

## Creating DHCP Profiles (SRC CLI)

---

When the SAE receives a DHCP discover request from the router, it uses the client's MAC address to find a DHCP profile in cache or in the directory. If it finds a DHCP profile, the SAE uses the information in the profile to create a discover decision that it returns to the router. The discover decision includes information to select an IP address and DHCP options to configure the DHCP client.

When a DHCP subscriber logs in to the SAE through a Web portal, the SAE registers the subscriber's equipment and creates a cached DHCP profile in the *o = AuthCache* directory. These profiles are keyed by the MAC address of the DHCP client device. They are created by the `grantPublicIp` or the `registerEquipment` methods.

DHCP profiles are stored in the *o = AuthCache* directory in the `dhcpProfile` object class. The `dhcpProfile` object class is subordinate to the `cachedAuthenticationProfiles` object class. Manually created profiles are keyed by the `cn` (common name) attribute.

For more information about how the SAE handles DHCP subscribers, see:

- Assigning DHCP Addresses to Subscribers
- DHCP Subscriber Login and Service Activation

Use the following configuration statements to create a DHCP profile:

```
shared auth-cache cached-dhcp-profile name {  
    description description ;  
    pool-name pool-name ;  
    ip-address ip-address ;  
    dhcp-options dhcp-options ;  
    boot-server-name boot-server-name ;  
    boot-file-name boot-file-name ;  
    virtual-router virtual-router ;  
    local-interface local-interface ;  
    lease-time lease-time ;  
    user-name user-name ;  
    service-bundle service-bundle ;  
    radius-class radius-class ;  
}
```

To create a DHCP profile:

1. From configuration mode, enter the DHCP cached authentication profile configuration.

```
user@host# edit shared auth-cache cached-dhcp-profile default
```

2. (Optional) Configure a description for the profile.

```
[edit shared auth-cache cached-dhcp-profile default]  
user@host# set description description
```

3. (Optional) Configure the name of the IP address pool on the JUNOS router from which a DHCP address is selected.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set pool-name pool-name
```

4. (Optional) Configure the fixed IP address that is offered to the DHCP client if the client is part of a network in the configured DHCP pool.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set ip-address ip-address
```

5. (Optional) Configure the DHCP options that are used to configure DHCP clients.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set dhcp-options dhcp-options
```

6. (Optional) Configure the name of the server used to boot the DHCP client.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set boot-server-name boot-server-name
```

7. (Optional) Configure the name of a boot file used to boot the DHCP client.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set boot-file-name boot-file-name
```

8. (Optional) Configure the name of the JUNOS virtual router that holds the IP address pool.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set virtual-router virtual-router
```

9. (Optional) Configure the name of the JUNOS interface that is used to check the validity of system-created DHCP profiles.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set local-interface local-interface
```

10. (Optional) Configure the length of time the supplied IP address is valid.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set lease-time lease-time
```

11. (Optional) Configure the name of DHCP user without the domain name.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set user-name user-name
```

12. (Optional) Configure the vendor-specific RADIUS attribute that specifies the SRC service bundle to use.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set service-bundle service-bundle
```

13. (Optional) Configure the RADIUS attribute class.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# set radius-class radius-class
```

14. (Optional) Verify your configuration.

```
[edit shared auth-cache cached-dhcp-profile default]
user@host# show
description "This DHCP profile is used to select addresses from the
\"default\"
pool.";
virtual-router *;
local-interface *;
```

- Related Topics**
- Selecting DHCP Parameters
  - Classifying DHCP Subscribers (SRC CLI)
  - Syntax for DHCP Classification Targets
  - DHCP Options Supported on the SAE
  - DHCP Classification Conditions

