



Service Selection Gateway Accounting Update Interval Per Service

Feature History

Release	Modification
12.2(4)B	This feature was introduced.
12.2(13)T	This feature was integrated into Cisco IOS Release 12.2(13)T.

This document describes the Service Selection Gateway Accounting Update Interval Per Service feature. It includes the following sections:

- [Feature Overview, page 1](#)
- [Supported Platforms, page 2](#)
- [Supported Standards, MIBs, and RFCs, page 3](#)
- [Prerequisites, page 3](#)
- [Configuration Tasks, page 3](#)
- [Monitoring and Maintaining SSG Accounting Update Interval Per Service, page 5](#)
- [Configuration Examples, page 5](#)
- [Command Reference, page 6](#)

Feature Overview

The Service Selection Gateway (SSG) Accounting Update Interval Per Service feature enhances SSG accounting by allowing users to configure an interim accounting interval for a particular service. Without the SSG Accounting Update Interval Per Service feature, all accounting information is sent simultaneously and accounting information for a particular SSG service cannot be sent at a separate, independent interval.

SSG Accounting sends information such as billing, auditing, and reporting, so the SSG Accounting Update Interval Per Service feature allows for more granular interim accounting interval options for all of these functions.

Benefits

Allows Accounting by Service

Before the introduction of the SSG Accounting Update Interval Per Service feature, SSG had one accounting interval for all services. Accounting intervals could not be set for an individual service, so monitoring some accounting services individually was problematic. Tasks such as billing by service were difficult because a particular service did not have an independent accounting interval.

With the SSG Accounting Update Interval Per Service feature, accounting can be performed on a particular SSG service when the service provider prefers different accounting intervals for different services.

Related Features and Technologies

- Authentication, Authorization, and Accounting (AAA)
- Service Selection Gateway (SSG)

Related Documents

- *Cisco IOS Security Configuration Guide*, Release 12.2
- *Cisco IOS Security Command Reference*, Release 12.2

Supported Platforms

- Cisco 6400 series routers
- Cisco 7200 series routers
- Cisco 7401ASR routers

Availability of Cisco IOS Software Images

Platform support for particular Cisco IOS software releases is dependent on the availability of the software images for those platforms. Software images for some platforms may be deferred, delayed, or changed without prior notice. For updated information about platform support and availability of software images for each Cisco IOS software release, refer to the online release notes or Cisco Feature Navigator.

Supported Standards, MIBs, and RFCs

Standards

None

MIBs

None

To obtain lists of supported MIBs by platform and Cisco IOS release, and to download MIB modules, go to the Cisco MIB website on Cisco.com at the following URL:

<http://www.cisco.com/public/sw-center/netmgt/cmtk/mibs.shtml>

RFCs

None

Prerequisites

The RADIUS server should be configured and operational when using the SSG Accounting Update Interval Per Service feature.

Configuration Tasks

See the following sections for configuration tasks for the SSG Accounting Update Interval Per Service feature. Each task in the list is identified as either required or optional.

- [Configuring the SSG Accounting Update Interval Per Service Feature in a RADIUS Service Profile](#) (required)
- [Verifying SSG Accounting Update Interval Per Service](#) (optional)

Configuring the SSG Accounting Update Interval Per Service Feature in a RADIUS Service Profile

The SSG Accounting Update Interval Per Service feature can be configured in a RADIUS service profile. This service profile will have the following configuration:

Service-Info = "*Linterval*"



Note

A RADIUS service profile can be configured using many authorization methods and the actual configuration steps depend on your selected security method. Therefore, this configuration example only provides the information required to configure an accounting interval in a service profile while not showing the configuration of the profile itself.

For information on authorization methods, see the “Configuring Authorization” section of the *Cisco IOS Security Configuration Guide* for Release 12.2.

The SSG Accounting Update Interval Per Service feature can also be configured on the router as part of a RADIUS local service profile.

	Command	Purpose
Step 1	Router(config)# local-profile <i>profile-name</i>	Enters profile configuration mode. Configures a local RADIUS service profile.
Step 2	Router(config-prof)# attribute <i>radius-attribute-id</i> [<i>vendor-id</i>] [<i>cisco-vsa-type</i>] " Linterval "	Configures the interim accounting interval in a local RADIUS service profile. The <i>interval</i> variable is specified in seconds. An accounting update will occur as often as specified (for instance, if the <i>interval</i> variable is set at 100, an accounting update for the service profile is sent every 100 seconds). If no interval is specified, a default value of 600 seconds is used. If the interval is set at 0, interim accounting is disabled. When interim accounting is disabled, the normal accounting stops and starts will still be sent.

**Note**

If the L option is not defined, the accounting records for a service profile will be sent with all accounting records based on the configuration of the **ssg accounting interval** command. If the **ssg accounting interval** command is not set, the accounting records are sent every 600 seconds.

Verifying SSG Accounting Update Interval Per Service

The following command can be entered to verify the SSG Accounting Update Interval Per Service feature:

Command	Purpose
Router# show ssg service <i>service-name</i>	Displays the information for an SSG service, including the accounting parameters and interval. If no service accounting interval has been specified by the user (and the default interval of 600 seconds is therefore being used), the show ssg service command output will not contain any accounting interval information. If a different service accounting interval has been successfully configured, the show ssg service command output will contain the following line: Service Accounting Interval: x seconds where x is equal to the specified accounting interval. If a service accounting interval has been disabled by entering the interval as 0 seconds, the show ssg service command output will contain the following line: Service Accounting Interval: Disabled

Monitoring and Maintaining SSG Accounting Update Interval Per Service

Command	Purpose
Router# <code>show ssg service service-name</code>	Displays the information for an SSG service, including the accounting parameters and interval.
Router# <code>debug radius</code>	Troubleshoots communications between the RADIUS server and the network access server (NAS).
Router# <code>radius-server vsa send</code>	Sends vendor-specific attributes with authentication and accounting requests to the AAA server.

Configuration Examples

This section contains the following configuration examples:

- [Configuring SSG Accounting Update Interval Per Service in RADIUS Example](#)
- [Configuring SSG Accounting Update Interval Per Service on Router Example](#)
- [Verifying SSG Accounting Update Interval Per Service Example](#)

Configuring SSG Accounting Update Interval Per Service in RADIUS Example

In the following example, the interim accounting interval for the RADIUS service profile named `proxy_ser` is set at 90 using the `L90` attribute. The attribute is italicized for emphasis.

```
user = proxy_ser{
radius=7200-SSG-v1.1 {
check_items= {
2=cisco
}
reply_attributes= {
9,251="TX"
9,251="R139.85.0.0;255.255.0.0"
9,251="S9.2.36.253;1645;1646;cisco;2;0"
9,251="L90"
28=600
}
}
}
```

Configuring SSG Accounting Update Interval Per Service on Router Example

In the following example, the local profile `cisco.com` is configured on the router to send an interim accounting update every 90 seconds:

```
Router(config)# local-profile cisco.com
Router(config-prof)# attribute 26 9 1 "L90"
```

Verifying SSG Accounting Update Interval Per Service Example

In the following example, the interim accounting interval for the RADIUS service profile will be sent every 100 seconds. The configuration is indicated by the following output, which has been italicized for emphasis in the text:

```
Service Accounting Interval: 100
```

```
Router# show ssg service serv1-proxy
```

```
----- ServiceInfo Content -----
Uplink IDB:
Name:serv1-proxy
Type:PROXY
Mode:CONCURRENT
Service Session Timeout:0 seconds
Service Idle Timeout:0 seconds
Service Accounting Interval: 100 seconds
Class Attr:NONE
Authentication Type:CHAP
Reference Count:1

Next Hop Gateway Key:my-key

DNS Server(s):Primary:10.13.1.5

Radius Server:IP=10.13.1.2, authPort=1645, acctPort=1646, secret=my-secret

Included Network Segments:
    10.13.0.0/255.255.0.0
Excluded Network Segments:
Full User Name Used
Service Defined Cookie exist

Domain List:servicel.com;

Active Connections:
    1 :Virtual=255.255.255.255, Subscriber=10.20.10.2

----- End of ServiceInfo Content -----
```

Command Reference

This section documents the **attribute** command. All other commands used with this feature are documented in the Cisco IOS Release 12.2 command reference publications.



Note

The **attribute** command in this command reference only addresses the **attribute** command when used with the L attribute. See the *SSG Command References* document for the complete **attribute** command reference.

attribute

To configure an attribute in a local service profile, use the **attribute** profile configuration command. Use the **no** form of this command to delete an attribute from a service profile.

attribute *radius-attribute-id* [*vendor-id*] [*cisco-vsa-type*] "**Linterval**"

no attribute *radius-attribute-id* [*vendor-id*] [*cisco-vsa-type*] "**Linterval**"

Syntax Description		
<i>radius-attribute-id</i>		RADIUS attribute ID to be configured.
<i>vendor-id</i>		(Optional) Vendor ID. Required if the RADIUS attribute ID is 26, indicating a vendor-specific attribute. Cisco's vendor ID is 9.
<i>cisco-vsa-type</i>		(Optional) Cisco vendor-specific attribute (VSA) type. Required if the vendor ID is 9, indicating a Cisco VSA.
L		(Required to change an interim accounting interval.) Specifies that an accounting interval is being modified.
<i>interval</i>		(Required to change an accounting interval.) Specifies the new accounting interval in seconds. For instance, if L80 is entered as the attribute value, the service profile sends accounting information every 80 seconds.

Defaults

For the L option: If the L option is not defined, the accounting records for a service profile will be sent with all accounting records based on the configuration of the **ssg accounting interval** command. If the **ssg accounting interval** command is not set, the accounting records are sent every 600 seconds.

Command Modes

Profile configuration

Command History

Release	Modification
12.2(4)B	The L attribute was introduced.
12.2(13)T	The L attribute was integrated into Cisco IOS Release 12.2(13)T.

Usage Guidelines

Use this command to configure attributes in local service profiles.

To change the SSG accounting interval for a service profile, use the L option in the **attribute** command.

Interim accounting can be disabled by entering the seconds variable as 0 (for instance, L0). When interim accounting is disabled, the normal accounting stops and starts are still sent.

Examples

In the following example, the local profile cisco.com is configured to send an interim accounting update every 90 seconds:

```
Router(config)# local-profile cisco.com
Router(config-prof)# attribute 26 9 1 "L90"
```

■ attribute

Related Commands	Command	Description
	local-profile	Configures a local service profile.
	ssg accounting interval	Specifies the interval at which accounting updates are sent to the server.