

Monitoring DHCP Binding Host Information

Purpose Display information for specified DHCP client bindings, with results arranged in ascending order by IP address. The **show dhcp host** command displays information only for DHCP client bindings with assigned IP addresses.

Action To display information about all DHCP local server bindings:

```
host1:vr1#show dhcp host local
BindingId      HwAddress      Type      IpSubnet      IpAddress      State
-----
2409734593     8000.0001.9365 local      0.0.0.0       81.3.0.2       bound
2409734595     8000.0003.9365 local      0.0.0.0       81.3.0.3       bound
2409734597     8000.0005.9365 local      0.0.0.0       81.3.0.4       bound
2409734599     8000.0007.9365 local      0.0.0.0       81.3.0.5       bound
2409734619     8000.0009.9365 local      0.0.0.0       81.3.0.6       bound
2409734618     8000.000b.9365 local      0.0.0.0       81.3.0.7       bound
2409734605     8000.000d.9365 local      0.0.0.0       81.3.0.8       bound
2409734607     8000.000f.9365 local      0.0.0.0       81.3.0.9       bound
2409734609     8000.0011.9365 local      0.0.0.0       81.3.0.10      bound
2409734611     8000.0013.9365 local      0.0.0.0       81.3.0.11      bound
```

The output of the **show dhcp host** command is identical to the output of the **show dhcp binding** command except for the order of the client bindings. The results of the **show dhcp host** command are arranged in ascending order by IP address, whereas the results of the **show dhcp binding** command are arranged in ascending order by binding ID.

To display binding information for DHCP clients with a specified interface string:

```
host1:vr2#show dhcp host interface ip71.*4
BindingId      HwAddress      Type      IpSubnet      IpAddress      State
-----
3053453315     7000.0002.9365 external     0.0.0.0       71.1.0.4       bound
3053453325     7000.000c.9365 external     0.0.0.0       71.1.0.14      bound
3053453353     7000.0016.9365 external     0.0.0.0       71.1.0.24      bound
```

This **show dhcp host** command uses the * (asterisk) regular expression metacharacter in the interface string to display information for DHCP client bindings on virtual router vr2 with an IP address beginning with 71 and ending with 4. The results of the **show dhcp host** command are arranged in ascending order by IP address.

To display binding information for DHCP clients that match the specified circuit ID string:

```
host1:vr3#show dhcp host circuit-id \\xe3
BindingId      HwAddress      Type      IpSubnet      IpAddress      State
-----
3070230529     7000.0000.9365 relay-p     0.0.0.0       71.1.0.2       bound
3070230531     7000.0002.9365 relay-p     0.0.0.0       71.1.0.4       bound
3070230572     7000.0004.9365 relay-p     0.0.0.0       71.1.0.6       bound
3070230535     7000.0006.9365 relay-p     0.0.0.0       71.1.0.8       bound
3070230537     7000.0008.9365 relay-p     0.0.0.0       71.1.0.10      bound
3070230539     7000.000a.9365 relay-p     0.0.0.0       71.1.0.12      bound
3070230541     7000.000c.9365 relay-p     0.0.0.0       71.1.0.14      bound
3070230543     7000.000e.9365 relay-p     0.0.0.0       71.1.0.16      bound
3070230545     7000.0010.9365 relay-p     0.0.0.0       71.1.0.18      bound
```

```

3070230547 7000.0012.9365 relay-p 0.0.0.0 71.1.0.20 bound
3070230549 7000.0014.9365 relay-p 0.0.0.0 71.1.0.22 bound
3070230569 7000.0016.9365 relay-p 0.0.0.0 71.1.0.24 bound
3070230553 7000.0018.9365 relay-p 0.0.0.0 71.1.0.26 bound
3070230555 7000.001a.9365 relay-p 0.0.0.0 71.1.0.28 bound
3070230557 7000.001c.9365 relay-p 0.0.0.0 71.1.0.30 bound

```

To specify nonprintable byte codes in the circuit ID string or remote ID string, you can use the string `\xab`, where `ab` is a hex code of the byte. This **show dhcp host** command uses the string `\xe3` to represent byte E3 in the circuit ID string. This command displays information for the DHCP client bindings on virtual router vr3 with the specified circuit ID string, with results arranged in ascending order by IP address.

To display information about DHCP external server bindings with a specified subnet address:

```
host1:vr1#show dhcp host external 0.0.0.0
```

To display information about DHCP bindings with a specified IP prefix:

```
host1:vr1#show dhcp host ip-prefix 10.2.0.0/28
```

To display information about DHCP relay proxy bindings without a lower-layer interface:

```
host1:vr1#show dhcp host relay-proxy no-interface
```

To display binding information for DHCP clients that match the specified remote ID string:

```
host1:vr1#show dhcp host remote-id "remote id.*west"
```

Filtering the display of DHCP client bindings by the circuit ID string or remote ID string is not supported for the DHCP external server application. DHCP external server does not store information about the agent-circuit-id suboption or agent-remote-id suboption of option 82.

Meaning Table 1 on page 2 lists the **show dhcp host** command output fields.

Table 1: show dhcp host Output Fields

Field Name	Field Description
BindingId	Client binding ID
HwAddress	MAC address of client
Type	Binding type; external (DHCP external server), local (DHCP local server), or relay-p (DHCP relay proxy)

Table 1: show dhcp host Output Fields *(continued)*

Field Name	Field Description
IpSubnet	For DHCP local server bindings, the subnet of the IP address assigned to the client; 0.0.0.0 for DHCP external server and DHCP relay proxy bindings
IpAddress	IP address assigned to client
State	State of the DHCP client binding
Server	(Detailed output only) IP address of the DHCP server that allocated the client IP address
Giaddr	(Detailed output only) For DHCP relay proxy the IP address of the DHCP relay proxy; for DHCP local server bindings, the IP address of the DHCP relay that sent the packet or 0.0.0.0 if the packet comes from the client; for DHCP external server bindings, the giaddr from the DHCP packet
Lease	(Detailed output only) Total time for which the IP address is available, in seconds
Remaining	(Detailed output only) Time remaining on the current lease, in seconds
IpInterface	(Detailed output only) IP interface that is associated with the client

- Related Topics**
- `show dhcp host`
 - To compare the output of the **show dhcp host** command and the **show dhcp binding** command, see Monitoring DHCP Binding Information

