



QUALYS®

Web Application Firewall API User Guide

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CONTINUOUS SECURITY

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Preface

Using the Qualys Web Application Firewall (WAF) API, third parties can integrate the Qualys Web Application Firewall solution into their own applications using an extensible XML interface. This user guide is intended for application developers who will use the Qualys WAF API.

About Qualys

Qualys, Inc. (NASDAQ: QLYS) is a pioneer and leading provider of cloud-based security and compliance solutions with over 9,200 customers in more than 100 countries, including a majority of each of the Forbes Global 100 and Fortune 100. The Qualys Cloud Platform and integrated suite of solutions help organizations simplify security operations and lower the cost of compliance by delivering critical security intelligence on demand and automating the full spectrum of auditing, compliance and protection for IT systems and web applications. Founded in 1999, Qualys has established strategic partnerships with leading managed service providers and consulting organizations including Accenture, BT, Cognizant Technology Solutions, Fujitsu, HCL Comnet, HPE, Infosys, NTT, Optiv, SecureWorks, Tata Communications, Verizon and Wipro. The company is also a founding member of the [Cloud Security Alliance \(CSA\)](#). For more information, please visit www.qualys.com.

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CHAPTER 1

Welcome

Welcome to Qualys Web Application Firewall API.

Get Started

[WAF API Framework](#) - Learn the basics about making API requests. The base URL depends on the platform where your Qualys account is located.

[XML Output and Schemas](#) - XML output uses schemas defined on your platform.

[Introduction to WAF API Paradigm](#) - We'll tell you about making requests with authentication, making requests with payloads, using Curl, and truncation/pagination logic. API requests must authenticate using Qualys credentials.

[Authentication](#) - We'll tell you about the method used for authentication. API requests must authenticate using Qualys credentials.

Get API Notifications

We recommend you join our Community and subscribe to our API notifications so you'll get email notifications telling you about important upcoming API enhancements and changes.

From our Community

[Join our Community](#)

[Subscribe to API Notifications \(select Receive email notifications\)](#)



WAF API Framework

The new Qualys Web Application Firewall (WAF) API framework introduces numerous innovations and new functionality compared to the other Qualys API frameworks.

Request URL

The URL for making API requests respects the following structure:

`https://<baseurl>/qps/rest/1.0/<operation>/<module>/<object>/<object_id>`

where the components are described below.

<code><baseurl></code>	The Qualys API server URL that you should use for API requests depends on the platform where your account is located. The base URL for Qualys US Platform 1 is: <code>https://qualysapi.qualys.com</code>
<code><operation></code>	The request operation, such as get a list and search.
<code><module></code>	The API module. For the WAF API, the module is: "waf".
<code><object></code>	The module specific object.
<code><object_id></code>	(Optional) The module specific object ID, if appropriate.

Base URL to the Qualys API Server

The Qualys API documentation and sample code within it use the API server URL for Qualys US Platform 1: `qualysapi.qualys.com`.

The Qualys API server URL that you should use for API requests depends on the platform where your account is located.

Account Location	API Server URL
US Platform 1	<code>https://qualysapi.qualys.com</code>
US Platform 2	<code>https://qualysapi.qg2.apps.qualys.com</code>
EU Platform	<code>https://qualysapi.qualys.eu</code>

XML Output and Schemas

Web Application XSD

`https://<baseurl>/qps/xsd/1.0/waf/webapp.xsd`

WAF Cluster XSD

`https://<baseurl>/qps/xsd/1.0/waf/cluster.xsd`

WAF Appliance XSD

`https://<baseurl>/qps/xsd/1.0/waf/appliance.xsd`

<baseurl> is the Qualys API server platform URL where your account is located. See [Base URL to the Qualys API Server](#).

Introduction to WAF API Paradigm

Authentication

The application must authenticate using Qualys account credentials (user name and password) as part of the HTTP request. The credentials are transmitted using the “Basic Authentication Scheme” over HTTPS.

For more information, see the “Basic Authentication Scheme” section of RFC #2617:

```
http://www.faqs.org/rfcs/rfc2617.html
```

The exact method of implementing authentication will vary according to which programming language is used.

The allowed methods, POST and/or GET, for each API request are documented with each API call in this user guide.

Example

Basic authentication - recommended option:

```
curl -u "USERNAME:PASSWORD"  
https://qualysapi.qualys.com/qps/rest/1.0/search/waf/webapp/
```

where qualysapi.qualys.com is the base URL to the Qualys API server where your account is located.

Making Requests with an XML Payload

While it is still possible to create simple API requests using the GET method, you can create API requests using the POST method with an XML payload to make an advanced request.

The XML payloads can be compared to a scripting language that allows user to make multiple actions within one single API request, like adding a parameter to an object and updating another parameter.

The XML structure of the payload is described in the XSD files.

Using Curl

Curl is a multi-platform command-line tool used to transfer data using multiple protocols. This tool is supported on many systems, including Windows, Unix, Linux and Mac. In this document Curl is used in the examples to build WAF API requests using the HTTP over SSL (https) protocol, which is required by the Qualys WAF API framework.

Want to learn more? Visit <http://curl/haxx/se>

The following Curl options are used according to different situations:

Option	Description
-u "LOGIN:PASSWORD"	This option is used for basic authentication.
-X "POST"	This option is used to provide a method other than the default method, GET.
-H "content-type"	This option is used to provide a custom HTTP request header parameter for content type, to specify the MIME type of the curl's payload.
--data-binary	This option is used to specify the POST data. See the examples below.

The sample below shows a typical Curl request using options mentioned above and how they interact with each other. The option -X "POST" tells Curl to execute the request using the HTTP POST method. The option "--data-binary @" tells Curl to read the POST data from its standard input (stdin). The string "< file.xml" is interpreted by the shell to redirect the content of the file to the stdin of the command. The option -H "content-type: text/xml" tells Curl the POST data in "file.xml" is XML in text format.

```
curl -H "content-type: text/xml" -X "POST" --data-binary @"https://example.com" < file.xml
```

This documentation uses Curl examples showing the POST data in the "file.xml" file. This is referred to as Request POST Data. This can also be referred to as the Payload.

XML Output Pagination / Truncation Logic

The XML output of a search API request is paginated and the default page size is 100 object records. The page size can be customized to a value between 1 and 1,000. If the number of records is greater than the page size then the <ServiceResponse> element shows the response code SUCCESS with the element <hasMoreRecords>>true</hasMoreRecords> as shown below.

Follow the process below to obtain the first two the XML pages for an API request. Please apply the same logic to get all the next (n+1) pages until all records are returned. This is indicated when <hasMoreRecords>>false</hasMoreRecords>.

Request 1:

The service requests in the data file defines the search criteria for web applications with security policy ID 56865 and restricts the results to 2.

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml" https://qualysapi.qualys.com/qps/rest/1.0/search/waf/webapp --data "<?xml version=\"1.0\" encoding=\"UTF-8\"?>
```

```
<ServiceRequest>
  <preferences><limitResults>2</limitResults></preferences>
  <filters><Criteria field=\"securityPolicy.id\"
operator=\"EQUALS\">56865</Criteria></filters>
</ServiceRequest>
```

Response:

The number of records is greater than the default pagination value (100) so the <ServiceResponse> element identifies the last ID of the object in the current page output.

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>2</count>
  <hasMoreRecords>true</hasMoreRecords>
  <lastId>2272281</lastId>
  <data>
    <WebApp>
      <id>2271074</id>
      <uuid>dae9d344-7478-42c2-91fe-cc7d41ae0487</uuid>
      <name><![CDATA[BoQ]]></name>
      <owner>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
      </owner>
      <created>2015-02-20T00:42:46Z</created>
      <createdBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
      </createdBy>
      <updated>2016-05-12T23:27:15Z</updated>
      <updatedBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
```

```
    <lastname>Smith</lastname>
  </updatedBy>
  <url>http://demo-suite.mydomain.com</url>
  <originServerAddress>http://site-
origin.mydomain.com</originServerAddress>
  <status>INACTIVE</status>
  <proxiedHostnames>false</proxiedHostnames>
  <isStagingModeEnabled>true</isStagingModeEnabled>
  <isSslEnabled>false</isSslEnabled>
  <urls/>
  <securityPolicy>
    <id>56865</id>
    <uuid>2e95f963-2d60-4289-8ea7-aeb08f9383aa</uuid>
    <name><![CDATA[Pass-through]]></name>
  </securityPolicy>
  <clusters/>
  <rules/>
  <enableAuthenticatedScanning>false</enableAuthenticatedScanning>
</WebApp>
<WebApp>
  <id>2272281</id>
  <uuid>00005763-2a62-4041-bf75-a2ea7566a7e1</uuid>
  <name><![CDATA[Check logs]]></name>
  <owner>
    <id>2049309</id>
    <username>acme_ss</username>
    <firstname>Sam</firstname>
    <lastname>Smith</lastname>
  </owner>
  <created>2015-02-20T19:02:09Z</created>
  <createdBy>
    <id>2049309</id>
    <username>acme_ss</username>
    <firstname>Sam</firstname>
    <lastname>Smith</lastname>
  </createdBy>
  <updated>2015-02-20T19:02:09Z</updated>
  <updatedBy>
    <id>2049309</id>
    <username>acme_ss</username>
    <firstname>Sam</firstname>
```

```
    <lastname>Smith</lastname>
  </updatedBy>
  <url>http://demo-suite2.mydomain.com</url>
  <originServerAddress>http://site-
origin2.mydomain.com</originServerAddress>
  <status>INACTIVE</status>
  <proxiedHostnames>>false</proxiedHostnames>
  <isStagingModeEnabled>>true</isStagingModeEnabled>
  <isSslEnabled>>false</isSslEnabled>
  <urls/>
  <securityPolicy>
    <id>56865</id>
    <uuid>2e95f963-2d60-4289-8ea7-aeb08f9383aa</uuid>
    <name><![CDATA[Pass-through]]></name>
  </securityPolicy>
  <clusters/>
  <rules/>
  <enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
  </WebApp>
</data>
</ServiceResponse>
```

Request 2:

To get the next page of results, you need to edit your service request in the data section that will be passed to API request as a POST payload. According to the <lastID> element returned in the first page, you want the next page of results to start with the web applications with security policy ID 56865.

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/search/waf/webapp --data
```

```
"<?xml version=\"1.0\" encoding=\"UTF-8\"?>
  <ServiceRequest>

  <preferences><startFromOffset>3</startFromOffset><limitResults>2</
limitResults>
    </preferences><filters><Criteria field=\"securityPolicy.id\"
operator=\"EQUALS\">56865</Criteria></filters>
  </ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>2</count>
  <hasMoreRecords>true</hasMoreRecords>
  <lastId>2275880</lastId>
  <data>
    <WebApp>
      <id>2275879</id>
      <uuid>85b793c1-f898-4fda-a13b-1ff1d85b8ebb</uuid>
      <name><![CDATA[RNS API fixed]]></name>
      <owner>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
      </owner>
      <created>2015-02-21T01:06:27Z</created>
      <createdBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
      </createdBy>
      <updated>2015-02-21T01:06:27Z</updated>
      <updatedBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
      </updatedBy>
      <url>http://demo-suite3.mydomain.com</url>
      <originServerAddress>http://site-
origin3.mydomain.com</originServerAddress>
      <status>INACTIVE</status>
      <proxiedHostnames>false</proxiedHostnames>
      <isStagingModeEnabled>true</isStagingModeEnabled>
      <isSslEnabled>false</isSslEnabled>
      <urls/>
      <securityPolicy>
```

```
        <id>56865</id>
        <uuid>2e95f963-2d60-4289-8ea7-aeb08f9383aa</uuid>
        <name><![CDATA[Pass-through]]></name>
    </securityPolicy>
</clusters/>
</rules/>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
</WebApp>
<WebApp>
    <id>2275880</id>
    <uuid>aa7ad82c-0749-4476-a905-9e9e0a381910</uuid>
    <name><![CDATA[broken]]></name>
    <owner>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
    </owner>
    <created>2015-02-21T01:10:04Z</created>
    <createdBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
    </createdBy>
    <updated>2015-02-21T01:10:04Z</updated>
    <updatedBy>
        <id>2049309</id>
        <username>acme_ss</username>
        <firstname>Sam</firstname>
        <lastname>Smith</lastname>
    </updatedBy>
    <url>http://demo-suite4.mydomain.com</url>
    <originServerAddress>http://site-
origin4.mydomain.com</originServerAddress>
    <status>INACTIVE</status>
    <proxiedHostnames>>false</proxiedHostnames>
    <isStagingModeEnabled>>true</isStagingModeEnabled>
    <isSslEnabled>>false</isSslEnabled>
</urls/>
```



```
<securityPolicy>
  <id>56865</id>
  <uuid>2e95f963-2d60-4289-8ea7-aeb08f9383aa</uuid>
  <name><![CDATA[Pass-through]]></name>
</securityPolicy>
<clusters/>
<rules/>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
  </WebApp>
</data>
</ServiceResponse>
```

Setting the Custom Page Size

The service request needs to contain the <preferences> section with the <limitResults> parameter. For the <limitResults> parameter you can enter a value from 1 to 1,000.

```
<ServiceRequest>
  <preferences>
    <startFromOffset>3</startFromOffset>
    <limitResults>2</limitResults>
  </preferences>
  <filters>
    <Criteria field=\"securityPolicy.id\"
      operator=\"EQUALS\">56865
    </Criteria>
  </filters>
</ServiceRequest>
```


Web Application API

Use these API functions to manage web applications in your WAF license.

[Current web application count](#)

[Get details on a web application](#)

[Search web applications](#)

[Create web application](#)

[Update web application](#)

[Update web applications \(bulk\)](#)

[Delete web application](#)

[Delete web applications \(bulk\)](#)

[Web application asset details](#)



Current web application count

Returns the total number of web applications licensed for WAF and in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/count/waf/webapp/`

Methods allowed: GET

Input

No input elements are available.

Permissions

User must have the WAF module enabled

User must have "API ACCESS" permission

Count includes web apps licensed for WAF and in the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/count/waf/webapp
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>72</count>
</ServiceResponse>
```

Get details on a web application

Returns details about a specific web application licensed for WAF, within the user's scope. Want to find a web application ID to use as input? See [Search web applications](#).

URL: `https://<baseurl>/qps/rest/1.0/get/waf/webapp/<id>`

Methods allowed: GET

Input

The element "id" (Integer) is required, where "id" identifies the web application ID of interest.

Permissions

User must have WAF module enabled

User must have "API ACCESS" permission

Output includes web app licensed for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/get/waf/webapp/60582
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <WebApp>
      <id>60582</id>
      <uuid>dd42a1e8-245e-44a6-a14c-24cb5541ff56</uuid>
      <name><![CDATA[DEMO SITE]]></name>
      <owner>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
```

```
<lastname>Smith</lastname>
</owner>
<created>2016-08-08T16:37:28Z</created>
<createdBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-08-09T11:47:28Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<url>https://demo-suite.mydomain.com</url>
<originServerAddress>http://site-
origin.mydomain.com</originServerAddress>
<status>ACTIVE</status>
<proxiedHostnames>>false</proxiedHostnames>
<isStagingModeEnabled>>true</isStagingModeEnabled>
<isSslEnabled>>true</isSslEnabled>
<sslStatus>OK</sslStatus>
<urls>
  <string>http://demo-suite-alias.mydomain.com</string>
</urls>
<securityPolicy>
  <id>4401</id>
  <uuid>14072e96-e472-48dd-8011-19e7773830a6</uuid>
  <name><![CDATA[Custom security policy]]></name>
</securityPolicy>
<clusters>
  <Cluster>
    <id>3001</id>
    <uuid>44e660e3-abbb-4659-a4fe-42e37f2c51fa</uuid>
    <name><![CDATA[QWAF1]]></name>
  </Cluster>
</clusters>
<rules/>
<certificateMetadata><![CDATA[{"fileName":"WEB APP
```

```
P04.crt", "commonName": "..."]}]>  
</certificateMetadata>  
  
<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>  
  </WebApp>  
</data>  
</ServiceResponse>
```

Search web applications

Finds web applications in the user's account matching the search criteria.

URL: `https://<baseurl>/qps/rest/1.0/search/waf/webapp/`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. These elements are optional and act as filters. When multiple elements are specified, parameters are combined using a logical AND.

Element	Supported Search Operators
id (Long)	EQUALS, NOT EQUALS
uuid (UUID)	EQUALS, NOT EQUALS
name (Text)	CONTAINS, EQUALS, NOT EQUALS
url (Text)	CONTAINS, EQUALS, NOT EQUALS
tags.tag.id (Long)	EQUALS, NOT EQUALS
tags.tag.name (Text)	CONTAINS, EQUALS, NOT EQUALS
originServerAddress (Text)	CONTAINS, EQUALS, NOT EQUALS
status	CONTAINS, EQUALS, NOT EQUALS
proxiedHostnames (Boolean)	EQUALS, NOT EQUALS
isStagingModeEnabled (Boolean)	EQUALS, NOT EQUALS
isSslEnabled (Boolean)	EQUALS, NOT EQUALS
sslStatus	EQUALS, NOT EQUALS
urls.value (Text)	CONTAINS, EQUALS, NOT EQUALS
securityPolicy.id (Long)	EQUALS, NOT EQUALS
securityPolicy.uuid (UUID)	EQUALS, NOT EQUALS
securityPolicy.name (Text)	CONTAINS, EQUALS, NOT EQUALS
clusters.cluster.id (Long)	EQUALS, NOT EQUALS
clusters.cluster.name (Text)	CONTAINS, EQUALS, NOT EQUALS
clusters.cluster.uuid (UUID)	EQUALS, NOT EQUALS
rules.rule.id (Long)	EQUALS, NOT EQUALS
rules.rule.uuid (UUID)	EQUALS, NOT EQUALS

rules.rule.name (Text)	CONTAINS, EQUALS, NOT EQUALS
rules.rule.criterion (Text)	CONTAINS, EQUALS, NOT EQUALS
rules.rule.action	CONTAINS, EQUALS, NOT EQUALS
enableAuthenticatedScanning (Boolean)	EQUALS, NOT EQUALS
lastComment (Text)	CONTAINS, EQUALS, NOT EQUALS

Permissions

User must have the WAF module enabled

User must have "API ACCESS" permission

Output includes web apps licensed for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/search/waf/webapp/ --
data
```

```
"<?xml version="1.0" ?>
<ServiceRequest>
  <filters>
    <Criteria field="clusters.cluster.name\"
operator="CONTAINS\">proxysset</Criteria>
    <Criteria field="status\"
operator="EQUALS\">INACTIVE</Criteria>
  </filters>
</ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <hasMoreRecords>>false</hasMoreRecords>
  <data>
    <WebApp>
```

```
<id>64223</id>
<uuid>c23f5881-ad62-460e-a30c-50f89813028f</uuid>
<name><![CDATA[API Test]]></name>
<owner>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</owner>
<created>2016-08-09T19:10:07Z</created>
<createdBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-08-09T19:10:07Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<url>http://api-test.eng.qualys.com</url>

<originServerAddress>http://origin.eng.qualys.com</originServerAddress>
<status>INACTIVE</status>
<proxiedHostnames>>false</proxiedHostnames>
<isStagingModeEnabled>>true</isStagingModeEnabled>
<isSslEnabled>>false</isSslEnabled>
<urls/>
<securityPolicy>
  <id>4202</id>
  <uuid>f04bf522-3607-4754-9b25-7b88e100444b</uuid>
  <name><![CDATA[Standard Security]]></name>
</securityPolicy>
<clusters>
  <Cluster>
    <id>3005</id>
    <uuid>44151068-9b7b-4e18-9e50-604df4931f31</uuid>
```

```
    <name><![CDATA[PROXYSET NO APPLIANCES]]></name>
  </Cluster>
  <Cluster>
    <id>3006</id>
    <uuid>a3dec00c-a288-4ece-b872-1000f24f677c</uuid>
    <name><![CDATA[PROXYSET API TEST]]></name>
  </Cluster>
</clusters>
<rules>
  <WebAppRule>
    <id>1002</id>
    <uuid>778a6bf4-8110-421f-a9c1-056639183736</uuid>
    <name><![CDATA[AC by country]]></name>
    <action>INCREASE_THREAT_LEVEL</action>
    <criterion><![CDATA[AL]]></criterion>
  </WebAppRule>
</rules>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
  <lastComment><![CDATA[These are the latest
comments]]></lastComment>
  <tags>
    <Tag>
      <id>7530430</id>
      <name><![CDATA[Cloud Agent]]></name>
    </Tag>
  </tags>
</WebApp>
</data>
</ServiceResponse>
```

Create web application

Create a web application asset that you want to monitor using WAF.

URL: `https://<baseurl>/qps/rest/1.0/create/waf/webapp`

Methods allowed: POST

Input

Required elements are listed below. Other elements are optional. See [Web application asset details](#).

name (Text)	rules.WebAppRule.name (Text)
url (Text)	rules.WebAppRule.action
originServerAddress (Text)	rules.WebAppRule.criterion (Text)
url.string	clusters.cluster.id
securityPolicy	privateKey (Text) (when SSL required)
securityPolicy.id (Long)	certificate (Text) (when SSL required)
tags.tag.id (Not required if tags.tag.name is passed)	passphrase (Text) (when SSL required)
tags.tag.name (Not required if tags.tag.id is passed)	

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Create WAF Asset" permission

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml" https://qualysapi.qualys.com/qps/rest/1.0/create/waf/webapp --data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <data>
    <WebApp>
      <name>DEMO SITE</name>
```

```
<url>http://demo-suite.mydomain.com</url>
<originServerAddress>http://site-
origin.mydomain.com</originServerAddress>
<urls><string>http://demo-suite-
alias.mydomain.com</string></urls>
<securityPolicy>
  <id>4201</id>
</securityPolicy>
<rules>
  <WebAppRule>
    <name>ALLOW AF</name>
    <action>ALLOW</action>
    <criteria>AF</criteria>
  </WebAppRule>
</rules>
<tags>
  <Tag>
    <name>Cloud Agent</name>
  </Tag>
</tags>
</WebApp>
</data>
</ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <WebApp>
      <id>65021</id>
      <uuid>c17a3bf3-52c1-4797-a465-22b104beac7c</uuid>
      <name><![CDATA[DEMO SITE]]></name>
      <owner>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
```

```
<lastname>Smith</lastname>
</owner>
<created>2016-08-09T19:26:35Z</created>
<createdBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-08-09T19:26:35Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<url>http://demo-suite.mydomain.com</url>
<originServerAddress>http://site-
origin.mydomain.com</originServerAddress>
<status>PENDING_DEPLOY</status>
<proxiedHostnames>>false</proxiedHostnames>
<isStagingModeEnabled>>true</isStagingModeEnabled>
<isSslEnabled>>false</isSslEnabled>
<urls>
  <string>http://demo-suite-alias.mydomain.com</string>
</urls>
<securityPolicy>
  <id>4201</id>
  <uuid>5ae116b9-0df1-4b0b-ba34-b4aa35eff92f</uuid>
  <name><![CDATA[Pass-through]]></name>
</securityPolicy>
<clusters/>
<rules>
  <WebAppRule>
    <id>1201</id>
    <uuid>70c69ee4-68dc-43f9-86a3-4ab951c0da26</uuid>
    <name><![CDATA[ALLOW AF]]></name>
    <action>ALLOW</action>
    <criteria><![CDATA[AF]]></criteria>
  </WebAppRule>
</rules>
```

```
<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
  <tags>
    <Tag>
      <id>7530430</id>
      <name><![CDATA[Cloud Agent]]></name>
    </Tag>
  </tags>
</WebApp>
</data>
</ServiceResponse>
```

Update web application

Update a web application asset in the user’s account. You can update all fields except system fields such as last modification date.

URL: `https://<baseurl>/qps/rest/1.0/update/waf/webapp/<id>`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. All elements are optional. See [Web application asset details](#).

name (Text)	rules
url (Text)	rules.WebAppRule.name (Text)
originServerAddress (Text)	rules.WebAppRule.action
isStagingModeEnabled	rules.WebAppRule.criterion (Text)
urls	enableAuthenticatedScanning
url.string	tags
securityPolicy	tags.tag.name
securityPolicy.id (Long)	tags.tag.id
clusters	privateKey (Text)
clusters.cluster.id	certificate (Text)
chain (Text)	passphrase (Text)
proxiedHostnames	

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Update WAF Asset" permission
- Web application must be licensed in user’s subscription
- Web application must be within the user’s scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/update/waf/webapp/
6174079 --data

"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <data>
    <WebApp>
      <url>https://demo-suite.mydomain.com</url>
      <lastComment>YET ANOTHER COMMENT</lastComment>
      <chain>
LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tDQpNSU1FT1RDQ0F5R2dBd01CQWdJQkFEQU5CZ
2txaGtpRz13MEJBUBVVGQURDQm9ERUxNQWtHQTFVRUJ0TUNWVWk14DQpFekFSQmdOVkJBZ1RDa0
5oYkdsbWlZSnVhV0V4R1RBVEJnTlZCQWNUREZKbFpIZHZiMlFnUTJsMGVURVVNQklHDQpBMVY
FQ2hNTFVYVmhISGx6SUVsdVl5NHhEakFNQmdOVk
...
      </chain>
      <privateKey>
LS0tLS1CRUdJTiBSU0EgUFJJKFURSBLRVktLS0tLQ0KTU1JRW9nSUJBQUtDQVFFQXNjv1BsU
Ww3N2VBaFFoUjdlSlFWd0NhdTBOa0oySUXWaTJQkYjejlYU3R0Y1FuMA0KVEdoRjFuZ2xXY3
RiMmhJc3I0VFBvSVpweTlueFc1RmZVbFpFeXl jVmt jQkhyaw1HQm9VOTJMUkVDYzZlMGlySw0
KblFVLzJzV2M3YTEzctBGNUdKaE05TDdlU04
...
      </privateKey>
      <certificate>
LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tDQpNSU1FUURDQ0F5aWdBd01CQWdJQkFUQU5CZ
2txaGtpRz13MEJBUBVVGQURDQmXURUxNQWtHQTFVRUJ0TUNWVWk14DQpFekFSQmdOVkJBZ1RDa0
5oYkdsbWlZSnVhV0V4R1RBVE
...
      </certificate>
      <passphrase>xxxxxxxxxxxxxxxx</passphrase>
    </WebApp>
  </data>
</ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/1.0/
waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <WebApp>
```

```

<id>6174079</id>
<uuid>45421e43-6821-4172-b395-8eabd9c1ad17</uuid>
<name><![CDATA[WEB APP P04]]></name>
<owner>
  <id>2049309</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</owner>
<created>2016-07-15T01:44:03Z</created>
<createdBy>
  <id>2049309</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-07-15T02:03:43Z</updated>
<updatedBy>
  <id>2049309</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<url>https://demo-suite.mydomain.com</url>
<originServerAddress>http://site-
origin.mydomain.com</originServerAddress>
<status>INACTIVE</status>
<proxiedHostnames>>false</proxiedHostnames>
<isStagingModeEnabled>>true</isStagingModeEnabled>
<isSslEnabled>>true</isSslEnabled>
<sslStatus>OK</sslStatus>
<urls>
  <string>http://demo-suite-alias.mydomain.com</string>
</urls>
<securityPolicy>
  <id>142265</id>
  <uuid>f99e9ac4-8b83-4aad-ae4e-4923867a0d6f</uuid>
  <name><![CDATA[0.8.1-18]]></name>
</securityPolicy>
<clusters/>
<rules>
  <WebAppRule>
    <id>57404</id>
    <uuid>0184c3c5-1ff2-4d1b-9d16-24e1fb1df2ed</uuid>
    <name><![CDATA[ALLOW AF]]></name>
    <action>ALLOW</action>
    <criteria><![CDATA[AF]]></criteria>
  </WebAppRule>
</rules>

```

```
<certificateMetadata><![CDATA[{ "fileName": "WEB APP  
P04.crt", "commonName": "..."}]]>  
</certificateMetadata>  
<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>  
<lastComment><![CDATA[ANOTHER COMMENT]]></lastComment>  
</WebApp>  
</data>  
</ServiceResponse>
```

Update web applications (bulk)

Update multiple web application assets in the user’s account.

URL: `https://<baseurl>/qps/rest/1.0/update/waf/webapp`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. All elements are optional. See [Web application asset details](#)

name (Text)	rules
url (Text)	rules.WebAppRule.name (Text)
originServerAddress (Text)	rules.WebAppRule.action
isStagingModeEnabled	rules.WebAppRule.criterion (Text)
urls	enableAuthenticatedScanning
url.string	tags
securityPolicy	tags.tag.name
securityPolicy.id (Long)	tags.tag.id
clusters	privateKey (Text)
clusters.cluster.id	certificate (Text)
chain (Text)	passphrase (Text)
proxiedHostnames	

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Update WAF Asset" permission
- Web application must be licensed in user’s subscription
- Web application must be within the user’s scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/update/waf/webapp --data
"<?xml version=\"1.0\" ?>
```

```
<ServiceRequest>
  <filters>
    <Criteria field=\"isStagingModeEnabled\"
operator=\"EQUALS\">true</Criteria>
  </filters>
  <data>
    <WebApp>
      <securityPolicy>
        <id>5202</id>
      </securityPolicy>
    </WebApp>
  </data>
</ServiceRequest>
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>3</count>
  <data>
    <WebApp>
      <id>60582</id>
      <uuid>dd42ale8-245e-44a6-a14c-24cb5541ff56</uuid>
      <name><![CDATA[QWAF1]]></name>
      <owner>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </owner>
      <created>2016-08-08T16:37:28Z</created>
      <createdBy>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </createdBy>
      <updated>2016-08-09T20:09:13Z</updated>
      <updatedBy>
        <id>354597</id>
```

```
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </updatedBy>
  <url>https://site1.mydomain.com</url>
  <originServerAddress>http://site1-
origin.mydomain.com</originServerAddress>
  <status>ACTIVE</status>
  <proxiedHostnames>>false</proxiedHostnames>
  <isStagingModeEnabled>>true</isStagingModeEnabled>
  <isSslEnabled>>true</isSslEnabled>
  <sslStatus>OK</sslStatus>
  <urls>
    <string>http://site1-alias.mydomain.com</string>
  </urls>
  <securityPolicy>
    <id>5202</id>
    <uuid>771e71ce-5ee5-4f93-a774-454a5ca09153</uuid>
    <name><![CDATA[API SEC POLICY]]></name>
  </securityPolicy>
  <clusters>
    <Cluster>
      <id>3001</id>
      <uuid>44e660e3-abbb-4659-a4fe-42e37f2c51fa</uuid>
      <name><![CDATA[QWAF1]]></name>
    </Cluster>
  </clusters>
  <rules/>
  <certificateMetadata><![CDATA[{"fileName":"WEB APP
P04.crt","commonName":"..."}]]>
</certificateMetadata>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
</WebApp>
<WebApp>
  <id>64223</id>
  <uuid>c23f5881-ad62-460e-a30c-50f89813028f</uuid>
  <name><![CDATA[API Test APP]]></name>
  <owner>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
```

```
    <lastname>Smith</lastname>
  </owner>
  <created>2016-08-09T19:10:07Z</created>
  <createdBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </createdBy>
  <updated>2016-08-09T20:09:19Z</updated>
  <updatedBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </updatedBy>
  <url>http://site2.mydomain.com</url>
  <originServerAddress>http://site2-
origin.mydomain.com</originServerAddress>
  <status>INACTIVE</status>
  <proxiedHostnames>>false</proxiedHostnames>
  <isStagingModeEnabled>>true</isStagingModeEnabled>
  <isSslEnabled>>false</isSslEnabled>
  <urls/>
  <securityPolicy>
    <id>5202</id>
    <uuid>771e71ce-5ee5-4f93-a774-454a5ca09153</uuid>
    <name><![CDATA[API SEC POLICY]]></name>
  </securityPolicy>
  <clusters>
    <Cluster>
      <id>3005</id>
      <uuid>44151068-9b7b-4e18-9e50-604df4931f31</uuid>
      <name><![CDATA[PROXYSET NO APPLIANCES]]></name>
    </Cluster>
    <Cluster>
      <id>3006</id>
      <uuid>a3dec00c-a288-4ece-b872-1000f24f677c</uuid>
      <name><![CDATA[PROXYSET API TEST]]></name>
    </Cluster>
  </clusters>
```

```
<rules>
  <WebAppRule>
    <id>1002</id>
    <uuid>778a6bf4-8110-421f-a9c1-056639183736</uuid>
    <name><![CDATA[AC by country]]></name>
    <action>INCREASE_THREAT_LEVEL</action>
    <criteria><![CDATA[AL]]></criteria>
  </WebAppRule>
</rules>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
<lastComment><![CDATA[These are the latest
comments]]></lastComment>
<tags>
  <Tag>
    <id>7530429</id>
    <name><![CDATA[Unassigned Business Unit]]></name>
  </Tag>
  <Tag>
    <id>7530430</id>
    <name><![CDATA[Cloud Agent]]></name>
  </Tag>
</tags>
</WebApp>
<WebApp>
  <id>65021</id>
  <uuid>c17a3bf3-52c1-4797-a465-22b104beac7c</uuid>
  <name><![CDATA[WEB APP P04]]></name>
  <owner>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </owner>
  <created>2016-08-09T19:26:35Z</created>
  <createdBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </createdBy>
```



```
<updated>2016-08-09T20:12:13Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<url>http://site3.mydomain.com</url>
<originServerAddress>http://site3-
origin.mydomain.com</originServerAddress>
<status>INACTIVE</status>
<proxiedHostnames>>false</proxiedHostnames>
<isStagingModeEnabled>>true</isStagingModeEnabled>
<isSslEnabled>>false</isSslEnabled>
<urls>
  <string>http://site3-alias.mydomain.com</string>
</urls>
<securityPolicy>
  <id>5202</id>
  <uuid>771e71ce-5ee5-4f93-a774-454a5ca09153</uuid>
  <name><![CDATA[API SEC POLICY]]></name>
</securityPolicy>
<clusters/>
<rules>
  <WebAppRule>
    <id>1201</id>
    <uuid>70c69ee4-68dc-43f9-86a3-4ab951c0da26</uuid>
    <name><![CDATA[ALLOW AF]]></name>
    <action>ALLOW</action>
    <criterion><![CDATA[AF]]></criterion>
  </WebAppRule>
</rules>

<enableAuthenticatedScanning>>false</enableAuthenticatedScanning>
<tags>
  <Tag>
    <id>7530429</id>
    <name><![CDATA[Unassigned Business Unit]]></name>
  </Tag>
  <Tag>
    <id>7530430</id>
```

Chapter 2 — Web Application API

Update web applications (bulk)

```
        <name><![CDATA[Cloud Agent]]></name>
      </Tag>
    </tags>
  </WebApp>
</data>
</ServiceResponse>
```

Delete web application

Delete a web application configuration in user's account.

URL: `https://<baseurl>/qps/rest/1.0/delete/waf/webapp/<id>`

Methods allowed: POST

Input

The "id" (Long) element is required. This identifies the web application asset you want to delete.

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Delete WAF Asset" permission
- Web application must be licensed in user's subscription
- Web application must be within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/delete/waf/webapp/
5739473
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <WebApp>
      <id>5739473</id>
    </WebApp>
  </data>
</ServiceResponse>
```

Delete web applications (bulk)

Delete multiple web application assets in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/delete/waf/webapp`

Methods allowed: POST

Input

All search forms supported by `/qps/rest/1.0/search/waf/webapp` are valid.

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Delete WAF Asset" permission
- Web application must be licensed in user's subscription
- Web application must be within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
http://qualysapi.qualys.com/qps/rest/1.0/delete/waf/webapp --data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <filters>
    <Criteria field=\"name\" operator=\"CONTAINS\">proxied
  </Criteria>
</filters>
</ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/webapp.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>2</count>
  <data>
```

```
<WebApp>
  <id>5755273</id>
</WebApp>
<WebApp>
  <id>5755274</id>
</WebApp>
</data>
</ServiceResponse>
```

Web application asset details

The <WebApp> element includes sub elements used to define a web application. A reference of these elements is provided below.

Element (Data Type)	Description
id	(Long) Web app asset identifier on Qualys Cloud Platform.
uuid	(UUID) Web app asset identifier within the Qualys Cloud WAF Service.
name	(Text) The name of the web app asset as defined by a user. This is unique in subscription. Valid action: Update
owner	(Text) The user for Qualys Cloud Platform who owns this web app asset.
owner.id	(Long) The user ID of the web app asset owner.
owner.username	(Text) The user name of the web app asset owner.
owner.firstname	(Text) The first name of the web app asset owner.
owner.lastname	(Text) The last name of the web app asset owner.
created	(Date) The date/time when the web app asset was created.
createdBy	(Text) The user for Qualys Cloud Platform who created this web app asset.
createdBy.id	(Long) The user ID who created the web app asset.
createdBy.username	(Text) The user name who created the web app asset.
createdBy.firstname	(Text) The first name of the user who created the web app asset.
createdBy.lastname	(Text) The last name of the user who created the web app asset.
updated	(Date) The date/time when the web app asset was last updated.
updatedBy	(Text) The user for Qualys Cloud Platform who updates this web app asset.
updatedBy.id	(Long) The user ID who last updated the web app asset.
updatedBy.username	(Text) The user name who last updated the web app asset.
updatedBy.firstname	(Text) The first name of the user who updated the web app asset.
updatedBy.lastname	(Text) The last name of the user who updated the web app asset.
url	(Text) The incoming URL used. Any requests received that match that URL should be routed to this web application. Valid action: Update

Element (Data Type)	Description
originServerAddress	(Text) The real (protected) web server URL where received requests should be routed to. Valid action: Update
status	(Text) Status information: INACTIVE, ACTIVE, PENDING_DEPLOY (updates not yet pushed to WAF appliances), DEGRADED (some WAF appliances may be down).
sslStatus	(Text) Status of SSL certificate provided (The status is returned in this priority order): - SELFSIGNED: Certificate is self-signed - URLINVALID: Certificate Common Name or Alternative Names don't match the web application URL - INVALID: Certificate is expired - OK: Certificate seems OK
isStagingModeEnabled	(Boolean) Indicates whether WAF is in staging mode (non blocking mode). In non blocking mode, requests are never blocked, this is used for testing purpose to observe the WAF behavior and check that turning blocking mode on does not impact production traffic. Valid action: Update
isSslEnabled	(Boolean) True if any URL declared is using HTTPS. This means that valid SSL URL is required (certificate/private key and even CA chain, if needed)
urls	List of alias URLs for the web app asset (url.string for each alias). Valid action: Update
url.string	(Text) An alias URL for the web app asset. Valid action: Update
securityPolicy	The security policy assigned to the web app asset. Valid action: Update
securityPolicy.id	(Long) The ID of the security policy assigned to the web app asset.
securityPolicy.uuid	(UUID) The UUID of the security policy assigned to the web app asset.
securityPolicy.name	(Text) The name of the security policy created by a user, assigned to the web app asset.
clusters	(Text) List of WAF clusters used to deploy the web app asset. Valid action: Update
clusters.cluster.id	(Text) A WAF cluster ID used to deploy the web app asset.

Element (Data Type)	Description
clusters.cluster.uuid	(UUID) A UUID for a WAF cluster used to deploy the web app asset.
clusters.cluster.name	(Text) The name of a WAF cluster, created by a user, used to deploy the web app asset.
rules	(Text) List of access control rules applicable for the web app asset. The list is in XML format.
rules.WebAppRule.id	(Long) The ID of the access control rule applicable for the web app asset within the Qualys Cloud Platform.
rules.WebAppRule.uuid	(UUID) The ID of the access control rule applicable for the web app asset within the WAF module.
rules.WebAppRule.name	(Text) The name of the access control rule applicable for the web app asset.

Element (Data Type)	Description
rules.WebAppRule.action	<p>Action to be implemented when the defined access control rule criterion is met and the access control rule is triggered.</p> <p>EXEMPT: Allow traffic without inspection.</p> <p>DECREASE_THREAT_LEVEL: Decrease threat level when matching traffic is detected.</p> <p>ALLOW: Allow security protections applied as normal.</p> <p>INCREASE_THREAT_LEVEL: Increase threat level when matching traffic is detected.</p> <p>ALWAYS_BLOCK: Stop matching traffic at point of access and return blocked response.</p> <p>ENABLE_BLOCKING: Block requests and/or responses based on security policy settings.</p> <p>DISABLE_BLOCKING: Disable blocking of requests and/or responses based on security policy settings.</p> <p>ENABLE_REQUEST_HEADERS_INSPECTION: Inspect the chosen HTTP(S) request header.</p> <p>DISABLE_REQUEST_HEADERS_INSPECTION: Do not inspect the chosen HTTP(S) request header.</p> <p>ENABLE_REQUEST_BODY_INSPECTION: Inspect the chosen HTTP(S) request body.</p> <p>DISABLE_REQUEST_BODY_INSPECTION: Do not inspect the chosen HTTP(S) request body.</p> <p>ENABLE_REQUEST_PARAMS_INSPECTION: Inspect the chosen HTTP(S) request parameters.</p> <p>DISABLE_REQUEST_PARAMS_INSPECTION: Do not inspect the chosen HTTP(S) request parameters.</p> <p>ENABLE_REQUEST_URI_INSPECTION: Inspect the chosen HTTP(S) request URI.</p> <p>DISABLE_REQUEST_URI_INSPECTION: Do not inspect the chosen HTTP(S) request URI.</p> <p>ENABLE_RESPONSE_HEADERS_INSPECTION: Inspect the chosen HTTP(S) response headers.</p> <p>DISABLE_RESPONSE_HEADERS_INSPECTION: Do not inspect the chosen HTTP(S) response headers.</p> <p>ENABLE_RESPONSE_BODY_INSPECTION: Inspect the chosen HTTP(S) response body.</p> <p>DISABLE_RESPONSE_BODY_INSPECTION: Do not inspect the chosen HTTP(S) response body.</p>
rules.webapp.criterion	(Text) The criterion that defines the condition to trigger the access control rule applicable for the web app asset.
enableAuthenticatedScanning	(Boolean) Indicates whether authenticated scanning is enabled for the web app asset. Valid action: Update

Element (Data Type)	Description
authenticatedScanningToken	(UUID) The token used for authenticated scanning.
tags	(Text) List of tags associated with the web app asset. Valid action: Update
tags.tag.id	(Long) The ID of a tag associated with the web app asset.
tags.tag.name	(Text) The name, defined by a user, of a tag associated with the web app asset.
chain	(Text) SSL certificate chain in PEM format base64 encoded. Valid action: Update
privateKey	(Text) SSL private key in PEM format base64 encoded. Valid action: Update
certificate	(Text) SSL certificate in PEM format base64 encoded. Valid action: Update
passphrase	(Text) When SSL configuration is used, the password used to encrypt the private key. This password is never stored on the Qualys Cloud Platform. Note: This password needs to be declared on any WAF appliance configured for the web app asset. Valid action: Update
proxiedHostnames	(Boolean) If TRUE, the requested host name from the web client is rewritten using origin server host name, when request is forwarded to the origin server. If FALSE, the requested host name from the web client is forwarded as is to the origin server.

Cluster API

Use these API functions to manage WAF clusters in the user's subscription.

[Current cluster count](#)

[Get details on clusters](#)

[Search clusters](#)

[Create cluster](#)

[Update cluster name](#)

[Update clusters \(bulk\)](#)

[Delete cluster](#)

[Delete clusters \(bulk\)](#)

[Cluster asset details](#)



Current cluster count

Returns the total number of WAF clusters in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/count/waf/cluster`

Methods allowed: GET

Input

No input elements are available.

Permissions

User must have the WAF module enabled

User must have "API ACCESS" permission

Count includes clusters licensed for WAF and in the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/count/waf/cluster
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>52</count>
</ServiceResponse>
```

Get details on clusters

Returns details about a specific WAF cluster in the user's account. Want to find a cluster ID to use as input? See [Search clusters](#).

URL: `https://<baseurl>/qps/rest/1.0/get/waf/cluster/<id>`

Methods allowed: GET

Input

The element "id" (Integer) is required, where "id" identifies the cluster ID of interest.

Permissions

User must have WAF module enabled

User must have "API ACCESS" permission

Output includes cluster for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/get/waf/cluster/3001
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Cluster>
      <id>3001</id>
      <uuid>44e660e3-abbb-4659-a4fe-42e37f2c51fa</uuid>
      <name><![CDATA[QWAF1]]></name>
      <owner>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
```

```
</owner>
<created>2016-08-08T12:48:33Z</created>
<createdBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-08-08T19:08:13Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<token><![CDATA[E91A49CC-62F1-4372-9FC7-
083B5E630D71]]></token>
<syncDate>2016-08-08T19:08:26Z</syncDate>
<status>ACTIVE</status>
<webApps>
  <WebApp>
    <id>60582</id>
    <uuid>dd42a1e8-245e-44a6-a14c-24cb5541ff56</uuid>
    <name><![CDATA[QWAF1]]></name>
  </WebApp>
</webApps>
<appliances>
  <Appliance>
    <id>1001</id>
    <uuid>64230cac-565c-495f-8a58-eeaa919a69f1</uuid>
    <name><![CDATA[64230CAC-565C-495F-8A58-
EEAA919A69F1]]></name>
  </Appliance>
</appliances>
<tags>
  <Tag>
    <id>7530430</id>
    <name><![CDATA[Cloud Agent]]></name>
  </Tag>
</tags>
<description><![CDATA[Cluster description]]></description>
```

```
<redirectUrl>http://mydomain.com</redirectUrl>  
<httpErrorCode>302</httpErrorCode>  
</Cluster>  
</data>  
</ServiceResponse>
```

Search clusters

Finds WAF clusters in the user’s account matching the search criteria.

URL: `https://<baseurl>/qps/rest/1.0/search/waf/cluster`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. These elements are optional and act as filters. When multiple elements are specified, parameters are combined using a logical AND.

Element	Supported Search Operators
id (Long)	EQUALS, NOT EQUALS
uuid (UUID)	EQUALS, NOT EQUALS
name (Text)	CONTAINS, EQUALS, NOT EQUALS
owner.id (Long)	EQUALS
owner.username (Text)	CONTAINS, EQUALS, NOT EQUALS
owner.firstname (Text)	CONTAINS, EQUALS, NOT EQUALS
owner.lastname (Text)	CONTAINS, EQUALS, NOT EQUALS
created	EQUALS, NOT EQUALS, GREATER, LESSER
createdBy.id(Long)	EQUALS
createdBy.username (Text)	CONTAINS, EQUALS, NOT EQUALS
createdBy.firstname (Text)	CONTAINS, EQUALS, NOT EQUALS
createdBy.lastname(Text)	CONTAINS, EQUALS, NOT EQUALS
updated	EQUALS, NOT EQUALS, GREATER, LESSER
updatedBy.id (Long)	EQUALS
updatedBy.username (Text)	CONTAINS, EQUALS, NOT EQUALS
updatedBy.firstname (Text)	CONTAINS, EQUALS, NOT EQUALS
updatedBy.lastname(Text)	CONTAINS, EQUALS, NOT EQUALS
token (Text)	EQUALS
syncDate	EQUALS, NOT EQUALS, GREATER, LESSER
status	EQUALS, NOT EQUALS
appliance.id (Long)	EQUALS

appliance.uuid (UUID)	EQUALS
appliance.name (Text)	CONTAINS, EQUALS, NOT EQUALS
tags.id (Long)	EQUALS, NOT EQUALS
tags.name (Text)	CONTAINS, EQUALS, NOT EQUALS

Permissions

User must have the WAF module enabled
 User must have "API ACCESS" permission
 Output includes clusters licensed for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/search/waf/cluster --
data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <filters>
    <Criteria field=\"status\"
operator=\"EQUALS\">ACTIVE</Criteria>
  </filters>
</ServiceRequest>"
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <hasMoreRecords>>false</hasMoreRecords>
  <data>
    <Cluster>
      <id>3001</id>
      <uuid>44e660e3-abbb-4659-a4fe-42e37f2c51fa</uuid>
      <name><![CDATA[QWAF1]]></name>
      <owner>
```

```
<id>354597</id>
<username>acme_js</username>
<firstname>Jill</firstname>
<lastname>Smith</lastname>
</owner>
<created>2016-08-08T12:48:33Z</created>
<createdBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</createdBy>
<updated>2016-08-08T19:08:13Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<token><![CDATA[E91A49CC-62F1-4372-9FC7-
083B5E630D71]]></token>
<syncDate>2016-08-08T19:12:26Z</syncDate>
<status>ACTIVE</status>
<webApps>
  <WebApp>
    <id>60582</id>
    <uuid>dd42a1e8-245e-44a6-a14c-24cb5541ff56</uuid>
    <name><![CDATA[QWAF1]]></name>
  </WebApp>
</webApps>
<appliances>
  <Appliance>
    <id>1001</id>
    <uuid>64230cac-565c-495f-8a58-eeaa919a69f1</uuid>
    <name><![CDATA[64230CAC-565C-495F-8A58-
EEAA919A69F1]]></name>
  </Appliance>
</appliances>
<tags>
  <Tag>
    <id>7530430</id>
```

```
        <name><![CDATA[Cloud Agent]]></name>
    </Tag>
</tags>
<description><![CDATA[Cluster description
added]]></description>
    <redirectUrl>http://mydomain.com</redirectUrl>
    <httpErrorCode>302</httpErrorCode>
</Cluster>
</data>
</ServiceResponse>
```

Create cluster

Create a WAF cluster.

URL: `https://<baseurl>/qps/rest/1.0/create/waf/cluster`

Methods allowed: POST

Input

Required elements are listed below. Other elements are optional. See [Cluster asset details](#).

name (Text)	httpErrorCode (Long) (Required only if redirectUrl is specified)
redirectUrl (Required only if httpErrorCode is specified)	

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Manage WAFs" permission

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml" https://qualysapi.qualys.com/qps/rest/1.0/create/waf/cluster --data
```

```
"<?xml version=\"1.0\"?>
<ServiceRequest>
  <data>
    <Cluster>
      <name>CHECK ORDER</name>
      <tags>
        <Tag>
          <name>CLUSTER API</name>
        </Tag>
        <Tag>
          <name>CLUSTERS</name>
        </Tag>
      </tags>
      <description>XSD vs RESPONSE XML</description>
      <redirectUrl>http://mydomain.com</redirectUrl>
      <httpErrorCode>301</httpErrorCode>
    </Cluster>
```

```
</data>
</ServiceRequest>"
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/1.0/w
af/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Cluster>
      <id>225802</id>
      <uuid>8ffd9a88-c5c6-4add-bd31-3621e55fbaf5</uuid>
      <name><![CDATA[CHECK ORDER]]></name>
      <owner>
        <id>2049309</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </owner>
      <created>2016-07-14T21:37:54Z</created>
      <createdBy>
        <id>2049309</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </createdBy>
      <updated>2016-07-14T21:37:54Z</updated>
      <updatedBy>
        <id>2049309</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </updatedBy>
      <token><![CDATA[DC7947DD-41E4-470D-AC9D-9531BA07973E]]></token>
      <status>NO_SENSORS</status>
      <webApps/>
      <appliances/>
      <tags>
        <Tag>
          <id>2260421</id>
          <name><![CDATA[CLUSTERS]]></name>
        </Tag>
        <Tag>
          <id>2251423</id>
          <name><![CDATA[CLUSTER API]]></name>
        </Tag>
```

Chapter 3 — Cluster API

Create cluster

```
</tags>
<description><![CDATA[XSD vs RESPONSE XML]]></description>
<redirectUrl>http://mydomain.com</redirectUrl>
<httpErrorCode>301</httpErrorCode>
</Cluster>
</data>
</ServiceResponse>
```

Update cluster name

Update a WAF cluster in the user’s account.

URL: `https://<baseurl>/qps/rest/1.0/update/waf/cluster/<id>`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. These elements are optional. See [Cluster asset details](#).

name (Text)	tags
description (Text)	tags.tag.id (Long)
redirectUrl	tags.tag.name (Text)
httpErrorCode (Long)	

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Manage WAFs" permission
- Cluster must be licensed in user’s subscription
- Cluster must be within the user’s scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/update/waf/cluster/3005
--data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <data>
    <Cluster><name>PROXYSET NO APPLIANCES</name></Cluster>
  </data>
</ServiceRequest>"
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Cluster>
      <id>3005</id>
      <uuid>44151068-9b7b-4e18-9e50-604df4931f31</uuid>
      <name><![CDATA[PROXYSET NO APPLIANCES]]></name>
      <owner>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </owner>
      <created>2016-08-08T19:15:17Z</created>
      <createdBy>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </createdBy>
      <updated>2016-08-08T19:18:37Z</updated>
      <updatedBy>
        <id>354597</id>
        <username>acme_js</username>
        <firstname>Jill</firstname>
        <lastname>Smith</lastname>
      </updatedBy>
      <token><![CDATA[48E7FC0E-A7BA-4661-9188-
8F0FA9ADCC80]]></token>
      <syncDate>2016-08-08T19:18:26Z</syncDate>
      <status>NO_SENSORS</status>
      <webApps/>
      <appliances/>
      <tags/>
    </Cluster>
  </data>
</ServiceResponse>

```


Update clusters (bulk)

Update multiple WAF clusters in the user’s account.

URL: `https://<baseurl>/qps/rest/1.0/update/waf/cluster`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. These elements are optional. See [Cluster asset details](#).

name (Text)	tags
description (Text)	tags.tag.id (Long)
redirectUrl	tags.tag.name (Text)
httpErrorCode (Long)	

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/update/waf/cluster --data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <filters>
    <Criteria field=\"name\" operator=\"CONTAINS\">proxynet</Criteria>
  </filters>
  <data>
    <Cluster>
      <redirectUrl>http://mydomain.com</redirectUrl>
      <httpErrorCode>301</httpErrorCode>
    </Cluster>
  </data>
</ServiceRequest>"
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/1.0/waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>2</count>
  <data>
```

Chapter 3 — Cluster API

Update clusters (bulk)

```
<Cluster>
  <id>3005</id>
  <uuid>44151068-9b7b-4e18-9e50-604df4931f31</uuid>
  <name><![CDATA[PROXYSET NO APPLIANCES]]></name>
  <owner>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </owner>
  <created>2016-08-08T19:15:17Z</created>
  <createdBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </createdBy>
  <updated>2016-08-08T19:29:21Z</updated>
  <updatedBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </updatedBy>
  <token><![CDATA[48E7FC0E-A7BA-4661-9188-8F0FA9ADCC80]]></token>
  <syncDate>2016-08-08T19:28:31Z</syncDate>
  <status>NO_SENSORS</status>
  <webApps/>
  <appliances/>
  <tags/>
  <redirectUrl>http://mydomain.com</redirectUrl>
  <httpErrorCode>301</httpErrorCode>
</Cluster>
<Cluster>
  <id>3006</id>
  <uuid>a3dec00c-a288-4ece-b872-1000f24f677c</uuid>
  <name><![CDATA[PROXYSET API TEST]]></name>
  <owner>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
  </owner>
  <created>2016-08-08T19:24:57Z</created>
  <createdBy>
    <id>354597</id>
    <username>acme_js</username>
    <firstname>Jill</firstname>
    <lastname>Smith</lastname>
```

```
</createdBy>
<updated>2016-08-08T19:29:49Z</updated>
<updatedBy>
  <id>354597</id>
  <username>acme_js</username>
  <firstname>Jill</firstname>
  <lastname>Smith</lastname>
</updatedBy>
<token><![CDATA[24FAF328-99AB-4032-BE1F-817765338F96]]></token>
<syncDate>2016-08-08T19:28:31Z</syncDate>
<status>NO_SENSORS</status>
<webApps/>
<appliances/>
<tags>
  <Tag>
    <id>7530429</id>
    <name><![CDATA[Unassigned Business Unit]]></name>
  </Tag>
</tags>
<description><![CDATA[User to add a description
here]]></description>
<redirectUrl>http://mydomain.com</redirectUrl>
<httpErrorCode>301</httpErrorCode>
</Cluster>
</data>
</ServiceResponse>
```

Delete cluster

Delete a WAF cluster in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/delete/waf/cluster/<id>`

Methods allowed: POST

Input

The "id" (Long) element is required. This identifies the cluster asset you want to delete.

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Manage WAFs" permission
- Cluster must be licensed in user's subscription
- Cluster must be within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/delete/waf/cluster/
122801
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/
waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Cluster>
      <id>122801</id>
    </Cluster>
  </data>
</ServiceResponse>
```

Delete clusters (bulk)

Delete multiple WAF clusters in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/delete/waf/cluster`

Methods allowed: POST

Input

All search forms supported by `/qps/rest/1.0/search/waf/cluster` are valid.

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Manage WAFs" permission
- Cluster must be licensed in user's subscription
- Cluster must be within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/delete/waf/cluster --
data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <filters>
    <Criteria field=\"name\" operator=\"CONTAINS\">redirect
    available</Criteria>
  </filters>
</ServiceRequest>"
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/
waf/cluster.xsd">
  <responseCode>SUCCESS</responseCode>
```

Chapter 3 — Cluster API

Delete clusters (bulk)

```
<count>2</count>
<data>
  <Cluster>
    <id>190459</id>
  </Cluster>
  <Cluster>
    <id>190461</id>
  </Cluster>
</data>
</ServiceResponse>
```

Cluster asset details

The <Cluster> element includes sub elements used to define a WAF cluster. A reference of these elements is provided below.

Element (Data Type)	Description
id	(Long) Cluster asset identifier on Qualys Cloud Platform.
uuid	(UUID) Cluster asset identifier within the Qualys Cloud WAF Service.
name	(Text) The name of the cluster asset as defined by a user. This is unique in subscription. Valid action: Update
owner	(Text) The user for Qualys Cloud Platform who owns this cluster.
owner.id	(Long) The user ID of the WAF cluster asset owner.
owner.username	(Text) The user name of the WAF cluster asset owner.
owner.firstname	(Text) The first name of the WAF cluster asset owner.
owner.lastname	(Text) The last name of the WAF cluster asset owner.
created	(Date) The date/time when the WAF cluster asset was created.
createdBy.id	(Long) The user ID who created the WAF cluster asset.
createdBy.username	(Text) The user name who created the WAF cluster asset.
createdBy.firstname	(Text) The first name of the user who created the WAF cluster asset owner.
createdBy.lastname	(Text) The last name of the user who created the WAF cluster asset owner.
updated	(Date) The date/time when the WAF cluster asset was last updated.
updatedBy	(Text) The user for Qualys Cloud Platform who updates this WAF cluster asset.
updatedBy.id	(Long) The user ID who last updated the WAF cluster asset.
updatedBy.username	(Text) The user name who last updated the WAF cluster asset.
updatedBy.firstname	(Text) The first name of the user who updated the WAF cluster asset.
updatedBy.lastname	(Text) The last name of the user who updated the WAF cluster asset.
token	(Text) The registration token for the WAF cluster asset.

Element (Data Type)	Description
syncDate	(Date) The last synchronization date of assets (between Qualys Cloud platform database and WAF database).
status	(Text) Status information: NO_SENSORS (No appliances are connected to the WAF cluster) INACTIVE (All appliances connected to the WAF cluster are up and ready for service, but the configuration is yet to be deployed) DEGRADED (At least one appliance is connected to the WAF cluster, but other appliances are disconnected) ACTIVE (All appliances connected to the WAF cluster are up and ready for service) ERROR (All appliances connected to the WAF cluster are disconnected)
description	(Text) The description of the WAF cluster asset as defined by a user. Valid action: Update
redirectUrl	Empty or a valid URL used to redirect web client when request cannot be routed to any known web application. Valid action: Update
httpErrorCode	(Long) A valid redirection HTTP code (301/302) used to redirect web client when a request cannot be routed to any existing declared WAF site. 301: Moved permanently 302: Found
tags.id	(Long) The ID of a tag associated with the WAF cluster.
tags.name	(Text) The name, defined by a user, of a tag associated with the WAF cluster.
appliances	The list of appliances that are connected to the WAF cluster. Each appliance entry contains only basic information allowing item identification.
appliance.id	(Long) The ID of the appliance associated with the WAF cluster on Qualys Cloud Platform. (see Appliance asset details)
appliance.uuid	(UUID) The UUID of the appliance within WAF module. (see Appliance asset details)
appliance.name	(Text) Appliance name, so far UUID in upper case as far name is not a field stored in database. (see Appliance asset details)

Appliance API

Use these API functions to manage WAF appliances in the user's subscription.

[Current appliance count](#)

[Get details on appliance](#)

[Search appliances](#)

[Delete appliance](#)

[Appliance asset details](#)



Current appliance count

Returns the total number of WAF appliances in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/count/waf/appliance`

Methods allowed: GET

Input

No input elements are available.

Permissions

User must have the WAF module enabled

User must have "API ACCESS" permission

Count includes appliances licensed for WAF and in the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/count/waf/appliance/
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/appliance.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>4</count>
</ServiceResponse>
```

Get details on appliance

Returns details about a specific WAF appliance in the user's account. Want to find an appliance ID to use as input? See [Appliance asset details](#).

URL: `https://<baseurL>/qps/rest/1.0/get/waf/appliance/:id`

Methods allowed: GET

Input

The element "id" (Integer) is required, where "id" identifies the appliance ID of interest.

Permissions

User must have WAF module enabled

User must have "API ACCESS" permission

Output includes appliance licensed for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "GET" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/get/waf/appliance/142407
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xsd/1.0/
waf/appliance.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Appliance>
      <id>142407</id>
      <uuid>7b7e71a1-63a8-4f67-bc24-163a6d223fed</uuid>
      <name><![CDATA[ 7B7E71A1-63A8-4F67-BC24-163A6D223FED ]]></name>
      <hostname><![CDATA[localhost.localdom]]></hostname>
      <lastPollDate>2016-07-14T18:22:15Z</lastPollDate>
      <applianceCreated>2016-06-23T00:45:41Z</applianceCreated>
      <applianceVersion><![CDATA[1.2.0]]></applianceVersion>
      <status>ACTIVE</status>
      <pollStatus>NOT_POLLING</pollStatus>
      <heartbeatGenerated>2016-07-02T03:06:00Z</heartbeatGenerated>
      <heartbeatProcessed>2016-07-02T03:06:02Z</heartbeatProcessed>
      <systemOs><![CDATA[Linux localhost.localdom 2.6.32-
```

Chapter 4 — Appliance API

Get details on appliance

```
573.12.1.e16.x86_64 #1 SMP Tue Dec 15 21:19:08 UTC 2015
x86_64]]></systemOs>
  <systemRam>4018700288</systemRam>
  <systemType><![CDATA[vmware]]></systemType>
  <systemEc2InstanceId><![CDATA[12344]]></systemEc2InstanceId>
  <systemEc2InstanceType><![CDATA[M3]]></systemEc2InstanceType>
  <systemEc2AmiId><![CDATA[Linux]]></systemEc2AmiId>
  <systemCpusCount>2</systemCpusCount>
  <systemCpusCores>1</systemCpusCores>
  <systemCpusSpeed>1995.192</systemCpusSpeed>
  <systemCpusModel><![CDATA[Intel(R) Xeon(R) CPU E5-2650 0 @
2.00GHz]]></systemCpusModel>
  <configRulesVersion><![CDATA[2016-07-
02T03:03:29.336Z]]></configRulesVersion>
  <configVersion><![CDATA[2016-07-01T20:04:35.618-
07:00]]></configVersion>
  <configGenerated>2016-07-02T03:04:35Z</configGenerated>
  <ip><![CDATA[/10.10.197.143]]></ip>
  <cluster>
    <id>131833</id>
    <uuid>81779f41-3be8-47c8-9ea4-f85bcc68bb41</uuid>
    <name><![CDATA[PROD IMAGE SENSOR(QWAF3)]]></name>
  </cluster>
</Appliance>
</data>
</ServiceResponse>
```

Search appliances

Finds WAF appliances in the user’s account matching search criteria.

URL: `https://<baseurl>/qps/rest/1.0/search/waf/appliance`

Methods allowed: POST

Input

Allowed input elements are listed below. The associated data type for each element appears in parentheses. These elements are optional. See Appliance asset details.

Element	Supported Search Operators
id (Long)	EQUALS, NOT EQUALS
uuid (UUID)	EQUALS, NOT EQUALS
name (Text)	CONTAINS, EQUALS, NOT EQUALS
hostname (Text)	CONTAINS, EQUALS, NOT EQUALS
lastPollDate	EQUALS, NOT EQUALS, GREATER, LESSER
applianceCreated	EQUALS, NOT EQUALS, GREATER, LESSER
applianceVersion (Text)	CONTAINS, EQUALS, NOT EQUALS
status (Long)	EQUALS, NOT EQUALS
pollStatus	EQUALS, NOT EQUALS
heartbeatGenerated	EQUALS, NOT EQUALS, GREATER, LESSER
heartbeatProcessed	EQUALS, NOT EQUALS, GREATER, LESSER
systemOs (Text)	CONTAINS, EQUALS, NOT EQUALS
systemRam (Long)	EQUALS, IN, NOT EQUALS, GREATER, LESSER
systemType (Text)	CONTAINS, EQUALS, NOT EQUALS
systemEc2InstanceId (Text)	CONTAINS, EQUALS, NOT EQUALS
systemEc2InstanceType (Text)	CONTAINS, EQUALS, NOT EQUALS
systemEc2AmiId (Text)	CONTAINS, EQUALS, NOT EQUALS
systemCpusCount (Long)	EQUALS, IN, NOT EQUALS, GREATER, LESSER
systemCpusCores (Long)	EQUALS, IN, NOT EQUALS, GREATER, LESSER
systemCpusSpeed (Float)	EQUALS, IN, NOT EQUALS, GREATER, LESSER
systemCpusModel (Text)	CONTAINS, EQUALS, NOT EQUALS
configRulesVersion (Text)	CONTAINS, EQUALS, NOT EQUALS

configVersion (Text)	CONTAINS, EQUALS, NOT EQUALS
configGenerated	EQUALS, NOT EQUALS, GREATER, LESSER
ip (Text)	EQUALS
cluster.id (Long)	EQUALS
cluster.uuid (UUID)	EQUALS
cluster.name (Text)	CONTAINS, EQUALS, NOT EQUALS

Permissions

User must have the WAF module enabled
User must have "API ACCESS" permission
Output includes appliances licensed for WAF and within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/search/waf/appliance --
data
```

```
"<?xml version=\"1.0\" ?>
<ServiceRequest>
  <filters>
    <Criteria field=\"systemType\"
operator=\"EQUALS\">vmware</Criteria><Criteria
field=\"applianceVersion\" operator=\"EQUALS\">1.2.1</Criteria>
  </filters>
</ServiceRequest>"
```

Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/xs
d/1.0/waf/appliance.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <hasMoreRecords>>false</hasMoreRecords>
  <data>
    <Appliance>
      <id>1001</id>
```

```

    <uuid>64230cac-565c-495f-8a58-eeaa919a69f1</uuid>
    <name><![CDATA[64230CAC-565C-495F-8A58-
EAAA919A69F1]]></name>
    <hostname><![CDATA[localhost.localdom]]></hostname>
    <lastPollDate>2016-08-08T19:00:15Z</lastPollDate>
    <applianceCreated>2016-08-08T16:35:24Z</applianceCreated>
    <applianceVersion><![CDATA[1.2.1]]></applianceVersion>
    <status>ACTIVE</status>
    <pollStatus>POLLING</pollStatus>
    <heartbeatGenerated>2016-08-
08T17:44:29Z</heartbeatGenerated>
    <heartbeatProcessed>2016-08-
08T17:44:31Z</heartbeatProcessed>
    <systemOs><![CDATA[Linux localhost.localdom 2.6.32-
573.12.1.el6.x86_64 #1 SMP Tue Dec 15 21:19:08 UTC 2015
x86_64]]></systemOs>
    <systemRam>4018700288</systemRam>
    <systemType><![CDATA[vmware]]></systemType>
    <systemCpusCount>2</systemCpusCount>
    <systemCpusCores>1</systemCpusCores>
    <systemCpusSpeed>1995.192</systemCpusSpeed>
    <systemCpusModel><![CDATA[Intel(R) Xeon(R) CPU E5-2650 0 @
2.00GHz]]></systemCpusModel>
    <configRulesVersion><![CDATA[2016-07-
21T13:36:04.038Z]]></configRulesVersion>
    <configVersion><![CDATA[2016-08-08T10:44:03.335-
07:00]]></configVersion>
    <configGenerated>2016-08-08T17:44:03Z</configGenerated>
    <ip><![CDATA[/10.10.197.221]]></ip>
    <cluster>
      <id>3001</id>
      <uuid>44e660e3-abbb-4659-a4fe-42e37f2c51fa</uuid>
      <name><![CDATA[QWAF1]]></name>
    </cluster>
  </Appliance>
</data>
</ServiceResponse>

```

Delete appliance

Delete a WAF appliance in the user's account.

URL: `https://<baseurl>/qps/rest/1.0/delete/waf/appliance/<id>`

Methods allowed: POST

Input

The "id" (Long) element is required. This identifies the web application asset you want to delete.

Permissions

- User must have the WAF module enabled
- User must have "API ACCESS" permission
- User must have "Delete Appliance" permission
- Appliance must be licensed in user's subscription
- Appliance must be within the user's scope

Example

Request:

```
curl -u "USERNAME:PASSWORD" -X "POST" -H "Content-Type: text/xml"
https://qualysapi.qualys.com/qps/rest/1.0/delete/waf/appliance/
139403
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="https://qualysapi.qualys.com/qps/
xsd/1.0/waf/appliance.xsd">
  <responseCode>SUCCESS</responseCode>
  <count>1</count>
  <data>
    <Appliance>
      <id>139403</id>
    </Appliance>
  </data>
</ServiceResponse>
```


Appliance asset details

The <Appliance> element includes sub elements used to define an appliance. A reference of these elements is provided below.

Element (Data Type)	Description
id	(Long) Appliance asset identifier on Qualys Cloud Platform.
uuid	(UUID) Appliance asset identifier within the Qualys Cloud WAF Service.
name	(Text) The name of the appliance asset as defined by a user. This is unique in subscription. Valid action: Update
hostname	(Text) The hostname of the appliance (retrieved asynchronously).
lastPollDate	(Date) The last poll date of appliance. If the appliance does not poll for the commands, connectivity error or failure status is detected.
applianceCreated	(Long) Appliance creation date in the Qualys Cloud WAF Service.
applianceVersion	(Text) Software version of Qualys WAF Service running on the appliance.
status	(Text) The appliance status information: ACTIVE, INACTIVE, DEPROVISIONING (appliance is currently cleaning configuration before shutdown for appliance deletion), DISABLED (appliance is removed from any cluster and is been destroyed. No appliance records should be retrieved with that status which is temporary).
pollStatus	(Text) The appliance polling status computed from lastPollDate. The appliance is considered as unreachable with a 5 minutes timeout (Timeout can be changed later). The valid values are: POLLING: last poll date is greater than the timeout (5 minutes). NOT_POLLING: the last poll date is less than timeout (5 minutes).
heartbeatGenerated	(Date) Date when the WAF appliance generates a new Heartbeat message. It is not updated directly, but retrieved asynchronously and is synchronized when Qualys Cloud platform/WAF module updates their respective records. The Heartbeat message contains system information such as systemOs, systemRam, and systemType.

Element (Data Type)	Description
heartbeatProcessed	(Date) Date when the WAF server processed the Heartbeat message (stored and available). It is not updated directly, but retrieved asynchronously and is synchronized when Qualys Cloud platform/WAF module updates their respective records. The Heartbeat message contains system information such as systemOs, systemRam, and systemType.
systemOs	(Text) The operating system detected on the WAF appliance.
systemRam	(Long) Total RAM detected on the WAF appliance.
systemType	(Text) System deployment type. EC2: for AWS Other: for undefined virtual platforms
systemEc2InstanceId	(Text) Instance identifier of the system on the WAF appliance. For EC2, unique AWS virtual machine identifier. Valid only for EC2 systems
systemEc2InstanceType	(Text) Type of instance. For EC2 type appliance, gives AWS virtual machine scheme. (such as "x-large") Valid only for EC2 systems
systemEc2Amild	(Text) For EC2 type appliance, the virtual machine image identifier used to create AWS virtual machine. Valid only for EC2 systems.
systemCpusCount	(Long) Number of CPU (socket) physical or virtual.
systemCpusCores	(Long) Number of core(s) per CPU (socket).
systemCpusSpeed	(Float) CPU frequency in KHz such as 2678.9 for a 2.6 GHz CPU.
systemCpusModel	(Text) The type of CPU model on the WAF appliance. Simple text identifier that describes CPU virtualized (Such as "Intel Bi-Xeon xxxx")
configRulesVersion	(Text) The version of security rules (rules provided by Qualys) that are available on the WAF appliance.
configVersion	(Text) Generated configuration version. The version is not updated directly, but is retrieved asynchronously and is synchronized when WAF module/Qualys Cloud platform update their respective records.
configGenerated	(Date) Date when the configuration is generated on the Qualys Cloud platform.

Element (Data Type)	Description
ip	(Text) The IP address of the WAF appliance. This field may not be configured depending on appliance code, version, and network settings. The appliance may not be able to detect its own IP address, if multiple network devices exist.
cluster.id	(Long) Cluster asset identifier within Qualys Cloud platform identifying appliance's group.
cluster.uuid	(UUID) Cluster asset identifier within WAF module identifying the appliance's group.
cluster.name	(Text) Cluster asset name within WAF module identifying the appliance's group.

