Web Application Firewall

API Reference

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1 Before You Start

1.1 Overview

Web Application Firewall (WAF) keeps web services stable and secure. It examines all HTTP and HTTPS requests to detect and block the following attacks: Structured Query Language (SQL) injection, cross-site scripting (XSS), web shells, command and code injections, file inclusion, sensitive file access, third-party vulnerability exploits, Challenge Collapsar (CC) attacks, malicious crawlers, and cross-site request forgery (CSRF).

This document describes how to use application programming interfaces (APIs) to perform operations on WAF, such as querying and updating.

Before you start, ensure that you are familiar with WAF. For details, see **Web Application Firewall (WAF)**.

1.2 API Calling

WAF provides Representational State Transfer (REST) APIs, allowing you to use HTTPS requests to call them. For details, see **API Calling**.

1.3 Concepts

- Account

  An account is created upon successful registration. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.

- User

  An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).

- Region

Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified as universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides services of the same type only or for specific tenants.

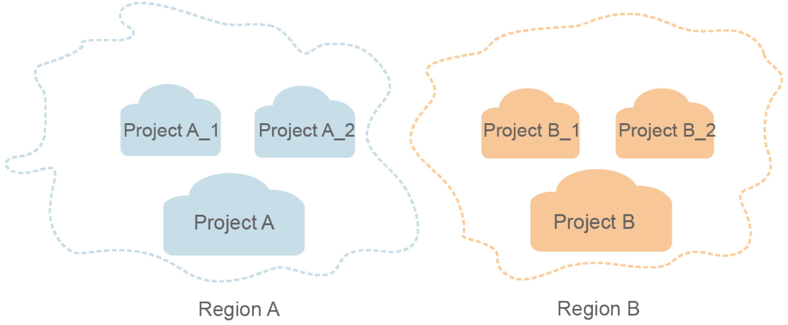
- Availability Zone (AZ)

  An AZ comprises one or multiple physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Compute, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.

- Project

  Projects group and isolate compute, storage, and network resources across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and create resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolation model



2 API Overview

You can use all functions of WAF through its APIs.

Type	Description
Cloud mode APIs	APIs for creating, modifying, querying, and removing domain names in cloud mode.
Dedicated mode APIs	APIs for creating, modifying, querying, and removing domain names in dedicated mode
Protection policy APIs	APIs for creating policies in batches and modifying the domain names that a policy applies to.
Protection rule APIs	APIs for creating, updating, querying, and deleting protection rules.
Certificate APIs	APIs for creating, modifying, and querying certificates.
Event API	API for querying details of an event.
Security overview APIs	APIs for querying overall security statistics.

3 API Calling

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for obtaining a user token as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

A request URI is in the following format:

{URI-scheme} :// {Endpoint} / {resource-path} ? {query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

- **URI-scheme**:

  Protocol used to transmit requests. All APIs use HTTPS.

- **Endpoint**:

  Domain name or IP address of the server bearing the RESTful service. The endpoint varies between services in different regions. It can be obtained from the administrator .

- **resource-path**:

  Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the **resource-path** of the API used to obtain a user token is **/v3/auth/tokens**.

- **query-string**:

  Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "Parameter name=Parameter value". For example, **?limit=10** indicates that a maximum of 10 data records will be displayed.

NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server:

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: same as GET except that the server must return only the response header.
- **PATCH**: requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to obtain a user token, the request method is POST. The request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields are as follows:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: specifies a user token only for token-based API authentication. The user token is a response to the API used to obtain a user token. This API is the only one that does not require authentication.

> **NOTE**
>
> In addition to supporting token-based authentication, APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.
>
> For more information, see **AK/SK Authentication**.

The API used to obtain a user token does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

Request Body

The body of a request is often sent in a structured format as specified in the **Content-Type** header field. The request body transfers content except the request header.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to obtain a user token, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Set ***username*** to the name of a user, ***domainname*** to the name of the account that the user belongs to, ******** to the user's login password, and ***xxxxxxxxxxxxxxxxxx*** to the project name. You can learn more information about projects from the administrator.

NOTE

> The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see "Obtaining a User Token".

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "********",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxxxxxxxxxxxx"
            }
        }
    }
}
```

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding. In the response to the API used to obtain a user token, **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. This method is recommended because it provides higher security than token-based authentication.

Token-based Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API.

The token can be obtained by calling the required API. For more information, see Obtaining a User Token. A project-level token is required for calling this API, that is, **auth.scope** must be set to **project** in the request body. Example:

```
{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "********",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxx"
            }
        }
    }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

NOTE

AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests.

NOTICE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

3.3 Response

Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see **Status Code**.

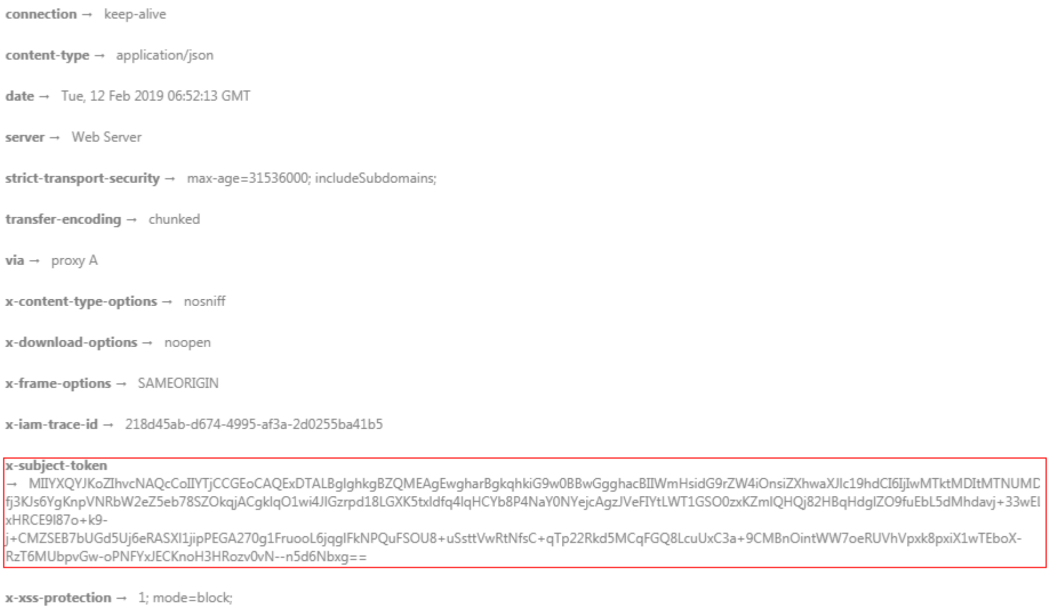
For example, if status code **201** is returned for calling the API used to obtain a user token, the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **content-type**.

The following shows the response header for the API to obtain a user token, in which **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-1 Header fields of the response to the request for obtaining a user token



```
connection → keep-alive

content-type → application/json

date → Tue, 12 Feb 2019 06:52:13 GMT

server → Web Server

strict-transport-security → max-age=31536000; includeSubdomains;

transfer-encoding → chunked

via → proxy A

x-content-type-options → nosniff

x-download-options → noopen

x-frame-options → SAMEORIGIN

x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5

x-subject-token
→ MIIYXQYJKoZIhvcNAQcCoIIYTjCCGEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IjIwMTktMDItMTNUMD
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpd18LGXK5txldfq4lqHCYb8P4NaY0NYejcAgzJVeFIYtLWT1GSO0zxKZmIQHQj82HBqHdglZO9fuEbL5dMhdavj+33wEl
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jqglFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;
```

(Optional) Response Body

The body of a response is often returned in structured format as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following shows part of the response body for the API to obtain a user token. For the sake of space, only part of the content is displayed here.

```
{
    "token": {
        "expires_at": "2019-02-13T06:52:13.855000Z",
        "methods": [
            "password"
        ],
        "catalog": [
            {
                "endpoints": [
                    {
                        "region_id": "xxxxxxxx",
......
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
    "error_msg": "The format of message is error",
    "error_code": "AS.0001"
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 APIs

4.1 Managing Websites Protected by Dedicated WAF Engines

4.1.1 Querying the List of Domain Names Protected by Dedicated WAF Instances

Function

This API is used to query domain names protected by dedicated WAF instances.

URI

GET /v1/{project_id}/premium-waf/host

Table 4-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-2 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS. The default value is 0. 0: indicates the default enterprise project. Default value: 0
page	No	String	Page number of the data to be returned during pagination query. Value range: **0** to **100,000**. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	String	Number of results on each page in query pagination. The value range is 1 to 100. The default value is **10**, indicating that each page contains 10 results. To query all domain names at a time, set this parameter to **-1**. Default: **10**
hostname	No	String	Domain name
policyname	No	String	Policy name
protect_status	No	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests for the domain name but does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Request Parameters

Table 4-3 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Response Parameters

Status code: 200

Table 4-4 Response body parameters

Parameter	Type	Description
total	Integer	Total number of protected domain names
items	Array of **SimplePremiumWafHost** objects	Array of details about all protected domain names

Table 4-5 SimplePremiumWafHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
region	String	Region ID. This parameter is included when the domain name was added to WAF through the console. This parameter is left blank when the domain name was added to WAF by calling an API. You can query the region ID on the Regions and Endpoints page on the website.
flag	**Flag** object	Special identifier, which is used on the console.

Parameter	Type	Description
description	String	Domain name description
policyid	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of a specific policy.
protect_status	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
hostid	String	Domain name ID, which is the same as the value of id and is a redundant field.

Table 4-6 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**

Parameter	Type	Description
pci_dss	String	Whether the website passed the PCI DSS certification check. - **true**: The website passed the PCI DSS certification check. - **false**: The website failed the PCI DSS certification check. Enumeration values: - **true** - **false**
cname	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Status code: 400

Table 4-7 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-8 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-9 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to obtain the list of domain names protected with dedicated WAF instances in a project The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/premium-waf/host?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "ee896796e1a84f3f85865ae0853d8974",
    "hostname" : "www.demo.com",
    "extend" : { },
    "region" : "xx-xxxxx-x",
    "flag" : {
      "pci_3ds" : "false",
      "pci_dss" : "false"
    },
    "description" : "",
    "policyid" : "df15d0eb84194950a8fdc615b6c012dc",
    "protect_status" : 1,
    "access_status" : 0,
    "hostid" : "ee896796e1a84f3f85865ae0853d8974"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid request
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.2 Adding a Domain Name to a Dedicated WAF Instance

Function

This API is used to add a domain name to a dedicated WAF instance.

URI

POST /v1/{project_id}/premium-waf/host

Table 4-10 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-11 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-12 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Table 4-13 Request body parameters

Parameter	Mandatory	Type	Description
certificateid	No	String	Certificate ID. It can be obtained by calling the **ListCertificates** API. ● This parameter is not required when the client protocol is HTTP. ● This parameter is mandatory when the client protocol is HTTPS.
certificatename	No	String	Certificate name. ● This parameter is not required when the client protocol is HTTP. ● This parameter is mandatory when the client protocol is HTTPS.
hostname	Yes	String	Protected domain name or IP address (port allowed)
proxy	Yes	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
policyid	No	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of a specific policy.

Parameter	Mandatory	Type	Description
server	Yes	Array of **PremiumWafServer** objects	Origin server configuration of the protected domain name
block_page	No	**BlockPage** object	Alarm page configuration. This parameter is optional. When a user-defined page needs to be configured, all subfields of this parameter are mandatory.
forward_header_map	No	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused
description	No	String	Remarks of the protected domain name

Table 4-14 PremiumWafServer

Parameter	Mandatory	Type	Description
front_protocol	Yes	String	Protocol used by the client to request access to the origin server. Enumeration values: - **HTTP** - **HTTPS**
back_protocol	Yes	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: - **HTTP** - **HTTPS**
weight	No	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	Yes	String	IP address of your origin server requested by the client
port	Yes	Integer	Port used by WAF to forward client requests to the origin server
type	Yes	String	The origin server address is an IPv4 or IPv6 address. Enumeration values: - **ipv4** - **ipv6**

Parameter	Mandatory	Type	Description
vpc_id	Yes	String	VPC ID. To obtain the VPC ID, perform the following steps: Use either of the following methods to obtain the VPC ID. ● Log in to the WAF console and choose **Instance Management** > **Dedicated Engine** > **VPC\Subnet**. The VPC ID is in the **VPC \Subnet** column. ● Log in to the VPC console and click the VPC name. On the page displayed, copy the ID in the **VPC Information** area.

Table 4-15 BlockPage

Parameter	Mandatory	Type	Description
template	Yes	String	Template name
custom_page	No	**CustomPage** object	Custom alarm page
redirect_url	No	String	URL of the redirected page

Table 4-16 CustomPage

Parameter	Mandatory	Type	Description
status_code	Yes	String	Status Codes
content_type	Yes	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	Yes	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Response Parameters

Status code: 200

Table 4-17 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Protected domain names
protocol	String	Client protocol, which is the protocol used by a client (for example, a browser) to access your website. Enumeration values: - **HTTPS** - **HTTP** - **HTTP&HTTPS**
server	Array of **PremiumWaf Server** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether to use a proxy - **true**: A proxy is used. - **false**: No proxy is used.
locked	Integer	Domain name status. The value can be **0** or **1**. - **0**: The domain name is not frozen. - **1**: The domain name is frozen. This parameter is redundant in this version.
timestamp	Long	Time the domain name was added to WAF. The value is a 13-digit timestamp in ms.
tls	String	TLS version. You can use TLS v1.0, TLS v1.1, or TLS v1.2. TLS v1.0 is used by default. Parameter **tls** is available only when the client protocol is HTTPS. Enumeration values: - **TLS v1.0** - **TLS v1.1** - **TLS v1.2**

Parameter	Type	Description
cipher	String	Parameter **cipher** is required only when the client protocol is HTTPS. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**. ● **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH ● **cipher_2**: EECDH+AESGCM:EDH+AESGCM ● **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH ● **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH ● **cipher_default**: ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: ● **cipher_1** ● **cipher_2** ● **cipher_3** ● **cipher_4** ● **cipher_default**
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Domain name description
policyid	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of a specific policy.
domainid	String	Account ID, which is the same as the account ID on the **My Credentials** page. To go to this page, log in to Cloud management console, hover the cursor over your username, and click **My Credentials** in the displayed window.

Parameter	Type	Description
projectid	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
enterprise_project_id	String	Enterprise project ID. To obtain the ID, log in to the Cloud management console first. On the menu bar at the top of the page, choose **Enterprise** > **Project Management**. Then, click the project name and view the ID.
protect_status	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
block_page	**BlockPage** object	Alarm page configuration

Parameter	Type	Description
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-18 PremiumWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: ● **HTTP** ● **HTTPS**
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.

Parameter	Type	Description
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	The origin server address is an IPv4 or IPv6 address. Enumeration values: - **ipv4** - **ipv6**
vpc_id	String	VPC ID. To obtain the VPC ID, perform the following steps: Use either of the following methods to obtain the VPC ID. - Log in to the WAF console and choose **Instance Management** > **Dedicated Engine** > **VPC\Subnet**. The VPC ID is in the **VPC\Subnet** column. - Log in to the VPC console and click the VPC name. On the page displayed, copy the ID in the **VPC Information** area.

Table 4-19 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. - **true**: The website passed the PCI 3DS certification check. - **false**: The website failed the PCI 3DS certification check. Enumeration values: - **true** - **false**

Parameter	Type	Description
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Table 4-20 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-21 CustomPage

Parameter	Type	Description
status_code	String	Status Codes
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Status code: 400

Table 4-22 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-23 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-24 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to add a website domain name to a dedicated WAF instance in a specific project. The project ID is specified by project_id, and the domain name is www.demo.com. The client protocol and server protocol is HTTP. The origin server address is ipv4 x.x.x.x. The service port used by WAF to forward client requests to the origin server is 80. The ID of the VPC where the dedicated WAF instance is deployed is cf6dbace-b36a-4d51-ae04-52a3319ae247.

```
POST https://{Endpoint}/v1/{project_id}/premium-waf/host?enterprise_project_id=0

{
  "hostname" : "www.demo.com",
  "server" : [ {
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP",
    "vpc_id" : "cf6dbace-b36a-4d51-ae04-52a3319ae247",
    "type" : "ipv4",
    "address" : "x.x.x.x",
    "port" : 80
  } ],
  "proxy" : false,
  "description" : ""
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "51a5649e52d341a9bb802044950969dc",
  "hostname" : "www.demo.com",
  "protocol" : "HTTP",
  "server" : [ {
    "address" : "x.x.x.x",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP",
    "vpc_id" : "cf6dbace-b36a-4d51-ae04-52a3319ae247"
  } ],
  "proxy" : false,
  "locked" : 0,
  "timestamp" : 1650596007113,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false"
  },
  "description" : "",
  "policyid" : "1607df035bc847b582ce9c838c083b88",
  "domainid" : "d4ecb00b031941ce9171b7bc3386883f",
  "enterprise_project_id" : "0",
  "protect_status" : 1,
  "access_status" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid request.

Status Code	Description
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.3 Modifying a Domain Name Protected by a Dedicated WAF Instance

Function

This API is used to update configurations of domain names protected with a dedicated WAF instance. The new origin server information will overwrite the old origin server information. If you want to keep the old information, provide them as new data. You can provide only the updated information in the request body.

URI

PUT /v1/{project_id}/premium-waf/host/{host_id}

Table 4-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
host_id	Yes	String	ID of the domain name protected by the dedicated WAF engine

Table 4-26 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-27 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Table 4-28 Request body parameters

Parameter	Mandatory	Type	Description
proxy	No	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
certificateid	No	String	Certificate ID. It can be obtained by calling the **ListCertificates** API. ● This parameter is not required when the client protocol is HTTP. ● This parameter is mandatory when the client protocol is HTTPS.
certificatename	No	String	Certificate name. ● This parameter is not required when the client protocol is HTTP. ● This parameter is mandatory when the client protocol is HTTPS.

Parameter	Mandatory	Type	Description
tls	No	String	TLS version. TLS v1.0 is supported by default. Enumeration values: - **TLS v1.0** - **TLS v1.1** - **TLS v1.2**

Parameter	Mandatory	Type	Description
cipher	No	String	Cipher suite. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**: **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH ● **cipher_2**: EECDH+AESGCM:EDH+AESGCM ● **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH ● **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH ● **cipher_default**: The cryptographic algorithms are ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: ● **cipher_1** ● **cipher_2** ● **cipher_3** ● **cipher_4** ● **cipher_default**
mode	No	String	Special domain name node in dedicated mode. This parameter is required only for special WAF modes, such as ELB.

Parameter	Mandatory	Type	Description
locked	No	Integer	This parameter is reserved, which will be used to freeze a domain name.
protect_status	No	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	No	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
timestamp	No	Integer	Timestamp.
pool_ids	No	Array of strings	Dedicated engine group the domain name was added to. This parameter is required only in special WAF mode, such as ELB mode.
block_page	No	**BlockPage** object	Alarm page configuration
traffic_mark	No	**TrafficMark** object	Traffic identifier
circuit_breaker	No	**CircuitBreaker** object	Circuit breaker configuration
timeout_config	No	**TimeoutConfig** object	Timeout settings
flag	No	**HostFlag** object	Feature switch for configuring compliance certification checks for domain names protected with the dedicated WAF instance.

Parameter	Mandatory	Type	Description
forward_header_map	No	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-29 BlockPage

Parameter	Mandatory	Type	Description
template	Yes	String	Template name
custom_page	No	**CustomPage** object	Custom alarm page
redirect_url	No	String	URL of the redirected page

Table 4-30 CustomPage

Parameter	Mandatory	Type	Description
status_code	Yes	String	Status Codes

Parameter	Mandatory	Type	Description
content_type	Yes	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	Yes	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-31 TrafficMark

Parameter	Mandatory	Type	Description
sip	No	Array of strings	IP tag. HTTP request header field of the original client IP address.
cookie	No	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	No	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-32 CircuitBreaker

Parameter	Mandatory	Type	Description
switch	No	Boolean	Whether to enable connection protection. ● **true**: Enable connection protection. ● **false**: Disable the connection protection.

Parameter	Mandatory	Type	Description
dead_num	No	Integer	502/504 error threshold. 502/504 errors allowed for every 30 seconds.
dead_ratio	No	Number	A breakdown protection is triggered when the 502/504 error threshold and percentage threshold have been reached.
block_time	No	Integer	Protection period upon the first breakdown. During this period, WAF stops forwarding client requests.
superposition_num	No	Integer	The maximum multiplier you can use for consecutive breakdowns. The number of breakdowns are counted from 0 every time the accumulated breakdown protection duration reaches 3,600s. For example, assume that Initial Downtime (s) is set to 180s and **Multiplier for Consecutive Breakdowns** is set to 3. If the breakdown is triggered for the second time, that is, less than 3, the protection duration is 360s (180s X 2). If the breakdown is triggered for the third or fourth time, that is, equal to or greater than 3, the protection duration is 540s (180s X 3). When the accumulated downtime duration exceeds 1 hour (3,600s), the number of breakdowns are counted from 0.
suspend_num	No	Integer	Threshold of the number of pending URL requests. Connection protection is triggered when the threshold has been reached.

Parameter	Mandatory	Type	Description
sus_block_time	No	Integer	Downtime duration after the connection protection is triggered. During this period, WAF stops forwarding website requests.

Table 4-33 TimeoutConfig

Parameter	Mandatory	Type	Description
connect_timeout	No	Integer	Timeout for WAF to connect to the origin server.
send_timeout	No	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	No	Integer	Timeout for WAF to receive responses from the origin server.

Table 4-34 HostFlag

Parameter	Mandatory	Type	Description
pci_3ds	No	String	Status of the PCI 3DS compliance certification check. The value can be: ● **true**: enabled. ● **false**: disabled. This parameter must be used together with **tls** and **cipher**. **tls** must be set to **TLS v1.2**, and **cipher** must be set to **cipher_2**. Note: The PCI 3DS compliance certification check cannot be disabled after being enabled. Before enabling the check, read the corresponding description in the WAF documentation in Help Center. Enumeration values: ● **true** ● **false**

Parameter	Mandatory	Type	Description
pci_dss	No	String	Status of the PCI DSS compliance certification check. The value can be: - **true**: enabled. - **false**: disabled. This parameter must be used together with **tls** and **cipher**. **tls** must be set to **TLS v1.2**, and **cipher** must be set to **cipher_2**. Note: Before enabling the check, read the corresponding description in WAF documentation in Help Center. Enumeration values: - **true** - **false**

Response Parameters

Status code: 200

Table 4-35 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name added to the dedicated WAF instance
protocol	String	Client protocol, which is the protocol used by a client (for example, a browser) to access your website.
server	Array of **PremiumWaf Server** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether a proxy is used for the protected domain name. - **false**: No proxy is used. - **true**: A proxy is used.
locked	Integer	This parameter is reserved, which will be used to freeze a domain name. Default: **0**

Parameter	Type	Description
timestamp	Long	Time the domain name was added to WAF.
tls	String	Minimum TLS version. The value can be **TLS v1.0**, **TLS v1.1**, or **TLS v1.2**. TLS v1.0 is used by default. Enumeration values: - **TLS v1.0** - **TLS v1.1** - **TLS v1.2**
cipher	String	Cipher suite. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**: **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH - **cipher_2**: EECDH+AESGCM:EDH+AESGCM - **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH - **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH - **cipher_default**: ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: - **cipher_1** - **cipher_2** - **cipher_3** - **cipher_4** - **cipher_default**
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Domain name description

Parameter	Type	Description
policyid	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of the specific policy.
domainid	String	Account ID, which is the same as the account ID on the **My Credentials** page. To go to this page, log in to Cloud management console, hover the cursor over your username, and click **My Credentials** in the displayed window.
projectid	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
enterprise_project_id	String	Enterprise project ID. To obtain the ID, log in to the Cloud management console first. On the menu bar at the top of the page, choose **Enterprise** > **Project Management**. Then, click the project name and view the ID.
certificateid	String	HTTPS certificate ID.
certificatename	String	Certificate name
protect_status	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
lb_algorithm	String	Load balancing algorithm. Weighted round robin is used by default and cannot be changed.
block_page	**BlockPage** object	Alarm page configuration

Parameter	Type	Description
traffic_mark	**TrafficMark** object	Traffic identifier
timeout_config	**TimeoutConfig** object	Timeout settings
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new WAF console.

Table 4-36 PremiumWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: ● **HTTP** ● **HTTPS**

Parameter	Type	Description
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	The origin server address is an IPv4 or IPv6 address. Enumeration values: ● **ipv4** ● **ipv6**
vpc_id	String	VPC ID. To obtain the VPC ID, perform the following steps: Use either of the following methods to obtain the VPC ID. ● Log in to the WAF console and choose **Instance Management** > **Dedicated Engine** > **VPC\Subnet**. The VPC ID is in the **VPC\Subnet** column. ● Log in to the VPC console and click the VPC name. On the page displayed, copy the ID in the **VPC Information** area.

Table 4-37 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. - **true**: The website passed the PCI 3DS certification check. - **false**: The website failed the PCI 3DS certification check. Enumeration values: - **true** - **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. - **true**: The website passed the PCI DSS certification check. - **false**: The website failed the PCI DSS certification check. Enumeration values: - **true** - **false**
cname	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Table 4-38 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-39 CustomPage

Parameter	Type	Description
status_code	String	Status Codes
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-40 TrafficMark

Parameter	Type	Description
sip	Array of strings	IP tag. HTTP request header field of the original client IP address.
cookie	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-41 TimeoutConfig

Parameter	Type	Description
connect_timeout	Integer	Timeout for WAF to connect to the origin server.

Parameter	Type	Description
send_timeout	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	Integer	Timeout for WAF to receive responses from the origin server.

Table 4-42 Access_progress

Parameter	Type	Description
step	Integer	Procedure ● **1**: Whitelisting the WAF IP addresses. ● **2**: Testing connectivity. ● **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. ● **0**: The step has not been finished. ● **1**: The step has finished.

Status code: 400

Table 4-43 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-44 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-45 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to change proxy settings for a dedicated WAF instance. The project ID is specified by project_id. The domain name ID is specified by host_id. Proxy settings: No proxy is used.

```
PUT https://{Endpoint}/v1/{project_id}/premium-waf/host/{host_id}?enterprise_project_id=0

{
  "proxy" : false
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "27995fb98a2d4928a1e453e65ee8117a",
  "hostname" : "www.demo.com",
  "protocol" : "HTTP",
  "server" : [ {
    "address" : "192.168.0.209",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP",
    "vpc_id" : "cf6dbace-b36a-4d51-ae04-52a8459ae247"
  } ],
  "proxy" : false,
  "locked" : 0,
  "timestamp" : 1650590814885,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false"
  },
  "description" : "",
  "policyid" : "9555cda636ef4ca294dfe4b14bc94c47",
  "domainid" : "d4ecb00b031941ce9171b7bc3386883f",
  "projectid" : "05e33ecd328025dd2f7fc00696201fb4",
  "enterprise_project_id" : "0",
  "protect_status" : 1,
  "access_status" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid request.
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.4 Querying Domain Name Settings in Dedicated Mode

Function

This API is used to query settings of domain names protected with dedicated WAF instances.

URI

GET /v1/{project_id}/premium-waf/host/{host_id}

Table 4-46 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
host_id	Yes	String	ID of the domain name protected by the dedicated WAF engine

Table 4-47 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-48 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Response Parameters

Status code: 200

Table 4-49 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name added to the dedicated WAF instance
protocol	String	Client protocol, which is the protocol used by a client (for example, a browser) to access your website.
server	Array of **PremiumWafServer** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.

Parameter	Type	Description
locked	Integer	This parameter is reserved, which will be used to freeze a domain name. Default: **0**
timestamp	Long	Time the domain name was added to WAF.
tls	String	Minimum TLS version. You can use TLS v1.0, TLS v1.1, or TLS v1.2. TLS v1.0 is used by default. Parameter **tls** is required only when the client protocol is HTTPS. Enumeration values: ● **TLS v1.0** ● **TLS v1.1** ● **TLS v1.2**
cipher	String	Parameter **cipher** is required only when the client protocol is HTTPS. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**. ● **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH ● **cipher_2**: EECDH+AESGCM:EDH+AESGCM ● **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH ● **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH ● **cipher_default**: ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: ● **cipher_1** ● **cipher_2** ● **cipher_3** ● **cipher_4** ● **cipher_default**
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.

Parameter	Type	Description
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Domain name description
policyid	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of the specific policy.
domainid	String	Account ID, which is the same as the account ID on the **My Credentials** page. To go to this page, log in to Cloud management console, hover the cursor over your username, and click **My Credentials** in the displayed window.
projectid	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
enterprise_project_id	String	Enterprise project ID. To obtain the ID, log in to the Cloud management console first. On the menu bar at the top of the page, choose **Enterprise** > **Project Management**. Then, click the project name and view the ID.
certificateid	String	HTTPS certificate ID.
certificatename	String	Certificate name
protect_status	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
block_page	**BlockPage** object	Alarm page configuration

Parameter	Type	Description
traffic_mark	**TrafficMark** object	Traffic identifier
timeout_config	**TimeoutConfig** object	Timeout settings
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: - $time_local - $request_id - $connection_requests - $tenant_id - $project_id - $remote_addr - $remote_port - $scheme - $request_method - $http_host - $origin_uri - $request_length - $ssl_server_name - $ssl_protocol - $ssl_curves - $ssl_session_reused
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new WAF console.

Table 4-50 PremiumWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: - **HTTP** - **HTTPS**

Parameter	Type	Description
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	The origin server address is an IPv4 or IPv6 address. Enumeration values: ● **ipv4** ● **ipv6**
vpc_id	String	VPC ID. To obtain the VPC ID, perform the following steps: Use either of the following methods to obtain the VPC ID. ● Log in to the WAF console and choose **Instance Management** > **Dedicated Engine** > **VPC\Subnet**. The VPC ID is in the **VPC\Subnet** column. ● Log in to the VPC console and click the VPC name. On the page displayed, copy the ID in the **VPC Information** area.

Table 4-51 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Table 4-52 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-53 CustomPage

Parameter	Type	Description
status_code	String	Status Codes
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-54 TrafficMark

Parameter	Type	Description
sip	Array of strings	IP tag. HTTP request header field of the original client IP address.
cookie	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-55 TimeoutConfig

Parameter	Type	Description
connect_timeout	Integer	Timeout for WAF to connect to the origin server.

Parameter	Type	Description
send_timeout	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	Integer	Timeout for WAF to receive responses from the origin server.

Table 4-56 Access_progress

Parameter	Type	Description
step	Integer	Procedure ● **1**: Whitelisting the WAF IP addresses. ● **2**: Testing connectivity. ● **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. ● **0**: The step has not been finished. ● **1**: The step has finished.

Status code: 400

Table 4-57 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-58 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-59 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to query configurations of a domain name protected with a dedicated WAF instance in a specific project. The project ID is specified by project_id, and the domain ID is specified by host_id.

```
GET https://{Endpoint}/v1/{project_id}/premium-waf/host/{host_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "ee896796e1a84f3f85865ae0853d8974",
  "hostname" : "www.demo.com",
  "protocol" : "HTTPS",
  "server" : [ {
    "address" : "1.2.3.4",
    "port" : 443,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTPS",
    "back_protocol" : "HTTPS",
    "vpc_id" : "ebfc553a-386d-4746-b0c2-18ff3f0e903d"
  } ],
  "proxy" : false,
  "locked" : 0,
  "timestamp" : 1650593801380,
  "tls" : "TLS v1.0",
  "cipher" : "cipher_1",
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false"
  },
  "description" : "",
  "policyid" : "df15d0eb84194950a8fdc615b6c012dc",
  "domainid" : "0ee78615ca08419f81f539d97c9ee353",
  "projectid" : "550500b49078408682d0d4f7d923f3e1",
  "protect_status" : 1,
  "access_status" : 0,
  "certificateid" : "360f992501a64de0a65c50a64d1ca7b3",
  "certificatename" : "certificatename75315"
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Invalid request
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.5 Deleting a Domain Name from a Dedicated WAF Instance

Function

This API is used to delete a domain name protected with a dedicated WAF instance.

URI

DELETE /v1/{project_id}/premium-waf/host/{host_id}

Table 4-60 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
host_id	Yes	String	ID of the domain name protected by the dedicated WAF engine

Table 4-61 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Parameter	Mandatory	Type	Description
keepPolicy	No	Boolean	Whether to retain the rule. **false**: The policy for the domain name will not be retained. **true**: The policy for the domain name will be retained. If the policy used for the domain name you want to delete is also used for other domain names, this parameter must be left blank. Default: **1**

Request Parameters

Table 4-62 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Response Parameters

Status code: 200

Table 4-63 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.

Parameter	Type	Description
region	String	Region ID. This parameter is included when the domain name was added to WAF through the console. This parameter is left blank when the domain name was added to WAF by calling an API. You can query the region ID on the Regions and Endpoints page on the website.
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Domain name description
policyid	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of a specific policy.
protect_status	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
host_id	String	Domain name ID, which is the same as the value of **id*. This field is redundant.

Table 4-64 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**

Parameter	Type	Description
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Status code: 400

Table 4-65 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-66 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-67 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to remove a domain name from a dedicated WAF instance in a specific project. The project ID is specified by project_id, and the domain ID is specified by host_id.

```
DELETE https://{Endpoint}/v1/{project_id}/premium-waf/host/{host_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "ee896796e1a84f3f85865ae0853d8974",
  "hostname" : "www.demo.com",
  "region" : "xx-xxxxx-x",
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false"
  },
  "description" : "",
  "policyid" : "df15d0eb84194950a8fdc615b6c012dc",
  "protect_status" : 1,
  "access_status" : 0,
  "hostid" : "ee896796e1a84f3f85865ae0853d8974"
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid request

Status Code	Description
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.1.6 Modifying the Protection Status of a Domain Name in Dedicated Mode

Function

This API is used to modify the protection status of a domain name connected to a dedicated WAF instance.

URI

PUT /v1/{project_id}/premium-waf/host/{host_id}/protect-status

Table 4-68 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
host_id	Yes	String	ID of the domain name protected by the dedicated WAF engine

Table 4-69 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-70 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Table 4-71 Request body parameters

Parameter	Mandatory	Type	Description
protect_status	Yes	Integer	WAF status of the protected domain name. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Response Parameters

Status code: 200

Table 4-72 Response body parameters

Parameter	Type	Description
protect_status	Integer	WAF status of the protected domain name. - **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. - **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. - **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Status code: 400

Table 4-73 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-74 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-75 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to change the protection status of a dedicated WAF instance to enabled for a domain name in a specific project. The project ID is specified by project_id, and the domain ID is specified by host_id.

```
PUT https://{Endpoint}/v1/{project_id}/premium-waf/host/{host_id}/protect-status?enterprise_project_id=0

{
  "protect_status" : 1
}
```

Example Responses

Status code: 200

OK

```
{
  "protect_status" : 1
}
```

Status Codes

Status Code	Description
200	OK
400	Invalid request
401	The token does not have the required permission.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2 Rule Management

4.2.1 Changing the Status of a Rule

Function

This API is used to change the status of a single rule, for example, disabling a Precise Protection rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/{ruletype}/{rule_id}/status

Table 4-76 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the API for querying the policy list.
ruletype	Yes	String	Policy Type Enumeration values: ● **whiteblackip** ● **geoip** ● **privacy** ● **antitamper** ● **custom** ● **ignore** ● **cc**
rule_id	Yes	String	Rule ID. It can be obtained by calling the specific API that is used to obtain the rule list of a certain type. For example, you can call the **ListWhiteblackipRule** API to obtain the ID of a blacklist or whitelist rule.

Table 4-77 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-78 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-79 Request body parameters

Parameter	Mandatory	Type	Description
status	No	Integer	Status. The options are **0** and **1**. **0**: Disabled. **1**: Enabled.

Response Parameters

Status code: 200

Table 4-80 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
timestamp	Long	Time when the rule was created.
description	String	Rule Description
status	Integer	Status. The options are **0** and **1**. **0**: Disabled. **1**: Enabled.

Status code: 400

Table 4-81 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 401

Table 4-82 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-83 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to change the protection status of a rule to disabled. Details about the rule are specified by project_id, policy_id, ruletype, and rule_id.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/{ruletype}/{rule_id}/status?
enterprise_project_id=0

{
  "status" : 0
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "709bfd0d62a9410394ffa9e25eb82c36",
  "policyid" : "62fd7f8c36234a4ebedabc2ce451ed45",
  "timestamp" : 1650362797070,
  "description" : "demo",
  "status" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.2 Querying CC Attack Protection Rules

Function

This API is used to query the list of CC attack protection rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/cc

Table 4-84 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-85 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
offset	Yes	Integer	Offset. The records after the offset are queried.
limit	Yes	Integer	Maximum number of records that can be returned.

Request Parameters

Table 4-86 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-87 Response body parameters

Parameter	Type	Description
total	Integer	Number of rules in the policy
items	Array of **CcrulesListInfo** objects	Array of Cc rules

Table 4-88 CcrulesListInfo

Parameter	Type	Description
name	String	Rule name.

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	When the value of mode is 0, this parameter has a return value. URL to which the rule applies, excluding a domain name.
prefix	Boolean	Whether a prefix is used for the path. If the protected URL ends with an asterisk (*), a path prefix is used. When the value of mode is 0, this parameter has a return value.
mode	Integer	CC rule protection mode, which corresponds to mode on the console. Currently, only advanced CC rule protection mode is supported. - 0: standard. Only the protection path of the domain name can be restricted. - 1: advanced. The path, IP address, cookie, header, and params fields can be restricted. Enumeration values: - **0** - **1**
status	Integer	Rule status. The value can be **0** or **1**. - **0**: The rule is disabled. - **1**: The rule is enabled.
conditions	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.
action	**action** object	Action to take if the number of requests reaches the upper limit.

Parameter	Type	Description
tag_type	String	Limit mode. - **ip**: IP-based rate limiting. Website visitors are identified by IP address. - **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. - **other**: Website visitors are identified by the **Referer** field (user-defined request source). - **policy**: Policy-based rate limiting - **domain**: Domain name rate limit - **url**: URL rate limit Enumeration values: - **ip** - **cookie** - **header** - **other** - **policy** - **domain** - **url**
tag_index	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). - **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. - **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.

Parameter	Type	Description
limit_period	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.
lock_time	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	Boolean	Whether to enable global counting.
description	String	Rule description.
total_num	Integer	This parameter is reserved and can be ignored currently.
unaggregation	Boolean	This parameter is reserved and can be ignored currently.
aging_time	Integer	Rule aging time. This parameter is reserved and can be ignored currently.
producer	Integer	Rule creation object. This parameter is reserved and can be ignored currently.
timestamp	Long	Timestamp the rule is created.

Table 4-89 CcCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**

Parameter	Type	Description
logic_operation	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-90 action

Parameter	Type	Description
category	String	Action type: - **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. - **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. - **log**: WAF logs the event only. - **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: - **captcha** - **block** - **log** - **dynamic_block**
detail	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. - If you want to use the default block page, this parameter can be excluded. - If you want to use a custom block page, set this parameter.

Table 4-91 detail

Parameter	Type	Description
response	**response** object	Block Page.

Table 4-92 response

Parameter	Type	Description
content_type	String	Content type. The value can only be **application/json**, **text/html**, or **text/xml**. Enumeration values: ● **application/json** ● **text/html** ● **text/xml**
content	String	Block page information.

Table 4-93 tag_condition

Parameter	Type	Description
category	String	User identifier. The value is fixed at **referer**.
contents	Array of strings	Content of the user identifier field.

Status code: 400

Table 4-94 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-95 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-96 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the CC attack protection rule list. Details about the query are specified by project_id and policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/cc?offset=0&limit=1
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "f88c5eabff9b4ff9ba6e7dd8e38128ba",
    "policyid" : "d471eef691684f1c8d7784532fd8f4bd",
    "timestamp" : 1678873040603,
    "name" : "test",
    "description" : "",
    "status" : 1,
    "mode" : 1,
    "conditions" : [ {
      "category" : "url",
      "contents" : [ "/url" ],
      "logic_operation" : "contain"
    } ],
    "action" : {
      "category" : "captcha"
    },
    "producer" : 1,
    "unaggregation" : false,
    "total_num" : 0,
    "limit_num" : 10,
    "limit_period" : 60,
    "lock_time" : 0,
    "tag_type" : "ip",
    "aging_time" : 0,
    "region_aggregation" : false,
    "domain_aggregation" : false
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.

Status Code	Description
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.3 Creating a CC Attack Protection Rule

Function

This API is used to create a CC attack protection rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/cc

Table 4-97 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-98 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-99 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-100 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Rule name.
mode	Yes	Integer	Work mode. The value can be 0 (standard) or 1 (advanced). The parameters of the advanced mode cannot be described in the same document of the same API. For details, see this parameter on the console page. Enumeration values: ● **0** ● **1**
conditions	Yes	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.
action	Yes	**action** object	Action to take if the number of requests reaches the upper limit.

Parameter	Mandatory	Type	Description
tag_type	Yes	String	Limit mode. - **ip**: IP-based rate limiting. Website visitors are identified by IP address. - **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. - **other**: Website visitors are identified by the **Referer** field (user-defined request source). - **policy**: Policy-based rate limiting - **domain**: Domain name rate limit - **url**: URL rate limit Enumeration values: - **ip** - **cookie** - **header** - **other** - **policy** - **domain** - **url**

Parameter	Mandatory	Type	Description
tag_index	No	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	No	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Yes	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Yes	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	No	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.

Parameter	Mandatory	Type	Description
lock_time	No	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	No	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	No	Boolean	Whether to enable global counting.
description	No	String	Rule description.

Table 4-101 CcCondition

Parameter	Mandatory	Type	Description
category	Yes	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**

Parameter	Mandatory	Type	Description
logic_operation	Yes	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.

Parameter	Mandatory	Type	Description
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	No	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-102 action

Parameter	Mandatory	Type	Description
category	Yes	String	Action type: • **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. • **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. • **log**: WAF logs the event only. • **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: • **captcha** • **block** • **log** • **dynamic_block**
detail	No	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. • If you want to use the default block page, this parameter can be excluded. • If you want to use a custom block page, set this parameter.

Table 4-103 detail

Parameter	Mandatory	Type	Description
response	No	**response** object	Block Page.

Table 4-104 response

Parameter	Mandatory	Type	Description
content_type	No	String	Content type. The value can only be **application/json**, **text/html**, or **text/xml**. Enumeration values: ● **application/json** ● **text/html** ● **text/xml**
content	No	String	Block page information.

Table 4-105 tag_condition

Parameter	Mandatory	Type	Description
category	No	String	User identifier. The value is fixed at **referer**.
contents	No	Array of strings	Content of the user identifier field.

Response Parameters

Status code: 200

Table 4-106 Response body parameters

Parameter	Type	Description
name	String	Rule name.
id	String	Rule ID.
policyid	String	Policy ID.

Parameter	Type	Description
url	String	When the value of mode is 0, this parameter has a return value. URL to which the rule applies, excluding a domain name.
prefix	Boolean	Whether a prefix is used for the path. If the protected URL ends with an asterisk (*), a path prefix is used. If the value of mode is 0, this parameter has a return value.
mode	Integer	Mode. ● **0**: Standard. ● **1**: Advanced. Enumeration values: ● **0** ● **1**
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.
action	**action** object	Action to take if the number of requests reaches the upper limit.
tag_type	String	Limit mode. ● **ip**: IP-based rate limiting. Website visitors are identified by IP address. ● **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. ● **other**: Website visitors are identified by the **Referer** field (user-defined request source). ● **policy**: Policy-based rate limiting ● **domain**: Domain name rate limit ● **url**: URL rate limit Enumeration values: ● **ip** ● **cookie** ● **header** ● **other** ● **policy** ● **domain** ● **url**

Parameter	Type	Description
tag_index	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.
lock_time	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	Boolean	Whether to enable global counting.
description	String	Rule description.
total_num	Integer	This parameter is reserved and can be ignored currently.
unaggregation	Boolean	This parameter is reserved and can be ignored currently.

Parameter	Type	Description
aging_time	Integer	Rule aging time. This parameter is reserved and can be ignored currently.
producer	Integer	Rule creation object. This parameter is reserved and can be ignored currently.
timestamp	Long	Timestamp the rule is created.

Table 4-107 CcCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**
logic_operation	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist

Parameter	Type	Description
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-108 action

Parameter	Type	Description
category	String	Action type: ● **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. ● **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. ● **log**: WAF logs the event only. ● **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: ● **captcha** ● **block** ● **log** ● **dynamic_block**

Parameter	Type	Description
detail	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. ● If you want to use the default block page, this parameter can be excluded. ● If you want to use a custom block page, set this parameter.

Table 4-109 detail

Parameter	Type	Description
response	**response** object	Block Page.

Table 4-110 response

Parameter	Type	Description
content_type	String	Content type. The value can only be **application/json**, **text/html**, or **text/xml**. Enumeration values: ● **application/json** ● **text/html** ● **text/xml**
content	String	Block page information.

Table 4-111 tag_condition

Parameter	Type	Description
category	String	User identifier. The value is fixed at **referer**.
contents	Array of strings	Content of the user identifier field.

Status code: 400

Table 4-112 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-113 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-114 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a CC protection rule. The project ID is specified by project_id and protection policy ID is specified by policy_id. The rule name is test55, rate limit mode is IP-based rate limit, the rate limit frequency is 10, the rate limit duration is 60s, and the protective action is verification code. The protection mode of the CC rule is advanced. The field type of the rate limit condition is the URL that contains /url. There is no subfield. Requests are counted only for the current WAF instance.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/cc?

{
  "description" : "",
  "name" : "test55",
  "tag_type" : "ip",
  "limit_num" : 10,
  "limit_period" : 60,
  "action" : {
    "category" : "captcha"
  },
  "mode" : 1,
  "domain_aggregation" : false,
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "contents" : [ "/url" ],
    "index" : null
  } ],
  "region_aggregation" : false
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "f88c5eabff9b4ff9ba6e7dd8e38128ba",
  "policyid" : "d471eef691684f1c8d7784532fd8f4bd",
  "name" : "test55",
  "timestamp" : 1678873040603,
  "description" : "",
  "status" : 1,
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/url" ],
    "logic_operation" : "contain"
  } ],
  "action" : {
    "category" : "captcha"
  },
  "producer" : 1,
  "unaggregation" : false,
  "total_num" : 0,
  "limit_num" : 10,
  "limit_period" : 60,
  "lock_time" : 0,
  "tag_type" : "ip",
  "aging_time" : 0,
  "region_aggregation" : false,
  "domain_aggregation" : false
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.4 Querying a CC Attack Protection Rule by ID

Function

This API is used to query a CC attack protection rule by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}

Table 4-115 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	"ID of the cc rule. It can be obtained by calling the **ListCcRules** API."

Table 4-116 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-117 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-118 Response body parameters

Parameter	Type	Description
name	String	Rule name.
id	String	Rule ID.
policyid	String	Policy ID.
url	String	When the value of mode is 0, this parameter has a return value. URL to which the rule applies, excluding a domain name.
prefix	Boolean	Whether a prefix is used for the path. If the protected URL ends with an asterisk (*), a path prefix is used. When the value of mode is 0, this parameter has a return value.
mode	Integer	Mode. ● **0**: Standard. ● **1**: Advanced. Enumeration values: ● **0** ● **1**
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.

Parameter	Type	Description
conditions	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.
action	**action** object	Action to take if the number of requests reaches the upper limit.
tag_type	String	Limit mode. ● **ip**: IP-based rate limiting. Website visitors are identified by IP address. ● **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. ● **other**: Website visitors are identified by the **Referer** field (user-defined request source). Enumeration values: ● **ip** ● **cookie** ● **header** ● **other** ● **policy** ● **domain** ● **url**
tag_index	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).

Parameter	Type	Description
limit_num	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.
lock_time	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	Boolean	Whether to enable global counting.
description	String	Rule description.
total_num	Integer	This parameter is reserved and can be ignored currently.
unaggregation	Boolean	This parameter is reserved and can be ignored currently.
aging_time	Integer	Rule aging time. This parameter is reserved and can be ignored currently.
producer	Integer	Rule creation object. This parameter is reserved and can be ignored currently.
timestamp	Long	Timestamp the rule is created.

Table 4-119 CcCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: - **url** - **ip** - **ipv6** - **params** - **cookie** - **header** - **response_code**
logic_operation	String	Logic for matching the condition. - If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal - If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all - If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Parameter	Type	Description
index	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-120 action

Parameter	Type	Description
category	String	Action type: ● **block**: WAF blocks discovered attacks. ● **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. ● If **tag_type** is set to **other**, the value can only be **block**. Enumeration values: ● **captcha** ● **block** ● **log** ● **dynamic_block**
detail	**detail** object	Action details. If detail is null, the default block page is displayed by default. ● This parameter cannot be included when **category** is set to **captcha**. ● This parameter is required when **category** is set to **block**.

Table 4-121 detail

Parameter	Type	Description
response	**response** object	Returned page

Table 4-122 response

Parameter	Type	Description
content_type	String	Content type. The value can only be application/json, text/html, or text/xml. Enumeration values: - **application/json** - **text/html** - **text/xml**
content	String	Content

Table 4-123 tag_condition

Parameter	Type	Description
category	String	User identifier. The value is fixed at **referer**.
contents	Array of strings	Content of the user identifier field.

Status code: 400

Table 4-124 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-125 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-126 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a CC attack protection rule. Details about the query are specified by project_id, policy_id, and rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}?
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "f88c5eabff9b4ff9ba6e7dd8e38128ba",
  "policyid" : "d471eef691684f1c8d7784532fd8f4bd",
  "name" : "test55",
  "timestamp" : 1678873040603,
  "description" : "",
  "status" : 1,
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/url" ],
    "logic_operation" : "contain"
  } ],
  "action" : {
    "category" : "captcha"
  },
  "producer" : 1,
  "unaggregation" : false,
  "total_num" : 0,
  "limit_num" : 10,
  "limit_period" : 60,
  "lock_time" : 0,
  "tag_type" : "ip",
  "aging_time" : 0,
  "region_aggregation" : false,
  "domain_aggregation" : false
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.5 Updating a CC Attack Protection Rule

Function

This API is used to update a CC attack protection rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}

Table 4-127 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	"ID of the cc rule. It can be obtained by calling the **ListCcRules** API."

Table 4-128 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-129 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-130 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Rule name.
mode	Yes	Integer	Mode. ● **0**: Standard. ● **1**: Advanced. Enumeration values: ● **0** ● **1**
url	No	String	Path to be protected in the CC attack protection rule. This parameter is mandatory when the CC attack protection rule is in standard mode (i.e. the value of **mode** is **0**).
conditions	Yes	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.

Parameter	Mandatory	Type	Description
action	Yes	**action** object	Action to take if the number of requests reaches the upper limit.
tag_type	Yes	String	Protection mode. - **ip**: IP-based rate limiting. Website visitors are identified by IP address. - **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. - **other**: Website visitors are identified by the **Referer** field (user-defined request source). Enumeration values: - **ip** - **cookie** - **header** - **other** - **policy** - **domain** - **url**

Parameter	Mandatory	Type	Description
tag_index	No	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	No	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Yes	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Yes	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	No	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.

Parameter	Mandatory	Type	Description
lock_time	No	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	No	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	No	Boolean	Whether to enable global counting.
description	No	String	Rule description.

Table 4-131 CcCondition

Parameter	Mandatory	Type	Description
category	Yes	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**

Parameter	Mandatory	Type	Description
logic_operation	Yes	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.

Parameter	Mandatory	Type	Description
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	No	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-132 action

Parameter	Mandatory	Type	Description
category	Yes	String	Action type: • **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. • **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. • **log**: WAF logs the event only. • **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: • **captcha** • **block** • **log** • **dynamic_block**
detail	No	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. • If you want to use the default block page, this parameter can be excluded. • If you want to use a custom block page, set this parameter.

Table 4-133 detail

Parameter	Mandatory	Type	Description
response	No	**response** object	Block Page.

Table 4-134 response

Parameter	Mandatory	Type	Description
content_type	No	String	Content type. The value can only be **application/json**, **text/html**, or **text/xml**. Enumeration values: ● **application/json** ● **text/html** ● **text/xml**
content	No	String	Block page information.

Table 4-135 tag_condition

Parameter	Mandatory	Type	Description
category	No	String	User identifier. The value is fixed at **referer**.
contents	No	Array of strings	Content of the user identifier field.

Response Parameters

Status code: 200

Table 4-136 Response body parameters

Parameter	Type	Description
name	String	Rule name.
id	String	Rule ID.
policyid	String	Policy ID.

Parameter	Type	Description
url	String	When the value of mode is 0, this parameter has a return value. URL to which the rule applies, excluding a domain name. ● Prefix match: A path ending with * indicates that the path is used as a prefix. For example, to protect /admin/test.php or /adminabc, you can set Path to /admin*. ● Exact match: The path you enter must exactly match the path you want to protect. If the path you want to protect is /admin, set url to /admin.
prefix	Boolean	Whether a prefix is used for the path. If the protected URL ends with an asterisk (*), a path prefix is used.
mode	Integer	Mode. ● **0**: Standard. ● **1**: Advanced. Enumeration values: ● **0** ● **1**
conditions	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.
action	**action** object	Action to take if the number of requests reaches the upper limit.
tag_type	String	Protection mode. ● **ip**: IP-based rate limiting. Website visitors are identified by IP address. ● **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. ● **other**: Website visitors are identified by the **Referer** field (user-defined request source). Enumeration values: ● **ip** ● **cookie** ● **header** ● **other** ● **policy** ● **domain** ● **url**

Parameter	Type	Description
tag_index	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.
unlock_num	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.
lock_time	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	Boolean	Whether to enable global counting.
description	String	Rule description.
total_num	Integer	This parameter is reserved and can be ignored currently.
unaggregation	Boolean	This parameter is reserved and can be ignored currently.

Parameter	Type	Description
aging_time	Integer	Rule aging time. This parameter is reserved and can be ignored currently.
producer	Integer	Rule creation object. This parameter is reserved and can be ignored currently.

Table 4-137 CcCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**
logic_operation	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist

Parameter	Type	Description
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-138 action

Parameter	Type	Description
category	String	Action type: ● **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. ● **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. ● **log**: WAF logs the event only. ● **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: ● **captcha** ● **block** ● **log** ● **dynamic_block**

Parameter	Type	Description
detail	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. ● If you want to use the default block page, this parameter can be excluded. ● If you want to use a custom block page, set this parameter.

Table 4-139 detail

Parameter	Type	Description
response	**response** object	Returned page

Table 4-140 response

Parameter	Type	Description
content_type	String	Content type. The value can only be application/json, text/html, or text/xml. Enumeration values: ● **application/json** ● **text/html** ● **text/xml**
content	String	Content

Table 4-141 tag_condition

Parameter	Type	Description
category	String	User identifier. The value is fixed at **referer**.
contents	Array of strings	Content of the user identifier field.

Status code: 400

Table 4-142 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-143 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-144 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to change the rate limit settings of a CC protection rule. The project ID is specified by project_id and protection policy ID is specified by policy_id. The rule name is test55, the rate limit mode is IP-based rate limit, rate limit frequency is 10, the rate limit duration is 60s, and the protective action is verification code. The protection mode of the CC rule is advanced. The field type of the rate limit condition is the URL that contains /url. There is no subfield. Requests are counted only for the current WAF instance.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}?

{
  "description" : "",
  "tag_type" : "ip",
  "limit_num" : 10,
  "limit_period" : 60,
  "action" : {
    "category" : "captcha"
  },
  "mode" : 1,
  "name" : "test55",
  "domain_aggregation" : false,
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "contents" : [ "/url" ],
    "index" : null
  } ],
  "region_aggregation" : false
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "f88c5eabff9b4ff9ba6e7dd8e38128ba",
  "policyid" : "d471eef691684f1c8d7784532fd8f4bd",
  "name" : "test55",
  "description" : "",
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/url" ],
    "logic_operation" : "contain"
  } ],
  "action" : {
    "category" : "captcha"
  },
  "producer" : 1,
  "unaggregation" : false,
  "total_num" : 0,
  "limit_num" : 10,
  "limit_period" : 60,
  "lock_time" : 0,
  "tag_type" : "ip",
  "aging_time" : 0,
  "region_aggregation" : false,
  "domain_aggregation" : false
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.6 Deleting a CC Attack Protection Rule

Function

This API is used to delete a CC attack protection rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}

Table 4-145 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	"ID of the cc rule. It can be obtained by calling the **ListCcRules** API."

Table 4-146 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-147 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-148 Response body parameters

Parameter	Type	Description
name	String	Rule name.
id	String	Rule ID.
policyid	String	Policy ID.
url	String	When the value of mode is 0, this parameter has a return value. URL to which the rule applies, excluding a domain name.
prefix	Boolean	Whether a prefix is used for the path. If the protected URL ends with an asterisk (*), a path prefix is used.
mode	Integer	Mode. ● **0**: Standard. ● **1**: Advanced. Enumeration values: ● **0** ● **1**
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **CcCondition** objects	Condition list. This parameter is returned when mode is set to **1**.

Parameter	Type	Description
action	**action** object	Action to take if the number of requests reaches the upper limit.
tag_type	String	Protection mode. ● **ip**: IP-based rate limiting. Website visitors are identified by IP address. ● **cookie**: User-based rate limiting. Website visitors are identified by the cookie key value. ● **other**: Website visitors are identified by the **Referer** field (user-defined request source). Enumeration values: ● **ip** ● **cookie** ● **header** ● **other** ● **policy** ● **domain** ● **url**
tag_index	String	User identifier. This parameter is mandatory when the rate limit mode is set to **user** (cookie or header). ● **cookie**: Set the cookie field name. You need to configure an attribute variable name in the cookie that can uniquely identify a web visitor based on your website requirements. This field does not support regular expressions. Only complete matches are supported. For example, if a website uses the name field in the cookie to uniquely identify a website visitor, select name. ● **header**: Set the user-defined HTTP header you want to protect. You need to configure the HTTP header that can identify web visitors based on your website requirements.
tag_condition	**tag_condition** object	User tag. This parameter is mandatory when the rate limit mode is set to **other**. -other: A website visitor is identified by the Referer field (user-defined request source).
limit_num	Integer	Rate limit frequency based on the number of requests. The value ranges from 1 to 2,147,483,647.
limit_period	Integer	Rate limit period, in seconds. The value ranges from 1 to 3,600.

Parameter	Type	Description
unlock_num	Integer	Allowable frequency based on the number of requests. The value ranges from 0 to 2,147,483,647. This parameter is required only when the protection action type is **dynamic_block**.
lock_time	Integer	Block duration, in seconds. The value ranges from 0 to 65,535. Access requests are blocked during the configured block duration, and an error page is displayed.
domain_aggregation	Boolean	Whether to enable domain name aggregation statistics
region_aggregation	Boolean	Whether to enable global counting.
description	String	Rule description.
total_num	Integer	This parameter is reserved and can be ignored.
unaggregation	Boolean	This parameter is reserved and can be ignored.
aging_time	Integer	This parameter is reserved and can be ignored.
producer	Integer	This parameter is reserved and can be ignored.
timestamp	Long	Timestamp the rule is created.

Table 4-149 CcCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **ip** ● **ipv6** ● **params** ● **cookie** ● **header** ● **response_code**

Parameter	Type	Description
logic_operation	String	Logic for matching the condition. ● If the category is **url**, the optional operations are contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal and len_not_equal ● If the category is **ip**, the optional operations are: equal, not_equal, , equal_any and not_equal_all ● If the category is **params**, **cookie** and **header**, the optional operations are: contain, not_contain, equal, not_equal, prefix, not_prefix, suffix, not_suffix, contain_any, not_contain_all, equal_any, not_equal_all, equal_any, not_equal_all, prefix_any, not_prefix_all, suffix_any, not_suffix_all, len_greater, len_less, len_equal, len_not_equal, num_greater, num_less, num_equal, num_not_equal, exist and not_exist
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.
index	String	Subfield. When Field Type is set to params, cookie, or header, set this parameter based on the site requirements and this parameter is mandatory.

Table 4-150 action

Parameter	Type	Description
category	String	Action type: - **captcha**: Verification code. WAF requires visitors to enter a correct verification code to continue their access to requested page on your website. - **block**: WAF blocks the requests. When **tag_type** is set to **other**, the value can only be **block**. - **log**: WAF logs the event only. - **dynamic_block**: In the previous rate limit period, if the request frequency exceeds the value of Rate Limit Frequency, the request is blocked. In the next rate limit period, if the request frequency exceeds the value of Permit Frequency, the request is still blocked. Note: The **dynamic_block** protection action can be set only when the advanced protection mode is enabled for the CC protection rule. Enumeration values: - **captcha** - **block** - **log** - **dynamic_block**
detail	**detail** object	Block page information. When protection action **category** is set to **block** or **dynamic_block**, you need to set the returned block page. - If you want to use the default block page, this parameter can be excluded. - If you want to use a custom block page, set this parameter.

Table 4-151 detail

Parameter	Type	Description
response	**response** object	Returned page

Table 4-152 response

Parameter	Type	Description
content_type	String	Content type. The value can only be application/json, text/html, or text/xml. Enumeration values: • **application/json** • **text/html** • **text/xml**
content	String	Content

Table 4-153 tag_condition

Parameter	Type	Description
category	String	User identifier. The value is fixed at **referer**.
contents	Array of strings	Content of the user identifier field.

Status code: 400

Table 4-154 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-155 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-156 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a CC attack protection rule. Details about the deletion are specified by project_id, policy_id, and rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/cc/{rule_id}?
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "f88c5eabff9b4ff9ba6e7dd8e38128ba",
  "policyid" : "d471eef691684f1c8d7784532fd8f4bd",
  "name" : "test55",
  "timestamp" : 1678873040603,
  "description" : "",
  "status" : 1,
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/url" ],
    "logic_operation" : "contain"
  } ],
  "action" : {
    "category" : "captcha"
  },
  "producer" : 1,
  "unaggregation" : false,
  "total_num" : 0,
  "limit_num" : 10,
  "limit_period" : 60,
  "lock_time" : 0,
  "tag_type" : "ip",
  "aging_time" : 0,
  "region_aggregation" : false,
  "domain_aggregation" : false
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.7 Querying the List of Precise Protection Rules

Function

This API is used to query the list of precise protection rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/custom

Table 4-157 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-158 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
offset	Yes	Integer	Offset. The records after the offset are queried.

Parameter	Mandatory	Type	Description
limit	Yes	Integer	Maximum number of records that can be returned.

Request Parameters

Table 4-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-160 Response body parameters

Parameter	Type	Description
total	Integer	Number of rules in the policy
items	Array of **CustomRule** objects	Array of rules

Table 4-161 CustomRule

Parameter	Type	Description
id	String	Policy ID.
policyid	String	Rule ID.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.

Parameter	Type	Description
conditions	Array of **conditions** objects	List of matching conditions. All conditions must be met.
action	**CustomAction** object	Protective action of the precise protection rule.
action_mode	Boolean	This parameter is reserved and can be ignored.
priority	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
timestamp	Long	Timestamp when the precise protection rule is created.
time	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is returned only when time is set to true.
terminal	Long	Timestamp (ms) when the precise protection rule expires. This parameter is returned only when **time** is set to **true**.
producer	Integer	This parameter is reserved and can be ignored.
name	String	Rule name.

Table 4-162 conditions

Parameter	Type	Description
category	String	Field type. The options are **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, and **request**.
index	String	Subfield ● If the field type is **url**, **user-agent**, **ip**, **refer**, **request_line**, **method**, or **request**, **index** is not required. ● If the field type is **params**, **header**, or **cookie**, and the subfield is customized, the value of **index** is the customized subfield.

Parameter	Type	Description
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions.
value_list_id	String	Reference table ID.

Table 4-163 CustomAction

Parameter	Type	Description
category	String	Protection type ● **block**: WAF blocks attacks. ● **pass**: WAF allows requests. ● **log**: WAF only logs discovered attacks. Enumeration values: ● **block** ● **pass** ● **log**
followed_action_id	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Status code: 400

Table 4-164 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-165 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 500

Table 4-166 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the precise protection rule list. Details about the query are specified by project_id and policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/custom?offset=0&limit=1
```

Example Responses

Status code: 200

ok

```
{
  "total" : 1,
  "items" : [ {
    "id" : "c637138b6fe048e4a797d1c3712e85b3",
    "policyid" : "41424a44c2904e1b9e505ccdbfe8c1fb",
    "timestamp" : 1679888279852,
    "description" : "",
    "status" : 1,
    "time" : false,
    "priority" : 50,
    "action_mode" : false,
    "conditions" : [ {
      "category" : "url",
      "contents" : [ "test" ],
      "logic_operation" : "contain"
    } ],
    "action" : {
      "category" : "block"
    },
    "producer" : 1
  } ]
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.8 Creating a precise protection rule

Function

This API is used to create a precise protection rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/custom

Table 4-167 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-168 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-169 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-170 Request body parameters

Parameter	Mandatory	Type	Description
time	Yes	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	No	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is mandatory only when **time** is set to **true**.
terminal	No	Long	Timestamp (ms) when the precise protection rule expires. This parameter is mandatory only when **time** is set to **true**.
description	No	String	Rule description.
conditions	Yes	Array of **CustomConditions** objects	Match condition List

Parameter	Mandatory	Type	Description
action	Yes	**CustomAction** object	Protective action of the precise protection rule.
priority	Yes	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
name	Yes	String	Rule name.

Table 4-171 CustomConditions

Parameter	Mandatory	Type	Description
category	No	String	Field type. The options can be **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, or **request**. Enumeration values: - **url** - **user-agent** - **referer** - **ip** - **method** - **request_line** - **request** - **params** - **cookie** - **header**
index	No	String	Subfield type. - If the field type is set to **url**, **user-agent**, **ip**, **referer**, **request_line**, **method**, or **request**, **index** can be null. - If the field type is set to **params**, **header**, or **cookie** and subfields are customized, **index** is set to the target custom subfield.

Parameter	Mandatory	Type	Description
logic_operation	No	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Table 4-172 CustomAction

Parameter	Mandatory	Type	Description
category	Yes	String	Protection type ● **block**: WAF blocks attacks. ● **pass**: WAF allows requests. ● **log**: WAF only logs discovered attacks. Enumeration values: ● **block** ● **pass** ● **log**
followed_action_id	No	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Response Parameters

Status code: 200

Table 4-173 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
name	String	Rule name.
policyid	String	Policy ID.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **conditions** objects	List of matching conditions. All conditions must be met.
action	**CustomAction** object	Protective action of the precise protection rule.
action_mode	Boolean	This parameter is reserved and can be ignored.
priority	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
timestamp	Long	Timestamp when the precise protection rule is created.
time	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is returned only when **time** is set to **true**.
terminal	Long	Timestamp (ms) when the precise protection rule expires. This parameter is returned only when **time** is set to **true**.
producer	Integer	This parameter is reserved and can be ignored.

Table 4-174 conditions

Parameter	Type	Description
category	String	Field type. The options are **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, and **request**.

Parameter	Type	Description
index	String	Subfield - When the field type is **url**, **user-agent**, **ip**, **refer**, **request_line**, **method**, or **request**, **index** is not required. - If the field type is **params**, **header**, or **cookie**, and the subfield is customized, the value of **index** is the customized subfield.
logic_operation	String	Logic for matching the condition.
contents	Array of strings	Content of the conditions.
value_list_id	String	Reference table ID.

Table 4-175 CustomAction

Parameter	Type	Description
category	String	Protection type - **block**: WAF blocks attacks. - **pass**: WAF allows requests. - **log**: WAF only logs discovered attacks. Enumeration values: - **block** - **pass** - **log**
followed_action_id	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Status code: 400

Table 4-176 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-177 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-178 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a precise protection rule. Details about the query are specified by project_id and policy_id. The rule name is test55. The protective action is Block. The priority for executing the rule is 50. The matching condition is that the demo field in the header contains demo. The rule takes effect immediately.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/custom?enterprise_project_id=0

{
  "name" : "test55",
  "description" : "",
  "action" : {
    "category" : "block"
  },
  "priority" : 50,
  "conditions" : [ {
    "category" : "header",
    "logic_operation" : "contain",
    "index" : "demo",
    "contents" : [ "demo" ]
  } ],
  "time" : false
}
```

Example Responses

Status code: 200

ok

```
{
  "action" : {
    "category" : "block"
  },
  "action_mode" : false,
  "conditions" : [ {
    "category" : "header",
    "index" : "demo",
    "logic_operation" : "contain",
    "contents" : [ "demo" ]
  } ],
  "description" : "",
  "name" : "test55",
  "id" : "2a3caa2bc9814c09ad73d02e3485b4a4",
  "policyid" : "1f016cde588646aca3fb19f277c44d03",
  "priority" : 50,
  "status" : 1,
  "time" : false,
  "timestamp" : 1656495488880
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.9 Querying a Precise Protection Rule by ID

Function

Querying a Precise Protection Rule by ID

URI

GET /v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}

Table 4-179 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Mandatory	Type	Description
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a precise protection rule. You can obtain it by calling the **ListCustomRules** API.

Table 4-180 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-181 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-182 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
name	String	Rule name.

Parameter	Type	Description
policyid	String	Policy ID.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **conditions** objects	List of matching conditions. All conditions must be met.
action	**CustomAction** object	Protective action of the precise protection rule.
action_mode	Boolean	This parameter is reserved and can be ignored.
priority	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
timestamp	Long	Timestamp when the precise protection rule is created.
time	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is returned only when **time** is set to **true**.
terminal	Long	Timestamp (ms) when the precise protection rule expires. This parameter is returned only when **time** is set to **true**.
producer	Integer	This parameter is reserved and can be ignored currently.

Table 4-183 conditions

Parameter	Type	Description
category	String	Field type. The options are **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, and **request**.

Parameter	Type	Description
index	String	Subfield - When the field type is **url**, **user-agent**, **ip**, **refer**, **request_line**, **method**, or **request**, **index** is not required. - If the field type is **params**, **header**, or **cookie**, and the subfield is customized, the value of **index** is the customized subfield.
logic_operation	String	Logic for matching the condition.
contents	Array of strings	Content of the conditions.
value_list_id	String	Reference table ID.

Table 4-184 CustomAction

Parameter	Type	Description
category	String	Protection type - **block**: WAF blocks attacks. - **pass**: WAF allows requests. - **log**: WAF only logs discovered attacks. Enumeration values: - **block** - **pass** - **log**
followed_action_id	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Status code: 400

Table 4-185 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-186 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-187 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a precise protection rule. Details about the query are specified by project_id, policy_id, and rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}?
```

Example Responses

Status code: 200

ok

```
{
  "action" : {
    "category" : "block"
  },
  "action_mode" : false,
  "conditions" : [ {
    "category" : "header",
    "index" : "demo",
    "logic_operation" : "contain",
    "contents" : [ "demo" ]
  } ],
  "description" : "",
  "name" : "test55",
  "id" : "2a3caa2bc9814c09ad73d02e3485b4a4",
  "policyid" : "1f016cde588646aca3fb19f277c44d03",
  "priority" : 50,
  "status" : 1,
  "time" : false,
  "timestamp" : 1656495488880
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.10 Updating a precise protection rule

Function

This API is used to update a precise protection rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}

Table 4-188 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a precise protection rule. You can obtain it by calling the **ListCustomRules** API.

Table 4-189 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-190 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-191 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Rule name.
time	Yes	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	No	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is mandatory only when **time** is set to **true**.
terminal	No	Long	Timestamp (ms) when the precise protection rule expires. This parameter is mandatory only when **time** is set to **true**.
description	No	String	Rule description.

Parameter	Mandatory	Type	Description
conditions	Yes	Array of **CustomConditions** objects	Match condition List
action	Yes	**CustomAction** object	Protective action of the precise protection rule.
priority	Yes	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.

Table 4-192 CustomConditions

Parameter	Mandatory	Type	Description
category	No	String	Field type. The options can be **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, or **request**. Enumeration values: ● **url** ● **user-agent** ● **referer** ● **ip** ● **method** ● **request_line** ● **request** ● **params** ● **cookie** ● **header**
index	No	String	Subfield type. ● If the field type is set to **url**, **user-agent**, **ip**, **referer**, **request_line**, **method**, or **request**, **index** can be null. ● If the field type is set to **params**, **header**, or **cookie** and subfields are customized, **index** is set to the target custom subfield.

Parameter	Mandatory	Type	Description
logic_operation	No	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Table 4-193 CustomAction

Parameter	Mandatory	Type	Description
category	Yes	String	Protection type ● **block**: WAF blocks attacks. ● **pass**: WAF allows requests. ● **log**: WAF only logs discovered attacks. Enumeration values: ● **block** ● **pass** ● **log**
followed_action_id	No	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Response Parameters

Status code: 200

Table 4-194 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
name	String	Rule name.
policyid	String	Policy ID.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **conditions** objects	List of matching conditions. All conditions must be met.
action	**CustomAction** object	Protective action of the precise protection rule.
action_mode	Boolean	This parameter is reserved and can be ignored.
priority	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
time	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is returned only when **time** is set to **true**.
terminal	Long	Timestamp (ms) when the precise protection rule expires. This parameter is returned only when **time** is set to **true**.
producer	Integer	This parameter is reserved and can be ignored currently.

Table 4-195 conditions

Parameter	Type	Description
category	String	Field type. The options are **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, and **request**.

Parameter	Type	Description
index	String	Subfield - When the field type is **url**, **user-agent**, **ip**, **refer**, **request_line**, **method**, or **request**, **index** is not required. - If the field type is **params**, **header**, or **cookie**, and the subfield is customized, the value of **index** is the customized subfield.
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions.
value_list_id	String	Reference table ID.

Table 4-196 CustomAction

Parameter	Type	Description
category	String	Protection type - **block**: WAF blocks attacks. - **pass**: WAF allows requests. - **log**: WAF only logs discovered attacks. Enumeration values: - **block** - **pass** - **log**
followed_action_id	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Status code: 400

Table 4-197 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-198 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-199 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to edit a precise protection rule. Details about the change are specified by project_id, policy_id, and rule_id. The rule name is test55. The protective action is Block. The priority for executing the rule is 50. The matching condition is that the demo2 field in the header contains demo. The rule takes effect immediately.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}?

{
  "name" : "test55",
  "description" : "",
  "action" : {
    "category" : "block"
  },
  "priority" : 50,
  "conditions" : [ {
    "category" : "header",
    "logic_operation" : "contain",
    "index" : "demo2",
    "contents" : [ "demo" ]
  } ],
  "time" : false
}
```

Example Responses

Status code: 200

ok

```
{
  "action" : {
    "category" : "block"
  },
  "action_mode" : false,
  "conditions" : [ {
    "category" : "header",
    "index" : "demo2",
    "logic_operation" : "contain",
    "contents" : [ "demo" ]
  } ],
  "description" : "",
  "name" : "test55",
  "id" : "2a3caa2bc9814c09ad73d02e3485b4a4",
  "policyid" : "1f016cde588646aca3fb19f277c44d03",
  "priority" : 50,
  "status" : 1,
  "time" : false
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.11 Deleting a precise protection rule

Function

This API is used to delete a precise protection rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}

Table 4-200 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Mandatory	Type	Description
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a precise protection rule. You can obtain it by calling the **ListCustomRules** API.

Table 4-201 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-202 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-203 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
name	String	Rule name.

Parameter	Type	Description
policyid	String	Policy ID.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
conditions	Array of **conditions** objects	List of matching conditions. All conditions must be met.
action	**CustomAction** object	Protective action of the precise protection rule.
action_mode	Boolean	This parameter is reserved and can be ignored.
priority	Integer	Priority of a rule. A small value indicates a high priority. If two rules are assigned with the same priority, the rule added earlier has higher priority. Value range: 0 to 1000.
timestamp	Long	Timestamp when the precise protection rule is created.
time	Boolean	Time the precise protection rule takes effect. ● **false**: The rule takes effect immediately. ● **true**: The effective time is customized.
start	Long	Timestamp (ms) when the precise protection rule takes effect. This parameter is returned only when **time** is set to **true**.
terminal	Long	Timestamp (ms) when the precise protection rule expires. This parameter is returned only when **time** is set to **true**.
producer	Integer	This parameter is reserved and can be ignored currently.

Table 4-204 conditions

Parameter	Type	Description
category	String	Field type. The options are **url**, **user-agent**, **ip**, **params**, **cookie**, **referer**, **header**, **request_line**, **method**, and **request**.

Parameter	Type	Description
index	String	Subfield - When the field type is **url**, **user-agent**, **ip**, **refer**, **request_line**, **method**, or **request**, **index** is not required. - If the field type is **params**, **header**, or **cookie**, and the subfield is customized, the value of **index** is the customized subfield.
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions.
value_list_id	String	Reference table ID.

Table 4-205 CustomAction

Parameter	Type	Description
category	String	Protection type - **block**: WAF blocks attacks. - **pass**: WAF allows requests. - **log**: WAF only logs discovered attacks. Enumeration values: - **block** - **pass** - **log**
followed_action_id	String	ID of a known attack source rule. This parameter can be configured only when **category** is set to **block**.

Status code: 400

Table 4-206 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-207 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-208 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a precise protection rule. Details about the deletion are specified by project_id, policy_id, and rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/custom/{rule_id}?
```

Example Responses

Status code: 200

ok

```
{
  "action" : {
    "category" : "block"
  },
  "action_mode" : false,
  "conditions" : [ {
    "category" : "header",
    "index" : "demo",
    "logic_operation" : "contain",
    "contents" : [ "demo" ]
  } ],
  "description" : "",
  "id" : "2a3caa2bc9814c09ad73d02e3485b4a4",
  "policyid" : "1f016cde588646aca3fb19f277c44d03",
  "priority" : 50,
  "status" : 1,
  "time" : false,
  "timestamp" : 1656495488880
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.12 Creating a Global Protection Whitelist (Formerly False Alarm Masking) Rule

Function

This API is used to create a global protection whitelist (formerly false alarm masking) rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/ignore

Table 4-209 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-210 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-211 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-212 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	Array of strings	Domain name or website to be protected. If the array length is **0**, the rule takes effect for all domain names or websites.
conditions	Yes	Array of **CreateCondition** objects	Condition list
mode	Yes	Integer	The value is fixed at **1**, indicating v2 false alarm masking rules. v1 is used only for compatibility with earlier versions, and false alarm rules cannot be created in v1.

Parameter	Mandatory	Type	Description
rule	Yes	String	Items to be masked. You can provide multiple items and separate them with semicolons (;). ● If you want to block a specific built-in rule, the value of this parameter is the rule ID. To query the rule ID, go to the WAF console, choose **Policies** and click the target policy name. On the displayed page, in the **Basic Web Protection** area, select the **Protection Rules** tab, and view the ID of the specific rule. You can also query the rule ID in the event details. ● If you want to mask a type of basic web protection rules, set this parameter to the name of the type of basic web protection rules. **xss**: XSS attacks **webshell**: Web shells **vuln**: Other types of attacks **sqli**: SQL injection attack **robot**: Malicious crawlers **rfi**: Remote file inclusion **lfi**: Local file inclusion **cmdi**: Command injection attack ● To bypass the basic web protection, set this parameter to **all**. ● To bypass all WAF protection, set this parameter to **bypass**.
description	No	String	Description of a masking rule

Table 4-213 CreateCondition

Parameter	Mandatory	Type	Description
category	Yes	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.

Parameter	Mandatory	Type	Description
contents	Yes	Array of strings	Content. The array length is limited to **1**. The content format varies depending on the field type. For example, if the field type is **ip**, the value must be an IP address or IP address range. If the field type is **url**, the value must be in the standard URL format. IF the field type is **params**, **cookie**, or **header**, the content format is not limited.
logic_operation	Yes	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	No	Integer	This parameter is reserved and can be ignored.
index	No	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter is not required. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Response Parameters

Status code: 200

Table 4-214 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID

Parameter	Type	Description
timestamp	Long	Timestamp the rule was created.
description	String	Rule Description
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
rule	String	ID of the built-in rule to be masked. You can query the rule ID by choosing **Policies** > **Policy Name** > **Basic Web Protection** > **Protection Rules** on the WAF console or on the event details page.
mode	Integer	The value is fixed at **1**, indicating v2 false alarm masking rules are used. v1 is used only for compatibility with earlier versions, and false alarm rules cannot be created in v1.
conditions	Array of **Condition** objects	Condition list
domain	Array of strings	Protected domain name or website

Table 4-215 Condition

Parameter	Type	Description
category	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.
contents	Array of strings	Content. The array length must be 1. The content format varies depending on field types. For example, if the field type is ip, the value must be an IP address or IP address range. If the field type is url, the value must be a URL in standard format. If the field type is params, cookie, or header, the content format is not limited.
logic_operation	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.

Parameter	Type	Description
check_all_indexes_logic	Integer	This parameter is reserved and can be ignored.
index	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter does not exist. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Status code: 400

Table 4-216 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-217 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-218 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a global whitelist protect (the formerly false alarm masking) rule. Details about the rule are specified by project_id and policy_id. The domain name is we.test.418lab.cn, the URL contains x.x.x.x, the description is demo, and the ID of the rule to be masked is 091004.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/ignore?enterprise_project_id=0

{
  "domain" : [ "we.test.418lab.cn" ],
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "contents" : [ "x.x.x.x" ],
    "index" : null
  } ],
  "mode" : 1,
  "description" : "demo",
  "rule" : "091004"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "a57f20ced01e4e0d8bea8e7c49eea254",
  "policyid" : "f385eceedf7c4c34a4d1def19eafbe85",
  "timestamp" : 1650522310447,
  "description" : "demo",
  "status" : 1,
  "rule" : "091004",
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "x.x.x.x" ],
    "logic_operation" : "contain"
  } ],
  "domain" : [ "we.test.418lab.cn" ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.13 Querying the List of Global Protection Whitelist (Formerly False Alarm Masking) Rules

Function

This API is used to query the list of global protection whitelist (formerly false alarm masking) rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}

Table 4-219 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a false alarm masking rule. You can obtain the rule ID from the **id** field in the response body of the **ListIgnoreRule** API, which is used for querying false alarm masking rules.

Table 4-220 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-222 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
timestamp	Long	Timestamp the rule is created.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	The path for false masking alarms. This parameter is available only when **mode** is set to **0**.

Parameter	Type	Description
rule	String	Items to be masked. You can provide multiple items and separate them with semicolons (;). ● To block a specific built-in rule, set the value of this parameter to the rule ID. To query the rule ID, go to the WAF console, choose **Policies** and click the target policy name. On the displayed page, in the **Basic Web Protection** area, select the **Protection Rules** tab, and view the ID of the specific rule. You can also query the rule ID in the event details. ● To mask a type of basic web protection rules, set this parameter to the name of the basic web protection rule type. **xss**: XSS attacks **webshell**: Web shells **vuln**: Other types of attacks **sqli**: SQL injection attack **robot**: Malicious crawlers **rfi**: Remote file inclusion **lfi**: Local file inclusion **cmdi**: Command injection attack ● To bypass the basic web protection, set this parameter to **all**. ● To bypass all WAF protection, set this parameter to **bypass**.
mode	Integer	Version number. The value can be **0** or **1**. **0**: indicates the old version V1. **1** indicates the new version V2. When the value of **mode** is **0**, the **conditions** field does not exist, but the **url** and **url_logic** fields exist. When the value of **mode** is **1**, the **url** and **url_logic** fields do not exist, but the **conditions** field exists.
url_logic	String	URL match logic
conditions	Array of **Condition** objects	Conditions
domain	Array of strings	Protected domain name or website

Table 4-223 Condition

Parameter	Type	Description
category	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.

Parameter	Type	Description
contents	Array of strings	Content. The array length must be 1. The content format varies depending on field types. For example, if the field type is ip, the value must be an IP address or IP address range. If the field type is url, the value must be a URL in standard format. If the field type is params, cookie, or header, the content format is not limited.
logic_operation	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	Integer	This parameter is reserved and can be ignored.
index	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter does not exist. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Status code: 400

Table 4-224 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-225 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-226 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a global whitelist protect (the formerly false alarm masking) rule. Details about the query are specified by project_id, policy_id, and rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "16e81d9a9e0244359204d7f00326ee4f",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "timestamp" : 1679106005786,
  "description" : "",
  "status" : 1,
  "rule" : "webshell;vuln",
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test" ],
    "logic_operation" : "contain"
  } ],
  "domain" : [ ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.14 Updating a Global Protection Whitelist (Formerly False Alarm Masking) Rule

Function

This API is used to update a global protection whitelist (formerly false alarm masking) rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}

Table 4-227 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a false alarm masking rule. You can obtain the rule ID from the **id** field in the response body of the **ListIgnoreRule** API, which is used for querying false alarm masking rules.

Table 4-228 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-229 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-230 Request body parameters

Parameter	Mandatory	Type	Description
domain	Yes	Array of strings	Domain name or website to be protected. If the array length is **0**, the rule takes effect for all domain names or websites.
conditions	Yes	Array of **CreateCondition** objects	Condition list
mode	Yes	Integer	The value is fixed at **1**, indicating v2 false alarm masking rules. v1 is used only for compatibility with earlier versions, and false alarm rules cannot be created in v1.

Parameter	Mandatory	Type	Description
rule	Yes	String	Items to be masked. You can provide multiple items and separate them with semicolons (;). ● To block a specific built-in rule, set the value of this parameter to the rule ID. To query the rule ID, go to the WAF console, choose **Policies** and click the target policy name. On the displayed page, in the **Basic Web Protection** area, select the **Protection Rules** tab, and view the ID of the specific rule. You can also query the rule ID in the event details. ● To mask a type of basic web protection rules, set this parameter to the name of the basic web protection rule type. **xss**: XSS attacks **webshell**: Web shells **vuln**: Other types of attacks **sqli**: SQL injection attack **robot**: Malicious crawlers **rfi**: Remote file inclusion **lfi**: Local file inclusion **cmdi**: Command injection attack ● To bypass the basic web protection, set this parameter to **all**. ● To bypass all WAF protection, set this parameter to **bypass**.
description	No	String	Description of a masking rule

Table 4-231 CreateCondition

Parameter	Mandatory	Type	Description
category	Yes	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.

Parameter	Mandatory	Type	Description
contents	Yes	Array of strings	Content. The array length is limited to **1**. The content format varies depending on the field type. For example, if the field type is **ip**, the value must be an IP address or IP address range. If the field type is **url**, the value must be in the standard URL format. IF the field type is **params**, **cookie**, or **header**, the content format is not limited.
logic_operation	Yes	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	No	Integer	This parameter is reserved and can be ignored.
index	No	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter is not required. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Response Parameters

Status code: 200

Table 4-232 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.

Parameter	Type	Description
timestamp	Long	Timestamp the rule is created.
description	String	Rule description.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	The path for false masking alarms. This parameter is available only when **mode** is set to **0**.
rule	String	Items to be masked. You can provide multiple items and separate them with semicolons (;). ● To block a specific built-in rule, set the value of this parameter to the rule ID. To query the rule ID, go to the WAF console, choose **Policies** and click the target policy name. On the displayed page, in the **Basic Web Protection** area, select the **Protection Rules** tab, and view the ID of the specific rule. You can also query the rule ID in the event details. ● To mask a type of basic web protection rules, set this parameter to the name of the basic web protection rule type. **xss**: XSS attacks **webshell**: Web shells **vuln**: Other types of attacks **sqli**: SQL injection attack **robot**: Malicious crawlers **rfi**: Remote file inclusion **lfi**: Local file inclusion **cmdi**: Command injection attack ● To bypass the basic web protection, set this parameter to **all**. ● To bypass all WAF protection, set this parameter to **bypass**.
mode	Integer	Version number. The value can be **0** or **1**. **0**: indicates the old version V1. **1** indicates the new version V2. When the value of **mode** is **0**, the **conditions** field does not exist, but the **url** and **url_logic** fields exist. When the value of **mode** is **1**, the **url** and **url_logic** fields do not exist, but the **conditions** field exists.
url_logic	String	URL match logic
conditions	Array of **Condition** objects	Conditions

Parameter	Type	Description
domain	Array of strings	Protected domain name or website

Table 4-233 Condition

Parameter	Type	Description
category	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.
contents	Array of strings	Content. The array length must be 1. The content format varies depending on field types. For example, if the field type is ip, the value must be an IP address or IP address range. If the field type is url, the value must be a URL in standard format. If the field type is params, cookie, or header, the content format is not limited.
logic_operation	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	Integer	This parameter is reserved and can be ignored.
index	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter does not exist. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Status code: 400

Table 4-234 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-235 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-236 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a global whitelist protect (the formerly false alarm masking) rule. Details about the rule are specified by project_id, policy_id, and rule_id. Set the protection condition to URL containing /test, set the rules to be masked to website Trojans and other types of attacks, and set advanced settings to all parameters.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}

{
  "domain" : [ ],
  "mode" : 1,
  "description" : "",
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "index" : null,
    "contents" : [ "/test" ]
  } ],
  "rule" : "webshell;vuln"
}
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "16e81d9a9e0244359204d7f00326ee4f",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "timestamp" : 1679106005786,
  "description" : "",
  "status" : 1,
  "rule" : "webshell;vuln",
  "mode" : 1,
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test" ],
    "logic_operation" : "contain"
  } ],
  "domain" : [ ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.15 Deleting a Global Protection Whitelist (Formerly False Alarm Masking) Rule

Function

This API is used to delete a global protection whitelist (formerly false alarm masking) rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}

Table 4-237 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Parameter	Mandatory	Type	Description
rule_id	Yes	String	ID of a false alarm masking rule. You can obtain the rule ID from the **id** field in the response body of the **ListIgnoreRule** API, which is used for querying false alarm masking rules.

Table 4-238 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-239 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-240 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
timestamp	Long	Timestamp the rule was created.
description	String	Rule Description

Parameter	Type	Description
status	Integer	Rule status. The value can be **0** or **1**. - **0**: The rule is disabled. - **1**: The rule is enabled.
url	String	The path for false masking alarms. This parameter is available only when **mode** is set to **0**.
rule	String	ID of the built-in rule to be masked. You can query the rule ID by choosing **Policies** > **Policy Name** > **Basic Web Protection** > **Protection Rules** on the WAF console or on the event details page.
mode	Integer	Version number. The value can be **0** or **1**. **0**: indicates the old version V1. **1** indicates the new version V2. When the value of **mode** is **0**, the **conditions** field does not exist, but the **url** and **url_logic** fields exist. When the value of **mode** is **1**, the **url** and **url_logic** fields do not exist, but the **conditions** field exists.
url_logic	String	URL match logic
conditions	Array of **Condition** objects	Filter
domains	Array of strings	Protected domain name or website

Table 4-241 Condition

Parameter	Type	Description
category	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.
contents	Array of strings	Content. The array length must be 1. The content format varies depending on field types. For example, if the field type is ip, the value must be an IP address or IP address range. If the field type is url, the value must be a URL in standard format. If the field type is params, cookie, or header, the content format is not limited.

Parameter	Type	Description
logic_operation	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	Integer	This parameter is reserved and can be ignored.
index	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter does not exist. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Status code: 400

Table 4-242 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-243 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-244 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Example Requests

The following example shows how to delete a global whitelist protect (the formerly false alarm masking) rule Details about the rule are specified by project_id, policy_id, and rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/ignore/{rule_id}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "40484384970948d79fffe4e4ae1fc54d",
  "policyid" : "f385eceedf7c4c34a4d1def19eafbe85",
  "timestamp" : 1650512535222,
  "description" : "demo",
  "status" : 1,
  "rule" : "091004",
  "mode" : 1,
  "conditions" : [ {
    "category" : "ip",
    "contents" : [ "x.x.x.x" ],
    "logic_operation" : "equal"
  } ],
  "domain" : [ "we.test.418lab.cn" ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.16 Querying the Blacklist and Whitelist Rule List

Function

This API is used to query the list of blacklist and whitelist rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/whiteblackip

Table 4-245 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-246 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results. Default: **10**
name	No	String	Name of the whitelist or blacklist rule

Request Parameters

Table 4-247 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-248 Response body parameters

Parameter	Type	Description
total	Integer	Number of the whitelist and blacklist rules
items	Array of **WhiteBlackIpResponseBody** objects	Details of blacklist or whitelist rules

Table 4-249 WhiteBlackIpResponseBody

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the whitelist or blacklist rule
policyid	String	Policy ID
timestamp	Long	Timestamp (ms) when the rule was created
description	String	Rule Description
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
addr	String	IP address/IP address group

Parameter	Type	Description
white	Integer	Protective action - **0**: WAF blocks requests that hit the rule. - **1**: WAF allows requests that hit the rule. - **2**: WAF only record requests that hit the rule.
ip_group	**Ip_group** object	IP address group

Table 4-250 Ip_group

Parameter	Type	Description
id	String	ID of the IP address group
name	String	Name of the IP address group
size	Long	Number of IP addresses or IP address ranges in the IP address group

Status code: 400

Table 4-251 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-252 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-253 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the whitelist and blacklist rule list in a project. The project ID is specified by project_id, and the policy is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/whiteblackip?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "3c96caf769ca4f57814fcf4259ea89a1",
    "policyid" : "4dddfd44fc89453e9fd9cd6bfdc39db2",
    "name" : "hkhtest",
    "timestamp" : 1650362891844,
    "description" : "demo",
    "status" : 1,
    "addr" : "x.x.x.x",
    "white" : 0
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.17 Creating a Blacklist/Whitelist Rule

Function

This API is used to create a blacklist or whitelist rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/whiteblackip

Table 4-254 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-255 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-256 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-257 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Rue name. The value can contain a maximum of 64 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed.
addr	No	String	IP address or IP address ranges in the blacklist or whitelist rule, for example, 42.123.120.66 or 42.123.120.0/16.
description	No	String	Rule description
white	Yes	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
ip_group_id	No	String	ID of the created IP address group. Use either this parameter or **addr**. To add an IP address group, go to the WAF console, choose **Objects** > **Address Groups**, and click **Add Address Group**.

Response Parameters

Status code: 200

Table 4-258 Response body parameters

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the whitelist or blacklist rule
policyid	String	Policy ID
addr	String	IP address or IP address ranges in the blacklist or whitelist rule, for example, 42.123.120.66 or 42.123.120.0/16.

Parameter	Type	Description
white	Integer	Protective action - **0**: WAF blocks requests that hit the rule. - **1**: WAF allows requests that hit the rule. - **2**: WAF only record requests that hit the rule.
ip_group	**Ip_group** object	IP address group
status	Integer	Rule status. The value can be **0** or **1**. - **0**: The rule is disabled. - **1**: The rule is enabled.
description	String	Rule Description
timestamp	Long	Time a rule is created. The value is a 13-digit timestamp in millisecond.

Table 4-259 Ip_group

Parameter	Type	Description
id	String	ID of the IP address group
name	String	Name of the IP address group
size	Long	Number of IP addresses or IP address ranges in the IP address group

Status code: 400

Table 4-260 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-261 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 500

Table 4-262 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a whitelist or blacklist rule in a protection policy. The project ID is specified by project_id, and the policy ID is specified by policy_id. The rule name is demo, the protective action is block, the description is demo, and the IP address of the rule is x.x.x.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/whiteblackip?enterprise_project_id=0

{
  "name" : "demo",
  "white" : 0,
  "description" : "demo",
  "addr" : "x.x.x.x"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "5d43af25404341058d5ab17b7ba78b56",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "timestamp" : 1650531872900,
  "description" : "demo",
  "status" : 1,
  "addr" : "x.x.x.x",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.

Status Code	Description
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.18 Querying a blacklist or whitelist rule

Function

Querying a blacklist or whitelist rule

URI

GET /v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}

Table 4-263 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the IP address whitelist or blacklist rule. You can obtain the ID by calling the **ListWhiteblackipRule** API used for querying the IP address whitelist and blacklist rules.

Table 4-264 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-265 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-266 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
name	String	Name of the whitelist or blacklist rule
policyid	String	Policy ID.
addr	String	IP address or IP address ranges in the blacklist or whitelist rule, for example, 42.123.120.66 or 42.123.120.0/16.
white	Integer	Protective action ● **0**: WAF blocks requests hit the rule. ● **1**: WAF allows requests hit the rule. ● **2**: WAF only record requests hit the rule.
ip_group	**Ip_group** object	IP address group

Parameter	Type	Description
status	Integer	Rule status. The value can be **0** or **1**. - **0**: The rule is disabled. - **1**: The rule is enabled.
description	String	Rule description.
timestamp	Long	Time a rule is created. The value is a 13-digit timestamp in millisecond.

Table 4-267 Ip_group

Parameter	Type	Description
id	String	ID of the IP address group
name	String	Name of the IP address group
size	Long	Number of IP addresses or IP address ranges in the IP address group

Status code: 400

Table 4-268 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-269 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-270 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a whitelist or blacklist protection rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "5d43af25404341058d5ab17b7ba78b56",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "timestamp" : 1650531872900,
  "description" : "demo",
  "status" : 1,
  "addr" : "1.1.1.2",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.19 Updating a Blacklist or Whitelist Protection Rule

Function

This API is used to update blacklist and whitelist protection rules. You can update IP addresses, IP address ranges, protective actions, and other information.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}

Table 4-271 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the blacklist or whitelist rule. It can be obtained by calling the **ListWhiteblackipRule API.

Table 4-272 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-273 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-274 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the whitelist or blacklist rule
addr	No	String	IP address or IP address ranges in the blacklist or whitelist rule, for example, 42.123.120.66 or 42.123.120.0/16.
description	No	String	Rule description
white	Yes	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
ip_group_id	No	String	ID of the created IP address group. Use either this parameter or **addr**. To add an IP address group, go to the WAF console, choose **Objects** > **Address Groups**, and click **Add Address Group**.

Response Parameters

Status code: 200

Table 4-275 Response body parameters

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the whitelist or blacklist rule
policyid	String	Policy ID
addr	String	IP address or IP address ranges included in the whitelist or blacklist rule.
description	String	Description of the blacklist or whitelist rule
white	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
ip_group	**Ip_group** object	IP address group

Table 4-276 Ip_group

Parameter	Type	Description
id	String	ID of the IP address group
name	String	Name of the IP address group
size	Long	Number of IP addresses or IP address ranges in the IP address group

Status code: 400

Table 4-277 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-278 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-279 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a whitelist or blacklist protection rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id. The rule name is changed to demo, protective action to block, description to demo, and blacklist/whitelist IP address to 1.1.1.2.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}?enterprise_project_id=0

{
  "name" : "demo",
  "white" : 0,
  "description" : "demo",
  "addr" : "1.1.1.2"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "5d43af25404341058d5ab17b7ba78b56",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "description" : "demo",
  "addr" : "1.1.1.2",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.20 Querying Global Protection Whitelist (Formerly False Alarm Masking) Rules

Function

Querying Global Protection Whitelist (Formerly False Alarm Masking) Rules

URI

GET /v1/{project_id}/waf/policy/{policy_id}/ignore

Table 4-280 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-281 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results. Default: **10**

Request Parameters

Table 4-282 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-283 Response body parameters

Parameter	Type	Description
total	Integer	The number of global protection whitelist (formerly false alarm masking) rules in the protection policy.

Parameter	Type	Description
items	Array of **IgnoreRuleBody** objects	Domain names the global protection whitelist (formerly false alarm masking) rule is used for.

Table 4-284 IgnoreRuleBody

Parameter	Type	Description
id	String	Rule ID
policyid	String	ID of the protection policy that includes the rule
timestamp	Long	Timestamp the rule was created.
description	String	Rule description
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	The path for false masking alarms. This parameter is available only when **mode** is set to **0**.
rule	String	Rules to be masked ● If you want to block a specific built-in rule, the value of this parameter is the rule ID. To query the rule ID, go to the WAF console, choose **Policies** and click the target policy name. On the displayed page, in the **Basic Web Protection** area, select the **Protection Rules** tab, and view the ID of the specific rule. You can also query the rule ID in the event details. ● If you want to mask a type of basic web protection rules, set this parameter to the name of the type of basic web protection rules. **xss**: XSS attacks **webshell**: Web shells **vuln**: Other types of attacks **sqli**: SQL injection attack **robot**: Malicious crawlers **rfi**: Remote file inclusion **lfi**: Local file inclusion **cmdi**: Command injection attack ● To bypass the basic web protection, set this parameter to **all**. ● To bypass all WAF protection, set this parameter to **bypass**.

Parameter	Type	Description
mode	Integer	Version number. The value 0 indicates the old version V1, and the value 1 indicates the new version V2. If the value of mode is 0, the conditions field does not exist, and the url and url_logic fields exist. When the value of mode is 1, the url and url_logic fields do not exist, and the conditions field exists.
url_logic	String	Matching logic. The value can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
conditions	Array of **Condition** objects	Condition list
domain	Array of strings	Protecting Domain Names or Protecting Websites

Table 4-285 Condition

Parameter	Type	Description
category	String	Field type. The value can be **ip**, **url**, **params**, **cookie**, or **header**.
contents	Array of strings	Content. The array length must be 1. The content format varies depending on field types. For example, if the field type is ip, the value must be an IP address or IP address range. If the field type is url, the value must be a URL in standard format. If the field type is params, cookie, or header, the content format is not limited.
logic_operation	String	The matching logic varies depending on the field type. For example, if the field type is **ip**, the logic can be **equal** or **not_equal**. If the field type is **url**, **params**, **cookie**, or **header**, the logic can be **equal**, **not_equal**, **contain**, **not_contain**, **prefix**, **not_prefix**, **suffix**, **not_suffix**.
check_all_indexes_logic	Integer	This parameter is reserved and can be ignored.

Parameter	Type	Description
index	String	If the field type is **ip** and the subfield is the client IP address, the **index** parameter does not exist. If the subfield type is **X-Forwarded-For**, the value is **x-forwarded-for**. If the field type is **params**, **header**, or **cookie**, and the subfield is user-defined, the value of **index** is the user-defined subfield.

Status code: 400

Table 4-286 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-287 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 403

Table 4-288 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-289 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the global whitelist protect (the formerly false alarm masking) rule list. Details about the query are specified by project_id and policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/ignore?
enterprise_project_id=0&page=1&pagesize=10
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "40484384970948d79fffe4e4ae1fc54d",
    "policyid" : "f385eceedf7c4c34a4d1def19eafbe85",
    "timestamp" : 1650512535222,
    "description" : "demo",
    "status" : 1,
    "rule" : "091004",
    "mode" : 1,
    "conditions" : [ {
      "category" : "ip",
      "contents" : [ "x.x.x.x" ],
      "logic_operation" : "equal"
    } ],
    "domain" : [ "we.test.418lab.cn" ]
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
403	Insufficient resource quota.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.21 Deleting a Blacklist or Whitelist Rule

Function

This API is used to delete a blacklist or whitelist rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}

Table 4-290 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a blacklist or whitelist rule. You can obtain the rule ID by calling the **ListWhiteblackipRule** API.

Table 4-291 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-292 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-293 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
name	String	Name of the whitelist or blacklist rule
timestamp	Long	Time a rule is deleted. The value must be a 13-digit timestamp in millisecond.
description	String	Description
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
addr	String	IP address or IP address ranges in the blacklist or whitelist rule, for example, 42.123.120.66 or 42.123.120.0/16.
white	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
ip_group	**Ip_group** object	IP address group

Table 4-294 Ip_group

Parameter	Type	Description
id	String	ID of the IP address group
name	String	Name of the IP address group
size	Long	Number of IP addresses or IP address ranges in the IP address group

Status code: 400

Table 4-295 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-296 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-297 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a whitelist or blacklist protection rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/whiteblackip/{rule_id}?
enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "5d43af25404341058d5ab17b7ba78b56",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "timestamp" : 1650531872900,
  "description" : "demo",
  "status" : 1,
  "addr" : "1.1.1.2",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.22 Querying the JavaScript Anti-Crawler Rule List

Function

This API is used to query the list of JavaScript anti-crawler rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/anticrawler

Table 4-298 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-299 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
offset	Yes	Integer	Offset. The records after the offset are queried.
limit	Yes	Integer	Maximum number of records that can be returned.
type	No	String	JavaScript anti-crawler rule protection mode ● **anticrawler_except_url**: In this mode, all paths are protected except the one specified in the queried anti-crawler rule. ● **anticrawler_specific_url**: In this mode, the path specified in the queried rule is protected.

Request Parameters

Table 4-300 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-301 Response body parameters

Parameter	Type	Description
total	Integer	The number of anti-crawler rules in the current policy.
items	Array of **AnticrawlerRule** objects	The list of anti-crawler protection rules.

Table 4-302 AnticrawlerRule

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
conditions	Array of **AnticrawlerCondition** objects	Condition list.
name	String	Rule name.
type	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.

Parameter	Type	Description
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
priority	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-303 AnticrawlerCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **user-agent**
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Status code: 400

Table 4-304 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-305 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-306 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the JavaScript-based anti-crawler protection rule list in a policy. The project ID is specified by project_id, and the policy ID is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler?
```

Example Responses

Status code: 200

ok

```
{
  "total" : 1,
  "items" : [ {
    "id" : "c06ec2e5d93241a694fcd9e0312657a1",
    "policyid" : "0681f69f94ac408e9688373e45a61fdb",
    "name" : "test",
    "timestamp" : 1678931359146,
    "status" : 1,
    "type" : "anticrawler_except_url",
    "conditions" : [ {
      "category" : "url",
      "contents" : [ "/test" ],
      "logic_operation" : "contain"
    } ],
    "priority" : 50
  } ]
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.23 Updating a JavaScript Anti-Crawler Protection Rule

Function

This API is used to update the protection mode for a JavaScript anti-crawler rule. Before creating a JavaScript anti-crawler rule, you need to call this API to specify the protection mode for the rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/anticrawler

Table 4-307 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-308 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-309 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-310 Request body parameters

Parameter	Mandatory	Type	Description
anticrawler_type	Yes	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.

Response Parameters

Status code: 200

Table 4-311 Response body parameters

Parameter	Type	Description
anticrawler_type	String	JavaScript anti-crawler rule type. - **anticrawler_specific_url**: used to protect a specific path specified by the rule. - **anticrawler_except_url**: used to protect all paths except the one specified by the rule.

Status code: 400

Table 4-312 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-313 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-314 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a JavaScript-based anti-crawler rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id. The rule type is changed to excluding protection paths.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler?

{
  "anticrawler_type" : "anticrawler_except_url"
}
```

Example Responses

Status code: 200

ok

```
{
  "anticrawler_type" : "anticrawler_except_url"
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.24 Creating a JavaScript Anti-Crawler Rule

Function

This API is used to create a JavaScript anti-crawler rule. Before invoking this API, you need to call the **UpdateAnticrawlerRuleType** API to specify the protection mode.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/anticrawler

Table 4-315 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-316 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-317 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-318 Request body parameters

Parameter	Mandatory	Type	Description
conditions	Yes	Array of **AnticrawlerCondition** objects	Condition list.
name	Yes	String	Rule name.
type	Yes	String	JavaScript anti-crawler rule type. - **anticrawler_specific_url**: used to protect a specific path specified by the rule. - **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
priority	Yes	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-319 AnticrawlerCondition

Parameter	Mandatory	Type	Description
category	No	String	Field type. Enumeration values: - **url** - **user-agent**
logic_operation	No	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.

Parameter	Mandatory	Type	Description
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Response Parameters

Status code: 200

Table 4-320 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
conditions	Array of **AnticrawlerCondition** objects	Condition list.
name	String	Rule name.
type	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
priority	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-321 AnticrawlerCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: - **url** - **user-agent**
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Status code: 400

Table 4-322 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-323 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-324 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a JavaScript-based anti-crawler rule in a policy. The project ID is specified by project_id, and the policy ID is specified by policy_id. The rule name is test66, the rule type is excluding protection paths, the match condition is url that contains /test66, and the priority is 50.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler?

{
  "name" : "test66",
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "contents" : [ "/test66" ]
  } ],
  "priority" : 50
}
```

Example Responses

Status code: 200

ok

```
{
  "id" : "7e7983bf2c9c41029d642bcbf819346d",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "name" : "test66",
  "timestamp" : 1678931492172,
  "status" : 1,
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test66" ],
    "logic_operation" : "contain"
  } ],
  "priority" : 50
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.25 Querying a JavaScript Anti-Crawler Rule

Function

This API is used to query a JavaScript anti-crawler rule by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}

Table 4-325 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	Rule ID.

Table 4-326 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-327 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-328 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
conditions	Array of **AnticrawlerCondition** objects	Condition list.
name	String	Rule name.
type	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
priority	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-329 AnticrawlerCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **user-agent**
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Status code: 400

Table 4-330 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-331 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-332 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a JavaScript-based anti-crawler rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}?
```

Example Responses

Status code: 200

ok

```
{
  "id" : "7e7983bf2c9c41029d642bcbf819346d",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "name" : "test66",
  "timestamp" : 1678931492172,
  "status" : 1,
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test66" ],
    "logic_operation" : "contain"
  } ],
  "priority" : 50
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.26 Updating a JavaScript Anti-Crawler Rule

Function

This API is used to update a JavaScript anti-crawler rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}

Table 4-333 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	Rule ID.

Table 4-334 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-335 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-336 Request body parameters

Parameter	Mandatory	Type	Description
conditions	Yes	Array of **AnticrawlerCondition** objects	Condition list.
name	Yes	String	Rule name.
type	Yes	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
priority	Yes	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-337 AnticrawlerCondition

Parameter	Mandatory	Type	Description
category	No	String	Field type. Enumeration values: - **url** - **user-agent**
logic_operation	No	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	No	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	No	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Response Parameters

Status code: 200

Table 4-338 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
conditions	Array of **AnticrawlerCondition** objects	Condition list.
name	String	Rule name.

Parameter	Type	Description
type	String	JavaScript anti-crawler rule type. ● **anticrawler_specific_url**: used to protect a specific path specified by the rule. ● **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
priority	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-339 AnticrawlerCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: ● **url** ● **user-agent**
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Status code: 400

Table 4-340 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-341 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-342 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a JavaScript-based anti-crawler rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id. The rule name is test66, the rule type is excluding protection paths, the match condition is url that contains /test66, and the priority is 50.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}?

{
  "name" : "test66",
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "logic_operation" : "contain",
    "contents" : [ "/test66" ]
  } ],
  "priority" : 50
}
```

Example Responses

Status code: 200

ok

```
{
  "id" : "7e7983bf2c9c41029d642bcbf819346d",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "name" : "test66",
  "timestamp" : 1678931492172,
  "status" : 1,
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test66" ],
    "logic_operation" : "contain"
  } ],
  "priority" : 50
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.27 Deleting a JavaScript Anti-Crawler Rule

Function

This API is used to delete a JavaScript anti-crawler rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}

Table 4-343 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.
rule_id	Yes	String	Rule ID.

Table 4-344 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-345 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-346 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
conditions	Array of **AnticrawlerCondition** objects	Condition list.
name	String	Rule name.
type	String	JavaScript anti-crawler rule type. - **anticrawler_specific_url**: used to protect a specific path specified by the rule. - **anticrawler_except_url**: used to protect all paths except the one specified by the rule.
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. - **0**: The rule is disabled. - **1**: The rule is enabled.
priority	Integer	Priority of the rule. A smaller value indicates a higher priority. If the value is the same, the rule is created earlier and the priority is higher. Value range: 0 to 1000.

Table 4-347 AnticrawlerCondition

Parameter	Type	Description
category	String	Field type. Enumeration values: - **url** - **user-agent**
logic_operation	String	Logic for matching the condition. The options are **contain**, **not_contain**, **equal**, **not_equal**, **prefix**, **not_prefix**, **suffix**, and **not_suffix**. For more details, see the console UI.
contents	Array of strings	Content of the conditions. This parameter is mandatory when the suffix of **logic_operation** is not any or all.

Parameter	Type	Description
value_list_id	String	Reference table ID. It can be obtained by calling the API Querying the Reference Table List. This parameter is mandatory when the suffix of **logic_operation** is any or all. The reference table type must be the same as the category type.

Status code: 400

Table 4-348 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-349 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-350 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a JavaScript-based anti-crawler rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/anticrawler/{rule_id}?
```

Example Responses

Status code: 200

ok

```
{
  "id" : "7e7983bf2c9c41029d642bcbf819346d",
  "policyid" : "0681f69f94ac408e9688373e45a61fdb",
  "name" : "test66",
  "timestamp" : 1678931492172,
  "status" : 1,
  "type" : "anticrawler_except_url",
  "conditions" : [ {
    "category" : "url",
    "contents" : [ "/test66" ],
    "logic_operation" : "contain"
  } ],
  "priority" : 50
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.28 Querying the list of Data Masking Rules.

Function

Querying the list of Data Masking Rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/privacy

Table 4-351 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-352 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned.
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results.

Request Parameters

Table 4-353 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-354 Response body parameters

Parameter	Type	Description
total	Integer	Number of rules
items	Array of **PrivacyResponseBody** objects	Array of rule details

Table 4-355 PrivacyResponseBody

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
timestamp	Long	Time the rule was created. The value is a 13-digit timestamp in ms.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk () indicates the path prefix.*

Parameter	Type	Description
category	String	Masked field. - **Params**: The **params** field in requests - **Cookie**: Web visitors distinguished by cookie - **Header**: Custom HTTP header - **Form**: Forms Enumeration values: - **params** - **cookie** - **header** - **form**
index	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs.
description	String	(Optional) A description of the rule.

Status code: 400

Table 4-356 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-357 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-358 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the data masking protection rule list. The project ID is specified by project_id and the policy ID is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/privacy?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "97e4d35f375f4736a21cccfad77613eb",
    "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
    "timestamp" : 1650533191385,
    "description" : "demo",
    "status" : 1,
    "url" : "/demo",
    "category" : "cookie",
    "index" : "demo"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.29 Creating a Data Masking Rule

Function

This API is used to create a data masking rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/privacy

Table 4-359 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-360 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-361 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-362 Request body parameters

Parameter	Mandatory	Type	Description
url	Yes	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.
category	Yes	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms Enumeration values: ● **params** ● **cookie** ● **header** ● **form**
index	Yes	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs. The masked field name cannot exceed 2,048 bytes. Only digits, letters, underscores (_), and hyphens (-) are allowed.
description	No	String	(Optional) A description of the rule.

Response Parameters

Status code: 200

Table 4-363 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID

Parameter	Type	Description
timestamp	Long	Time the rule was created. The value is a 13-digit timestamp in ms.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.
category	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms Enumeration values: ● **params** ● **cookie** ● **header** ● **form**
index	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs.
description	String	(Optional) A description of the rule.

Status code: 400

Table 4-364 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-365 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-366 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a data masking rule in a policy. The project ID is specified by project_id and the policy ID is specified by policy_id. The url of the rule is /demo, the masking field is cookie, the masking field name is demo, and the rule description is demo.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/privacy?enterprise_project_id=0

{
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo",
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "97e4d35f375f4736a21cccfad77613eb",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "timestamp" : 1650533191385,
  "description" : "demo",
  "status" : 1,
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.30 Querying a Data Masking Rule

Function

Querying a the Data Masking Rule

URI

GET /v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}

Table 4-367 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the data masking rule. You can obtain the rule ID by calling the **ListPrivacyRule** API which is used for querying the data masking rule list.

Table 4-368 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-369 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-370 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
timestamp	Long	Time the rule was created. The value is a 13-digit timestamp in ms.
description	String	(Optional) A description of the rule.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.

Parameter	Type	Description
category	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms
index	String	Name of the masked field

Status code: 400

Table 4-371 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-372 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-373 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a data masking rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "97e4d35f375f4736a21cccfad77613eb",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "timestamp" : 1650533191385,
  "description" : "demo",
  "status" : 1,
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo1"
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.31 Updating a Data Masking Rule

Function

This API is used to update a data masking rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}

Table 4-374 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the data masking rule. You can obtain the rule ID by calling the **ListPrivacyRule** API which is used for querying the data masking rule list.

Table 4-375 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-376 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-377 Request body parameters

Parameter	Mandatory	Type	Description
url	Yes	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/. *The asterisk ()* indicates the path prefix.
category	Yes	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms Enumeration values: ● **params** ● **cookie** ● **header** ● **form**
index	Yes	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs. The masked field name cannot exceed 2,048 bytes. Only digits, letters, underscores (_), and hyphens (-) are allowed.
description	No	String	(Optional) A description of the rule.

Response Parameters

Status code: 200

Table 4-378 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID

Parameter	Type	Description
timestamp	Long	Time the rule was created. The value is a 13-digit timestamp in ms.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.
category	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms Enumeration values: ● **params** ● **cookie** ● **header** ● **form**
index	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs.
description	String	(Optional) A description of the rule.

Status code: 400

Table 4-379 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-380 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-381 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a data masking rule. The project ID is specified by project_id and the policy ID is specified by policy_id. The rule ID is specified by rule_id. The url of the rule is /demo, the masking field is cookie, the masking field name is demo1, and the rule description is demo.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}?enterprise_project_id=0

{
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo1",
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "97e4d35f375f4736a21cccfad77613eb",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "description" : "demo",
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo1"
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.32 Deleting a Data Masking Rule

Function

This API is used to delete a data masking rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}

Table 4-382 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the data masking rule. You can obtain the rule ID by calling the **ListPrivacyRule** API which is used for querying the data masking rule list.

Table 4-383 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-384 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-385 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
timestamp	Long	Time the rule was created. The value is a 13-digit timestamp in ms.
description	String	(Optional) A description of the rule.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
url	String	URL protected by the data masking rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.

Parameter	Type	Description
category	String	Masked field. ● **Params**: The **params** field in requests ● **Cookie**: Web visitors distinguished by cookie ● **Header**: Custom HTTP header ● **Form**: Forms
index	String	Masked field name. Set the field name based on the masked field. The masked field will not be displayed in logs.

Status code: 400

Table 4-386 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-387 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-388 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a data masking rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/privacy/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "97e4d35f375f4736a21cccfad77613eb",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "timestamp" : 1650533191385,
  "description" : "demo",
  "status" : 1,
  "url" : "/demo",
  "category" : "cookie",
  "index" : "demo1"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.33 Querying the List of Known Attack Source Rules

Function

This API is used to query the list of known attack source rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/punishment

Table 4-389 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the known attack source rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-390 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
offset	Yes	Integer	Offset. The records after the offset are queried.
limit	Yes	Integer	Maximum number of records that can be returned.

Request Parameters

Table 4-391 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-392 Response body parameters

Parameter	Type	Description
total	Integer	The number of known attack source rules.
items	Array of **PunishmentInfo** objects	The list of known attack source rules.

Table 4-393 PunishmentInfo

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
block_time	Integer	Block duration.
category	String	Type of the known attack source rule.
description	String	Rule description.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-394 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-395 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-396 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the known attack source rule list. The project ID is specified by project_id and the policy ID is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/punishment?offset=0&limit=2
```

Example Responses

Status code: 200

Request sent.

```
{
  "items" : [ {
    "block_time" : 305,
    "category" : "long_ip_block",
    "description" : "test",
    "id" : "2c3afdcc982b429da4f72ee483aece3e",
    "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
    "timestamp" : 1668148186106
  } ],
  "total" : 1
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.34 Creating a Known Attack Source Rule

Function

This API is used to create a known attack source rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/punishment

Table 4-397 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. In the displayed window, choose **My Credentials**. Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-398 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-399 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-400 Request body parameters

Parameter	Mandatory	Type	Description
category	Yes	String	Type of the known attack source rule. Enumeration values: - **long_ip_block** - **long_cookie_block** - **long_params_block** - **short_ip_block** - **short_cookie_block** - **short_params_block**
block_time	Yes	Integer	Block duration. If prefix **long** is selected for the rule type, the value for **block_time** ranges from **301** to **1800**. If prefix **short** is selected for the rule type, the value for **block_time** ranges from **0** to **300**.
description	No	String	Rule description.

Response Parameters

Status code: 200

Table 4-401 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
block_time	Integer	Block duration.
category	String	Type of the known attack source rule.
description	String	Rule description.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-402 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-403 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-404 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a known attack source rule in a policy. The project ID is specified by project_id and the policy ID is specified by policy_id. The rule type is long_ip_block, the block duration is 1233 seconds, and the rule description is demo.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/punishment?

{
  "category" : "long_ip_block",
  "block_time" : "1233",
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request sent.

```
{
  "block_time" : 1233,
  "category" : "long_ip_block",
  "description" : "demo",
  "id" : "2c3afdcc982b429da4f72ee483aece3e",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668148186106
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.35 Querying a Known Attack Source Rule by ID

Function

This API is used to query a known attack source rule by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}

Table 4-405 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a known attack source rule. You can obtain it by calling the **ListPunishmentRules** API.

Table 4-406 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-407 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-408 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
block_time	Integer	Block duration.
category	String	Type of the known attack source rule.
description	String	Rule description.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-409 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-410 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-411 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a known attack source rule. Details about the query are specified by project_id, policy_id, and rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}?
```

Example Responses

Status code: 200

Request sent.

```
{
  "block_time" : 1233,
  "category" : "long_ip_block",
  "description" : "demo",
  "id" : "2c3afdcc982b429da4f72ee483aece3e",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668148186106
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.36 Updating a Known Attack Source Rule

Function

This API is used to update a known attack source rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}

Table 4-412 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a known attack source rule. You can obtain it by calling the **ListPunishmentRules** API.

Table 4-413 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-414 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-415 Request body parameters

Parameter	Mandatory	Type	Description
category	Yes	String	Type of the known attack source rule. Enumeration values: • **long_ip_block** • **long_cookie_block** • **long_params_block** • **short_ip_block** • **short_cookie_block** • **short_params_block**
block_time	Yes	Integer	Block duration. If prefix **long** is selected for the rule type, the value for **block_time** ranges from **301** to **1800**. If prefix **short** is selected for the rule type, the value for **block_time** ranges from **0** to **300**.
description	No	String	Rule description.

Response Parameters

Status code: 200

Table 4-416 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
block_time	Integer	Block duration.
category	String	Type of the known attack source rule.
description	String	Rule description.

Status code: 400

Table 4-417 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-418 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-419 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a known attack source rule. The project ID is specified by project_id and the policy ID is specified by policy_id. The rule ID is specified by rule_id. The rule type is long_ip_block, the block duration is 1233 seconds, and the rule description is update.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}?

{
  "category" : "long_ip_block",
  "block_time" : "1233",
  "description" : "update"
}
```

Example Responses

Status code: 200

Request sent.

```
{
  "block_time" : 1233,
  "category" : "long_ip_block",
  "description" : "update",
  "id" : "2c3afdcc982b429da4f72ee483aece3e",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d"
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.37 Deleting a Known Attack Source Rule

Function

This API is used to delete a known attack source rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}

Table 4-420 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of a known attack source rule. You can obtain it by calling the **ListPunishmentRules** API.

Table 4-421 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-422 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-423 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
block_time	Integer	Block duration.
category	String	Type of the known attack source rule.
description	String	Rule description.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-424 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-425 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-426 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a known attack source rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/punishment/{rule_id}?
```

Example Responses

Status code: 200

Request sent.

```
{
  "block_time" : 1233,
  "category" : "long_ip_block",
  "description" : "update",
  "id" : "2c3afdcc982b429da4f72ee483aece3e",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668148186106
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.38 Querying the List of Geolocation Access Control Rules

Function

This API is used to query the list of geolocation access control rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/geoip

Table 4-427 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-428 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results. Default: **10**

Request Parameters

Table 4-429 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-430 Response body parameters

Parameter	Type	Description
total	Integer	Number of geolocation access control rules in the policy
items	Array of **GeOIpItem** objects	Array of geolocation access control rues

Table 4-431 GeOIpItem

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
name	String	Name of the geolocation access control rue
geoip	String	Locations that can be configured in the geolocation access control rule: (Countries/Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Integer	Protective action - **0**: WAF blocks requests that hit the rule. - **1**: WAF allows requests that hit the rule. - **2**: WAF only record requests that hit the rule.
status	Integer	Rule status. - **true**: enabled. - **false**: disabled.

Parameter	Type	Description
timestamp	Long	Time the rule is created.

Status code: 400

Table 4-432 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-433 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-434 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the geolocation access control rule list in a project. The project ID is specified by project_id, and the policy is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/geoip?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "06f07f6c229141b9a4a78614751bb687",
    "policyid" : "2abeeecefb9840e6bf05efbd80d0fcd7",
    "timestamp" : 1636340038062,
    "status" : 1,
    "geoip" : "GD",
    "white" : 1,
    "name" : "demo"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.39 Creating a Geolocation Access Control Rule

Function

This API is used to create a geolocation access control rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/geoip

Table 4-435 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-436 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-437 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-438 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Name of the geolocation access control rue
geoip	Yes	String	Locations that can be configured in the geolocation access control rule: (Countries/Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.

Parameter	Mandatory	Type	Description
white	Yes	Integer	Protective action - **0**: WAF blocks requests that hit the rule. - **1**: WAF allows requests that hit the rule. - **2**: WAF only record requests that hit the rule.
status	No	Integer	Rule status. - **true**: enabled. - **false**: disabled.
description	No	String	Rule Description

Response Parameters

Status code: 200

Table 4-439 Response body parameters

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the geolocation access control rue
policyid	String	Policy ID
geoip	String	Locations that can be configured in the geolocation access control rule: (Countries/ Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Integer	Protective action - **0**: WAF blocks requests that hit the rule. - **1**: WAF allows requests that hit the rule. - **2**: WAF only record requests that hit the rule.
status	Integer	Rule status. - **true**: enabled. - **false**: disabled.
timestamp	Long	Time the rule is created.

Status code: 400

Table 4-440 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-441 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-442 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a geolocation access control rule in a policy. The project ID is specified by project_id, and the policy ID is specified by policy_id. The protective action is set to block, rule description to demo, rule name to demo, and blocked regions to Shanghai.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/geoip?enterprise_project_id=0

{
  "white" : 0,
  "description" : "demo",
  "name" : "demo",
  "geoip" : "SH|Afghanistan"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "02dafa406c4941368a1037b020f15a53",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "timestamp" : 1650534513775,
  "status" : 1,
  "geoip" : "SH",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.40 Querying a Geolocation Access Control Rule by ID.

Function

Querying a Geolocation Access Control Rule by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}

Table 4-443 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Parameter	Mandatory	Type	Description
rule_id	Yes	String	ID of the geolocation access control rule. You can obtain the rule ID by calling **ListGeoipRule** API which is used to query the list of geolocation access control rules. The rule ID is included the **id** field in the response body.

Table 4-444 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-445 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-446 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.

Parameter	Type	Description
geoip	String	Locations that can be configured in the geolocation access control rule: (Countries/ Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
status	Integer	Rule status. ● **true**: enabled. ● **false**: disabled.
timestamp	Long	Time the rule is created.

Status code: 400

Table 4-447 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-448 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-449 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a geolocation access control rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "02dafa406c4941368a1037b020f15a53",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "status" : 1,
  "geoip" : "BJ|Afghanistan",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.41 Updating a Geolocation Access Control Rule

Function

This API is used to update a geolocation access control rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}

Table 4-450 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API (value of the **id** field in the response body).
rule_id	Yes	String	ID of the geolocation access control rule. You can obtain the rule ID by calling **ListGeoipRule** API which is used to query the list of geolocation access control rules. The rule ID is included the **id** field in the response body.

Table 4-451 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-452 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-453 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Name of the geolocation access control rue
description	No	String	Description
geoip	Yes	String	Locations that can be configured in the geolocation access control rule: (Countries/Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Yes	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.

Response Parameters

Status code: 200

Table 4-454 Response body parameters

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the geolocation access control rue
description	String	description
policyid	String	Policy ID

Parameter	Type	Description
geoip	String	Locations that can be configured in the geolocation access control rule: (Countries/ Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.

Status code: 400

Table 4-455 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-456 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-457 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a geolocation access control rule in a policy. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id. The protective action is set to block, rule description to demo, rule name to demo, and blocked regions to Beijing.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}?enterprise_project_id=0

{
  "white" : 0,
  "name" : "demo",
  "geoip" : "BJ|Afghanistan"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "02dafa406c4941368a1037b020f15a53",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "description" : "demo",
  "geoip" : "BJ|Afghanistan",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.42 Deleting a Geolocation Access Control Rule

Function

This API is used to delete a geolocation access control rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}

Table 4-458 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the geolocation access control rule. You can obtain the rule ID by calling **ListGeoipRule** API which is used to query the list of geolocation access control rules. The rule ID is included the **id** field in the response body.

Table 4-459 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-460 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-461 Response body parameters

Parameter	Type	Description
id	String	Rule ID
name	String	Name of the geolocation access control rue
policyid	String	Policy ID
geoip	String	Locations that can be configured in the geolocation access control rule: (Countries/ Regions outside China: **CA**: Canada, **South Africa**: South Africa, **Mexico**: Mexico, **Peru**: Peru, **Indonesia**: Indonesia) For details about the location code, see *Appendix - Geographical Location Codes*.
white	Integer	Protective action ● **0**: WAF blocks requests that hit the rule. ● **1**: WAF allows requests that hit the rule. ● **2**: WAF only record requests that hit the rule.
status	Integer	Rule status. ● **true**: enabled. ● **false**: disabled.
description	String	Description
timestamp	Long	Time the rule is created.

Status code: 400

Table 4-462 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-463 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-464 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a geolocation access control rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/geoip/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "02dafa406c4941368a1037b020f15a53",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "timestamp" : 1650534513775,
  "status" : 1,
  "geoip" : "BJ|Afghanistan",
  "white" : 0
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.43 Querying the List of Web Tamper Protection Rules

Function

This API is used to query the list of web tamper protection rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/antitamper

Table 4-465 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-466 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned.
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results.

Request Parameters

Table 4-467 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-468 Response body parameters

Parameter	Type	Description
total	Integer	Total number of web tamper protection rules
items	Array of **AntiTamperRuleResponseBody** objects	Number of web tamper protection rules.

Table 4-469 AntiTamperRuleResponseBody

Parameter	Type	Description
id	String	Rule ID
policyid	String	ID of the protection policy that includes the rule
timestamp	Long	Timestamp the rule was created.
description	String	Rule remarks
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
hostname	String	Domain name protected by the web tamper protection rule

Parameter	Type	Description
url	String	URL protected by the web tamper protection rule

Status code: 400

Table 4-470 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-471 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-472 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the web tamper protection rule list in a project. The project ID is specified by project_id, and the policy is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antitamper?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "b77c3182957b46ed8f808a1998245cc4",
    "policyid" : "bdba8e224cbd4d11915f244c991d1720",
    "timestamp" : 1647499571037,
    "description" : "",
    "status" : 0,
    "hostname" : "www.demo.com",
    "url" : "/sdf"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.44 Creating a Web Tamper Protection Rule

Function

This API is used to create a web tamper protection rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/antitamper

Table 4-473 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-474 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-475 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-476 Request body parameters

Parameter	Mandatory	Type	Description
hostname	Yes	String	Protected websites. The list can be obtained by calling the **ListHost** API in cloud mode (the value of the **hostname** field in the response body).
url	Yes	String	URL protected by the web tamper protection rule. The value must be in the standard URL format, for example, /admin/xxx or /admin/*. The asterisk ()* indicates the path prefix.
description	No	String	Rule Description

Response Parameters

Status code: 200

Table 4-477 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
hostname	String	Domain name protected by the web tamper protection rule
url	String	URL protected by the web tamper protection rule
description	String	Timestamp the rule was created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.

Status code: 400

Table 4-478 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-479 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-480 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a web tamper protection rule in a policy. The project ID is specified by project_id, and the policy ID is specified by policy_id. The website for the rule is www.demo.com, the URL of the rule is /test, and the rule description is demo.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antitamper?enterprise_project_id=0

{
  "hostname" : "www.demo.com",
  "url" : "/test",
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "eed1c1e9c1b04b4bad4ba1186387a5d8",
  "policyid" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "description" : "demo",
  "status" : 1,
  "hostname" : "www.demo.com",
  "url" : "/test"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.45 Querying a Web Tamper Protection Rule

Function

This API is used to query a web tamper protection rule.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}

Table 4-481 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the anti-tamper rule. It can be obtained by calling the **ListAntitamperRule** API.

Table 4-482 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-483 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-484 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
hostname	String	Domain name protected by the web tamper protection rule
url	String	URL protected by the web tamper protection rule
description	String	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-485 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-486 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-487 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Example Requests

The following example shows how to query a web tamper protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "b77c3182957b46ed8f808a1998245cc4",
  "policyid" : "bdba8e224cbd4d11915f244c991d1720",
  "timestamp" : 1647499571037,
  "description" : "",
  "status" : 0,
  "hostname" : "www.demo.com",
  "url" : "/sdf"
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.46 Deleting a Web Tamper Protection Rule

Function

This API is used to delete a web tamper protection rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}

Table 4-488 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	ID of the anti-tamper rule. It can be obtained by calling the **ListAntitamperRule** API.

Table 4-489 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-490 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-491 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
url	String	URL protected by the web tamper protection rule
timestamp	Long	Timestamp the rule was created.

Status code: 400

Table 4-492 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-493 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-494 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a web tamper protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}?
enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "b77c3182957b46ed8f808a1998245cc4",
    "policyid" : "bdba8e224cbd4d11915f244c991d1720",
    "policyname" : "demo",
    "timestamp" : 1647499571037,
    "description" : "",
    "status" : 0,
    "hostname" : "www.demo.com",
    "url" : "/sdf"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.47 Updating the Cache for a Web Tamper Protection Rule

Function

This API is used to updating the cache for a web tamper protection Rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}/refresh

Table 4-495 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	Rule ID.

Table 4-496 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-497 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-498 Response body parameters

Parameter	Type	Description
id	String	Rule ID
policyid	String	Policy ID
hostname	String	Domain name protected by the web tamper protection rule
url	String	URL protected by the web tamper protection rule
description	String	Timestamp the rule was created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
timestamp	Long	Timestamp the rule was created.

Status code: 400

Table 4-499 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-500 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-501 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Example Requests

The following example shows how to update cache for a web tamper protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antitamper/{rule_id}/refresh?
```

Example Responses

Status code: 200

ok

```
{
  "description" : "",
  "hostname" : "www.domain.com",
  "id" : "0f59185b76c143f884d21cd0d88e6fa8",
  "policyid" : "1f016cde588646aca3fb19f277c44d03",
  "status" : 1,
  "timestamp" : 1666506256928,
  "url" : "/login"
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.48 Querying the List of Information Leakage Prevention Rules

Function

This API is used to query the list of information leakage prevention rules.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/antileakage

Table 4-502 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	ID of a protection policy. You can specify a protection policy ID to query the information leakage prevention rules used in the protection policy. You can obtain the policy ID by calling the **ListPolicy** API.

Table 4-503 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
offset	Yes	Integer	Offset. The records after the offset are queried.
limit	Yes	Integer	Maximum number of records that can be returned.

Request Parameters

Table 4-504 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-505 Response body parameters

Parameter	Type	Description
total	Integer	The number of information leakage prevention rules
items	Array of **LeakageListInfo** objects	The list of information leakage prevention rules

Table 4-506 LeakageListInfo

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	URL to which the rule applies.
category	String	Type
contents	Array of strings	Value
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
description	String	Rule description.

Status code: 400

Table 4-507 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-508 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-509 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the information leakage protection rule list in a project. The project ID is specified by project_id, and the policy is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antileakage?offset=0&limit=2
```

Example Responses

Status code: 200

Request sent.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "82c4f04f84fd4b2b9ba4b4ea0df8ee82",
    "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
    "timestamp" : 1668152426471,
    "description" : "demo",
    "status" : 1,
    "url" : "/attack",
    "category" : "sensitive",
    "contents" : [ "id_card" ]
```

```
 }]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.49 Creating an Information Leakage Prevention Rule

Function

This API is used to create an information leakage prevention rule.

URI

POST /v1/{project_id}/waf/policy/{policy_id}/antileakage

Table 4-510 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-511 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-512 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-513 Request body parameters

Parameter	Mandatory	Type	Description
url	Yes	String	URL to which the rule applies.
category	Yes	String	Type. The value can be **code** for response code or **sensitive** for sensitive information. Enumeration values: ● **code** ● **sensitive**
contents	Yes	Array of strings	Rule content. The value can be HTTP status code: 400, 401, 402, 403, 404, 405, 500, 501, 502, 503, 504, 507; **phone** for mobile phone numbers, **id_card** for personal identity card number, and/or **email** for email addresses.
description	No	String	Rule description.

Response Parameters

Status code: 200

Table 4-514 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	URL to which the rule applies.
category	String	Type
contents	Array of strings	Content
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.

Status code: 400

Table 4-515 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-516 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-517 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create an information leakage protection rule in a project. The project ID is specified by project_id, and the policy is specified by policy_id. The URL for the rule is /attack, the content type is sensitive information, and the rule content is ID card number.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antileakage?

{
  "url" : "/attack",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "82c4f04f84fd4b2b9ba4b4ea0df8ee82",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668152426471,
  "status" : 1,
  "url" : "/attack",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.50 Querying an Information Leakage Prevention Rule

Function

This API is used to query an information leakage prevention rule by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}

Table 4-518 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	Information leakage prevention rule ID. You can obtain it by calling the **ListAntileakageRules** API.

Table 4-519 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-520 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-521 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	URL to which the rule applies.
category	String	Type
contents	Array of strings	Content
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
description	String	Rule description.

Status code: 400

Table 4-522 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-523 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-524 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query an information leakage protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}?
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "82c4f04f84fd4b2b9ba4b4ea0df8ee82",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668152426471,
  "description" : "demo",
  "status" : 1,
  "url" : "/attack",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.51 Updating an Information Leakage Prevention Rule

Function

This API is used to update an information leakage prevention rule.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}

Table 4-525 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	Information leakage prevention rule ID. You can obtain it by calling the **ListAntileakageRules** API.

Table 4-526 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-527 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-528 Request body parameters

Parameter	Mandatory	Type	Description
url	Yes	String	URL to which the rule applies.
category	Yes	String	Type. The value can be **code** for response code or **sensitive** for sensitive information. Enumeration values: ● **code** ● **sensitive**
contents	Yes	Array of strings	Content. The value can be an HTTP status code, **phone** for mobile phone numbers, **id_card** for personal identity card number, and/or **email** for email addresses.
description	No	String	Rule description.

Response Parameters

Status code: 200

Table 4-529 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	URL to which the rule applies.

Parameter	Type	Description
category	String	Type
contents	Array of strings	Value
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
description	String	Rule description.

Status code: 400

Table 4-530 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-531 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-532 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a web tamper protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id. The URL for the rule is /attack, the content type is sensitive information, and the rule content is ID card number.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}?

{
  "url" : "/login",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "82c4f04f84fd4b2b9ba4b4ea0df8ee82",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "description" : "demo",
  "status" : 1,
  "url" : "/login",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.52 Deleting an Information Leakage Prevention Rule

Function

This API is used to delete an information leakage prevention rule.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}

Table 4-533 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.
rule_id	Yes	String	Information leakage prevention rule ID. You can obtain it by calling the **ListAntileakageRules** API.

Table 4-534 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-535 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-536 Response body parameters

Parameter	Type	Description
id	String	Rule ID.
policyid	String	Policy ID.
url	String	URL to which the rule applies.
category	String	Type
contents	Array of strings	Content
timestamp	Long	Timestamp the rule is created.
status	Integer	Rule status. The value can be **0** or **1**. ● **0**: The rule is disabled. ● **1**: The rule is enabled.
description	String	Rule description.

Status code: 400

Table 4-537 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-538 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-539 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Example Requests

The following example shows how to delete an information leakage protection rule. The project ID is specified by project_id, the policy ID is specified by policy_id, and the rule ID is specified by rule_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}/antileakage/{rule_id}?
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "82c4f04f84fd4b2b9ba4b4ea0df8ee82",
  "policyid" : "2fcbcb23ef0d48d99d24d7dcff00307d",
  "timestamp" : 1668152426471,
  "description" : "demo",
  "status" : 1,
  "url" : "/attack",
  "category" : "sensitive",
  "contents" : [ "id_card" ]
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.53 Querying the Reference Table List

Function

This API is used to query the reference table list.

URI

GET /v1/{project_id}/waf/valuelist

Table 4-540 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-541 Query Parameters

Parameter	Mandatory	Type	Description
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned.
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results.
name	No	String	Reference table name

Request Parameters

Table 4-542 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-543 Response body parameters

Parameter	Type	Description
total	Integer	Number of reference tables
items	Array of **ValueListResponseBody** objects	Reference table list

Table 4-544 ValueListResponseBody

Parameter	Type	Description
id	String	ID of the reference table
name	String	Reference table name.
type	String	Reference table type Enumeration values: ● **url** ● **params** ● **ip** ● **cookie** ● **referer** ● **user-agent** ● **header** ● **response_code** ● **response_header** ● **response_body**
timestamp	Long	Reference table timestamp
values	Array of strings	Value of the reference table
producer	Integer	Reference table source. The value can be **1** or others. **1**: The table is created by you. Other values indicate that the table is automatically generated by moduleX.
description	String	Reference table description

Status code: 400

Table 4-545 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-546 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-547 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the reference table list in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/valuelist?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "3b03be27a40b45d3b21fe28a351e2021",
    "name" : "ip_list848",
    "type" : "ip",
    "values" : [ "100.100.100.125" ],
    "timestamp" : 1650421866870,
    "producer" : 1,
    "description" : "demo"
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.54 Creating a Reference Table

Function

This API is used to add a reference table. A reference table can be used by CC attack protection rules and precise protection rules.

URI

POST /v1/{project_id}/waf/valuelist

Table 4-548 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-549 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-550 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-551 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Reference table name. The value can contain a maximum of 64 characters. Only digits, letters, hyphens (-), underscores (_), and periods (.) are allowed. Minimum: **2** Maximum: **64**
type	Yes	String	Reference table type. For details, see the enumeration list. Minimum: **2** Maximum: **32** Enumeration values: ● **url** ● **params** ● **ip** ● **cookie** ● **referer** ● **user-agent** ● **header** ● **response_code** ● **response_header** ● **response_body**
values	Yes	Array of strings	Value of the reference table

Parameter	Mandatory	Type	Description
description	No	String	Reference table description. The value contains a maximum of 128 characters. Minimum: **0** Maximum: **128**

Response Parameters

Status code: 200

Table 4-552 Response body parameters

Parameter	Type	Description
id	String	ID of the reference table
name	String	Reference table name.
type	String	Reference table type
description	String	Reference table description
timestamp	Long	Reference table timestamp
values	Array of strings	Value of the reference table
producer	Integer	Source of the reference table. ● **1**: The reference table was created by you. ● **2**: The reference table was created by the intelligent access control protection.

Status code: 400

Table 4-553 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-554 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-555 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a reference table in the project. The project ID is specified by project_id. The reference table name is demo, the reference table type is url, the value is /124, and the description is demo.

```
POST https://{Endpoint}/v1/{project_id}/waf/valuelist?enterprise_project_id=0

{
  "name" : "demo",
  "type" : "url",
  "values" : [ "/124" ],
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "e5d9032d8da64d169269175c3e4c2849",
  "name" : "demo",
  "type" : "url",
  "values" : [ "/124" ],
  "timestamp" : 1650524684892,
  "description" : "demo",
  "producer" : 1
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.55 Querying a Reference Table

Function

This API is used to query a reference table.

URI

GET /v1/{project_id}/waf/valuelist/{valuelistid}

Table 4-556 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
valuelistid	Yes	String	Reference table ID. It can be obtained by calling the **ListValueList** API.

Table 4-557 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-558 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-559 Response body parameters

Parameter	Type	Description
id	String	ID of the reference table
name	String	Reference table name.
type	String	Reference table type
description	String	Reference table description
values	Array of strings	Value of the reference table
producer	Integer	Source of the reference table. ● **1**: The reference table was created by you. ● **2**: The reference table was created by the intelligent access control protection.
timestamp	Long	Timestamp the rule is created.

Status code: 400

Table 4-560 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-561 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-562 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a reference table in a project. The project ID is specified by project_id. The reference table ID is valuelistid.

```
GET https://{Endpoint}/v1/{project_id}/waf/valuelist/{valuelistid}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request sent.

```
{
  "id" : "63b1d9edf2594743bc7c6ee98527306c",
  "name" : "RPmvp0m4",
  "type" : "response_code",
  "values" : [ "500" ],
  "description" : "demo",
  "producer" : 1
}
```

Status Codes

Status Code	Description
200	Request sent.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.56 Modifying a Reference Table

Function

This API is used to modify a reference table.

URI

PUT /v1/{project_id}/waf/valuelist/{valuelistid}

Table 4-563 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
valuelistid	Yes	String	Reference table ID. It can be obtained by calling the **ListValueList** API.

Table 4-564 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-565 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-566 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Reference table name, which is a string of 2 to 32 characters. Minimum: **2** Maximum: **32**
type	Yes	String	Reference table type. For details, see the enumeration list. Minimum: **2** Maximum: **32** Enumeration values: • **url** • **params** • **ip** • **cookie** • **referer** • **user-agent** • **header** • **response_code** • **response_header** • **resopnse_body**
values	No	Array of strings	Value of the reference table

Parameter	Mandatory	Type	Description
description	No	String	Reference table description. The value contains a maximum of 128 characters. Minimum: **0** Maximum: **128**

Response Parameters

Status code: 200

Table 4-567 Response body parameters

Parameter	Type	Description
id	String	ID of the reference table
name	String	Reference table name.
type	String	Reference table type
description	String	Reference table description
values	Array of strings	Value of the reference table
producer	Integer	Source of the reference table. ● **1**: The reference table was created by you. ● **2**: The reference table was created by the intelligent access control protection.

Status code: 400

Table 4-568 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-569 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-570 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a reference table whose ID is valuelistid in the project. The project ID is specified by project_id. The reference table name is RPmvp0m4, the reference table type is response_coderl, the value is 500, and the description is demo.

```
PUT https://{Endpoint}/v1/{project_id}/waf/valuelist/{valuelistid}?enterprise_project_id=0

{
  "name" : "RPmvp0m4",
  "type" : "response_code",
  "values" : [ "500" ],
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "63b1d9edf2594743bc7c6ee98527306c",
  "name" : "RPmvp0m4",
  "type" : "response_code",
  "values" : [ "500" ],
  "description" : "demo",
  "producer" : 1
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.2.57 Deleting a Reference Table

Function

This API is used to delete a reference table.

URI

DELETE /v1/{project_id}/waf/valuelist/{valuelistid}

Table 4-571 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
valuelistid	Yes	String	Reference table ID. It can be obtained by calling the **ListValueList** API.

Table 4-572 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-573 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-574 Response body parameters

Parameter	Type	Description
id	String	ID of a reference table
name	String	Reference table name.
type	String	Reference table type
timestamp	Long	Time the reference table is deleted. The value is a 13-digit timestamp in millisecond.

Status code: 400

Table 4-575 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-576 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-577 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a reference table in a project. The project ID is specified by project_id. The reference table ID is valuelistid.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/valuelist/{valuelistid}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "63b1d9edf2594743bc7c6ee98527306c",
  "name" : "RPmvp0m4",
  "type" : "response_code",
  "timestamp" : 1640938602391
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.3 Address Group Management

4.3.1 Querying IP Address Groups

Function

Querying IP Address Groups

URI

GET /v1/{project_id}/waf/ip-groups

Table 4-578 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-579 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number. The default value is 1. Default: **1**
pagesize	No	Integer	Number of records on each page. A maximum of 100 records can be displayed on a page. The default value is 10. Default: **10**
name	No	String	Name of the IP address group. Fuzzy search is supported.

Parameter	Mandatory	Type	Description
ip	No	String	IP addresses or IP address ranges. If this parameter is specified, the address group that contains the specified IP address or IP address ranges are queried.

Request Parameters

Table 4-580 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-581 Response body parameters

Parameter	Type	Description
total	Integer	Total number of IP address groups in the current enterprise project. Only local address groups are listed.
items	Array of **IpGroupBody** objects	Details about IP address groups
cloudTotal	Integer	Total number of IP address groups, including local and shared address groups.

Table 4-582 IpGroupBody

Parameter	Type	Description
id	String	ID of the IP address group

Parameter	Type	Description
name	String	IP address group name
ips	String	Address group IP addresses (IP addresses or IP address ranges are separated by commas (,).
size	Integer	Length of the IP address group
rules	Array of **RuleInfo** objects	List of rules that use the IP address group
share_info	**ShareInfo** object	Sharing information
description	String	Address group description

Table 4-583 RuleInfo

Parameter	Type	Description
rule_id	String	Rule ID
rule_name	String	Rule name
policy_id	String	Policy ID
policy_name	String	Policy Name

Table 4-584 ShareInfo

Parameter	Type	Description
share_count	Integer	Total number of the users who share the address group.
accept_count	Integer	Number of users who accept the sharing
process_status	Integer	Status

Status code: 400

Table 4-585 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-586 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-587 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the address group list in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/ip-groups?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "description" : "",
    "id" : "c36e896b18ee486a81026fce8e69fb1a",
    "ips" : "xxx.xx.xx.xx",
    "name" : "sfddf",
    "rules" : [ ],
    "share_info" : {
      "accept_count" : 0,
      "process_status" : 0,
      "share_count" : 0
    }
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.3.2 Creating an IP Address Group

Function

This API is used to create an IP address group.

URI

POST /v1/{project_id}/waf/ip-groups

Table 4-588 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID

Table 4-589 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.

Request Parameters

Table 4-590 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-591 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Address group name
ips	Yes	String	IP addresses or IP address ranges are separated by commas (,).
description	No	String	Address group description

Response Parameters

Status code: 200

Table 4-592 Response body parameters

Parameter	Type	Description
id	String	ID of the IP address group
name	String	IP address group name
ips	String	Address group IP addresses (IP addresses or IP address ranges are separated by commas (,).
size	Integer	Length of the IP address group
rules	Array of **RuleInfo** objects	List of rules that use the IP address group
description	String	Address group description
timestamp	Long	Timestamp

Table 4-593 RuleInfo

Parameter	Type	Description
rule_id	String	Rule ID
rule_name	String	Rule name

Parameter	Type	Description
policy_id	String	Policy ID
policy_name	String	Policy Name

Status code: 400

Table 4-594 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-595 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-596 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create an address group in a project. The project ID is specified by project_id. IP address group name: group3. IP address: xx.xx.xx.xx. Address group description: demo.

```
POST https://{Endpoint}/v1/{project_id}/waf/ip-groups?enterprise_project_id=0

{
  "name" : "group3",
  "ips" : "xx.xx.xx.xx",
  "description" : "demo"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "c36e896b18ee486a81026fce8e69fb1a",
  "ips" : "xx.xx.xx.xx",
  "name" : "group3",
  "rules" : [ ],
  "size" : 1,
  "timestamp" : 1666747418345,
  "description" : "demo"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.3.3 Querying IP Addresses in an Address Group

Function

This API is used to query IP addresses included in an address group.

URI

GET /v1/{project_id}/waf/ip-group/{id}

Table 4-597 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
id	Yes	String	ID of the IP address group.

Table 4-598 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-599 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-600 Response body parameters

Parameter	Type	Description
id	String	ID of the IP address group

Parameter	Type	Description
name	String	IP address group name
ips	String	Address group IP addresses (IP addresses or IP address ranges are separated by commas (,).
size	Integer	Length of the IP address group
rules	Array of **RuleInfo** objects	List of rules that use the IP address group
share_info	**ShareInfo** object	Sharing information
description	String	Address group description

Table 4-601 RuleInfo

Parameter	Type	Description
rule_id	String	Rule ID
rule_name	String	Rule name
policy_id	String	Policy ID
policy_name	String	Policy Name

Table 4-602 ShareInfo

Parameter	Type	Description
share_count	Integer	Total number of the users who share the address group.
accept_count	Integer	Number of users who accept the sharing
process_status	Integer	Status

Status code: 400

Table 4-603 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-604 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-605 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query an address group in a project. The project ID is specified by project_id. The address group ID is id.

```
GET https://{Endpoint}/v1/{project_id}/waf/ip-group/{id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "description" : "",
  "id" : "c36e896b18ee486a81026fce8e69fb1a",
  "ips" : "xx.xx.xx.xx",
  "name" : "sfddf",
  "rules" : [ ],
  "size" : 1
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.3.4 Modifying an IP Address Group

Function

This API is used to modify an IP address group.

URI

PUT /v1/{project_id}/waf/ip-group/{id}

Table 4-606 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
id	Yes	String	ID of the IP address group.

Table 4-607 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-608 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/ json;charset=utf8**

Table 4-609 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Group Name
ips	Yes	String	IP addresses or IP address ranges are separated by commas (,).
description	No	String	Address group description

Response Parameters

Status code: 200

Table 4-610 Response body parameters

Parameter	Type	Description
id	String	ID of the IP address group
name	String	IP address group name
ips	String	Address group IP addresses (IP addresses or IP address ranges are separated by commas (,).
size	Integer	Length of the IP address group
rules	Array of **RuleInfo** objects	List of rules that use the IP address group
description	String	Address group description

Table 4-611 RuleInfo

Parameter	Type	Description
rule_id	String	Rule ID
rule_name	String	Rule name
policy_id	String	Policy ID

Parameter	Type	Description
policy_name	String	Policy Name

Status code: 400

Table 4-612 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-613 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-614 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update an address group in a project. The project ID is specified by project_id. The address group ID is ip. IP address group name: demo. IP address: xx.xx.xx.xx. The address group description is empty.

```
PUT https://{Endpoint}/v1/{project_id}/waf/ip-group/{id}?enterprise_project_id=0

{
  "ips" : "xx.xx.xx.xx",
  "name" : "demo",
  "description" : ""
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "description" : "",
  "id" : "c36e896b18ee486a81026fce8e69fb1a",
  "ips" : "xx.xx.xx.xx",
  "name" : "demo",
  "size" : 1,
  "rules" : [ ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.3.5 Deleting an IP Address Group

Function

This API is used to delete an IP address group.

URI

DELETE /v1/{project_id}/waf/ip-group/{id}

Table 4-615 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Mandatory	Type	Description
id	Yes	String	ID of the IP address group.

Table 4-616 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-617 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-618 Response body parameters

Parameter	Type	Description
id	String	ID of the IP address group
name	String	IP address group name
ips	String	Address group IP addresses (IP addresses or IP address ranges are separated by commas (,).
size	Integer	Length of the IP address group
rules	Array of **RuleInfo** objects	List of rules that use the IP address group

Table 4-619 RuleInfo

Parameter	Type	Description
rule_id	String	Rule ID
rule_name	String	Rule name
policy_id	String	Policy ID
policy_name	String	Policy Name

Status code: 400

Table 4-620 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-621 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-622 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete an address group in a project. The project ID is specified by project_id. The address group ID is id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/ip-group/{id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "description" : "",
  "id" : "c36e896b18ee486a81026fce8e69fb1a",
  "ips" : "xx.xx.xx.xx",
  "name" : "demo",
  "size" : 1,
  "rules" : [ ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request Failed
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4 Certificate Management

4.4.1 Querying the List of Certificates

Function

This API is used to query the list of certificates.

URI

GET /v1/{project_id}/waf/certificate

Table 4-623 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-624 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results. Default: **10**
name	No	String	Certificate name
host	No	Boolean	Whether to obtain the domain name for which the certificate is used. The default value is **false**. ● **true**: Obtain the certificates that have been used for domain names. ● **false**: Obtain the certificates that have not been used for any domain name. Default: **false**

Parameter	Mandatory	Type	Description
exp_status	No	Integer	Certificate status. The options are as follows: 0: not expired; 1: expired; 2: about to expire (The certificate will expire within one month.)

Request Parameters

Table 4-625 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-626 Response body parameters

Parameter	Type	Description
items	Array of **CertificateBody** objects	Certificates
total	Integer	Total number of certificates

Table 4-627 CertificateBody

Parameter	Type	Description
id	String	Certificate ID.
name	String	Certificate name
expire_time	Long	Certificate expiration timestamp.

Parameter	Type	Description
exp_status	Integer	Certificate status. The value can be: **0**: The certificate is valid. **1**: The certificate has expired. **2**: The certificate will expire within one month.
timestamp	Long	Certificate upload timestamp.
bind_host	Array of **BindHost** objects	Domain name associated with the certificate

Table 4-628 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-629 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-630 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-631 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the certificate list in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/certificate?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "dc443ca4f29c4f7e8d4adaf485be317b",
    "name" : "demo",
    "timestamp" : 1643181401751,
    "expire_time" : 1650794100000,
    "bind_host" : [ ],
    "exp_status" : 2
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4.2 Uploading a Certificate

Function

This API is used to upload a certificate.

URI

POST /v1/{project_id}/waf/certificate

Table 4-632 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-633 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-634 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-635 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Certificate name. The value can contain a maximum of 64 characters. Only digits, letters, hyphens (-), underscores (_), and periods (.) are allowed.
content	Yes	String	Certificate file. Only certificates and private key files in PEM format are supported, and the newline characters in the file must be replaced with \n.
key	Yes	String	Certificate private key. Only certificates and private key files in PEM format are supported, and the newline characters in the files must be replaced with \n.

Response Parameters

Status code: 200

Table 4-636 Response body parameters

Parameter	Type	Description
id	String	Certificate ID
name	String	Certificate name
content	String	Certificate file, PEM encoding
key	String	Private key of the certificate, which is in PEM format.
expire_time	Long	Certificate expiration timestamp
exp_status	Integer	Certificate status. The options can be: **0**: The certificate has not expired. **1**: The certificate expired. **2**: The certificate is about to expire.
timestamp	Long	Certificate upload timestamp
bind_host	Array of **BindHost** objects	Domain name associated with the certificate

Table 4-637 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-638 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-639 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-640 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a certificate in the project whose project ID is project_id. The certificate name is demo, the certificate content is -------BEGIN CERTIFICATIONATE-----..., and the certificate key is -------BEGIN Private KEY------.......

```
POST https://{Endpoint}/v1/{project_id}/waf/certificate?enterprise_project_id=0

{
  "name" : "demo",
  "content" : "-----BEGIN CERTIFICATE----- \
\nMIIDyzCCArOgAwIBAgIJAN5U0Z4Bh5ccMA0GCSqGSIb3DQEBCwUAMHwxCzAJBgNV
BAYTAlpIMRIwEAYDVQQIDAlHVUFOR0RPTkcxETAPBgNVBAcMCERPTkdHVUFOMQ0w
CwYDVQQKDARERUtFMQswCQYDVQQLDAJESzELMAkGA1UEAwwCT0QxHTAbBgkqhkiG
9w0BCQEWDk8IZC5odWF3ZWkuY29tMB4XDTIxMTExNTA4MTk0MVoXDTIyMTExNTA4
MTk0MVowfDELMAkGA1UEBhMCWkgxEjAQBgNVBAgMCUdVQU5HRE9ORzERMA8GA1UE
BwwIRE9OR0dVQU4xDTALBgNVBAoMBERFS0UxCzAJBgNVBAsMAkRLMQswCQYDVQQD
DAJPRDEdMBsGCSqGSIb3DQEJARYOTwhkLmh1YXdlaS5jb20wggEiMA0GCSqGSIb3
DQEBAQUAA4IBDwAwggEKAoIBAQDcoLFK62//r0RHFyweYBj97S4NsJ8Qj0RG+Y02
OgwhQmRiNNjubJwP8Nqqyd86zr+fsSQxKBaBCosn1PcN2Pj2vPJD6NEk4I6VdOWr /
kFYMlOcimhSfW4wt6VakniOKIYGrCxxvQe1X2OyBxT+ocTLRgEIB8ZbvJyPNseg
feLEUuPYRpQ5kXLgJH2/3NwZFOgBHVv/b07l4fR+sWJMnIA2yIjSBQ0DEAOSusXo FQ/
WRbBRH7DrQmxGiXsq4VELEr9Nnc/Kywq+9pYi8L+mKeRL+lcMMbXC/3k6OfMB
tVTiwcmS1Mkr3iG03i8u6H7RSvRwyBz9G9sE+tmJZTPH6lYtAgMBAAGjUDBOMB0G
A1UdDgQWBBQprUUFXW+gIkpzXdrYlsWjfSahWjAfBgNVHSMEGDAWgBQprUUFXW+g
IkpzXdrYlsWjfSahWjAMBgNVHRMEBTADAQH/MA0GCSqGSIb3DQEBCwUAA4IBAQA2
603KozsQoIKeLvqDJlcAXwWRfNW8SvlaSJAulhHgneMt9bQgIL+3PJWA/iMniOhU o/
kVwkiUIcxw4t7RwP0hVms0OZw59MuqKd3oCSWkYO4vEHs3t40JDWnGDnmQ4sol
RkOWJwL4w8tnPe3qY9JSupjlsu6Y1hlvKtEfN2vEKFnsuMhidkUpUAJWodHhWBQH
wgIDo4/6yTnWZNGK8JDal86Dm5IchXea1EoYBJsHxiJb7HeWQlkre+MCYi1RHOin 4mIXTr0oT4/jWlgklSz6/
ZhGRq+7W7tIl7cvzCe+4XsVZIenAcYoNd/WLfo91PD4 yAsRXrOjW1so1Bj0BkDz\\n -----END CERTIFICATE-----",
  "key" : "-----BEGIN PRIVATE KEY----- \
\nMIIEvwIBADANBgkqhkiG9w0BAQEFAASCBKkwggSlAgEAAoIBAQDcoLFK62//r0RH FyweYBj97S4NsJ8Qj0RG
+Y02OgwhQmRiNNjubJwP8Nqqyd86zr+fsSQxKBaBCosn 1PcN2Pj2vPJD6NEk4I6VdOWr/
kFYMlOcimhSfW4wt6VakniOKIYGrCxxvQe1X2Oy BxT
+ocTLRgEIB8ZbvJyPNsegfeLEUuPYRpQ5kXLgJH2/3NwZFOgBHVv/b07l4fR+ sWJMnIA2yIjSBQ0DEAOSusXoFQ/
WRbBRH7DrQmxGiXsq4VELEr9Nnc/Kywq+9pYi 8L+mKeRL+lcMMbXC/
3k6OfMBtVTiwcmS1Mkr3iG03i8u6H7RSvRwyBz9G9sE+tmJ ZTPH6lYtAgMBAAECggEBAL+xZxm/QoqXT
+2stoqV2GEYaMFASpRqxlocjZMmEE/9 jZa+cBWIjHhVPsjRqYFBDcHEebu0JwlrjcjIAvgnIvnO5XgXm1A9Q
+WbscokmcX1 xCvpHgc+MDVn+uWdCd4KW5kEk4EnSsFN5iNSf+1VxNURN+gwSSp/0E+muwA5IISO G6HQ
+p6qs52JAitX5t/7ruKoHYXJxBnf7TUs7768qrh++KPKpPlq044qoYlcGO1n 4urPBHuNLy04GgGw
+vkaqjqOvZrNLVOMMaFWBxsDWBehgSSBQTj+f3NCxneGYtt8 3SCTZQI5nIkb+r/
M455EwKTSXuEsNHoIwx7L6GEPbQECgYEA8IxgK2fYykloICoh
TFJaRAvyjyKa2+Aza4qT9SGY9Y30VPClPjBB1vUu5M9KrFufzlv06nGEcHmpEwOe
8vbRu7nLAQTGYFi8VK63q8w6FlFdAyCG6Sx+BWCfWxJzXsZLAJTfklwi8HsOSlqh
6QNv0xbE2fLjXKf8MHvtrufip40CgYEA6sy87eDrkVgtq4ythAik3i1C5Z3v0fvx mTblG52Z21OyocNq3Tf/
b1ZwoIc1ik6cyBzY6z1bIrbSzArCqm0sb2iD+kJL81O0 /qqdXjBxZUkKiVAMNNp7xJGZHHFKWUxT2+UX/
tlyx4tT4dzrFIkdDXkcMmqfsRxd 1NEVaAaT8SECgYAoU7BPtpIun43YTpfUfr3pSIN6oZeKoxSbw9i4MNC
+4fSDRPC+ 80ImcmZRL7taF+Y7p0jxAOTuIkdJC8NbAiv5J9WzrwQ+5MF2BPB/2bYnRa6tNofH kZDy/
9bXYsl6qw2p5Ety8wVcgZTMvFMGiG/32IpZ65FYWEU8L5qSRwfFhQKBgQC9 ihjZTj/bTHtRiHZppzCvyYm/Igd
+Uwtsy0uXR1n0G1SQENgrTBD/J6AzdfJae6tE P0U8YIM5Oqxf2i/as9ay+IPRecMl4eSxz7jJWAGx6Yx/3AZ
+hAB1ZbNbqniCLYNk d0MvjwmA25ATO+ro4OZ7AdEpQbk3l9aG/WFyYBz9AQKBgQCucFPA1l5eslL8196V
WMr2Qo0tqzl7CGSoWQk2Sa2HZtZdfofXAaaqo+zvJ6RPHtJh0jgJtx536DVV3egI
37YrdQyJbCPZXQ3SPgqWCorUnXBwq/nxS06uwu6JBxUFc57ijmMU4fWYNrvkkmWb 7keAg/
r5Uy1joMAvBN1I6lB8pg==\\n -----END PRIVATE KEY-----"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "64af92e2087d49cbabc233e9bdc761b7",
  "name" : "testly",
  "timestamp" : 1658994431596,
  "expire_time" : 1682394560000
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4.3 Querying a Certificate

Function

This API is used to query a certificate.

URI

GET /v1/{project_id}/waf/certificate/{certificate_id}

Table 4-641 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
certificate_id	Yes	String	HTTPS certificate ID. It can be obtained by calling the **ListCertificates** API.

Table 4-642 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-643 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-644 Response body parameters

Parameter	Type	Description
id	String	Certificate ID
name	String	Certificate name
content	String	Certificate file, PEM encoding
key	String	Private key of the certificate, which is in PEM format.
expire_time	Long	Certificate expiration timestamp.
exp_status	Integer	Certificate status. The options can be: **0**: The certificate has not expired. **1**: The certificate expired. **2**: The certificate is about to expire.
timestamp	Long	Certificate upload timestamp
bind_host	Array of **BindHost** objects	Domain name associated with the certificate

Table 4-645 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-646 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-647 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-648 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a certificate in a project. The project ID is specified by project_id, and the certificate ID is specified by certificate_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/certificate/{certificate_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "6e2be127b79f4a418414952ad5d8c59f",
  "name" : "certificatename94319",
  "content" : "-----BEGIN CERTIFICATE-----\nMIIB
+TCCAaOgAwIBAgIUJP9I8OupQ77w0bGL2yWOQXreM4kwDQYJKoZIhvcNAQELBQAwUTELMAkGA1UEBhMC
QVUxEzARBgNVBAgMClNvbWUtU3RhdGUxDzANBgNVBAoMBkh1YXdlaTEcMBoGA1UEAwwTd2FmLmh1YXdl
aWNsb3VkLmNvbTAeFw0yMDA3MDkwNTQ2MDRaFw0yMDA4MDgwNTQ2MDRaMFExCzAJBgNVBAYTAkFV
MRMwEQYDVQQIDApTb21lLVN0YXRlMQ8wDQYDVQQKDAZIdWF3ZWkxHDAaBgNVBAMME3dhZi5odWF3Z
WljbG91ZC5jb20wXDANBgkqhkiG9w0BAQEFAANLADBIAkEA0UEbMzbvgOJTKrKcDUw9xjFqxM7BaQFM3SLs
QlmD5hkzygyL1ra
+cWajPJlTCxz9Ph6qldna2+OrIuTdvCcpjwIDAQABo1MwUTAdBgNVHQ4EFgQUE7ZQNcgl3lmryx1s5gy9mnC1rs
YwHwYDVR0jBBgwFoAUE7ZQNcgl3lmryx1s5gy9mnC1rsYwDwYDVR0TAQH/BAUwAwEB/
zANBgkqhkiG9w0BAQsFAANBAM5wGi88jYWLgOnGbae5hH3I9lMBKxGqv17Cbm1tjWuUogVINz86lqvCpuhzLv
D/vzJAqPIuDwqM8uvzjgRfZs8=\n-----END CERTIFICATE-----",
  "key" : "-----BEGIN RSA PRIVATE KEY-----
\nMIIBOQIBAAJBANFBGzM274DiUyqynA1MPcYxasTOwWkBTN0i7EJZg+YZM8oMi9a2vnFmozyZUwsc/
T4eqpXZ2tvjqyLk3bwnKY8CAwEAAQJBAI7LMPaH/HQk/b/bVmY0qsr
+me9nb9BqFLuqwzKbx0hSmWPOWFsd3rOFlSopyHqgYtAsPfvPumEdGbdnCyU8zAECIQD71768K1ejb
+ei2lqZqHaczqdUNQxMh54yot9F2yVWjwIhANS1Y1Jv89WEU/ZvvMS9a4638Msv2c4GGp08RtXNYn0BAiA0H4b
+cwoEbZjHf+HYg6Fo+uxu5TvSaw8287a6Qo0LyQIfVZSlYYWplT6oiX5rdLzBiap4N0gJWdsa2ihmV59LAQIgK8N
+j1daq63b0bJ9k4HruhQtpgxI6U9nFBemH4zTRYM=\n-----END RSA PRIVATE KEY-----",
  "timestamp" : 1650595334578,
  "expire_time" : 1596865564000,
  "bind_host" : [ {
    "id" : "978b411657624c2db069cd5484195d1c",
    "hostname" : "www.demo.com",
    "waf_type" : "cloud"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4.4 Modifying a Certificate

Function

This API is used to modify a certificate.

URI

PUT /v1/{project_id}/waf/certificate/{certificate_id}

Table 4-649 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
certificate_id	Yes	String	HTTPS certificate ID. It can be obtained by calling the **ListCertificates** API.

Table 4-650 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-651 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-652 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Certificate name. The value can contain a maximum of 64 characters. Only digits, letters, hyphens (-), underscores (_), and periods (.) are allowed.
content	No	String	Certificate file. Only certificates and private key files in PEM format are supported, and the newline characters in the file must be replaced with \n.
key	No	String	Certificate private key. Only certificates and private key files in PEM format are supported, and the newline characters in the files must be replaced with \n.

Response Parameters

Status code: 200

Table 4-653 Response body parameters

Parameter	Type	Description
id	String	Certificate ID
name	String	Certificate name
expire_time	Long	Timestamp when the certificate expires
timestamp	Long	Timestamp.

Status code: 400

Table 4-654 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-655 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-656 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a certificate name in a project. The project ID is specified by project_id, and the certificate ID is specified by certificate_id. The certificate name is updated to demo.

```
PUT https://{Endpoint}/v1/{project_id}/waf/certificate/{certificate_id}?enterprise_project_id=0

{
  "name" : "demo"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "360f992501a64de0a65c50a64d1ca7b3",
  "name" : "demo",
  "timestamp" : 1650593797892,
  "expire_time" : 1596865564000
}
```

Status Codes

Status Code	Description
200	OK

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4.5 Deleting a Certificate

Function

This API is used to delete a certificate.

URI

DELETE /v1/{project_id}/waf/certificate/{certificate_id}

Table 4-657 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
certificate_id	Yes	String	HTTPS certificate ID. It can be obtained by calling the **ListCertificates** API.

Table 4-658 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-659 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-660 Response body parameters

Parameter	Type	Description
id	String	Certificate ID
name	String	Certificate name
content	String	Certificate file, PEM encoding
key	String	Private key of the certificate in PEM format
expire_time	Long	Certificate expiration timestamp
exp_status	Integer	Certificate status. The options can be: **0**: The certificate has not expired. **1**: The certificate expired. **2**: The certificate is about to expire.
timestamp	Long	Certificate upload timestamp
bind_host	Array of **BindHost** objects	Domain name associated with the certificate

Table 4-661 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name

Parameter	Type	Description
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-662 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-663 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-664 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a certificate in a project. The project ID is specified by project_id, and the certificate ID is specified by certificate_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/certificate/{certificate_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "e1d87ba2d88d4ee4a3b0c829e935e5e0",
  "name" : "certificatename29556",
  "timestamp" : 1650594410630,
  "expire_time" : 1596865564000
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.4.6 Applying a Certificate to a Domain Name

Function

This API is used to apply a certificate to a domain name.

URI

POST /v1/{project_id}/waf/certificate/{certificate_id}/apply-to-hosts

Table 4-665 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Mandatory	Type	Description
certificate_id	Yes	String	HTTPS certificate ID. It can be obtained by calling the **ListCertificates** API.

Table 4-666 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-667 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-668 Request body parameters

Parameter	Mandatory	Type	Description
cloud_host_ids	No	Array of strings	ID of HTTPS domain name in cloud mode. You can obtain it by calling the **ListHost** API.
premium_host_ids	No	Array of strings	ID of the HTTPS domain name in dedicated mode. You can obtain it by calling the **ListPremiumHost** API.

Response Parameters

Status code: 200

Table 4-669 Response body parameters

Parameter	Type	Description
id	String	Certificate ID.
name	String	Certificate name
timestamp	Long	Timestamp.
expire_time	Long	Expiration date
bind_host	Array of **CertificateBundingHostBody** objects	Domain name list

Table 4-670 CertificateBundingHostBody

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	WAF mode (Cloud: cloud; Dedicated: premium) Enumeration values: ● **cloud** ● **premium**

Status code: 400

Table 4-671 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-672 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-673 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to use a certificate for two domain names in a project. The project ID is specified by project_id, and certificate ID is specified by certificate_id The ID of the domain name protected in cloud mode is 85e554189d494c0f97789e93531c9f90, and the ID of the domain name protected in dedicated mode is 4e9e97c425fc463c8f374b90124e8392.

```
POST https://{Endpoint}/v1/{project_id}/waf/certificate/{certificate_id}/apply-to-hosts?
enterprise_project_id=0

{
  "cloud_host_ids" : [ "85e554189d494c0f97789e93531c9f90" ],
  "premium_host_ids" : [ "4e9e97c425fc463c8f374b90124e8392" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "3ac1402300374a63a05be68c641e92c8",
  "name" : "www.abc.com",
  "timestamp" : 1636343349139,
  "expire_time" : 1650794100000,
  "bind_host" : [ {
    "id" : "e350cf556da34adab1f017523d1c05ed",
    "hostname" : "www.demo.com",
    "waf_type" : "cloud"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5 Event Management

4.5.1 This API is used to query details about an event of a specified ID

Function

Querying Details About an Event of a Specified ID

URI

GET /v1/{project_id}/waf/event/{eventid}

Table 4-674 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
eventid	Yes	String	Event ID. It can be obtained by calling the **ListEvent** API.

Table 4-675 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-676 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Language	No	String	Language. The default value is en-us. zh-cn (Chinese)/en-us (English)

Response Parameters

Status code: 200

Table 4-677 Response body parameters

Parameter	Type	Description
total	Integer	Number of attack events
items	Array of **ShowEventItems** objects	Details about an attack event

Table 4-678 ShowEventItems

Parameter	Type	Description
time	Long	Timestamp when the attack occurs, in milliseconds.
policyid	String	ID of the policy
sip	String	Source IP address
host	String	Domain name
url	String	Attacked URL
attack	String	Attack type
rule	String	ID of the hit rule

Parameter	Type	Description
action	String	Protective action
cookie	String	Cookie of the attack request
headers	Object	Header of the attack request
host_id	String	ID of the attacked domain name
id	String	Event ID
payload	String	Malicious load
payload_location	String	Malicious load location
region	String	Geographical location of the source IP address
process_time	Integer	Processing time
request_line	String	Body of the attack request
response_size	Integer	Response body size (byte)
response_time	Long	Response time (ms)
status	String	Response code
request_body	String	Request body

Status code: 400

Table 4-679 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-680 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-681 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query details about an event in a project. The event ID is specified by event_id, and the project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/event/{event_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

ok

```
{
  "total" : 1,
  "items" : [ {
    "id" : "09-0000-0000-0000-12120220421093806-a60a6166",
    "time" : 1650505086000,
    "policyid" : "173ed802272a4b0798049d7edffeff03",
    "host" : "x.x.x.x:xxxxxx-xxx-xxx-xxx-xxxxxxxxx",
    "url" : "/mobile/DBconfigReader.jsp",
    "attack" : "vuln",
    "rule" : "091004",
    "payload" : " /mobile/dbconfigreader.jsp",
    "payload_location" : "uri",
    "sip" : "x.x.x.x",
    "action" : "block",
    "request_line" : "GET /mobile/DBconfigReader.jsp",
    "headers" : {
      "ls-id" : "c0d957e6-26a8-4f2e-8216-7fc9332a250f",
      "host" : "x.x.x.x:81",
      "lb-id" : "68d3c435-2607-45e0-a5e2-38980544dd45",
      "accept-encoding" : "gzip",
      "user-agent" : "Mozilla/5.0 (Windows NT 10.0; rv:78.0) Gecko/20100101 CSIRTx/2022"
    },
    "cookie" : "HWWAFSESID=2a0bf76a111c93926d; HWWAFSESTIME=1650505086260",
    "status" : "418",
    "region" : "Reserved IP",
    "host_id" : "e093a352fd3a4ddd994c585e2e1dda59",
    "response_time" : 0,
    "response_size" : 3318,
    "process_time" : 0,
    "request_body" : "{}"
  } ]
}
```

Status Codes

Status Code	Description
200	ok

Status Code	Description
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.5.2 Querying the List of Attack Events

Function

This API is used to query the attack event list. Currently, this API does not support query of all protection events. The **pagesize** parameter cannot be set to **-1**. The larger the data volume, the larger the memory consumption. A maximum of 10,000 data records can be queried. For example, if the number of data records in a user-defined period exceeds 10,000, the data whose page is 101 (or **pagesize** is greater than 100) cannot be queried. You need to adjust the time range to a longer period and then query the data.

URI

GET /v1/{project_id}/waf/event

Table 4-682 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-683 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Parameter	Mandatory	Type	Description
recent	No	String	Time range for querying logs. This parameter cannot be used together with **from** or **to** at the same time. Parameter **recent** must be used with either **from** or **to**. Enumeration values: - **yesterday** - **today** - **3days** - **1week** - **1month**
from	No	Long	Start time (13-digit timestamp). This parameter must be used together with to, but cannot be used together with recent.
to	No	Long	End time (13-digit timestamp). This parameter must be used together with from but cannot be used together with recent.

Parameter	Mandatory	Type	Description
attacks	No	Array	Attack type - **vuln**: other attack types - **sqli**: SQL injection attacks - **lfi**: local file inclusion - **cmdi**: command injection attacks - **xss**: XSS attacks - **robot**: malicious crawler - **rfi**: remote file inclusion - **custom_custom**: attack hit the precision protection rule - **cc**: CC attacks - **webshell**: website Trojan - **custom_whiteblackip**: attacks that hit the blocklist and trustlist rule - **custom_geoip**: attacks that hit the geolocation access control rule - **antitamper**: attacks that hit the web tamper prevention rule - **anticrawler**: attacks that hit the anti-crawler rules - **leakage**: attacks that hit the information leakage prevention rule - **illegal**: illegal requests
hosts	No	Array	Domain name ID. It can be obtained by calling the **ListHost API.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned.
pagesize	No	Integer	Number of records on each page during pagination query. The default value is **10**, indicating that each page contains 10 records.

Request Parameters

Table 4-684 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Language	No	String	Language. The default value is en-us. zh-cn (Chinese)/en-us (English)

Response Parameters

Status code: 200

Table 4-685 Response body parameters

Parameter	Type	Description
total	Integer	Number of attack events
items	Array of **ListEventItems** objects	Details about an attack event

Table 4-686 ListEventItems

Parameter	Type	Description
id	String	Event ID
time	Long	Count
policyid	String	Policy ID
sip	String	Source IP address, which is the IP address of the web visitor (attacker's IP address).
host	String	Attacked domain name
url	String	Attacked URL

Parameter	Type	Description
attack	String	Attack type - **vuln**: other attack types - **sqli**: SQL injection attack - **lfi**: local file inclusion - **cmdi**: command injection attacks - **XSS**: XSS attacks - **robot**: malicious crawler - **rfi**: remote file inclusion - **custom_custom**: attacks hit a precise protection rule - **webshell**: Trojan - **custom_whiteblackip**: attacks hit a blacklist or whitelist rule - **custom_geoip**: attacks hit a geolocation access control rule - **antitamper**: attacks hit a web tamper prevention rule - anticrawler: attacks hit an anti-crawler rule - **leakage**: attacks hit an information leakage prevention rule - **illegal**: invalid requests
rule	String	ID of the matched rule
payload	String	Hit payload
payload_location	String	Hit Load Position
action	String	Protective action
request_line	String	Request method and path
headers	Object	HTTP request header
cookie	String	Request cookie
status	String	Response code status
process_time	Integer	Processing time
region	String	Geographical location
host_id	String	Domain name ID
response_time	Long	Time to response
response_size	Integer	Response body size

Parameter	Type	Description
response_body	String	Response body
request_body	String	Request body

Status code: 400

Table 4-687 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-688 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-689 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the event list for the current day in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/event?
enterprise_project_id=0&page=1&pagesize=10&recent=today
```

Example Responses

Status code: 200

ok

```
{
  "total" : 1,
  "items" : [ {
    "id" : "04-0000-0000-0000-21120220421152601-2f7a5ceb",
    "time" : 1650525961000,
    "policyid" : "25f1d179896e4e3d87ceac0598f48d00",
    "host" : "x.x.x.x:xxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "url" : "/osclass/oc-admin/index.php",
    "attack" : "lfi",
    "rule" : "040002",
    "payload" : " file=../../../../../../../../../../etc/passwd",
    "payload_location" : "params",
    "sip" : "x.x.x.x",
    "action" : "block",
    "request_line" : "GET /osclass/oc-admin/index.php?
page=appearance&action=render&file=../../../../../../../../../../etc/passwd",
    "headers" : {
      "accept-language" : "en",
      "ls-id" : "xxxxx-xxxxx-xxxx-xxxx-9c302cb7c54a",
      "host" : "x.x.x.x",
      "lb-id" : "2f5f15ce-08f4-4df0-9899-ec0cc1fcdc52",
      "accept-encoding" : "gzip",
      "accept" : "*/*",
      "user-agent" : "Mozilla/5.0 (Windows NT 5.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/
35.0.2309.372 Safari/537.36"
    },
    "cookie" : "HWWAFSESID=2a1d773f9199d40a53; HWWAFSESTIME=1650525961805",
    "status" : "418",
    "host_id" : "6fbe595e7b874dbbb1505da3e8579b54",
    "response_time" : 0,
    "response_size" : 3318,
    "response_body" : "",
    "process_time" : 2,
    "request_body" : "{}"
  } ]
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6 Dashboard

4.6.1 Querying the QPS Statistics

Function

This API is used to query the website QPS.

URI

GET /v1/{project_id}/waf/overviews/qps/timeline

Table 4-690 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-691 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.
from	Yes	Long	Start time (13-digit timestamp in millisecond). This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp in millisecond). This parameter must be used together with **from**.

Parameter	Mandatory	Type	Description
hosts	No	String	Domain name IDs. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API. By default, this parameter is not specified, and the QPS data of every protected domain name in the project is queried.
instances	No	String	Instance IDs you want to query. This parameter is required only for dedicated WAF instances and load-balancing instances (ELB mode).
group_by	No	String	Display dimension. For example, the value is **DAY** if data is displayed by the day.

Request Parameters

Table 4-692 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-693 Response body parameters

Parameter	Type	Description
[items]	Array of **StatisticsTimelineItem** objects	QPS statistics over time on the dashboard

Table 4-694 StatisticsTimelineItem

Parameter	Type	Description
key	String	Key value. The options are **ACCESS** for total requests, **CRAWLER** for bot mitigation, **ATTACK** for total attacks, **WEB_ATTACK** for basic web protection, **PRECISE** for precise protection, and **CC** for CC attack protection.
timeline	Array of **TimeLineItem** objects	Statistics data over time for the corresponding key value

Table 4-695 TimeLineItem

Parameter	Type	Description
time	Long	Time point
num	Integer	Statistics for the time range from the previous time point to the point specified by the **time** field.

Status code: 400

Table 4-696 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-697 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-698 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the QPS. The project ID is specified by project_id and the time is from 2022-04-21 00:00:00 to 2022-04-21 14:35:36.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/qps/timeline?
enterprise_project_id=0&from=1650470400196&to=1650522936196
```

Example Responses

Status code: 200

ok

```
[ {
  "key" : "ACCESS",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "PRECISE",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "CRAWLER",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "CC",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "ATTACK",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "WEB_ATTACK",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
} ]
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6.2 Querying Statistics of Requests and Attacks

Function

Querying Statistics of Requests and Attacks Note that APIs related to the dashboard cannot be used to query data for custom time. Only data displayed on the console for yesterday, today, past 3 days, past 7 days, and past 30 days can be queried.

URI

GET /v1/{project_id}/waf/overviews/statistics

Table 4-699 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-700 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
from	Yes	Long	Start time (13-digit timestamp). This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp). This parameter must be used together with **from**.
hosts	No	String	Domain name IDs. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API. By default, this parameter is not specified, and the number of requests and attacks of all protected domain names in the project is queried.
instances	No	String	Instance IDs you want to query. This parameter is required only for dedicated WAF instances and load-balancing instances (ELB mode).

Request Parameters

Table 4-701 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-702 Response body parameters

Parameter	Type	Description
[items]	Array of **CountItem** objects	Statistics about requests and attacks on the WAF console

Table 4-703 CountItem

Parameter	Type	Description
key	String	Type. The options are **ACCESS** for total requests, **CRAWLER** for bot mitigation, **ATTACK** for total attacks, **WEB_ATTACK** for basic web protection, **PRECISE** for precise protection, and **CC** for CC attack protection.
num	Integer	Quantity.

Status code: 400

Table 4-704 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-705 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 403

Table 4-706 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-707 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the number of security overview requests and attacks. The project ID is specified by project_id and the time is from 2022-04-21 00:00:00 to 2022-04-21 14:35:36.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/statistics?
enterprise_project_id=0&from=1650470400196&to=1650522936196
```

Example Responses

Status code: 200

Request succeeded.

```
[ {
  "key" : "ACCESS",
  "num" : 1190
}, {
  "key" : "PRECISE",
  "num" : 0
}, {
  "key" : "CRAWLER",
  "num" : 10
}, {
  "key" : "WEB_ATTACK",
  "num" : 22
}, {
  "key" : "CC",
  "num" : 0
}, {
  "key" : "ATTACK",
  "num" : 32
} ]
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
403	The resource quota is insufficient.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6.3 Querying Bandwidth Usage Statistics

Function

This API is used to query average bandwidth usage (in bit/s) for a specific time range.

URI

GET /v1/{project_id}/waf/overviews/bandwidth/timeline

Table 4-708 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-709 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Parameter	Mandatory	Type	Description
from	Yes	Long	Start time (13-digit timestamp in millisecond) of the time range for which you want to query the average bandwidth usage. This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp in millisecond) of the time range for which you want to query the average bandwidth usage. This parameter must be used together with **from**.
hosts	No	String	IDs of the domain names for which you want to query the bandwidth usage for a time range that is specified by **from** and **to**. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API.
instances	No	String	IDs of dedicated WAF instances. This parameter is used to query the average bandwidth usage of domain names protected by those dedicated WAF instances for a time range that is specified by **from** and **to**.
group_by	No	String	How data is displayed. For example, if the value is **DAY**, data is displayed by the day. If this parameter is not specified, the data is displayed by the minute.

Request Parameters

Table 4-710 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-711 Response body parameters

Parameter	Type	Description
[items]	Array of **BandwidthStatisticsTimelineItem** objects	Bandwidth statistics over the time, including **BANDWIDTH**, **IN_BANDWIDTH**, and **OUT_BANDWIDTH**.

Table 4-712 BandwidthStatisticsTimelineItem

Parameter	Type	Description
key	String	Key value. The options are **BANDWIDTH**, **IN_BANDWIDTH**, and **OUT_BANDWIDTH**.
timeline	Array of **TimeLineItem** objects	Statistics of the corresponding key value over time. This parameter includes the **time** field for the time point and the **num** field for statistics between the previous time point and the time point specified by the **time** field.

Table 4-713 TimeLineItem

Parameter	Type	Description
time	Long	Time point

Parameter	Type	Description
num	Integer	Statistics for the time range from the previous time point to the point specified by the **time** field.

Status code: 400

Table 4-714 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-715 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-716 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the bandwidth usage. The project ID is specified by project_id and the time is from 2022-04-21 00:00:00 to 2022-04-21 14:35:36.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/bandwidth/timeline?
enterprise_project_id=0&from=1650470400196&to=1650522936196
```

Example Responses

Status code: 200

ok

```
[ {
  "key" : "IN_BANDWIDTH",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "OUT_BANDWIDTH",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "BANDWIDTH",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
} ]
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6.4 Querying Statistics of Top Exceptions

Function

This API is used to query top service exceptions, such as abnormal requests or errors.

URI

GET /v1/{project_id}/waf/overviews/abnormal

Table 4-717 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-718 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
from	Yes	Long	Start time (13-digit timestamp in millisecond). This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp in millisecond). This parameter must be used together with **from**.
top	No	Integer	Top N results to be queried. The default value is 5, and the maximum value is 10.
code	No	Integer	Error code to be queried. Currently, 404, 500, and 502 are supported. If this parameter is not specified, status code 404 is queried by default.

Parameter	Mandatory	Type	Description
hosts	No	String	Domain name IDs. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API. By default, this parameter is not required, and the statistics data of all protected domain names in the project is queried.
instances	No	String	Instance IDs you want to query. This parameter is required only for dedicated WAF instances and load-balancing instances (ELB mode).

Request Parameters

Table 4-719 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-720 Response body parameters

Parameter	Type	Description
total	Integer	Number of abnormal requests

Parameter	Type	Description
items	Array of **UrlCountItem** objects	Array of abnormal request information.

Table 4-721 UrlCountItem

Parameter	Type	Description
key	String	Attack Type.
num	Integer	Quantity.
host	String	Protected domain names

Status code: 400

Table 4-722 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-723 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-724 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the number of 404 errors and top exceptions. The project ID is specified by project_id and the time is from 2022-04-21 00:00:00 to 2022-04-21 14:35:36.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/abnormal?
enterprise_project_id=0&from=1650470400089&to=1650523520089&top=10&code=404
```

Example Responses

Status code: 200

ok

```
{
  "total" : 2,
  "items" : [ {
    "key" : "/",
    "num" : 6,
    "host" : "hkh4.test.418lab.cn"
  }, {
    "key" : "/",
    "num" : 6,
    "host" : "ces_after.test.418lab.cn"
  } ]
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6.5 Querying Top Security Statistics by Category

Function

This API is used to query statistics by category, including the attacked domain name, attack source IP address, attacked URL, attack source region, and attack event distribution.

URI

GET /v1/{project_id}/waf/overviews/classification

Table 4-725 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-726 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
from	Yes	Long	Start time (13-digit timestamp in millisecond). This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp in millisecond). This parameter must be used together with **from**.
top	No	Integer	The first several results you want to query. Maximum value: **10**. Default value: **5**.
hosts	No	String	Domain name IDs. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API. By default, this parameter is not required, and the statistics data of all protected domain names in the project is queried. To query data about several specified domain names, refer to the request example.

Parameter	Mandatory	Type	Description
instances	No	String	Instance IDs you want to query. This parameter is required only for dedicated WAF instances and load-balancing instances (ELB mode).

Request Parameters

Table 4-727 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Language	No	String	Language. The default value is en-us. zh-cn (Chinese)/en-us (English)

Response Parameters

Status code: 200

Table 4-728 Response body parameters

Parameter	Type	Description
domain	**DomainClassificationItem** object	Attacked domain name
attack_type	**AttackTypeClassificationItem** object	Attack event distribution
ip	**IpClassificationItem** object	Attacking source IP address
url	**UrlClassificationItem** object	Attacking URL

Parameter	Type	Description
geo	**GeoClassificationItem** object	Source region

Table 4-729 DomainClassificationItem

Parameter	Type	Description
total	Integer	Total number of DomainItem
items	Array of **DomainItem** objects	DomainItem details

Table 4-730 DomainItem

Parameter	Type	Description
key	String	Domain name
num	Integer	Quantity.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.

Table 4-731 AttackTypeClassificationItem

Parameter	Type	Description
total	Integer	Total number of AttackTypeItem
items	Array of **AttackTypeItem** objects	AttackTypeItem details

Table 4-732 AttackTypeItem

Parameter	Type	Description
key	String	Attack type
num	Integer	Quantity.

Table 4-733 IpClassificationItem

Parameter	Type	Description
total	Integer	Total number of IpItem
items	Array of **IpItem** objects	IpItem Details

Table 4-734 IpItem

Parameter	Type	Description
key	String	IP address.
num	Integer	Quantity.

Table 4-735 UrlClassificationItem

Parameter	Type	Description
total	Integer	Total number of UrlItem
items	Array of **UrlItem** objects	UrlItem Details

Table 4-736 UrlItem

Parameter	Type	Description
key	String	URL path.
num	Integer	Quantity.
host	String	Domain name

Table 4-737 GeoClassificationItem

Parameter	Type	Description
total	Integer	Total number of GeoItem
items	Array of **GeoItem** objects	GeoItem details

Table 4-738 GeoItem

Parameter	Type	Description
key	String	Source region
num	Integer	Quantity.

Status code: 400

Table 4-739 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-740 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-741 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the top 10 security overview statistics in a project. The project ID is specified by project_id. The time is from 2022-05-19 00:00:00 to 2022-06-17 11:14:41. The domain name ID is 1bac09440a814aa98ed08302c580a48b, and engine instance ID is 5a532f83a2fb476ba51ca1de7b1ebc43.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/classification?
enterprise_project_id=0&from=1652889600354&to=1655435681354&top=10&hosts=1bac09440a814aa98ed0
8302c580a48b&instances=5a532f83a2fb476ba51ca1de7b1ebc43
```

Example Responses

Status code: 200

ok

```
{
  "attack_type" : {
    "total" : 1,
    "items" : [ {
      "key" : "custom_custom",
      "num" : 2
    } ]
  },
  "domain" : {
    "total" : 2,
    "items" : [ {
      "key" : "www.whitelist.com",
      "num" : 2,
      "web_tag" : "www.whitelist.com"
    }, {
      "key" : "zbx002.apayaduo.cn",
      "num" : 2,
      "web_tag" : ""
    } ]
  },
  "geo" : {
    "total" : 1,
    "items" : [ {
      "key" : "Shanghai",
      "num" : 2
    } ]
  },
  "ip" : {
    "total" : 1,
    "items" : [ {
      "key" : "10.142.4.15",
      "num" : 2
    } ]
  },
  "url" : {
    "total" : 1,
    "items" : [ {
      "key" : "/attack",
      "num" : 2,
      "host" : "www.whitelist.com"
    } ]
  }
}
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.6.6 Querying Website Requests

Function

This API is used to query website requests.

URI

GET /v1/{project_id}/waf/overviews/request/timeline

Table 4-742 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-743 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
from	Yes	Long	Start time (13-digit timestamp in millisecond). This parameter must be used together with **to**.
to	Yes	Long	End time (13-digit timestamp in millisecond). This parameter must be used together with **from**.

Parameter	Mandatory	Type	Description
hosts	No	Array	Domain name IDs. In the cloud mode, domain name IDs can be obtained by calling the **ListHost** API. In the dedicated mode, domain name IDs can be obtained by calling the **ListPremiumHost** API. By default, this parameter is not required, and the statistics data of all protected domain names in the project is queried. To query data about several specified domain names, refer to the request example.
instances	No	Array	Instance IDs you want to query. This parameter is required only for dedicated WAF instances and load-balancing instances (ELB mode).
group_by	No	String	How data is displayed. To display data by the day, set the parameter to **DAY**. By default, this parameter is not specified, and data is displayed by the minute.

Request Parameters

Table 4-744 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-745 Response body parameters

Parameter	Type	Description
[items]	Array of **StatisticsTimelineItem** objects	Request Timeline Data for Security Statistics.

Table 4-746 StatisticsTimelineItem

Parameter	Type	Description
key	String	Key value. The options are **ACCESS** for total requests, **CRAWLER** for bot mitigation, **ATTACK** for total attacks, **WEB_ATTACK** for basic web protection, **PRECISE** for precise protection, and **CC** for CC attack protection.
timeline	Array of **TimeLineItem** objects	Statistics data over time for the corresponding key value

Table 4-747 TimeLineItem

Parameter	Type	Description
time	Long	Time point
num	Integer	Statistics for the time range from the previous time point to the point specified by the **time** field.

Status code: 400

Table 4-748 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-749 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-750 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the number of requests in security overview in a project. The project ID is specified by project_id and the time is from 2022-04-21 00:00:00 to 2022-04-21 00:00:50.

```
GET https://{Endpoint}/v1/{project_id}/waf/overviews/request/timeline?
enterprise_project_id=0&from=1650470400196&to=1650470450000
```

Example Responses

Status code: 200

ok

```
[ {
  "key" : "ACCESS",
  "timeline" : [ {
    "time" : 1650470400196,
    "num" : 0
  } ]
}, {
  "key" : "PRECISE",
  "timeline" : [ {
    "time" : 1650470400196,
    "num" : 0
  } ]
}, {
  "key" : "CRAWLER",
  "timeline" : [ {
    "time" : 1650470400196,
    "num" : 0
  } ]
}, {
  "key" : "CC",
  "timeline" : [ {
    "time" : 1650470400196,
    "num" : 0
  } ]
}, {
  "key" : "ATTACK",
  "timeline" : [ {
    "time" : 1650470400000,
    "num" : 0
  } ]
}, {
  "key" : "WEB_ATTACK",
  "timeline" : [ {
    "time" : 1650470400196,
    "num" : 0
  } ]
} ]
```

Status Codes

Status Code	Description
200	ok
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.7 Dedicated Instance Management

4.7.1 Querying Dedicated WAF Instances

Function

This API is used to query the list of dedicated WAF instances.

URI

GET /v1/{project_id}/premium-waf/instance

Table 4-751 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-752 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number for pagination query. The default value is 1.
pagesize	No	Integer	Records that can be displayed on each page. The default value is 10.
instancename	No	String	Fuzzy query of dedicated WAF engine names

Request Parameters

Table 4-753 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-754 Response body parameters

Parameter	Type	Description
total	Integer	Number of the dedicated WAF instance.
purchased	Boolean	Whether any dedicated WAF instance has been purchased.
items	Array of **ListInstance** objects	Details about the dedicated WAF instance.

Table 4-755 ListInstance

Parameter	Type	Description
id	String	IDs of the dedicated WAF instance.
instancename	String	Names of the dedicated WAF instance.
region	String	ID of the region where the dedicated WAF instance is deployed.
zone	String	AZ ID
arch	String	CPU architecture.
cpu_flavor	String	ECS specifications.
vpc_id	String	ID of the VPC where the dedicated WAF instance locates.
subnet_id	String	ID of the VPC subnet where the dedicated WAF instance locates.
service_ip	String	Service plane IP address of the dedicated WAF instance.
security_group_ids	Array of strings	Security group where the dedicated WAF instance is added.
status	Integer	Billing status of the dedicated WAF instance. ● **0**: Normal. ● **1**: Frozen. Resources and data will be retained, but the instance cannot be used. ● **2**: Terminated. Resources and data will be cleared.

Parameter	Type	Description
run_status	Integer	Running status of the dedicated instance. The value can be any of the following: ● **0**: Creating ● **1**: Running ● **2**: Deleting ● **3**: Deleted ● **4**: Creation failed ● **5**: Frozen ● **6**: Abnormal ● **7**: Updating ● **8**: Update failed
access_status	Integer	Access status of the domain names protected with the dedicated WAF instance. The value can be **0** or **1**. ● **0**: the domain name is not connected with the dedicated WAF instance. ● **1**: The domain name is connected with the dedicated WAF instance.
upgradable	Integer	Whether the dedicated WAF instance can be upgraded. The value can be **0** or **1**. ● **0**: The instance cannot be upgraded. ● **1**: The instance can be upgraded.
cloudServiceType	String	Cloud service code This parameter is used as an identifier only. You can ignore this parameter.
resourceType	String	Cloud service resource type, which is used as an identifier only. You can ignore this parameter.
resourceSpecCode	String	Cloud service resource code This parameter is used as an identifier only. You can ignore this parameter.
specification	String	Dedicated engine ECS specifications, for example, 8 vCPUs | 16 GB
hosts	Array of **IdHostnameEntry** objects	Domain name protected by the dedicated engine
serverId	String	ID of the ECS hosting the dedicated engine
create_time	Long	Time the dedicated WAF instance is created.

Parameter	Type	Description
instance_name	String	Names of the dedicated WAF instance.

Table 4-756 IdHostnameEntry

Parameter	Type	Description
id	String	Domain name ID.
hostname	String	Protected Domain Name

Status code: 400

Table 4-757 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-758 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-759 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the dedicated WAF instance list in a project. The project ID is specified by project_id.

```
GET https://{endpoint}/v1/{project_id}/premium-waf/instance
```

Example Responses

Status code: 200

Lists of dedicated WAF instances

```
{
  "purchased" : true,
  "total" : 1,
  "items" : [ {
    "id" : "0619871acb764d48a112695e8f7cbb10",
    "region" : "region-01-7",
    "zone" : "region-01-7a",
    "specification" : "8vCPUs | 16GB",
    "arch" : "x86",
    "upgradable" : 0,
    "status" : 0,
    "serverId" : "477353dc-8687-4bf4-b45b-1d7fee74fa63",
    "cloudServiceType" : "hws.service.type.waf",
    "resourceType" : "hws.resource.type.waf.instance",
    "resourceSpecCode" : "waf.instance.enterprise",
    "vpc_id" : "13718074-a3f9-408d-82aa-3c41ef55e589",
    "subnet_id" : "74d1b5a6-c7eb-4e9a-8372-181212552fcc",
    "service_ip" : "192.168.10.68",
    "security_group_ids" : [ "34287bdb-7aba-471a-b041-27427f1af76a" ],
    "cpu_flavor" : "Si2.2xlarge.2",
    "run_status" : 2,
    "access_status" : 1,
    "hosts" : [ {
      "id" : "c3be17bbe3a641c7a1ded6019c377402",
      "hostname" : "demo.www.com"
    } ],
    "instance_name" : "0412elb"
  } ]
}
```

Status Codes

Status Code	Description
200	Lists of dedicated WAF instances
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.7.2 Creating a Dedicated WAF Instance

Function

This API is used to create a dedicated WAF instance.

URI

POST /v1/{project_id}/premium-waf/instance

Table 4-760 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-761 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-762 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-763 Request body parameters

Parameter	Mandatory	Type	Description
chargemode	No	Integer	Billing mode. Currently, only pay-per-use (30) is supported.
region	Yes	String	Region where a dedicated engine is to be created.
available_zone	Yes	String	AZ where the dedicated engine is to be created.
arch	Yes	String	CPU architecture of the dedicated WAF instance, supporting only x86
instancename	Yes	String	Prefix of dedicated WAF engine names
specification	Yes	String	Specifications of the dedicated WAF instance ● **waf.instance.enterprise**: the enterprise edition, corresponding to WI-500 on the console. ● **waf.instance.enterprise**: the professional edition, corresponding to WI-100 on the console.
cpu_flavor	No	String	Flavor of the ECS used for the dedicated WAF instance. This parameter is optional when you create the WAF instances of the network interface type. This parameter is mandatory when you create the WAF instances of the ECS type. For WAF instances of the ECS type, select a flavor based on what are available on the console.
vpc_id	Yes	String	ID of the VPC where the dedicated engine is located.
subnet_id	Yes	String	ID of the VPC subnet where the dedicated engine is located.
security_group	Yes	Array of strings	ID of the security group where the dedicated engine is located.

Parameter	Mandatory	Type	Description
count	Yes	Integer	Number of dedicated WAF instance applied for
res_tenant	No	Boolean	Whether this is resource tenant. The default value is false. ● **false**: common tenant. ● **true**: resource tenant.
anti_affinity	No	Boolean	Whether to enable anti-affinity. Only the WAF instances of the network interface type support this feature.

Response Parameters

Status code: 200

Table 4-764 Response body parameters

Parameter	Type	Description
instances	Array of **instanceInfo** objects	instances

Table 4-765 instanceInfo

Parameter	Type	Description
id	String	ID of the dedicated WAF instance.
name	String	Name of the dedicated WAF instance.

Status code: 400

Table 4-766 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-767 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-768 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a WAF dedicated instance. The project ID is specified by project_id. Billing mode: pay-per-use. Region: region-01-4. AZ: region-01-4a. CPU architecture: x86. Prefix of the instance name: demo. Edition: Enterprise. VPC ID: d7b6a5ff-6c53-4cd4-9d57-f20ee8753056. Subnet ID: e59ccd18-7e15-4588-b689-04b856f4e78b. Security group ID: 09b156a2-f0f0-41fd-9891-60e594601cfd. Quantity: one. Instance type: ECS.

```
POST https://{endpoint}/v1/{project_id}/premium-waf/instance

{
  "chargemode" : 30,
  "region" : "region-01-4",
  "available_zone" : "region-01-4a",
  "arch" : "x86",
  "instancename" : "demo",
  "specification" : "waf.instance.enterprise",
  "vpc_id" : "d7b6a5ff-6c53-4cd4-9d57-f20ee8753056",
  "subnet_id" : "e59ccd18-7e15-4588-b689-04b856f4e78b",
  "security_group" : [ "09b156a2-f0f0-41fd-9891-60e594601cfd" ],
  "count" : 1,
  "res_tenant" : true
}
```

Example Responses

Status code: 200

Dedicated WAF instance information

```
{
  "instances" : [ {
    "id" : "50a6b6c9bdb643f9a8038976fc58ad02",
    "name" : "demo-6wvl"
  } ]
}
```

Status Codes

Status Code	Description
200	Dedicated WAF instance information
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.7.3 Querying Details about a Dedicated WAF Instance

Function

This API is used to query details about a dedicated WAF instance.

URI

GET /v1/{project_id}/premium-waf/instance/{instance_id}

Table 4-769 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	ID of the dedicated WAF instance. It can be obtained by calling the WAF ListInstance API

Table 4-770 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-771 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-772 Response body parameters

Parameter	Type	Description
id	String	ID of the dedicated WAF instance.
instancename	String	Name of the dedicated WAF instance.
region	String	ID of the region where the dedicated WAF instance is deployed.
zone	String	AZ ID
arch	String	CPU Architecture
cpu_flavor	String	ECS Specifications
vpc_id	String	ID of the VPC where the dedicated WAF instance locates.
subnet_id	String	ID of the VPC subnet where the dedicated WAF instance locates.

Parameter	Type	Description
service_ip	String	Service plane IP address of the dedicated WAF instance.
security_group_ids	Array of strings	Security group where the dedicated WAF instance is added.
status	Integer	Billing status of the dedicated WAF instance. ● **0**: Normal. ● **1**: Frozen. Resources and data will be retained, but the instance cannot be used. ● **2**: Terminated. Resources and data will be cleared.
run_status	Integer	Running status of the dedicated instance. The value can be any of the following: ● **0**: Creating ● **1**: Running ● **2**: Deleting ● **3**: Deleted ● **4**: Creation failed ● **5**: Frozen ● **6**: Abnormal ● **7**: Updating ● **8**: Update failed
access_status	Integer	Access status of the dedicated engine. The value 0 indicates that the dedicated engine is not connected, and the value 1 indicates that the dedicated engine is connected.
upgradable	Integer	Whether the dedicated engine can be upgraded (0: no; 1: yes)
cloudServiceType	String	Cloud service code This parameter is used as an identifier only. You can ignore this parameter.
resourceType	String	Cloud service resource type, which is used as an identifier only. You can ignore this parameter.
resourceSpecCode	String	Cloud service resource code This parameter is used as an identifier only. You can ignore this parameter.
specification	String	Dedicated engine ECS specifications, for example, 8 vCPUs | 16 GB
serverId	String	ID of the ECS hosting the dedicated engine

Parameter	Type	Description
create_time	Long	Time the dedicated WAF instance is created.

Status code: 400

Table 4-773 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-774 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-775 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query a dedicated WAF instance in a project. The project ID is specified by project_id, and the instance ID is specified by instance_id.

```
GET https://{endpoint}/v1/{project_id}/premium-waf/instance/{instance_id}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "0619871acb764d48a112695e8f7cbb10",
  "region" : "region-01-7",
  "zone" : "region-01-7a",
  "specification" : "8vCPUs | 16GB",
  "arch" : "x86",
  "upgradable" : 0,
  "status" : 0,
  "serverId" : "477353dc-8687-4bf4-b45b-1d7fee74fa63",
  "cloudServiceType" : "hws.service.type.waf",
  "resourceType" : "hws.resource.type.waf.instance",
  "resourceSpecCode" : "waf.instance.enterprise",
  "vpc_id" : "13718074-a3f9-408d-82aa-3c41ef55e589",
  "subnet_id" : "74d1b5a6-c7eb-4e9a-8372-181212552fcc",
  "service_ip" : "192.168.10.68",
  "security_group_ids" : [ "34287bdb-7aba-471a-b041-27427f1af76a" ],
  "cpu_flavor" : "Si2.2xlarge.2",
  "run_status" : 2,
  "access_status" : 1,
  "instancename" : "0412elb",
  "create_time" : 1649217360674
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.7.4 Renaming a Dedicated WAF Instance

Function

This API is used to rename a dedicated WAF engine.

URI

PUT /v1/{project_id}/premium-waf/instance/{instance_id}

Table 4-776 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	ID of the dedicated WAF instance. It can be obtained by calling the WAF ListInstance API

Table 4-777 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-778 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-779 Request body parameters

Parameter	Mandatory	Type	Description
instancename	Yes	String	New name of the dedicated WAF engine

Response Parameters

Status code: 200

Table 4-780 Response body parameters

Parameter	Type	Description
id	String	ID of the dedicated WAF instance.
instancename	String	Name of the dedicated WAF instance.
region	String	ID of the region where the dedicated WAF instance is deployed.
zone	String	AZ ID
arch	String	CPU Architecture
cpu_flavor	String	ECS Specifications
vpc_id	String	ID of the VPC where the dedicated WAF instance locates.
subnet_id	String	ID of the VPC subnet where the dedicated WAF instance locates.
service_ip	String	Service plane IP address of the dedicated WAF instance.
security_group_ids	Array of strings	Security group where the dedicated WAF instance is added.
status	Integer	Billing status of the dedicated WAF instance. ● **0**: Normal. ● **1**: Frozen. Resources and data will be retained, but the instance cannot be used. ● **2**: Terminated. Resources and data will be cleared.
run_status	Integer	Running status of the dedicated instance. The value can be any of the following: ● **0**: Creating ● **1**: Running ● **2**: Deleting ● **3**: Deleted ● **4**: Creation failed ● **5**: Frozen ● **6**: Abnormal ● **7**: Updating ● **8**: Update failed

Parameter	Type	Description
access_status	Integer	Access status of the dedicated engine. The value 0 indicates that the dedicated engine is not connected, and the value 1 indicates that the dedicated engine is connected.
upgradable	Integer	Whether the dedicated engine can be upgraded (0: no; 1: yes)
cloudServiceType	String	Cloud service code This parameter is used as an identifier only. You can ignore this parameter.
resourceType	String	Cloud service resource type, which is used as an identifier only. You can ignore this parameter.
resourceSpecCode	String	Cloud service resource code This parameter is used as an identifier only. You can ignore this parameter.
specification	String	Dedicated engine ECS specifications, for example, 8 vCPUs | 16 GB
serverId	String	ID of the ECS hosting the dedicated engine
create_time	Long	Time the dedicated WAF instance is created.

Status code: 400

Table 4-781 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-782 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-783 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update a dedicated WAF instance in a project. The project ID is specified by project_id, and the instance ID is specified by instance_id. The new instance name is 0412elb.

```
PUT https://{endpoint}/v1/{project_id}/premium-waf/instance/{instance_id}

{
  "instancename" : "0412elb"
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "0619871acb764d48a112695e8f7cbb10",
  "region" : "region-01-7",
  "zone" : "region-01-7a",
  "specification" : "8vCPUs | 16GB",
  "arch" : "x86",
  "upgradable" : 0,
  "status" : 0,
  "serverId" : "477353dc-8687-4bf4-b45b-1d7fee74fa63",
  "cloudServiceType" : "hws.service.type.waf",
  "resourceType" : "hws.resource.type.waf.instance",
  "resourceSpecCode" : "waf.instance.enterprise",
  "vpc_id" : "13718074-a3f9-408d-82aa-3c41ef55e589",
  "subnet_id" : "74d1b5a6-c7eb-4e9a-8372-181212552fcc",
  "service_ip" : "192.168.10.68",
  "security_group_ids" : [ "34287bdb-7aba-471a-b041-27427f1af76a" ],
  "cpu_flavor" : "Si2.2xlarge.2",
  "run_status" : 2,
  "access_status" : 1,
  "instancename" : "0412elb"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.7.5 Deleting a Dedicated WAF Instance

Function

This API is used to delete a dedicated WAF instance.

URI

DELETE /v1/{project_id}/premium-waf/instance/{instance_id}

Table 4-784 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	ID of the dedicated WAF instance. It can be obtained by calling the WAF ListInstance API

Table 4-785 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	ID of the enterprise project. It can be obtained by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-786 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-787 Response body parameters

Parameter	Type	Description
id	String	ID of the dedicated WAF instance.
instancename	String	Name of the dedicated WAF instance.
region	String	ID of the region where the dedicated WAF instance is deployed.
zone	String	AZ ID
arch	String	CPU Architecture
cpu_flavor	String	ECS Specifications
vpc_id	String	ID of the VPC where the dedicated WAF instance locates.
subnet_id	String	ID of the VPC subnet where the dedicated WAF instance locates.
service_ip	String	Service plane IP address of the dedicated WAF instance.
security_group_ids	Array of strings	Security group where the dedicated WAF instance is added.

Parameter	Type	Description
status	Integer	Billing status of the dedicated WAF instance. ● **0**: Normal. ● **1**: Frozen. Resources and data will be retained, but the instance cannot be used. ● **2**: Terminated. Resources and data will be cleared.
run_status	Integer	Running status of the dedicated instance. The value can be any of the following: ● **0**: Creating ● **1**: Running ● **2**: Deleting ● **3**: Deleted ● **4**: Creation failed ● **5**: Frozen ● **6**: Abnormal ● **7**: Updating ● **8**: Update failed
access_status	Integer	Access status of the dedicated engine. The value 0 indicates that the dedicated engine is not connected, and the value 1 indicates that the dedicated engine is connected.
upgradable	Integer	Whether the dedicated engine can be upgraded (0: no; 1: yes)
cloudServiceType	String	Cloud service code This parameter is used as an identifier only. You can ignore this parameter.
resourceType	String	Cloud service resource type, which is used as an identifier only. You can ignore this parameter.
resourceSpecCode	String	Cloud service resource code This parameter is used as an identifier only. You can ignore this parameter.
specification	String	Dedicated engine ECS specifications, for example, 8 vCPUs | 16 GB
serverId	String	ID of the ECS hosting the dedicated engine
create_time	Long	Time the dedicated WAF instance is created.

Status code: 400

Table 4-788 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-789 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-790 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a dedicated WAF instance in a project. The project ID is specified by project_id, and the instance ID is specified by instance_id.

```
DELETE https://{endpoint}z/v1/{project_id}/premium-waf/instance/{instance_id}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "0619871acb764d48a112695e8f7cbb10",
  "region" : "region-01-7",
  "zone" : "region-01-7a",
  "specification" : "8vCPUs | 16GB",
  "arch" : "x86",
  "upgradable" : 0,
  "status" : 0,
  "serverId" : "477353dc-8687-4bf4-b45b-1d7fee74fa63",
  "cloudServiceType" : "hws.service.type.waf",
  "resourceType" : "hws.resource.type.waf.instance",
  "resourceSpecCode" : "waf.instance.enterprise",
  "vpc_id" : "13718074-a3f9-408d-82aa-3c41ef55e589",
  "subnet_id" : "74d1b5a6-c7eb-4e9a-8372-181212552fcc",
  "service_ip" : "192.168.10.68",
  "security_group_ids" : [ "34287bdb-7aba-471a-b041-27427f1af76a" ],
  "cpu_flavor" : "Si2.2xlarge.2",
  "run_status" : 2,
  "access_status" : 1,
  "instancename" : "0412elb"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.8 Log Reporting

4.8.1 Querying LTS Settings

Function

This API is used to query the LTS settings.

URI

GET /v1/{project_id}/waf/config/lts

Table 4-791 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-792 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-793 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-794 Response body parameters

Parameter	Type	Description
id	String	LTS configuration information ID. Each enterprise project has a unique ID.
enabled	Boolean	Whether to enable LTS for WAF logging\n - **false**: LTS is disabled for WAF.\n - **true**: LTS is enabled for WAF.
ltsIdInfo	**LtsIdInfo** object	Log group and log stream IDs.
enabale	Boolean	This parameter has been discarded. Ignore it.

Table 4-795 LtsIdInfo

Parameter	Type	Description
ltsGroupId	String	Log group ID.
ltsAccessStreamID	String	Log stream ID for access logs
ltsAttackStreamID	String	Log stream ID for attack logs

Status code: 400

Table 4-796 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-797 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-798 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the LTS configuration in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/config/lts?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "enabled" : true,
  "id" : "c89a667487734f6a95e9967d1f373c77",
  "ltsIdInfo" : {
    "ltsAccessStreamID" : "4bcff74d-f649-41c8-8325-1b0a264ff683",
    "ltsAttackStreamID" : "0a7ef713-cc3e-418d-abda-85df04db1a3c",
    "ltsGroupId" : "f4fa07f6-277b-4e4a-a257-26508ece81e6"
  }
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.8.2 Configuring LTS for WAF Logging

Function

This API is used to enable or disable Log Tank Service (LTS) for WAF logging and to configure log groups and streams. You can obtain the log group ID and log stream ID from LTS. The log stream ID must belong to the log group you configure.

URI

PUT /v1/{project_id}/waf/config/lts/{ltsconfig_id}

Table 4-799 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
ltsconfig_id	Yes	String	ID of the LTS configuration. The ID can be obtained by calling the **ShowLtsInfoConfig** API.

Table 4-800 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-801 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-802 Request body parameters

Parameter	Mandatory	Type	Description
enabled	No	Boolean	Whether to enable LTS for WAF logging\n - **false**: LTS is disabled for WAF.\n - **true**: LTS is enabled for WAF.
ltsIdInfo	No	**LtsIdInfo** object	Log group and log stream IDs.

Table 4-803 LtsIdInfo

Parameter	Mandatory	Type	Description
ltsGroupId	No	String	Log group ID.
ltsAccessStreamID	No	String	Log stream ID for access logs
ltsAttackStreamID	No	String	Log stream ID for attack logs

Response Parameters

Status code: 200

Table 4-804 Response body parameters

Parameter	Type	Description
id	String	LTS configuration information ID. Each enterprise project has a unique ID.
enabled	Boolean	Whether to enable LTS for WAF logging\n - **false**: LTS is disabled for WAF.\n - **true**: LTS is enabled for WAF.
ltsIdInfo	**LtsIdInfo** object	Log group and log stream IDs.

Table 4-805 LtsIdInfo

Parameter	Type	Description
ltsGroupId	String	Log group ID.
ltsAccessStreamID	String	Log stream ID for access logs

Parameter	Type	Description
ltsAttackStreamID	String	Log stream ID for attack logs

Status code: 400

Table 4-806 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-807 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-808 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update the LTS configuration in a project. The project ID is specified by project_id. The new LTS configuration ID is c89a667487734f6a95e9967d1f373c77. LTS for WAF logging is enabled. Log group ID: 4bcff74d-f649-41c8-8325-1b0a264ff683. Access og stream ID: 0a7ef713-cc3e-418d-abda-85df04db1a3c. Attack log stream ID: f4fa07f6-277b-4e4a-a257-26508ece81e6

```
GET https://{Endpoint}/v1/{project_id}/waf/config/lts/c89a667487734f6a95e9967d1f373c77?
enterprise_project_id=0

{
  "enabled" : true,
  "ltsIdInfo" : {
    "ltsAccessStreamID" : "4bcff74d-f649-41c8-8325-1b0a264ff683",
    "ltsAttackStreamID" : "0a7ef713-cc3e-418d-abda-85df04db1a3c",
    "ltsGroupId" : "f4fa07f6-277b-4e4a-a257-26508ece81e6"
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "enabled" : true,
  "id" : "c89a667487734f6a95e9967d1f373c77",
  "ltsIdInfo" : {
    "ltsAccessStreamID" : "4bcff74d-f649-41c8-8325-1b0a264ff683",
    "ltsAttackStreamID" : "0a7ef713-cc3e-418d-abda-85df04db1a3c",
    "ltsGroupId" : "f4fa07f6-277b-4e4a-a257-26508ece81e6"
  }
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.9 Managing Your Subscriptions

4.9.1 Request body for buying a yearly/monthly-billed cloud WAF instance

Function

Request body for buying a yearly/monthly-billed cloud WAF instance. Expansion packages are not supported by the starter edition.

Constraints

If the payment fails, the system automatically generates a pending payment order. You can select another payment method on the console.

URI

POST /v1/{project_id}/waf/subscription/purchase/prepaid-cloud-waf

Table 4-809 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain the value, go to the Cloud management console first. Then, click your username, select **My Credentials**, and view the **Project ID** column in the **Projects** area.

Table 4-810 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-811 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-812 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
is_auto_pay	Yes	Boolean	Whether automatic payment is enabled. - **false**: Automatic payment is not enabled. You need to complete payment manually. - **: Automatic payment is enabled.
is_auto_renew	Yes	Boolean	Whether auto-renewal is enabled. - **true**: Auto-renewal is enabled for the instance. - **false**: Auto-renewal is disabled for the instance.
region_id	Yes	String	region Id
waf_product_info	No	**WafProductInfo** object	Details about purchased WAF instances
domain_expack_product_info	No	**ExpackProductInfo** object	Domain name expansion packages purchased
bandwidth_expack_product_info	No	**ExpackProductInfo** object	Bandwidth expansion packages purchased
rule_expack_product_info	No	**ExpackProductInfo** object	Rule expansion packages purchased

Table 4-813 WafProductInfo

Parameter	Mandatory	Type	Description
resource_spec_code	No	String	WAF editions - **professional**: The Standard edition. - **enterprise**: The Professional edition. - **ultimate**: The Platinum edition.

Parameter	Mandatory	Type	Description
period_type	No	String	Period type in yearly/monthly billing. **month (2)** is for monthly billing and **year(3)** for yearly billing.
period_num	No	Integer	Number of subscription periods

Table 4-814 ExpackProductInfo

Parameter	Mandatory	Type	Description
resource_size	No	Integer	Number of expansion packages

Response Parameters

Status code: 200

Table 4-815 Response body parameters

Parameter	Type	Description
orderId	String	Order ID.

Status code: 400

Table 4-816 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-817 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-818 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to purchase yearly/monthly billed cloud WAF. Project Id:550500b49078408682d0d4f7d923f3e1. Auto-renewal: Disabled. Region ID: xx-xxxxx-x. Quantity of bandwidth expansion packages: 1.

```
POST https://{Endpoint}/v1/{project_id}/waf/subscription/purchase/prepaid-cloud-waf?
enterprise_project_id=0

{
  "project_id" : "550500b49078408682d0d4f7d923f3e1",
  "is_auto_renew" : false,
  "is_auto_pay" : false,
  "region_id" : "xx-xxxxx-x",
  "bandwidth_expack_product_info" : {
    "resource_size" : 1
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "orderId" : "38ff0cb9a10e4d5293c642bc0350fa6d"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.9.2 Changing specifications of a cloud WAF instance billed yearly/monthly.

Function

This API is used to change specifications of a cloud WAF instance that is billed yearly/monthly. Notes:

- **1**: The cloud WAF instance must be billed yearly/monthly.
- **2**: The edition for the WAF instance cannot be scaled down. The number of any type of expansion packages cannot be decreased to 0.
- **3**: The number of each type of expansion packages can only be increased or decreased together.

Constraints

If the payment fails, the system automatically generates a pending payment order. You can select another payment method on the console.

URI

POST /v1/{project_id}/waf/subscription/batchalter/prepaid-cloud-waf

Table 4-819 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain the value, go to the Cloud management console first. Then, click your username, select **My Credentials**, and view the **Project ID** column in the **Projects** area.

Table 4-820 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-821 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-822 Request body parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
is_auto_pay	Yes	Boolean	Whether automatic payment is enabled. ● **false**: Automatic payment is not enabled. You need to complete payment manually. ● **: Automatic payment is enabled.
waf_product_info	No	**AlterWafProductInfo** object	Changing the WAF edition.
domain_expack_product_info	No	**ExpackProductInfo** object	Changing the quantity of domain name expansion packages
bandwidth_expack_product_info	No	**ExpackProductInfo** object	Changing the quantity of bandwidth name expansion packages
rule_expack_product_info	No	**ExpackProductInfo** object	Changing the quantity of rule name expansion packages

Table 4-823 AlterWafProductInfo

Parameter	Mandatory	Type	Description
resource_spec_code	No	String	WAF editions - **detection**: The Starter edition. - **professional**: The Standard edition. - **enterprise**: The Professional edition. - **ultimate**: The Platinum edition.

Table 4-824 ExpackProductInfo

Parameter	Mandatory	Type	Description
resource_size	No	Integer	Number of expansion packages

Response Parameters

Status code: 200

Table 4-825 Response body parameters

Parameter	Type	Description
orderId	String	Order ID.

Status code: 400

Table 4-826 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-827 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-828 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to change the yearly/monthly cloud WAF specifications. Project ID: 550500b49078408682d0d4f7d923f3e1. Auto-renewal: changed to enabled. Quantity of bandwidth expansion packages: changed to 2.

```
POST https://{Endpoint}/v1/{project_id}/waf/subscription/batchalter/prepaid-cloud-waf?
enterprise_project_id=0

{
  "project_id" : "550500b49078408682d0d4f7d923f3e1",
  "is_auto_pay" : true,
  "domain_expack_product_info" : {
    "resource_size" : 2
  }
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "orderId" : "38ff0cb9a10e4d5293c642bc0350fa6d"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.9.3 Querying Your Subscriptions

Function

This API is used to query your subscriptions to cloud and dedicated WAF instances billed on a yearly/monthly or pay-per-use basis.

URI

GET /v1/{project_id}/waf/subscription

Table 4-829 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain the value, go to the Cloud management console first. Then, click your username, select **My Credentials**, and view the **Project ID** column in the **Projects** area.

Request Parameters

Table 4-830 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-831 Response body parameters

Parameter	Type	Description
type	Integer	The edition for the cloud WAF instance. - **-2**: Frozen. - **-1**: Not subscribed. - **2**: The Standard edition. - **3**: The Professional edition. - **4**: The Platinum edition. - **7**: The Starter edition. - **22**: The pay-per-use edition.
resources	Array of **ResourceResponse** objects	The resource list.
isNewUser	Boolean	New user or not.
premium	**Premium** object	Information about subscriptions to dedicated WAF instances

Table 4-832 ResourceResponse

Parameter	Type	Description
resourceId	String	Resource ID.
cloudServiceType	String	Cloud service type

Parameter	Type	Description
resourceType	Object	Cloud service resource type. ● hws.resource.type.waf: yearly/monthly cloud-mode WAF ● hws.resource.type.waf.domain: domain name expansion packages in yearly/monthly cloud-mode WAF ● hws.resource.type.waf.bandwidth: bandwidth expansion packages in yearly/monthly cloud-mode WAF ● hws.resource.type.waf.rule: rule expansion packages in yearly/monthly cloud-mode WAF ● hws.resource.type.waf.payperuserequest: requests to pay-per-use WAF instances ● hws.resource.type.waf.payperusedomain: domain names protected with pay-per-use WAF instances ● hws.resource.type.waf.payperuserule: rules created in pay-per-use WAF instances
resourceSpecCode	String	Cloud resource specifications.
status	Integer	Resource status. The value can be: ● **0**: Unfrozen/Normal. ● **1**: Frozen. ● **2**: Deleted.
expireTime	String	Resource expiration time.
resourceSize	Integer	Resource quantity.

Table 4-833 Premium

Parameter	Type	Description
purchased	Boolean	Whether the dedicated mode is enabled.
total	Integer	The number of dedicated WAF instances, including load-balancing instances.
elb	Integer	The number of load-balancing WAF instances (ELB mode).
dedicated	Integer	The number of the dedicated WAF instances

Status code: 400

Table 4-834 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-835 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-836 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the subscriptions in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/subscription?
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "type" : 3,
  "resources" : [ {
    "resourceId" : "d2759a06ed844b9c9837bb76326ca656",
    "cloudServiceType" : "hws.service.type.waf",
    "resourceType" : "hws.resource.type.waf",
    "resourceSpecCode" : "waf.enterprise",
    "resourceSize" : null,
    "expireTime" : "2022-12-07T15:59:59Z",
    "status" : 0
  }, {
    "resourceId" : "6a5a4b06dbcd4cc5be6ff88bcd988046",
    "cloudServiceType" : "hws.service.type.waf",
    "resourceType" : "hws.resource.type.waf.rule",
    "resourceSpecCode" : "waf.expack.rule.enterprise",
    "resourceSize" : 5,
    "expireTime" : "2022-12-07T15:59:59Z",
    "status" : 0
  }, {
    "resourceId" : "a9202ca8704740b6a1e0481c80bd4255",
    "cloudServiceType" : "hws.service.type.waf",
    "resourceType" : "hws.resource.type.waf.domain",
    "resourceSpecCode" : "waf.expack.domain.enterprise",
    "resourceSize" : 10,
    "expireTime" : "2022-12-07T15:59:59Z",
    "status" : 0
  } ],
  "isNewUser" : false,
  "premium" : {
    "purchased" : true,
    "total" : 8,
    "elb" : 0,
    "dedicated" : 8
  }
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.10 System Management

4.10.1 Querying the IP addresses of WAF

Function

This API is used to query WAF IP addresses.

URI

GET /v1/{project_id}/waf/config/source-ip

Table 4-837 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Request Parameters

Table 4-838 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-839 Response body parameters

Parameter	Type	Description
source_ip	Array of **IpsItem** objects	Origin server information list
last_modify	Long	Last time the WAF IP addresses are updated.

Table 4-840 IpsItem

Parameter	Type	Description
ips	Array of strings	WAF retrieval IP address

Parameter	Type	Description
update_time	Long	Time the WAF IP addresses are updated.

Status code: 400

Table 4-841 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-842 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-843 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the WAF IP addresses in a project. The project ID is specified by project_id.

```
GET https://{endpoint}/v1/{project_id}/waf/config/source-ip
```

Example Responses

Status code: 200

IP addresses of WAF

```
{
  "source_ip" : [ {
```

```
  "ips" : [ "122.112.208.32/28", "49.4.56.64/27", "2407:c080:804::/48" ],
  "update_time" : 1573779840000
 } ]
}
```

Status Codes

Status Code	Description
200	IP addresses of WAF
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.11 Alarm Management

4.11.1 This API is used to query configuration of alarm notifications.

Function

Querying Alarm Notification Configuration

URI

GET /v2/{project_id}/waf/alerts

Table 4-844 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-845 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-846 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-847 Response body parameters

Parameter	Type	Description
total	Integer	Total number of configured alarm notifications
items	Array of **AlertNoticeConfigResponse** objects	Configured alarm notifications

Table 4-848 AlertNoticeConfigResponse

Parameter	Type	Description
id	String	ID
name	String	Alarm notification name

Parameter	Type	Description
enabled	Boolean	Whether to enable - **false**: It is disabled for WAF. - **true**: It is enabled.
topic_urn	String	Theme
sendfreq	Integer	Interval, in minute. When the notification type is event, an alarm notification is sent when the number of attacks within the given interval is greater than or equal to the threshold. The value can be **5**, **15**, **30**, **60**, **120**, **360**, **720**, or **1440**. When the notification type is certificate expiration, an alarm notification is sent once within the give interval. The supported values are 1440 and 10080 (unit: minute).
locale	String	Language
times	Integer	This parameter is mandatory when notification type is set to **Event**. A notification alarm is sent when the number of attacks reaches the configured threshold. Default: **1**
threat	Array of strings	Event type
prefer_html	Boolean	This parameter is reserved and can be ignored. Default: **false**
notice_class	String	Notification type
nearly_expired_time	String	Advance notification days
is_all_enterprise_project	Boolean	Whether all enterprise projects are involved. Default: **true**
enterprise_project_id	String	Specifies the enterprise project ID.
update_time	Long	Update time.

Status code: 400

Table 4-849 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 401

Table 4-850 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-851 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the alarm notifications in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v2/{project_id}/waf/alerts?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "enabled" : true,
    "enterprise_project_id" : "0",
    "id" : "753231205d474fa78655760c8dbd9e6f",
    "is_all_enterprise_project" : true,
    "locale" : "zh-cn",
    "name" : "test-demo33",
    "nearly_expired_time" : 60,
    "notice_class" : "cert_alert_notice",
    "prefer_html" : false,
    "sendfreq" : 10080,
    "threat" : [ ],
    "times" : 1,
    "topic_urn" : "urn:smn:xx-xxxxx-x:550500b49078408682d0d4f7d923f3e1:ces_zyh_test",
    "update_time" : 1664347553944
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.11.2 This API is used to update alarm notification configuration.

Function

Updating Alarm Notification Configuration

URI

PUT /v2/{project_id}/waf/alert/{alert_id}

Table 4-852 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
alert_id	Yes	String	Alarm ID.

Request Parameters

Table 4-853 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Tenant token.

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**
X-Language	Yes	String	zh-cn/en-us

Table 4-854 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Alarm notification name
enabled	No	Boolean	Whether to enable this function. ● **false**: It is disabled for WAF. ● **true**: It is enabled.
topic_urn	Yes	String	Topic URN. You can obtain it by calling an API of [Simple Message Notification].
sendfreq	No	Integer	Interval, in minute. When the notification type is event, an alarm notification is sent when the number of attacks within the given interval is greater than or equal to the threshold. The value can be **5**, **15**, **30**, **60**, **120**, **360**, **720**, or **1440**. When the notification type is certificate expiration, an alarm notification is sent once within the give interval. The supported values are 1440 and 10080 (unit: minute). Default: **5**
locale	No	String	Language. ● **zh-cn**: Chinese. ● **en-us**: English.
times	No	Integer	This parameter is mandatory when notification type is event-based. A notification alarm is sent when the number of attacks reaches the configured threshold. Default: **1**

Parameter	Mandatory	Type	Description
threat	No	Array of strings	Event type
notice_class	Yes	String	Notification type. - **threat_alert_notice**: Events. - **cert_alert_notice**: Certificate expiration
nearly_expired_time	No	String	How long before you certificate expires you want the system to notify you. This parameter is mandatory when the notification type is certificate expiration.
is_all_enterprise_project	No	Boolean	Whether all enterprise projects are involved.

Response Parameters

Status code: 200

Table 4-855 Response body parameters

Parameter	Type	Description
id	String	ID
name	String	Alarm notification name
enabled	Boolean	Whether to enable this function - **false**: It is disabled for WAF. - **true**: Enable
topic_urn	String	Theme
sendfreq	Integer	Interval, in minute. When the notification type is event, an alarm notification is sent when the number of attacks within the given interval is greater than or equal to the threshold. The value can be **5**, **15**, **30**, **60**, **120**, **360**, **720**, or **1440**. When the notification type is certificate expiration, an alarm notification is sent once within the give interval. The supported values are 1440 and 10080 (unit: minute).
locale	String	Languages

Parameter	Type	Description
times	Integer	This parameter is mandatory when notification type is event-based. A notification alarm is sent when the number of attacks reaches the configured threshold. Default: **1**
threat	Array of strings	Event type.
prefer_html	Boolean	This parameter is reserved and can be ignored. Default: **false**
notice_class	String	Alarm type.
nearly_expired_time	String	Advance notification days
is_all_enterprise_project	Boolean	Whether all enterprise projects are involved. Default: **true**
enterprise_project_id	String	Enterprise project ID.
update_time	Long	Update time.

Status code: 400

Table 4-856 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-857 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-858 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to update the alarm notification configuration for a project. Project ID: project_id. Notification type: Certificate expiration. Topic URN: urn:smn:xx-xxxxx-x:550500b49078408682d0d4f7d923f3e1:ces_zyh_test. Alarm notification name: test. Notifications are sent 60 days before a certificate expires at an interval of 10,080 minutes.

```
PUT https://{Endpoint}/v2/{project_id}/waf/alert/{alert_id}?enterprise_project_id=0

{
  "notice_class" : "cert_alert_notice",
  "topic_urn" : "urn:smn:xx-xxxxx-x:550500b49078408682d0d4f7d923f3e1:ces_zyh_test",
  "name" : "test",
  "nearly_expired_time" : 60,
  "sendfreq" : 10080
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "enabled" : true,
  "enterprise_project_id" : "0",
  "id" : "7a19ee86a7dc43f0b12093decb795096",
  "is_all_enterprise_project" : true,
  "locale" : "zh-cn",
  "name" : "demo",
  "nearly_expired_time" : 60,
  "notice_class" : "cert_alert_notice",
  "prefer_html" : false,
  "sendfreq" : 10080,
  "threat" : [ ],
  "times" : 1,
  "topic_urn" : "urn:smn:xx-xxxxx-x:550500b49078408682d0d4f7d923f3e1:ces_zyh_test"
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.

Status Code	Description
500	Internal server error.

Error Codes

See **Error Codes**.

4.12 Protected Website Management in Cloud Mode

4.12.1 Querying the List of Domain Names Protected in Cloud Mode

Function

This API is used to query the list of domain names protected in cloud mode.

URI

GET /v1/{project_id}/waf/instance

Table 4-859 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-860 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Parameter	Mandatory	Type	Description
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page in query pagination. The value range is 1 to 100. The default value is **10**, indicating that each page contains 10 results. To query all domain names at a time, set this parameter to **-1**. Default: **10**
hostname	No	String	The domain name whose information you want to query. This parameter is used to query information about a specified domain name. If this parameter is not specified, all domain names protected with cloud WAF are queried.
policyname	No	String	Protection policy name. This parameter is used to query domain names added to a specified protection policy. This parameter is optional.

Request Parameters

Table 4-861 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-862 Response body parameters

Parameter	Type	Description
total	Integer	Number of domain names protected with cloud WAF
items	Array of **CloudWafHostItem** objects	Array of details about the protected domain names protected with cloud WAF.

Table 4-863 CloudWafHostItem

Parameter	Type	Description
id	String	Domain name ID
hostid	String	Domain name ID
region	String	Region ID. This parameter is included when the domain name was added to WAF through the console. This parameter is left blank when the domain name was added to WAF by calling an API. You can query the region ID on the Regions and Endpoints page on the website.
description	String	(Optional) Descriptions of the domain names
type	Integer	WAF deployment mode. The default value is **1**. Currently, only the reverse proxy is supported. This parameter is redundant.
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
hostname	String	Domain name added to cloud WAF.
access_code	String	CNAME prefix, CNAME suffix: .vip1.huaweicloudwaf.com
policyid	String	Policy ID
timestamp	Long	Time the domain name was added to WAF.

Parameter	Type	Description
protect_status	Integer	WAF status of the protected domain name. - **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. - **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. - **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. - **true**: Use a dedicated IP address. - **false**: Do not use a dedicated IP address.
paid_type	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
flag	**Flag** object	Special identifier, which is used on the console.

Table 4-864 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. - **true**: The website passed the PCI 3DS certification check. - **false**: The website failed the PCI 3DS certification check. Enumeration values: - **true** - **false**

Parameter	Type	Description
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Status code: 400

Table 4-865 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-866 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-867 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to obtain all domain names protected with cloud WAF in a specific project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/instance?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "total" : 1,
  "items" : [ {
    "id" : "d0a4bc2f74e3407388a50243af700305",
    "hostid" : "d0a4bc2f74e3407388a50243af700305",
    "description" : "e",
    "type" : 1,
    "proxy" : false,
    "flag" : {
      "pci_3ds" : "false",
      "pci_dss" : "false",
      "ipv6" : "false",
      "cname" : "new",
      "is_dual_az" : "true"
    },
    "region" : "xx-xxxxx-x",
    "hostname" : "www.demo.com",
    "access_code" : "7d06456ffaexxxxxxxxxxxx281bc13b",
    "policyid" : "bb2124fabe6f42ff9fe4770eeccb2670",
    "timestamp" : 1642648030687,
    "protect_status" : 1,
    "access_status" : 0,
    "exclusive_ip" : false,
    "web_tag" : "iii",
    "paid_type" : "prePaid"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.12.2 Adding a Domain Name to the Cloud WAF

Function

This API is used to add a domain name to the cloud WAF.

URI

POST /v1/{project_id}/waf/instance

Table 4-868 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-869 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-870 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-871 Request body parameters

Parameter	Mandatory	Type	Description
hostname	Yes	String	The domain name can contain a maximum of 64 characters. Only letters, digits, hyphens (-), underscores (_), and periods (.) are allowed, for example, www.domain.com.
policyid	No	String	ID of the policy initially used to the domain name. You can call the **ListPolicy** API to query the policy list and view the ID of the specific policy.
server	Yes	Array of **CloudWafServer** objects	Origin server configuration of the protected domain name
certificateid	No	String	Certificate ID. It can be obtained by calling the **ListCertificates** API. ● This parameter is not required when the client protocol is HTTP. ● This parameter is mandatory when the client protocol is HTTPS.

Parameter	Mandatory	Type	Description
certificatename	No	String	Certificate name. - This parameter is not required when the client protocol is HTTP. - This parameter is mandatory when the client protocol is HTTPS.
web_tag	No	String	Website name
exclusive_ip	No	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. - **true**: Use a dedicated IP address. - **false**: Do not use a dedicated IP address.
paid_type	No	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
proxy	Yes	Boolean	Whether a proxy is used for the protected domain name. - **false**: No proxy is used. - **true**: A proxy is used.

Parameter	Mandatory	Type	Description
lb_algorithm	No	String	Load balancing algorithms. This parameter is included only in the professional edition (formerly enterprise edition) and platinum edition (formerly premium edition). ● **Source IP hash**: Requests from a certain IP address are forwarded to the same server. ● **Weighted round robin**: All requests are distributed to origin servers in turn based on the weight assigned to each server. ● **Session hash**: Requests with a specific session ID are forwarded to the same origin server. Ensure that the traffic identifiers for known attack sources are configured after the domain name was added to WAF. Otherwise, the session hash configuration does not take effect. Enumeration values: ● **ip_hash** ● **round_robin** ● **session_hash**
description	No	String	Domain name description

Parameter	Mandatory	Type	Description
forward_header_map	No	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-872 CloudWafServer

Parameter	Mandatory	Type	Description
front_protocol	Yes	String	Protocol used by the client to request access to the origin server. Enumeration values: ● **HTTP** ● **HTTPS**
back_protocol	Yes	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**

Parameter	Mandatory	Type	Description
weight	No	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	Yes	String	IP address of your origin server requested by the client
port	Yes	Integer	Port used by WAF to forward client requests to the origin server
type	Yes	String	Origin server IP address format, IPv4 and IPv6 Enumeration values: ● **ipv4** ● **ipv6**

Response Parameters

Status code: 200

Table 4-873 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name added to cloud WAF.
policyid	String	Policy ID
access_code	String	CNAME prefix, CNAME suffix: .vip1.huaweicloudwaf.com
protect_status	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Parameter	Type	Description
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
lb_algorithm	String	Load balancing algorithms. This parameter is included only in the professional edition (formerly enterprise edition) and platinum edition (formerly premium edition). ● **Source IP hash**: Requests from a certain IP address are forwarded to the same server. ● **Weighted round robin**: All requests are distributed to origin servers in turn based on the weight assigned to each server. ● **Session hash**: Requests with a specific session ID are forwarded to the same origin server. Ensure that the traffic identifiers for known attack sources are configured after the domain name was added to WAF. Otherwise, the session hash configuration does not take effect. Enumeration values: ● **ip_hash** ● **round_robin** ● **session_hash**
protocol	String	Returned client protocol type
certificateid	String	Returned certificate ID
certificatename	String	Certificate name
server	Array of **CloudWafServer** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
timestamp	Long	Time the domain name was added to WAF.
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
web_tag	String	Website name

Parameter	Type	Description
http2_enable	Boolean	Whether to support HTTP/2. ● **true**: HTTP/2 is supported. ● **false**: HTTP/2 is not supported.
block_page	**BlockPage** object	Alarm page configuration
flag	**Flag** object	Special identifier, which is used on the console.
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-874 CloudWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: ● **HTTP** ● **HTTPS**
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	Origin server IP address format, IPv4 and IPv6 Enumeration values: ● **ipv4** ● **ipv6**

Table 4-875 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-876 CustomPage

Parameter	Type	Description
status_code	String	Status Codes

Parameter	Type	Description
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-877 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**

Parameter	Type	Description
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Status code: 400

Table 4-878 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-879 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-880 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to add a website domain name to cloud WAF in a specific project. The project ID is specified by project_id, and the domain name is www.demo.com. The client protocol is HTTPS, and server protocol is HTTP. The origin server address is ipv4 x.x.x.x. The service port used by WAF to forward client requests to the origin server is 7443. The domain name does not use a proxy or dedicated IP address. The WAF is billed yearly/monthly. The domain name description is dome. The website name is dome. The certificate name is test6, and the certificate ID is 3ac1402300374a63a05be68c641e92c8.

```
POST https://{Endpoint}/v1/{project_id}/waf/instance?enterprise_project_id=0

{
  "hostname" : "www.demo.com",
  "server" : [ {
    "front_protocol" : "HTTPS",
    "back_protocol" : "HTTP",
    "type" : "ipv4",
    "address" : "x.x.x.x",
    "port" : "7443"
  } ],
  "proxy" : false,
  "paid_type" : "prePaid",
  "description" : "demo",
  "web_tag" : "demo",
  "certificateid" : "3ac1402300374a63a05be68c641e92c8",
  "certificatename" : "test6",
  "exclusive_ip" : false
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "31af669f567246c289771694f2112289",
  "hostname" : "www.demo.com",
  "protocol" : "HTTP",
  "server" : [ {
    "address" : "x.x.x.x",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP"
  } ],
  "proxy" : false,
  "timestamp" : 1650527546420,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false",
    "ipv6" : "false",
    "cname" : "new",
    "is_dual_az" : "true"
  },
  "policyid" : "41cba8aee2e94bcdbf57460874205494",
  "protect_status" : 1,
  "access_status" : 0,
  "access_code" : "1b18879b9d064f8bbcbf8abce7294cac",
  "block_page" : {
    "template" : "default"
  },
  "web_tag" : "",
  "exclusive_ip" : false,
  "http2_enable" : false
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.12.3 Querying Details About a Domain Name by Domain Name ID in Cloud Mode

Function

This API is used to query details about a domain name protected in cloud mode by domain name ID.

URI

GET /v1/{project_id}/waf/instance/{instance_id}

Table 4-881 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	Domain name ID. It can be obtained by calling the **ListHost** API.

Table 4-882 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-883 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-884 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name added to cloud WAF.
policyid	String	ID of the policy used for the domain name.
domainid	String	Account ID, which is the same as the account ID on the **My Credentials** page. To go to this page, log in to Cloud management console, hover the cursor over your username, and click **My Credentials** in the displayed window.
projectid	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Type	Description
enterprise_project_id	String	Enterprise project ID. To obtain the ID, log in to the Cloud management console first. On the menu bar at the top of the page, choose **Enterprise** > **Project Management**. Then, click the project name and view the ID.
protocol	String	Backend protocol type. The value can be HTTPS, HTTP, or HTTP&HTTPS.
server	Array of **CloudWafServer** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
protect_status	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
access_code	String	CNAME prefix, CNAME suffix: .vip1.huaweicloudwaf.com
locked	Integer	This parameter is reserved, which will be used to freeze a domain name.
timestamp	Long	Timestamp (ms) when the protected domain name is created.
certificateid	String	HTTPS certificate ID.
certificatename	String	Certificate name

Parameter	Type	Description
tls	String	Minimum TLS version. The value can be **TLS v1.0**, **TLS v1.1**, or **TLS v1.2**. TLS v1.0 is used by default. Enumeration values: ● **TLS v1.0** ● **TLS v1.1** ● **TLS v1.2**
cipher	String	Cipher suite. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**: **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH ● **cipher_2**: EECDH+AESGCM:EDH+AESGCM ● **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH ● **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH ● **cipher_default**: ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: ● **cipher_1** ● **cipher_2** ● **cipher_3** ● **cipher_4** ● **cipher_default**
block_page	**BlockPage** object	Alarm page configuration
extend	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
traffic_mark	**TrafficMark** object	Traffic identifier
circuit_breaker	**CircuitBreaker** object	Circuit breaker configuration

Parameter	Type	Description
lb_algorithm	String	Load balancing algorithms. This parameter is included only in the professional edition (formerly enterprise edition) and platinum edition (formerly premium edition). ● **Source IP hash**: Requests from a certain IP address are forwarded to the same server. ● **Weighted round robin**: All requests are distributed to origin servers in turn based on the weight assigned to each server. ● **Session hash**: Requests with a specific session ID are forwarded to the same origin server. Ensure that the traffic identifiers for known attack sources are configured after the domain name was added to WAF. Otherwise, the session hash configuration does not take effect. Enumeration values: ● **ip_hash** ● **round_robin** ● **session_hash**
timeout_config	**TimeoutConfig** object	Timeout settings
web_tag	String	Website name
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Website remarks
http2_enable	Boolean	Whether to support HTTP/2. ● **true**: HTTP/2 is supported. ● **false**: HTTP/2 is not supported.
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new WAF console.

Parameter	Type	Description
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: - $time_local - $request_id - $connection_requests - $tenant_id - $project_id - $remote_addr - $remote_port - $scheme - $request_method - $http_host - $origin_uri - $request_length - $ssl_server_name - $ssl_protocol - $ssl_curves - $ssl_session_reused

Table 4-885 CloudWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: - **HTTP** - **HTTPS**
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: - **HTTP** - **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.

Parameter	Type	Description
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	Origin server IP address format, IPv4 and IPv6 Enumeration values: - **ipv4** - **ipv6**

Table 4-886 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-887 CustomPage

Parameter	Type	Description
status_code	String	Status Codes
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-888 TrafficMark

Parameter	Type	Description
sip	Array of strings	IP tag. HTTP request header field of the original client IP address.

Parameter	Type	Description
cookie	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-889 CircuitBreaker

Parameter	Type	Description
switch	Boolean	Whether to enable connection protection. ● **true**: Enable connection protection. ● **false**: Disable the connection protection.
dead_num	Integer	502/504 error threshold. 502/504 errors allowed for every 30 seconds.
dead_ratio	Number	A breakdown protection is triggered when the 502/504 error threshold and percentage threshold have been reached.
block_time	Integer	Protection period upon the first breakdown. During this period, WAF stops forwarding client requests.
superposition_num	Integer	The maximum multiplier you can use for consecutive breakdowns. The number of breakdowns are counted from 0 every time the accumulated breakdown protection duration reaches 3,600s. For example, assume that Initial Downtime (s) is set to 180s and **Multiplier for Consecutive Breakdowns** is set to 3. If the breakdown is triggered for the second time, that is, less than 3, the protection duration is 360s (180s X 2). If the breakdown is triggered for the third or fourth time, that is, equal to or greater than 3, the protection duration is 540s (180s X 3). When the accumulated downtime duration exceeds 1 hour (3,600s), the number of breakdowns are counted from 0.

Parameter	Type	Description
suspend_num	Integer	Threshold of the number of pending URL requests. Connection protection is triggered when the threshold has been reached.
sus_block_time	Integer	Downtime duration after the connection protection is triggered. During this period, WAF stops forwarding website requests.

Table 4-890 TimeoutConfig

Parameter	Type	Description
connect_timeout	Integer	Timeout for WAF to connect to the origin server.
send_timeout	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	Integer	Timeout for WAF to receive responses from the origin server.

Table 4-891 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**

Parameter	Type	Description
cname	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Table 4-892 Access_progress

Parameter	Type	Description
step	Integer	Procedure - **1**: Whitelisting the WAF IP addresses. - **2**: Testing connectivity. - **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. - **0**: The step has not been finished. - **1**: The step has finished.

Status code: 400

Table 4-893 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 401

Table 4-894 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-895 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to obtain details about domain names protected with cloud WAF in a specific project. The project ID is specified by project_id, and the domain ID is specified by instance_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/instance/{instance_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "31af669f567246c289771694f2112289",
  "hostname" : "www.demo.com",
  "protocol" : "HTTP",
  "server" : [ {
    "address" : "x.x.x.x",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP"
  } ],
  "proxy" : false,
  "locked" : 0,
  "timestamp" : 1650527546420,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false",
    "ipv6" : "false",
    "cname" : "new",
    "is_dual_az" : "true"
  },
  "description" : "",
  "policyid" : "41cba8aee2e94bcdbf57460874205494",
  "domainid" : "d4ecb00b031941ce9171b7bc3386883f",
  "projectid" : "0456cf04d6f64725ab02ed5bd2efdfa4",
  "enterprise_project_id" : "0",
  "protect_status" : 0,
  "access_status" : 0,
  "access_code" : "1b18879b9d064f8bbcbf8abce7294cac",
  "block_page" : {
    "template" : "default"
  },
  "web_tag" : "",
  "exclusive_ip" : false,
  "http2_enable" : false
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.12.4 Updating Configurations of Domain Names Protected with Cloud WAF

Function

This API is used to update configurations of domain names protected with cloud WAF. The new origin server information will overwrite the old origin server information. If you want to keep the old information, provide them as new data. You can provide only the updated information in the request body.

URI

PATCH /v1/{project_id}/waf/instance/{instance_id}

Table 4-896 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	Domain name ID. It can be obtained by calling the **ListHost** API.

Table 4-897 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-898 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-899 Request body parameters

Parameter	Mandatory	Type	Description
proxy	No	Boolean	Whether a proxy is used for the protected domain name. - **false**: No proxy is used. - **true**: A proxy is used.
certificateid	No	String	Certificate ID. It can be obtained by calling the **ListCertificates** API. - This parameter is not required when the client protocol is HTTP. - This parameter is mandatory when the client protocol is HTTPS.
certificatename	No	String	Certificate name. - This parameter is not required when the client protocol is HTTP. - This parameter is mandatory when the client protocol is HTTPS.
server	No	Array of **CloudWafServer** objects	Origin server configuration of the protected domain name
tls	No	String	Minimum TLS version. The value can be **TLS v1.0**, **TLS v1.1**, or **TLS v1.2**. TLS v1.0 is used by default. Enumeration values: - **TLS v1.0** - **TLS v1.1** - **TLS v1.2**

Parameter	Mandatory	Type	Description
cipher	No	String	Cipher suite. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**: **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH ● **cipher_2**: EECDH+AESGCM:EDH+AESGCM ● **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH ● **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH ● **cipher_default**: The cryptographic algorithms are ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: ● **cipher_1** ● **cipher_2** ● **cipher_3** ● **cipher_4** ● **cipher_default**
http2_enable	No	Boolean	Whether to support HTTP/2. ● **true**: HTTP/2 is supported. ● **false**: HTTP/2 is not supported.

Parameter	Mandatory	Type	Description
ipv6_enable	No	Boolean	Whether to enable IPv6 protection. Only the professional edition (formerly enterprise edition) and platinum edition (formerly premium edition) support IPv6 protection. ● **true**: IPv6 protection is enabled. ● **false**: IPv6 protection is disabled.
web_tag	No	String	Website name
exclusive_ip	No	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
paid_type	No	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
block_page	No	**BlockPage** object	Alarm page configuration
traffic_mark	No	**TrafficMark** object	Traffic identifier
flag	No	**Flag** object	Special identifier, which is used on the console.
extend	No	Map<String,String>	Extended field, which is used to save some configuration information about the protected domain name.
circuit_breaker	No	**CircuitBreaker** object	Circuit breaker configuration
timeout_config	No	**TimeoutConfig** object	Timeout settings

Parameter	Mandatory	Type	Description
forward_header_map	No	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of **Value** are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-900 CloudWafServer

Parameter	Mandatory	Type	Description
front_protocol	Yes	String	Protocol used by the client to request access to the origin server. Enumeration values: ● **HTTP** ● **HTTPS**
back_protocol	Yes	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: ● **HTTP** ● **HTTPS**

Parameter	Mandatory	Type	Description
weight	No	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	Yes	String	IP address of your origin server requested by the client
port	Yes	Integer	Port used by WAF to forward client requests to the origin server
type	Yes	String	Origin server IP address format, IPv4 and IPv6 Enumeration values: ● **ipv4** ● **ipv6**

Table 4-901 BlockPage

Parameter	Mandatory	Type	Description
template	Yes	String	Template name
custom_page	No	**CustomPage** object	Custom alarm page
redirect_url	No	String	URL of the redirected page

Table 4-902 CustomPage

Parameter	Mandatory	Type	Description
status_code	Yes	String	Status Codes
content_type	Yes	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	Yes	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-903 TrafficMark

Parameter	Mandatory	Type	Description
sip	No	Array of strings	IP tag. HTTP request header field of the original client IP address.
cookie	No	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	No	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-904 Flag

Parameter	Mandatory	Type	Description
pci_3ds	No	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**

Parameter	Mandatory	Type	Description
pci_dss	No	String	Whether the website passed the PCI DSS certification check. - **true**: The website passed the PCI DSS certification check. - **false**: The website failed the PCI DSS certification check. Enumeration values: - **true** - **false**
cname	No	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	No	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	No	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Table 4-905 CircuitBreaker

Parameter	Mandatory	Type	Description
switch	No	Boolean	Whether to enable connection protection. ● **true**: Enable connection protection. ● **false**: Disable the connection protection.
dead_num	No	Integer	502/504 error threshold. 502/504 errors allowed for every 30 seconds.
dead_ratio	No	Number	A breakdown protection is triggered when the 502/504 error threshold and percentage threshold have been reached.
block_time	No	Integer	Protection period upon the first breakdown. During this period, WAF stops forwarding client requests.
superposition_num	No	Integer	The maximum multiplier you can use for consecutive breakdowns. The number of breakdowns are counted from 0 every time the accumulated breakdown protection duration reaches 3,600s. For example, assume that Initial Downtime (s) is set to 180s and **Multiplier for Consecutive Breakdowns** is set to 3. If the breakdown is triggered for the second time, that is, less than 3, the protection duration is 360s (180s X 2). If the breakdown is triggered for the third or fourth time, that is, equal to or greater than 3, the protection duration is 540s (180s X 3). When the accumulated downtime duration exceeds 1 hour (3,600s), the number of breakdowns are counted from 0.

Parameter	Mandatory	Type	Description
suspend_num	No	Integer	Threshold of the number of pending URL requests. Connection protection is triggered when the threshold has been reached.
sus_block_time	No	Integer	Downtime duration after the connection protection is triggered. During this period, WAF stops forwarding website requests.

Table 4-906 TimeoutConfig

Parameter	Mandatory	Type	Description
connect_timeout	No	Integer	Timeout for WAF to connect to the origin server.
send_timeout	No	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	No	Integer	Timeout for WAF to receive responses from the origin server.

Response Parameters

Status code: 200

Table 4-907 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name connected to a cloud WAF instance
policyid	String	Policy ID
domainid	String	Account ID.
projectid	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Type	Description
enterprise_project_id	String	Enterprise Project ID
protocol	String	Backend protocol type
server	Array of **CloudWafServer** objects	Origin server configuration of the protected domain name
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
protect_status	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
access_code	String	CNAME prefix
locked	Integer	This parameter is reserved, which will be used to freeze a domain name.
timestamp	Long	Time the domain name was added to WAF.
certificateid	String	HTTPS certificate ID.
certificatename	String	Certificate name
tls	String	SSL version Enumeration values: ● **TLS v1.0** ● **TLS v1.1** ● **TLS v1.2**

Parameter	Type	Description
cipher	String	Cipher suite. The value can be **cipher_1**, **cipher_2**, **cipher_3**, **cipher_4**, or **cipher_default**: **cipher_1**: ECDHE-ECDSA-AES256-GCM-SHA384:HIGH:!MEDIUM:!LOW:!aNULL:!eNULL:!DES:!MD5:!PSK:!RC4:!kRSA:!SRP:!3DES:!DSS:!EXP:!CAMELLIA:@STRENGTH **cipher_2**: EECDH+AESGCM:EDH+AESGCM **cipher_3**: ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH **cipher_4**: ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!EDH **cipher_default**: The cryptographic algorithms are ECDHE-RSA-AES256-SHA384:AES256-SHA256:RC4:HIGH:!MD5:!aNULL:!eNULL:!NULL:!DH:!EDH:!AESGCM. Enumeration values: • **cipher_1** • **cipher_2** • **cipher_3** • **cipher_4** • **cipher_default**
block_page	**BlockPage** object	Alarm page configuration
extend	Map<String,String>	Special identifier, which is used on the console.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
traffic_mark	**TrafficMark** object	Traffic identifier
circuit_breaker	**CircuitBreaker** object	Circuit breaker configuration
lb_algorithm	String	Load balancing algorithm. Weighted round robin is used by default and cannot be changed. Enumeration values: • **ip_hash** • **round_robin** • **session_hash**

Parameter	Type	Description
timeout_config	**TimeoutConfig** object	Timeout settings
flag	**Flag** object	Special identifier, which is used on the console.
description	String	Domain name description
http2_enable	Boolean	Whether to support HTTP/2. ● **true**: HTTP/2 is supported. ● **false**: HTTP/2 is not supported.
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new console (frontend).
forward_header_map	Map<String,String>	Field forwarding configuration. WAF inserts the added fields into the header and forwards the header to the origin server. The key cannot be the same as the native Nginx field. The options of Value are as follows: ● $time_local ● $request_id ● $connection_requests ● $tenant_id ● $project_id ● $remote_addr ● $remote_port ● $scheme ● $request_method ● $http_host ● $origin_uri ● $request_length ● $ssl_server_name ● $ssl_protocol ● $ssl_curves ● $ssl_session_reused

Table 4-908 CloudWafServer

Parameter	Type	Description
front_protocol	String	Protocol used by the client to request access to the origin server. Enumeration values: - **HTTP** - **HTTPS**
back_protocol	String	Protocol used by WAF to forward client requests it received to origin servers Enumeration values: - **HTTP** - **HTTPS**
weight	Integer	Weight of the origin server. The load balancing algorithm forwards requests to the origin server based on the weight. The default value is **1**. This field is not included by cloud WAF.
address	String	IP address of your origin server requested by the client
port	Integer	Port used by WAF to forward client requests to the origin server
type	String	Origin server IP address format, IPv4 and IPv6 Enumeration values: - **ipv4** - **ipv6**

Table 4-909 BlockPage

Parameter	Type	Description
template	String	Template name
custom_page	**CustomPage** object	Custom alarm page
redirect_url	String	URL of the redirected page

Table 4-910 CustomPage

Parameter	Type	Description
status_code	String	Status Codes

Parameter	Type	Description
content_type	String	The content type of the custom alarm page. The value can be **text/html**, **text/xml**, or **application/json**.
content	String	The page content based on the selected page type. For details, see the *Web Application Firewall (WAF) User Guide*.

Table 4-911 TrafficMark

Parameter	Type	Description
sip	Array of strings	IP tag. HTTP request header field of the original client IP address.
cookie	String	Session tag. This tag is used by known attack source rules to block malicious attacks based on cookie attributes. This parameter must be configured in known attack source rules to block requests based on cookie attributes.
params	String	User tag. This tag is used by known attack source rules to block malicious attacks based on params attributes. This parameter must be configured to block requests based on the params attributes.

Table 4-912 CircuitBreaker

Parameter	Type	Description
switch	Boolean	Whether to enable connection protection. ● **true**: Enable connection protection. ● **false**: Disable the connection protection.
dead_num	Integer	502/504 error threshold. 502/504 errors allowed for every 30 seconds.
dead_ratio	Number	A breakdown protection is triggered when the 502/504 error threshold and percentage threshold have been reached.
block_time	Integer	Protection period upon the first breakdown. During this period, WAF stops forwarding client requests.

Parameter	Type	Description
superposition_num	Integer	The maximum multiplier you can use for consecutive breakdowns. The number of breakdowns are counted from 0 every time the accumulated breakdown protection duration reaches 3,600s. For example, assume that Initial Downtime (s) is set to 180s and **Multiplier for Consecutive Breakdowns** is set to 3. If the breakdown is triggered for the second time, that is, less than 3, the protection duration is 360s (180s X 2). If the breakdown is triggered for the third or fourth time, that is, equal to or greater than 3, the protection duration is 540s (180s X 3). When the accumulated downtime duration exceeds 1 hour (3,600s), the number of breakdowns are counted from 0.
suspend_num	Integer	Threshold of the number of pending URL requests. Connection protection is triggered when the threshold has been reached.
sus_block_time	Integer	Downtime duration after the connection protection is triggered. During this period, WAF stops forwarding website requests.

Table 4-913 TimeoutConfig

Parameter	Type	Description
connect_timeout	Integer	Timeout for WAF to connect to the origin server.
send_timeout	Integer	Timeout for WAF to send requests to the origin server.
read_timeout	Integer	Timeout for WAF to receive responses from the origin server.

Table 4-914 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. - **true**: The website passed the PCI 3DS certification check. - **false**: The website failed the PCI 3DS certification check. Enumeration values: - **true** - **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. - **true**: The website passed the PCI DSS certification check. - **false**: The website failed the PCI DSS certification check. Enumeration values: - **true** - **false**
cname	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Table 4-915 Access_progress

Parameter	Type	Description
step	Integer	Procedure ● **1**: Whitelisting the WAF IP addresses. ● **2**: Testing connectivity. ● **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. ● **0**: The step has not been finished. ● **1**: The step has finished.

Status code: 400

Table 4-916 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-917 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-918 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to update two origin servers in a specific project. The project ID is specified by project_id, and domain ID is specified by instance_id. The

IP address of the first origin server is x.x.x.x, and the port is 80. The origin server address format is IPv4, and the origin server weight is 1. The client protocol and server protocol are HTTP. The IP address of the second origin server is x.x.x.x, the port is 80, and the origin server address format is IPv4. The client protocol and server protocol are HTTP. IPv6 protection is disabled for the domain name.

```
PATCH https://{Endpoint}/v1/{project_id}/waf/instance/{instance_id}?enterprise_project_id=0

{
  "server" : [ {
    "address" : "x.x.x.x",
    "port" : "80",
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP"
  }, {
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP",
    "type" : "ipv4",
    "address" : "x.x.x.x",
    "port" : "80"
  } ],
  "ipv6_enable" : false
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "e91ad96e379b4bea84f8fcda3d153370",
  "hostname" : "www.demo.com",
  "protocol" : "HTTP",
  "server" : [ {
    "address" : "x.x.x.x",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP"
  }, {
    "address" : "1.1.1.4",
    "port" : 80,
    "type" : "ipv4",
    "weight" : 1,
    "front_protocol" : "HTTP",
    "back_protocol" : "HTTP"
  } ],
  "proxy" : false,
  "locked" : 0,
  "timestamp" : 1650423573577,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false",
    "ipv6" : "false",
    "cname" : "new",
    "is_dual_az" : "true"
  },
  "description" : "",
  "policyid" : "f385eceedf7c4c34a4d1def19eafbe85",
  "domainid" : "d4ecb00b031941ce9171b7bc3386883f",
  "projectid" : "0456cf04d6f64725ab02ed5bd2efdfa4",
  "enterprise_project_id" : "0",
  "protect_status" : 1,
  "access_status" : 0,
  "access_code" : "4f5372610cdc44f7970759fcca138c81",
  "block_page" : {
    "template" : "default"
  },
  "web_tag" : "we",
  "exclusive_ip" : false,
  "http2_enable" : false
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.12.5 Deleting a Domain Name from the Cloud WAF

Function

This API is used to delete a domain name from the cloud WAF.

URI

DELETE /v1/{project_id}/waf/instance/{instance_id}

Table 4-919 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	Domain name ID. It can be obtained by calling the **ListHost** API.

Table 4-920 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-921 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-922 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostid	String	Domain name ID
description	String	Description.
type	Integer	WAF deployment mode. The default value is 1. Currently, only the reverse proxy is supported.
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.
flag	**Flag** object	Special identifier, which is used on the console.
hostname	String	Domain name added to cloud WAF.
access_code	String	CNAME suffix

Parameter	Type	Description
policyid	String	Policy ID
timestamp	Long	Time the domain name was added to WAF.
protect_status	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Access status. ● **0**: The website traffic has not been routed to WAF. (Inaccessible) ● **1**: The website traffic has been routed to WAF. (Accessible)
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
paid_type	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
web_tag	String	Website name

Table 4-923 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**

Parameter	Type	Description
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Status code: 400

Table 4-924 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-925 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-926 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

```
DELETE https://{Endpoint}/v1/{project_id}/waf/instance/{instance_id}?enterprise_project_id=0

The following shows how to delete domain names protected with cloud WAF in a specific project. The
project ID is specified by project_id, and the domain ID is specified by instance_id.
```

Example Responses

Status code: 200

OK

```
{
  "id" : "e91ad96e379b4bea84f8fcda3d153370",
  "hostid" : "e91ad96e379b4bea84f8fcda3d153370",
  "description" : "",
  "type" : 1,
  "proxy" : true,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false",
    "ipv6" : "true",
    "cname" : "new",
    "is_dual_az" : "true"
  },
  "region" : "xx-xxxxx-x",
  "hostname" : "www.demo.com",
  "access_code" : "4f5372610cdc44f7970759fcca138c81",
  "policyid" : "f385eceedf7c4c34a4d1def19eafbe85",
  "timestamp" : 1650423573650,
  "protect_status" : 1,
  "access_status" : 0,
  "exclusive_ip" : false,
  "web_tag" : "we",
  "paid_type" : "prePaid"
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.12.6 Changing the Protection Status of a Domain Name

Function

This API is used to change the protection status of a domain name.

URI

PUT /v1/{project_id}/waf/instance/{instance_id}/protect-status

Table 4-927 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
instance_id	Yes	String	Domain name ID. This parameter is used to specify the domain name whose protection status you want to modify. You can obtain the domain name ID by calling the API (**ListHost**) for querying the list of domain names protected with cloud WAF.

Table 4-928 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-929 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-930 Request body parameters

Parameter	Mandatory	Type	Description
protect_status	Yes	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Response Parameters

Status code: 200

Table 4-931 Response body parameters

Parameter	Type	Description
protect_status	Integer	WAF status of the protected domain name. - **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. - **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. - **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.

Status code: 400

Table 4-932 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-933 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-934 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to change WAF protection to suspended for a domain name in a specific project. The project ID is specified by project_id, and the domain ID is specified by instance_id.

```
PUT https://{Endpoint}/v1/{project_id}/waf/instance/{instance_id}/protect-status?enterprise_project_id=0

{
  "protect_status" : 0
}
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "protect_status" : 0
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.13 Querying the Domain Name of a Tenant

4.13.1 Querying Domain Names Protected with All WAF Instances

Function

This API is used to query the list of protection domain names.

URI

GET /v1/{project_id}/composite-waf/host

Table 4-935 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-936 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS. If you use the default enterprise project, set this parameter to **0**. Default value: 0
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page in query pagination. The value range is 1 to 100. The default value is **10**, indicating that each page contains 10 results. To query all domain names at a time, set this parameter to **-1**. Default: **10**
hostname	No	String	Domain name
policyname	No	String	Policy name

Parameter	Mandatory	Type	Description
protect_status	No	Integer	WAF status of the protected domain name. - **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. - **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. - **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
waf_type	No	String	WAF mode of the domain name
is_https	No	Boolean	Whether HTTPS is used for the domain name

Request Parameters

Table 4-937 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-938 Response body parameters

Parameter	Type	Description
total	Integer	Number of all protected domain names
cloud_total	Integer	Number of domain names protected with cloud WAF
premium_total	Integer	Number of domain names protected with dedicated WAF instances
items	Array of **CompositeHostResponse** objects	Details about the protected domain name

Table 4-939 CompositeHostResponse

Parameter	Type	Description
id	String	Domain name ID
hostid	String	Domain name ID
hostname	String	Domain name added to cloud WAF.
policyid	String	Policy ID
access_code	String	CNAME prefix
protect_status	Integer	WAF status of the protected domain name. ● **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. ● **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. ● **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
proxy	Boolean	Whether a proxy is used for the protected domain name. ● **false**: No proxy is used. ● **true**: A proxy is used.

Parameter	Type	Description
timestamp	Long	Time the domain name was added to WAF.
paid_type	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
flag	**Flag** object	Special identifier, which is used on the console.
waf_type	String	Mode of WAF that is used to protection the domain name. The value can be **cloud** or **premium**. **cloud**: The cloud WAF is used to protect the domain. **premium**: A dedicated WAF instance is used to protect the domain name.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new WAF console.
premium_waf_instances	Array of **Premium_waf_instances** objects	List of dedicated WAF instances
description	String	Domain name description
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
region	String	Region ID. This parameter is included when the domain name was added to WAF through the console. This parameter is left blank when the domain name was added to WAF by calling an API. You can query the region ID on the Regions and Endpoints page on the website.

Table 4-940 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. - **true**: The website passed the PCI 3DS certification check. - **false**: The website failed the PCI 3DS certification check. Enumeration values: - **true** - **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. - **true**: The website passed the PCI DSS certification check. - **false**: The website failed the PCI DSS certification check. Enumeration values: - **true** - **false**
cname	String	The CNAME record being used. - **old**: The old CNAME record is used. - **new**: The new CNAME record is used. Enumeration values: - **old** - **new**
is_dual_az	String	Whether WAF support Multi-AZ DR - **true**: WAF supports multi-AZ DR. - **false**: WAF does not support multi-AZ DR. Enumeration values: - **true** - **false**
ipv6	String	Whether IPv6 protection is supported. - **true**: IPv6 protection is supported. - **false**: IPv6 protection is not supported. Enumeration values: - **true** - **false**

Table 4-941 Access_progress

Parameter	Type	Description
step	Integer	Procedure - **1**: Whitelisting the WAF IP addresses. - **2**: Testing connectivity. - **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. - **0**: The step has not been finished. - **1**: The step has finished.

Table 4-942 Premium_waf_instances

Parameter	Type	Description
id	String	ID of the dedicated WAF instance
name	String	Name of the dedicated WAF instance
accessed	Boolean	Whether the domain name is added to the dedicated WAF instance. The options are **true** and **false**. - **true**: The domain name has been added to WAF. - **false**: The domain name has not been added to WAF.

Status code: 400

Table 4-943 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-944 Response body parameters

Parameter	Type	Description
error_code	String	Error code

Parameter	Type	Description
error_msg	String	Error message

Status code: 500

Table 4-945 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query the protected domain name list in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/composite-waf/host?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "items" : [ {
    "id" : "31af669f567246c289771694f2112289",
    "hostid" : "31af669f567246c289771694f2112289",
    "description" : "",
    "proxy" : false,
    "flag" : {
      "pci_3ds" : "false",
      "pci_dss" : "false",
      "ipv6" : "false",
      "cname" : "new",
      "is_dual_az" : "true"
    },
    "region" : "xx-xxxxx-x",
    "hostname" : "www.demo.com",
    "access_code" : "1b18879b9d064f8bbcbf8abce7294cac",
    "policyid" : "41cba8aee2e94bcdbf57460874205494",
    "timestamp" : 1650527546454,
    "protect_status" : 0,
    "access_status" : 0,
    "exclusive_ip" : false,
    "web_tag" : "",
    "paid_type" : "prePaid",
    "waf_type" : "cloud"
  } ],
  "total" : 1,
  "cloud_total" : 1,
  "premium_total" : 0
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.13.2 Querying a Domain Name by ID

Function

This API is used to query a protected domain name by ID.

URI

GET /v1/{project_id}/composite-waf/host/{host_id}

Table 4-946 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
host_id	Yes	String	Domain name ID. In the cloud mode, it can be obtained by calling the ListHost API. In the dedicated mode, it can be obtained by calling the **ListPremiumHost** API.

Table 4-947 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-948 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-949 Response body parameters

Parameter	Type	Description
id	String	Domain name ID
hostid	String	Domain name ID
hostname	String	Domain name added to cloud WAF.
policyid	String	Policy ID
access_code	String	CNAME prefix

Parameter	Type	Description
protect_status	Integer	WAF status of the protected domain name. - **-1**: The WAF protection is bypassed. Requests of the domain name are directly sent to the backend server and do not pass through WAF. - **0**: The WAF protection is suspended. WAF only forwards requests destined for the domain name and does not detect attacks. - **1**: The WAF protection is enabled. WAF detects attacks based on the policy you configure.
access_status	Integer	Domain name access status. The value can be **0** or **1**. **0**: The website traffic has not been routed to WAF. **1**: The website traffic has been routed to WAF.
proxy	Boolean	Whether a proxy is used for the protected domain name. - **false**: No proxy is used. - **true**: A proxy is used.
timestamp	Long	Time the domain name was added to WAF.
paid_type	String	Package billing mode. The value can be prePaid or postPaid. prePaid is for yearly/monthly billing. postPaid is for pay-per-use billing. Default value: prePaid.
flag	**Flag** object	Special identifier, which is used on the console.
waf_type	String	Mode of WAF that is used to protection the domain name. The value can be **cloud** or **premium**. **cloud**: The cloud WAF is used to protect the domain. **premium**: A dedicated WAF instance is used to protect the domain name.
web_tag	String	Website name, which is the same as the website name in the domain name details on the WAF console.
access_progress	Array of **Access_progress** objects	Access progress, which is used only for the new WAF console.
premium_waf_instances	Array of **Premium_waf_instances** objects	List of dedicated WAF instances
description	String	Domain name description

Parameter	Type	Description
exclusive_ip	Boolean	Whether to use a dedicated IP address. This parameter is reserved and can be ignored. ● **true**: Use a dedicated IP address. ● **false**: Do not use a dedicated IP address.
region	String	Region ID. This parameter is included when the domain name was added to WAF through the console. This parameter is left blank when the domain name was added to WAF by calling an API. You can query the region ID on the Regions and Endpoints page on the website.

Table 4-950 Flag

Parameter	Type	Description
pci_3ds	String	Whether the website passes the PCI 3DS certification check. ● **true**: The website passed the PCI 3DS certification check. ● **false**: The website failed the PCI 3DS certification check. Enumeration values: ● **true** ● **false**
pci_dss	String	Whether the website passed the PCI DSS certification check. ● **true**: The website passed the PCI DSS certification check. ● **false**: The website failed the PCI DSS certification check. Enumeration values: ● **true** ● **false**
cname	String	The CNAME record being used. ● **old**: The old CNAME record is used. ● **new**: The new CNAME record is used. Enumeration values: ● **old** ● **new**

Parameter	Type	Description
is_dual_az	String	Whether WAF support Multi-AZ DR ● **true**: WAF supports multi-AZ DR. ● **false**: WAF does not support multi-AZ DR. Enumeration values: ● **true** ● **false**
ipv6	String	Whether IPv6 protection is supported. ● **true**: IPv6 protection is supported. ● **false**: IPv6 protection is not supported. Enumeration values: ● **true** ● **false**

Table 4-951 Access_progress

Parameter	Type	Description
step	Integer	Procedure ● **1**: Whitelisting the WAF IP addresses. ● **2**: Testing connectivity. ● **3**: Modifying DNS records.
status	Integer	Status. The value can be **0** or **1**. ● **0**: The step has not been finished. ● **1**: The step has finished.

Table 4-952 Premium_waf_instances

Parameter	Type	Description
id	String	ID of the dedicated WAF instance
name	String	Name of the dedicated WAF instance
accessed	Boolean	Whether the domain name is added to the dedicated WAF instance. The options are **true** and **false**. ● **true**: The domain name has been added to WAF. ● **false**: The domain name has not been added to WAF.

Status code: 400

Table 4-953 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-954 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-955 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following shows how to obtain details about a domain name. The project ID is specified by project_id, and the domain ID is specified by host_id.

```
GET https://{Endpoint}/v1/{project_id}/composite-waf/host/{host_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "31af669f567246c289771694f2112289",
  "hostid" : "31af669f567246c289771694f2112289",
  "description" : "",
  "proxy" : false,
  "flag" : {
    "pci_3ds" : "false",
    "pci_dss" : "false",
    "ipv6" : "false",
    "cname" : "new",
    "is_dual_az" : "true"
  },
  "region" : "xx-xxxxx-x",
  "hostname" : "www.demo.com",
  "access_code" : "1b18879b9d064f8bbcbf8abce7294cac",
  "policyid" : "41cba8aee2e94bcdbf57460874205494",
  "timestamp" : 1650527546454,
  "protect_status" : 0,
  "access_status" : 0,
  "exclusive_ip" : false,
  "web_tag" : "",
  "paid_type" : "prePaid",
  "waf_type" : "cloud"
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14 Policy management

4.14.1 Querying the Protection Policy List

Function

This API is used to query the protection policy list.

URI

GET /v1/{project_id}/waf/policy

Table 4-956 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-957 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.
page	No	Integer	Page number of the data to be returned during pagination query. The default value is **1**, indicating that the data on the first page is returned. Default: **1**
pagesize	No	Integer	Number of results on each page during pagination query. Value range: **1** to **100**. The default value is **10**, indicating that each page contains 10 results. Default: **10**
name	No	String	Policy name

Request Parameters

Table 4-958 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-959 Response body parameters

Parameter	Type	Description
total	Integer	Total number of policies
items	Array of **PolicyResponse** objects	Array of protection policy information

Table 4-960 PolicyResponse

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies
level	Integer	Protection level of basic web protection ● **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. ● **2**: Medium. This protection level meets web protection requirements in most scenarios. ● **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: ● **1** ● **2** ● **3**

Parameter	Type	Description
full_detection	Boolean	The detection mode in Precise Protection. ● **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. ● **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	Array of strings	Array of domain name IDs protected by the policy.
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-961 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-962 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-963 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**
common	Boolean	Whether general check is enabled Enumeration values: ● **true** ● **false**
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: ● **true** ● **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: ● **true** ● **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: ● **true** ● **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: - **true** - **false**

Table 4-964 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-965 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-966 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-967 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to obtain the policy list in a project. The project ID is specified by project_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "total" : 1,
  "items" : [ {
    "id" : "41cba8aee2e94bcdbf57460874205494",
    "name" : "policy_2FHwFOKz",
    "level" : 2,
    "action" : {
      "category" : "log"
    },
    "options" : {
      "webattack" : true,
      "common" : true,
      "crawler" : true,
      "crawler_engine" : false,
      "crawler_scanner" : true,
      "crawler_script" : false,
      "crawler_other" : false,
      "webshell" : false,
      "cc" : true,
      "custom" : true,
      "whiteblackip" : true,
      "geoip" : true,
      "ignore" : true,
      "privacy" : true,
      "antitamper" : true,
      "antileakage" : false,
      "bot_enable" : true,
      "modulex_enabled" : false
    },
    "hosts" : [ ],
    "extend" : { },
    "timestamp" : 1650527546218,
    "full_detection" : false,
    "bind_host" : [ ]
  } ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14.2 Creating a Protection Policy

Function

This API is used to create a protection policy. The system configures some default configuration items when generating the policy. To modify the default configuration items, call the API for updating the protection policy.

URI

POST /v1/{project_id}/waf/policy

Table 4-968 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Table 4-969 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-970 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-971 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Array of details of policies

Response Parameters

Status code: 200

Table 4-972 Response body parameters

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies
level	Integer	Protection level of basic web protection ● **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. ● **2**: Medium. This protection level meets web protection requirements in most scenarios. ● **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: ● **1** ● **2** ● **3**
full_detection	Boolean	The detection mode in Precise Protection. ● **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. ● **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.

Parameter	Type	Description
hosts	Array of strings	Array of domain name IDs protected by the policy.
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-973 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-974 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-975 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
common	Boolean	Whether general check is enabled Enumeration values: - **true** - **false**
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: - **true** - **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: - **true** - **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: - **true** - **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: - **true** - **false**
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: ● **true** ● **false**

Table 4-976 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-977 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-978 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 403

Table 4-979 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-980 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to create a protection policy named demo in a specific project. The project ID is specified by project_id.

```
POST https://{Endpoint}/v1/{project_id}/waf/policy?enterprise_project_id=0

{
  "name" : "demo"
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "level" : 2,
  "action" : {
    "category" : "log"
  },
  "options" : {
    "webattack" : true,
    "common" : true,
    "crawler" : true,
    "crawler_engine" : false,
    "crawler_scanner" : true,
    "crawler_script" : false,
    "crawler_other" : false,
    "webshell" : false,
    "cc" : true,
    "custom" : true,
    "whiteblackip" : true,
    "geoip" : true,
    "ignore" : true,
    "privacy" : true,
    "antitamper" : true,
    "antileakage" : false,
    "bot_enable" : true,
    "modulex_enabled" : false
  },
  "hosts" : [ ],
  "extend" : { },
  "timestamp" : 1650529538732,
  "full_detection" : false,
  "bind_host" : [ ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
403	The resource quota is insufficient.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14.3 Querying a Policy by ID

Function

This API is used to query a policy by ID.

URI

GET /v1/{project_id}/waf/policy/{policy_id}

Table 4-981 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-982 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-983 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-984 Response body parameters

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies

Parameter	Type	Description
level	Integer	Protection level of basic web protection - **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. - **2**: Medium. This protection level meets web protection requirements in most scenarios. - **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: - **1** - **2** - **3**
full_detection	Boolean	The detection mode in Precise Protection. - **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. - **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	Array of strings	Array of domain name IDs protected by the policy.

Parameter	Type	Description
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-985 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-986 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-987 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**
common	Boolean	Whether general check is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: - **true** - **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: - **true** - **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: - **true** - **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: - **true** - **false**
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: - **true** - **false**

Table 4-988 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-989 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-990 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-991 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to query details about a protection policy in a specific project. The project is specified by project_id, and the policy is specified by policy_id.

```
GET https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

OK

```
{
  "id" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "level" : 2,
  "action" : {
    "category" : "log"
  },
  "options" : {
    "webattack" : true,
    "common" : true,
    "crawler" : true,
    "crawler_engine" : false,
    "crawler_scanner" : true,
    "crawler_script" : false,
    "crawler_other" : false,
    "webshell" : false,
    "cc" : true,
    "custom" : true,
    "whiteblackip" : true,
    "geoip" : true,
    "ignore" : true,
    "privacy" : true,
    "antitamper" : true,
    "antileakage" : false,
    "bot_enable" : true,
    "modulex_enabled" : false
  },
  "hosts" : [ ],
  "extend" : { },
  "timestamp" : 1650529538732,
  "full_detection" : false,
  "bind_host" : [ ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14.4 Updating a Protection Policy

Function

This API is used to update a policy. The request body can contain only the part to be updated.

URI

PATCH /v1/{project_id}/waf/policy/{policy_id}

Table 4-992 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-993 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-994 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Table 4-995 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Array of details of policies
level	No	Integer	Protection level of basic web protection ● **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. ● **2**: Medium. This protection level meets web protection requirements in most scenarios. ● **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: ● **1** ● **2** ● **3**

Parameter	Mandatory	Type	Description
full_detection	No	Boolean	The detection mode in Precise Protection. ● **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. ● **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	No	**Action** object	Protective actions for each rule in anti-crawler protection.
action	No	**PolicyAction** object	Protective action
options	No	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	No	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	No	Array of strings	Array of domain name IDs protected by the policy. This parameter cannot be edited and is reserved for extended functions. You can ignore it.
bind_host	No	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details. This parameter cannot be edited and is reserved for extended functions. You can ignore it.

Parameter	Mandatory	Type	Description
extend	No	Map<String,String>	Extended field, which is used to store the basic web protection settings. - **deep_decode**: Deep inspection status. - **check_all_headers**: Header inspection status. - **shiro_rememberMe_enable**: Shiro decryption check status.

Table 4-996 Action

Parameter	Mandatory	Type	Description
category	No	String	Protective action for feature-based anti-crawler rules: - **log**: WAF only logs discovered attacks. - **block**: WAF blocks discovered attacks.

Table 4-997 PolicyAction

Parameter	Mandatory	Type	Description
category	No	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: - **block** - **log**

Table 4-998 PolicyOption

Parameter	Mandatory	Type	Description
webattack	No	Boolean	Whether basic web protection is enabled Enumeration values: - **true** - **false**
common	No	Boolean	Whether general check is enabled Enumeration values: - **true** - **false**
crawler	No	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: - **true** - **false**
crawler_engine	No	Boolean	Whether the search engine is enabled Enumeration values: - **true** - **false**
crawler_scanner	No	Boolean	Whether the anti-crawler detection is enabled Enumeration values: - **true** - **false**
crawler_script	No	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: - **true** - **false**
crawler_other	No	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**

Parameter	Mandatory	Type	Description
webshell	No	Boolean	Whether webshell detection is enabled Enumeration values: ● **true** ● **false**
cc	No	Boolean	Whether the CC attack protection rules are enabled Enumeration values: ● **true** ● **false**
custom	No	Boolean	Whether precise protection is enabled Enumeration values: ● **true** ● **false**
whiteblackip	No	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: ● **true** ● **false**
geoip	No	Boolean	Whether geolocation access control is enabled Enumeration values: ● **true** ● **false**
ignore	No	Boolean	Whether false alarm masking is enabled Enumeration values: ● **true** ● **false**
privacy	No	Boolean	Whether data masking is enabled Enumeration values: ● **true** ● **false**

Parameter	Mandatory	Type	Description
antitamper	No	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	No	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	No	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**
modulex_enabled	No	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: - **true** - **false**

Table 4-999 BindHost

Parameter	Mandatory	Type	Description
id	No	String	Domain name ID
hostname	No	String	Domain name
waf_type	No	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	No	String	This parameter is required only by the dedicated mode.

Response Parameters

Status code: 200

Table 4-1000 Response body parameters

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies
level	Integer	Protection level of basic web protection ● **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. ● **2**: Medium. This protection level meets web protection requirements in most scenarios. ● **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: ● **1** ● **2** ● **3**
full_detection	Boolean	The detection mode in Precise Protection. ● **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. ● **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.

Parameter	Type	Description
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	Array of strings	Array of domain name IDs protected by the policy.
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-1001 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-1002 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-1003 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
common	Boolean	Whether general check is enabled Enumeration values: - **true** - **false**
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: - **true** - **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: - **true** - **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: - **true** - **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: - **true** - **false**
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: ● **true** ● **false**

Table 4-1004 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-1005 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-1006 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-1007 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

- The following example shows how to modify basic web protection settings, including enabling deep inspection, header inspection, and Shiro decryption check, for a specific policy in a project. The project is specified by project_id, and the policy is specified by policy_id.

```
PATCH https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}?enterprise_project_id=0

{
  "extend" : {
    "extend" : "{\"deep_decode\":true,\"check_all_headers\":true,\"shiro_rememberMe_enable\":true}"
  }
}
```

- The following example shows how to disable whitelist and blacklist protection for a specific policy in a project. The project is specified by project_id, and the policy is specified by policy_id.

```
PATCH https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}?enterprise_project_id=0

{
  "options" : {
    "whiteblackip" : false
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "id" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "level" : 2,
  "action" : {
    "category" : "log"
  },
  "options" : {
    "webattack" : true,
    "common" : true,
    "crawler" : true,
    "crawler_engine" : false,
    "crawler_scanner" : true,
    "crawler_script" : false,
    "crawler_other" : false,
    "webshell" : false,
    "cc" : true,
    "custom" : true,
    "whiteblackip" : false,
    "geoip" : true,
    "ignore" : true,
    "privacy" : true,
    "antitamper" : true,
    "antileakage" : false,
    "bot_enable" : true
  },
  "hosts" : [ "c0268b883a854adc8a2cd352193b0e13" ],
  "timestamp" : 1650529538732,
  "full_detection" : false,
  "bind_host" : [ {
    "id" : "c0268b883a854adc8a2cd352193b0e13",
    "hostname" : "www.demo.com",
    "waf_type" : "cloud"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14.5 Deleting a Protection Policy

Function

This API is used to delete a protection policy. If the policy is in use, unbind the domain name from the policy before deleting the policy.

URI

DELETE /v1/{project_id}/waf/policy/{policy_id}

Table 4-1008 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.

Parameter	Mandatory	Type	Description
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-1009 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	You can obtain the ID by calling the **ListEnterpriseProject** API of EPS.

Request Parameters

Table 4-1010 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-1011 Response body parameters

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies

Parameter	Type	Description
level	Integer	Protection level of basic web protection - **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. - **2**: Medium. This protection level meets web protection requirements in most scenarios. - **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: - **1** - **2** - **3**
full_detection	Boolean	The detection mode in Precise Protection. - **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. - **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	Array of strings	Array of domain name IDs protected by the policy.

Parameter	Type	Description
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-1012 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-1013 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-1014 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**
common	Boolean	Whether general check is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: - **true** - **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: - **true** - **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: - **true** - **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: - **true** - **false**
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: - **true** - **false**

Table 4-1015 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-1016 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-1017 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-1018 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to delete a protection policy in a specific project. The project is specified by project_id, and the policy is specified by policy_id.

```
DELETE https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}?enterprise_project_id=0
```

Example Responses

Status code: 200

Request succeeded.

```
{
  "id" : "62169e2fc4e64148b775ec01b24a1947",
  "name" : "demo",
  "level" : 2,
  "action" : {
    "category" : "log",
    "modulex_category" : "log"
  },
  "options" : {
    "webattack" : true,
    "common" : true,
    "crawler" : true,
    "crawler_engine" : false,
    "crawler_scanner" : true,
    "crawler_script" : false,
    "crawler_other" : false,
    "webshell" : false,
    "cc" : true,
    "custom" : true,
    "precise" : false,
    "whiteblackip" : true,
    "geoip" : true,
    "ignore" : true,
    "privacy" : true,
    "antitamper" : true,
    "anticrawler" : false,
    "antileakage" : false,
    "followed_action" : false,
    "bot_enable" : true,
    "modulex_enabled" : false
  },
  "hosts" : [ ],
  "extend" : { },
  "timestamp" : 1649316510603,
  "full_detection" : false,
  "bind_host" : [ ]
}
```

Status Codes

Status Code	Description
200	Request succeeded.
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

4.14.6 Updating the Domain Name Protection Policy

Function

This API is used to update protection policy applied to a domain name.

URI

PUT /v1/{project_id}/waf/policy/{policy_id}

Table 4-1019 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain it, go to Cloud management console and hover the cursor over your username. On the displayed window, choose **My Credentials**.Then, in the **Projects** area, view **Project ID** of the corresponding project.
policy_id	Yes	String	Policy ID. It can be obtained by calling the **ListPolicy** API.

Table 4-1020 Query Parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID.
hosts	Yes	String	Domain name ID. It can be obtained by calling the **ListHost** API.

Request Parameters

Table 4-1021 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API (value of **X-Subject-Token** in the response header).
Content-Type	Yes	String	Content type. Default: **application/json;charset=utf8**

Response Parameters

Status code: 200

Table 4-1022 Response body parameters

Parameter	Type	Description
id	String	Policy ID
name	String	Array of details of policies
level	Integer	Protection level of basic web protection ● **1**: Low. At this protection level, WAF blocks only requests with obvious attack features. If a large number of false alarms have been reported, **Low** is recommended. ● **2**: Medium. This protection level meets web protection requirements in most scenarios. ● **3**: High. At this protection level, WAF provides the finest granular protection and can intercept attacks with complex bypass features, such as Jolokia cyber attacks, common gateway interface (CGI) vulnerability detection, and Druid SQL injection attacks. Default: **2** Enumeration values: ● **1** ● **2** ● **3**

Parameter	Type	Description
full_detection	Boolean	The detection mode in Precise Protection. ● **false**: Instant detection. When a request hits the blocking conditions in Precise Protection, WAF terminates checks and blocks the request immediately. ● **true**: Full detection. If a request hits the blocking conditions in Precise Protection, WAF does not block the request immediately. Instead, it blocks the requests until other checks are finished.
robot_action	**Action** object	Protective actions for each rule in anti-crawler protection.
action	**PolicyAction** object	Protective action
options	**PolicyOption** object	Whether a protection type is enabled in protection policy.
modulex_options	Map<String,Object>	Configurations about intelligent access control. Currently, this feature is still in the open beta test (OBT) phase and available at some sites.
hosts	Array of strings	Array of domain name IDs protected by the policy.
bind_host	Array of **BindHost** objects	Array of domain names protected with the protection policy. Compared with the **hosts** field, this field contains more details.
extend	Map<String,String>	Extended field, which is used to store the rule configuration of basic web protection.
timestamp	Long	Time a policy is created

Table 4-1023 Action

Parameter	Type	Description
category	String	Protective action for feature-based anti-crawler rules: ● **log**: WAF only logs discovered attacks. ● **block**: WAF blocks discovered attacks.

Table 4-1024 PolicyAction

Parameter	Type	Description
category	String	Basic web protection action. The value can be **log** or **block**. **log**: WAF only logs discovered attacks. **block**: WAF blocks discovered attacks. Enumeration values: ● **block** ● **log**

Table 4-1025 PolicyOption

Parameter	Type	Description
webattack	Boolean	Whether basic web protection is enabled Enumeration values: ● **true** ● **false**
common	Boolean	Whether general check is enabled Enumeration values: ● **true** ● **false**
crawler	Boolean	This parameter is reserved. The value of this parameter is fixed at **true**. You can ignore this parameter. Enumeration values: ● **true** ● **false**
crawler_engine	Boolean	Whether the search engine is enabled Enumeration values: ● **true** ● **false**
crawler_scanner	Boolean	Whether the anti-crawler detection is enabled Enumeration values: ● **true** ● **false**
crawler_script	Boolean	Whether the JavaScript anti-crawler is enabled Enumeration values: ● **true** ● **false**

Parameter	Type	Description
crawler_other	Boolean	Whether other crawler check is enabled Enumeration values: - **true** - **false**
webshell	Boolean	Whether webshell detection is enabled Enumeration values: - **true** - **false**
cc	Boolean	Whether the CC attack protection rules are enabled Enumeration values: - **true** - **false**
custom	Boolean	Whether precise protection is enabled Enumeration values: - **true** - **false**
whiteblackip	Boolean	Whether blacklist and whitelist protection is enabled Enumeration values: - **true** - **false**
geoip	Boolean	Whether geolocation access control is enabled Enumeration values: - **true** - **false**
ignore	Boolean	Whether false alarm masking is enabled Enumeration values: - **true** - **false**
privacy	Boolean	Whether data masking is enabled Enumeration values: - **true** - **false**

Parameter	Type	Description
antitamper	Boolean	Whether the web tamper protection is enabled Enumeration values: - **true** - **false**
antileakage	Boolean	Whether the information leakage prevention is enabled Enumeration values: - **true** - **false**
bot_enable	Boolean	Whether the anti-crawler protection is enabled Enumeration values: - **true** - **false**
modulex_enabled	Boolean	Whether CC attack protection for moduleX is enabled. This feature is in the open beta test (OBT). During the OBT, only the log only mode is supported. Enumeration values: - **true** - **false**

Table 4-1026 BindHost

Parameter	Type	Description
id	String	Domain name ID
hostname	String	Domain name
waf_type	String	Deployment mode of WAF instance that is used for the domain name. The value can be **cloud** for cloud WAF or **premium** for dedicated WAF instances.
mode	String	This parameter is required only by the dedicated mode.

Status code: 400

Table 4-1027 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 401

Table 4-1028 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Status code: 500

Table 4-1029 Response body parameters

Parameter	Type	Description
error_code	String	Error code
error_msg	String	Error message

Example Requests

The following example shows how to change a domain name added to a protection policy in a specific project. The project is specified by project_id, and the policy is specified by policy_id. The domain name ID is changed to c0268b883a854adc8a2cd352193b0e13.

```
PUT https://{Endpoint}/v1/{project_id}/waf/policy/{policy_id}?
enterprise_project_id=0&hosts=c0268b883a854adc8a2cd352193b0e13
```

Example Responses

Status code: 200

OK

```
{
  "id" : "38ff0cb9a10e4d5293c642bc0350fa6d",
  "name" : "demo",
  "level" : 2,
  "action" : {
    "category" : "log"
  },
  "options" : {
    "webattack" : true,
    "common" : true,
    "crawler" : true,
    "crawler_engine" : false,
    "crawler_scanner" : true,
    "crawler_script" : false,
    "crawler_other" : false,
    "webshell" : false,
    "cc" : true,
    "custom" : true,
    "whiteblackip" : true,
    "geoip" : true,
    "ignore" : true,
    "privacy" : true,
    "antitamper" : true,
    "antileakage" : false,
    "bot_enable" : true,
    "modulex_enabled" : false
  },
  "hosts" : [ "c0268b883a854adc8a2cd352193b0e13" ],
  "extend" : { },
  "timestamp" : 1650529538732,
  "full_detection" : false,
  "bind_host" : [ {
    "id" : "c0268b883a854adc8a2cd352193b0e13",
    "hostname" : "www.demo.com",
    "waf_type" : "cloud"
  } ]
}
```

Status Codes

Status Code	Description
200	OK
400	Request failed.
401	The token does not have required permissions.
500	Internal server error.

Error Codes

See **Error Codes**.

A Appendix

A.1 Status Code

- Normal

Returned Value	Description
200	The request is successfully processed.

- Abnormal

Status Code	Status	Description
400	Bad Request	The server fails to process the request.
401	Unauthorized	The requested page requires a username and a password.
403	Forbidden	Access to the requested page is denied.
404	Not Found	The server fails to find the requested page.
405	Method Not Allowed	Method specified in the request is not allowed.
406	Not Acceptable	Response generated by the server is not acceptable to the client.
407	Proxy Authentication Required	Proxy authentication is required before the request is processed.
408	Request Timeout	A timeout error occurs because the request is not processed within the specified waiting period of the server.

Status Code	Status	Description
409	Conflict	The request cannot be processed due to a conflict.
500	Internal Server Error	The request is not processed due to a server error.
501	Not Implemented	The request is not processed because the server does not support the requested function.
502	Bad Gateway	The request is not processed, and the server receives an invalid response from the upstream server.
503	Service Unavailable	The request is not processed due to a temporary system abnormality.
504	Gateway Timeout	A gateway timeout error occurs.

A.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00011001	bad.request	Bad request	Check param
400	WAF.00011002	url.param.illegal	The URL format is incorrect	Check URL format
400	WAF.00011003	request.body.illegal	Request body format error: missing parameter and illegal value in body	Check request body
400	WAF.00011004	id.illegal	Illegal ID	Check ID
400	WAF.00011005	name.illegal	Illegal name	Check name
400	WAF.00011006	host.illegal	Illegal domain name	Check domain name
400	WAF.00011007	port.illegal	Illegal port	Check port

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00011007	ip.illegal	Illegal IP	Check IP
400	WAF.00011008	protect.status.illegal	Illegal protection status	Check whether the protection state is in the range of enumeration value
400	WAF.00011009	access.status.illegal	Illegal access status	Check whether the access status is in the range of enumeration value
400	WAF.00011010	offsetOrLimit.illegal	Illegal offset or limit number	Check whether the starting line or limit number is within the range
400	WAF.00011011	pageOrPageSize.illegal	Illegal page number or number of entries per page	Check if page number or number of items per page are in range
400	WAF.00011012	standard.violated	Invalid parameter	Check the parameters
400	WAF.00011013	description.illegal	Illegal description format	Check description format
400	WAF.00011014	request.header.illegal	Request header format error: missing parameter and illegal value in header	Check header required parameters
400	WAF.00011014	website.not.register	The website has not been put on record	Filing website
400	WAF.00011016	name.duplicate	Duplicated name.	Change the name.

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00012001	invalid.token	Illegal token	Check whether the token is correct
400	WAF.00012002	invalid.project	Inconsistency between project_id and token	Check consistency of project_id and token
400	WAF.00012003	permission.denied	No permission	Assign WAF required permissions to account
400	WAF.00012004	account.frozen	Account freezing	Account unfreezing
400	WAF.00012005	not.subscribe	Unsubscribed	Subscribe to WAF service first
400	WAF.00012006	pdp.permission.denied	No permission	Check the PDP authority of the account
400	WAF.00012007	jwt.authentication.disabled	JWT certification off	Open JWT certification
400	WAF.00012008	jwt.authentication.invalid.token	Illegal JWT token	Check whether the account has JWT permission
400	WAF.00012009	jwt.authentication.failed	JWT authentication failed	Give the account authorization first
400	WAF.00012010	eps.all.not.support	eps.all.not.support	Open the write permission of enterprise project
400	WAF.00013001	insufficient.quota	Insufficient function quota	Purchase function quota upgrade package
400	WAF.00013002	feature.not.support	Function not supported	nothing
400	WAF.00013003	port.not.support	Port not supported	Port conversion via ELB
400	WAF.00013004	protocol.not.support	Protocol not supported	Through ELB conversion protocol

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00013005	wildcard.domain.not.support	Pan domain name not supported	Use specific domain names
400	WAF.00013006	ipv6.not.support	IPv6 is not supported	The current version does not support IPv6
400	WAF.00013007	insufficient.tenant.quota	insufficient.tenant.quota	Purchase quota upgrade package
400	WAF.00014001	resource.not.found	Resource not found	The resource has been deleted or does not exist
400	WAF.00014002	resource.already.exists	Resource already exists	Resource already exists
400	WAF.00014003	open.protect.failed	Failed to open protection	Check domain name protection status
400	WAF.00014004	access.failed	Failed to access WAF	Modify DNS resolution
400	WAF.00014005	bypass.failed	Bypasswaf failed	Check the protection status and try again
400	WAF.00014006	proxy.config.error	Agent configuration error	Reconfigure the agent correctly and try again
400	WAF.00014007	host.conflict	Domain name conflict	Check that the domain name already exists in the website configuration
400	WAF.00014008	cert.inconsistent	The same domain name, but the certificate is inconsistent	Use the same certificate
400	WAF.00014009	api.not.found	The interface does not exist	Check interface URL
400	WAF.00014010	port.protocol.mismatch	Port and protocol mismatch	Select the matching protocol and port

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00014011	host.blacklist	It is forbidden to add the protection website, and the domain name is blacklisted	
400	WAF.00014012	insufficient.tenant.quota	Insufficient tenant quota	Purchase quota upgrade package
400	WAF.00014013	exclusive.ip.config.error	Exclusive IP configuration error	Check exclusive IP configuration
400	WAF.00014014	exclusive.ip.config.error	exclusive.ip.config.error	Check exclusive IP configuration
400	WAF.00021002	url.param.illegal	The URL format is incorrect	It is recommended to modify the URL in the request body parameter to the standard URL and debug again
400	WAF.00021003	request.body.illegal	The request body parameter is incorrect	It is recommended that you verify the parameters according to the document before initiating debugging
400	WAF.00021004	id.illegal	The unique identifier ID format is incorrect	It is recommended to follow the correct instructions in the documentation to obtain the ID
400	WAF.00021005	name.illegal	The name parameter format is incorrect	Check the format of name, which can only be composed of letters, numbers, -_ And. Cannot exceed 64 characters in length

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00021006	host.illegal	The domain name format is incorrect	Domain name can only be composed of letters, numbers, -_ And. Cannot exceed 64 characters in length
400	WAF.00021007	protocol.illegal	The back-end protocol format is incorrect	The back-end protocol can only be configured as HTTP or HTTPS and must be capitalized
400	WAF.00021008	port.illegal	The source port format is incorrect	Check whether the configured port is empty and whether the target port is in the range of 0-65535
400	WAF.00021009	ip.illegal	Incorrect IP format	Check whether the IP format meets the standard format of IPv4 or IPv6
400	WAF.00021010	server.address.illegal	Server configuration exception	Check whether the server configuration is empty and whether the quantity is in the range of 1-80
400	WAF.00021012	path.illegal	The URL format in the rule configuration is incorrect	It is recommended to modify the URL in the request body parameter to the standard URL and debug again
400	WAF.00021013	cert.illegal	The HTTPS certificate has expired	It is recommended to upload the unexpired certificate again

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00021014	action.illegal	Illegal protective action	It is recommended to configure protection actions according to the enumerated values in the document
400	WAF.00021015	rule.status.illegal	Illegal rule status	It is recommended to modify the rule status according to the rule status enumeration value in the document
400	WAF.00021016	description.illegal	Description exception	It is recommended to use standard English grammar for description
400	WAF.00021017	incorrect.rule.config	Incorrect rule configuration	It is recommended to configure protection rules according to the documentation in the help center
400	WAF.00021018	incorrect.reference.table.config	Incorrect reference table configuration	It is recommended to configure the reference table according to the documentation in the help center
400	WAF.00021019	incorrect.route.config	Incorrect line configuration	It is recommended to configure the line according to the documentation in the help center

Status Code	Error Codes	Error Message	Description	Solution
400	WAF.00021020	offsetOrLimit.illegal	Paging parameter error	It is recommended to fill in pagination parameters according to the documents in the help center
400	WAF.00021021	param.exceed.limit	Parameter exceeds limit	It is recommended to view the parameter limits according to the documentation in the help center
400	WAF.00022002	resource.already.exists	Resource already exists	It is recommended to check whether the created resource already exists in the console
400	WAF.00022003	resource.is.being.used	The resource is in use	Remove the relationship between the resource and the user before deleting the resource
400	WAF.00022004	rule.conflict	Rule conflict	Check whether the target rule conflicts with the existing rule
403	WAF.00013014	insufficient.policy.quota	Insufficient policy quota	Purchase the domain name expansion package or upgrade the specification
403	WAF.00022005	insufficient.quota	Insufficient resources	It is recommended to purchase the upgrade package of corresponding resources

Status Code	Error Codes	Error Message	Description	Solution
404	WAF.00022001	resource.not.found	Resource does not exist	It is recommended to check the resource status on the console or ask for technical support
500	WAF.00010001	internal.error	Internal error	Contact technical support
500	WAF.00010002	system.busy	Internal error	Contact technical support
500	WAF.00010003	cname.failed	Failed to create or modify CNAME	Contact technical support
500	WAF.00010004	cname.failed	Failed to get OBS file download link	Contact technical support
500	WAF.00020001	internal.error	Service internal exception	It is recommended to try again in five minutes
500	WAF.00020002	system.busy	System busy	It is recommended to try again in five minutes

A.3 Obtaining a Project ID

Obtaining a Project ID by Calling an API

You can obtain the project ID by calling the IAM API used to query project information based on the specified criteria.

The API used to obtain a project ID is GET https://{Endpoint} /v3/projects. {Endpoint} indicates the IAM endpoint, which can be obtained from the administrator . For details about API authentication, see **Authentication**.

In the following example, **id** indicates the project ID.

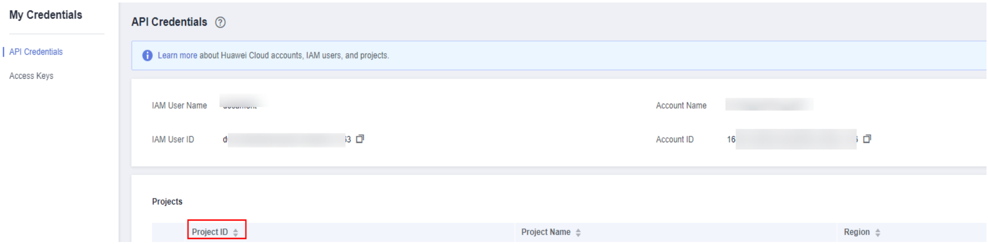
```
{
    "projects": [
        {
            "domain_id": "65382450e8f64ac0870cd180d14e684b",
            "is_domain": false,
            "parent_id": "65382450e8f64ac0870cd180d14e684b",
            "name": "xxxxxxxx",
            "description": "",
            "links": {
                "next": null,
                "previous": null,
                "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
            },
            "id": "a4a5d4098fb4474fa22cd05f897d6b99",
            "enabled": true
        }
    ],
    "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects"
    }
}
```

Obtaining a Project ID from the Console

A project ID is required for some URLs when an API is called. To obtain a project ID, perform the following operations:

1. Log in to the management console.
2. Click the username and choose **My Credentials** from the drop-down list.
3. On the **API Credentials** page, view the project ID in the project list.

Figure A-1 Viewing project IDs



My Credentials

API Credentials

Access Keys

API Credentials

Learn more about Huawei Cloud accounts, IAM users, and projects.

IAM User Name [redacted]

IAM User ID d[redacted]3

Account Name [redacted]

Account ID 16[redacted]

Projects

Project ID	Project Name	Region

B Change History

Released On	Description
2024-04-25	This issue is the fifth official release. Added APIs related to dedicated WAF.
2023-11-30	This issue is the fourth official release. Added the following APIs: ● Enabling Pay-Per-Use Billing for Cloud WAF ● Disabling Pay-Per-Use Pricing for Cloud WAF
2023-03-20	This issue is the third official release. Added the following APIs: ● Querying the List of Information Leakage Prevention Rules ● Creating an Information Leakage Prevention Rule ● Querying an Information Leakage Prevention Rule ● Updating an Information Leakage Prevention Rule ● Deleting an Information Leakage Prevention Rule ● Address Group Management ● Log Reporting ● Managing Your Subscriptions ● Domain Name Management ● System Management ● Alarm Management ● Querying the Domain Name of a Tenant ● Querying Features Available at a Site

Released On	Description
2022-10-09	This issue is the second official release. Modified the following content: ● **Querying the List of Geolocation Access Control Rules**: Modified the description of the **geoip** parameter. ● **Creating a Geolocation Access Control Rule**: Modified the description of the **geoip** parameter. ● **Updating a Geolocation Access Control Rule**: Modified the description of the **geoip** parameter. ● **Deleting a Geolocation Access Control Rule**: Modified the description of the **geoip** parameter.
2022-09-15	This issue is the first official release.