

Network Tools Settings on the CVR100W VPN Router

Objective

[Ping](#) is a technique which is used to test if a host can be reached. It also measures the total trip time. Ping is useful if you want to troubleshoot the network connectivity or bandwidth.

[Traceroute](#) discovers the IP routes along which packets are forwarded. To do this, Traceroute sends IP packets to the different hops as well as the target host and back to the router. The *Traceroute* page allows the user to view each hop between the router and the target host as well as the round-trip time to each stop.

In a real time scenario, a traceroute can be used if you have some connectivity problems and need to find whether the packets are delivered to the destination or not. Traceroute can exactly point out where the packets are dropped if such a problem exists.

[DNS Lookup](#) is a technique when a device asks a DNS server for the IP address associated with a domain name. The DNS server then "look ups" the IP associated with that domain name.

This article explains how to use various network tools on the CVR100W VPN Router.

Applicable Device

- CVR100W

Software Version

- 1.0.1.19

Network Tools

Ping

Step 1. Log in to the web configuration utility and choose **Administration > Diagnostics > Network Tools**. The *Network Tools* page opens:

Network Tools

Ping or Trace an IP Address:

IP Address / Domain Name:

Perform a DNS Lookup:

Internet Name:

Step 2. In the IP Address / Domain Name enter the IP address or domain name that you want to ping.

Step 3. Click **Ping** for the IP address to generate an output which can be used to analyze the network issues.

Network Tools

Ping

Result

```
PING 74.125.227.209 (74.125.227.209): 64 data bytes
 72 bytes from 74.125.227.209: seq=0 ttl=53 time=20.875 ms
 72 bytes from 74.125.227.209: seq=1 ttl=53 time=20.943 ms
 72 bytes from 74.125.227.209: seq=2 ttl=53 time=20.723 ms
--- 74.125.227.209 ping statistics ---
 3 packets transmitted, 3 packets received, 0% packet loss
 round-trip min/avg/max = 20.723/20.847/20.943 ms
```

Step 4. Click the **Close** button to close the window.

Traceroute

Step 1. Log in to the web configuration utility and choose **Administration > Diagnostics > Network Tools**. The *Network Tools* page opens:

Network Tools

Ping or Trace an IP Address:

IP Address / Domain Name:

Perform a DNS Lookup:

Internet Name:

Step 2. In the IP Address / Domain Name field enter the IP address or domain name for which you want to perform a traceroute.

Step 3. Click **Traceroute** to generate an output which you can use to analyze the network issues.

Network Tools

Traceroute	
Result	
traceroute to 74.125.227.209 (74.125.227.209), 30 hops max, 40 byte packets	
1	7.752 ms 7.563 ms 7.399 ms 10.32.32.1
2	7.345 ms 7.382 ms 7.602 ms 70.183.70.185
3	14.466 ms 15.602 ms 15.476 ms 70.183.71.105
4	15.656 ms 15.513 ms 15.625 ms 70.183.71.66
5	14.824 ms 15.500 ms 15.471 ms 70.183.71.64
6 *	27.375 ms 32.436 ms 68.1.2.109
7	29.707 ms 27.235 ms 25.378 ms 72.14.212.233
8	27.934 ms 31.559 m

Step 4. (Optional) To stop the traceroute, click the **Stop** button.

Step 5. Click the **Close** button to close the window.

DNS Lookup

Step 1. Log in to the web configuration utility and choose **Administration > Diagnostics > Network Tools**. The *Network Tools* page opens:

Network Tools

Ping or Trace an IP Address:

IP Address / Domain Name:

Perform a DNS Lookup:

Internet Name:

Step 2. In the Internet Name field enter the domain name for which you want to perform a DNS lookup.

Step 3. Click **Look up** to generate an output which you can use to analyze the network issues.

Network Tools

Look up

Result

Server: 156.26.1.1

Address 1: 156.26.1.1

Name:

Address 1: 2001:4860:4002:801::1004

Address 2: 74.125.227.35 dfw06s06-in-f3.1e100.net

Address 3: 74.125.227.36 dfw06s06-in-f4.1e100.net

Address 4: 74.125.227.37 dfw06s06-in-f5.1e100.net

Address 5: 74.125.227.38 dfw06s06-in-f6.1e100.net

Address 6: 74.125.227.39 dfw06s06-in-f7.1e100.net

Address 7: 74.125.227.40 dfw06s06-in-f8.1e100.net

Address 8: 74.125.227.41 dfw06s06-in-f9.1e100.net

Address 9: 74.125.227.46 dfw06s06-in-f14.1e100.net

Address 10: 74.125.227.32 dfw06s06-in-f0.1e100.net

Address 11: 74.125.227.33 dfw06s06-in-f1.1e100.net

Address 12: 74.125.227.34 dfw06s06-in-f2.1e100.net

Step 4. Click the **Close** button to close the window.