Per-User QoS via AAA Policy Name

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The Per-User QoS via AAA Policy Name feature provides the ability to download a policy name that describes quality of service (QoS) parameters for a user session from a RADIUS server and apply them for the particular session.

History for the Per-User QoS via AAA Policy Name Feature

Release	Modification
12.2(15)B	This feature was introduced.
12.2(15)T	This feature was integrated into Cisco IOS Release 12.2(15)T.
12.2(28)SB	This feature was integrated into Cisco IOS Release 12.2(28)SB.

Finding Support Information for Platforms and Cisco IOS Software Images

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Prerequisites for Per-User QoS via AAA Policy Name

Before you configure the Per-User QoS via AAA Policy Name feature, you must locally define on your router the policy whose name is received from the RADIUS server.

Information About Per-User QoS via AAA Policy Name

Effective with Cisco IOS Release 12.2(15)T, separate Cisco vendor-specific attributes (VSAs) are added for the service map.

To configure the Per-User QoS via AAA Policy Name feature, you must understand the following concept:

- VSAs Added for Per-User QoS via AAA Policy Name, page 2

VSAs Added for Per-User QoS via AAA Policy Name

Two new VSAs have been added for the service map, and the VSAs will bypass the parser while applying the policy for a particular user or session. The new VSAs are as follows:

- vendor-id=9 (Cisco) Vendor type 37 for upstream traffic to input policy name
- vendor-id+9 (Cisco) Vendor type 38 for downstream traffic to output policy name

How to Configure Per-User QoS via AAA Policy Name

This section contains the following procedure:

- Monitoring and Maintaining Per-User QoS via AAA Policy Name, page 2

To configure per-user QoS, use the authentication, authorization, and accounting (AAA) policy name that you have received from the RADIUS server. To configure QoS policy, refer to the documents listed in the "Related Documents" section on page 4.

Monitoring and Maintaining Per-User QoS via AAA Policy Name

To monitor and maintain per-user QoS using the AAA policy name, use the following **debug** commands:

SUMMARY STEPS

1. **enable**
2. **debug aaa authorization**
3. **debug aaa per-user**

DETAILED STEPS

	Command or Action	Purpose

Step 1	`enable`
	
	Example:
	`Router> enable`
		Enables privileged EXEC mode.
		• Enter your password if prompted.

Step 2	`debug aaa authorization`
	
	Example:
	`Router# debug aaa authorization`
		Displays information about AAA/TACACS+ authorization.

Step 3	`debug aaa per-user`
	
	Example:
	`Router# debug aaa per-user`
		Displays information about per-user QoS parameters.

Configuration Examples for Per-User QoS via AAA Policy Name

This section provides the following configuration example:

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Per-User QoS Using the AAA Policy Name

The following example shows that per-user QoS is being configured using the AAA policy name “policy_class_1_2”:

```
class-map match-all class1
 match access-group 101
class-map match-all class2
 match qos-group 4
 match access-group 101

policy-map policy_class_1_2
 class class1
 bandwidth 3000
 queue-limit 30
 class class2
 bandwidth 2000
 class class-default
 bandwidth 500

peruser_qos_1    Password = "lab"
 Service-Type = Framed,
 Framed-Protocol = PPP,
 Cisco:Cisco-avpair = "ip:sub-policy-In=ssspolicy"
!ssspolicy in the above line is the name of the policy.

peruser_qos_2    Password = "lab"
 Service-Type = Framed,
```

```
Framed-Protocol = PPP,
Cisco:Cisco-avpair = "ip:sub-policy-Out=ssspolicy”
```

Additional References

The following sections provide references related to Per-User QoS via AAA Policy Name.

Related Documents

Related Topic	Document Title
AAA per-user and QoS configurations and information about the **policy-map** command	• *Configuring Per-User Configuration* • *Cisco IOS Security Command Reference*, Release 12.2T

Standards

Standard	Title
None	—

MIBs

MIB	MIBs Link
None	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFC	Title
None	—

Technical Assistance

Description	Link
The Cisco Technical Support website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

Glossary

RADIUS—Remote Authentication Dial-In User Service. RADIUS is a database for authenticating modem and ISDN connections and for tracking connection time.

VSA—vendor-specific attribute. A VSA is an attribute that has been implemented by a particular vendor. It uses the attribute Vendor-Specific to encapsulate the resulting AV pair: essentially, Vendor-Specific = protocol:attribute = value.

Note Refer to the *Internetworking Terms and Acronyms* for terms not included in this glossary.

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