Configuring Prepaid Support

This chapter contains the following information about Content Service Gateway (CSG) support for prepaid billing:

Configuring a Prepaid Billing Plan

A billing plan identifies one or more content billing services to be used for prepaid billing.

To define a billing plan, follow these steps:

	Command	Purpose
Step 1	`Router (config-csg-module)# ip csg billing` *billing-plan-name*	Defines a billing plan, and enters CSG billing configuration mode.
Step 2	`Router (config-csg-billing)# service` *service-name*	Associates a service with a CSG billing plan.
Step 3	`Router # show module csg` *slot* `billing [detail] {all | plan` *billing-plan-name*`}`	Displays statistics and counters for the CSG billing.

The following example shows how to define a prepaid billing plan:

```
ip csg billing REGULAR
 service MOVIES
 service BROWSING
```

When a CSG prepaid user initiates a new IP session, a large amount of quota might be reserved for the IP session if the IP session maps to a service configured for **basis byte ip** or **basis byte tcp**. The reservation often greatly exceeds the amount of quota that the session actually uses. This does not result in incorrect charging. However, as a result of one or more large reservations for IP sessions, the CSG might make additional requests for quota from the quota server.

By default, the CSG limits the reservation size to the size of the intermediate byte count, which results in the sending of additional records to the BMA. However, you can limit the size of the reservation per IP session to reduce the number of requests to the quota server. To configure a maximum amount of reserved quota for a prepaid IP user session, configure the following in module CSG configuration mode:

`Router (config-module-csg)# variable CSG_BASIS_BYTE_RESERVED_MAX` *quota*

Prepaid Billing with Policies Configuration Example

The following example shows a CSG configuration for prepaid billing with policies:

```
ip csg map TRAINING url
 match url *.edu/*
!
ip csg policy TRAINING
 report radius attribute type http
 url-map TRAINING
!
ip csg map AUCTION_HOUSE url
 match url *.auction_house.com/*
!
ip csg policy AUCTION_HOUSE
 accounting type http customer-string AUCTION_HOUSE
 url-map AUCTION_HOUSE
!
ip csg map MOVIES url
 match url *.movies_(comedy|action|drama).com/*.mpeg
!
ip csg policy MOVIES_COMEDY
 accounting type http customer-string MOVIES_COMEDY
 url-map MOVIES
!
ip csg policy MOVIES_ACTION
 accounting type http customer-string MOVIES_ACTION
 url-map MOVIES
!
ip csg content MOVIES_COMEDY
 ip 172.18.45.0/24 tcp 8080
 policy MOVIES_COMEDY
 inservice
!
ip csg content MOVIES_ACTION
 ip 66.33.78.0/24 tcp 80
 policy MOVIES_ACTION
 inservice
!
ip csg content AUCTION_HOUSE
 ip 216.32.120.0/24 tcp 8080
 policy AUCTION_HOUSE
 vlan AUCTION_HOUSE
 inservice
!
ip csg content WAKETECH
 ip 48.33.0.0/16 tcp 80
 policy TRAINING
 inservice
!
ip csg ruleset R1
 content MOVIES_COMEDY
 content MOVIES_ACTION
 content AUCTION_HOUSE
 content WAKETECH
!
ip csg weight DOUBLE 2
!
ip csg service MOVIES
 content MOVIES_COMEDY policy MOVIES_COMEDY
 content MOVIES_ACTION policy MOVIES_ACTION weight DOUBLE
!
ip csg service BROWSING
```

```
 basis fixed
 content AUCTION_HOUSE policy AUCTION_HOUSE
 content WAKETECH policy TRAINING
!
ip csg billing FREE_BROWSING
 service MOVIES
!
ip csg billing REGULAR
 service MOVIES
 service BROWSING
!
ip csg user-group G1
 entries max 100000
 database 10.1.2.3 11111
 quota server 10.1.4.5 888 1
 quota server 10.1.6.7 999 2
 radius key secretpassword
 redirect nat 10.33.33.3
!
ip csg accounting A1
 user-group G1
 agent local-port 3775
 agent 10.1.2.4 11112 1
 agent 10.1.2.5 11113 2
 records max 250
 inservice
!
mod csg 5
 vlan 30 client AUCTION_HOUSE
  ip address 123.44.50.6 255.255.255.0
  gateway 123.44.50.1
 vlan 40 server
  ip address 123.46.50.6 255.255.255.0
  alias 123.60.7.6 255.255.255.0
  route 123.50.0.0 255.255.0.0 gateway 123.44.50.1
 ruleset R1
 accounting A1
```