Centralizing Services on a Cisco Content (M-Series) Security Management Appliance

This chapter contains the following sections:

Overview of Cisco Content Security Management Appliance Services

The Cisco Content Security Management appliance (M-Series appliance) is an external or “off box” location that provides a single interface to certain services on multiple Email Security appliances .

The Cisco Content Security Management appliance includes the following features:

- External spam quarantine. Holds spam and suspected spam messages for end users, and allow end users and administrators to review messages that are flagged as spam before making a final determination.
- Centralized policy, virus, and outbreak quarantines. Provide a single location behind the firewall to store and manage messages quarantined by anti-virus scanning, outbreak filters, and policies.
- Centralized reporting. Run reports on aggregated data from multiple Email Security appliances .
- Centralized tracking. Track email messages that traverse multiple Email Security appliances .

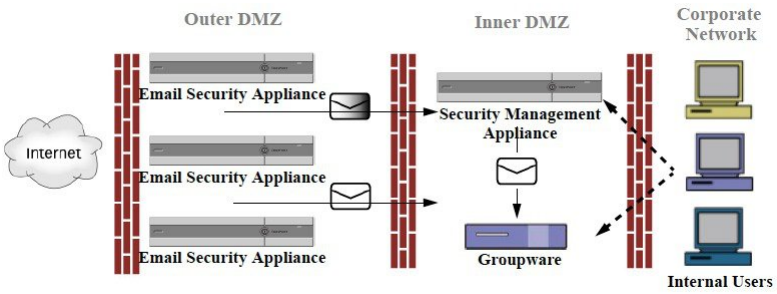
For complete information about configuring and using your Cisco Content Security Management appliance , see the Cisco Content Security Management appliance User Guide.

Network Planning

The Cisco Content Security Management appliance lets you separate the end-user interfaces (such as mail applications) from the more secure gateway systems residing in your various DMZs. Using a two-layer firewall can provide you with flexibility in network planning so that end users do not connect directly to the outer DMZ.

The following figure shows a typical network configuration incorporating Cisco Content Security Management appliance and multiple DMZs.

Figure 1: Typical Network Configuration with Cisco Content Security Management Appliance



Large corporate data centers can share one Cisco Content Security Management appliance which acts as an external spam quarantine for one or more Email Security appliances. Meanwhile, remote offices can maintain local spam quarantines on Email Security appliances for local use.

Working with an External Spam Quarantine

Mail Flow and External Spam Quarantine

If your network is configured as described in Network Planning, on page 2, incoming mail from the Internet is received by appliances in the outer DMZ. Clean mail is sent along to the mail transfer agent (MTA) (groupware) in the inner DMZ and eventually to the end users within the corporate network.

Spam and suspected spam (depending on your mail flow policy settings) is sent to the spam quarantine on Cisco Content Security Management appliance . End users may then access the quarantine and elect to delete spam and release messages that they would like to have delivered to themselves. Messages remaining in the spam quarantine are automatically deleted after a configurable amount of time.

Messages that are released from the external quarantine on the Cisco Content Security Management appliance are returned to the originating Email Security appliance for delivery. These messages do not normally pass through the following processes before delivery: HAT and other policy or scanning settings, RAT, domain exceptions, aliasing, incoming filters, masquerading, bounce verification, and the work queue.

An Email Security appliance that is configured to send mail to a Cisco Content Security Management appliance will automatically expect to receive mail released from the Cisco Content Security Management appliance and will not reprocess those messages when they are received back. For this to work, the IP address of the Cisco Content Security Management appliance must not change. If the IP address of the Cisco Content Security Management appliance changes, the receiving Email Security appliance will process the message as it would any other incoming message. You should always use the same IP address for receiving and delivery on the Cisco Content Security Management appliance .

The Cisco Content Security Management appliance accepts mail for quarantining from the IP addresses specified in the spam quarantine settings. To configure the spam quarantine on the Security Management appliance, see the Cisco Content Security Management appliance User Guide.

Mail released by the Cisco Content Security Management appliance is delivered to the primary and secondary hosts (content security appliance or other groupware host) as defined in the spam quarantine settings (see the Cisco Content Security Management appliance User Guide). Therefore, regardless of the number of Email Security appliances delivering mail to the Cisco Content Security Management appliance , all released mail, notifications, and alerts are sent to a single host (groupware or content security appliance). Take care not to overburden the primary host for delivery from the Cisco Content Security Management appliance .

Migrating from a Local Spam Quarantine to an External Quarantine

If you are currently using the local spam quarantine on an Email Security appliance but would like to migrate to an external spam quarantine hosted on a Cisco Content Security Management appliance — while retaining access to the messages in the local quarantine — you should prevent new messages from entering the local quarantine during the transition.

Consider the following possible strategies:

- Configuring anti-spam settings — Configure the anti-spam settings on your mail policy specifying Cisco Content Security Management appliance as the alternate host. This action sends new spam to the external quarantine while still allowing access to the local quarantine.
- Setting a shorter expiration time — Configure the Schedule Delete After setting on the local quarantine to a shorter duration.
- Deleting all of the remaining messages — To delete all remaining messages in the local quarantine, disable the quarantine and the click the “Delete All” link on the local quarantines page (see Deleting Messages from the Spam Quarantine). This link only becomes available when a local spam quarantine with messages still contained in it has been disabled.

You should now be ready to enable the external quarantine and disable the local quarantine.

Note If both the local quarantine and the external quarantine are enabled, the local quarantine is used.

Enabling an External Spam Quarantine and External Safelist/Blocklist

You can enable only one external spam quarantine on an Email Security appliance .

Before You Begin

- Review the information in Mail Flow and External Spam Quarantine , on page 2 .
- Review and take action on the information in Migrating from a Local Spam Quarantine to an External Quarantine, on page 3.

- Configure Cisco Content Security Management appliance to support the centralized spam quarantine and safelist/blocklist features. See the documentation for your Cisco Content Security Management appliance .
- If a different external spam quarantine was previously configured for the Email Security appliance, first disable the external spam quarantine setting.

Complete the following procedure on each Email Security appliance .

Procedure

Step 1 Select **Security Services > Centralized Services > Spam Quarantine**.

Step 2 Click **Configure**.

Step 3 Select **Enable External Spam Quarantine**.

Step 4 In the Name field, enter the name of Cisco Content Security Management appliance

The name is not significant, and is used for reference only. For example, enter the hostname of Cisco Content Security Management appliance .

Step 5 Enter an IP address and port number.

These must match the IP address and port number that are specified on Cisco Content Security Management appliance in the Spam Quarantines Settings page (**Management Appliance > Centralized Services > Spam Quarantine**.)

Step 6 (Optional) Select the check box to enable the **External Safelist/Blocklist** feature, and specify the appropriate blocklist action.

Step 7 Submit and commit your changes.

Step 8 Repeat this procedure for each Email Security appliance .

What to do next

If you have been using a local quarantine, see Disabling the Local Spam Quarantine to Activate the External Quarantine , on page 4.

Related Topics

- Local Versus External Spam Quarantine
- Spam Quarantine
- Managing Spam and Graymail
- How to Configure the Appliance to Scan Messages for Spam

Disabling the Local Spam Quarantine to Activate the External Quarantine

If you were using a local spam quarantine before enabling an external spam quarantine, you must disable the local quarantine in order to send messages to the external quarantine.

Before You Begin

Follow all directions, including information in the Before You Begin section, in Enabling an External Spam Quarantine and External Safelist/Blocklist , on page 3.

Procedure

Step 1 Select **Monitor** > **Spam Quarantine**.

Step 2 In the Spam Quarantine section, click the **Spam Quarantine** link.

Step 3 Deselect **Enable Spam Quarantine**.

Ignore any warnings to adjust mail policies as a result of this change. Mail policies automatically send messages to the external spam quarantine if you have configured the external quarantine settings.

Step 4 Submit and commit your changes.

Troubleshooting an External Spam Quarantine

Email Security Appliance Reprocesses Messages Released from External Quarantine

Problem: Messages released from Cisco Content Security Management appliance are unnecessarily reprocessed by the Email Security appliance .

Solution: This can occur if the IP address of Cisco Content Security Management appliance has changed. See Mail Flow and External Spam Quarantine , on page 2.

About Centralizing Policy, Virus, and Outbreak Quarantines

Centralized Policy, Virus, and Outbreak Quarantines

You can centralize policy, virus, and outbreak quarantines on a Cisco Content Security Management appliance . Messages are processed by Email Security appliances but are stored in quarantines on Cisco Content Security Management appliance .

Centralizing policy, virus, and outbreak quarantines offers the following benefits:

- Administrators can manage quarantined messages from multiple Email Security appliances in one location.
- Quarantined messages are stored behind the firewall instead of in the DMZ, reducing security risk.
- Centralized quarantines can be backed up using the standard backup functionality on Cisco Content Security Management appliance .

For complete information, see the user guide or online help for your Cisco Content Security Management appliance .

Restrictions and Limitations of Centralized Policy, Virus, and Outbreak Quarantines

- On each Email Security appliance , either all policy, virus, and outbreak quarantines must be centralized or all must be stored locally.

- Because scanning engines are not available on Cisco Content Security Management appliances, you cannot manually test messages in policy, virus, or outbreak quarantines for viruses.

Requirements for Centralized Policy, Virus, and Outbreak Quarantines in Cluster Configurations

You can enable centralized policy, virus, and outbreak quarantines at any level for clustered appliances.

Requirements:

- Before you enable centralized policy, virus, and outbreak quarantines on an Email Security appliance at a particular level (machine, group, or cluster), all appliances that belong to the same level must first be added to Cisco Content Security Management appliance .
- Content and message filters and DLP message actions must be configured at the same level and not overridden at any level below that level.
- Centralized policy, virus, and outbreak quarantines settings must be configured at the same level and not be overridden at any level below the configured level.
- Ensure that the interface to be used for communications with Cisco Content Security Management appliance has the same name on all appliances in the group or cluster.

For example:

If you want to enable centralized policy, virus, and outbreak quarantines at the cluster or group level, but an Email Security appliance which is connected to the cluster has these settings defined at the machine level, you must remove the centralized quarantines settings configured at the machine level before you can enable the feature at the cluster or group level.

About Migration of Policy, Virus, and Outbreak Quarantines

When you centralize policy, virus, and outbreak quarantines, existing policy, virus, and outbreak quarantines on your Email Security appliance migrate to Cisco Content Security Management appliance.

You will configure migration on Cisco Content Security Management appliance , but migration occurs when you commit the change enabling centralized policy, virus, and outbreak quarantines on the Email Security appliance .

As soon as you commit this change, the following occur:

- Local policy, virus, and outbreak quarantines on the Email Security appliance are disabled. All new messages entering these quarantines will be quarantined on Cisco Content Security Management appliance .
- Migration of existing non-spam quarantines to Cisco Content Security Management appliance begins.
- All local policy, virus, and outbreak quarantines are deleted. If you configured a custom migration, any local policy quarantines that you chose not to migrate are also deleted. For effects of deleting policy quarantines, see About Deleting Policy Quarantines.
- A message that was in multiple quarantines before migration will be in the corresponding centralized quarantines after migration.
- Migration happens in the background. The amount of time it takes depends on the size of your quarantines and on your network. When you enable centralized quarantines on the Email Security appliance , you can enter one or more email addresses that will receive notification when migration is complete.
- The settings in the centralized quarantine, not those of the originating local quarantine, apply to the messages. However, the original expiration time still applies to each message.

Note All centralized quarantines that are automatically created during migration have the default quarantine settings.

Centralizing Policy, Virus, and Outbreak Quarantines

Before you begin

Note Perform this procedure during a maintenance window or off-peak hours.

- You must first configure your Cisco Content Security Management appliance for centralized policy, virus, and outbreak quarantines. See the table in the "Centralizing Policy Virus, and Outbreak Quarantines" section in the "Centralized Policy, Virus, and Outbreak Quarantines" chapter in the online help or user guide for Cisco Content Security Management appliance .
- If the space allocated to centralized quarantines on Cisco Content Security Management appliance will be smaller than the amount of space that your existing local quarantines collectively occupy, messages will be expired early based on the quarantine settings on Cisco Content Security Management appliance . Before migration, consider taking manual action to reduce quarantine sizes. For more information about early expiration, see Default Actions for Automatically Processed Quarantined Messages.
- If you have chosen automatic migration, or configured custom migration to create centralized quarantines during migration, consider noting the current quarantine settings on your Email Security appliances in order to use them as guidelines for configuring the centralized quarantines.
- If your Email Security appliances are deployed in a cluster configuration, see Requirements for Centralized Policy, Virus, and Outbreak Quarantines in Cluster Configurations , on page 6.
- Be aware of the changes that will occur as soon as you commit the changes in this procedure. See About Migration of Policy, Virus, and Outbreak Quarantines , on page 6.

Procedure

Step 1 Choose **Security Services > Centralized Services > Policy, Virus, and Outbreak Quarantines**.

Step 2 Click **Enable**.

Step 3 Enter the interface and port to use for communication with Cisco Content Security Management appliance .

Make sure the interface and port are reachable from Cisco Content Security Management appliance .

If your Email Security appliances are clustered, the interface you select must be available on all machines in the cluster.

Step 4 To receive notification when migration is complete, enter one or more email addresses.

Step 5 Verify the information about quarantines to be migrated to be sure that this is what you want.

Step 6 If you are completing a Custom migration, note any quarantines that will be deleted when you commit the changes in this procedure.

Step 7 Verify that the information about content and message filters and DLP message actions to be updated is as you expect it to be.

Note For cluster configurations, filters and message actions can be automatically updated on a particular level only if filters and message actions are defined at that level and not overridden at any level below that level. After migration, you may need to manually reconfigure filters and message actions with centralized quarantine names.

Step 8 If you need to reconfigure migration mapping:

a) Return to Cisco Content Security Management appliance .

b) Reconfigure the migration mapping.

On Cisco Content Security Management appliance , select a quarantines to remap, then click **Remove from Centralized Quarantine**. Then you can remap the quarantine.

c) Commit the new migration configuration on Cisco Content Security Management appliance .

d) Start this procedure from the beginning.

Important! Be sure to reload the **Security Services > Centralized Services > Policy, Virus, and Outbreak Quarantines** page.

Step 9 Click **Submit**.

Step 10 If you need to reconfigure migration mapping, follow the procedure in Step 8.

Step 11 Commit your changes.

Note While migration is in progress, avoid making configuration changes on Email Security appliance or Cisco Content Security Management appliance .

Step 12 Look at the top of the page to monitor migration status, or, if you entered an email address when configuring migration, await the email notifying you that migration is complete.

What to do next

Perform the remaining tasks described in the table in the "Centralizing Policy, Virus, and Outbreak Quarantines" topic in the online help or user guide for Cisco Content Security Management appliance .

Related Topics

- Which User Groups Can Access Policy, Virus, and Outbreak Quarantines

About Disabling Centralized Policy, Virus, and Outbreak Quarantines

When you disable centralized policy, virus, and outbreak quarantines on the Email Security appliance :

- Local quarantines are automatically enabled on the Email Security appliance .
- System-created quarantines and quarantines that are referenced by message filters, content filters, and DLP message actions are automatically created on the Email Security appliance . The Virus, Outbreak, and Unclassified quarantines are created with the same settings that they had before quarantines were centralized, including assigned user roles. All other quarantines are created with default settings.
- Newly quarantined messages go immediately to local quarantines.
- Messages in the centralized quarantine at the time it is disabled remain there until one of the following occurs:
  - Messages are manually deleted or automatically deleted when they expire.
  - Messages are manually or automatically released, if one of the following is also true:

* An alternate release appliance is configured on Cisco Content Security Management appliance . See the online help or documentation for Cisco Content Security Management appliance .

* Centralized quarantines are again enabled on the Email Security appliance .

Disabling Centralized Policy, Virus, and Outbreak Quarantines

Before you begin

- Understand the impacts of disabling centralized policy, virus, and outbreak quarantines.
- Do one of the following:
  - Process all messages that are currently in centralized policy, virus, and outbreak quarantines.
  - Ensure that you have designated an alternate release appliance to process messages that are released from the centralized quarantine after you disable it. For information, see the online help or user guide for your Cisco Content Security Management appliance .

Procedure

Step 1 On the Email Security appliance , choose **Security Services > Centralized Services > Policy, Virus, and Outbreak Quarantines**.

Step 2 Disable centralized policy, virus, and outbreak quarantines.

Step 3 Submit and commit the change.

Step 4 Customize the settings of the newly created local quarantines.

Troubleshooting Centralized Policy, Virus, and Outbreak Quarantines

If a Cisco Content Security Management Appliance Goes Out of Service

If Policy, Virus, and Outbreak Quarantines are centralized on a Cisco Content Security Management appliance that goes out of service, you should disable these centralized quarantines on the Email Security appliance .

If you deploy a replacement Cisco Content Security Management appliance , you must reconfigure quarantine migration on Cisco Content Security Management appliance and on each Email Security appliance . See the table in the “Centralizing Policy Virus, and Outbreak Quarantines” section in the “Centralized Policy, Virus, and Outbreak Quarantines” chapter in the online help or user guide for Cisco Content Security Management appliance .

Configuring Centralized Reporting

Before you begin

- Enable and configure centralized reporting on a Cisco Content Security Management appliance . See prerequisites and instructions in Cisco Content Security Management Appliance User Guide.
- Ensure that sufficient disk space is allocated to the reporting service on Cisco Content Security Management appliance .

Procedure

Step 1 Click **Security Services > Reporting**.

Step 2 In the Reporting Service section, select the Centralized Reporting option.

Step 3 Submit and commit your changes.

Requirements for Advanced Malware Protection Reporting

For required configurations for full reporting on Advanced Malware Protection (file reputation and file analysis) features on Cisco Content Security Management appliance , see the information about Advanced Malware Protection reports in the email reporting chapter of the online help or user guide for your version of Cisco Content Security Management appliance software.

Availability of Reporting Information after Changing to Centralized Reporting

When centralized reporting is enabled on an Email Security appliance :

- Existing data on the Email Security appliance for the monthly report is not transferred to Cisco Content Security Management appliance .
- Archived reports on the Email Security appliance are not available.
- The Email Security appliance stores only a week's worth of data.
- New data for the monthly and yearly reports is stored on Cisco Content Security Management appliance .
- Scheduled reports on the Email Security appliance are suspended.
- You can no longer access the scheduled report configuration page on the Email Security appliance .

About Disabling Centralized Reporting

If you disable centralized reporting on the Email Security appliance , the Email Security appliance begins storing new monthly report data, scheduled reports resume, and you can access its archived reports. After disabling centralized reporting, the appliance only displays data for the past hour and day, but not the past week or month. This is temporary. The appliance will display the reports for the past week and month after it accumulates enough data. If the Email Security appliance Email Security appliance is placed back into centralized reporting mode, it will display data for the past week in the interactive reports.

Configuring Centralized Message Tracking

Before you begin

Note You cannot enable both centralized and local tracking on an Email Security appliance .

Procedure

Step 1 Click **Security Services > Message Tracking**.

Step 2 In the Message Tracking Service section, click **Edit Settings**.

Step 3 Select the **Enable Message Tracking Service** check box.

Step 4 Select the Centralized Tracking option.

Step 5 (Optional) Select the check box to save information for rejected connections.

Note Saving tracking information for rejected connections can adversely affect the performance of Cisco Content Security Management appliance .

Step 6 Submit and commit your changes.

What To Do Next

To use centralized tracking, you must enable the feature on the Email Security appliances *and* Cisco Content Security Management appliance . To enable centralized tracking on S Cisco Content Security Management appliance , see Cisco Content Security Management Appliance User Guide.

Using Centralized Services

For instructions on using centralized services, see the Cisco Content Security Management Appliance User Guide.