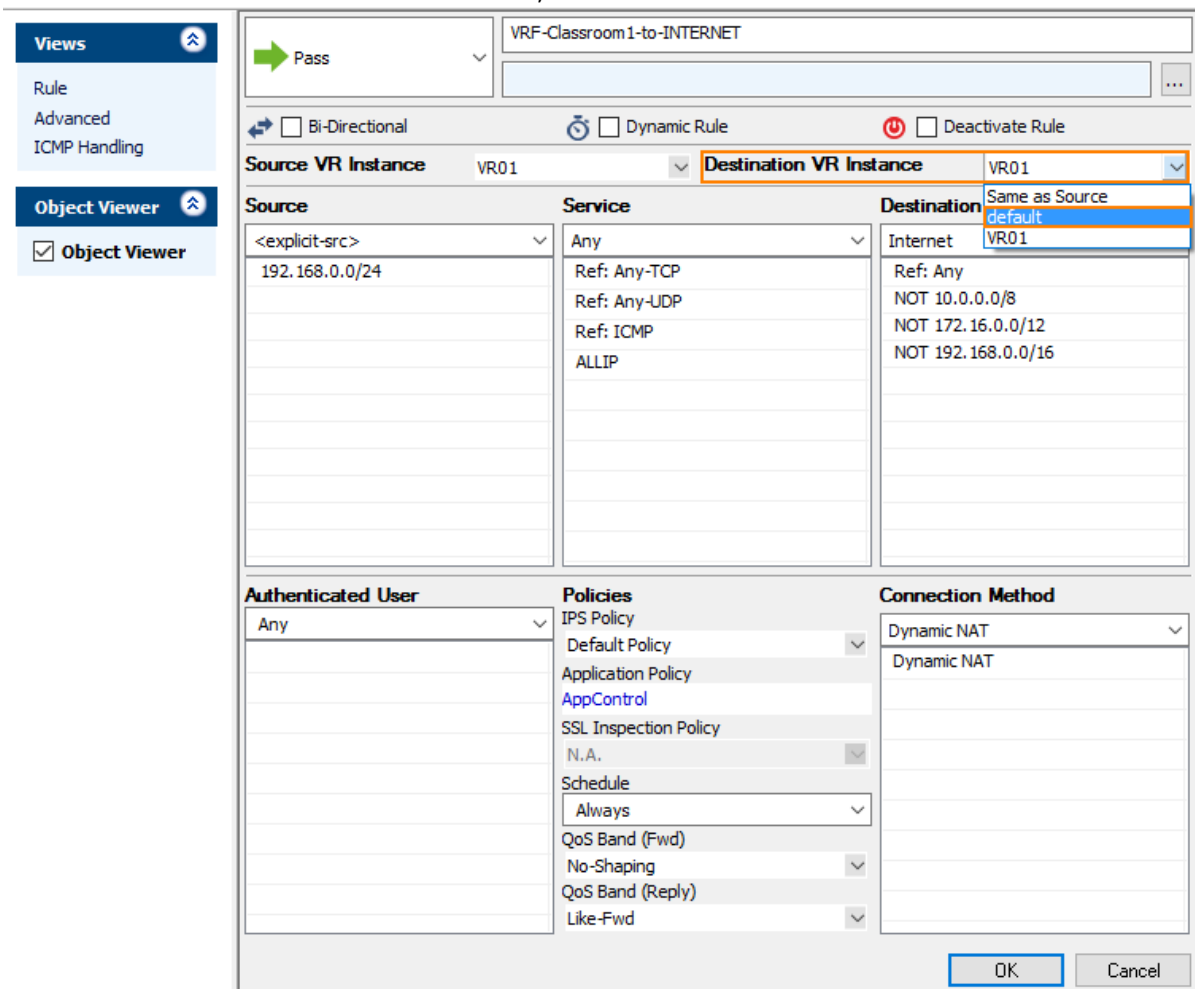


### Before You Begin

You must have already configured an additional virtual router instance. For more information, see [How to Configure and Activate a Virtual Router Instance with Hardware, Virtual, VLAN, or Bundled Interfaces](#).

### Step 1. Modify the Access Rule to Redirect Traffic

1. Go to **CONFIGURATION > Configuration Tree > Virtual Servers > your virtual server > Assigned Services > NGFW (Firewall) > Forwarding Rules.**
2. Click **Lock**.
3. Locate the access rule that handles the traffic flow from eth2 to eth3, e.g., VRF-Classroom1-to-INTERNET.
4. Double-click the access rule to open it for modification.
5. From the list **Destination VR instance**, select **default**.



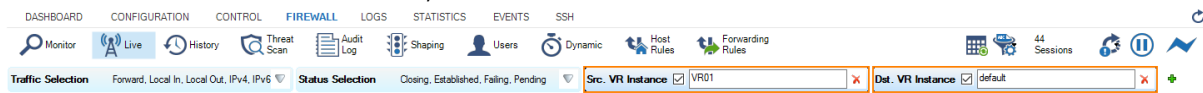
The screenshot shows the configuration window for an access rule. The rule name is "VRF-Classroom1-to-INTERNET". The action is set to "Pass". The rule is not bi-directional, dynamic, or deactivated. The source VR instance is "VR01" and the destination VR instance is "VR01". The source is "<explicit-src>" with a list of IP addresses including "192.168.0.0/24". The service is "Any" with references for Any-TCP, Any-UDP, ICMP, and ALLIP. The destination is "Internet" with references for Any, NOT 10.0.0.0/8, NOT 172.16.0.0/12, and NOT 192.168.0.0/16. The authenticated user is "Any". The policies include IPS Policy (Default Policy), Application Policy (AppControl), SSL Inspection Policy (N.A.), Schedule (Always), QoS Band (Fwd) (No-Shaping), and QoS Band (Reply) (Like-Fwd). The connection method is Dynamic NAT. The "Destination VR instance" dropdown menu is open, showing "Same as Source", "default", and "VR01", with "default" selected.

6. Click **OK**.
7. Click **Send Changes**.
8. Click **Activate**.

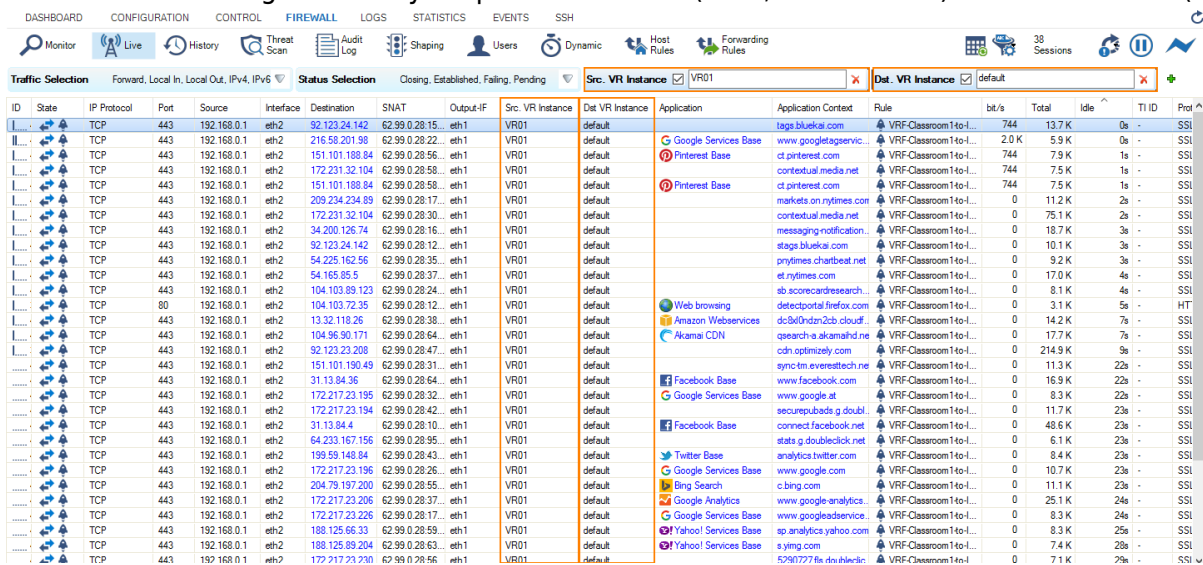
### Step 2. Verify that Traffic from the Private Network is Redirected to the Default Router

Verify that the Internet is connected to the public interface that is handled by the default router, e.g., eth1. Also verify that your client PC is connected to the private network 192.168.0.0/24 and the default route points to 192.168.0.254 (eth2 on the firewall).

1. Go to **FIREWALL > Live**.
2. The **Live** view will display a mixture of traffic flowing both through the default router and the virtual router you configured earlier, e.g., VR01.
3. Click **+**.
4. From the list, select **Src. VR Instance**.
5. For the filter **Src. VR Instance**, enter **VR01**.
6. From the list, select **Dst. VR Instance**.
7. For the filter **Dst. VR Instance**, enter **default**.



8. Create traffic on your client by requesting a website, e.g., [www.nytimes.com](http://www.nytimes.com)
9. Check traffic flowing between your private network (eth2, 192.168.0.1) and the Internet (eth1).



ID	State	IP Protocol	Port	Source	Interface	Destination	SNAT	Output-IF	Src. VR Instance	Dst. VR Instance	Application	Application Context	Rule	bit/s	Total	Idle	Ti ID	Prot	
...	...	TCP	443	192.168.0.1	eth2	92.123.24.142	62.99.0.28.15...	eth1	VR01	default	tags.bluekai.com	VRF-Classroom1to...	VRF-Classroom1to...	744	13.7 K	0s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	216.58.201.98	62.99.0.28.22...	eth1	VR01	default	Google Services Base	www.googleadservic...	VRF-Classroom1to...	2.0 K	5.9 K	0s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	151.101.198.84	62.99.0.28.56...	eth1	VR01	default	Pinterest Base	ct.pinterest.com	VRF-Classroom1to...	744	7.9 K	1s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	172.231.32.104	62.99.0.28.58...	eth1	VR01	default	contextual.media.net	contextual.media.net	VRF-Classroom1to...	744	7.5 K	1s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	151.101.198.84	62.99.0.28.58...	eth1	VR01	default	Pinterest Base	ct.pinterest.com	VRF-Classroom1to...	744	7.5 K	1s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	209.234.234.89	62.99.0.28.17...	eth1	VR01	default	markets.nytimes.com	markets.nytimes.com	VRF-Classroom1to...	0	11.2 K	2s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	172.231.32.104	62.99.0.28.30...	eth1	VR01	default	contextual.media.net	contextual.media.net	VRF-Classroom1to...	0	75.1 K	2s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	34.200.126.74	62.99.0.28.16...	eth1	VR01	default	messaging.notification...	VRF-Classroom1to...	VRF-Classroom1to...	0	18.7 K	3s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	92.123.24.142	62.99.0.28.12...	eth1	VR01	default	stags.bluekai.com	VRF-Classroom1to...	VRF-Classroom1to...	0	10.1 K	3s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	54.225.162.56	62.99.0.28.35...	eth1	VR01	default	nytimes.charitbeat.net	VRF-Classroom1to...	VRF-Classroom1to...	0	9.2 K	3s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	54.165.85.5	62.99.0.28.37...	eth1	VR01	default	nytimes.com	VRF-Classroom1to...	VRF-Classroom1to...	0	17.0 K	4s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	104.103.89.123	62.99.0.28.24...	eth1	VR01	default	sb.scorecardresearch...	VRF-Classroom1to...	VRF-Classroom1to...	0	3.1 K	4s	-	SSl	
...	...	TCP	80	192.168.0.1	eth2	104.103.72.35	62.99.0.28.12...	eth1	VR01	default	detectportal.firefox.com	VRF-Classroom1to...	VRF-Classroom1to...	0	3.1 K	5s	-	HT	
...	...	TCP	443	192.168.0.1	eth2	13.32.118.26	62.99.0.28.38...	eth1	VR01	default	Amazon Webservices	dc:9x0ndzn2cb.cloudf...	VRF-Classroom1to...	VRF-Classroom1to...	0	14.2 K	7s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	104.96.90.171	62.99.0.28.64...	eth1	VR01	default	Akamai CDN	search-a.akamaihd.ne...	VRF-Classroom1to...	VRF-Classroom1to...	0	17.7 K	7s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	92.123.23.208	62.99.0.28.47...	eth1	VR01	default	cdn.optimizely.com	VRF-Classroom1to...	VRF-Classroom1to...	0	214.9 K	9s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	151.101.190.49	62.99.0.28.31...	eth1	VR01	default	sync.tm.everesttech.ne	VRF-Classroom1to...	VRF-Classroom1to...	0	11.3 K	22s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	31.13.84.36	62.99.0.28.64...	eth1	VR01	default	Facebook Base	www.facebook.com	VRF-Classroom1to...	VRF-Classroom1to...	0	16.9 K	22s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.195	62.99.0.28.32...	eth1	VR01	default	Google Services Base	www.google.at	VRF-Classroom1to...	VRF-Classroom1to...	0	8.3 K	22s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.194	62.99.0.28.42...	eth1	VR01	default	securepubads.g.double...	VRF-Classroom1to...	VRF-Classroom1to...	0	11.7 K	23s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	31.13.84.4	62.99.0.28.10...	eth1	VR01	default	connect.facebook.net	VRF-Classroom1to...	VRF-Classroom1to...	0	48.6 K	23s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	64.233.167.155	62.99.0.28.95...	eth1	VR01	default	stats.g.doubleclick.net	VRF-Classroom1to...	VRF-Classroom1to...	0	6.1 K	23s	-	SSl	
...	...	TCP	443	192.168.0.1	eth2	199.59.148.84	62.99.0.28.43...	eth1	VR01	default	Twitter Base	analytics.twitter.com	VRF-Classroom1to...	VRF-Classroom1to...	0	8.4 K	23s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.196	62.99.0.28.26...	eth1	VR01	default	Google Services Base	www.google.com	VRF-Classroom1to...	VRF-Classroom1to...	0	10.7 K	23s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	204.79.197.200	62.99.0.28.55...	eth1	VR01	default	Bing Search	c.bing.com	VRF-Classroom1to...	VRF-Classroom1to...	0	11.1 K	23s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.206	62.99.0.28.37...	eth1	VR01	default	Google Analytics	www.google-analytics...	VRF-Classroom1to...	VRF-Classroom1to...	0	25.1 K	24s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.226	62.99.0.28.17...	eth1	VR01	default	Google Services Base	www.googleadservice...	VRF-Classroom1to...	VRF-Classroom1to...	0	8.3 K	24s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	188.125.66.33	62.99.0.28.59...	eth1	VR01	default	Yahoo! Services Base	sp.analytics.yahoo.com	VRF-Classroom1to...	VRF-Classroom1to...	0	8.3 K	25s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	188.125.89.204	62.99.0.28.63...	eth1	VR01	default	Yahoo! Services Base	s.yimg.com	VRF-Classroom1to...	VRF-Classroom1to...	0	7.4 K	28s	-	SSl
...	...	TCP	443	192.168.0.1	eth2	172.217.23.230	62.99.0.28.56...	eth1	VR01	default	5290777file.dn.dhbcn...	VRF-Classroom1to...	VRF-Classroom1to...	0	7.1 K	29s	-	SSl	

You firewall is now redirecting traffic from virtual router VR01 to the default router.

## Figures

1. vr\_redirect.png
2. vrf\_modify\_access\_rule\_to\_redirect\_traffic.png
3. vrf\_create\_filter\_for\_redirected\_traffic.png
4. vrf\_traffic\_check\_for\_redirection.png

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