

## Overriding Default DHCP Local Server Configuration Settings

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You can override certain default DHCP local server configuration settings. You can override the settings at the global level and for a named group of interfaces.

To override global default DHCP local server configuration options, include the `overrides` statement and its subordinate statements at the `[edit system services dhcp-local-server]` hierarchy level. To override DHCP local server configuration options for a named group of interfaces, include the statements at the `[edit system services dhcp-local-server group group-name]` hierarchy level.

To remove all DHCP local server configuration overrides at a particular hierarchy level, include the `overrides` statement without any subordinate statements.

To override default DHCP local server configuration settings:

1. Specify that you want to configure override options.

```
[edit system services dhcp-local-server]
user@host# edit overrides
```

2. (Optional) Override the maximum number of DHCP clients allowed per interface.

See “Specifying the Maximum Number of DHCP Clients Per Interface” on page 1.

3. (Optional) Override ARP table population in distrusted environments.

See “Disabling ARP Table Population” on page 2.

This topic contains the following sections:

- Specifying the Maximum Number of DHCP Clients Per Interface on page 1
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### Specifying the Maximum Number of DHCP Clients Per Interface

By default, there is no limit to the number of DHCP local server or DHCP relay clients allowed on an interface. However, you can override the default setting and specify the maximum number of clients allowed per interface, in the range 1 to 500,000. When the number of clients on the interface reaches the specified limit, no additional DHCP Discover PDUs are accepted. When the number of clients subsequently drops below the limit, new clients are again accepted.



**NOTE:** The maximum number of DHCP local server clients or DHCP relay clients can also be specified by Juniper Networks VSA 26-143 during client login. The VSA-specified value always takes precedence if the interface-client-limit number statement specifies a different number.

If the VSA-specified value differs with each client login, DHCP uses the largest limit set by the VSA until there are no clients on the interface.

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To configure the maximum number of DHCP clients allowed per interface:

1. Specify that you want to configure override options.

- For DHCP local server:

```
[edit system services dhcp-local-server]
user@host# edit overrides
```

- For DHCP relay agent:

```
[edit forwarding-options dhcp-relay]
user@host# edit overrides
```

2. Configure the maximum number of clients allowed per interface. (DHCP local server and DHCP relay agent both support the `interface-client-limit` statement.)

```
[edit system services dhcp-local-server overrides]
user@host# set interface-client-limit number
```

## Disabling ARP Table Population

By default, DHCP populates the ARP table with the MAC address of a client when the client binding is established. However, you may choose to use the DHCP `no-arp` statement to hide the subscriber MAC address information, as it appears in ARP table entries.

When running in a trusted environment (that is, when not using the `no-arp` statement), DHCP populates the ARP table with unique MAC addresses contained within the DHCP PDU for each DHCP client:

**Table 1: ARP Table in Trusted Environment**

IP Address	MAC Address
Client 1 IP Address	MAC A
Client 2 IP Address	MAC B
Client 3 IP Address	MAC C

In distrusted environments, you can specify the `no-arp` statement to hide the MAC addresses of clients. When you specify the `no-arp` statement, DHCP does not automatically populate the ARP table with MAC address information from the DHCP PDU for each client. Instead, the system performs an ARP to obtain the MAC address of each client and obtains the MAC address of the immediately-attached device (for example, a DSLAM). DHCP populates the ARP table with the same interface MAC address (for example, MAC X from a DSLAM interface) for each client:

**Table 2: ARP Table in Distrusted Environment**

<b>IP Address</b>	<b>MAC Address</b>
Client 1 IP Address	MAC X
Client 2 IP Address	MAC X
Client 3 IP Address	MAC X

To disable ARP table population:

1. Specify that you want to configure override options.
  - For DHCP local server:  

```
[edit system services dhcp-local-server]  
user@host# edit overrides
```
  - For DHCP relay:  

```
[edit forwarding-options dhcp-relay]  
user@host# edit overrides
```
2. Disable ARP table population with client-specific information. (DHCP local server and DHCP relay agent both support the `no-arp` statement.)
  - For DHCP local server:  

```
[edit system services dhcp-local-server overrides]  
user@host# set no-arp
```
  - For DHCP relay:  

```
[edit forwarding-options dhcp-relay overrides]  
user@host# set no-arp
```

