

[Background]

For widespread branch network, IT staffs are not possible debug locally every so often, especially while administrators want to exactly know whether the remote PC/server behind firewall is live or not. Netdefend series provide a useful "ping" tool in CLI for easy debug. In the document, we demo one of the PING functions for example, and you're able to test it based on the same way.

[Procedure]

In the current scenario, we're tried to detect if the Remote Desktop Protocol(TCP Port: 3389) of PC is listening or not.

1. Issue the command of "ping 172.22.100.6 -tcp -port=3389 -verbose -count=5", the output shown the RDP port is still stay alive.

```
#####  
DFL-800:/> ping 172.22.100.6 -tcp -port=3389 -verbose -count=5  
  
Sending 0-byte TCP ping to 172.22.100.6:3389 from 192.166.11.20:53639 using PBR table "main"  
... using route "172.22.100.6 via lan, gw 192.166.11.254" in PBR table "main"  
Sending 0-byte TCP ping to 172.22.100.6:3389 from 192.166.11.20:6808 using PBR table "main"  
... using route "172.22.100.6 via lan, gw 192.166.11.254" in PBR table "main"  
Sending 0-byte TCP ping to 172.22.100.6:3389 from 192.166.11.20:10111 using PBR table "main"  
... using route "172.22.100.6 via lan, gw 192.166.11.254" in PBR table "main"  
Sending 0-byte TCP ping to 172.22.100.6:3389 from 192.166.11.20:7554 using PBR table "main"  
... using route "172.22.100.6 via lan, gw 192.166.11.254" in PBR table "main"  
Sending 0-byte TCP ping to 172.22.100.6:3389 from 192.166.11.20:18999 using PBR table "main"  
... using route "172.22.100.6 via lan, gw 192.166.11.254" in PBR table "main"  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:18999 seq=4 SYN+ACK time= 10 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:18999 seq=4 ACK time= 10 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:7554 seq=3 SYN+ACK time=2990 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:7554 seq=3 ACK time=3000 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:53639 seq=0 SYN+ACK time=3010 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:6808 seq=1 SYN+ACK time=3010 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:10111 seq=2 SYN+ACK time=3010 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:53639 seq=0 ACK time=3010 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:6808 seq=1 ACK time=3010 ms  
TTL=125  
TCP Reply from 172.22.100.6:3389 to 192.166.11.20:10111 seq=2 ACK time=3010 ms  
TTL=125
```

TCP Ping Results: Sent: 5, RST/ACKs Received:5, Loss: 0%, Avg RTT: 2408.0 ms

```
DFL-800:/>  
#####
```

Issue the command of "help ping" you're able to find more advance options.

```
#####  
DFL-800:/> help ping  
COMMAND  
ping (pin). Ping host.
```

## DESCRIPTION

Sends one or more ICMP ECHO, TCP SYN or UDP datagrams to the specified IP address of a host. All datagrams are sent preloaded-style (all at once).

The data size '-length' given is the ICMP or UDP data size. 1472 bytes of ICMP data results in a 1500-byte IP datagram (1514 bytes ethernet).

## USAGE

ping <host> [OPTIONS]

## OPTIONS

-count=<1...10>

Number of packets to send.

Default value: 1

-length=<4...8192>

Packet size.

Default value: 4

-pbr=<table>

Route using PBR Table.

-port=<0...65535>

Destination port of UDP or TCP ping.

-recvif=<interface>

Pass packet through the rule set, simulating that the packet was received by <recvif>.

-srcip=<ip address>

Use this source IP.

-tcp Send TCP ping.

-tos=<0...255>

Type of service.

-udp Send UDP ping.

-verbose Verbose (more information).

<host> IP address of host to ping.

#####

End of document.