Table Of Contents

nixCraft: Linux Tips, Hacks, Tutorials, And Ideas In Blog Format
http://www.cyberciti.biz/

Home > Faq > BASH Shell

ICMP IP Network Scanning / Probing using a Shell Commands

Posted by Vivek Gite <vivek@nixcraft.com>

Q. How do I check security of my network by running ICMP IP Network Scanning under FreeBSD / Linux? How do I subnet broadcast addresses? All I wanted to see if my firewall is working or not.

A. Internet Control Message Protocol [2] (ICMP) one of the core protocols of the Internet protocol suite. It is chiefly used by networked computers' operating systems to send error messages—indicating, for instance, that a requested service is not available or that a host or router could not be reached.

[1]

ICMP IP Network Scanning with nmap tool

You can use regular open source tool called nmap. Type the following command to run ICMP IP Scan:

```
$ nmap -sP -PI 192.168.1.0/24
```

Output:

```
Starting Nmap 4.20 ( http://insecure.org ) at 2008-01-29 23:40 IST
Host 192.168.1.1 appears to be up.
MAC Address: 00:18:39:6A:C6:8B (Cisco-Linksys)
Host 192.168.1.106 appears to be up.
......
...
....
Nmap finished: 256 IP addresses (2 hosts up) scanned in 5.746 seconds
```

Where,

- **-sP** : This option tells Nmap to only perform a ping scan (host discovery), then print out the available hosts that responded to the scan. This is also known as ping scan.
- **-PI** : This open tells Nmap that we are sending ICMP echo requests

4000+ howtos and counting! Want to read more Linux / UNIX howtos, tips and tricks? Subscribe to our daily email newsletter or weekly newsletter to make sure you don't miss a single tip/tricks. Alternatively, subscribe via RSS/XML feed.

Article printed from Frequently Asked Questions About Linux / UNIX: **http://www.cyberciti.biz/faq/**

URL to article: **http://www.cyberciti.biz/faq/howto-pingscan-icmp-ip-network-scanning/**

URLs in this post:

[1] Image: **http://www.cyberciti.biz/faq/faq/category/networking/**
[2] Internet Control Message Protocol: **http://en.wikipedia.org/wiki/Internet_Control_Message_Protocol**