Votiro Cloud for Email User Guide

0





Copyright Notice

The material herein is proprietary to Votiro CyberSec Ltd. This document is for informative purposes. Any unauthorized reproduction, use or disclosure of any part of this document is strictly prohibited.

Votiro CyberSec's name and logos are trademarks of Votiro CyberSec Ltd., its subsidiaries or affiliates. All other company or product names are the trademarks of their respective holders.

www.votiro.com

Contents

1	Introduction	5
	1.1 Architecture and Data Flow	6
	1.1.1 System Components	6
	1.2 Votiro Cloud for Email Operation Overview	7
	1.2.1 Edge Transport Server and Transport Service	7
	1.2.2 Integration as a Transport Agent	7
	1.2.3 Integration with the Positive Selection [®] Engine	7
	1.2.4 Email Connector-Specific Internet X-Headers	9
2	Installing Votiro Cloud for Email	11
	2.1 System Requirements	11
	2.1.1 Hardware Requirements	. 11
	2.1.2 Software Requirements	11
	2.1.3 Network Requirements	11
	2.1.4 Internet Connectivity	12
	2.2 Running the Installation Wizard	12
	2.2.1 Before You Begin	. 12
	2.2.2 Installing SFG for Email	13
	2.3 Uninstalling Votiro Cloud for Email	17
3	Configuring Votiro Cloud for Email	
	3.1 Connecting Votiro Cloud for Email to the Positive Selection [®] Engine	18
	3.2 Votiro Cloud for Email Configuration	19
	3.3 Whitelisting a Domain	19
	3.4 Specifying Filter Rules	20
	3.4.1 Filters	20
	3.4.2 Actions	21
	3.4.3 Precedence	22
	3.4.4 Tokens	22
	3.4.5 Scan Values	22
	3.4.6 Operators	. 22

3.4.7 Example of Filter Rules	23
3.5 Configuring Thresholds and Timeouts	23
3.6 Configuring a Service Token	24
3.7 Best Practice, Anti-Spam Exchange Connector Server Settings	24
3.8 Viewing, Enabling and Disabling Votiro Cloud for Email	25
3.8.1 Viewing the Current Transport Agent Status	25
3.8.2 Enabling Votiro Cloud for Email	25

1 Introduction

Votiro Cloud for Email uses advanced proactive positive selection for Email traffic, allowing you to communicate safely, without disrupting your workflow.

Today's most sophisticated malicious file attacks are those that bypass most security barriers under the radar, leaving enterprises in their most vulnerable state: unaware and unprotected. Emails have increasingly gained popularity as one of the most common targets for dangerous and malicious content attacks, exposing organizations to identity thefts, banking scams, spear-phishing, ransomware attacks, and more.

Organizations simply cannot function effectively without a seamless and instant data flow of email communication.

Votiro Cloud for Email targets the most commonly exploited file formats by eliminating elements of exploit attempts prior to their disclosure, and before any other security system can provide protection against them. The files processed for positive selection are reconstructed for a continuous, undisturbed workflow, and secure management of incoming emails with their attachments.

1.1 Architecture and Data Flow

There are three Votiro components to the system:

- Votiro's Positive Selection[®] Engine: Responsible for positively selecting files and eliminating potential threats and exploits.
- Management Dashboard: Provides an interface for:
 - Viewing and editing positive selection policies in the Positive Selection[®]
 Engine.
 - Managing incidents.
 - Displaying data and statistics about positively selected files.
- Votiro Cloud for Email: An adapter that manages the positive selection process for emails with the Positive Selection[®] Engine.

The following diagram illustrates the architecture of Votiro Cloud for Email, showing the steps taken by an email received into your organization, processed by Votiro's Positive Selection[®] Engine, and safely delivered to the recipient.



1.1.1 System Components

Votiro Cloud for Email contains the components described in the following table.

Table 1 Votiro Cloud for Email Solution Components

Component	Description
Votiro Cloud	Votiro's Positive Selection Service
Microsoft Edge Transport Server	Microsoft Exchange server with Edge Transport role
Votiro Cloud for Email	Interfaces with Microsoft Exchange server that includes an Edge transport role to distribute email to the Positive Selection® Engine for processing, using the Votiro Cloud for Web Applications.

1.2 Votiro Cloud for Email Operation Overview

1.2.1 Edge Transport Server and Transport Service

Microsoft Exchange Edge Transport servers handle all inbound and outbound Internet mail flow, by providing mail relay and smart host services for an organization. Transport agents running on the Edge Transport server provide additional layers of message protection and security.

The transport service, also referred to as a transport pipeline, is a collection of services, connections, components, queues and server roles that work together to route email messages to and from an organization in the MS Exchange server.

The transport service handles SMTP mail flow, performs message categorization and drives the Votiro Votiro Cloud for Email transport agent.

1.2.2 Integration as a Transport Agent

Votiro Cloud for Email is a transport agent created by Votiro to communicate with Votiro Votiro Cloud to provide positive selection processing for emails.

Transport agents have full access to emails they encounter on the network. Votiro Cloud for Email utilizes the SmtpReceiveAgent for processing all SMTP Receive events from the MS Exchange server that are initiated by remote SMTP servers, such as a mail transfer agent or an email server on the Internet.

Only inbound emails are processed on a typical (and recommended) deployment. Outbound and internal emails within the organization are not processed.

1.2.3 Integration with the Positive Selection® Engine

Before you integrate Votiro Cloud for Email with the Microsoft Exchange Edge Transport Server, you must verify that the Attachment Filtering function is disabled. Run the Disable-TransportAgent *Attachment Filtering Agent* Exchange PowerShell command to disable the function.

When an SMTP session is initiated with the Microsoft Exchange Edge Transport Server services, it generates an email that is processed and then routed to Votiro Cloud for Email transfer agent. Votiro Cloud for Email implements the Votiro API and queues the files for positive selection by the Positive Selection[®] Engine.

When a file is successfully uploaded to the Positive Selection[®] Engine for processing, Votiro Cloud for Email polls the engine for the status. Polling continues throughout the positive selection process, until the file is downloaded. These requests enable internal coordination, tracking and bi-directional communication for each file transferred to the Positive Selection[®] Engine for processing. Each status request tracks the time and processing of the email through the positive selection process. The possible responses to the status requests are described in the following table.

Response	Description
Queued	The email is queued to be sent to the Positive Selection® Engine. Emails remain in queued status until a positive selection worker-thread is available.
Processing	The email is being processed for positive selection.
Done	The positive selection process is complete.
Blocked	The email is blocked from processing.
Error	An internal error was encountered by the Positive Selection® Engine while processing the file.
LimitExceeded	Exceeded the number of uploads.

Table 2 Votiro API Status Responses

Although the email is transferred to the Positive Selection[®] Engine during the SMTP session, the SMTP session is not considered complete until the Positive Selection[®] Engine processes the file, which means that the initiating server does not receive delivery approval for the file until positive selection processing is finished. To ensure that the positive selection process does not cause timeouts to be triggered, you might need to adjust the respective timeout values for any of the preceding components. For example, the timeout values of the initiating servers, such as anti-spam or mail relay might need to be adjusted.

If the Positive Selection[®] Engine cannot process the file, *** Unsanitized *** is added to the beginning of the subject line of the email. To ensure business continuity, the email is routed to the next SMTP server in the process of delivering the email to the recipient.

You can configure the text that will be added to the subject line of an unsanitized email. In the **WebApiHandlerConfig.xml** configuration file, edit the following line, as needed.

```
SubjectPrefixOnError="***Unsanitized***"
```

The **SMTPActionOnError** configuration parameter in the **WebApiHandlerConfig.xml** file provides two options for handling emails that have failed to undergo positive selection:

- Reject: will invoke a system-generated notification email to the sender. It will not contain the prefix *** Unsanitized *** (or other text that you have configured) in the subject line.
- **Pass** will not generate a notification email to the sender. This is the default value.

Example

<SmtpSettings SmtpActionOnError="Pass">

Note

The characters &, <, >, `, and `` are not permitted within the attribute value in an XML file.

1.2.4 Email Connector-Specific Internet X-Headers

Each email that is processed by Votiro Cloud for Email includes Email Connector-specific internet X-headers. The X-headers provide key information that relates to the positive selection processing, tracking and troubleshooting of each email.

X-Headers are not usually visible to the recipients unless they specifically request the header information from the email client application.

X-Header	Description		
X-MTRecipients	Lists the SMTP (envelope) recipients who are in the Microsoft Exchange server authoritative domain. This header is used to release emails to intended recipients in the organization.		
X-MTConnectorResult	Indicates if the email has been processed. The result is Sanitized, Timeout, WebApiInternalError or Blocked.		
X-Votiro-Connector-WebApi-MsgId	An internal Email Connector identifier.		
X-Votiro-Connector-WebApi-ItemId	An internal identifier to the file that enables status tracking.		
X-Votiro-Connector-WebApi- TotalTime	Represents the total time to upload, queue, process and download the email.		
	The result is in HH:MM:SS:MS format.		
X-Votiro-Connector-WebApi-	Represents the time to upload the email to the Positive Selection® Engine.		
opioudrime	The result is in HH:MM:SS:MS format.		
X-Votiro-Connector-WebApi-	Represents the time the email is queued for processing.		
QueuedTime	The result is in HH:MM:SS:MS format.		
X-Votiro-Connector-WebApi-	Represents the processing time.		
ProcessTime	The result is in HH:MM:SS:MS format.		
X-Votiro-Connector-WebApi-	Represents the time to download the email.		
DownloadTime	The result is in HH:MM:SS:MS format.		

 Table 3
 Internet X-Headers and Descriptions

The X-Header X-MTConnectorResult returns the final status of the positive selection process for the email. Below are the descriptions for the results.

Table 4 X-MT Connector Result Descriptions

X-MT Connector Result	Description
Sanitized	The Positive Selection® Engine sent a Done response. The file is processed.
Blocked	The Positive Selection® Engine sent a Blocked response. The file is blocked.

X-MT Connector Result	Description
WebApiInternalError	The Positive Selection® Engine sent an Error response. The file is not processed.
TimeOut	The Email Connector timed out while waiting for a response from the Positive Selection® Engine.

Sample X-Headers

X-MTRecipients: <u>user@company.com</u>

X-MTConnectorResult: Sanitized

X-Votiro-Connector-WebApi-MsgId: ee4871d2-e140-4a05-9306-c3ab309dd18f

X-Votiro-Connector-WebApi-ItemId: 560eab29-fbcb-436b-99f1-13b85efee39a

X-Votiro-Connector-WebApi-TotalTime: 00:00:02.4156542

X-Votiro-Connector-WebApi-UploadTime: 00:00:00.0376172

X-Votiro-Connector-WebApi-QueuedTime: 00:00:01.8574844

X-Votiro-Connector-WebApi-ProcessTime: 00:00:00.5167820

X-Votiro-Connector-WebApi-DownloadTime: 00:00:00.0037706

2 Installing Votiro Cloud for Email

This chapter describes the hardware, software and network requirements to install Votiro Cloud for Email. Steps to install and uninstall Votiro Cloud for Email follow.

2.1 System Requirements

2.1.1 Hardware Requirements

Votiro Cloud for Email Hardware Requirements.

Required Item	Minimum Specification	Comment
CPU	Dual Core 2.7GHz	The number of cores is determined by the requested volume of data. Can be vCPU on a virtual machine.
RAM	8GB	
Operating system drive	30GB of free space	Can be a virtual hard disk. SSD or other fast storage is recommended.
Network Card		Can be a virtual network card (vNIC) on a virtual machine.

Table 5 Hardware Requirements

2.1.2 Software Requirements

The following software requirements must be pre-installed before you run the Votiro Cloud for Email setup wizard.

Operating System and Services

Microsoft Windows Server 2019 or 2016, with the latest rollups and updates installed.

Software

- Microsoft .NET Framework v3.5.
- One of the following releases of Microsoft Exchange with Edge role:
 - Microsoft Exchange 2013 SP1
 - Microsoft Exchange 2016 RTM
 - Microsoft Exchange 2019

2.1.3 Network Requirements

Votiro Cloud for Email Firewall Rules.

Source Host	Source Port	Destination Host	Destination Port	Description
SMTP as Mail relay or Antispam device	Any	Microsoft Exchange Edge	TCP-25	The Exchange server must be able to establish an SMTP session from an external network. For example, the internet.
Microsoft Exchange Edge	Any	Microsoft Exchange Mailbox	TCP-25	The Exchange Edge server must be able to establish an SMTP session from it to the Microsoft Exchange Mailbox server.
Microsoft Exchange Edge	Any	Votiro Cloud	TCP-443	The Exchange Connector must be able to communicate with the Positive Selection® Engine to queue files for processing and retrieve processed files, using HTTPS requests and responses.

Table 6 Network Requirements - Firewall Rules

2.1.4 Internet Connectivity

An internet connection is required for installing and updating Microsoft components for the operating system.

Votiro Cloud for Email does not require internet connectivity to run the Positive Selection[®] Engine.

2.2 Running the Installation Wizard

2.2.1 Before You Begin

You must have administration permissions for the Microsoft Exchange Server on which you wish to install Votiro Cloud for Email, also referred to as **SFG for Email**.

2.2.2 Installing SFG for Email

1. Run the **SFG for Email** file, the version number is included.

The setup wizard displays the User Agreement for you to read and understand Votiro's licensing terms and conditions.



To proceed with the installation, click **Accept**. Alternatively, to exit the setup wizard, click **Decline**.

2. The setup wizard allows you to accept the suggested folder location, or browse to a new folder location.





When satisfied with your installation folder location, click Next.

3. Complete the parameters required for the **SFG for Email** connector to be set up and used with Votiro Cloud.

SFG for Email v8.4.6.10	ſIRŰ	SFG fo	or Ema	– × il v8.4.6.10
A Connector Name: B Connector Id: C Use policy	Votiro Email Connector d21d2d06-1733-42cf-b84 Default Policy	d4-e2a3b27a	284c	Generate
		Cancel	Back	Next

- a. Enter the **Connector Name**.
- b. The **Connector Id** used is a GUID. Either add your own, or click **Generate**, for entry of a **Connector Id**.
- c. To select a policy to use with the **SFG for Email** connector, ensure the **Use policy** box is selected and the name of the policy to be used has been entered, for example, **Default policy**.

To proceed with the installation, click Next.

4. On the **Remote Servers** screen, complete the following:



- a. Enter Cluster FQDN.
- b. Enter the SFG Client Version using the up and down arrows.

For Secure File Gateway enter **4** and for Disarmer enter **3**.

c. The SDS server automatically validates. To bypass this step, select **Skip SDS Server Validation**.

To proceed with the installation, click Next.

5. The setup wizard presents a summary of details entered earlier in the process. To make changes, click **Back**. Locate the screen(s) to make changes, then return to this screen by clicking **Next**.

SFG for Email v8.4.6.10	_ ×
VOTIRO	SFG for Email v8.4.6.10
Install Location: Connector Name: Connector Id: SFG client: Policy:	C:\Program Files\Votiro\SDS-Connector Votiro Email Connector d21d2d06-1733-42cf-b8d4-e2a3b27a284c https://QA-ADEX2K9-ORGK/disarmer/api/c Default Policy
Microsoft .NET Framework 4.8 Nolepad++ SFG for Email	
	Cancel Back Install

The setup wizard determines and displays a \mathbf{v} (tick) by software required for the successful installation of Votiro Cloud for Email.

Note

The checkboxes are for display purposes only and cannot be changed.

To proceed with the installation, click **Install**. Alternatively, to leave the setup wizard, click **Cancel**.

6. After Votiro Cloud for Email has been successfully installed, the following message displays:



After the installation wizard is complete, the Votiro Cloud for Email transport agent is enabled on the Microsoft Exchange server.

To exit the setup wizard, click Close.

2.3 Uninstalling Votiro Cloud for Email

You uninstall Votiro Cloud for Email using the Programs and Features function on the Control Panel.

- 1. Disable Votiro Cloud for Email.
- 2. Select SDS-Connector and click Uninstall.
- 3. To begin the uninstallation process, click **Yes**.
- 4. To complete the uninstallation process, click **OK**.

Your computer will reboot and update files and services.

VOTIRG

3

Configuring Votiro Cloud for Email

Votiro Cloud for Email can be installed on the Microsoft Exchange server with Edge Transport Services. The Votiro Cloud for Email, in conjunction with the Votiro Votiro Cloud for Web Applications, facilitates bidirectional communication between the Microsoft Exchange server and the Positive Selection® Engine for email routing and positive selection processing.

Configuration changes can be made in the files described in the following table.

File Name	Description
WebApiHandlerConfig.xml	Configures the remote host location, connector definitions, threshold limits, timeouts and policy parameters.
FilterSettings.xml	Specifies whether specific emails are to be excluded from positive selection processing, based on the email recipient or source IP address.
Logs.xml	Log files for Votiro Cloud for Email operations.

These files are located in the Program Files/Votiro/SDS-Connector directory, or the location designated during the installation.

Note

Logs that are maintained on the Microsoft Exchange Server with Edge role must be monitored for available disk space. If disk space is not available, Votiro Cloud will not process emails.

Connecting Votiro Cloud for Email to the Positive 3.1 Selection[®] Engine

After the setup wizard has completed, you must create a connection between Votiro Cloud for Email and Votiro Cloud.

Prerequisites

Before you start the connection process note the FQDN of Votiro Cloud service. You can determine this by running the following command:

kubectl get ing -A

In the output on screen the FQDN is located in the HOSTS column.

- 1. Open the WebApiHandlerConfig.xml file for editing.
- 2. Scroll to the WebApiRemoteHost parameter and enter the FQDN of the Positive Selection[®] Engine.

For example, when the FQDN is **votiro_secure_file_gateway**, enter:

<WebApiRemoteHost>https://<votiro_secure_file_gateway>

Notes

- The Votiro Cloud for Web Applications Version is 4.0, unless instructed otherwise by your Votiro-certified reseller.
- For customers using our Windows product (SDS-WS V8), the compatible Email connector version is 8.4.1.16.
- This specifies the service end point and enables the communication to begin between Votiro Cloud for Email and the Positive Selection® Engine.
- Load balancing between multiple servers is supported.

3.2 Votiro Cloud for Email Configuration

Your system could include more than one Email Connector. For the purposes of filtering data in the Management Dashboard according to Email Connector, it is recommended assign a name and ID to each one. The name and ID pair work together and must be unique within your Votiro Cloud environment.

For each Email Connector:

- 1. Open the WebApiHandlerConfig.xml file for editing.
- 2. Under **WebApiSettings**, assign a name and ID to the Email Connector, using the following parameter:
 - WebApiConnectorName
 - WebApiConnectorId

For details of these parameters, along with examples, see the following table.

 Table 7
 Email Connector Configuration Settings

Description	Parameter	Example
Name	<webapiconnectorname=""></webapiconnectorname="">	Email-AP
ID	<webapiconnectorid=""></webapiconnectorid="">	b45z3c8d-57c4-4p0f-b38a-227ed057325f

3.3 Whitelisting a Domain

Your organization may wish to whitelist a specific domain, allowing all traffic to pass through the Positive Selection[®] Engine.

To whitelist a domain, follow these steps:

- 1. Login to the Microsoft Exchange Transport Edge Server.
- 2. Locate and open the **FilterSettings.xml** file.

The default location of this file is: C:\Program Files\Votiro\SDS-Connector\.

3. Edit the file and add the following line:

```
<Rule type="Domain" token="YourOrganizationDomain.com"
action="Pass" precedence="1" scanFrom="true" scanTo="false"
scanCC="false" scanBCC="false" />
```

For example:

	🖬 RecSetings.uml 🖾
1 <	<pre>(7xml version="1.0" encoding="utf-8" 7> ///////////////////////////////////</pre>
2 🗖 <	<pre>(FilterRules defaultAction="Block"></pre>
3	
4	Change "YourOrganizationDomain.com" to your exchange organization domain to pass every outgoing SMTP packet from your organization
5	«Rule type="Domain" token="YourOrganizationDomar form" action="Fass" precedence="1" scanFrom="frue" scanTo="false" scanBCC="false" scanBCC="false" / >
7 8	<pre><rule action="Pass" precedence="1" scancc="false" scanfrom="true" scantc="false" token="YourOrganizationDomain.ggm" type="Domain"></rule></pre>
9	Change XXX.XXX.XXX.XXX to your SDS-Flow server IP address to pass every SMTP packet from SDS-Flow (useful in case of releasing original mails to clients)
10	<Rule type="SmtpRemoteIP" token="XXX.XXX.XXX.XXX" action="Pass" precedence="1" / >
11	<rule action="Pass" precedence="1" token="10.130.1.128" type="SmtpRemoteIP"></rule>
12	<rule action="Pass" precedence="1" token="192.168.11.120" type="SmtpRemoteIP"></rule>
13	<rule action="Pass" precedence="1" token="192.168.11.1" type="SmtpRemotaIP"></rule>
15	$<\!$ Every change in this file requires a restart of the "Exchange Transport Service">
17	<pre>//FilterRules></pre>

- 4. Save the **FilterSettings.xml** file.
- 5. Restart the Microsoft Exchange Transport service.

3.4 Specifying Filter Rules

Votiro Cloud for Email filter rules are a set of filters that are used to exclude or include emails or SMTP sessions for positive selection.

You can set filters for Votiro Cloud for Email in the **FilterSettings.xml** file. Rules that result in a true value generate an action. SMTP sessions that do not match any of the explicitly specified rules are applied according to the **DefaultAction** value.

The basic structure of a filter rule is:

```
<?xml version="1.0" encoding="utf-8" ?>
<FilterRules defaultAction="Block">
</FilterRules>
```

Note

If a filter rule is added to a specific user, all recipients of the same mail are affected.

3.4.1 Filters

You can specify values for the following filters.

Table 8 Votiro Cloud for EmailConfiguration Files

Filter Name	Description
EmailUser	The user name of an email recipient, as specified in the SMTP session.
Domain	The domain name to which an email is being sent.

Filter Name	Description
SmtpRemoteIP	Use this filter to specify that emails arriving from the IP address of Management are not processed. This prevents a loop in which already positively selected emails that are routed back to the Exchange server for delivery to the recipient do not enter the queue for positive selection again.
Logical	The logical operators AND, OR and NOT which can be used to link sub-rules within a filter.

Notes

- Filter names and values are case sensitive.
- To exclude internal and outgoing emails from positive selection, you must update the domain rule type with the exchange company domain name or the IP address of the internal email server in the **FilterSettings.xml** file. This will allow passing every outgoing SMTP packet from the organization.

Example 1:

<Rule type="Domain" token="YourOrganizationDomain.com" action="Pass" precedence="1" scanFrom="true" scanTo="false" scanCC="false" />

Where *YourOrganizationDomain.com* is the domain name of your company or the IPv4 address of the internal mail server.

Example 2:

<Rule type="SmtpRemoteIP" token="XXX.XXX.XXX.XXX" action="Pass" precedence="1" />

Where XXX.XXX.XXX.XXX is the IPv4 address of the internal mail server.

Note

In order for the Positive Selection® Engine to send the original emails to recipients within the organization, you must add the **SmtpRemoteIp** rule type with the IPv4 address of the Management server in the **FilterSettings.xml** file.

Example 3:

<Rule type="SmtpRemoteIP" token="XXX.XXX.XXX.XXX" action="Pass" precedence="1" />

Where XXX.XXX.XXX.XXX is the IPv4 address of the Positive Selection[®] Engine.

Note

Adding a filter rule to a specific user will affect all of the mail recipients in the same SMTP session.

3.4.2 Actions

The actions that are available for filter rules are:

Block, which occurs when the true filter value is satisfied, that results in the email being positively selected.

Pass, which occurs when the false filter value is satisfied or when the true filter is not satisfied.

In the case of multiple filters, the process moves through each one, according the Precedence and Logical values.

Note

When no true value filters are satisfied, the email is processed according to the **DefaultAction** value.

3.4.3 Precedence

Precedence is a priority, expressed as an integer. The lowest number represents the highest priority. Filter rules are processed according to the assigned priority. When the first true value or **DefaultAction** value is satisfied, the filtering process stops

3.4.4 Tokens

A token can be specified as a search word for the EmailUser, Domain and SmtpRemoteIP fields.

3.4.5 Scan Values

You can use scanFrom, scanTo, and scanCC in Emailuser and Domain filters to specify whether a rule should be run on an email's From, To, and CC fields.

When the value is true, the rule is applied.

3.4.6 Operators

Operators are used to specify logical operations between sub-rules in a filter.

For example, to specify that emails being sent from jack@abc.com to jill@votiro.com are not to be processed using positive selection, you can use the following filter.

3.4.7 Example of Filter Rules

The following example shows the construction of a filter that allows email from the specific IP address **192.168.0.2** to **Jeff** to be delivered without positive selection processing.

```
<Rule type="Logical" operator="And" action="Pass"

precedence="4">

<Rule type="SmtpRemoteIP" token="192.168.0.2" />

<Rule type="Logical" operator="Not" >

<Rule type="EmailUser" token="jeff" scanFrom="false"

scanTo="true" scanCC="true" />

</Rule>

</Rule>
```

3.5 Configuring Thresholds and Timeouts

Thresholds and timeouts are important because they affect the positive selection processing of each email that passes through Votiro Cloud for Email to the Positive Selection[®] Engine. For each email, a number of requests pass between the Votiro Cloud for Email and the Positive Selection[®] Engine - from the initial handshake, through various status check requests, to completion of positive selection processing. If thresholds and timeouts are not specified appropriately, emails might be returned and delivered to recipients in an unprocessed state.

Although unsanitized emails are identified as such in the email subject, the objective of using the Votiro Cloud solution is to positively select the mail. The maximum size limit of email attachments is 50MB. The limit is to be set on the Exchange server. Emails with attachments that are greater than 50MB are not sent and the sender receives an exception stating that the mailbox cannot receive an email at this size.

You modify thresholds and timeouts in the WebApiHandlerConfig.xml file. The following fields can be configured.

Field Name	Description	Value
WebApiTimeoutInMS	The total length of time Votiro Cloud for Email waits for a positive selection process to be completed, in milliseconds.	Range: 5000 to 180000000 Default value is 90000
WebRequestTimeoutInMS	The length of time the Votiro Cloud for Email waits per API request from the Positive Selection® Engine, in milliseconds.	Range: 5000 to 180000000 Default value is 60000

Table 9 Votiro Cloud for Email Thresholds and Timeouts

Field Name	Description	Value
WebApiStatusCheckIntervalInMS	The length of time the Email Connector waits before a periodic status is sent to the Positive Selection® Engine, in milliseconds.	Range: 1 to 5000 Default value is 100
WebApiNumberOfRetries	 Number of retries to perform in case one of the following HTTP error codes is returned by the Positive Selection® Engine: 500 Internal Server Error 404 Not Found 	Range: 0 (minimum) Default value is 5.

Note

The WebApiStatusCheckIntervalInMS cannot be greater than the WebRequestTimeoutInMS or WebApiTimeoutInMS fields for correct operation.

3.6 Configuring a Service Token

For security purposes a Service Token is used for processing emails through Votiro Cloud for Email to the Positive Selection[®] Engine.

The **CloudAPIKey** uses a Service Token exported from the Votiro Cloud Management Dashboard. The Service Token is mandatory for use with the Positive Selection[®] Engine.

To ensure the correct security is in place, configure the CloudAPIKey:

- 1. Open the WebApiHandlerConfig.xml file for editing.
- 2. Under **WebApiSettings**, assign the Service Token exported from the Management Dashboard.

```
<CloudAPIKey="[service-token]">
```

For Example,

```
<WebApiSettings
CloudAPIKey=
"eyJhbGciOiJOUZIINiIsImtpZCI6IkIwQTVFNEZFMDI5QjA3RDhCMzkwRTFFRkYyRjQ1ODZGMTQzODUwQjciLCJ0eXAiO
iJKVlQifQ.eyJlbmlxdWVfbmFtZSI6IkVkZ2UtNTciLCJncm91cHNpZCI6IlZvdGlyb0ludGVybmFoU2VydmljZXMiLCJy
b2xLTjoiQWRtaw5pc3RyYXRvciIsImp0asI6IjExNmY0OWQ1LTYzNWItNCFiZSI1iZjk5LTI0NWFmMjg0NTk0MyIsIn5iZi
I6MTYwMzM10PI3NSwi8XhwIjoxOTE5NjI4MDAwLCJpYXQi0jE2MDMzNTgyNzV9.haFThk4rvoT9cBAxBSBlPkE76zQHqNH
023uAkof2aVpV8gUwkgR8FFgzdJ2pD10g_6NvmUU0A3CkIQGSCVt_5YCHBM6up7vob-NH21Tc2DdvbX4pl8yyn-HENsdU
f_sboctJVheHAH70kkTi4rjYFJGpzaaELQ6ntAmUioH5ACTceQ-Skd0ju7LavoXTEHWHbT1gkXZWJfyoa5Wkt26j5XlPKz
mCJmLMh9TCegkXurqwPOgpkf3GB1D2J0tz7jYCBdfsuID4GkVIIEe7RaiKkYjhVIv2KaBwdNqnCuCBpn2iC86SLch9vX
27s_f84h0JvnFVHTuis_A_5pZisUg" />
```

3.7 Best Practice, Anti-Spam Exchange Connector Server Settings

Multiple settings are built into the MS Exchange server to reduce spam emails. The following is a list of best practices recommended by Votiro.

1. Content Filtering:

Select the box labeled **Reject messages with SCL rating greater than or equal to:** and enter the value **9**.

- 2. Suggested IP Block List Providers:
 - SpamHaus: zen.spamhaus.org
 - SpamCop: bl.spamcop.net
 - Surriel: psbl.surriel.com
- 3. Sender Reputation Properties:
 - Select the box labeled Perform an open proxy test when determination sender reputation level.
 - For the Sender Reputation Level Block Threshold, enter 7.
 - Set the **Threshold Action** to **24 hrs**.

3.8 Viewing, Enabling and Disabling Votiro Cloud for Email

When the connection to Votiro Cloud for Email must be stopped or started immediately, you can use a shell command from the MS Exchange Power Shell. You must have administration permissions to the server to enable and disable Votiro Cloud for Email.

3.8.1 Viewing the Current Transport Agent Status

Use the following shell command to view the current transport agent status:

Get-TransportAgent

3.8.2 Enabling Votiro Cloud for Email

Use the following shell command to enable the Email Connector:

Enable-TransportAgent "Transport Agent Name"

The default transport name is **"SDSConnector2"**. Include the quotation marks as part of the name.

Disabling Votiro Cloud for Email

To disable the Email Connector, use the following shell command:

Disable-TransportAgent "Transport Agent Name"

The default transport name is **"SDSConnector2"**. Include the quotation marks as part of the name.

Removing Votiro Cloud for Email

To remove the Email Connector, use the following shell command:

Uninstall-TransportAgent "Transport Agent Name"



The default transport name is **"SDSConnector2"**. Include the quotation marks as part of the name.