

# Perform a Diagnostic Evaluation on an RV34x Series Router

## Objective

The Domain Name Service (DNS) Name Lookup and Ping Test are two built-in tools in the RV34x Series Router that are helpful to identify and solve issues with connectivity. The DNS Name Lookup is used to learn an IP address of a given domain. The Ping test lets you enter an IP address or host name and shows if the RV34x router is able to send a packet to a remote host and receive a response.

This article explains how to use the diagnostic tools on the RV34x VPN Series Router.

## Applicable Devices

- RV34x Series

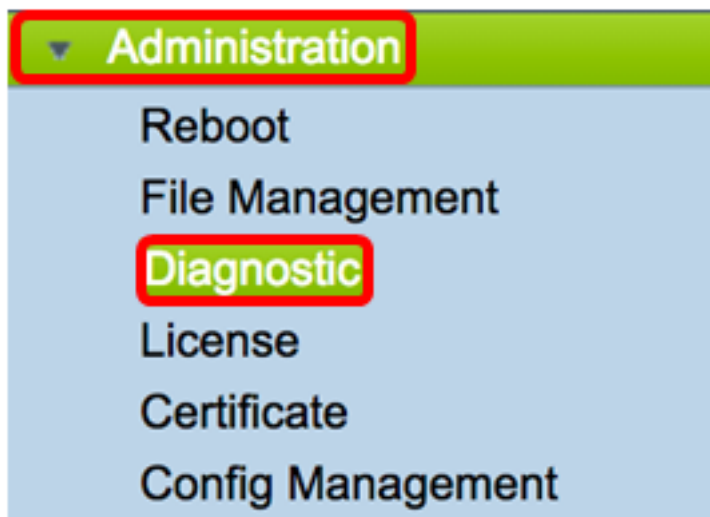
## Software Version

- 1.0.01.16

## Perform Diagnostic on the Rv34x Series Router

### Ping or Trace an IP Address

Step 1. Log in to the web-based utility of the router and choose **Administration > Diagnostic**.



Step 2. In the *IP Address/Domain Name* field under Ping or Trace on IP Address area, enter an IP address. This can be an IPv4 or an IPv6 address.

**Note:** In this example, 98.138.253.109 is used.

## Ping or Trace on IP Address

IP Address/Domain Name: 98.138.253.109

Ping

Traceroute

Step 3. (Optional) Click the **Ping** button to test the connectivity between the router and another device on the network connected to this router. Ping test sends Internet Control Message Protocol (ICMP) echo request packets from the host to the target host. The results of the test include status, packets transmitted or received and packet loss.

## Ping or Trace on IP Address

IP Address/Domain Name: 98.138.253.109

Ping

Traceroute

**Note:** The returns show that the destination was reached and a ping was returned.

```
64 bytes from 98.138.253.109: icmp_req=0 ttl=50 time=247.300003
64 bytes from 98.138.253.109: icmp_req=1 ttl=50 time=246.546997
64 bytes from 98.138.253.109: icmp_req=2 ttl=50 time=247.214996
64 bytes from 98.138.253.109: icmp_req=3 ttl=50 time=246.623993
```

Step 4. (Optional) Click the **Traceroute** button to display all the routers present between the destination IP address and the active device. The results will display up to 30 hops between your router and its destination.

## Ping or Trace on IP Address

IP Address/Domain Name:  (hint: 1.2.3.4 or abc.com or fe80::10)

Ping

Traceroute

```
1  10.10.10.1 0.066 ms 0.028 ms 0.03 ms
2  124.6.177.113 0.246 ms 0.025 ms 0.025 ms
3  124.6.149.117 17.201 ms 15.626 ms 15.806 ms
4  120.28.0.61 11.672 ms 12.804 ms 11.96 ms
5  120.28.1.237 25.143 ms 120.28.0.26 27.299 ms 120.28.10.101 43.637001 ms
6  120.28.9.158 25.313 ms 120.28.10.105 26.815001 ms 120.28.10.105 28.535999 ms
7  ***
8  ***
9  202.127.73.41 70.672997 ms 71.678001 ms 67.885002 ms
10 202.84.243.113 67.886002 ms 67.505997 ms 67.804001 ms
11 202.84.249.161 63.547001 ms 63.467999 ms 64.004997 ms
12 202.84.136.162 213.035004 ms 202.84.143.238 215.404999 ms 202.84.136.162 211.852997 ms
13 202.40.149.70 236.617996 ms 202.40.149.101 230.311996 ms 202.84.251.122 212.694 ms
14 206.223.116.150 212.455002 ms 216.070007 ms 233.449997 ms
15 216.115.101.148 238.434006 ms 238.509003 ms 238.917999 ms
16 216.115.104.116 247.123993 ms 247.296997 ms 247.632996 ms
17 216.115.105.29 254.177994 ms 216.115.105.31 247.233994 ms 216.115.105.185 247.654999 ms
18 98.138.97.67 283.709991 ms 98.138.97.61 247.901993 ms 98.138.97.69 248.397003 ms
19 98.138.93.15 246.207001 ms 98.138.0.93 247.311996 ms 98.138.0.91 247.649994 ms
20 98.138.240.18 248.768997 ms 98.138.240.22 248.488998 ms 98.138.240.28 250.257996 ms
21 ***
22 ***
23 ***
24 ***
25 ***
26 ***
27 ***
28 ***
29 ***
30 ***
```

You should now have successfully pinged or traced an IP address on an RV34x Series Router.

## Perform a DNS Lookup

Step 1. In the *IP Address/Domain Name* field under Perform a DNS Lookup area, enter a Fully Qualified Domain Name (FQDN). The DNS lookup is used to retrieve IP addresses for the given host name.

**Note:** In this example, facebook.com is used.

## Perform a DNS Lookup

IP Address/Domain Name:  (hint: yahoo.com)

Lookup

Step 2. Click on **Lookup** to perform the DNS lookup.

## Perform a DNS Lookup

IP Address/Domain Name:  (hint: yahoo.com)

Lookup

**Note:** The window below displays the IP addresses for Facebook.

## Perform a DNS Lookup

IP Address/Domain Name:  (hint: yahoo.com)

Lookup

Server:192.168.100.150

Address: facebook.com

Name: facebook.com

Address: 31.13.66.36 edge-star-mini-shv-02-dft4.facebook.com

Name: facebook.com

Address: 2a03:2880:f113:83:face:b00c:0:25de edge-star-mini6-shv-02-dft4.facebook.com

You should now have successfully performed a DNS lookup on your RV34x Series Router.