



## Configuring Prepaid Support

This chapter contains the following information related to the CSG support for prepaid billing:

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### 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, perform this task:

	Command	Purpose
Step 1	Router (config-csg-module)# <b>ip csg billing</b> <i>billing-plan-name</i>	Defines a billing plan to be used for prepaid billing, and enters CSG billing configuration mode.
Step 2	Router (config-csg-billing)# <b>service</b> <i>service-name</i>	Associates a service with a CSG billing plan.
Step 3	Router # <b>show module csg slot billing</b> [ <b>detail</b> ] { <b>all</b>   <b>plan</b> <i>billing-plan-name</i> }	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**. Often, the reservation 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.

Prior to this enhancement, the CSG would limit the reservation size to the size of the intermediate byte count, which resulted in additional records sent to the BMA. Now, 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 quota reserved 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
```

