

Configuring User-Defined CoS Variables in a Dynamic Service Profile

You can configure user-defined variables in the dynamic service profile for traffic scheduling and shaping parameters.



NOTE: The JUNOS predefined variables for dynamic CoS are only to be used in dynamic access profiles and not in dynamic service profiles.

You can use variables in a dynamic service profile in two ways:

- To enable subscribers to upgrade or downgrade services after login using a RADIUS change of authorization (CoA), configure user-defined variables for CoS parameters as RADIUS attributes.
- To provide subscribers with default values for CoS parameters, configure user-defined variables for CoS parameters with static default values. If you have configured values to be supplied by a RADIUS CoA, subscribers can receive the previously configured default value when deactivating a service.

You activate the variables by referencing them in the traffic control profile configured in the dynamic service profile.

To configure user-defined variables for CoS in a dynamic profile:

1. Specify that you want to configure variables in the dynamic profile.

[edit dynamic-profiles residential-silver variables]

2. Do one of the following to configure variables for the shaping rate:

- Enable RADIUS to modify the shaping rate based on service changes.
 - a. Configure the attribute:

[edit dynamic-profiles residential-silver variables]

user@host# **set srate radius vendor-id 4874 attribute 108**

- b. Configure the tag:

[edit dynamic-profiles residential-silver variables]

user@host# **set srate radius vendor-id 4874 tag 2**



NOTE: You can configure user-defined values for RADIUS tags that are different than the values that are required in access profiles with predefined variables. For example, in a dynamic service profile, you could assign the shaping rate with a tag of 1 rather than 2, which is required for the `$junos-shaping-rate` variable. When you configure user-defined values, the VSA that is sent from RADIUS must share the same definition.

- Configure a default value for the shaping rate.

```
[edit dynamic-profiles residential-silver variables]
user@host# set srate default-value 10m
```

3. Do one of the following to configure variables for the guaranteed rate.
 - Enable RADIUS to modify the guaranteed rate based on service changes.
 - a. Configure the attribute:

```
[edit dynamic-profiles residential-silver variables]
user@host# set grate radius vendor-id 4874 attribute 108
```

- b. Configure the tag:

```
[edit dynamic-profiles residential-silver variables]
user@host# set grate radius vendor-id 4874 tag 3
```

- Configure a default value for the guaranteed rate.

```
[edit dynamic-profiles residential-silver variables]
user@host# set grate default-value 5m
```

4. Do one of the following to configure variables for the delay buffer rate:
 - Enable RADIUS to modify the delay buffer rate based on service changes.
 - a. Configure the attribute:

```
[edit dynamic-profiles residential-silver variables]
user@host# set dbrate radius vendor-id 4874 attribute 108
```

- b. Configure the tag:

```
[edit dynamic-profiles residential-silver variables]
user@host# set dbrate radius vendor-id 4874 tag 4
```

- Configure a default value for the delay buffer rate.

```
[edit dynamic-profiles residential-silver variables]
user@host# set dbrate default-value 10m
```

5. Do one of the following to configure variables for the scheduler map.
 - Enable RADIUS to modify the scheduler map based on service changes.
 - a. Configure the attribute:

```
[edit dynamic-profiles residential-silver variables]
user@host# set smap radius vendor-id 4874 attribute 108
```

- b. Configure the tag:

```
[edit dynamic-profiles residential-silver variables]
user@host# set smap radius vendor-id 4874 tag 1
```

- Configure a default value for the scheduler map.

```
[edit dynamic-profiles residential-silver variables]
```

```
user@host# set smap default-value triple-play
```

6. Configure the variables for the CoS parameters in the traffic control profile.

Either the shaping rate or the guaranteed rate are required in the traffic control profile.

- a. Specify that you want to configure CoS parameters in the dynamic profile.

```
user@host# edit dynamic-profiles residential-silver class-of-service  
traffic-control-profiles tcp1
```

- b. Configure the scheduler map variable.

```
[edit dynamic-profiles residential-silver class-of-service traffic-control-profiles  
tcp1]  
user@host# set scheduler-map "$smap"
```

- c. Configure the shaping rate variable.

```
[edit dynamic-profiles residential-silver class-of-service traffic-control-profiles  
tcp1]  
user@host# set shaping-rate "$srate"
```

- d. Configure the guaranteed rate variable.

```
[edit dynamic-profiles residential-silver class-of-service traffic-control-profiles  
tcp1]  
user@host# set guaranteed-rate "$grate"
```

- e. Configure the delay buffer rate variable.

```
[edit dynamic-profiles residential-silver class-of-service traffic-control-profiles  
tcp1]  
user@host# set delay-buffer-rate "$dbrate"
```

- Related Topics**
- Changing CoS Services Overview
 - Guidelines for Configuring CoS for Subscriber Access

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