



Quote Manager Images

RDR Settings

Transaction Usage RDRs	Log RDRs	Real-Time Subscriber RDRs	Real-Time Signaling RDRs
Usage RDRs		Transaction RDRs	Quota RDRs

Quota Breach RDRs

Generate Quota Breach RDRs

Remaining Quota RDRs

Generate Remaining Quota RDRs every minutes

Limit the total rate of Remaining Quota RDRs to RDRs per second

Quota Threshold RDRs

Generate Quota Threshold RDRs when remaining quota is less than MBytes

Quota State Restore RDRs

Generate Quota State Restore RDRs

OK Cancel

210272

Edit Rule for Service "Default Service"

General Control **Usage Limits** Breach Handling

Set the Quota Buckets that the Service's traffic will consume.

Select Quota Bucket for upstream traffic: Bucket 1

Select Quota Bucket for downstream traffic: Bucket 1

Select Quota Bucket for sessions: None (Unlimited)

OK Cancel

210270

Edit Rule for Service "Default Service"

General Control Usage Limits **Breach Handling**

In case a subscriber's usage exceeded the volume or number of sessions limits:

No changes to active control

Block the flow Redirect to: Default set

Control the flow's characteristics:

Select an upstream Bandwidth Controller: Default Upstream BWC

Select a downstream Bandwidth Controller: Default Downstream BWC

Limit the flow's upstream bandwidth to: Kbps

Limit the flow's downstream bandwidth to: Kbps

Limit concurrent flows of this Service to:

Activate a Subscriber Notification: Default Notification

OK Cancel

210269

Package Settings for "Default Package"

General | **Quota Management** | Subscriber BW Controllers | Advanced

Select quota management mode:

External - replenished on external request

Periodical - replenished automatically at the end of the aggregation period

Aggregation Period:

Hourly - ends on the hour

Daily - ends at midnight

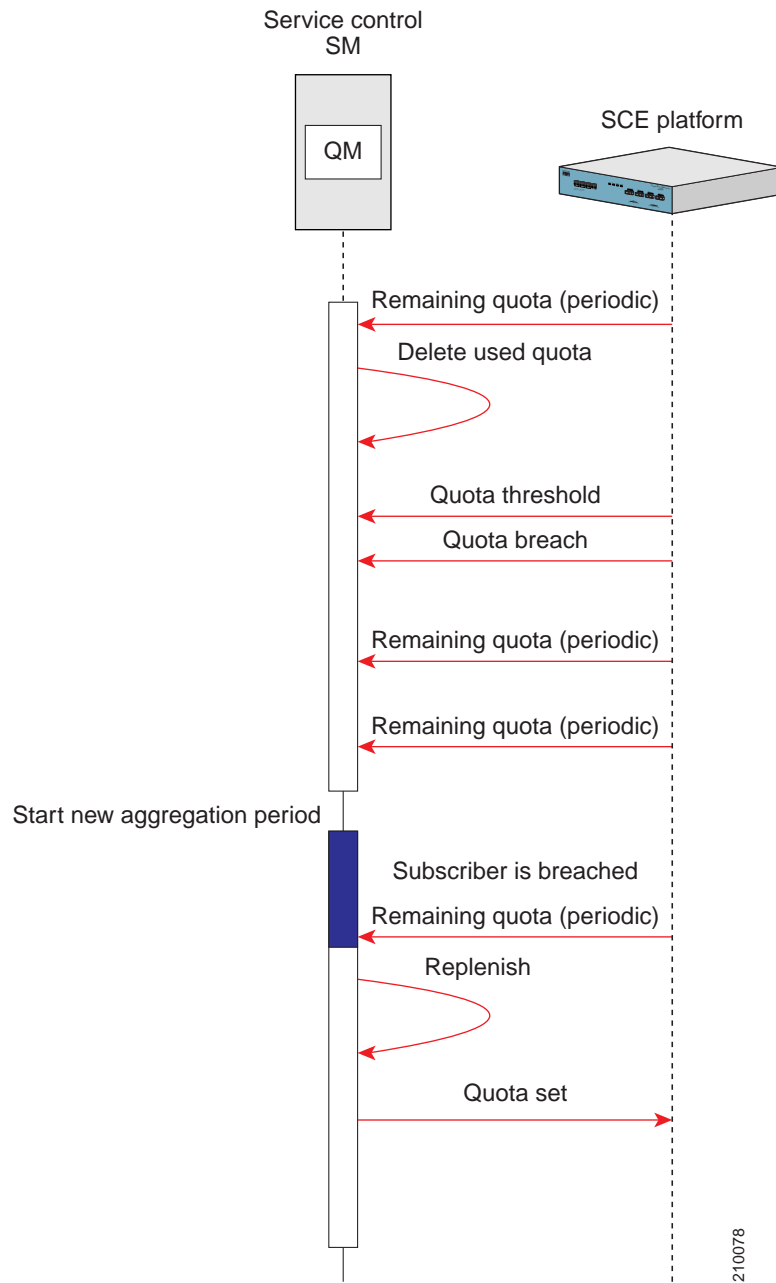
Quota Buckets

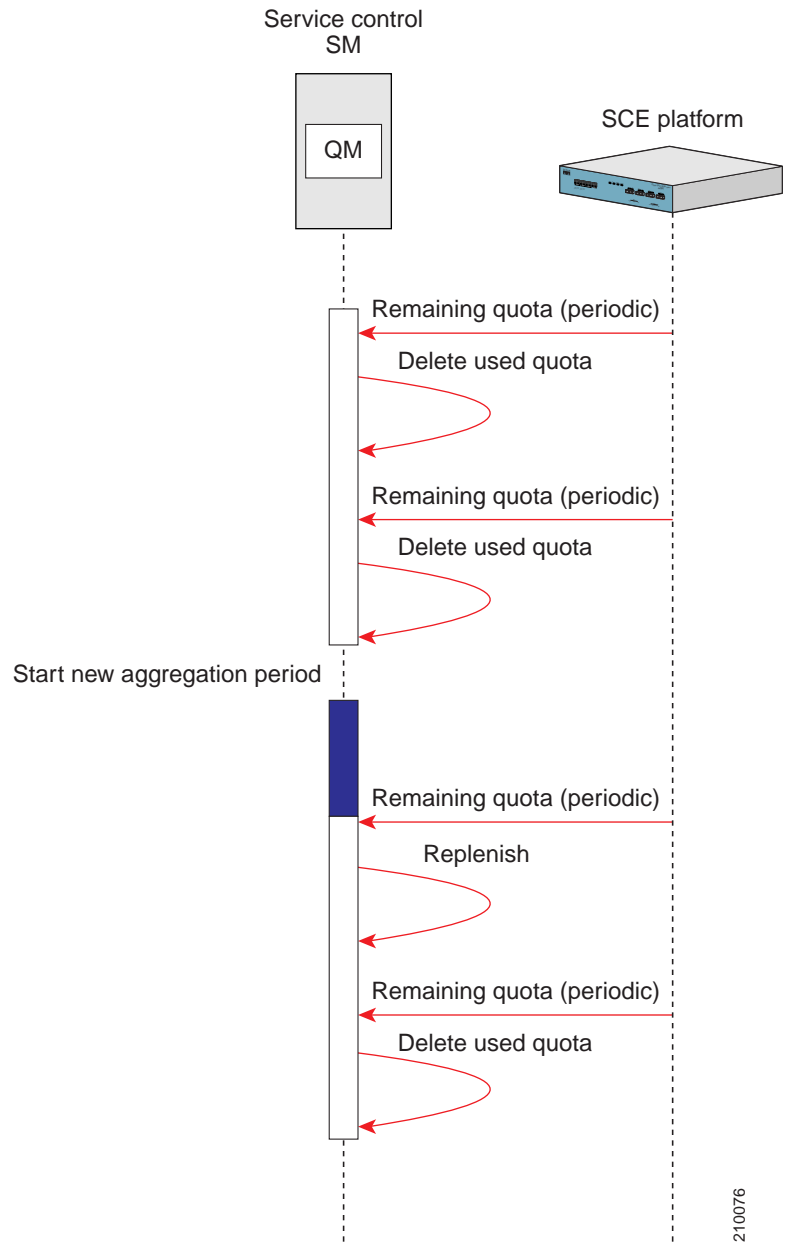
Buckets define limits on the volume and session consumption of a subscriber.

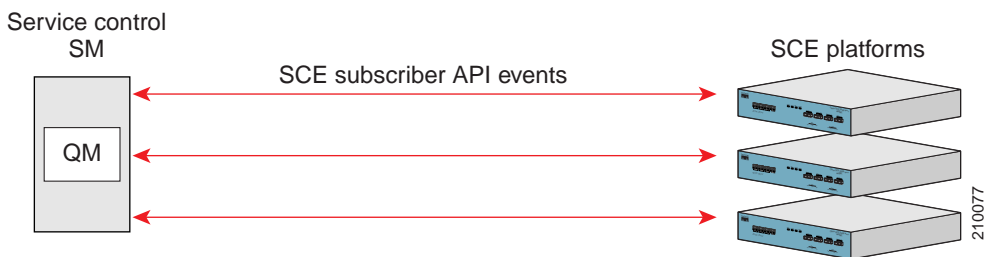
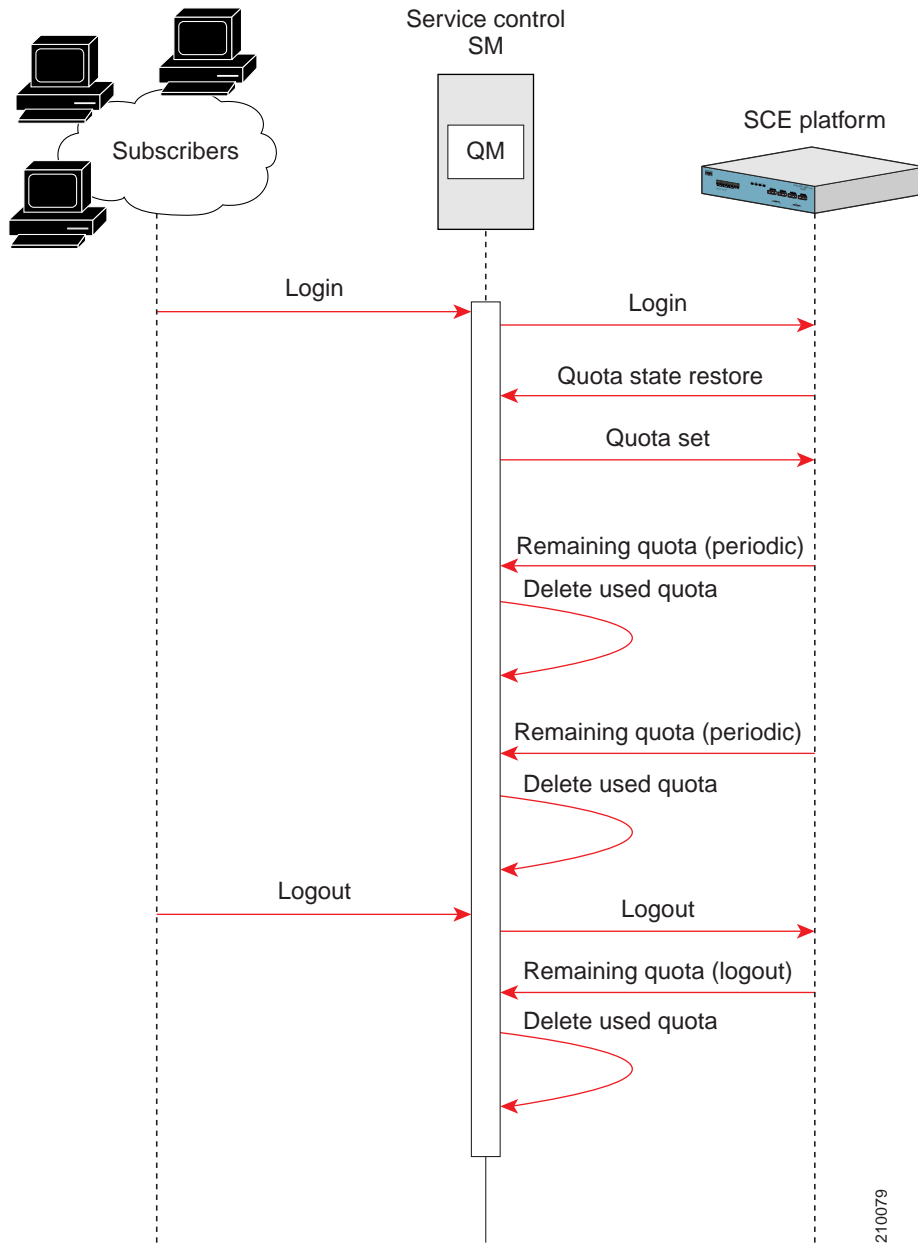
Bucket ID	Name	Type	Quota Limit
1	Bucket 1	Volume (L3 KBytes)	Set Externally
2	Bucket 2	Volume (L3 KBytes)	Set Externally
3	Bucket 3	Volume (L3 KBytes)	Set Externally
4	Bucket 4	Volume (L3 KBytes)	Set Externally
5	Bucket 5	Volume (L3 KBytes)	Set Externally

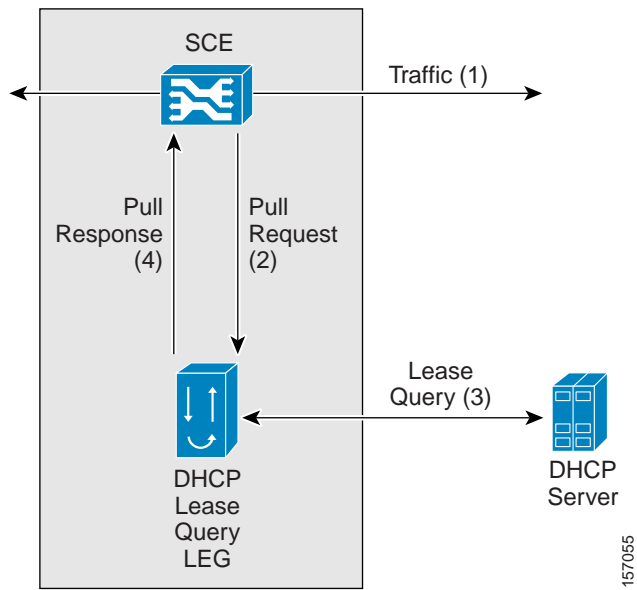
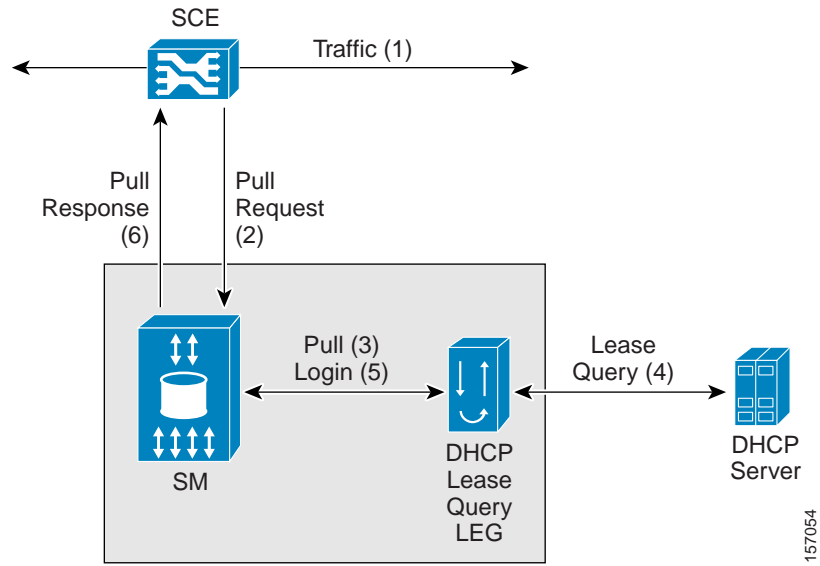
OK Cancel

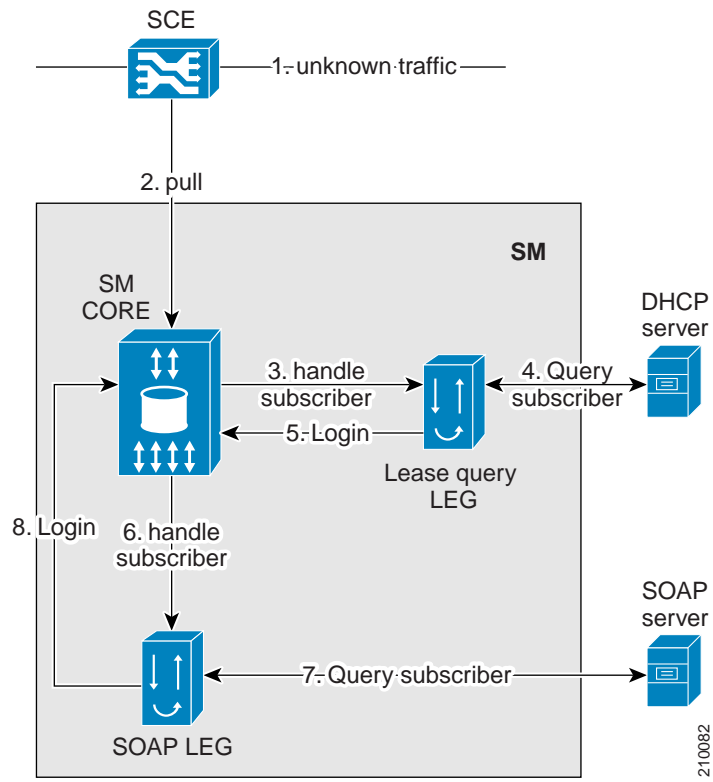
210271

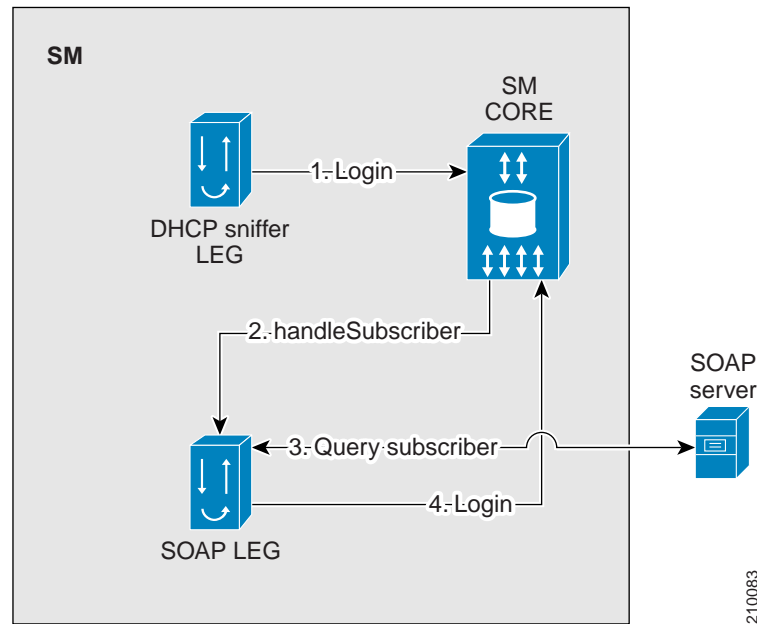
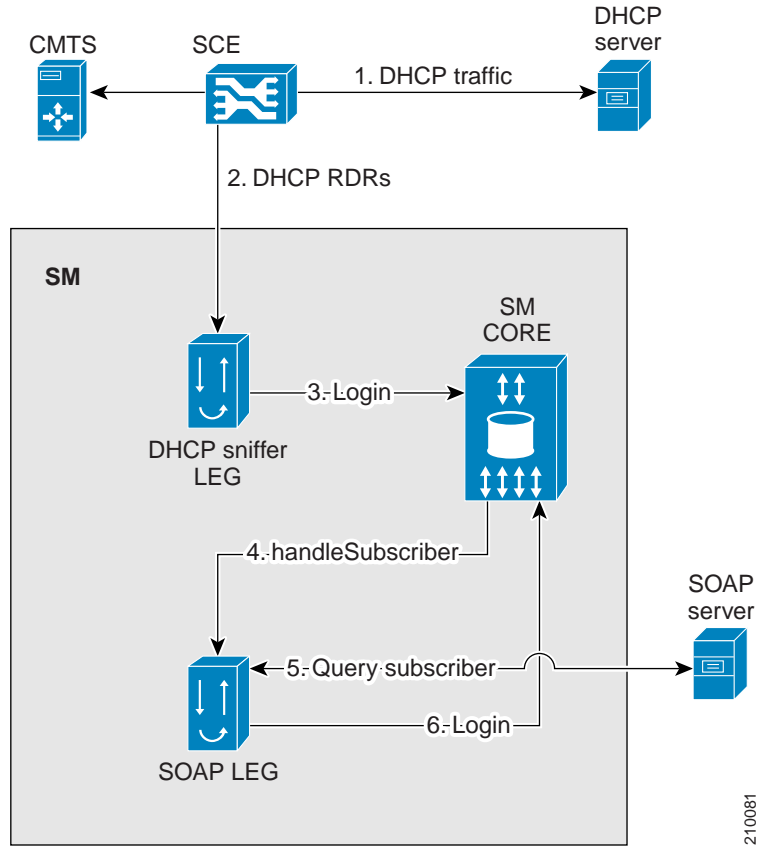


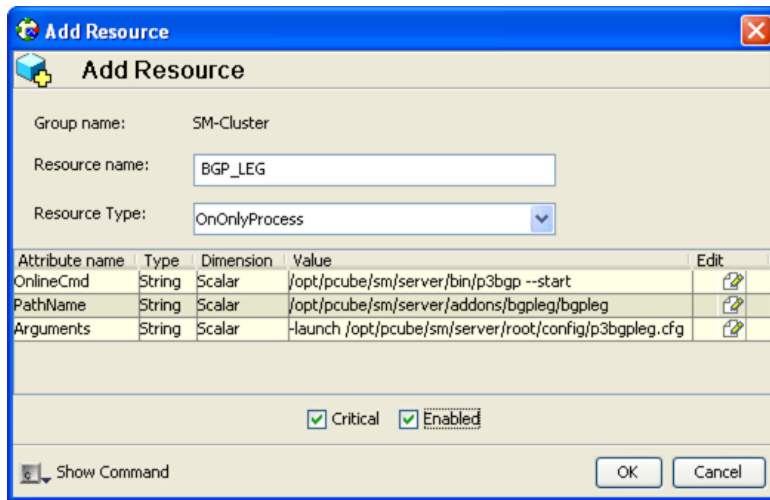








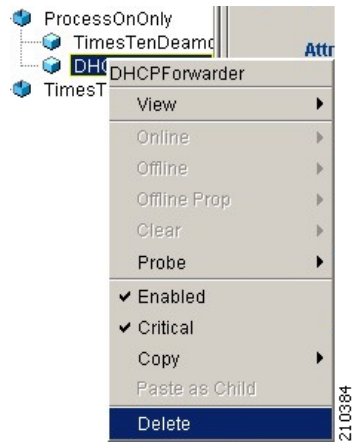
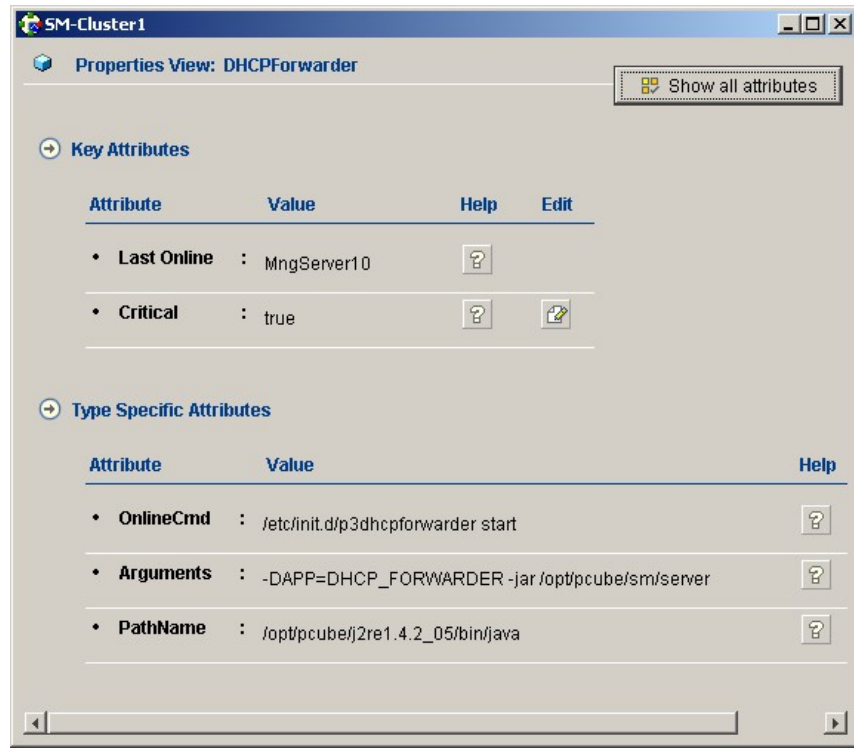


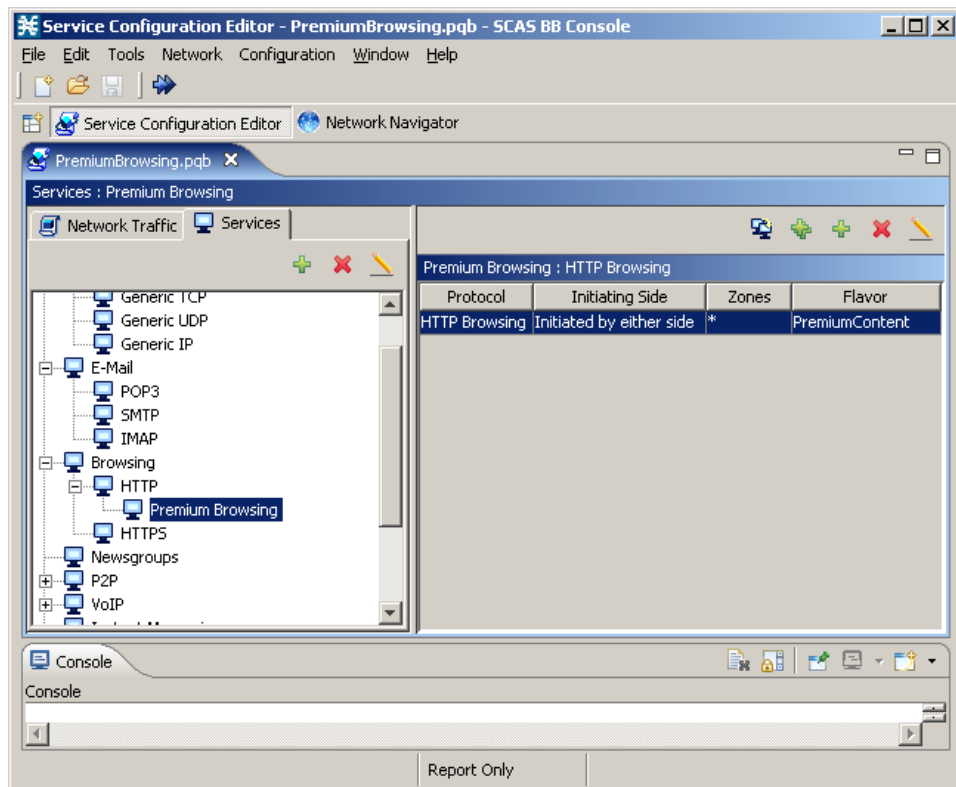
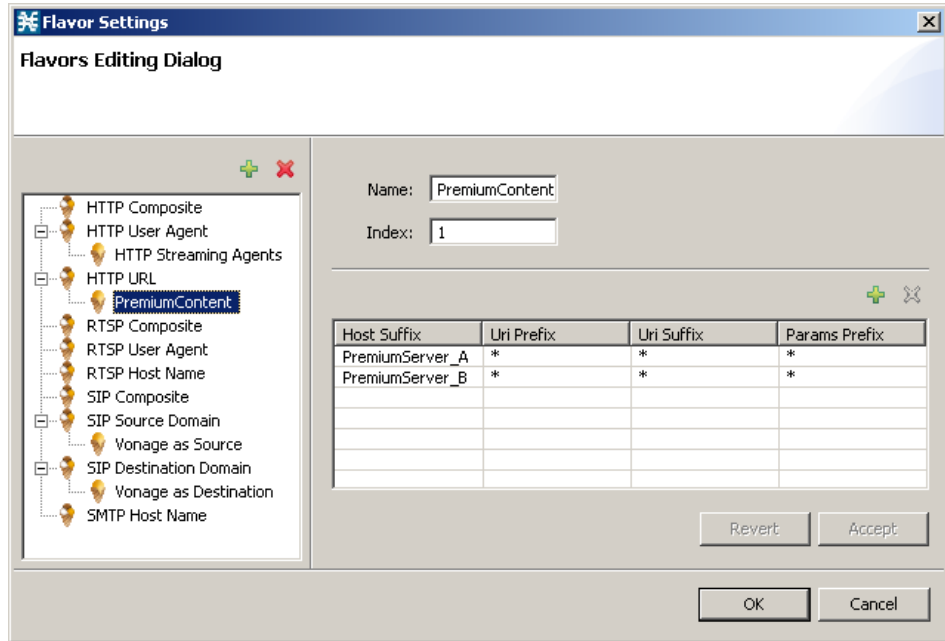


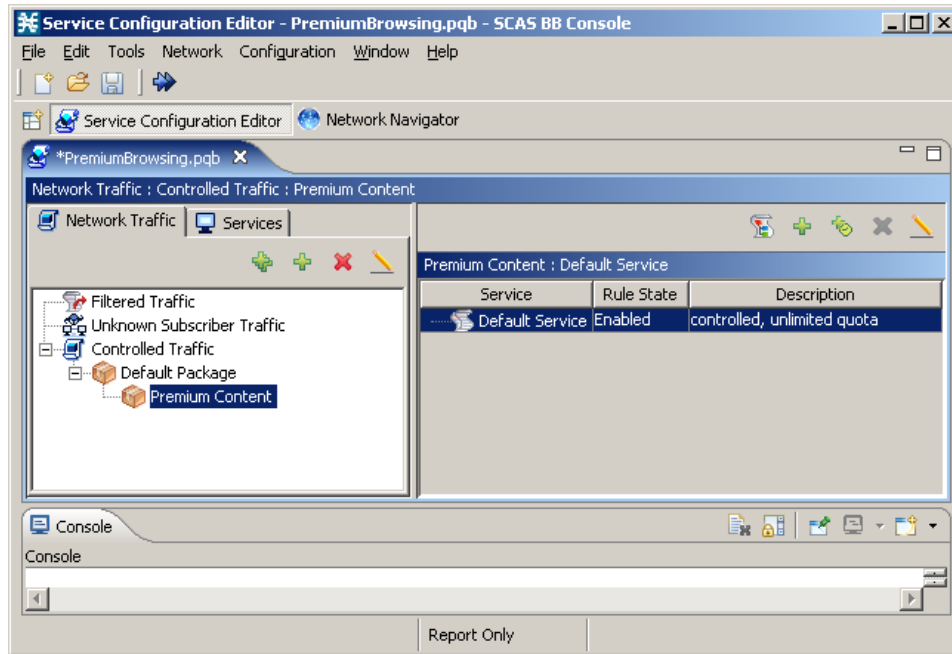
210386



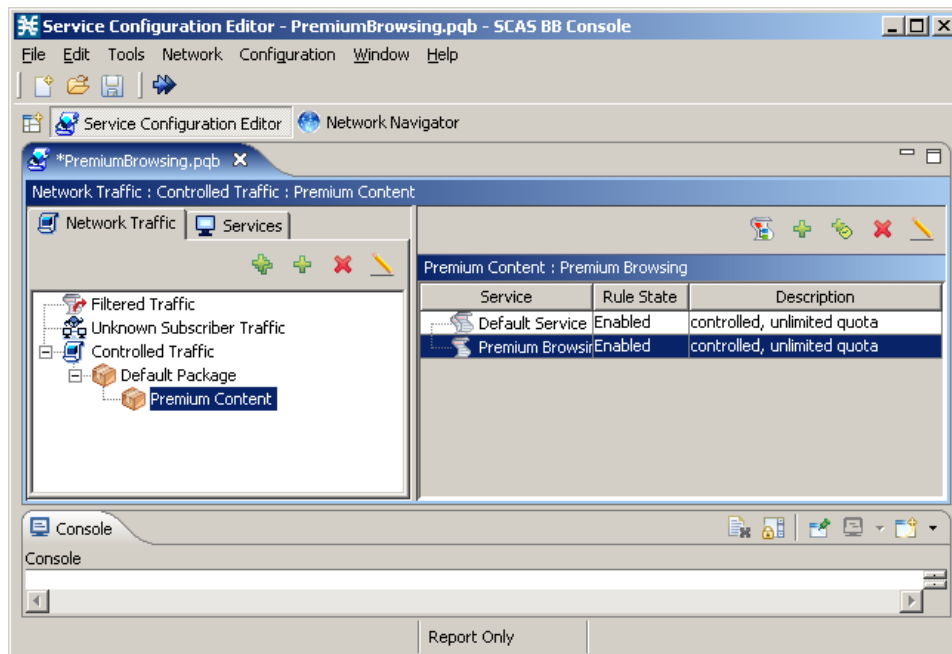
210386



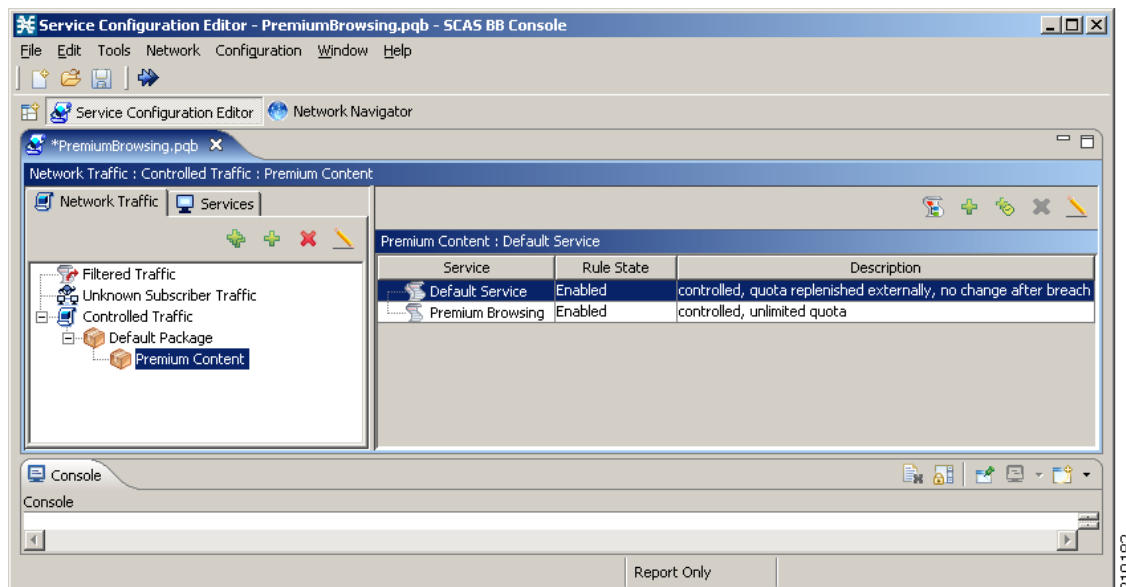
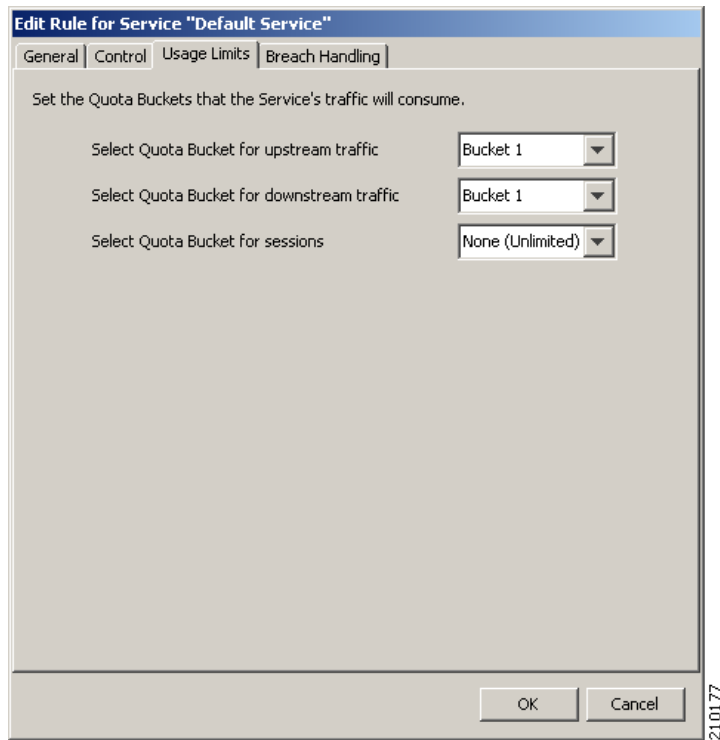


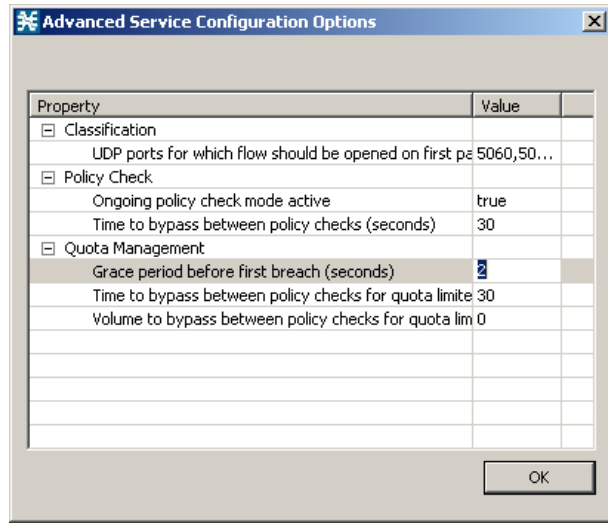


210179

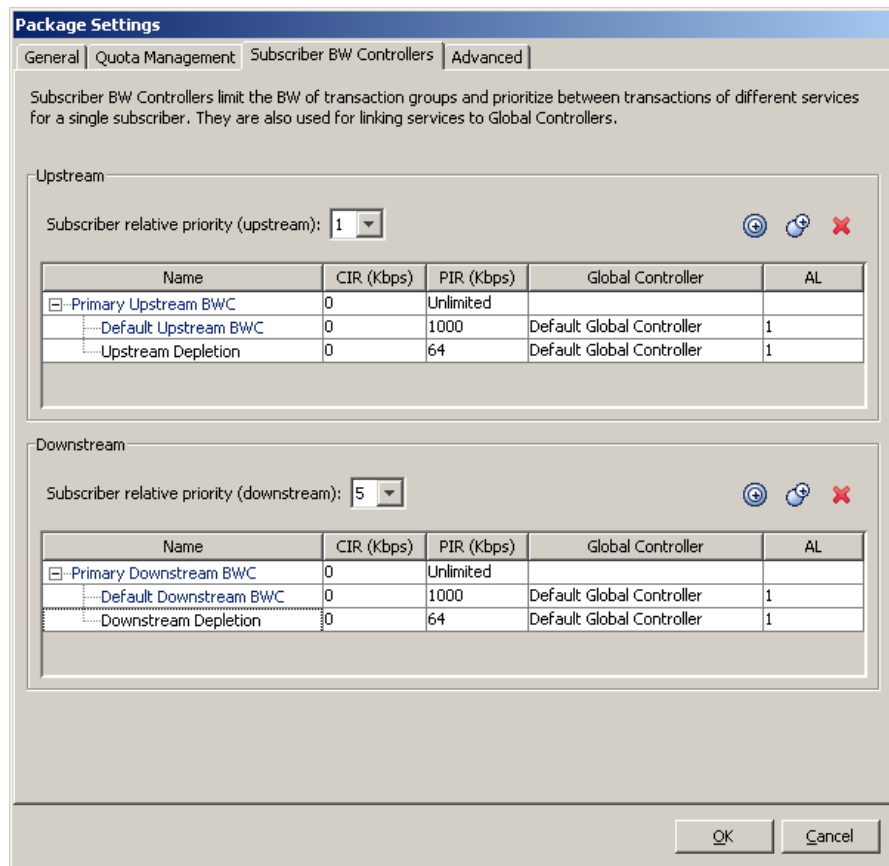


210180

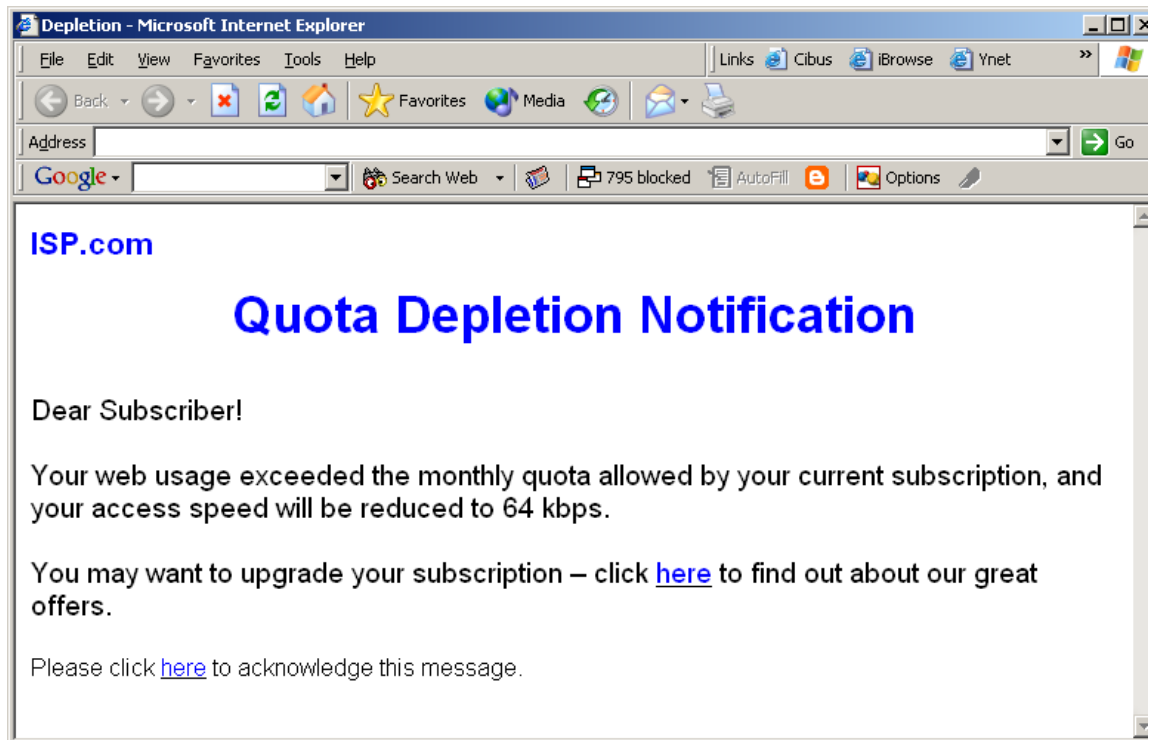




210175



210176



Subscriber Notification Settings

Notifications + ×

- Depletion Notification

Notification Parameters

Name:

Destination

Destination URL:

Append notification parameters to URL

Dismissal Method

Notification is dismissed when:

- Subscriber browses to the destination URL
- The condition that activated the notification no longer holds
- Subscriber browses to the dismissal URL

The dismissal URL should be in the format *host-suffix:path-prefix* (for example *.my-host.com:/redir/*)

:

Allowed URLs

List of allowed URLs:

The dismissal URLs should be in the format *host-suffix:path-prefix* (for example *.my-host.com:/redir/*), Type one URL per line .

210186

Edit Rule for Service "Default Service"

General | Control | Usage Limits | Breach Handling

In case a subscriber's usage exceeded the volume or number of sessions limits:

No changes to active control

Block the flow Redirect to: Default set

Control the flow's characteristics:

Select an upstream Bandwidth Controller: Upstream Depletion

Select a downstream Bandwidth Controller: Downstream Depletion

Limit the flow's upstream bandwidth to: Kbps

Limit the flow's downstream bandwidth to: Kbps

Limit concurrent flows of this Service to:

Activate a Subscriber Notification: Depletion Notification

OK Cancel

210185

Package Settings

General | Quota Management | **Subscriber BW Controllers** | Advanced

Subscriber BW Controllers limit the BW of transaction groups and prioritize between transactions of different services for a single subscriber. They are also used for linking services to Global Controllers.

Upstream

Subscriber relative priority (upstream): 5

Name	CIR (Kbps)	PIR (Kbps)	Global Controller	AL
[-] Primary Upstream BWC	0	3000		
[-] Default Upstream BWC	0	3000	Default Global Controller	1

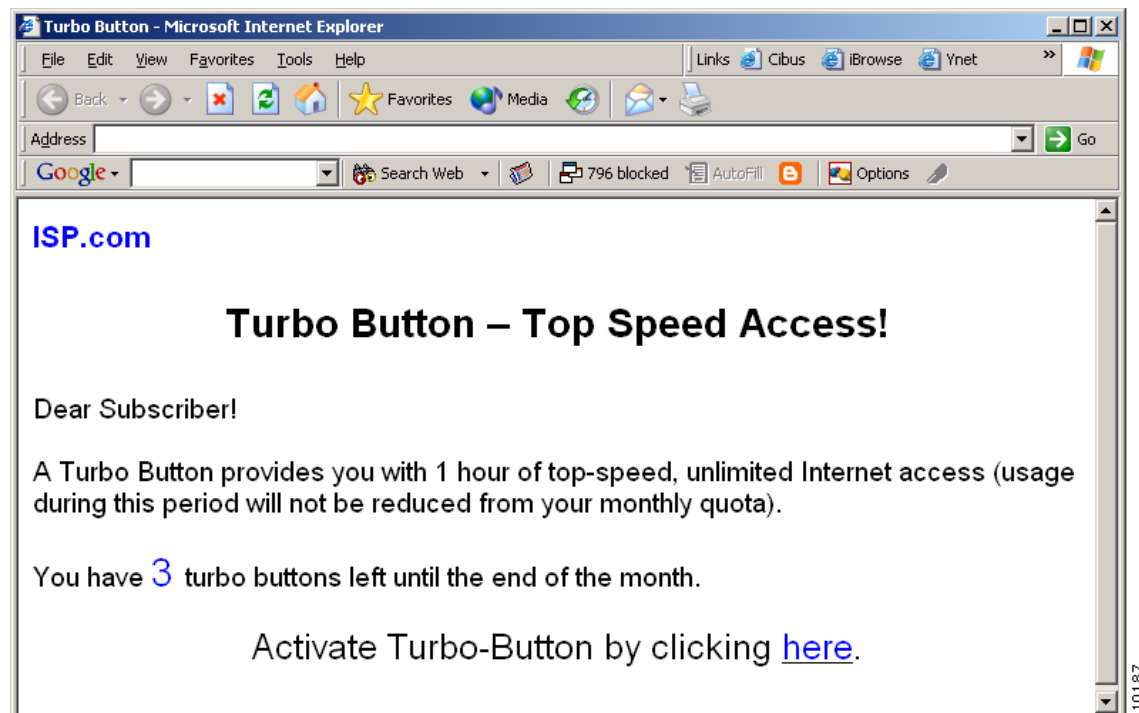
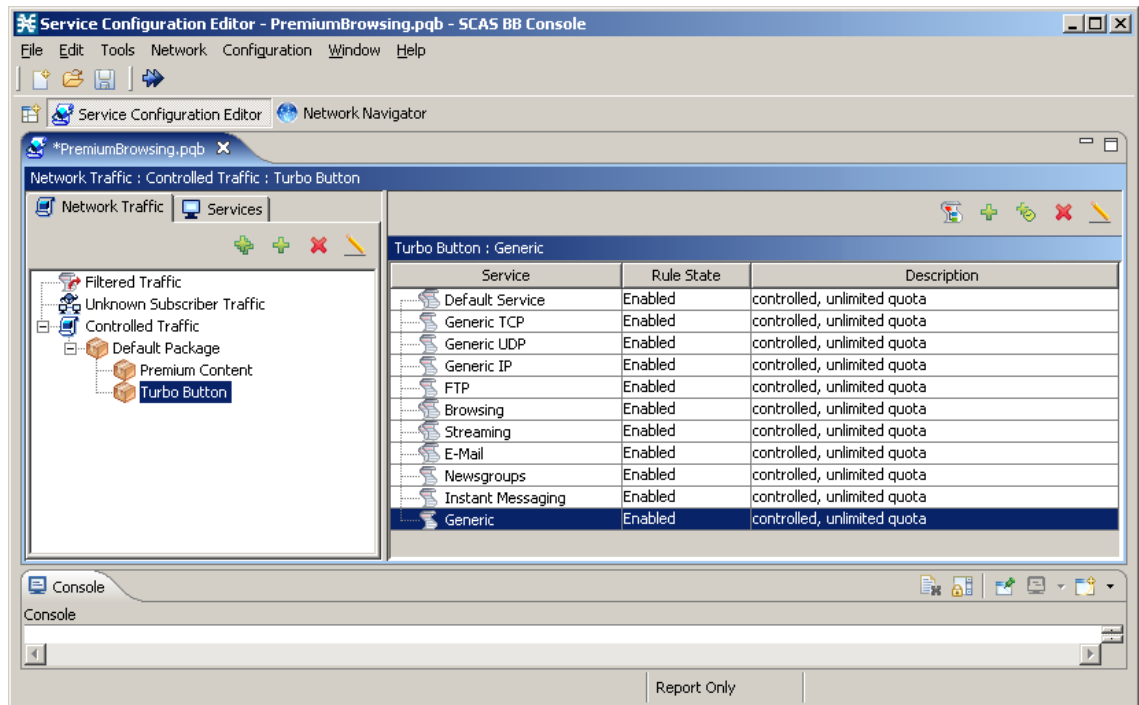
Downstream

Subscriber relative priority (downstream): 5

Name	CIR (Kbps)	PIR (Kbps)	Global Controller	AL
[-] Primary Downstream BWC	0	3000		
[-] Default Downstream BWC	0	3000	Default Global Controller	1

OK Cancel

210183



Anomaly Detector Wizard

Anomaly Detection Action Settings

Choose the actions to perform upon detecting malicious attack

Block
Block malicious traffic

Use the Default Detector's settings Enable Disable

Alert
Generate an SNMP trap

Use the Default Detector's settings Enable Disable

Notify Subscriber
Notify the subscriber through browser redirect

Use the Default Detector's settings Enable Disable

< Back Next > Finish Cancel

21.02.28

Anomaly Detector Wizard

Anomaly Detection Thresholds

Define attack detection thresholds, or use the Default Detector's values

Malicious Traffic Detection Thresholds

Use the Default Detector's settings

An anomaly will be detected once flow rate exceeds this threshold.

Flow Open Rate (flows/sec)

An anomaly will be detected once suspected flow rate exceeds threshold AND suspected flows ratio exceeds threshold.

Suspected Flows Rate (flows/sec)

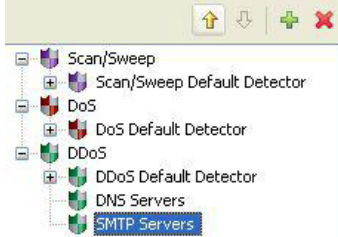
Ratio of Suspected Flow Rate (%)

< Back Next > Finish Cancel

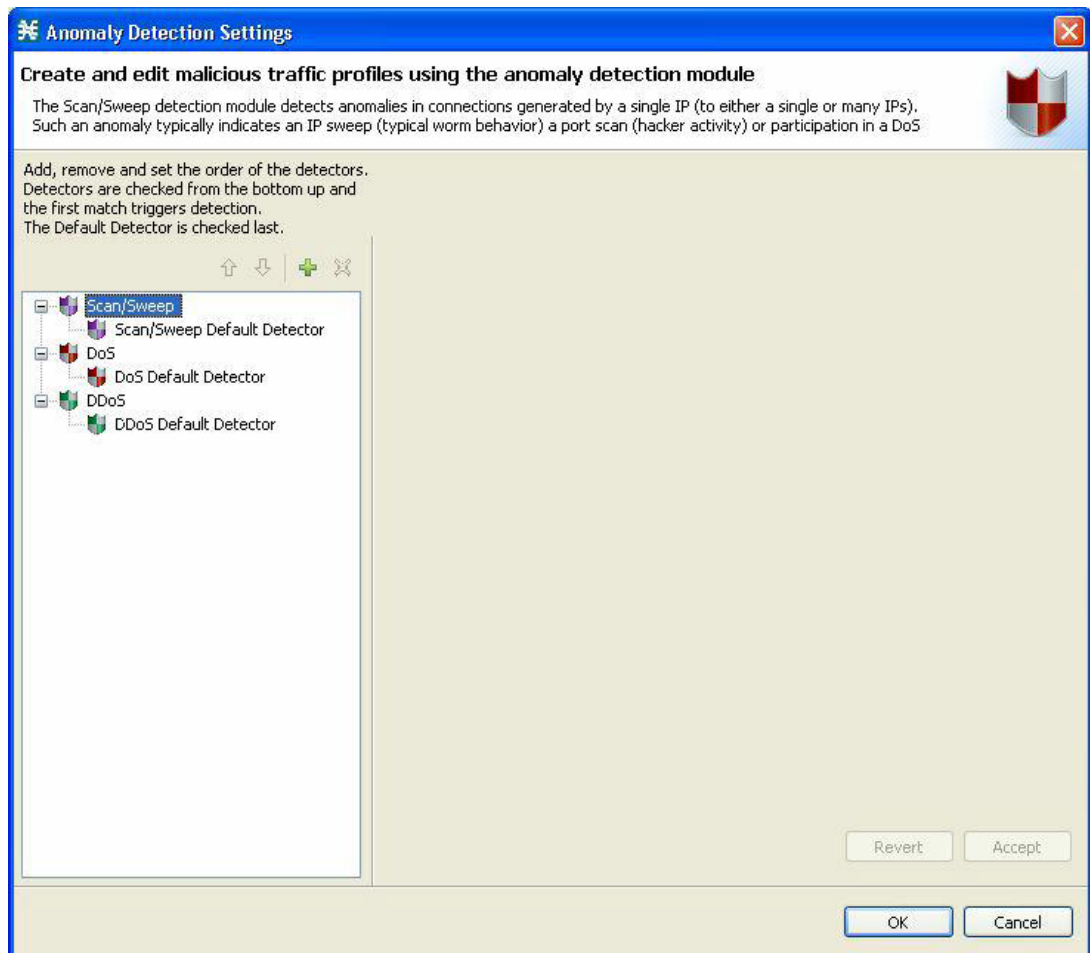
21.02.29

Such an anomaly indicates that an IP is under an at

Add, remove and set the order of the detectors.
Detectors are checked from the bottom up and
the first match triggers detection.
The Default Detector is checked last.



210230



210231

Anomaly Detector Wizard

Anomaly Detection Thresholds
Define attack detection thresholds, or use the Default Detector's values

Malicious Traffic Detection Thresholds

Use the Default Detector's settings

An anomaly will be detected once flow rate exceeds this threshold.

Flow Open Rate (flows/sec)

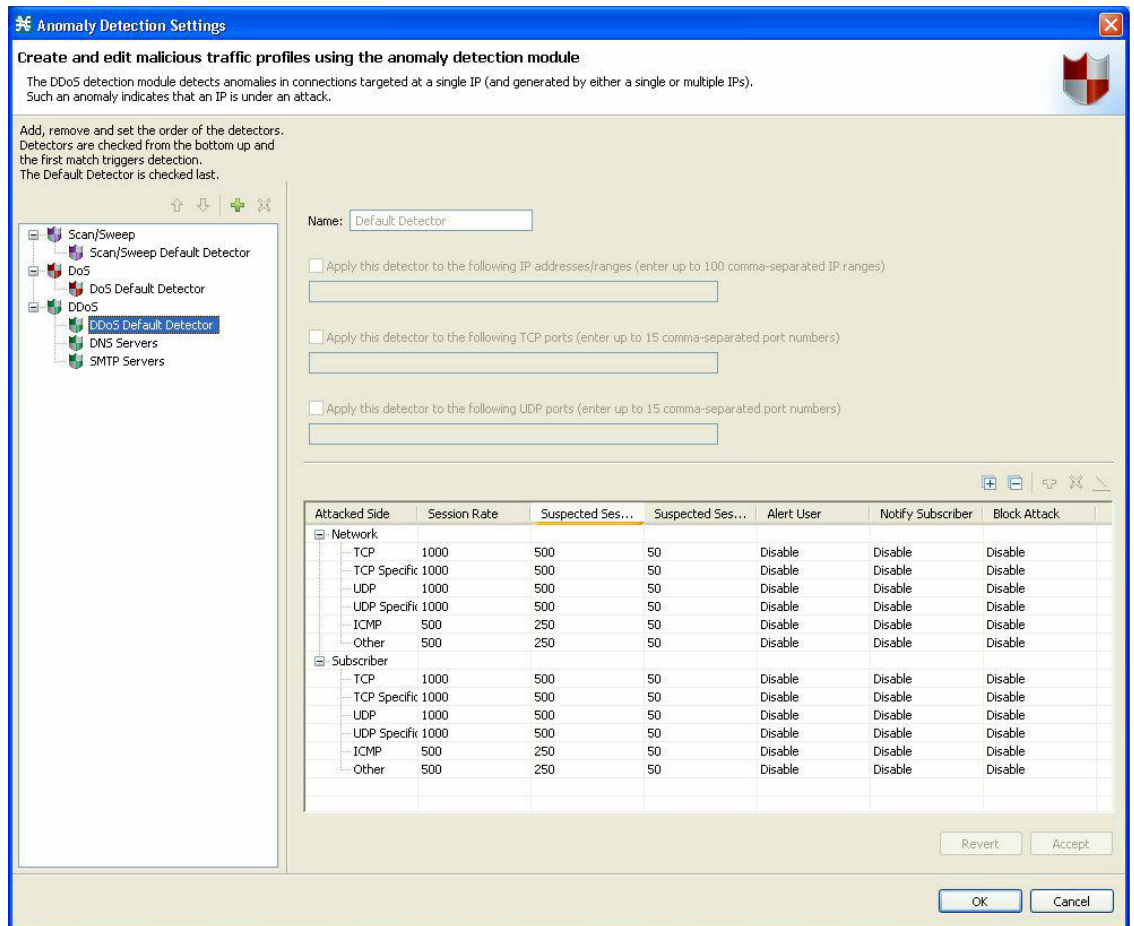
An anomaly will be detected once suspected flow rate exceeds threshold AND suspected flows ratio exceeds threshold.

Suspected Flows Rate (flows/sec)

Ratio of Suspected Flow Rate (%)

< Back Next > Finish Cancel

210232



Anomaly Detection Settings

Create and edit malicious traffic profiles using the anomaly detection module

The Scan/Sweep detection module detects anomalies in connections generated by a single IP (to either a single or many IPs). Such an anomaly typically indicates an IP sweep (typical worm behavior) a port scan (hacker activity) or participation in a DoS attack.

Add, remove and set the order of the detectors. Detectors are checked from the bottom up and the first match triggers detection. The Default Detector is checked last.

Scan/Sweep
 Scan/Sweep Default Detector
 DoS
 DoS Default Detector
 DDoS
 DDoS Default Detector

Name: Default Detector

Apply this detector to the following IP addresses/ranges (enter up to 100 comma-separated IP ranges)

Apply this detector to the following TCP ports (enter up to 15 comma-separated port numbers)

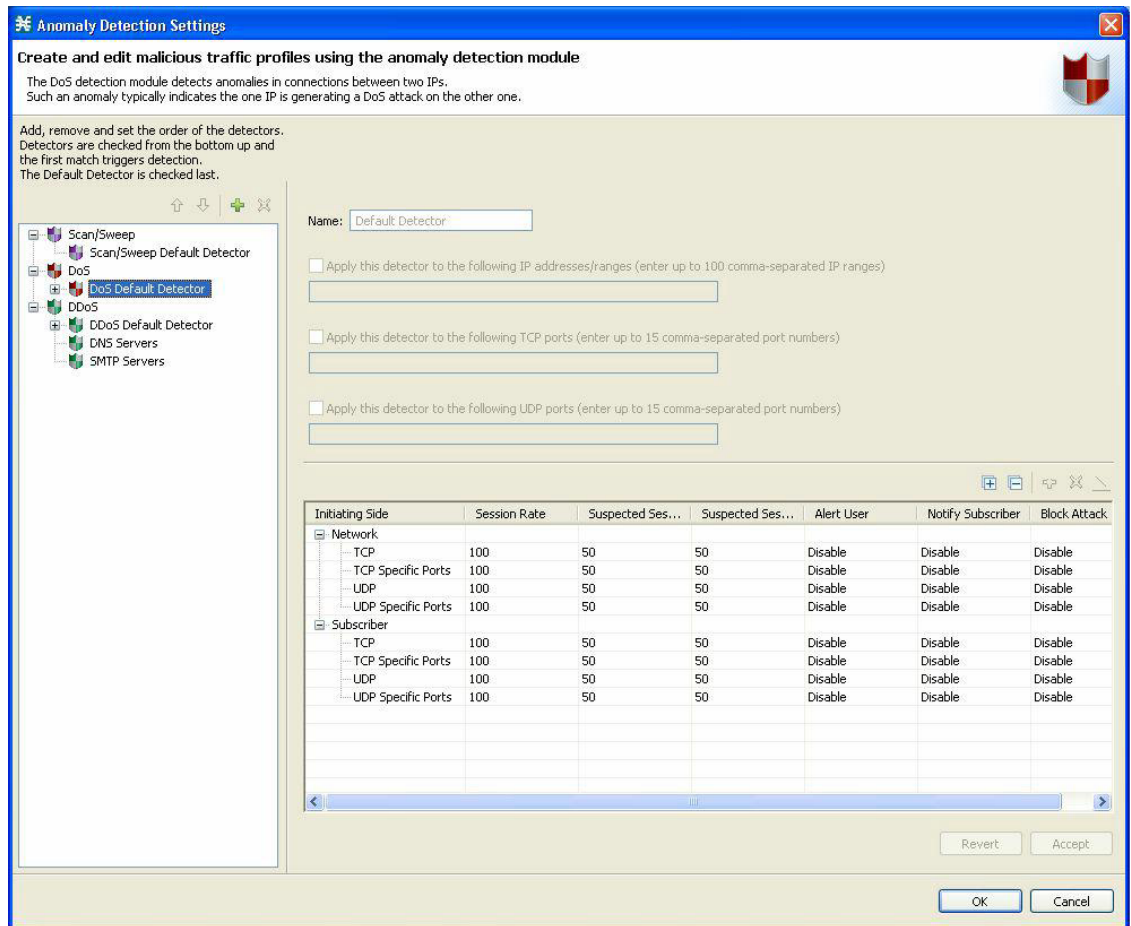
Apply this detector to the following UDP ports (enter up to 15 comma-separated port numbers)

Initiating Side	Session Rate	Suspected Ses...	Suspected Ses...	Alert User	Notify Subscriber	Block Attack
Network						
TCP	1000	500	50	Disable	Disable	Disable
TCP Specific Ports	1000	500	50	Disable	Disable	Disable
UDP	1000	500	50	Disable	Disable	Disable
UDP Specific Ports	1000	500	50	Disable	Disable	Disable
ICMP	500	250	50	Disable	Disable	Disable
Other	500	250	50	Disable	Disable	Disable
Subscriber						
TCP	1000	500	50	Disable	Disable	Disable
TCP Specific Ports	1000	500	50	Disable	Disable	Disable
UDP	1000	500	50	Disable	Disable	Disable
UDP Specific Ports	1000	500	50	Disable	Disable	Disable
ICMP	500	250	50	Disable	Disable	Disable
Other	500	250	50	Disable	Disable	Disable

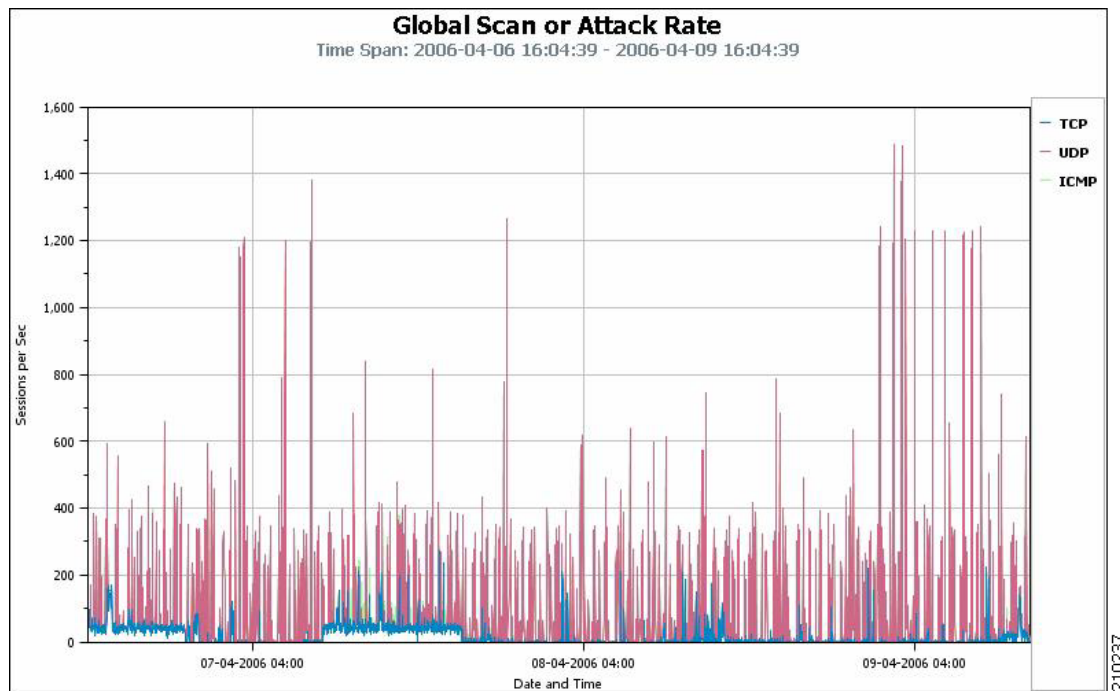
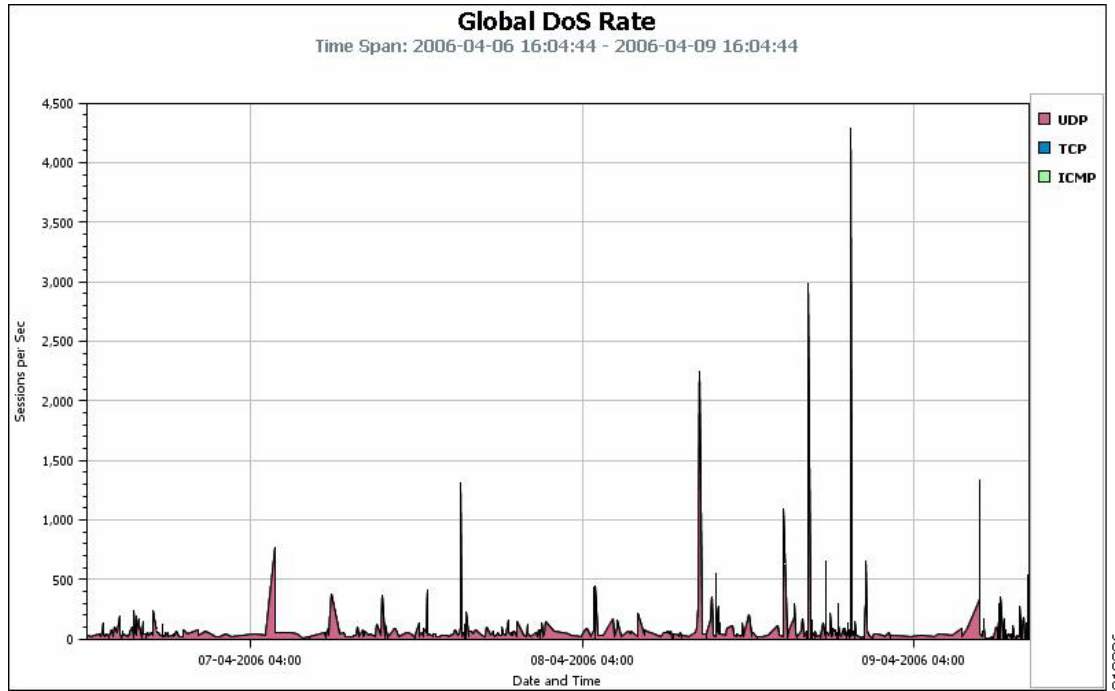
Revert Accept

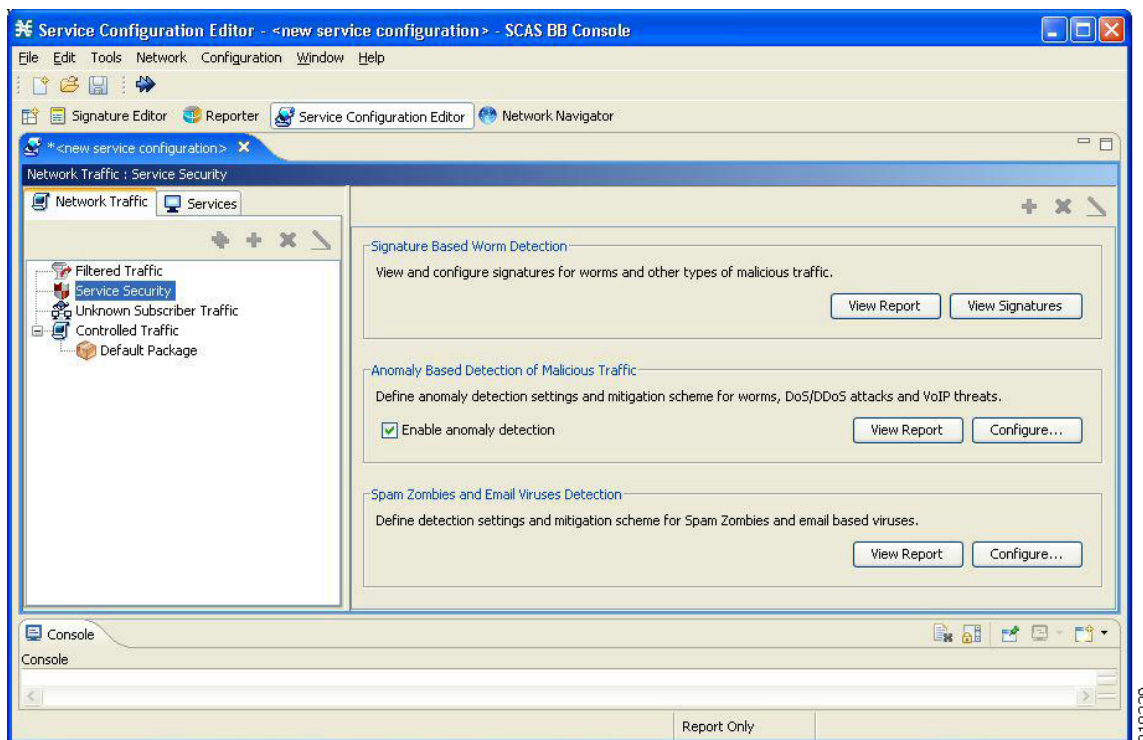
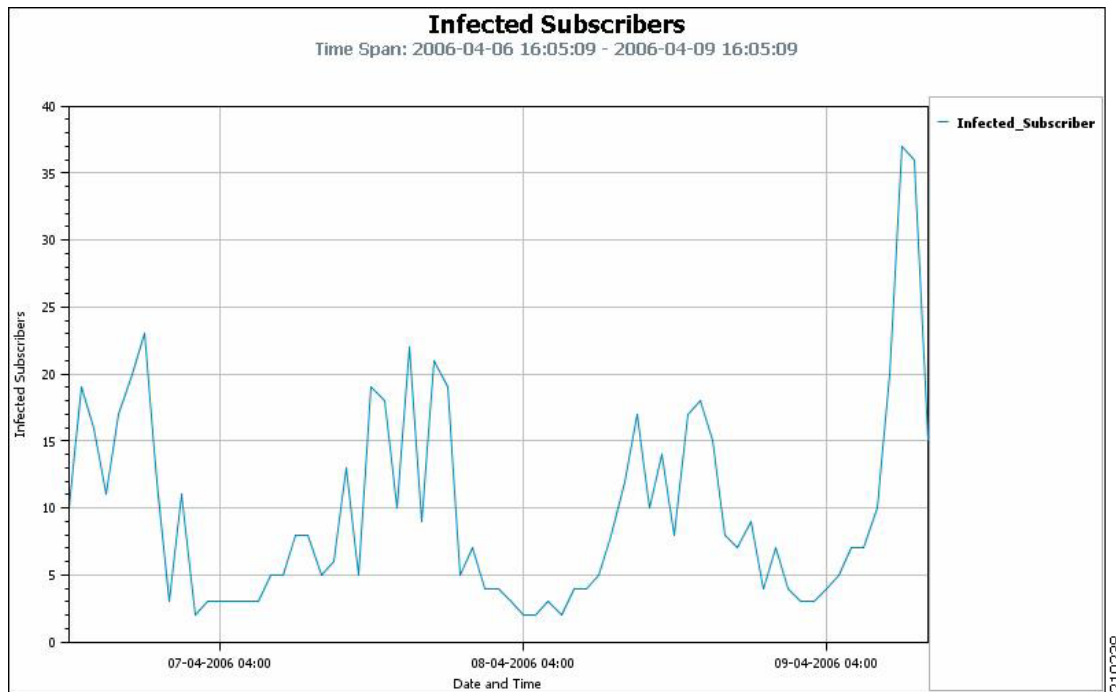
OK Cancel

210234



210235





Anomaly Detection Settings

Create and edit malicious traffic profiles using the anomaly detection module

The Scan/Sweep detection module detects anomalies in connections generated by a single IP (to either a single or many IPs). Such an anomaly typically indicates an IP sweep (typical worm behavior) a port scan (hacker activity) or participation in a DoS attack.

Add, remove and set the order of the detectors. Detectors are checked from the bottom up and the first match triggers detection. The Default Detector is checked last.

Scan/Sweep
 Scan/Sweep Default Detector
 DoS
 DoS Default Detector
 DDoS
 DDoS Default Detector
 DNS Servers
 SMTP Servers

Name:

Apply this detector to the following IP addresses/ranges (enter up to 100 comma-separated IP ranges)

Apply this detector to the following TCP ports (enter up to 15 comma-separated port numbers)

Apply this detector to the following UDP ports (enter up to 15 comma-separated port numbers)

Initiating Side	Session Rate	Suspected Ses...	Suspected Ses...	Alert User	Notify Subscriber	Block Attack
Network						
TCP	1000	500	50	Disable	Disable	Disable
TCP Specific Ports	1000	500	50	Disable	Disable	Disable
UDP	1000	500	50	Disable	Disable	Disable
UDP Specific Ports	1000	500	50	Disable	Disable	Disable
ICMP	500	250	50	Disable	Disable	Disable
Other	500	250	50	Disable	Disable	Disable
Subscriber						
TCP	1000	500	50	Disable	Disable	Disable
TCP Specific Ports	1000	500	50	Disable	Disable	Disable
UDP	1000	500	50	Disable	Disable	Disable
UDP Specific Ports	1000	500	50	Disable	Disable	Disable
ICMP	500	250	50	Disable	Disable	Disable
Other	500	250	50	Disable	Disable	Disable

Revert Accept

OK Cancel

210240

Spam Setting

Spam Detection

This Wizard helps you configure detection and mitigation settings for Spam zombies and email based viruses activity.

Enable Spam detection

Spam is detected based on exceeding a predefined quota of sessions for SMTP.

For best accuracy, detect Spam/email virus activity on a service that includes "outbound SMTP" or "outbound off-net SMTP".

Service to monitor for Spam:

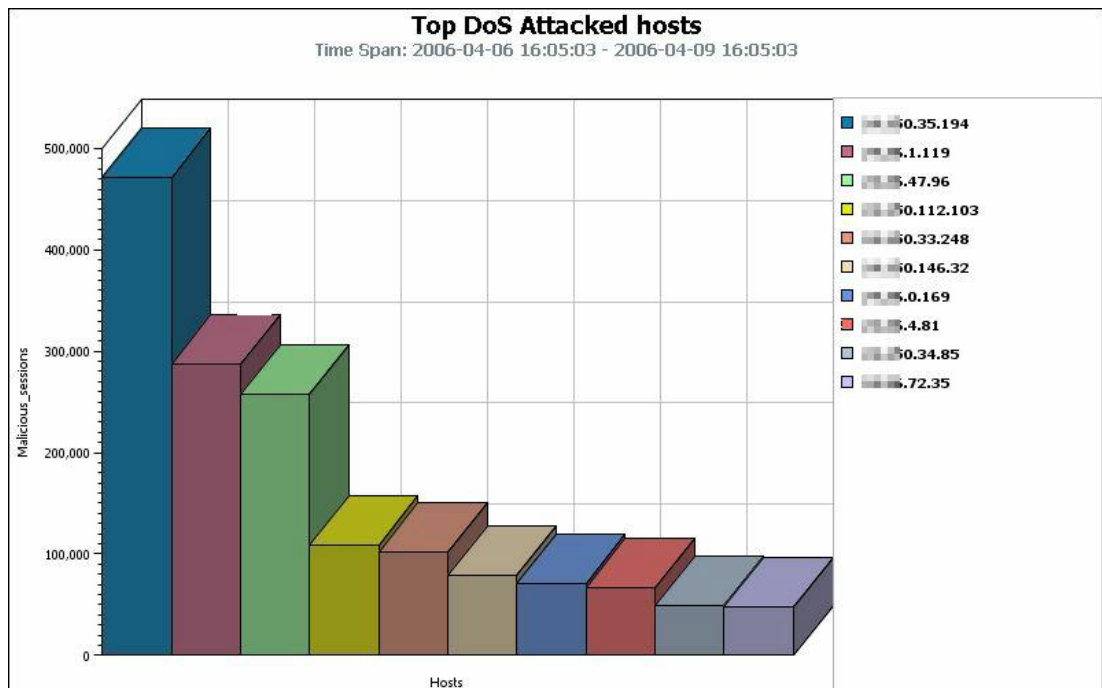
Define Spam as sessions over seconds.

Select the action to take upon detection of Spam Zombie / email virus activity.

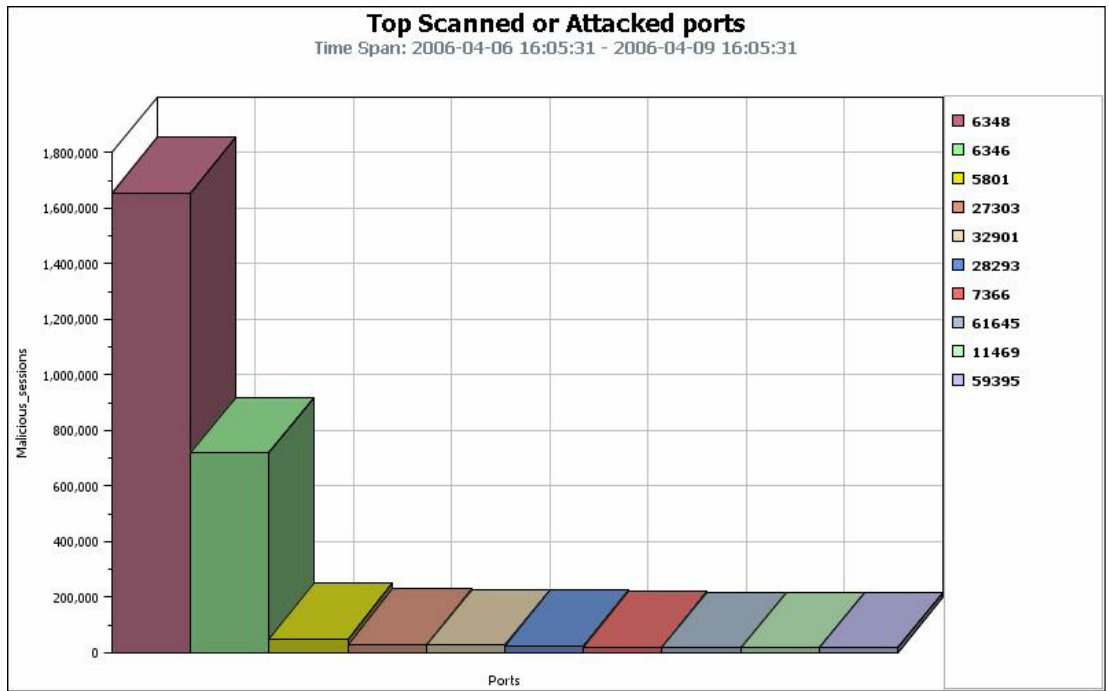
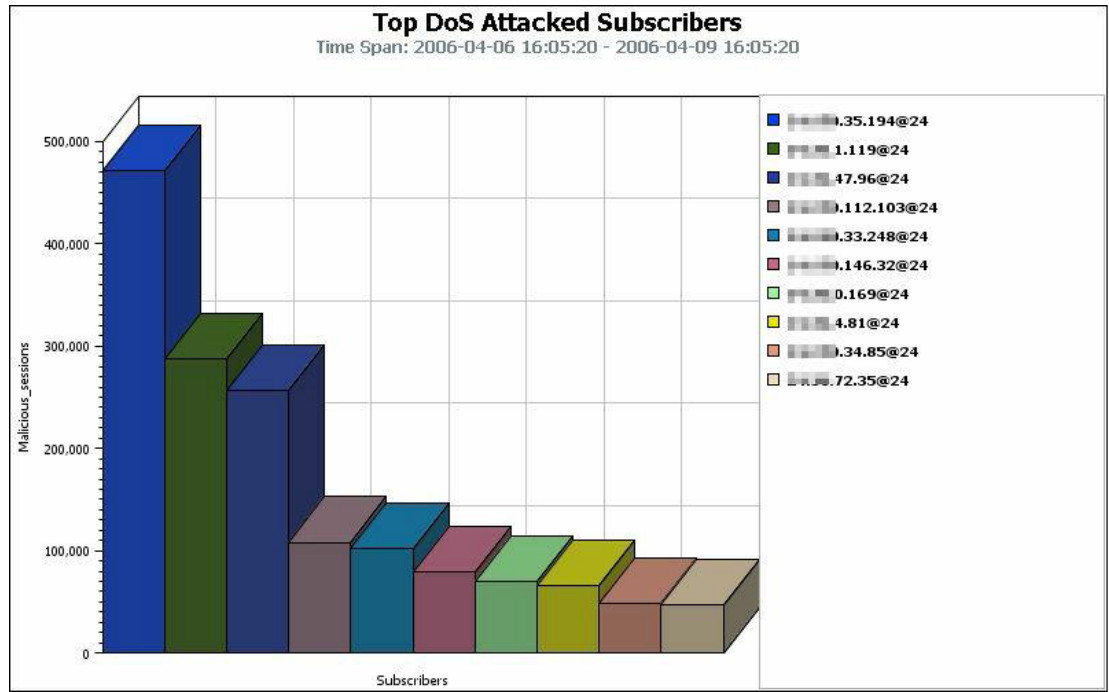
Action upon detection:

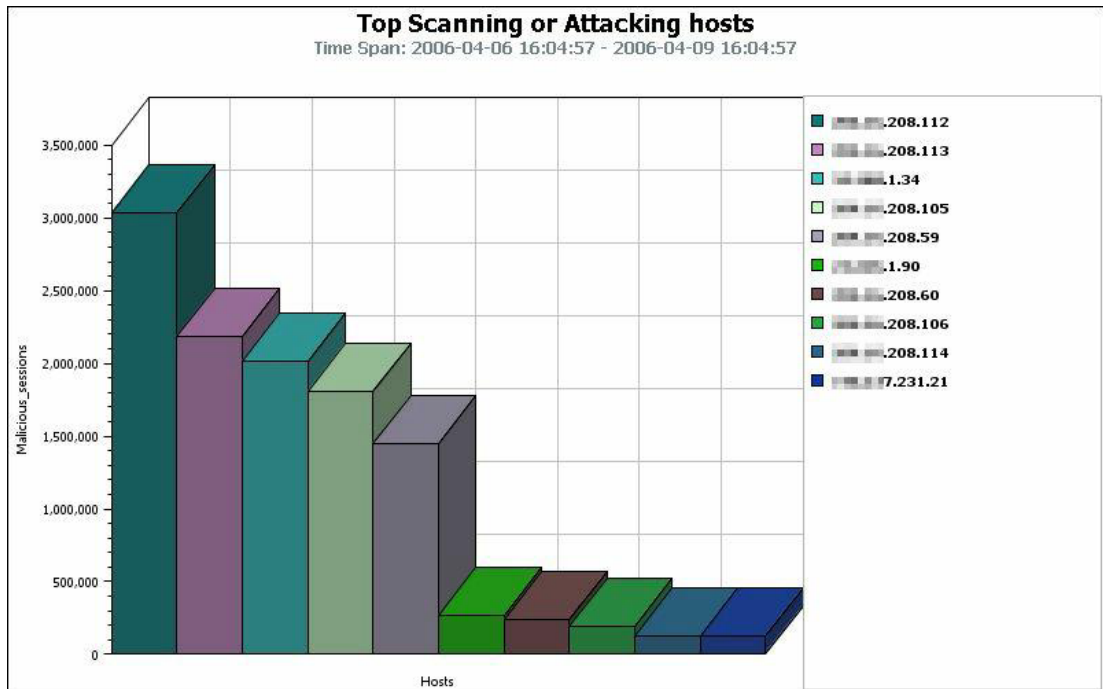
Subscriber Notification:

210241

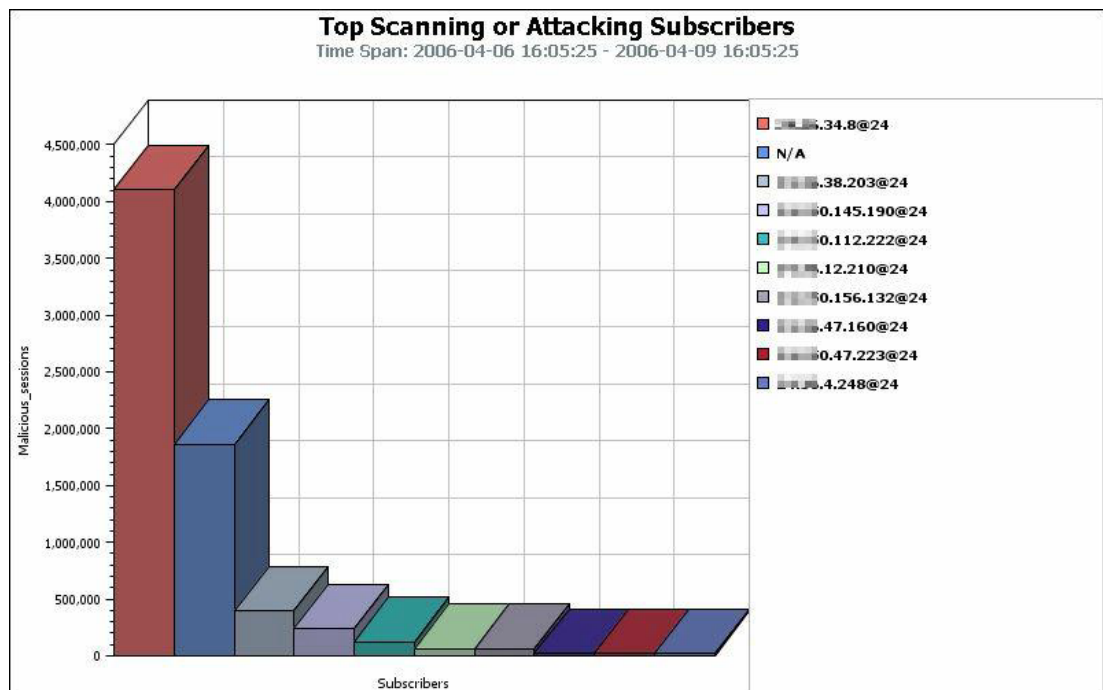


210242

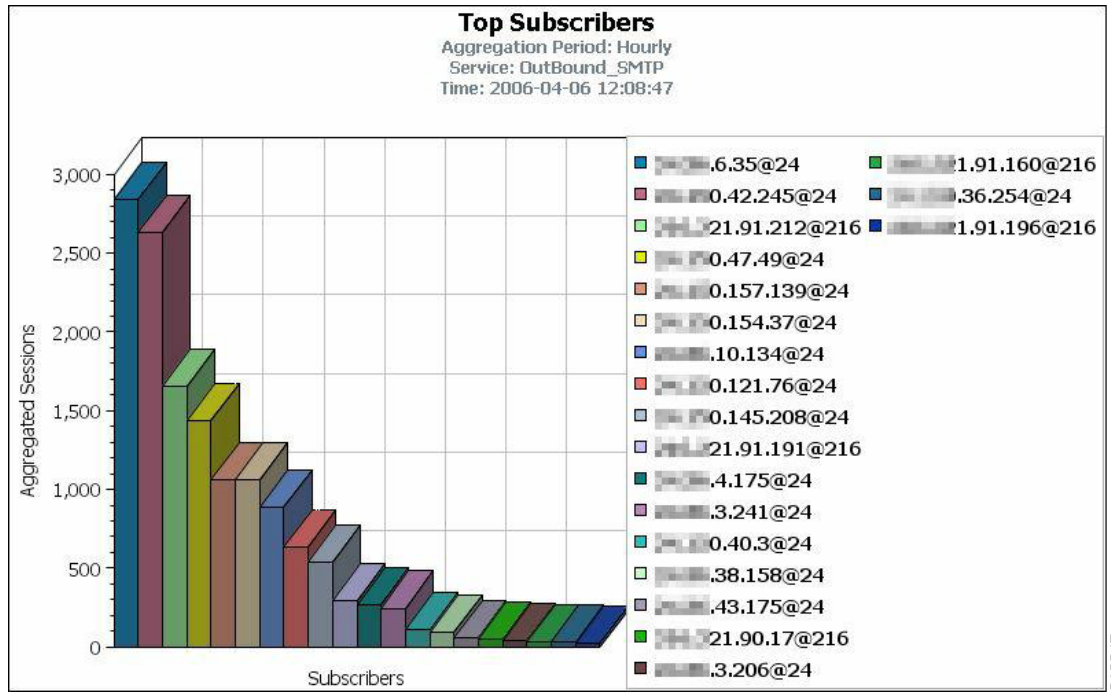




210245



210246



210247

210387.tif



210388.tif



210389.tif



210390.tif



210391.tif



210392.tif



210393.tif



210394.tif



210395.tif



210396.tif



210397.tif



210398.tif



210399.tif



210400.tif



210401.tif



210402.tif



210403.tif



210404.tif

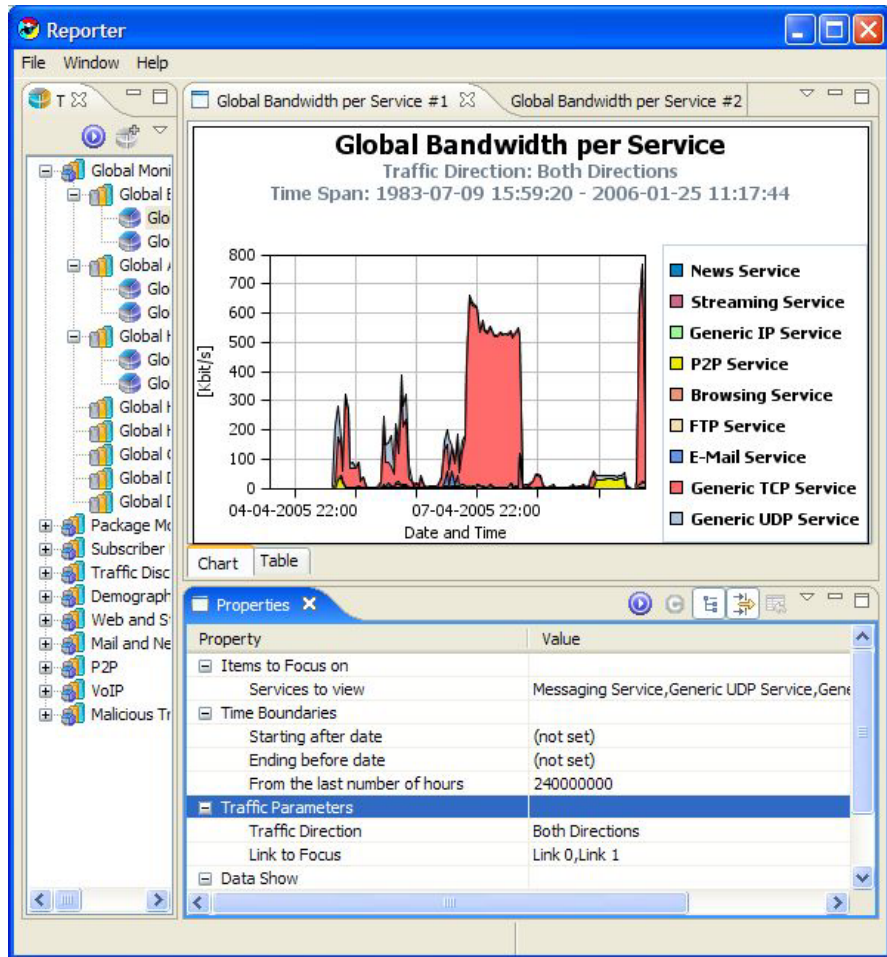


210405.tif



210406.tif

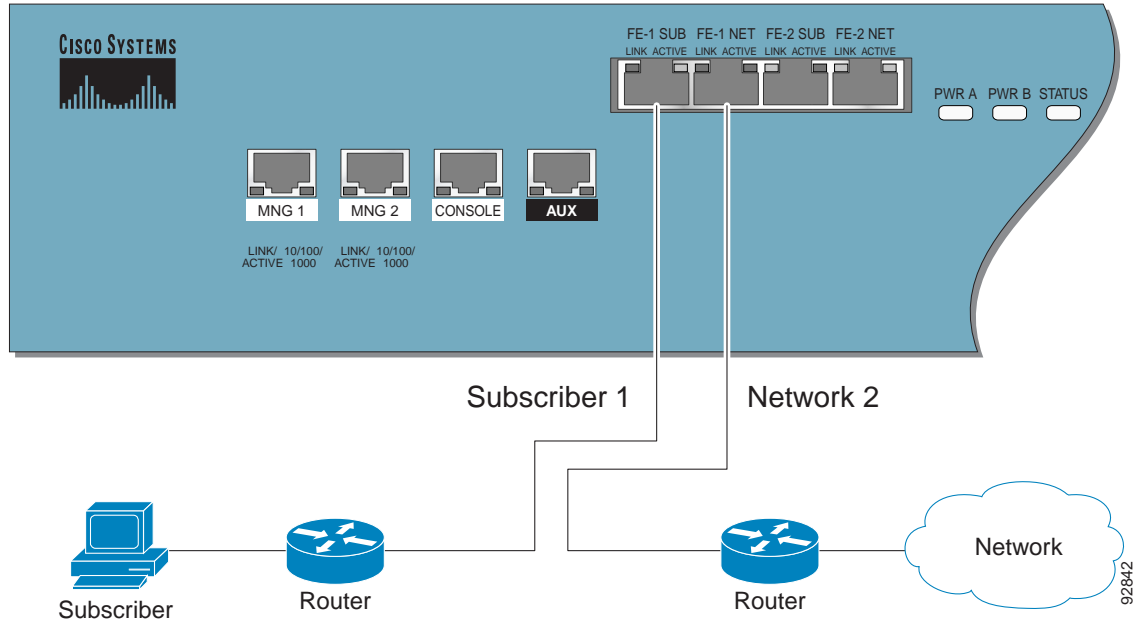


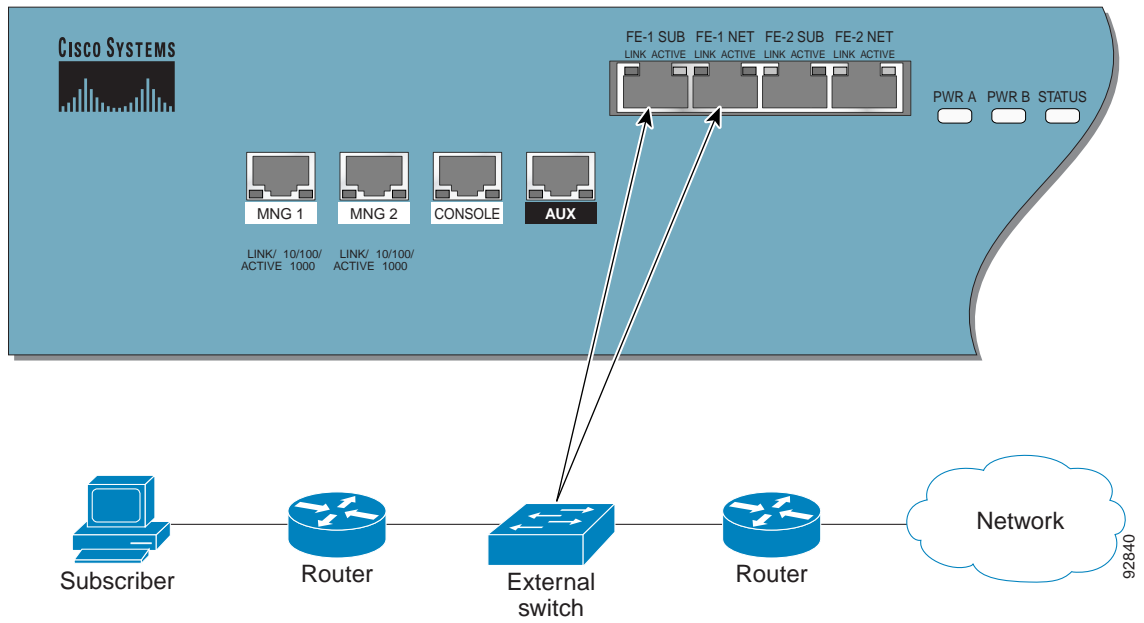
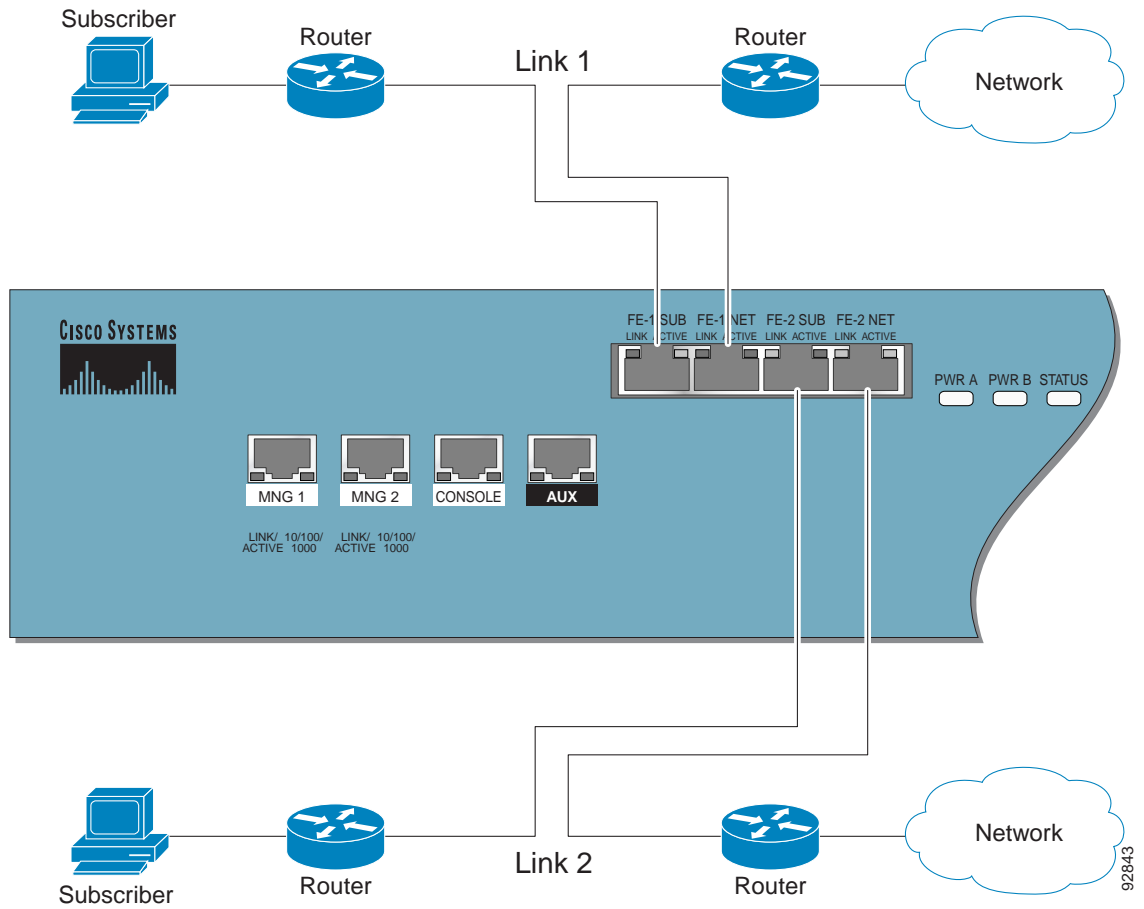


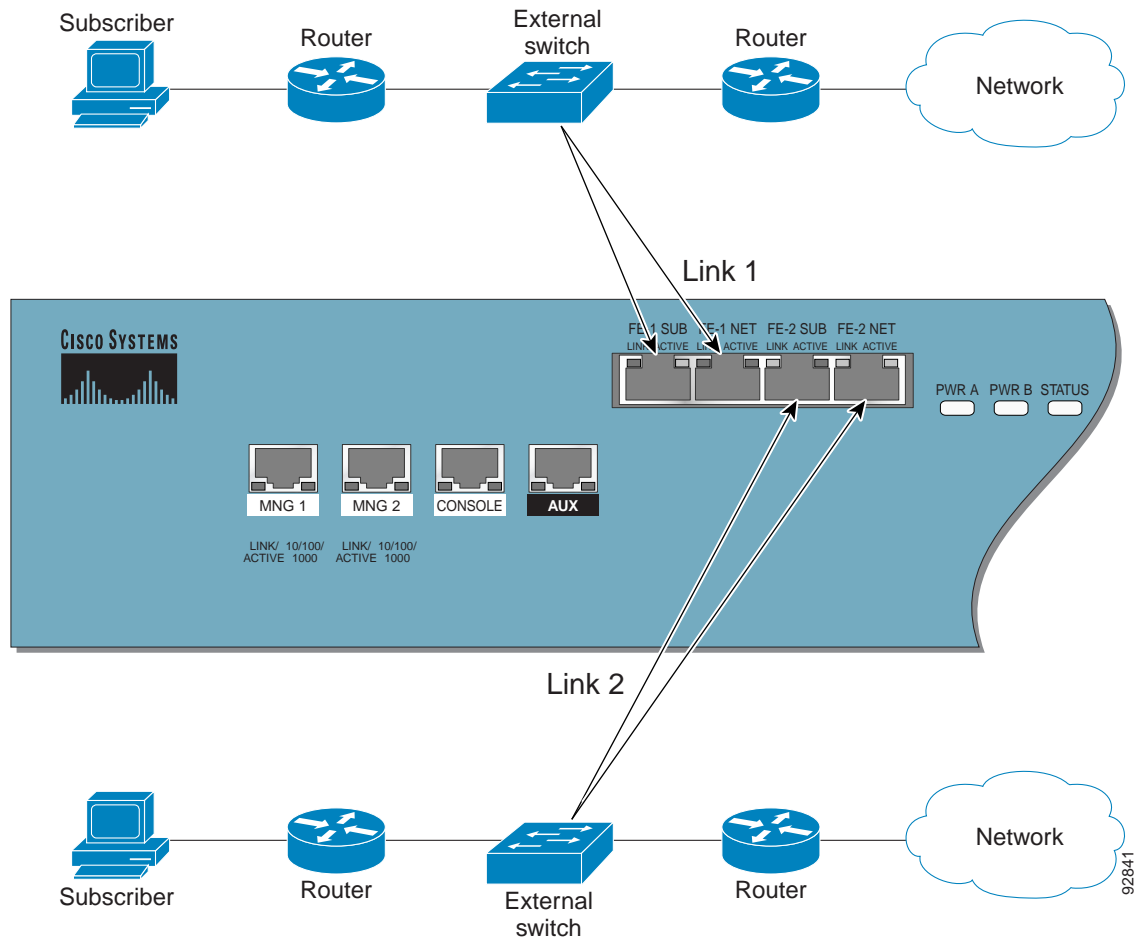
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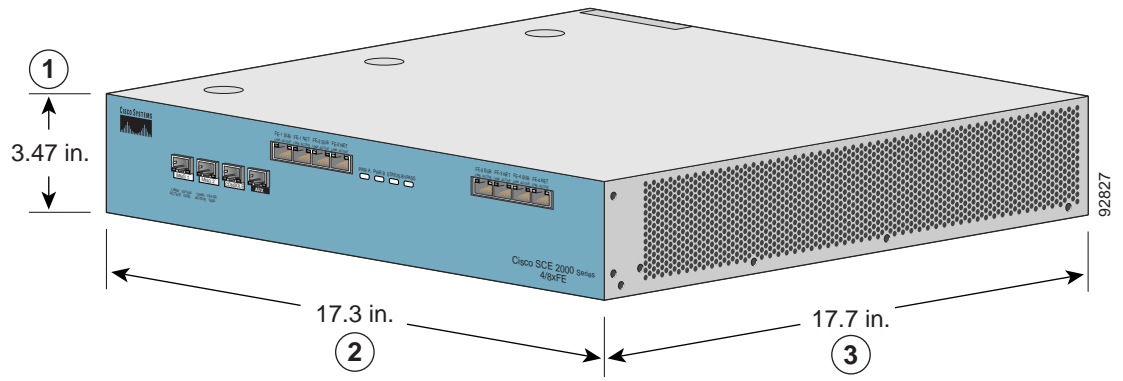
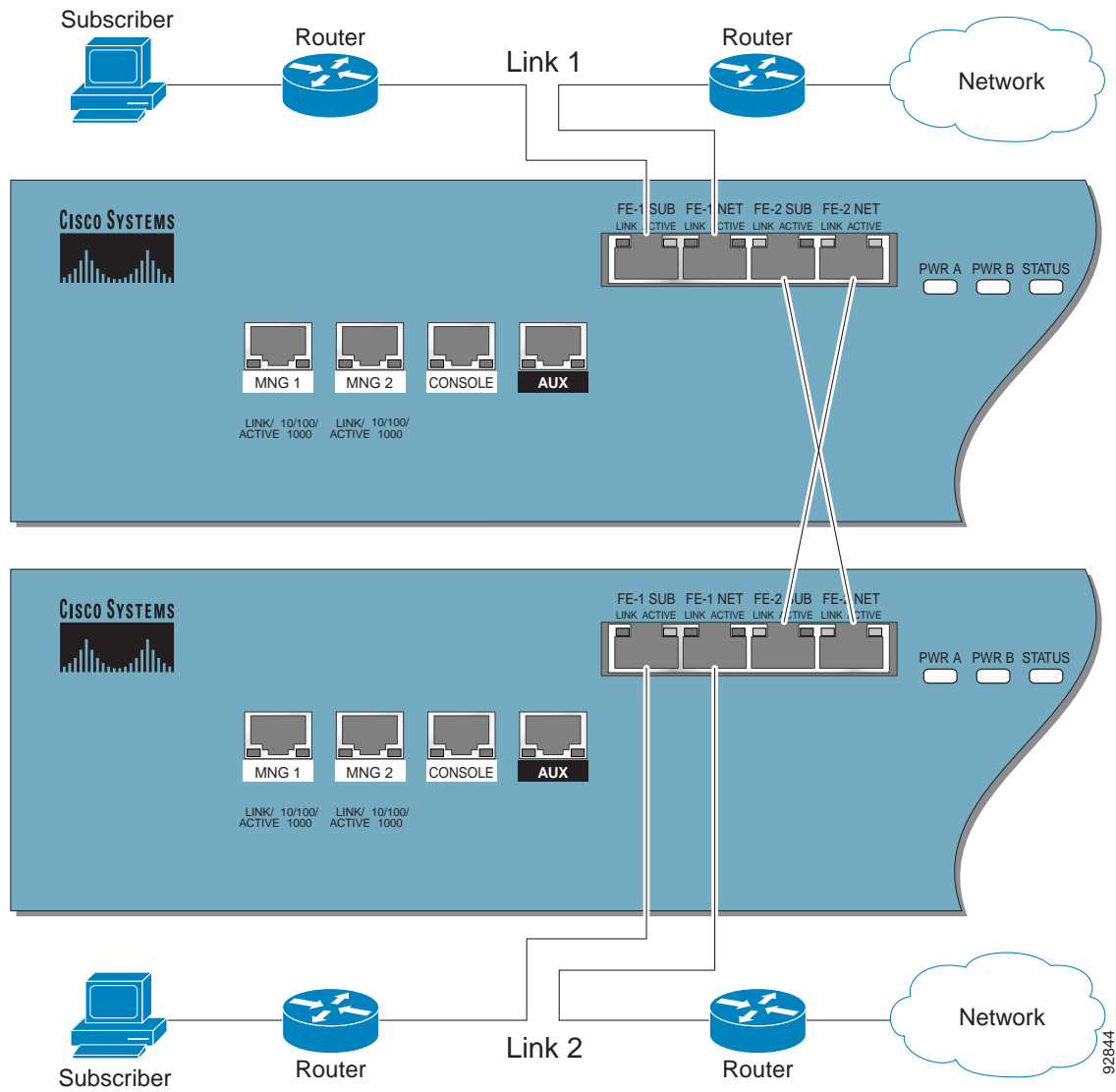


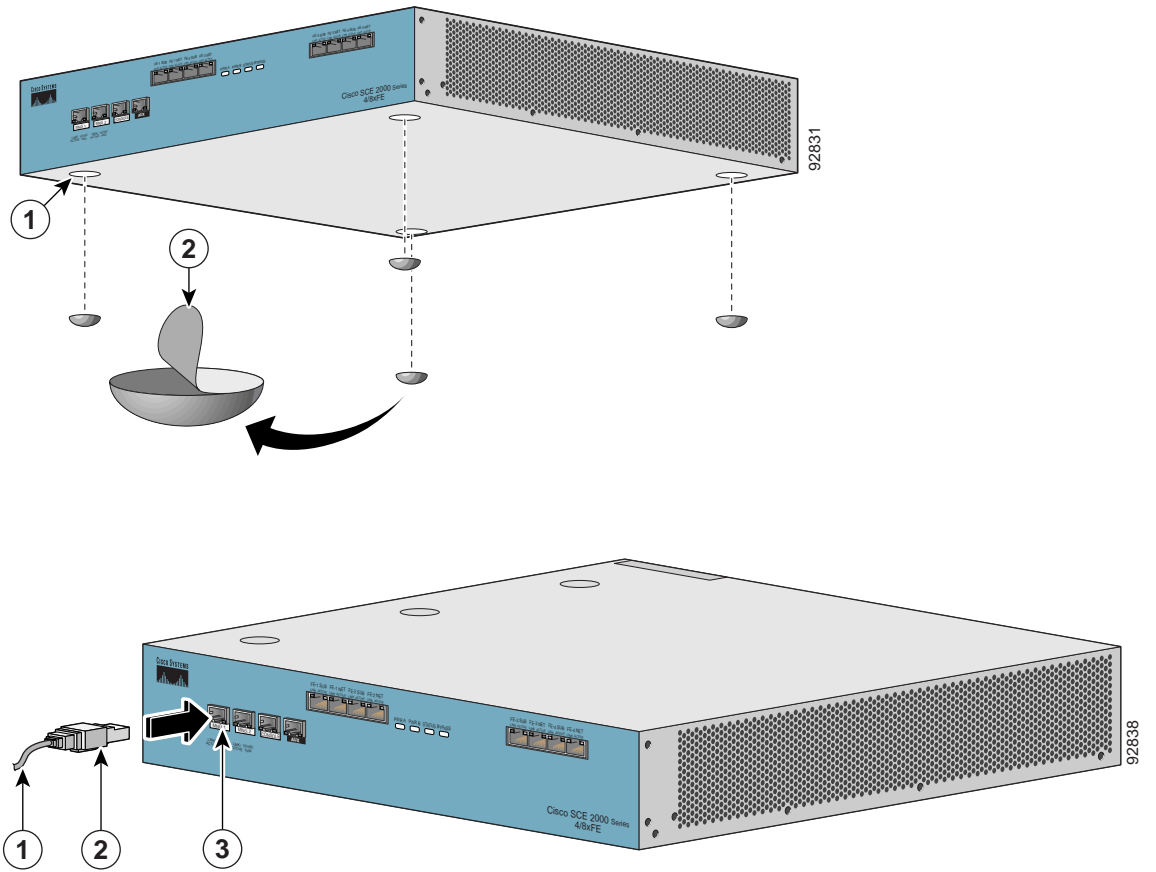
Executing Global Ban...W Per Serv

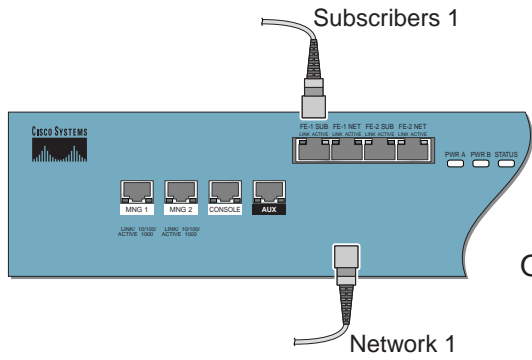
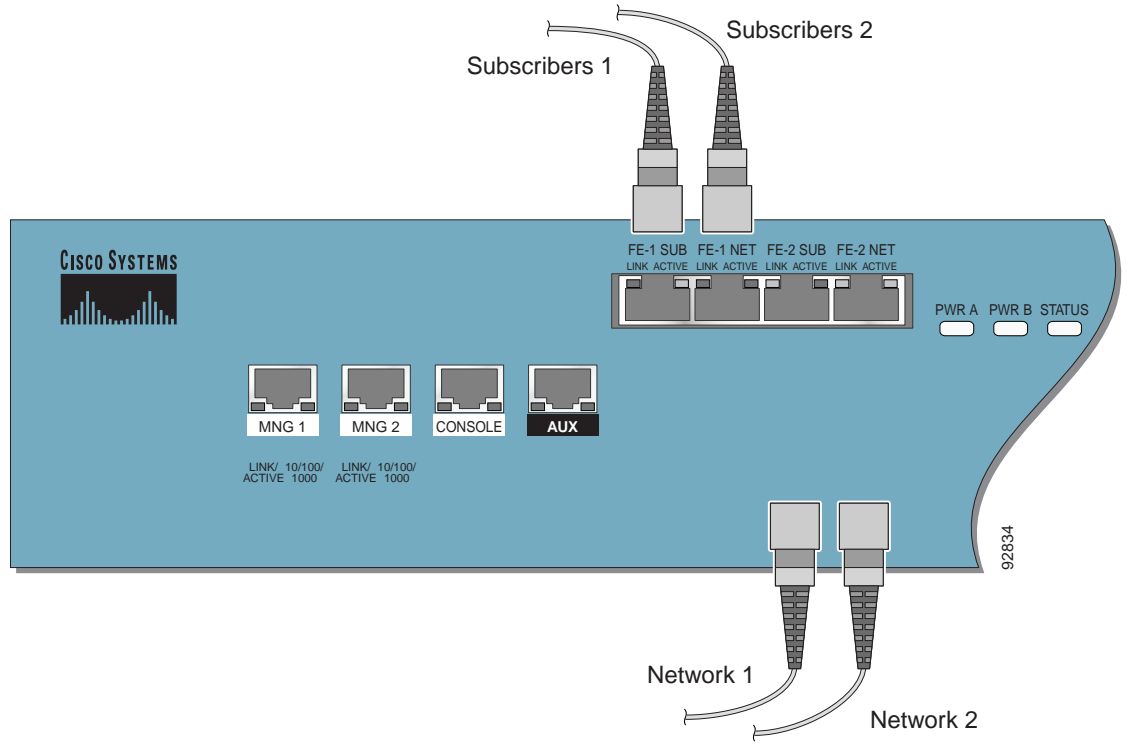




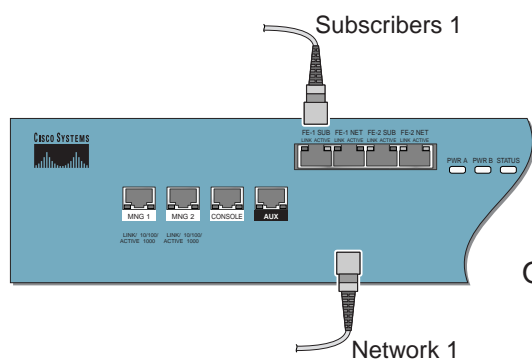
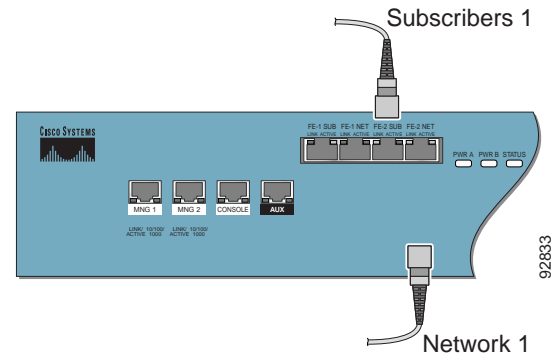




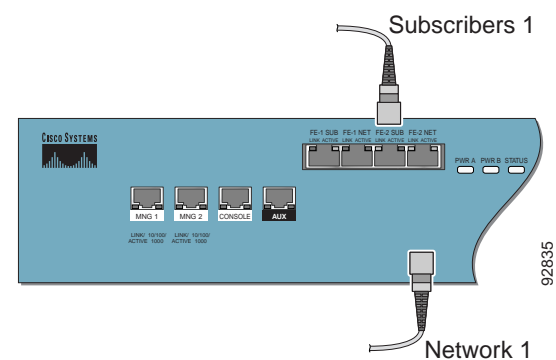


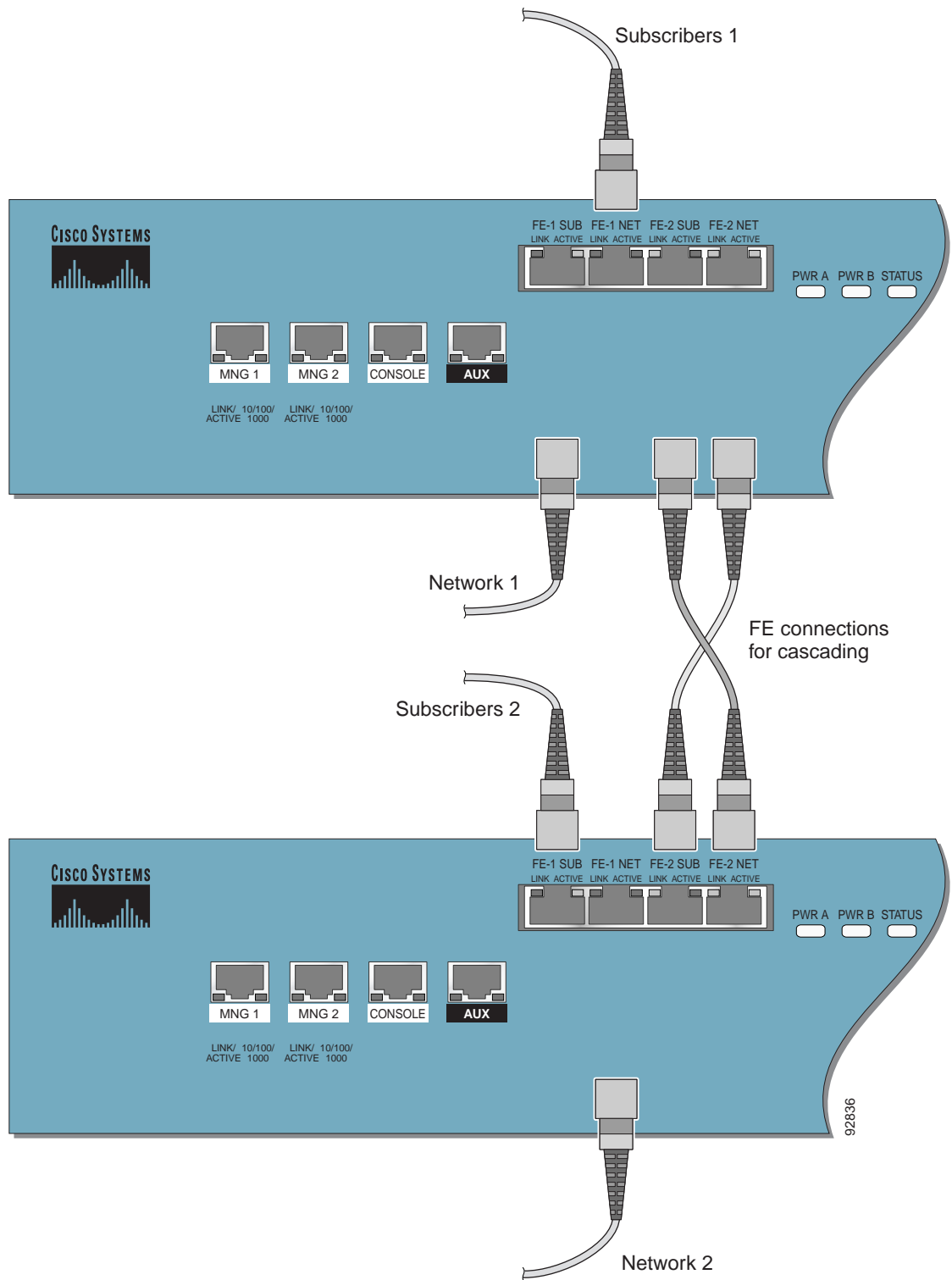


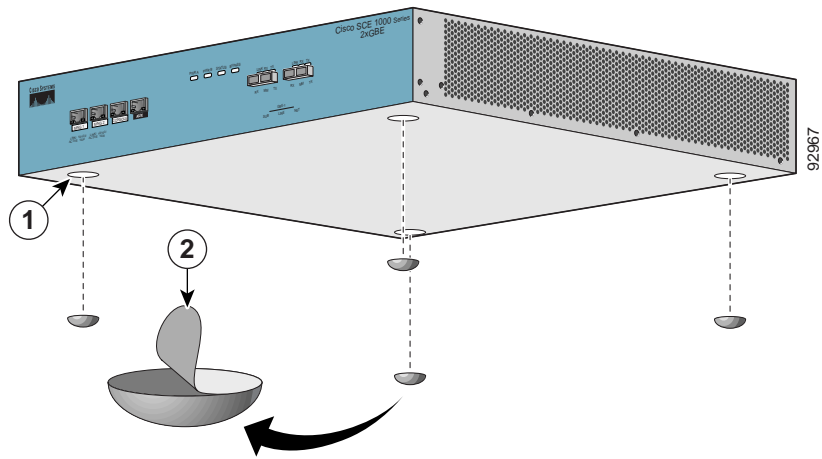
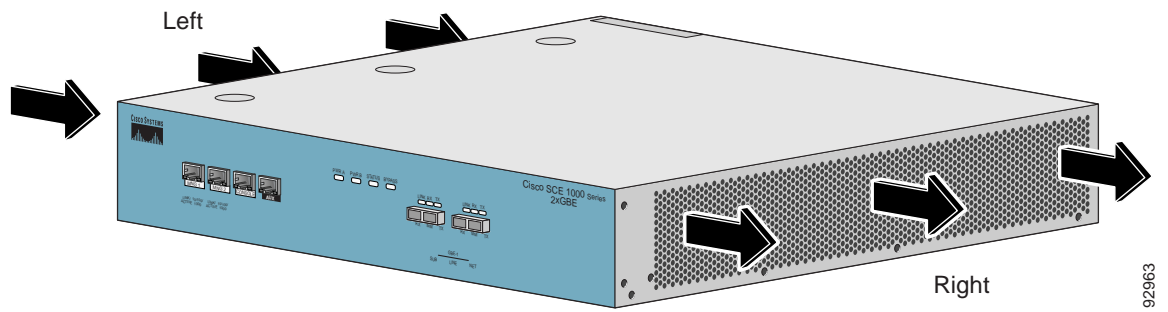
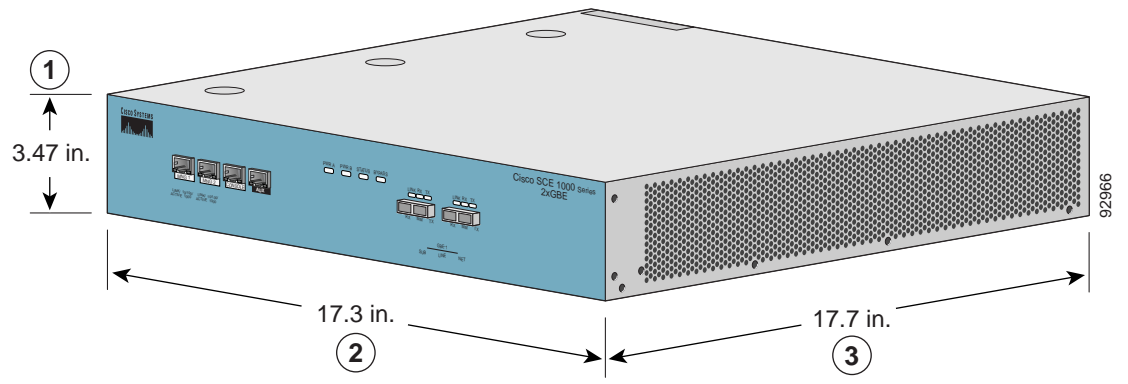
OR

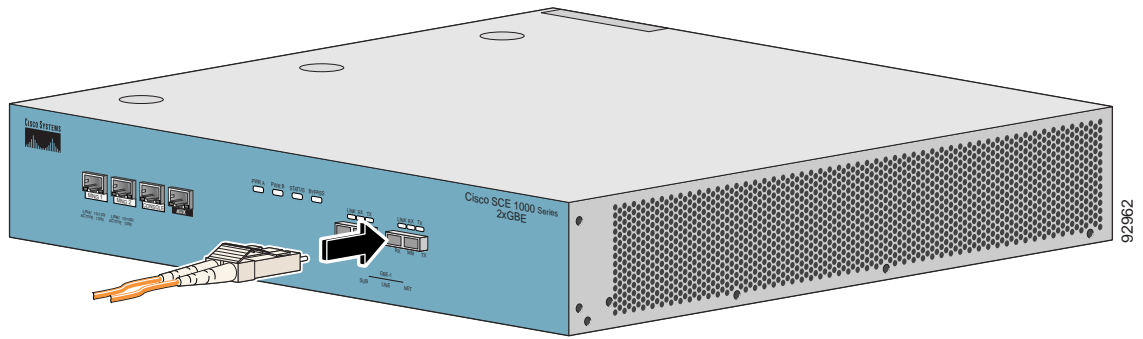


OR









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