

DHCPv6 Local Server Overview

The DHCPv6 local server enhances the extended DHCP local server by providing support for IPv6. When a DHCPv6 client logs in, the DHCPv6 local server uses the AAA service framework to interact with the RADIUS server. The RADIUS server, which is configured independently of DHCP, authenticates the client and supplies the IPv6 prefix and client configuration parameters.

You can configure DHCPv6 local server to communicate the following attributes to the AAA service framework and RADIUS at login time:

- Client username
- Client password



NOTE: The client username, which uniquely identifies a subscriber, must be present in the configuration in order for DHCPv6 local server to use RADIUS authentication.

Based on the attributes that the DHCPv6 local server provides, RADIUS returns the information shown in Table 1 to configure the client:

Table 1: RADIUS Attributes and VSAs for DHCPv6 Local Server

Attribute Number	Attribute Name	Description
27	Session-Timeout	Lease time, in seconds. If not supplied, the lease does not expire
125	Delegated-IPv6-Prefix	Prefix that is delegated to the client
26-143	Max-Clients-Per-Interface	Maximum number of clients allowed per interface

The DHCPv6 local server is compatible with the extended DHCP local server and the extended DHCP relay agent, and can be enabled on the same interface as either the extended DHCP local server or DHCP relay agent.

The DHCPv6 local server provides many of the same features as the extended DHCP local server, including:

- Configuration for a specific interface or for a group of interfaces
- Site-specific usernames and passwords
- Numbered Ethernet interfaces
- Statically configured CoS and filters
- AAA directed login



NOTE: DHCPv6 local server does not support dynamic profiles or the local address-assignment pool feature, which the DHCP local server does support.

To configure the extended DHCPv6 local server on the router, you include the **dhcpv6** statement at the **[edit system services dhcp-local-server]** hierarchy level. See the **[edit system services dhcp-local-server]** Hierarchy Level for the complete DHCP local server syntax, including the DHCPv6 syntax.

You can also include the **dhcpv6** statement at the following hierarchy levels:

- **[edit logical-systems *logical-system-name* system services dhcp-local-server]**
- **[edit logical-systems *logical-system-name* routing-instances *routing-instance-name* system services dhcp-local-server]**
- **[edit routing-instances *routing-instance-name* system services dhcp-local-server]**

Related Topics

- Extended DHCP Local Server Overview
- Using External AAA Authentication Services with DHCP
- Grouping Interfaces with Common DHCP Configurations
- Group-Specific DHCP Local Server Options
- Overriding Default DHCP Local Server Configuration Settings
- Configuring Passwords for Usernames
- Creating Unique Usernames for DHCP Clients
- Example: Extended DHCPv6 Local Server Configuration

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