

Classifying Congestion Points

The tasks to classify congestion points are:

1. Configuring Targets and Criteria for Classification Scripts on page 1
2. Configuring Classification Scripts Contents for Classification Scripts on page 1
3. Configuring Congestion Point Classification Targets on page 2

Configuring Targets and Criteria for Classification Scripts

To define a target and criteria for the congestion point classification script:

1. From configuration mode, access the configuration statement that configures congestion point scripts. In this sample procedure, the scripts are configured in the config group.

```
user@host# edit shared acp group config congestion-point-classifier rule name
```

Enter a name for the congestion point classification script.

2. Specify the target for the classification script.

```
[edit shared acp group config congestion-point-classifier rule name]  
user@host# set target target
```

For information about classification targets, see “Classifying Congestion Points” on page 1.

3. Specify the classification criteria for the target.

```
[edit shared acp group config congestion-point-classifier rule name]  
user@host# set condition condition
```

For information about classification criteria, see “Congestion Point Classification Criteria” on page 2.

Configuring Classification Scripts Contents for Classification Scripts

To use the contents of a classification script to another object for the congestion point classification script:

1. From configuration mode, access the configuration statement that configures congestion point scripts. In this sample procedure, the scripts are configured in the config group.

```
user@host# edit shared acp group config congestion-point-classifier rule name
```

Enter a name for the congestion point classification script.

2. Specify the classification script that you want to use.

```
[edit shared acp group config congestion-point-classifier rule name]  
user@host# set script script
```

Configuring Congestion Point Classification Targets

The target of the congestion point classification script is an LDAP search string. The search string uses a syntax similar to an LDAP URL (see RFC 2255—The LDAP URL Format (December 1997)). The syntax is:

```
baseDN [ ? [ attributes ] [ ? [ scope ] [ ? [ filter ] ] ] ]
```

- baseDN—Distinguished name (DN) of the object where the LDAP search starts.
- attributes—Is ignored.
- scope—Scope of search in the directory:
 - base—Default; searches the base DN only.
 - one—Searches the direct children of the base DN.
 - sub—Searches the complete subtree below the base DN.
- filter—An RFC 2254-style LDAP search filter expression; for example, (uniqueId = <-userName->). See RFC 2254—The String Representation of LDAP Search Filters (December 1997).

With the exception of baseDN all the fields are optional.

The result of the LDAP search must be exactly one directory object. If no object or more than one object is found, congestion points for the subscriber are not loaded and all service activations for the subscriber are denied.

Congestion Point Classification Criteria

Congestion point classification criteria define match criteria that are used to find the congestion point profile. Use the fields in this topic to define classification criteria.

accountingId

- Value of directory attribute accountingUserId.

authUserId

- Identifier that a subscriber uses for authentication.
- Value—Username

dhcpPacket

- Content of the DHCP discover request.
- Value—Byte array
 - First 4 octets—Gateway IP address (giaddr field)
 - Remaining octets—DHCP options

For more information, see RFC 2131—Dynamic Host Configuration Protocol (March 1997) and RFC 2132—DHCP Options and BOOTP Vendor Extensions (March 1997).

domain

- Name of the domain used for secondary authentication.
- Value—Valid domain name
- Example—domain = “ isp99.com”

ifRadiusClass

- RADIUS class attribute on the JUNOS interface.
- Value—RADIUS class name
- Example—ifRadiusClass = “ acpe”

ifSessionId

- Identifier for RADIUS accounting on the JUNOS interface.

interfaceAlias

- Description of the interface.
- Value—Interface description that is configured on the JUNOS router with the `interface ip description` command
- Example—interfaceAlias = “ dhcp-subscriber12”

interfaceDescr

- Alternate name for the interface that is used by SNMP. This name is a system-generated name.
- Value
 - On a JUNOS router, the format of the description is
`ip<slot>/<port>.<subinterface>`
 - On the JUNOS routing platform, interfaceDescr is the same as interfaceName.
- Example—interfaceDescr = “ IP3/1 ”

interfaceName

- Name of the interface.
- Value
 - Name of the interface in your router CLI syntax
 - FORWARDING_INTERFACE for routing instance (used by traffic mirroring)
- Example—For JUNOSe routers: `interfaceName = “ fastEthernet6/0”`
For JUNOS routing platforms: `interfaceName = “fe-0/1/0.0”`
For forwarding interface: `interfaceName = “FORWARDING_INTERFACE”`

loginName

- Subscriber's login name.
- Value—Login name
- Guidelines—The format of the login name varies. A loginName can be of form subscriber, domain\subscriber, subscriber@domain, or as otherwise defined by the login setup of the manager.
- Example—`idp@idp`

nasIp

- IP address of the router.
- Value—Byte array
 - For IPv4 address—4 octets in network byte order
 - For IPv6 address—16 octets in network byte order

nasPort

- Port identifier of an interface.
- Value—Includes interface name and additional layer 2 information
- Example—`nasPort = “ fastEthernet 3/1”` (There is a space between fastEthernet and slot number 3/1 in the nasPort field.)

portId

- Identifier of VLAN or virtual circuit.
- Value—String; for a virtual circuit, use the format `< VPI > / < VCI >`

primaryUserName

- PPP login name or the public DHCP username.
- Value—Subscriber name
- Example—primaryUserName = “ peter”

radiusClass

- RADIUS class attribute of the service definition.
- Value—RADIUS class name
- Example—radiusClass = “ Premium”

routerName

- Name of virtual router.
- Value—Virtual router name in the format <virtualRouter> @ <router>
- Example—routerName = “ default@e_series5”

sessionId

- Identifier of RADIUS session for the subscriber session.

serviceBundle

- Content of the RADIUS vendor-specific attribute for the service bundle.
- Value—Name of a service bundle
- Example—serviceBundle = “ goldSubscriber”

sspHost

- Name of host on which the SAE is installed.

userDn

- DN of a subscriber in the directory.
- Value—DN of a subscriber profile

userIp

- IP address of the subscriber.
- Value—Byte array
 - For IPv4 address—4 octets in network byte order
 - For IPv6 address—16 octets in network byte order

userMacAddress

- Media access control (MAC) address of the DHCP subscriber.
- Value—Valid MAC address
- Example—userMacAddress = “ 00:11:22:33:44:55”

userType

- Type of subscriber.

Related Topics

- Configuring Congestion Point Classification (C-Web Interface)
- Configuration Statements for Congestion Point Classification
- Viewing Congestion Point Information by DN
- Congestion Point Expressions
- Overview of Congestion Point Classification