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Email Queue API Guide: Email Security.cloud

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Introduction

Overview

The Email Security.cloud Email Queue API is an HTTP interface that offers Email Security.cloud customers up-to-date information about in-transit mail queue sizes, broken down by domain.

HTTPS secures and encrypts the data transmitted. API requests are authorized using Basic Authentication. Standard HTTP status codes are used during the processing of all API requests.

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Getting Started

Getting started with the Email Queue API

The easiest way to get started working with the Email Queue API is to use the simple curl example supplied in this document to query the `stats` API. Once you have access to data returned by the API, you can determine how best to structure your client application to make the data available to your SIEM, dashboard or correlation application. You can use the curl script as-is, or as a model on which to base a similar script or program in a different language. You can use the script to access the API and save data locally, and then point your SIEM to the saved files. You can also configure your SIEM to poll the web service directly.

What you need to begin

The following tasks must be performed before you begin implementing your API client application. These tasks are performed in the Email Security.cloud portal by someone with portal administrator credentials.

- Ensure that your Email Security.cloud portal administrator has created at least one new user account in the portal for authentication to the Email Queue API service. The user account must have **View Statistics** permissions for the Email Threat Detection and Response service. This account will be used to access the Email Queue API.
- Ensure that your portal administrator has downloaded the *Email Queue API Guide* (this document), which explains how to use the script to access the API.

Accessing and using `stats` data

To access and use stats data from the Email Queue API, run the curl script and then examine the resulting data to determine how to use the data in your SIEM or other security monitoring applications.

Run the curl script

To use the curl script to access domain queue data, run the following:

```
$ curl https://emailqueue.emailsecurity.symantec.com/stats -u <username>
```

Where `<username>` is the Email Security.cloud credential supplied by your administrator. You will be prompted for the password.

Examine the `stats` API response contents

The best way to understand the structure and content of the data that the Email Queue API returns is to examine the data you receive from the `stats` URI. In addition, you can also examine the JSON sample file that is included in this document. See Sample JSON files produced by the Email Queue API.

API Methods

API Methods

Version information

Version 1.0

URI schemes

- Method: `stats`
- Host endpoint: https://emailqueue.emailsecurity.symantec.com
- Scheme: HTTPS

`stats` API method

Get queue stats

`GET /stats`

Description

Returns a list of domains owned by the customer, with queue statistics for each domain.

Table 1: Parameters

Type	Name	Description	Schema
query	domain (*optional*)	This is optional. If not present, stats for all domains visible to the caller's credential are returned. Limit responses to only contain results for this domain. This argument can be repeated to specify multiple domains. Example: `stats?domain=domain1.com&domain=domain2.com`	string

Table 2: Responses

HTTP Code	Description	Schema
200	OK	string
401	Authorization error	No content
403	**ViewStats** not permitted	No content
500	Service unavailable - try again later.	No content

Table 3: Security

Type	Name
basic	BasicAuth

Produces

application/json

The following elements are present in the Email Queue response JSON document. Queue statistics aggregated across all domains included in the Domains list are provided in the elements with the “Total” prefix. An array of per-domain statistics is also available.

Table 4: Elements for aggregate statistics

Element Name	Element Type	Example	Description
TotalMessagesInbound	Number	18	Total number inbound messages in queue, for all domains.
TotalMessagesOutbound	Number	19	Total number of outbound messages in queue, for all domains.
MeanTimeInQueueInbound	Number	18	Average (mean) queue wait for inbound messages, for all domains. Measured in seconds.
MeanTimeInQueueOutbound	Number	29	Average (mean) queue wait for outbound messages, for all domains. Measured in seconds.
LongestTimeInQueueInbound	Number	39	How long the oldest message in the inbound queue has been queue, across all domains. Measured in seconds.
LongestTimeInQueueOutbound	Number	61	How long the oldest message in the outbound queue has been queue, across all domains. Measured in seconds.
Domains	List	See Sample Output section.	List of domain elements (see chart below).

Table 5: Elements present in per-domain statistics

Element	Type	Example	Description
Name	String	domain1.com	Domain name
ReceiveQueueCountInbound	Numeric	8	Number of inbound messages waiting to be processed.
ReceiveQueueCountOutbound	Numeric	16	Number of outbound messages waiting to be processed.
DeliveryQueueCountInbound	Numeric	12	Number of inbound messages that have been processed and are waiting to be delivered.
DeliveryQueueCountOutbound	Numeric	31	Number of outbound messages that have been processed and are waiting to be delivered.
LongestTimeInReceiveQueueInbound	Numeric	4	Oldest inbound message in queue waiting to be processed. Measured in seconds.
LongestTimeInReceiveQueueOutbound	Numeric	8	Oldest outbound message in queue waiting to be processed. Measured in seconds.

Element	Type	Example	Description
LongestTimeInDeliveryQueueInbound	Numeric	39	Oldest inbound message waiting to be delivered after processing. Measured in seconds.
LongestTimeInDeliveryQueueOutbound	Numeric	61	Oldest outbound message waiting to be delivered after processing. Measured in seconds.
MeanTimeInReceiveQueueInbound	Numeric	2	Average (mean) wait time for inbound messages waiting to be processed. Measured in seconds.
MeanTimeInReceiveQueueOutbound	Numeric	4	Average (mean) wait time for outbound messages waiting to be processed. Measured in seconds.
MeanTimeInDeliveryQueueInbound	Numeric	18	Average (mean) wait time for inbound messages waiting to be delivered after processing. Measured in seconds.
MeanTimeInDeliveryQueueOutbound	Numeric	31	Average (mean) wait time for outbound messages waiting to be delivered after processing. Measured in seconds.

Sample Output

Sample JSON file produced by the Email Queue API

Samples have been edited to remove any identifying or confidential information, and linebreaks have been added as necessary to improve readability on the page.


```
{
  "TotalMessagesInbound" : 10,
  "TotalMessagesOutbound" : 11,
  "MeanTimeInQueueInbound" : 12,
  "MeanTimeInQueueOutbound" : 13,
  "LongestTimeInInbound" : 14,
  "LongestTimeInOutbound" : 15,
  "Domains" : [ {
    "Name" : "domain1.com",
    "ReceiveQueueCountInbound" : 16,
    "ReceiveQueueCountOutbound" : 17,
    "DeliveryQueueCountInbound" : 18,
    "DeliveryQueueCountOutbound" : 19,
    "LongestTimeInReceiveQueueInbound" : 20,
    "LongestTimeInReceiveQueueOutbound" : 21,
    "LongestTimeInDeliveryQueueInbound" : 22,
    "LongestTimeInDeliveryQueueOutbound" : 23,
    "MeanTimeInReceiveQueueInbound" : 24,
    "MeanTimeInReceiveQueueOutbound" : 25,
    "MeanTimeInDeliveryQueueInbound" : 26,
    "MeanTimeInDeliveryQueueOutbound" : 27
  }, {
    "Name" : "domain2.com",
    "ReceiveQueueCountInbound" : 28,
    "ReceiveQueueCountOutbound" : 29,
    "DeliveryQueueCountInbound" : 30,
    "DeliveryQueueCountOutbound" : 31,
    "LongestTimeInReceiveQueueInbound" : 32,
    "LongestTimeInReceiveQueueOutbound" : 33,
    "LongestTimeInDeliveryQueueInbound" : 34,
    "LongestTimeInDeliveryQueueOutbound" : 35,
    "MeanTimeInReceiveQueueInbound" : 36,
    "MeanTimeInReceiveQueueOutbound" : 37,
    "MeanTimeInDeliveryQueueInbound" : 38,
    "MeanTimeInDeliveryQueueOutbound" : 39
  } ]
}
```

Security

Security

BasicAuth

Basic authentication is used to allow access to the API.

Type: basic

Overall API security

The Email Queue API uses Basic Authentication over SSL. Symantec Email Security.cloud restricts users to particular customers, domains, and services. This security model is the same as the model that is deployed for the ClientNet application.

The client application passes a valid ClientNet logon and password to gain access to the HTTPS URIs. The logon credentials are authenticated against the ClientNet database through the ClientNet Web services client application. The API provides a unique `userid` and `customerid` which are authenticated against the `View Statistics` role in ClientNet. Only valid users who have the `View Statistics` role on the associated service for the given `customerid` can receive data.


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