

Re: Determine IP address assigned to MAC

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On 13 Jan 2006, in the Usenet newsgroup comp.os.linux.networking, in article <1137146504.233516.130700@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>, Secure Buddha wrote:

>This ia actually the job of the reverse address resolution
>protocol(rarp). Google for it to find out more information if you so
>desire.

0903 Reverse Address Resolution Protocol. R. Finlayson, T. Mann, J.C. Mogul, M. Theimer. Jun-01-1984. (Format: TXT=9345 bytes) (Also STD0038) (Status: STANDARD)

This protocol is handled by a 'rarpd' server that may or may not be part of the distribution. Red Hat/Fedora has been supplying rarpd-ss981107 for several years. RFC0903 is widely available on many web server world wide.

>However, this rarp protocol will not apply to your scenario becuae there
>are no static address assignments.

1931 Dynamic RARP Extensions for Automatic Network Address Acquisition. D. Brownell. April 1996. (Format: TXT=27544 bytes) (Status: INFORMATIONAL)

Likewise, depending on a user supplied string (here, the MAC address which can easily be changed) isn't the greatest security feature. RFC1931 should also be available at the same place you find RFC0903.

>Now this whole process is dependent on a few things:
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>1. You are capable of sending broadcasts to the internal subnet. It may
>be rejected from a external router or firewall through ingress rules.

1a. The remote systems may not respond to a 'broadcast' ping. Some O/S do this to avoid DOS or broadcast storms.

>2. Host resident firewalls may deny echo_requests.

However, if the individual address is pinged, the remote hosts will almost always respond to the ARP request that precedes the ICMP echo. The exception would be if the remote is filtering on MAC addresses in a modified

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network stack. (ARP is normally at a "lower" level in the stack than the firewall code.) Thus, the "remote" hardware address will almost always be available in the ARP cache.

Old guy
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• **References:**

- ◆ **Determine IP address assigned to MAC**
 - ◇ From: Ian Pilcher
- ◆ **Re: Determine IP address assigned to MAC**
 - ◇ From: Secure Buddha
- Prev by Date: **Re: Determine IP address assigned to MAC**
- Next by Date: **Re: client & server (socket) running on same machine, tcpdump can't dumpout any packet info, how?**
- Previous by thread: **Re: Determine IP address assigned to MAC**
- Next by thread: **Need some help, how to write small application to access Linux loadable module**
- Index(es):
 - ◆ **Date**
 - ◆ **Thread**