Configuraton of Subscriber Accounting Functions

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

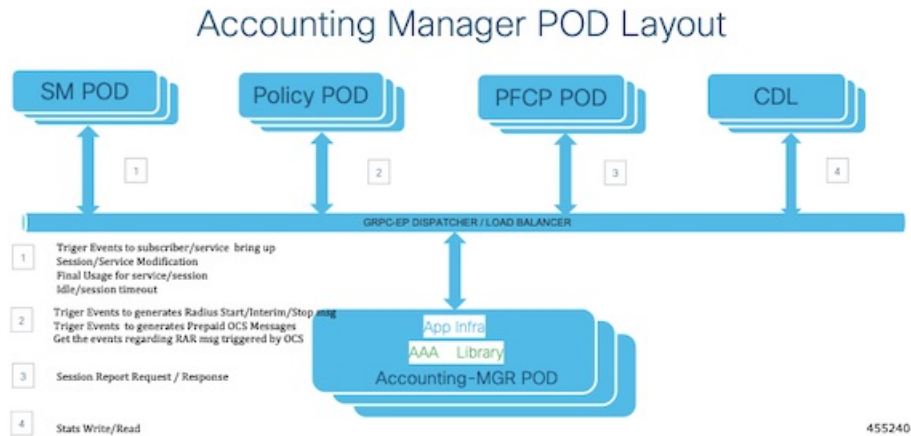|	
Applicable Product(s) or FunctionalArea	Cloud Native Broadband Network Gateway
Applicable Platform(s)	SMI
Feature Default Setting	Not Applicable
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Feature Description

The Accounting Manager handles the Subscriber Accounting functions in the cnBNG CP. The Accounting function includes features that track traffic either in volume or duration. It provides accounting information for subscribers on a session or per service. The Accounting function determines the length and duration of a given service that a subscriber has used. Certain regulations require service providers to account for services they provide to the subscriber.

The following figure illustrates the Accounting Manager external interfaces.

The Accounting Manager in cnBNG supports the following forms of accounting:

Service Accounting

ISPs can offer different tiered services to their subscribers with the ability to move between different tiers. Different tiers could correspond to different bandwidths offered to the subscriber. A subscriber can enable a new service that corresponds to temporarily moving from one tier of service to another. ISPs need to keep track of when a new service is enabled and how long it is active for each subscriber. Often there might be a need to count the number of packets and bytes associated with a service. Both of these forms of accountng are referred to as service accounting. When service accounting is enabled, BNG sends a Service-Start request when service is activated and a Service-Stop request when the service is deactivated. A timestamp is sent with both the actions. Service-Stop can also contain statistics associated with the service.

To configure Service accounting, see Configuring Service Accounting, on page 3.

Session Accounting

When Session Accounting is activated, an Accounting-Start request is sent to AAA when the session is started. When the session is terminated, an Accounting-Stop request is sent. The Accounting-Stop request contains the final session accounting statistics (packets, bytes in, bytes out). An "interim" session accounting can be optionally activated that sends Interim-Updates periodically while the session is active. These updates provide the current session statistics accumulated since the start of the session.

Session Accounting is configured directly on the template. For more information, see Configuring Session Accounting, on page 3.

Limitations and Restrictions

The Subscriber Accounting Function has the following limitation in this release:

- An interim Interval of zero is not supported.

- AAA profile change at service level is not supported.

- Service-level attributes changes are not supported after service bring-up.

- Session accounting is mandatory to enable Service accounting due to User Plane (UP) (asr9k) limitation.

- Session and Service Accounting enable or disable is not supported after session or service is up because of UP limitations. Session Accounting must be enabled only during session bring-up.

Configuring Subscriber Accounting Functions

This section describes how to configure the Subscriber Accounting Functions.

The configuration of the Subscriber Accounting Functions involve the following procedures:

- Configuring Service Accounting
- Configuring Session Accounting

Configuring Service Accounting

Use the following commands to configure service accounting.

```
configure
  profile feature-template feature-template
  service accounting
    aaa-profile aaa_profile_name
    enable
    periodic-interval interval_in_seconds
    exit
```

NOTES:

- **profile feature-template** *feature-template*: Specifies the profile feature template name and enters Feature-Template Configuration mode.

- **service accounting**: Enters the Service Configuration mode to configure service accounting for a AAA profile.

- **aaa-profile** *aaa_profile_name*: Specifies the AAA profile to use for service accounting.

- **enable**: Enables service accounting for the specified AAA profile.

- **periodic-interval** *interval_in_seconds*: Specifies the interim interval in seconds. The valid values range from 60 to 4320000 seconds.

Configuring Session Accounting

Use the following commands to configure session accounting.

```
configure
  profile feature-template feature-template
  service accounting
    aaa-profile aaa_profile_name
    dual-stack-delay delay_in_seconds
    enable
    periodic-interval interval_in_seconds
    exit
```

NOTES:

- **profile feature-template** *feature-template*: Specifies the profile feature template name and enters Feature-Template Configuration mode.

- **session accounting**: Enters the Session Configuration mode to configure session accounting for a AAA profile.

- **aaa-profile** *aaa_profile_name*: Specifies the AAA profile to use for session accounting.

- **dual-stack-delay** *delay_in_seconds*: Specifies the dual stack set dealy time in seconds. The valid values range from 1 to 30 seconds.

- **enable**: Enables session accounting for the specified AAA profile.

- **periodic-interval** *interval_in_seconds*: Specifies the interim interval in seconds. The valid values range from 60 to 4320000 seconds.