云防火墙

API 参考

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华为云计算技术有限公司

地址：　贵州省贵安新区黔中大道交兴功路华为云数据中心　邮编：550029

网址：　https://www.huaweicloud.com/

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1 使用前必读

1.1 概述

云防火墙（Cloud Firewall，CFW）是新一代的云原生防火墙，提供云上互联网边界和VPC边界的防护，包括实时入侵检测与防御、全局统一访问控制、全流量分析可视化、日志审计与溯源分析等，同时支持按需弹性扩容、AI提升智能防御能力、灵活扩展满足云上业务的变化和扩张需求，极简应用让用户快速灵活应对威胁。云防火墙服务是为用户业务上云提供网络安全防护的基础服务。

您可以使用本文档提供的API对CFW进行相关操作，如查询、更新等操作。

在调用云防火墙API之前，请确保已经充分了解云防火墙服务，有关云防火墙服务的详细介绍，请参见产品介绍。

1.2 调用说明

CFW提供了REST（Representational State Transfer）风格API，支持您通过HTTPS请求调用，调用方法请参见**如何调用API**。

1.3 终端节点

终端节点（Endpoint）即调用API的**请求地址**，不同服务不同区域的终端节点不同，您可以从地区和终端节点中查询所有服务的终端节点。

1.4 基本概念

- 账号

  用户注册时的账号，账号对其所拥有的资源及云服务具有完全的访问权限，可以重置用户密码、分配用户权限等。由于账号是付费主体，为了确保账号安全，建议您不要直接使用账号进行日常管理工作，而是通过创建用户来进行日常管理工作。

- 用户

  由账号在IAM中创建的用户，是云服务的使用人员，具有身份凭证（密码和访问密钥）。

- 区域（Region）

  从地理位置和网络时延维度划分，同一个Region内共享弹性计算、块存储、对象存储、弹性公网IP、镜像等公共服务。Region分为通用Region和专属Region，通用Region指面向公共租户提供通用云服务的Region；专属Region指只承载同一类业务或只面向特定租户提供业务服务的专用Region。

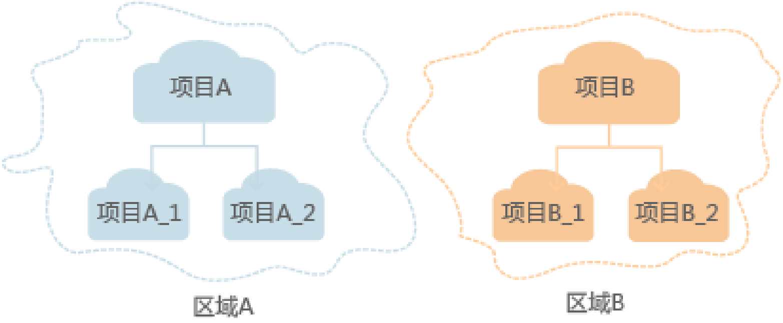
- 可用区（AZ，Availability Zone）

  一个AZ是一个或多个物理数据中心的集合，有独立的风火水电，AZ内逻辑上再将计算、网络、存储等资源划分成多个集群。一个Region中的多个AZ间通过高速光纤相连，以满足用户跨AZ构建高可用性系统的需求。

- 项目

  区域默认对应一个项目，这个项目由系统预置，用来隔离物理区域间的资源（计算资源、存储资源和网络资源），以默认项目为单位进行授权，用户可以访问您账号中该区域的所有资源。如果您希望进行更加精细的权限控制，可以在区域默认的项目中创建子项目，并在子项目中创建资源，然后以子项目为单位进行授权，使得用户仅能访问特定子项目中资源，使得资源的权限控制更加精确。

图 1-1 项目隔离模型



2 API 概览

通过使用CFW提供的接口，您可以完整的使用CFW的所有功能。

类型	说明
防火墙管理	查询防火墙信息接口，包括查询防火墙列表、查询防火墙详细信息、修改防火墙防护状态等。
EIP管理	管理EIP接口，包括开启/关闭EIP、查询EIP个数，查询EIP列表等。
ACL规则管理	ACL规则接口，包括创建、更新、删除ACL规则等接口。
黑白名单管理	管理黑白名单，包括创建、更新、删除黑/白名单等接口。
地址组管理	管理地址组，包括添加、查询、更新地址组等接口。
服务组管理	管理服务组，包括新增、查询、修改服务组等接口。
域名解析及域名组管理	管理域名组，包括添加、查询、更新域名组等接口。
IPS管理	管理IPS特性开关，包括查询IPS状态、IPS开关、查询防护模式等操作。
日志管理	管理日志接口，包括查询访问控制日志、查询攻击事件日志、查询流量日志等接口。
抓包管理	管理抓包任务，包括创建、查询、删除抓包任务等接口。

3 如何调用 API

3.1 构造请求

本节介绍如何构造REST API的请求，并以调用IAM服务的**获取用户Token**说明如何调用API，该API获取用户的Token，Token可以用于调用其他API时鉴权。

请求 URI

请求URI由如下部分组成。

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

尽管请求URI包含在请求消息头中，但大多数语言或框架都要求您从请求消息中单独传递它，所以在此单独强调。

- **URI-scheme**：

  表示用于传输请求的协议，当前所有API均采用**HTTPS**协议。

- **Endpoint**：

  指定承载REST服务端点的服务器域名或IP，不同服务不同区域的Endpoint不同，您可以从**地区和终端节点**获取。

  例如IAM服务在“中国-香港”区域的Endpoint为“iam.ap-southeast-1.myhuaweicloud.com”。

- **resource-path**：

  资源路径，也即API访问路径。从具体API的URI模块获取，例如“获取用户Token”API的resource-path为“/v3/auth/tokens”。

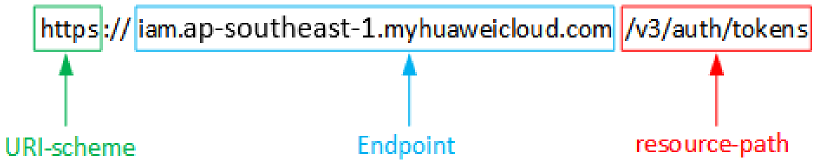
- **query-string**：

  查询参数，是可选部分，并不是每个API都有查询参数。查询参数前面需要带一个“？”，形式为“参数名=参数取值”，例如“limit=10”，表示查询不超过10条数据。

例如您需要获取IAM在“中国-香港”区域的Token，则需使用“中国-香港”区域的Endpoint（iam.ap-southeast-1.myhuaweicloud.com），并在**获取用户Token**的URI部分找到resource-path（/v3/auth/tokens），拼接起来如下所示。

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

图 3-1 URI 示意图



说明

为查看方便，在每个具体API的URI部分，只给出resource-path部分，并将请求方法写在一起。这是因为URI-scheme都是HTTPS，同一个服务的Endpoint在同一个区域也相同，所以简洁起见将这两部分省略。

请求方法

HTTP请求方法（也称为操作或动词），它告诉服务你正在请求什么类型的操作。

- **GET**：请求服务器返回指定资源。
- **PUT**：请求服务器更新指定资源。
- **POST**：请求服务器新增资源或执行特殊操作。
- **DELETE**：请求服务器删除指定资源，如删除对象等。
- **HEAD**：请求服务器资源头部。
- **PATCH**：请求服务器更新资源的部分内容。当资源不存在的时候，PATCH可能会去创建一个新的资源。

在**获取用户Token**的URI部分，您可以看到其请求方法为“POST”，则其请求为：

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

请求消息头

附加请求头字段，如指定的URI和HTTP方法所要求的字段。例如定义消息体类型的请求头“Content-Type”，请求鉴权信息等。

如下公共消息头需要添加到请求中。

- **Content-Type**：消息体的类型（格式），必选，默认取值为“application/json”，有其他取值时会在具体接口中专门说明。
- **X-Auth-Token**：用户Token，可选，当使用Token方式认证时，必须填充该字段。用户Token也就是调用**获取用户Token**接口的响应值，该接口是唯一不需要认证的接口。

  说明

  API同时支持使用AK/SK认证，AK/SK认证是使用SDK对请求进行签名，签名过程会自动往请求中添加Authorization（签名认证信息）和X-Sdk-Date（请求发送的时间）请求头。

  AK/SK认证的详细说明请参见**AK/SK认证**。

对于**获取用户Token**接口，由于不需要认证，所以只添加“Content-Type”即可，添加消息头后的请求如下所示。

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

请求消息体

请求消息体通常以结构化格式发出，与请求消息头中Content-type对应，传递除请求消息头之外的内容。若请求消息体中参数支持中文，则中文字符必须为UTF-8编码。

每个接口的请求消息体内容不同，也并不是每个接口都需要有请求消息体（或者说消息体为空），GET、DELETE操作类型的接口就不需要消息体，消息体具体内容需要根据具体接口而定。

对于**获取用户Token**接口，您可以从接口的请求部分看到所需的请求参数及参数说明。将消息体加入后的请求如下所示，加粗的斜体字段需要根据实际值填写，其中***username***为用户名，***domainname***为用户所属的账号名称，***************为用户登录密码，***xxxxxxxxxxxxxxxxxx***为project的名称，您可以从**地区和终端节点**获取，对应地区和终端节点页面的“区域”字段的值。

说明

> scope参数定义了Token的作用域，下面示例中获取的Token仅能访问project下的资源。您还可以设置Token作用域为某个账号下所有资源或账号的某个project下的资源，详细定义请参见**获取用户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"
            }
        }
    }
}
```

到这里为止这个请求需要的内容就具备齐全了，您可以使用**curl**、**Postman**或直接编写代码等方式发送请求调用API。对于获取用户Token接口，返回的响应消息头中“x-subject-token”就是需要获取的用户Token。有了Token之后，您就可以使用Token认证调用其他API。

3.2 认证鉴权

调用接口有如下两种认证方式，您可以选择其中一种进行认证鉴权。

- Token认证：通过Token认证调用请求。
- AK/SK认证：通过AK（Access Key ID）/SK（Secret Access Key）加密调用请求。推荐使用AK/SK认证，其安全性比Token认证要高。

Token 认证

说明

Token的有效期为24小时，需要使用一个Token鉴权时，可以先缓存起来，避免频繁调用。

Token在计算机系统中代表令牌（临时）的意思，拥有Token就代表拥有某种权限。Token认证就是在调用API的时候将Token加到请求消息头，从而通过身份认证，获得操作API的权限。

Token可通过调用**获取用户Token**接口获取，调用本服务API需要project级别的Token，即调用**获取用户Token**接口时，请求body中auth.scope的取值需要选择project，如下所示。

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

获取Token后，再调用其他接口时，您需要在请求消息头中添加“X-Auth-Token”，其值即为Token。例如Token值为“ABCDEFJ....”，则调用接口时将“X-Auth-Token: ABCDEFJ....”加到请求消息头即可，如下所示。

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

AK/SK 认证

说明

AK/SK签名认证方式仅支持消息体大小12MB以内，12MB以上的请求请使用Token认证。

AK/SK认证就是使用AK/SK对请求进行签名，在请求时将签名信息添加到消息头，从而通过身份认证。

- AK(Access Key ID)：访问密钥ID。与私有访问密钥关联的唯一标识符；访问密钥ID和私有访问密钥一起使用，对请求进行加密签名。
- SK(Secret Access Key)：与访问密钥ID结合使用的密钥，对请求进行加密签名，可标识发送方，并防止请求被修改。

使用AK/SK认证时，您可以基于签名算法使用AK/SK对请求进行签名，也可以使用专门的签名SDK对请求进行签名。详细的签名方法和SDK使用方法请参见**API签名指南**。

须知

签名SDK只提供签名功能，与服务提供的SDK不同，使用时请注意。

3.3 返回结果

状态码

请求发送以后，您会收到响应，包含状态码、响应消息头和消息体。

状态码是一组从1xx到5xx的数字代码，状态码表示了请求响应的状态，完整的状态码列表请参见状态码。

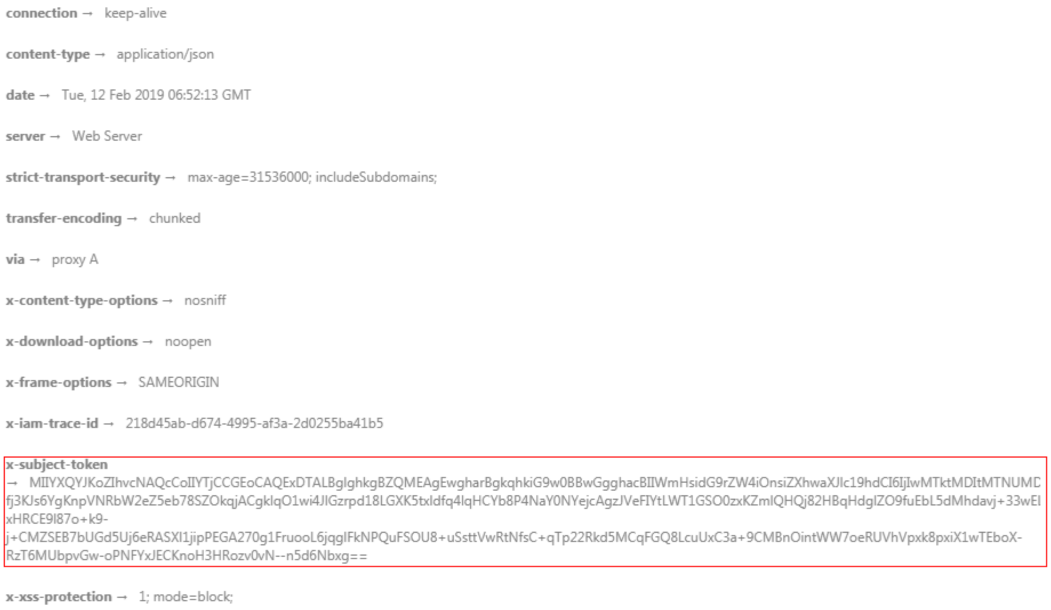
对于**获取用户Token**接口，如果调用后返回状态码为“201”，则表示请求成功。

响应消息头

对应请求消息头，响应同样也有消息头，如“Content-type”。

对于**获取用户Token**接口，返回如**图3-2**所示的消息头，其中“x-subject-token”就是需要获取的用户Token。有了Token之后，您就可以使用Token认证调用其他API。

图 3-2 获取用户 Token 响应消息头



```
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
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpd18LGXK5txldfq4lqHCYb8P4NaY0NYejcAgzJVeFIYtLWT1GSO0zxKZmIQHQj82HBqHdgIZO9fuEbL5dMhdavj+33wEl
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jqglFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;
```

响应消息体（可选）

响应消息体通常以结构化格式返回，与响应消息头中Content-type对应，传递除响应消息头之外的内容。

对于**获取用户Token**接口，返回如下消息体。为篇幅起见，这里只展示部分内容。

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

当接口调用出错时，会返回错误码及错误信息说明，错误响应的Body体格式如下所示。

```
{
    "error": {
        "message": "The request you have made requires authentication.",
        "title": "Unauthorized"
    }
}
```

其中，error_code表示错误码，error_msg表示错误描述信息。

4 API

4.1 防火墙管理

4.1.1 创建防火墙

功能介绍

创建防火墙

调用方法

请参见**如何调用API**。

URI

POST /v2/{project_id}/firewall

表 4-1 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

请求参数

表 4-2 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

参数	是否必选	参数类型	描述
X-Client-Token	否	String	保证客户端请求幂等性的标识。 该标识为32位UUID格式，由客户端生成，且需确保不同请求之间该标识具有唯一性。

表 4-3 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	防火墙名称
enterprise_project_id	否	String	企业项目ID，租户未开启企业项目时传0 缺省值：**0**
tags	否	Array of **tags** objects	资源标签
flavor	是	**flavor** object	规格信息
charge_info	是	**charge_info** object	计费类型信息，支持包年/包月和按需，默认为按需。

表 4-4 tags

参数	是否必选	参数类型	描述
key	否	String	标签KEY
value	否	String	标签VALUE

表 4-5 flavor

参数	是否必选	参数类型	描述
version	是	String	防火墙版本 “charge_mode”为“postPaid”时，仅支持专业版。 “charge_mode”为“prePaid”时，支持标准版、专业版。 Standard - 标准版 Professional - 专业版 枚举值： ● **Standard** ● **Professional**

参数	是否必选	参数类型	描述
extend_eip_count	否	Integer	扩展EIP数量，仅包周期场景下生效 最小值：**0** 最大值：**2000** 缺省值：**0**
extend_bandwidth	否	Integer	扩展带宽，步长为5，仅包周期场景下生效 最小值：**0** 最大值：**5000**
extend_vpc_count	否	Integer	扩展VPC数量，仅包周期场景下生效 最小值：**0** 最大值：**100**

表 4-6 charge_info

参数	是否必选	参数类型	描述
charge_mode	是	String	计费模式。 取值范围： prePaid：预付费，即包年/包月。 postPaid：后付费，即按需付费。
period_type	否	String	订购周期类型。 取值范围： month：包月。 year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。
period_num	否	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： 当“period_type”为“month”时，取值为1~9。 当“period_type”为“year”时，取值为1~3。

参数	是否必选	参数类型	描述
is_auto_renew	是	Boolean	创建包周期实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 true，为自动续订。 false，为不自动续订，默认该方式。 缺省值：**false**
is_auto_pay	是	Boolean	创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 true，为自动支付。（会自动选择折扣和优惠券进行优惠，然后自动从客户华为云账户中支付），自动支付失败后会生成订单成功(该订单应付金额是优惠后金额)、但订单状态为“待支付”，等待客户手动支付(手动支付时，客户还可以修改系统自动选择的折扣和优惠券) false，为手动支付，默认该方式。（需要客户手动去支付，客户可以选择折扣和优惠券） 缺省值：**false**

响应参数

状态码： 200

表 4-7 响应 Body 参数

参数	参数类型	描述
job_id	String	实例创建的任务id。 仅创建按需实例时会返回该参数。
order_id	String	订单号，创建包年包月时返回该参数。
data	**CreateFirewallReq** object	按需防火墙实体

表 4-8 CreateFirewallReq

参数	参数类型	描述
name	String	防火墙名称

参数	参数类型	描述
enterprise_project_id	String	企业项目ID，租户未开启企业项目时传0 缺省值：**0**
tags	Array of **tags** objects	资源标签
flavor	**flavor** object	规格信息
charge_info	**charge_info** object	计费类型信息，支持包年/包月和按需，默认为按需。

表 **4-9** tags

参数	参数类型	描述
key	String	标签KEY
value	String	标签VALUE

表 **4-10** flavor

参数	参数类型	描述
version	String	防火墙版本 “charge_mode”为“postPaid”时，仅支持专业版。 “charge_mode”为“prePaid”时，支持标准版、专业版。 Standard - 标准版 Professional - 专业版 枚举值： ● **Standard** ● **Professional**
extend_eip_count	Integer	扩展EIP数量，仅包周期场景下生效 最小值：**0** 最大值：**2000** 缺省值：**0**
extend_bandwidth	Integer	扩展带宽，步长为5，仅包周期场景下生效 最小值：**0** 最大值：**5000**
extend_vpc_count	Integer	扩展VPC数量，仅包周期场景下生效 最小值：**0** 最大值：**100**

表 4-11 charge_info

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： prePaid：预付费，即包年/包月。 postPaid：后付费，即按需付费。
period_type	String	订购周期类型。 取值范围： month：包月。 year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： 当“period_type”为“month”时，取值为1~9。 当“period_type”为“year”时，取值为1~3。
is_auto_renew	Boolean	创建包周期实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 true，为自动续订。 false，为不自动续订，默认该方式。 缺省值：**false**
is_auto_pay	Boolean	创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 true，为自动支付。（会自动选择折扣和优惠券进行优惠，然后自动从客户华为云账户中支付），自动支付失败后会生成订单成功(该订单应付金额是优惠后金额)、但订单状态为“待支付”，等待客户手动支付(手动支付时，客户还可以修改系统自动选择的折扣和优惠券) false，为手动支付，默认该方式。（需要客户手动去支付，客户可以选择折扣和优惠券） 缺省值：**false**

状态码： 400

表 4-12 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

开通标准版防火墙，扩展防护EIP2000个，扩展防护带宽5000Mbps，扩展防护VCP100个，包周期计费模式，启用自动续费，启用自动付款，开通1个月

```
https://{Endpoint}/v2/124147da-5b08-471a-93d2-bc82acc290c6/firewall

{
  "name" : "CFW-TEST",
  "enterprise_project_id" : "0",
  "tags" : [ {
    "key" : "TagKey",
    "value" : "TagVal"
  } ],
  "flavor" : {
    "version" : "Standard",
    "extend_eip_count" : 2000,
    "extend_bandwidth" : 5000,
    "extend_vpc_count" : 100
  },
  "charge_info" : {
    "charge_mode" : "prePaid",
    "period_type" : "month",
    "period_num" : 1,
    "is_auto_renew" : true,
    "is_auto_pay" : true
  }
}
```

响应示例

状态码： 200

执行成功，返回JobID

```
{
  "data" : {
    "charge_info" : {
      "charge_mode" : "prePaid",
      "is_auto_pay" : true,
      "is_auto_renew" : true,
      "period_num" : 1,
      "period_type" : "month"
    },
    "enterprise_project_id" : "0",
    "flavor" : {
      "extend_bandwidth" : 5000,
      "extend_eip_count" : 2000,
      "extend_vpc_count" : 100,
      "version" : "Standard"
    },
    "name" : "CFW-TEST",
    "tags" : [ {
      "key" : "TagKey",
      "value" : "TagVal"
    } ]
  },
  "order_id" : "CS2403271050ZEM0L"
}
```

状态码： 400

请求体错误

```
{
  "error_code" : "CFW.00100001",
  "error_msg" : "系统繁忙，请稍后重试"
}
```

SDK 代码示例

SDK代码示例如下。

Java

开通标准版防火墙，扩展防护EIP2000个，扩展防护带宽5000Mbps，扩展防护VCP100个，包周期计费模式，启用自动续费，启用自动付款，开通1个月

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateFirewallSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateFirewallRequest request = new CreateFirewallRequest();
        CreateFirewallReq body = new CreateFirewallReq();
        CreateFirewallReqChargeInfo chargeInfobody = new CreateFirewallReqChargeInfo();
        chargeInfobody.withChargeMode("prePaid")
            .withPeriodType("month")
            .withPeriodNum(1)
            .withIsAutoRenew(true)
            .withIsAutoPay(true);
        CreateFirewallReqFlavor flavorbody = new CreateFirewallReqFlavor();
        flavorbody.withVersion(CreateFirewallReqFlavor.VersionEnum.fromValue("Standard"))
            .withExtendEipCount(2000)
            .withExtendBandwidth(5000)
            .withExtendVpcCount(100);
        List<CreateFirewallReqTags> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new CreateFirewallReqTags()
                .withKey("TagKey")
                .withValue("TagVal")
        );
        body.withChargeInfo(chargeInfobody);
        body.withFlavor(flavorbody);
        body.withTags(listbodyTags);
        body.withEnterpriseProjectId("0");
        body.withName("CFW-TEST");
        request.withBody(body);
        try {
            CreateFirewallResponse response = client.createFirewall(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

开通标准版防火墙，扩展防护EIP2000个，扩展防护带宽5000Mbps，扩展防护VCP100个，包周期计费模式，启用自动续费，启用自动付款，开通1个月

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateFirewallRequest()
        chargeInfobody = CreateFirewallReqChargeInfo(
            charge_mode="prePaid",
            period_type="month",
            period_num=1,
            is_auto_renew=True,
            is_auto_pay=True
        )
        flavorbody = CreateFirewallReqFlavor(
            version="Standard",
            extend_eip_count=2000,
            extend_bandwidth=5000,
            extend_vpc_count=100
        )
        listTagsbody = [
            CreateFirewallReqTags(
                key="TagKey",
                value="TagVal"
            )
        ]
        request.body = CreateFirewallReq(
            charge_info=chargeInfobody,
            flavor=flavorbody,
            tags=listTagsbody,
            enterprise_project_id="0",
            name="CFW-TEST"
        )
        response = client.create_firewall(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

开通标准版防火墙，扩展防护EIP2000个，扩展防护带宽5000Mbps，扩展防护VCP100个，包周期计费模式，启用自动续费，启用自动付款，开通1个月

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateFirewallRequest{}
    periodTypeChargeInfo:= "month"
    periodNumChargeInfo:= int32(1)
    chargeInfobody := &model.CreateFirewallReqChargeInfo{
        ChargeMode: "prePaid",
        PeriodType: &periodTypeChargeInfo,
        PeriodNum: &periodNumChargeInfo,
        IsAutoRenew: true,
        IsAutoPay: true,
    }
    extendEipCountFlavor:= int32(2000)
    extendBandwidthFlavor:= int32(5000)
    extendVpcCountFlavor:= int32(100)
    flavorbody := &model.CreateFirewallReqFlavor{
        Version: model.GetCreateFirewallReqFlavorVersionEnum().STANDARD,
        ExtendEipCount: &extendEipCountFlavor,
        ExtendBandwidth: &extendBandwidthFlavor,
        ExtendVpcCount: &extendVpcCountFlavor,
    }
    keyTags:= "TagKey"
    valueTags:= "TagVal"
    var listTagsbody = []model.CreateFirewallReqTags{
        {
            Key: &keyTags,
            Value: &valueTags,
        },
    }
    enterpriseProjectIdCreateFirewallReq:= "0"
    request.Body = &model.CreateFirewallReq{
        ChargeInfo: chargeInfobody,
        Flavor: flavorbody,
        Tags: &listTagsbody,
        EnterpriseProjectId: &enterpriseProjectIdCreateFirewallReq,
        Name: "CFW-TEST",
    }
    response, err := client.CreateFirewall(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	执行成功，返回JobID
400	请求体错误

错误码

请参见**错误码**。

4.1.2 获取 CFW 任务执行状态

功能介绍

获取CFW任务执行状态

调用方法

请参见如何调用API。

URI

GET /v3/{project_id}/jobs/{job_id}

表 4-13 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	项目ID
job_id	是	String	任务ID

请求参数

表 4-14 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-15 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

参数	参数类型	描述
data	**data** object	执行结果

表 4-16 data

参数	参数类型	描述
id	String	任务ID
status	String	任务执行状态。 取值： 值为“Running”，表示任务正在执行。 值为“Success”，表示任务执行成功。 值为“Failed”，表示任务执行失败。 枚举值： ● **Running** ● **Success** ● **Failed**
begin_time	String	创建时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_time	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。

请求示例

获取项目09bb24e6fe80d23d2fa2c010b53b418c下的jobid为的f588ce71-e26c-400d-8981-f854355f6849的任务情况

```
/v3/09bb24e6fe80d23d2fa2c010b53b418c/jobs/f588ce71-e26c-400d-8981-f854355f6849
```

响应示例

状态码： 200

获取任务情况接口返回值

```
{
  "data" : {
    "begin_time" : 1641370501000,
    "end_time" : 1641370515000,
    "id" : "f588ce71-e26c-400d-8981-f854355f6849",
    "status" : "Success"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListJobSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListJobRequest request = new ListJobRequest();
        try {
            ListJobResponse response = client.listJob(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListJobRequest()
        response = client.list_job(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListJobRequest{}
    response, err := client.ListJob(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	获取任务情况接口返回值

错误码

请参见**错误码**。

4.1.3 删除防火墙

功能介绍

删除防火墙，仅按需生效

调用方法

请参见**如何调用API**。

URI

DELETE /v2/{project_id}/firewall/{resource_id}

表 4-17 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
resource_id	是	String	资源id

请求参数

表 4-18 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-19 响应 Body 参数

参数	参数类型	描述
data	String	删除防火墙返回data

请求示例

删除项目id为06217ebc876e427a80a2c05d51264ab1下的防火墙08065281-860a-4c98-aeb5-82cf65c44c46。

```
https://{Endpoint}/v2/06217ebc876e427a80a2c05d51264ab1/firewall/08065281-860a-4c98-aeb5-82cf65c44c46
```

响应示例

状态码： 200

删除防火墙返回值

```
{
  "data" : "56884cd0-cf3c-4cb7-bbeb-59d8722a2671"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteFirewallSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteFirewallRequest request = new DeleteFirewallRequest();
        try {
            DeleteFirewallResponse response = client.deleteFirewall(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteFirewallRequest()
        response = client.delete_firewall(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteFirewallRequest{}
    response, err := client.DeleteFirewall(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	删除防火墙返回值

错误码

请参见**错误码**。

4.1.4 查询防火墙列表

功能介绍

查询防火墙列表

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/firewalls/list

表 4-20 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID

表 4-21 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-22 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-23 请求 Body 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id
key_word	否	String	查询关键字
tags	否	Array of **TagInfo** objects	标签列表
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0

表 4-24 TagInfo

参数	是否必选	参数类型	描述
key	否	String	标签键
values	否	Array of strings	标签值列表

响应参数

状态码： 200

表 4-25 响应 Body 参数

参数	参数类型	描述
user_support_eps	Boolean	是否支持eps
has_ndr	Boolean	是否存在ndr
is_support_postpaid	Boolean	是否支持按需购买
is_support_basic_version	Boolean	是否支持基础版
is_support_buy_professional	Boolean	是否支持购买专业版
data	**HttpFirewallInstanceListResponseData** object	查询防火墙列表返回值data信息

表 4-26 HttpFirewallInstanceListResponseData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
project_id	String	租户项目ID
total	Integer	总数
records	Array of **FirewallInstanceVO** objects	查询防火墙列表记录

表 4-27 FirewallInstanceVO

参数	参数类型	描述
fw_instance_id	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
resource_id	String	资源id
name	String	防火墙创建时间戳
fw_instance_name	String	防火墙名称
enterprise_project_id	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
ha_type	Integer	集群类型
charge_mode	Integer	计费模式 0：包年/包月 1：按需
service_type	Integer	服务类型
engine_type	Integer	引擎类型
flavor	**Flavor** object	防火墙规格信息
status	Integer	防火墙状态列表，包括-1：等待支付，0：创建中，1，删除中，2：运行中，3：升级中，4：删除完成：5：冻结中，6：创建失败，7：删除失败，8：冻结失败，9：存储中，10：存储失败，11：升级失败
tags	String	标签列表

表 **4-28** Flavor

参数	参数类型	描述
version	Integer	防火墙版本，0：标准版，1：专业版，2：铂金版，3：基础版，购买时，当防火墙“charge_mode”为“postPaid”时，仅支持专业版。“charge_mode”为“prePaid”时，支持标准版、专业版。 枚举值： ● **0** ● **1** ● **2** ● **3**
eip_count	Integer	eip数量 最小值：**1**
vpc_count	Integer	vpc数量 最小值：**1**
bandwidth	Integer	带宽 最小值：**1**
log_storage	Integer	日志存储
default_bandwidth	Integer	默认防火墙带宽
default_eip_count	Integer	默认eip数
default_log_storage	Integer	默认日志存储
default_vpc_count	Integer	默认vpc数

请求示例

查询项目id为14181c1245cf4fd786824efe1e2b9388，企业项目id为all_granted_eps的第一页的防火墙列表

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/firewalls/list?
enterprise_project_id=all_granted_eps

{
  "limit" : 10,
  "offset" : 0
}
```

响应示例

状态码： 200

查询防火墙列表返回值

```
{
  "data" : {
    "limit" : 1,
    "offset" : 0,
    "project_id" : "14181c1245cf4fd786824efe1e2b9388",
    "records" : [ {
      "fw_instance_id" : "ebf891cd-2163-48a0-9963-6309f99dd3c4",
      "resource_id" : "ebf891cd-2163-48a0-9963-6309f99dd3c4",
      "name" : "1709176078374",
      "fw_instance_name" : "test",
      "enterprise_project_id" : "default",
      "tags" : "{\"key_test3\":\"value_test3\"}",
      "ha_type" : 0,
      "charge_mode" : 0,
      "service_type" : 0,
      "engine_type" : 1,
      "flavor" : {
        "version" : 1,
        "eip_count" : 50,
        "vpc_count" : 6,
        "bandwidth" : 50,
        "log_storage" : 0,
        "default_eip_count" : 50,
        "default_vpc_count" : 2,
        "default_bandwidth" : 50,
        "default_log_storage" : 0
      },
      "status" : 2
    } ],
    "total" : 18
  },
  "has_ndr" : false,
  "is_support_basic_version" : true,
  "is_support_buy_professional" : false,
  "is_support_postpaid" : true,
  "user_support_eps" : false
}
```

SDK 代码示例

SDK代码示例如下。

Java

查询项目id为14181c1245cf4fd786824efe1e2b9388，企业项目id为all_granted_eps的第一页的防火墙列表

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListFirewallListSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
```

```
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListFirewallListRequest request = new ListFirewallListRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        QueryFireWallInstanceDto body = new QueryFireWallInstanceDto();
        body.withOffset(0);
        body.withLimit(10);
        request.withBody(body);
        try {
            ListFirewallListResponse response = client.listFirewallList(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

查询项目id为14181c1245cf4fd786824efe1e2b9388，企业项目id为all_granted_eps的第一页的防火墙列表

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListFirewallListRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.body = QueryFireWallInstanceDto(
            offset=0,
            limit=10
        )
        response = client.list_firewall_list(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

查询项目id为14181c1245cf4fd786824efe1e2b9388，企业项目id为all_granted_eps的第一页的防火墙列表

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListFirewallListRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.Body = &model.QueryFireWallInstanceDto{
        Offset: int32(0),
        Limit: int32(10),
    }
    response, err := client.ListFirewallList(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询防火墙列表返回值

错误码

请参见错误码。

4.1.5 修改东西向防火墙防护状态

功能介绍

东西向防护资源防护开启/关闭

调用方法

请参见如何调用API。

URI

POST /v1/{project_id}/firewall/east-west/protect

表 4-29 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-30 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-31 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-32 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
status	是	Integer	防护状态：0 开启，1 关闭 枚举值： ● **0** ● **1**

响应参数

状态码： 200

表 4-33 响应 Body 参数

参数	参数类型	描述
data	**data** object	响应体
trace_id	String	trace id

表 4-34 data

参数	参数类型	描述
id	String	标识ID

状态码： 400

表 4-35 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

给项目id为09bb24e6fe80d23d2fa2c010b53b418c的项目的防护对象74820b38-1cc0-4f0b-8cce-32490fa840a3修改东西向防火墙防护状态为开启

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/firewall/east-west/protect

{
  "object_id" : "74820b38-1cc0-4f0b-8cce-32490fa840a3",
  "status" : 1
}
```

响应示例

状态码： 200

更新东西向防护状态响应体

```
{
  "data" : {
    "id" : "5c539816-7a94-4833-9df0-944b362f0797"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为09bb24e6fe80d23d2fa2c010b53b418c的项目的防护对象74820b38-1cc0-4f0b-8cce-32490fa840a3修改东西向防火墙防护状态为开启

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ChangeEastWestFirewallStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeEastWestFirewallStatusRequest request = new ChangeEastWestFirewallStatusRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        ChangeProtectStatusRequestBody body = new ChangeProtectStatusRequestBody();
        body.withStatus(ChangeProtectStatusRequestBody.StatusEnum.NUMBER_1);
        body.withObjectId("74820b38-1cc0-4f0b-8cce-32490fa840a3");
        request.withBody(body);
        try {
            ChangeEastWestFirewallStatusResponse response = client.changeEastWestFirewallStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为09bb24e6fe80d23d2fa2c010b53b418c的项目的防护对象74820b38-1cc0-4f0b-8cce-32490fa840a3修改东西向防火墙防护状态为开启

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeEastWestFirewallStatusRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = ChangeProtectStatusRequestBody(
            status=1,
            object_id="74820b38-1cc0-4f0b-8cce-32490fa840a3"
        )
        response = client.change_east_west_firewall_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为09bb24e6fe80d23d2fa2c010b53b418c的项目的防护对象74820b38-1cc0-4f0b-8cce-32490fa840a3修改东西向防火墙防护状态为开启

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeEastWestFirewallStatusRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    request.Body = &model.ChangeProtectStatusRequestBody{
        Status: model.GetChangeProtectStatusRequestBodyStatusEnum().E_1,
        ObjectId: "74820b38-1cc0-4f0b-8cce-32490fa840a3",
    }
    response, err := client.ChangeEastWestFirewallStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	更新东西向防护状态响应体
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.1.6 查询防火墙详细信息

功能介绍

查询防火墙实例

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/firewall/exist

表 **4-36** 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 **4-37** Query 参数

参数	是否必选	参数类型	描述
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	是	Integer	每页显示个数，范围为1-1024
service_type	是	Integer	服务类型 0 南北向防火墙 1 东西向防火墙 最小值：**0** 最大值：**1** 枚举值： ● **0** ● **1**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
name	否	String	防火墙名称

请求参数

表 **4-38** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-39** 响应 Body 参数

参数	参数类型	描述
data	**GetFirewallInstanceData** object	查询防火墙实例数据

表 **4-40** GetFirewallInstanceData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
total	Integer	总数
records	Array of **GetFirewallInstanceResponseRecord** objects	查询防火墙实例信息列表

表 **4-41** GetFirewallInstanceResponseRecord

参数	参数类型	描述
fw_instance_id	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**。
name	String	防火墙名称
ha_type	Integer	集群类型
charge_mode	Integer	计费模式 0：包年/包月 1：按需
service_type	Integer	服务类型
engine_type	Integer	引擎类型
flavor	**Flavor** object	防火墙规格信息
protect_objects	Array of **ProtectObjectVO** objects	防护对象列表

参数	参数类型	描述
status	Integer	防火墙状态列表，包括-1：等待支付，0：创建中，1，删除中，2：运行中，3：升级中，4：删除完成：5：冻结中，6：创建失败，7：删除失败，8：冻结失败，9：存储中，10：存储失败，11：升级失败 枚举值： ● **-1** ● **0** ● **1** ● **2** ● **3** ● **4** ● **5** ● **6** ● **7** ● **8** ● **9** ● **10** ● **11**
is_old_firewall_instance	Boolean	是否为旧引擎，true表示是，false表示不是 枚举值： ● **true** ● **false**
is_available_obs	Boolean	是否支持obs
is_support_threat_tags	Boolean	是否支持威胁标签
support_ipv6	Boolean	是否支持ipv6，true表示是，false表示不是
feature_toggle	Map<String,Boolean>	特性开关，boolean值为true表示是，false表示否
resources	Array of **FirewallInstanceResource** objects	防火墙资源列表
fw_instance_name	String	防火墙名称
enterprise_project_id	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	参数类型	描述
resource_id	String	资源id
support_url_filtering	Boolean	是否支持url过滤，true表示是，false表示不是
tags	String	标签列表

表 4-42 Flavor

参数	参数类型	描述
version	Integer	防火墙版本，0：标准版，1：专业版，2：铂金版，3：基础版，购买时，当防火墙“charge_mode”为“postPaid”时，仅支持专业版。“charge_mode”为“prePaid”时，支持标准版、专业版。 枚举值： ● **0** ● **1** ● **2** ● **3**
eip_count	Integer	eip数量 最小值：**1**
vpc_count	Integer	vpc数量 最小值：**1**
bandwidth	Integer	带宽 最小值：**1**
log_storage	Integer	日志存储
default_bandwidth	Integer	默认防火墙带宽
default_eip_count	Integer	默认eip数
default_log_storage	Integer	默认日志存储
default_vpc_count	Integer	默认vpc数

表 4-43 ProtectObjectVO

参数	参数类型	描述
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
object_name	String	防护对象名称
type	Integer	防护对象类型：0 南北向，1 东西向护对象类型 枚举值： ● **0** ● **1**

表 4-44 FirewallInstanceResource

参数	参数类型	描述
resource_id	String	资源id
cloud_service_type	String	服务类型，用于CBC使用，特指：hws.service.type.cfw
resource_type	String	资源类型，包括: 1、云防火墙:hws.resource.type.cfw 2、EIP:hws.resource.type.cfw.exp.eip 3、带宽:hws.resource.type.cfw.exp.bandwidth 4、VPC:hws.resource.type.cfw.exp.vpc 5、日志存储:hws.resource.type.cfw.exp.logaudit
resource_spec_code	String	库存单位码
resource_size	Integer	资源数量
resource_size_measure_id	Integer	资源单位

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429的项目存在的防火墙列表

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/firewall/exist?
service_type=0&offset=0&limit=10
```

响应示例

状态码： 200

获取存在防火墙实例响应

```
{
  "data" : {
    "limit" : 10,
    "offset" : 0,
    "records" : [ {
      "charge_mode" : 0,
      "engine_type" : 1,
      "enterprise_project_id" : "default",
      "feature_toggle" : {
        "is_support_anti_virus" : true,
        "is_support_application" : true,
        "is_support_tcp_proxy" : false,
        "is_support_url_profile" : true,
        "is_support_threat_tags" : true,
        "is_support_flow_associated_host" : false,
        "is_support_predefined" : true,
        "isSupportSession" : false,
        "is_support_acl_region_config" : true,
        "is_support_ips" : true,
        "is_support_ew_create_er_tenant_inspection_mode" : false,
        "ips_rule_list" : true,
        "long_connect" : true,
        "is_support_ew_create_vpc_peering_inspection_mode" : true,
        "alarm_config" : true,
        "is_not_support_resource_reduction" : false,
        "acl_multi_object" : true,
        "is_support_advanced_ips_rule" : true,
        "is_support_multi_account" : false,
        "is_support_capture" : true,
        "is_support_ew_create_er_bearer_inspection_mode" : true
      },
      "flavor" : {
        "bandwidth" : 60,
        "eip_count" : 51,
        "log_storage" : 0,
        "session_concurrent" : 200,
        "session_create" : 200,
        "total_rule_count" : 200,
        "used_rule_count" : 2136,
        "version" : 1,
        "vpc_bandwith" : 1400,
        "vpc_count" : 8,
        "default_eip_count" : 20,
        "default_vpc_count" : 0,
        "default_bandwidth" : 10,
        "default_log_storage" : 0
      },
      "tags" : "{\"key1234\":\"1234\",\"key122\":\"2222\"}",
      "fw_instance_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
      "fw_instance_name" : "test",
      "ha_type" : 1,
      "is_available_obs" : false,
      "is_old_firewall_instance" : false,
      "is_support_threat_tags" : false,
      "name" : "1680054140516",
      "protect_objects" : [ {
        "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
        "object_name" : "1680054141674",
        "type" : 0
      }, {
        "object_id" : "be83d202-df0b-498d-a96e-41589dc85c86",
        "object_name" : "ew-1680070626042",
        "type" : 1
      } ],
      "resource_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
      "resources" : [ {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
        "resource_spec_code" : "cfw.professional",
        "resource_type" : "hws.resource.type.cfw"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "0acdd5c7-1178-4bea-b5b6-bd55dc5e2669",
        "resource_size" : 5,
        "resource_size_measure_id" : 14,
        "resource_spec_code" : "cfw.expack.vpc.professional",
        "resource_type" : "hws.resource.type.cfw.exp.vpc"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "4002620c-916a-49c7-8042-cbe02fc17e61",
        "resource_size" : 5,
        "resource_size_measure_id" : 36,
        "resource_spec_code" : "cfw.expack.bandwidth.professional",
        "resource_type" : "hws.resource.type.cfw.exp.bandwidth"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "0235c7db-0baa-4c82-8db2-7b8d5108bd86",
        "resource_size" : 2,
        "resource_size_measure_id" : 14,
        "resource_spec_code" : "cfw.expack.eip.professional",
        "resource_type" : "hws.resource.type.cfw.exp.eip"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "079ade46-18cd-4917-b7bb-00d402931097",
        "resource_size" : 6,
        "resource_size_measure_id" : 14,
        "resource_spec_code" : "cfw.expack.vpc.professional",
        "resource_type" : "hws.resource.type.cfw.exp.vpc"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "dd078faa-abfd-4e63-b681-1a93489955b9",
        "resource_size" : 1,
        "resource_size_measure_id" : 14,
        "resource_spec_code" : "cfw.expack.eip.professional",
        "resource_type" : "hws.resource.type.cfw.exp.eip"
      }, {
        "cloud_service_type" : "hws.service.type.cfw",
        "resource_id" : "4d78d523-745d-4d54-a9ca-e6d25e555bde",
        "resource_size" : 10,
        "resource_size_measure_id" : 36,
        "resource_spec_code" : "cfw.expack.bandwidth.professional",
        "resource_type" : "hws.resource.type.cfw.exp.bandwidth"
      } ],
      "service_type" : 0,
      "status" : 2,
      "support_ipv6" : true,
      "support_url_filtering" : true
    } ],
    "total" : 1
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListFirewallDetailSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListFirewallDetailRequest request = new ListFirewallDetailRequest();
        request.withOffset(<offset>);
        request.withLimit(<limit>);
        request.withServiceType(ListFirewallDetailRequest.ServiceTypeEnum.NUMBER_<service_type>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withName("<name>");
        try {
            ListFirewallDetailResponse response = client.listFirewallDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListFirewallDetailRequest()
        request.offset = <offset>
        request.limit = <limit>
        request.service_type = <service_type>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.name = "<name>"
        response = client.list_firewall_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListFirewallDetailRequest{}
    request.Offset = int32(<offset>)
    request.Limit = int32(<limit>)
    request.ServiceType = model.GetListFirewallDetailRequestServiceTypeEnum().<SERVICE_TYPE>
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    nameRequest:= "<name>"
    request.Name = &nameRequest
    response, err := client.ListFirewallDetail(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	获取存在防火墙实例响应
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.1.7 获取东西向防火墙信息

功能介绍

获取东西向防火墙信息

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/firewall/east-west

表 4-45 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-46 Query 参数

参数	是否必选	参数类型	描述
limit	是	Integer	每页显示个数，范围为1-1024

参数	是否必选	参数类型	描述
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-47** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-48** 响应 Body 参数

参数	参数类型	描述
data	**GetEastWestFirewallResponseBody** object	获取东西向防火墙列表返回data

表 **4-49** GetEastWestFirewallResponseBody

参数	参数类型	描述
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
project_id	String	租户project_id
status	Integer	防护状态：0 已开启防护， 1 未开启防护
er_associated_subnet	**SubnetInfo** object	ER关联子网信息
firewall_associated_subnets	Array of **SubnetInfo** objects	云防火墙关联子网信息
er	**ErInstance** object	出方向关联企业路由器信息
inspection_vpc	**VpcDetail** object	监控vpc信息
protect_infos	Array of **EwProtectResourceInfo** objects	东西向防护资源信息
total	Integer	防护VPC总数
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
mode	String	防护模式
ew_vpc_route_limit	Integer	东西向路由限制

表 **4-50** SubnetInfo

参数	参数类型	描述
availability_zone	String	子网id
cidr	String	vpc cidr
name	String	子网名称
id	String	子网id

参数	参数类型	描述
gateway_ip	String	子网网关ip
vpc_id	String	vpc id
status	String	子网的状态
ipv6_enable	Boolean	是否支持ipv6，boolean值为true表示是，false表示否

表 **4-51** ErInstance

参数	参数类型	描述
id	String	ER实例id
name	String	ER名称
state	String	ER状态
enterprise_project_id	String	企业租户id
project_id	String	租户id
enable_ipv6	String	是否开启ipv6
attachment_id	String	连接id

表 **4-52** VpcDetail

参数	参数类型	描述
id	String	id
name	String	名称
cidr	String	vpc cidr
status	String	状态

表 **4-53** EwProtectResourceInfo

参数	参数类型	描述
protected_resource_type	Integer	防护资源类型：0 VPC，1 VGW
protected_resource_name	String	防护资源名称

参数	参数类型	描述
protected_resource_id	String	防护资源id
protected_resource_nat_name	String	防护资源nat网关名称
protected_resource_nat_id	String	防护资源nat网关id
protected_resource_project_id	String	防护资源租户id
protected_resource_mode	String	防护资源模式
status	Integer	防护VPC的防护状态，0表示已关联，1表示未关联。

状态码： 500

表 **4-54** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

获取东西向防火墙信息

```
https://{Endpoint}/v1/09bb24e6f280d23d0f9fc0104b901480/firewall/east-west?limit=10&offset=0
```

响应示例

状态码： 200

东西向防火墙信息响应

```
{
  "data" : {
    "er" : {
      "id" : "f0f5275a-40aa-4d1e-ac78-2550f7818d43",
      "name" : "er",
      "project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "attachment_id" : "e978c028-0ccf-4168-a015-0094ac631e88"
    },
    "inspection_vpc" : {
      "cidr" : "10.13.13.0/24",
      "id" : "3baa2248-03d4-47ac-aefa-ec6f9a30ed80",
      "name" : "inspection-vpc"
    },
    "limit" : 50,
    "mode" : "er",
    "object_id" : "6cc31075-0b03-461d-aa3a-73c4765bf9ac",
    "offset" : 0,
    "project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
    "protect_infos" : [ {
      "protected_resource_id" : "09b26b83-4b7c-499f-805b-50820900cd9f",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "vpc-4",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 0
    }, {
      "protected_resource_id" : "2956f917-af18-44a2-a0f2-f592633d4431",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "vpc-t3",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 0
    }, {
      "protected_resource_id" : "69d4c81f-80bd-4c28-9074-f26b400b3a34",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "vpc-t2",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 0
    }, {
      "protected_resource_id" : "e1b18d3e-8f7d-4c4e-a326-37db7bd89a3a",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "vpc-t1",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 0
    }, {
      "protected_resource_id" : "f91c1747-1325-4b39-9d58-7fac0bd2786f",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "vpc-5",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 0
    }, {
      "protected_resource_id" : "bd556a7d-447e-49eb-be17-f93af09769f5",
      "protected_resource_mode" : "er",
      "protected_resource_name" : "inspct-a",
      "protected_resource_project_id" : "5c69cf330cda42369cbd726ee1bc5e76",
      "protected_resource_type" : 0,
      "status" : 1
    } ],
    "status" : 0,
    "total" : 6,
    "special_vpc" : [ ]
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListEastWestFirewallSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListEastWestFirewallRequest request = new ListEastWestFirewallRequest();
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListEastWestFirewallResponse response = client.listEastWestFirewall(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
```

```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListEastWestFirewallRequest()
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_east_west_firewall(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListEastWestFirewallRequest{}
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    response, err := client.ListEastWestFirewall(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
```

```
  }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	东西向防火墙信息响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.1.8 创建东西向防火墙

功能介绍

创建东西向防火墙

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/firewall/east-west

表 4-55 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-56 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-57 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-58 请求 Body 参数

参数	是否必选	参数类型	描述
er_id	否	String	出方向关联ER实例id
inspection_cidr	是	String	inspection cidr
mode	是	String	东西向防火墙模式，填写er

响应参数

状态码： 200

表 4-59 响应 Body 参数

参数	参数类型	描述
data	**CreateEWFirewallResp** object	创建东西向防火墙返回值

表 **4-60** CreateEWFirewallResp

参数	参数类型	描述
id	String	东西向防护id
er	**ER** object	ER信息
inspertion_vpc	**CreateEWFirewallInspectVpcResp** object	引流vpc信息

表 **4-61** ER

参数	参数类型	描述
er_id	String	ER ID
er_attach_id	String	ER连接ID

表 **4-62** CreateEWFirewallInspectVpcResp

参数	参数类型	描述
vpc_id	String	vpc id
subnet_ids	Array of strings	子网列表

请求示例

项目09bb24e6f280d23d0f9fc0104b901480下防火墙55b26ab5-e4b0-40e8-941c-a1778fe2a500创建er模式防火墙inspection_cidr为10.1.0.0/24，er_id为e0b22a23-02cf-4092-ace9-34b39e10dc77。

```
https://{Endpoint}/v1/09bb24e6f280d23d0f9fc0104b901480/firewall/east-west?fw_instance_id=55b26ab5-e4b0-40e8-941c-a1778fe2a500&enterprise_project_id=default

{
  "inspection_cidr" : "10.1.0.0/24",
  "mode" : "er",
  "er_id" : "e0b22a23-02cf-4092-ace9-34b39e10dc77"
}
```

响应示例

状态码： 200

创建东西向防火墙返回值

```
{
  "data" : {
    "id" : "acc86ca7-818b-4c3d-8a9a-3915a2b21651",
    "er" : {
      "er_id" : "f0f5275a-40aa-4d1e-ac78-2550f7818d43",
      "er_attach_id" : "bd62ddd3-5e20-482b-aefa-9e2940e2b1a9"
    },
    "inspertion_vpc" : {
      "vpc_id" : "00672633-0466-4c35-99ef-5e3f5c813a4b",
      "subnet_ids" : [ "294682a0-1e85-45f5-92c8-e52bee09c204", "a86277bb-35d5-4442-bc0b-2e9d4e6a9080", "95829240-14e0-47e6-b9e7-2ac228e7b00f" ]
    }
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

项目09bb24e6f280d23d0f9fc0104b901480下防火墙55b26ab5-e4b0-40e8-941c-a1778fe2a500创建er模式防火墙inspection_cidr为10.1.0.0/24，er_id为e0b22a23-02cf-4092-ace9-34b39e10dc77。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class CreateEastWestFirewallSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateEastWestFirewallRequest request = new CreateEastWestFirewallRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        CreateEastWestFirewallRequestBody body = new CreateEastWestFirewallRequestBody();
        body.withMode("er");
        body.withInspectionCidr("10.1.0.0/24");
        body.withErId("e0b22a23-02cf-4092-ace9-34b39e10dc77");
        request.withBody(body);
        try {
            CreateEastWestFirewallResponse response = client.createEastWestFirewall(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

项目09bb24e6f280d23d0f9fc0104b901480下防火墙55b26ab5-e4b0-40e8-941c-a1778fe2a500创建er模式防火墙inspection_cidr为10.1.0.0/24，er_id为e0b22a23-02cf-4092-ace9-34b39e10dc77。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateEastWestFirewallRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = CreateEastWestFirewallRequestBody(
            mode="er",
            inspection_cidr="10.1.0.0/24",
            er_id="e0b22a23-02cf-4092-ace9-34b39e10dc77"
        )
        response = client.create_east_west_firewall(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

项目09bb24e6f280d23d0f9fc0104b901480下防火墙55b26ab5-e4b0-40e8-941c-a1778fe2a500创建er模式防火墙inspection_cidr为10.1.0.0/24，er_id为e0b22a23-02cf-4092-ace9-34b39e10dc77。

```
package main

```

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateEastWestFirewallRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    erIdCreateEastWestFirewallRequestBody:= "e0b22a23-02cf-4092-ace9-34b39e10dc77"
    request.Body = &model.CreateEastWestFirewallRequestBody{
        Mode: "er",
        InspectionCidr: "10.1.0.0/24",
        ErId: &erIdCreateEastWestFirewallRequestBody,
    }
    response, err := client.CreateEastWestFirewall(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	创建东西向防火墙返回值

错误码

请参见**错误码**。

4.1.9 查询防护 VPC 数

功能介绍

查询防护vpc信息

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/vpcs/protection

表 4-63 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-64 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口获得，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口获得，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-65 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-66 响应 Body 参数

参数	参数类型	描述
data	**VPCProtectsVo** object	防护vpc返回值

表 4-67 VPCProtectsVo

参数	参数类型	描述
total	Integer	总VPC数
self_total	Integer	本项目防护VPC数
other_total	Integer	其他项目防护VPC数
protect_vpcs	Array of **VpcAttachmentDetail** objects	防护VPC
self_protect_vpcs	Array of **VpcAttachmentDetail** objects	本项目防护VPC
other_protect_vpcs	Array of **VpcAttachmentDetail** objects	其他项目防护VPC
total_assets	Integer	所有资产数量

表 **4-68** VpcAttachmentDetail

参数	参数类型	描述
vpc_id	String	vpc id

状态码： 500

表 **4-69** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为0b2179bbe180d3762fb0c01a2d5725c7，防护对象id为8839526e-b804-4a15-a082-a2c797dce633的东西向墙防护信息

```
https://{Endpoint}/v1/0b2179bbe180d3762fb0c01a2d5725c7/vpcs/protection?object_id=8839526e-
b804-4a15-a082-a2c797dce633
```

响应示例

状态码： 200

查询东西向防护返回值

```
{
  "data" : {
    "other_protect_vpcs" : [ ],
    "other_total" : 0,
    "protect_vpcs" : [ ],
    "self_protect_vpcs" : [ ],
    "self_total" : 0,
    "total" : 0,
    "total_assets" : 5
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00109004",
  "error_msg" : "HTTP请求错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListProtectedVpcsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListProtectedVpcsRequest request = new ListProtectedVpcsRequest();
        request.withObjectId("<object_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListProtectedVpcsResponse response = client.listProtectedVpcs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *
```

```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListProtectedVpcsRequest()
        request.object_id = "<object_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_protected_vpcs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListProtectedVpcsRequest{}
    request.ObjectId = "<object_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.ListProtectedVpcs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询东西向防护返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.1.10 标签创建接口

功能介绍

创建标签

调用方法

请参见**如何调用API**。

URI

POST /v2/{project_id}/cfw-cfw/{fw_instance_id}/tags/create

表 4-70 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-71** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-72** 请求 Body 参数

参数	是否必选	参数类型	描述
tags	否	Array of **CreateTag** objects	标签列表

表 **4-73** CreateTag

参数	是否必选	参数类型	描述
key	否	String	键
value	否	String	值

响应参数

无

请求示例

给项目id为0b2179bbe180d3762fb0c01a2d5725c7，防火墙id为5e7eba7f-5de4-4ce9-8f60-11330dfc6565添加标签，标签的键为keytest，值为valuetest。

```
https://{Endpoint}/v2/0b2179bbe180d3762fb0c01a2d5725c7/cfw-cfw/
5e7eba7f-5de4-4ce9-8f60-11330dfc6565/tags/create

{
  "tags" : [ {
    "key" : "keytest",
    "value" : "valuetest"
  } ]
}
```

响应示例

无

状态码

状态码	描述
200	OK

错误码

请参见**错误码**。

4.1.11 删除标签

功能介绍

删除标签

调用方法

请参见**如何调用API**。

URI

DELETE /v2/{project_id}/cfw-cfw/{fw_instance_id}/tags/delete

表 4-74 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-75** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-76** 请求 Body 参数

参数	是否必选	参数类型	描述
tags	否	Array of **ResourceTag** objects	标签列表

表 **4-77** ResourceTag

参数	是否必选	参数类型	描述
key	否	String	键
value	否	String	值
update_time	否	String	更新时间

响应参数

无

请求示例

删除项目id为0b2179bbe180d3762fb0c01a2d5725c7，防火墙id为5e7eba7f-5de4-4ce9-8f60-11330dfc6565下的防火墙标签，标签key值为keytest，value为valuetest

```
https://{Endpoint}/v2/408972e72dcd4c1a9b033e955802a36b/cfw-cfw/
5e7eba7f-5de4-4ce9-8f60-11330dfc6565/tags/delete

{
  "tags" : [ {
    "key" : "keytest",
    "value" : "valuetest"
  } ]
}
```

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

删除项目id为0b2179bbe180d3762fb0c01a2d5725c7，防火墙id为5e7eba7f-5de4-4ce9-8f60-11330dfc6565下的防火墙标签，标签key值为keytest，value为valuetest

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteTagSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteTagRequest request = new DeleteTagRequest();
        DeleteTagsDto body = new DeleteTagsDto();
        List<ResourceTag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new ResourceTag()
                .withKey("keytest")
                .withValue("valuetest")
        );
        body.withTags(listbodyTags);
        request.withBody(body);
        try {
            DeleteTagResponse response = client.deleteTag(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除项目id为0b2179bbe180d3762fb0c01a2d5725c7，防火墙id为5e7eba7f-5de4-4ce9-8f60-11330dfc6565下的防火墙标签，标签key值为keytest，value为valuetest

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteTagRequest()
        listTagsbody = [
            ResourceTag(
                key="keytest",
                value="valuetest"
            )
        ]
        request.body = DeleteTagsDto(
            tags=listTagsbody
        )
        response = client.delete_tag(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除项目id为0b2179bbe180d3762fb0c01a2d5725c7，防火墙id为5e7eba7f-5de4-4ce9-8f60-11330dfc6565下的防火墙标签，标签key值为keytest，value为valuetest

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTagRequest{}
    keyTags:= "keytest"
    valueTags:= "valuetest"
    var listTagsbody = []model.ResourceTag{
        {
            Key: &keyTags,
            Value: &valueTags,
        },
    }
    request.Body = &model.DeleteTagsDto{
        Tags: &listTagsbody,
    }
    response, err := client.DeleteTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK

错误码

请参见**错误码**。

4.2 EIP 管理

4.2.1 弹性 IP 开启关闭

功能介绍

开启关闭EIP，客户购买EIP后首次开启EIP防护前需使用ListEips同步EIP资产，sync字段设置为1。

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/eip/protect

表 4-78 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID 最小长度：**32** 最大长度：**32**

表 4-79 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-80** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-81** 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。 最小长度：**36** 最大长度：**36**
status	是	Integer	EIP状态，0表示防护中，1表示未防护 最小值：**0** 最大值：**1**
ip_infos	是	Array of **ip_infos** objects	EIP信息列表 数组长度：**0 - 50**

表 **4-82** ip_infos

参数	是否必选	参数类型	描述
id	否	String	弹性公网IP数据ID 最小长度：**36** 最大长度：**36**
public_ip	否	String	弹性公网IP地址 最小长度：**0** 最大长度：**255**
public_ipv6	否	String	弹性公网IP地址IPV6

响应参数

状态码： 200

表 4-83 响应 Body 参数

参数	参数类型	描述
data	EIPSwitchStatusVO object	改变EIP防护状态返回值data

表 4-84 EIPSwitchStatusVO

参数	参数类型	描述
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
fail_eip_id_list	Array of strings	修改eip防护状态失败列表。
id	String	ID

状态码： 400

表 4-85 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

- 开启项目id为857ddec2-55f2-4503-a93a-fe70021b743c，防护对象id为6d3db4fd-fd58-4d8e-914b-ef91aa268f62弹性公网IP数据id为4a589be0-b40a-4694-94ff-c0710af9a0a2的 EIP（100.85.121.62）流量防护

```
https://{Endpoint}/v1/857ddec2-55f2-4503-a93a-fe70021b743c/eip/protect

{
  "object_id" : "6d3db4fd-fd58-4d8e-914b-ef91aa268f62",
  "status" : 0,
  "ip_infos" : [ {
    "id" : "4a589be0-b40a-4694-94ff-c0710af9a0a2",
    "public_ip" : "1.2.3.4"
  } ]
}
```

- 关闭项目id为857ddec2-55f2-4503-a93a-fe70021b743c，防护对象id为6d3db4fd-fd58-4d8e-914b-ef91aa268f62弹性公网IP数据id为4a589be0-b40a-4694-94ff-c0710af9a0a2的 EIP（100.85.121.62）流量防护

```
/v1/857ddec2-55f2-4503-a93a-fe70021b743c/eip/protect

{
  "object_id" : "6d3db4fd-fd58-4d8e-914b-ef91aa268f62",
  "status" : 1,
  "ip_infos" : [ {
    "id" : "4a589be0-b40a-4694-94ff-c0710af9a0a2",
    "public_ip" : "1.2.3.4"
  } ]
}
```

响应示例

状态码： 200

开启关闭EIP防护状态返回值

```
{
  "data" : {
    "fail_eip_id_list" : [ ],
    "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
    "id" : "b0a2dacc-3886-4805-838e-281653d3cd1f"
  }
}
```

状态码

状态码	描述
200	开启关闭EIP防护状态返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.2.2 查询 Eip 个数

功能介绍

查询Eip个数

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/eip-count/{object_id}

表 4-86 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID 最小长度：**32** 最大长度：**32**
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。 最小长度：**36** 最大长度：**36**

表 4-87 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-88** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-89** 响应 Body 参数

参数	参数类型	描述
data	**EipCountRespData** object	Eip个数数据

表 **4-90** EipCountRespData

参数	参数类型	描述
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。 最小长度：**36** 最大长度：**36**
eip_total	Integer	EIP总数 最小值：**0** 缺省值：**0**
eip_protected	Integer	该账号下所有墙防护EIP总数量 最小值：**0** 缺省值：**0**
eip_protected_self	Integer	该当前防火墙防护EIP数量

状态码： 400

表 4-91 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的eip个数

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/eip-count/cfebd347-b655-4b84-
b938-3c54317599b2
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "eip_protected" : 1,
    "eip_protected_self" : 4,
    "eip_total" : 5,
    "object_id" : ""
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListEipCountSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListEipCountRequest request = new ListEipCountRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListEipCountResponse response = client.listEipCount(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListEipCountRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_eip_count(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListEipCountRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.ListEipCount(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.2.3 弹性 IP 列表查询

功能介绍

弹性IP列表查询

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/eips/protect

表 4-92 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID 最小长度：**32** 最大长度：**32**

表 4-93 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。 最小长度：**36** 最大长度：**36**
key_word	否	String	弹性公网ID/弹性公网IP 最小长度：**0** 最大长度：**255**
status	否	String	防护状态 null-全部 0-开启防护 1-关闭防护 枚举值： ● **null** ● **0** ● **1**
sync	否	Integer	是否同步租户EIP数据 0-不同步 1-同步 枚举值： ● **0** ● **1**
limit	是	Integer	每页显示个数，范围为1-1024 最小值：**0**
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0 最小值：**0**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
device_key	否	String	设备键
address_type	否	Integer	地址类型0 ipv4,1 ipv6

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
fw_key_word	否	String	所绑定防火墙id防火墙名称
eps_id	否	String	弹性公网ip的企业项目id
tags	否	String	标签列表信息

请求参数

表 **4-94** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-95** 响应 Body 参数

参数	参数类型	描述
data	**EipResponseData** object	查询eip返回data

表 **4-96** EipResponseData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0

参数	参数类型	描述
total	Integer	总数
records	Array of **EipResource** objects	eip资源记录

表 **4-97** EipResource

参数	参数类型	描述
id	String	弹性公网ID
public_ip	String	弹性公网IP
status	Integer	EIP防护状态，0表示防护中，1表示未防护 枚举值： ● **0** ● **1**
public_ipv6	String	弹性公网IP,IPV6
enterprise_project_id	String	企业项目id
device_id	String	设备id
device_name	String	设备名称
device_owner	String	设备拥有者
associate_instance_type	String	关联实例类型
fw_instance_name	String	防火墙名称
fw_instance_id	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**。
fw_enterprise_project_id	String	Eip绑定的防火墙企业项目id
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
tags	String	标签列表
domain_id	String	EIP所属用户
owner	String	所属用户的名称

参数	参数类型	描述
fw_domain_id	String	防火墙所属用户

状态码： 400

表 4-98 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象id为cfebd347-b655-4b84-b938-3c54317599b2，非同步的第一页的数据

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/eips/protect?object_id=cfebd347-b655-4b84-b938-3c54317599b2&limit=10&offset=0&sync=0
```

响应示例

状态码： 200

EIP数据查询返回值

```
{
  "data" : {
    "limit" : 200,
    "offset" : 0,
    "records" : [ {
      "associate_instance_type" : "PORT",
      "device_id" : "c87579ab-c76a-4afd-83ce-62e0f531f13e",
      "device_name" : "test",
      "device_owner" : "compute:test",
      "domain_id" : "7d07807209524a4280266db9df63c4fa",
      "enterprise_project_id" : "0",
      "fw_domain_id" : "7d07807209524a4280266db9df63c4fa",
      "fw_enterprise_project_id" : "default",
      "fw_instance_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
      "fw_instance_name" : "test",
      "id" : "465b34fe-e017-4831-a21c-9c6c753bb1f2",
      "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
      "public_ip" : "100.85.223.15",
      "status" : 0,
      "tags" : "combined_order_id=CBRCS23040615138M2KW912"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00109004",
  "error_msg" : "HTTP请求错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```java
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListEipsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListEipsRequest request = new ListEipsRequest();
        request.withObjectId("<object_id>");
        request.withKeyWord("<key_word>");
        request.withStatus(ListEipsRequest.StatusEnum.fromValue("<status>"));
        request.withSync(ListEipsRequest.SyncEnum.NUMBER_<sync>);
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withDeviceKey("<device_key>");
        request.withAddressType(<address_type>);
        request.withFwInstanceId("<fw_instance_id>");
        request.withFwKeyWord("<fw_key_word>");
        request.withEpsId("<eps_id>");
        request.withTags("<tags>");
        try {
            ListEipsResponse response = client.listEips(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListEipsRequest()
        request.object_id = "<object_id>"
        request.key_word = "<key_word>"
        request.status = "<status>"
        request.sync = <sync>
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.device_key = "<device_key>"
        request.address_type = <address_type>
        request.fw_instance_id = "<fw_instance_id>"
        request.fw_key_word = "<fw_key_word>"
        request.eps_id = "<eps_id>"
        request.tags = "<tags>"
        response = client.list_eips(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListEipsRequest{}
    request.ObjectId = "<object_id>"
    keyWordRequest:= "<key_word>"
    request.KeyWord = &keyWordRequest
    statusRequest:= model.GetListEipsRequestStatusEnum().<STATUS>
    request.Status = &statusRequest
    syncRequest:= model.GetListEipsRequestSyncEnum().<SYNC>
    request.Sync = &syncRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    deviceKeyRequest:= "<device_key>"
    request.DeviceKey = &deviceKeyRequest
    addressTypeRequest:= int32(<address_type>)
    request.AddressType = &addressTypeRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    fwKeyWordRequest:= "<fw_key_word>"
    request.FwKeyWord = &fwKeyWordRequest
    epsIdRequest:= "<eps_id>"
    request.EpsId = &epsIdRequest
    tagsRequest:= "<tags>"
    request.Tags = &tagsRequest
    response, err := client.ListEips(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	EIP数据查询返回值
400	Bad Request

状态码	描述
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.3 ACL 规则管理

4.3.1 创建 ACL 规则

功能介绍

创建ACL规则

调用方法

请参见如何调用API。

URI

POST /v1/{project_id}/acl-rule

表 4-99 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-100 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-101** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-102** 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
type	是	Integer	规则type，0：互联网规则，1：vpc规则，2：nat规则 枚举值： ● **0** ● **1** ● **2**
rules	是	Array of **rules** objects	rules

表 **4-103** rules

参数	是否必选	参数类型	描述
name	是	String	规则名称
sequence	是	**OrderRuleAclDto** object	规则序列
address_type	是	Integer	地址类型，0 ipv4,1 ipv6,2 domain 枚举值： ● **0** ● **1** ● **2**
action_type	是	Integer	动作0：permit,1：deny
status	是	Integer	规则下发状态 0：禁用,1：启用 枚举值： ● **0** ● **1**
applications	否	Array of strings	应用列表
applicationsJsonString	否	String	应用列表转化json字符串
long_connect_time	否	Long	长连接时长
long_connect_time_hour	否	Long	长连接时长小时
long_connect_time_minute	否	Long	长连接时长分钟
long_connect_time_second	否	Long	长连接时长秒
long_connect_enable	是	Integer	是否支持长连接，0表示不支持长连接，1表示支持长连接 枚举值： ● **0** ● **1**
description	否	String	描述

参数	是否必选	参数类型	描述
direction	否	Integer	方向：0表示外到内，1表示内到外【说明：规则type=0：互联网规则 | 2：nat规则时方向值必填】 枚举值： ● **0** ● **1**
source	是	**RuleAddressDtoForRequest** object	源地址传输对象
destination	是	**RuleAddressDtoForRequest** object	目的地址传输对象
service	是	**RuleServiceDto** object	服务对象
tag	否	**TagsVO** object	标签显示值

表 4-104 OrderRuleAclDto

参数	是否必选	参数类型	描述
dest_rule_id	否	String	目标规则id，添加规则位于此规则之后，非置顶时不能为空，置顶时为空
top	否	Integer	是否置顶，0代表非置顶，1代表置顶
bottom	否	Integer	是否置底，0代表非置底，1代表置底

表 4-105 RuleAddressDtoForRequest

参数	是否必选	参数类型	描述
type	是	Integer	源类型0手工输入,1关联IP地址组,2域名，3地理位置，4域名组，5多对象，6域名组-DNS解析，7域名组-URL过滤。
address_type	否	Integer	源类型0 ipv4,1 ipv6
address	否	String	源IP，手动类型不能为空，自动及domain类型为空

参数	是否必选	参数类型	描述
address_set_id	否	String	关联IP地址组ID，自动类型不能为空，手动类型和domain类型为空
address_set_name	否	String	地址组名称
domain_address_name	否	String	域名地址名称，域名类型时不能为空，手动类型及自动类型时为空
region_list_json	否	String	规则region列表json值
region_list	否	Array of IpRegionDto objects	规则region列表
domain_set_id	否	String	域名组id
domain_set_name	否	String	域名组名称
ip_address	否	Array of strings	IP地址列表
address_set_type	否	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组
predefined_group	否	Array of strings	预定义地址组列表
address_group	否	Array of strings	地址组列表

表 **4-106** IpRegionDto

参数	是否必选	参数类型	描述
region_id	否	String	区域id
description_cn	否	String	中文描述
description_en	否	String	英文描述
region_type	否	Integer	区域类型，0表示国家，1表示省份，2表示大洲

表 **4-107** RuleServiceDto

参数	是否必选	参数类型	描述
type	是	Integer	服务输入类型，0为手动输入类型，1为自动输入类型
protocol	否	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
protocols	否	Array of integers	协议列表，协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	否	String	源端口
dest_port	否	String	目的端口
service_set_id	否	String	服务组id，手动类型为空，自动类型为非空
service_set_name	否	String	服务组名称
custom_service	否	Array of **ServiceItem** objects	自定义服务
predefined_group	否	Array of strings	预定义服务组列表
service_group	否	Array of strings	服务组列表
service_group_names	否	Array of **ServiceGroupVO** objects	服务组名称列表
service_set_type	否	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库

表 **4-108** ServiceItem

参数	是否必选	参数类型	描述
protocol	否	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空

参数	是否必选	参数类型	描述
source_port	否	String	源端口
dest_port	否	String	目的端口
description	否	String	服务成员描述
name	否	String	服务成员名称

表 **4-109** ServiceGroupVO

参数	是否必选	参数类型	描述
name	否	String	服务组名称
protocols	否	Array of integers	协议列表
service_set_type	否	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库
set_id	否	String	服务组ID

表 **4-110** TagsVO

参数	是否必选	参数类型	描述
tag_id	否	String	标签id
tag_key	否	String	标签键
tag_value	否	String	标签值

响应参数

状态码： 200

表 **4-111** 响应 Body 参数

参数	参数类型	描述
data	**RuleIdList** object	规则id列表

表 **4-112** RuleIdList

参数	参数类型	描述
rules	Array of **RuleId** objects	规则id列表

表 **4-113** RuleId

参数	参数类型	描述
id	String	id
name	String	名称

状态码： 400

表 **4-114** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

示例为添加一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rule

{
  "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
  "rules" : [ {
    "name" : "测试规则",
    "status" : 1,
    "action_type" : 0,
    "description" : "",
    "source" : {
      "type" : 0,
      "address" : "1.1.1.1"
    },
    "destination" : {
      "type" : 0,
      "address" : "2.2.2.2"
    },
    "service" : {
      "type" : 0,
      "protocol" : 6,
      "source_port" : "0",
      "dest_port" : "0"
    },
    "address_type" : 0,
    "tag" : {
      "tag_key" : "",
      "tag_value" : ""
    },
    "long_connect_enable" : 0,
    "direction" : 0,
    "sequence" : {
      "top" : 1,
      "dest_rule_id" : null
    }
  } ],
  "type" : 0
}
```

响应示例

状态码： 200

添加acl响应

```
{
  "data" : {
    "rules" : [ {
      "id" : "0475c516-0e41-4caf-990b-0c504eebd73f"
    } ]
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00900016",
  "error_msg" : "导入任务进行中，请任务结束后再操作"
}
```

SDK 代码示例

SDK代码示例如下。

Java

示例为添加一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;
import java.util.List;
import java.util.ArrayList;

public class AddAclRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddAclRuleRequest request = new AddAclRuleRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddRuleAclDto body = new AddRuleAclDto();
        TagsVO tagRules = new TagsVO();
        tagRules.withTagKey("")
            .withTagValue("");
        RuleServiceDto serviceRules = new RuleServiceDto();
        serviceRules.withType(0)
            .withProtocol(6)
            .withSourcePort("0")
            .withDestPort("0");
        RuleAddressDtoForRequest destinationRules = new RuleAddressDtoForRequest();
        destinationRules.withType(0)
            .withAddress("2.2.2.2");
        RuleAddressDtoForRequest sourceRules = new RuleAddressDtoForRequest();
        sourceRules.withType(0)
            .withAddress("1.1.1.1");
        OrderRuleAclDto sequenceRules = new OrderRuleAclDto();
        sequenceRules.withTop(1);
        List<AddRuleAclDtoRules> listbodyRules = new ArrayList<>();
        listbodyRules.add(
            new AddRuleAclDtoRules()
                .withName("测试规则")
                .withSequence(sequenceRules)
                .withAddressType(AddRuleAclDtoRules.AddressTypeEnum.NUMBER_0)
                .withActionType(0)
                .withStatus(AddRuleAclDtoRules.StatusEnum.NUMBER_1)
                .withLongConnectEnable(AddRuleAclDtoRules.LongConnectEnableEnum.NUMBER_0)
                .withDescription("")
                .withDirection(AddRuleAclDtoRules.DirectionEnum.NUMBER_0)
                .withSource(sourceRules)
                .withDestination(destinationRules)
                .withService(serviceRules)
                .withTag(tagRules)
        );
        body.withRules(listbodyRules);
        body.withType(AddRuleAclDto.TypeEnum.NUMBER_0);
        body.withObjectId("ae42418e-f077-41a0-9d3b-5b2f5ad9102b");
        request.withBody(body);
        try {
            AddAclRuleResponse response = client.addAclRule(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

示例为添加一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddAclRuleRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        tagRules = TagsVO(
            tag_key="",
            tag_value=""
        )
        serviceRules = RuleServiceDto(
            type=0,
            protocol=6,
            source_port="0",
            dest_port="0"
        )
        destinationRules = RuleAddressDtoForRequest(
            type=0,
            address="2.2.2.2"
        )
        sourceRules = RuleAddressDtoForRequest(
            type=0,
            address="1.1.1.1"
        )
        sequenceRules = OrderRuleAclDto(
            top=1
        )
        listRulesbody = [
            AddRuleAclDtoRules(
                name="测试规则",
                sequence=sequenceRules,
                address_type=0,
                action_type=0,
                status=1,
                long_connect_enable=0,
                description="",
                direction=0,
                source=sourceRules,
                destination=destinationRules,
                service=serviceRules,
                tag=tagRules
            )
        ]
        request.body = AddRuleAclDto(
            rules=listRulesbody,
            type=0,
            object_id="ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
        )
        response = client.add_acl_rule(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

示例为添加一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddAclRuleRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    tagKeyTag:= ""
    tagValueTag:= ""
    tagRules := &model.TagsVo{
        TagKey: &tagKeyTag,
        TagValue: &tagValueTag,
    }
    protocolService:= int32(6)
    sourcePortService:= "0"
    destPortService:= "0"
    serviceRules := &model.RuleServiceDto{
        Type: int32(0),
        Protocol: &protocolService,
        SourcePort: &sourcePortService,
        DestPort: &destPortService,
    }
    addressDestination:= "2.2.2.2"
    destinationRules := &model.RuleAddressDtoForRequest{
        Type: int32(0),
        Address: &addressDestination,
    }
    addressSource:= "1.1.1.1"
    sourceRules := &model.RuleAddressDtoForRequest{
        Type: int32(0),
        Address: &addressSource,
    }
    topSequence:= int32(1)
    sequenceRules := &model.OrderRuleAclDto{
        Top: &topSequence,
    }
    descriptionRules:= ""
    directionRules:= model.GetAddRuleAclDtoRulesDirectionEnum().E_0
    var listRulesbody = []model.AddRuleAclDtoRules{
        {
            Name: "测试规则",
            Sequence: sequenceRules,
            AddressType: model.GetAddRuleAclDtoRulesAddressTypeEnum().E_0,
            ActionType: int32(0),
            Status: model.GetAddRuleAclDtoRulesStatusEnum().E_1,
            LongConnectEnable: model.GetAddRuleAclDtoRulesLongConnectEnableEnum().E_0,
            Description: &descriptionRules,
            Direction: &directionRules,
            Source: sourceRules,
            Destination: destinationRules,
            Service: serviceRules,
            Tag: tagRules,
        },
    }
    request.Body = &model.AddRuleAclDto{
        Rules: listRulesbody,
        Type: model.GetAddRuleAclDtoTypeEnum().E_0,
        ObjectId: "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
    }
    response, err := client.AddAclRule(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加acl响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.3.2 删除 ACL 规则

功能介绍

删除ACL规则组

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/acl-rule/{acl_rule_id}

表 4-115 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目Id
acl_rule_id	是	String	规则Id

表 4-116 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-117** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-118** 响应 Body 参数

参数	参数类型	描述
data	**RuleId** object	规则id数据

表 **4-119** RuleId

参数	参数类型	描述
id	String	id
name	String	名称

状态码： 400

表 4-120 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目Id：9d80d070b6d44942af73c9c3d38e0429的ruleId：ceaa0407-b9c8-4dfd-9eca-b6ead2dfd031的规则

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rule/ceaa0407-b9c8-4dfd-9eca-
b6ead2dfd031
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "ceaa0407-b9c8-4dfd-9eca-b6ead2dfd031",
    "name" : "name"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00900016",
  "error_msg" : "导入任务进行中，请任务结束后再操作"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;
```

```
public class DeleteAclRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAclRuleRequest request = new DeleteAclRuleRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteAclRuleResponse response = client.deleteAclRule(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAclRuleRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_acl_rule(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAclRuleRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.DeleteAclRule(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK

状态码	描述
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.3.3 批量删除 Acl 规则

功能介绍

批量删除Acl规则

调用方法

请参见如何调用API。

URI

DELETE /v1/{project_id}/acl-rule

表 4-121 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID

表 4-122 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-123 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-124 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
rule_ids	是	Array of strings	规则ID列表

响应参数

状态码： 200

表 **4-125** 响应 Body 参数

参数	参数类型	描述
data	**BatchDeleteAclRulesResponseData** object	批量删除ACL规则返回值data

表 **4-126** BatchDeleteAclRulesResponseData

参数	参数类型	描述
responseDatas	Array of **BatchDeleteRuleInfo** objects	批量删除规则返回data

表 **4-127** BatchDeleteRuleInfo

参数	参数类型	描述
name	String	acl名称
id	String	aclId

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护对象 id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b的规则，规则id为0475c516-0e41-4caf-990b-0c504eebd73f和8662868e-fe7e-4dfc-bfb1-ca4d73081ca6

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rule

{
  "rule_ids" : [ "0475c516-0e41-4caf-990b-0c504eebd73f", "8662868e-fe7e-4dfc-bfb1-ca4d73081ca6" ],
  "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
}
```

响应示例

状态码： 200

批量删除规则返回值

```
{
  "data" : {
    "responseDatas" : [ {
      "name" : "test",
      "id" : "0475c516-0e41-4caf-990b-0c504eebd73f"
    }, {
      "name" : "test2",
    "id" : "8662868e-fe7e-4dfc-bfb1-ca4d73081ca6"
  } ]
 }
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护对象 id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b的规则，规则id为0475c516-0e41-4caf-990b-0c504eebd73f和8662868e-fe7e-4dfc-bfb1-ca4d73081ca6

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteAclRulesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteAclRulesRequest request = new BatchDeleteAclRulesRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        DeleteRuleAclDto body = new DeleteRuleAclDto();
        List<String> listbodyRuleIds = new ArrayList<>();
        listbodyRuleIds.add("0475c516-0e41-4caf-990b-0c504eebd73f");
        listbodyRuleIds.add("8662868e-fe7e-4dfc-bfb1-ca4d73081ca6");
        body.withRuleIds(listbodyRuleIds);
        body.withObjectId("ae42418e-f077-41a0-9d3b-5b2f5ad9102b");
        request.withBody(body);
        try {
            BatchDeleteAclRulesResponse response = client.batchDeleteAclRules(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护对象 id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b的规则，规则id为0475c516-0e41-4caf-990b-0c504eebd73f和8662868e-fe7e-4dfc-bfb1-ca4d73081ca6

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteAclRulesRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listRuleIdsbody = [
            "0475c516-0e41-4caf-990b-0c504eebd73f",
            "8662868e-fe7e-4dfc-bfb1-ca4d73081ca6"
        ]
        request.body = DeleteRuleAclDto(
            rule_ids=listRuleIdsbody,
            object_id="ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
        )
        response = client.batch_delete_acl_rules(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护对象 id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b的规则，规则id为0475c516-0e41-4caf-990b-0c504eebd73f和8662868e-fe7e-4dfc-bfb1-ca4d73081ca6

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteAclRulesRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    var listRuleIdsbody = []string{
        "0475c516-0e41-4caf-990b-0c504eebd73f",
        "8662868e-fe7e-4dfc-bfb1-ca4d73081ca6",
    }
    request.Body = &model.DeleteRuleAclDto{
        RuleIds: listRuleIdsbody,
        ObjectId: "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
    }
    response, err := client.BatchDeleteAclRules(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	批量删除规则返回值

错误码

请参见**错误码**。

4.3.4 删除规则击中次数

功能介绍

清除规则击中次数

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/acl-rule/count

表 4-128 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	project id

表 4-129 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-130 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-131 请求 Body 参数

参数	是否必选	参数类型	描述
rule_ids	是	Array of strings	规则id列表

响应参数

状态码： 400

表 4-132 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

清除项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965的命中次数

```
https://{Endpoint}/v1/0b2179bbe180d3762fb0c01a2d5725c7/acl-rule/count

{
  "rule_ids" : [ "59ff6bd9-0a76-41ec-9650-380086069965" ]
}
```

响应示例

状态码： 200

OK

```
{ }
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00400006",
  "error_msg" : "清除规则击中次数参数错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

清除项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965的命中次数

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteAclRuleHitCountSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAclRuleHitCountRequest request = new DeleteAclRuleHitCountRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        ClearAccessLogRuleHitCountsDto body = new ClearAccessLogRuleHitCountsDto();
        List<String> listbodyRuleIds = new ArrayList<>();
        listbodyRuleIds.add("59ff6bd9-0a76-41ec-9650-380086069965");
        body.withRuleIds(listbodyRuleIds);
        request.withBody(body);
        try {
            DeleteAclRuleHitCountResponse response = client.deleteAclRuleHitCount(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

清除项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965的命中次数

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAclRuleHitCountRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listRuleIdsbody = [
            "59ff6bd9-0a76-41ec-9650-380086069965"
        ]
        request.body = ClearAccessLogRuleHitCountsDto(
            rule_ids=listRuleIdsbody
        )
        response = client.delete_acl_rule_hit_count(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

清除项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965的命中次数

```
package main
```

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAclRuleHitCountRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    var listRuleIdsbody = []string{
        "59ff6bd9-0a76-41ec-9650-380086069965",
    }
    request.Body = &model.ClearAccessLogRuleHitCountsDto{
        RuleIds: listRuleIdsbody,
    }
    response, err := client.DeleteAclRuleHitCount(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

状态码	描述
500	Internal Server Error

错误码

请参见错误码。

4.3.5 更新 ACL 规则

功能介绍

更新ACL规则

调用方法

请参见如何调用API。

URI

PUT /v1/{project_id}/acl-rule/{acl_rule_id}

表 4-133 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
acl_rule_id	是	String	规则Id

表 4-134 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-135** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-136** 请求 Body 参数

参数	是否必选	参数类型	描述
address_type	否	Integer	地址类型，0 ipv4,1 ipv6 枚举值: - **0** - **1**
name	否	String	规则名称
sequence	否	**OrderRuleAclDto** object	UpdateRuleAclDto
direction	否	Integer	方向：0表示外到内，1表示内到外【说明：规则type=0：互联网规则 | 2：nat规则时方向值必填】 枚举值: - **0** - **1**
action_type	否	Integer	动作0：permit,1：deny 枚举值: - **0** - **1**
status	否	Integer	规则下发状态 0：禁用,1：启用
applications	否	Array of strings	应用列表
applicationsJsonString	否	String	应用列表转化为字符串
description	否	String	描述
long_connect_time_hour	否	Long	长连接时长小时

参数	是否必选	参数类型	描述
long_connect_time_minute	否	Long	长连接时长分钟
long_connect_time_second	否	Long	长连接时长秒
long_connect_time	否	Long	长连接时长
long_connect_enable	否	Integer	是否支持长连接，0表示不支持，1表示支持 枚举值： ● **0** ● **1**
source	否	**RuleAddressDto** object	源地址传输对象
destination	否	**RuleAddressDto** object	目的地址传输对象
service	否	**RuleServiceDto** object	服务对象
type	否	Integer	规则type，0：互联网规则，1：vpc规则，2：nat规则 枚举值： ● **0** ● **1** ● **2**
tag	否	**TagsVO** object	标签显示值

表 **4-137** OrderRuleAclDto

参数	是否必选	参数类型	描述
dest_rule_id	否	String	目标规则id，添加规则位于此规则之后，非置顶时不能为空，置顶时为空
top	否	Integer	是否置顶，0代表非置顶，1代表置顶
bottom	否	Integer	是否置底，0代表非置底，1代表置底

表 4-138 RuleAddressDto

参数	是否必选	参数类型	描述
type	是	Integer	源类型0手工输入,1关联IP地址组,2域名，3地理位置，4域名组，5多对象，6域名组-DNS解析，7域名组-URL过滤。
address_type	否	Integer	源类型0 ipv4,1 ipv6
address	否	String	源IP，手动类型不能为空，自动及domain类型为空
address_set_id	否	String	关联IP地址组ID，自动类型不能为空，手动类型和domain类型为空
address_set_name	否	String	地址组名称
domain_address_name	否	String	域名地址名称，域名类型时不能为空，手动类型及自动类型时为空
region_list_json	否	String	规则region列表json值
region_list	否	Array of **IpRegionDto** objects	规则region列表
domain_set_id	否	String	域名组id
domain_set_name	否	String	域名组名称
ip_address	否	Array of strings	IP地址列表
address_group	否	Array of strings	地址组列表
address_group_names	否	Array of **AddressGroupVO** objects	地址组名称列表
address_set_type	否	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组
predefined_group	否	Array of strings	预定义地址组列表

表 **4-139** IpRegionDto

参数	是否必选	参数类型	描述
region_id	否	String	区域id
description_cn	否	String	中文描述
description_en	否	String	英文描述
region_type	否	Integer	区域类型，0表示国家，1表示省份，2表示大洲

表 **4-140** AddressGroupVO

参数	是否必选	参数类型	描述
address_set_type	否	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组
name	否	String	地址组名称
set_id	否	String	地址组id

表 **4-141** RuleServiceDto

参数	是否必选	参数类型	描述
type	是	Integer	服务输入类型，0为手动输入类型，1为自动输入类型
protocol	否	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
protocols	否	Array of integers	协议列表，协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	否	String	源端口
dest_port	否	String	目的端口
service_set_id	否	String	服务组id，手动类型为空，自动类型为非空
service_set_name	否	String	服务组名称

参数	是否必选	参数类型	描述
custom_service	否	Array of **ServiceItem** objects	自定义服务
predefined_group	否	Array of strings	预定义服务组列表
service_group	否	Array of strings	服务组列表
service_group_names	否	Array of **ServiceGroupVO** objects	服务组名称列表
service_set_type	否	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库

表 4-142 ServiceItem

参数	是否必选	参数类型	描述
protocol	否	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	否	String	源端口
dest_port	否	String	目的端口
description	否	String	服务成员描述
name	否	String	服务成员名称

表 4-143 ServiceGroupVO

参数	是否必选	参数类型	描述
name	否	String	服务组名称
protocols	否	Array of integers	协议列表
service_set_type	否	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库
set_id	否	String	服务组ID

表 **4-144** TagsVO

参数	是否必选	参数类型	描述
tag_id	否	String	标签id
tag_key	否	String	标签键
tag_value	否	String	标签值

响应参数

状态码： 200

表 **4-145** 响应 Body 参数

参数	参数类型	描述
data	**RuleId** object	规则Id

表 **4-146** RuleId

参数	参数类型	描述
id	String	id
name	String	名称

状态码： 400

表 **4-147** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

示例为更新一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rule/ceaa0407-b9c8-4dfd-9eca-b6ead2dfd031

{
  "name" : "测试规则",
  "status" : 1,
  "action_type" : 0,
  "description" : "",
  "source" : {
    "type" : 0,
    "address" : "1.1.1.1"
  },
  "destination" : {
    "type" : 0,
    "address" : "2.2.2.2"
  },
  "service" : {
    "type" : 0,
    "protocol" : 6,
    "source_port" : "0",
    "dest_port" : "0"
  },
  "type" : 0,
  "address_type" : 0,
  "tag" : {
    "tag_key" : "",
    "tag_value" : ""
  },
  "long_connect_enable" : 0,
  "direction" : 0
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "ceaa0407-b9c8-4dfd-9eca-b6ead2dfd031"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

示例为更新一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateAclRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateAclRuleRequest request = new UpdateAclRuleRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        UpdateRuleAclDto body = new UpdateRuleAclDto();
        TagsVO tagbody = new TagsVO();
        tagbody.withTagKey("")
            .withTagValue("");
        RuleServiceDto servicebody = new RuleServiceDto();
        servicebody.withType(0)
            .withProtocol(6)
            .withSourcePort("0")
            .withDestPort("0");
        RuleAddressDto destinationbody = new RuleAddressDto();
        destinationbody.withType(0)
            .withAddress("2.2.2.2");
        RuleAddressDto sourcebody = new RuleAddressDto();
        sourcebody.withType(0)
            .withAddress("1.1.1.1");
        body.withTag(tagbody);
        body.withType(UpdateRuleAclDto.TypeEnum.NUMBER_0);
        body.withService(servicebody);
        body.withDestination(destinationbody);
        body.withSource(sourcebody);
        body.withLongConnectEnable(UpdateRuleAclDto.LongConnectEnableEnum.NUMBER_0);
        body.withDescription("");
        body.withStatus(1);
        body.withActionType(UpdateRuleAclDto.ActionTypeEnum.NUMBER_0);
        body.withDirection(UpdateRuleAclDto.DirectionEnum.NUMBER_0);
        body.withName("测试规则");
        body.withAddressType(UpdateRuleAclDto.AddressTypeEnum.NUMBER_0);
        request.withBody(body);
        try {
            UpdateAclRuleResponse response = client.updateAclRule(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

示例为更新一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAclRuleRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        tagbody = TagsVO(
            tag_key="",
            tag_value=""
        )
        servicebody = RuleServiceDto(
            type=0,
            protocol=6,
            source_port="0",
            dest_port="0"
        )
        destinationbody = RuleAddressDto(
            type=0,
            address="2.2.2.2"
        )
        sourcebody = RuleAddressDto(
            type=0,
            address="1.1.1.1"
        )
        request.body = UpdateRuleAclDto(
            tag=tagbody,
            type=0,
            service=servicebody,
            destination=destinationbody,
            source=sourcebody,
            long_connect_enable=0,
            description="",
            status=1,
            action_type=0,
            direction=0,
            name="测试规则",
            address_type=0
        )
        response = client.update_acl_rule(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

示例为更新一个IPv4类型的外到内的规则，名称为测试规则，源类型为IP地址，地址为1.1.1.1，目的类型为IP地址，目的地址类型为2.2.2.2，服务类型为服务，协议类型为TCP，源端口为0，目的端口为0，不支持长连接，动作为放行，启用状态为启用

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAclRuleRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    tagKeyTag:= ""
    tagValueTag:= ""
    tagbody := &model.TagsVo{
        TagKey: &tagKeyTag,
        TagValue: &tagValueTag,
    }
    protocolService:= int32(6)
    sourcePortService:= "0"
    destPortService:= "0"
    servicebody := &model.RuleServiceDto{
        Type: int32(0),
        Protocol: &protocolService,
        SourcePort: &sourcePortService,
        DestPort: &destPortService,
    }
    addressDestination:= "2.2.2.2"
    destinationbody := &model.RuleAddressDto{
        Type: int32(0),
        Address: &addressDestination,
    }
    addressSource:= "1.1.1.1"
    sourcebody := &model.RuleAddressDto{
        Type: int32(0),
        Address: &addressSource,
    }
    typeUpdateRuleAclDto:= model.GetUpdateRuleAclDtoTypeEnum().E_0
    longConnectEnableUpdateRuleAclDto:= model.GetUpdateRuleAclDtoLongConnectEnableEnum().E_0
    descriptionUpdateRuleAclDto:= ""
    statusUpdateRuleAclDto:= int32(1)
    actionTypeUpdateRuleAclDto:= model.GetUpdateRuleAclDtoActionTypeEnum().E_0
    directionUpdateRuleAclDto:= model.GetUpdateRuleAclDtoDirectionEnum().E_0
    nameUpdateRuleAclDto:= "测试规则"
    addressTypeUpdateRuleAclDto:= model.GetUpdateRuleAclDtoAddressTypeEnum().E_0
    request.Body = &model.UpdateRuleAclDto{
        Tag: tagbody,
        Type: &typeUpdateRuleAclDto,
        Service: servicebody,
        Destination: destinationbody,
        Source: sourcebody,
        LongConnectEnable: &longConnectEnableUpdateRuleAclDto,
        Description: &descriptionUpdateRuleAclDto,
        Status: &statusUpdateRuleAclDto,
        ActionType: &actionTypeUpdateRuleAclDto,
        Direction: &directionUpdateRuleAclDto,
        Name: &nameUpdateRuleAclDto,
        AddressType: &addressTypeUpdateRuleAclDto,
    }
    response, err := client.UpdateAclRule(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized

状态码	描述
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.3.6 批量更新规则动作

功能介绍

批量更新规则动作

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/acl-rule/action

表 4-148 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID

表 4-149 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-150 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-151 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
action	是	String	动作
rule_ids	是	Array of strings	规则ID列表

响应参数

状态码： 200

表 4-152 响应 Body 参数

参数	参数类型	描述
data	Array of strings	批量更新acl规则id

请求示例

批量更新项目id为14181c1245cf4fd786824efe1e2b9388下防火墙id为546af3f8-88e9-47f2-a205-2346d7090925下的规则id为4e12d889-c1d3-491b-8470-3d1b3dadc1fd和f798a6a8-c4c5-42b4-838c-c922c9908cb4的规则为启用状态

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/acl-rule/action?
fw_instance_id=546af3f8-88e9-47f2-a205-2346d7090925&enterprise_project_id=default

{
  "action" : "enable",
  "rule_ids" : [ "4e12d889-c1d3-491b-8470-3d1b3dadc1fd", "f798a6a8-c4c5-42b4-838c-c922c9908cb4" ],
  "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
}
```

响应示例

状态码： 200

批量更新acl规则返回值

```
{
  "data" : [ "4e12d889-c1d3-491b-8470-3d1b3dadc1fd", "f798a6a8-c4c5-42b4-838c-c922c9908cb4" ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

批量更新项目id为14181c1245cf4fd786824efe1e2b9388下防火墙id为546af3f8-88e9-47f2-a205-2346d7090925下的规则id为4e12d889-c1d3-491b-8470-3d1b3dadc1fd和f798a6a8-c4c5-42b4-838c-c922c9908cb4的规则为启用状态

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchUpdateAclRuleActionsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchUpdateAclRuleActionsRequest request = new BatchUpdateAclRuleActionsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        UpdateSecurityPolciesActionDto body = new UpdateSecurityPolciesActionDto();
        List<String> listbodyRuleIds = new ArrayList<>();
        listbodyRuleIds.add("4e12d889-c1d3-491b-8470-3d1b3dadc1fd");
        listbodyRuleIds.add("f798a6a8-c4c5-42b4-838c-c922c9908cb4");
        body.withRuleIds(listbodyRuleIds);
        body.withAction("enable");
        body.withObjectId("ae42418e-f077-41a0-9d3b-5b2f5ad9102b");
        request.withBody(body);
        try {
            BatchUpdateAclRuleActionsResponse response = client.batchUpdateAclRuleActions(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

批量更新项目id为14181c1245cf4fd786824efe1e2b9388下防火墙id为546af3f8-88e9-47f2-a205-2346d7090925下的规则id为4e12d889-c1d3-491b-8470-3d1b3dadc1fd和f798a6a8-c4c5-42b4-838c-c922c9908cb4的规则为启用状态

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchUpdateAclRuleActionsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        listRuleIdsbody = [
            "4e12d889-c1d3-491b-8470-3d1b3dadc1fd",
            "f798a6a8-c4c5-42b4-838c-c922c9908cb4"
        ]
        request.body = UpdateSecurityPolciesActionDto(
            rule_ids=listRuleIdsbody,
            action="enable",
            object_id="ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
        )
        response = client.batch_update_acl_rule_actions(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

批量更新项目id为14181c1245cf4fd786824efe1e2b9388下防火墙id为546af3f8-88e9-47f2-a205-2346d7090925下的规则id为4e12d889-c1d3-491b-8470-3d1b3dadc1fd和f798a6a8-c4c5-42b4-838c-c922c9908cb4的规则为启用状态

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchUpdateAclRuleActionsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    var listRuleIdsbody = []string{
        "4e12d889-c1d3-491b-8470-3d1b3dadc1fd",
        "f798a6a8-c4c5-42b4-838c-c922c9908cb4",
    }
    request.Body = &model.UpdateSecurityPolciesActionDto{
        RuleIds: listRuleIdsbody,
        Action: "enable",
        ObjectId: "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
    }
    response, err := client.BatchUpdateAclRuleActions(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	批量更新acl规则返回值

错误码

请参见**错误码**。

4.3.7 ACL 防护规则优先级设置

功能介绍

ACL防护规则优先级设置

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/acl-rule/order/{acl_rule_id}

表 4-153 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
acl_rule_id	是	String	规则id

表 4-154 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**获得，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-155** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-156** 请求 Body 参数

参数	是否必选	参数类型	描述
dest_rule_id	否	String	目标规则id，添加规则位于此规则之后，非置顶时不能为空，置顶时为空
top	否	Integer	是否置顶，0代表非置顶，1代表置顶
bottom	否	Integer	是否置底，0代表非置底，1代表置底

响应参数

状态码： 200

表 **4-157** 响应 Body 参数

参数	参数类型	描述
data	**RuleId** object	规则id列表

表 **4-158** RuleId

参数	参数类型	描述
id	String	id
name	String	名称

状态码： 400

表 4-159 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

设置项目id9d80d070b6d44942af73c9c3d38e0429中规则id为ffe9af47-d893-483b-86e3-ee5242e8cb15的规则移动到规则id为69c32dc5-f801-4294-98ee-978b51f97d35后

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rule/order/ffe9af47-d893-483b-86e3-ee5242e8cb15

{
  "top" : 0,
  "dest_rule_id" : "69c32dc5-f801-4294-98ee-978b51f97d35"
}
```

响应示例

状态码： 200

规则排序响应

```
{
  "data" : {
    "id" : "ffe9af47-d893-483b-86e3-ee5242e8cb15"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置项目id9d80d070b6d44942af73c9c3d38e0429中规则id为ffe9af47-d893-483b-86e3-ee5242e8cb15的规则移动到规则id为69c32dc5-f801-4294-98ee-978b51f97d35后

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateAclRuleOrderSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateAclRuleOrderRequest request = new UpdateAclRuleOrderRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        OrderRuleAclDto body = new OrderRuleAclDto();
        body.withTop(0);
        body.withDestRuleId("69c32dc5-f801-4294-98ee-978b51f97d35");
        request.withBody(body);
        try {
            UpdateAclRuleOrderResponse response = client.updateAclRuleOrder(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

设置项目id9d80d070b6d44942af73c9c3d38e0429中规则id为ffe9af47-d893-483b-86e3-ee5242e8cb15的规则移动到规则id为69c32dc5-f801-4294-98ee-978b51f97d35后

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *
```

```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAclRuleOrderRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = OrderRuleAclDto(
            top=0,
            dest_rule_id="69c32dc5-f801-4294-98ee-978b51f97d35"
        )
        response = client.update_acl_rule_order(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置项目id9d80d070b6d44942af73c9c3d38e0429中规则id为ffe9af47-d893-483b-86e3-ee5242e8cb15的规则移动到规则id为69c32dc5-f801-4294-98ee-978b51f97d35后

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
    request := &model.UpdateAclRuleOrderRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    topOrderRuleAclDto:= int32(0)
    destRuleIdOrderRuleAclDto:= "69c32dc5-f801-4294-98ee-978b51f97d35"
    request.Body = &model.OrderRuleAclDto{
        Top: &topOrderRuleAclDto,
        DestRuleId: &destRuleIdOrderRuleAclDto,
    }
    response, err := client.UpdateAclRuleOrder(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	规则排序响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.3.8 查询防护规则

功能介绍

查询防护规则

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/acl-rules

表 4-160 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-161 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
type	否	Integer	规则Type0：互联网规则,1：vpc规则, 2:nat规则 枚举值: ● **0** ● **1** ● **2**
ip	否	String	ip地址
name	否	String	名称
direction	否	Integer	方向0：外到内1：内到外
status	否	Integer	规则下发状态 0：禁用,1：启用 枚举值: ● **0** ● **1**
action_type	否	Integer	动作0：permit,1：deny 枚举值: ● **0** ● **1**

参数	是否必选	参数类型	描述
address_type	否	Integer	地址类型0 ipv4 枚举值： ● **0** ● **1** ● **2**
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
tags_id	否	String	标签id
source	否	String	源地址
destination	否	String	目的地址
service	否	String	服务端口
application	否	String	应用

请求参数

表 4-162 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-163 响应 Body 参数

参数	参数类型	描述
data	**data** object	data

表 4-164 data

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	查询总条数
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用**查询防火墙实例接口**，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
records	Array of **records** objects	records

表 4-165 records

参数	参数类型	描述
rule_id	String	规则id
address_type	Integer	地址类型0 ipv4,1 ipv6
name	String	规则名称
direction	Integer	规则方向0：外到内1：内到外 枚举值： ● **0** ● **1**
action_type	Integer	动作0：permit,1：deny
status	Integer	规则下发状态 0：禁用,1：启用
description	String	描述
long_connect_time	Long	长连接时长
long_connect_enable	Integer	长连接支持

参数	参数类型	描述
long_connect_time_hour	Long	长连接时长小时
long_connect_time_minute	Long	长连接时长分钟
long_connect_time_second	Long	长连接时长秒
source	**RuleAddressDtoForResponse** object	源地址传输对象
destination	**RuleAddressDtoForResponse** object	destination
service	**RuleServiceDtoForResponse** object	service
type	Integer	规则type，0：互联网规则，1：vpc规则，2：nat规则 枚举值： ● **0** ● **1** ● **2**
created_date	String	创建时间
last_open_time	String	最后开启时间
tag	**TagsVO** object	标签显示信息

表 **4-166** RuleAddressDtoForResponse

参数	参数类型	描述
type	Integer	源类型0手工输入,1关联IP地址组,2域名，3地理位置，4域名组，5多对象，6域名组-DNS解析，7域名组-URL过滤。
address_type	Integer	源类型0 ipv4,1 ipv6
address	String	源IP，手动类型不能为空，自动及domain类型为空
address_set_id	String	关联IP地址组ID，自动类型不能为空，手动类型和domain类型为空

参数	参数类型	描述
address_set_name	String	地址组名称
domain_address_name	String	域名地址名称，域名类型时不能为空，手动类型及自动类型时为空
region_list_json	String	规则region列表json值
region_list	Array of **IpRegionDto** objects	规则region列表
domain_set_id	String	域名组id
domain_set_name	String	域名组名称
ip_address	Array of strings	IP地址列表
address_group	Array of strings	地址组列表
address_group_names	Array of **AddressGroupVO** objects	地址组名称列表
address_set_type	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组

表 4-167 IpRegionDto

参数	参数类型	描述
region_id	String	区域id
description_cn	String	中文描述
description_en	String	英文描述
region_type	Integer	区域类型，0表示国家，1表示省份，2表示大洲

表 **4-168** AddressGroupVO

参数	参数类型	描述
address_set_type	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组
name	String	地址组名称
set_id	String	地址组id

表 **4-169** RuleServiceDtoForResponse

参数	参数类型	描述
type	Integer	服务输入类型，0为手动输入类型，1为自动输入类型
protocol	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
protocols	Array of integers	协议列表，协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	String	源端口
dest_port	String	目的端口
service_set_id	String	服务组id，手动类型为空，自动类型为非空
service_set_name	String	服务组名称
custom_service	Array of **ServiceItem** objects	自定义服务
service_group	Array of strings	服务组列表
service_group_names	Array of **ServiceGroupVO** objects	服务组名称列表
service_set_type	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库

表 **4-170** ServiceItem

参数	参数类型	描述
protocol	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	String	源端口
dest_port	String	目的端口
description	String	服务成员描述
name	String	服务成员名称

表 **4-171** ServiceGroupVO

参数	参数类型	描述
name	String	服务组名称
protocols	Array of integers	协议列表
service_set_type	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库
set_id	String	服务组ID

表 **4-172** TagsVO

参数	参数类型	描述
tag_id	String	标签id
tag_key	String	标签键
tag_value	String	标签值

状态码： 400

表 **4-173** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**

参数	参数类型	描述
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象id为e12bd2cd-ebfc-4af7-ad6f-ebe6da398029的第一页，size为10的数据

```
https://{Endpoint}/cfw/v1/9d80d070b6d44942af73c9c3d38e0429/acl-rules?object_id=e12bd2cd-ebfc-4af7-ad6f-ebe6da398029&limit=10&offset=0
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "limit" : 10,
    "object_id" : "cfebd347-b655-4b84-b938-3c54317599b2",
    "offset" : 0,
    "records" : [ {
      "action_type" : 0,
      "address_type" : 0,
      "destination" : {
        "address" : "0.0.0.0/0",
        "address_type" : 0,
        "type" : 0
      },
      "direction" : 1,
      "long_connect_enable" : 0,
      "created_date" : "2024-02-27 04:01:17",
      "last_open_time" : "2024-02-27 04:01:17",
      "description" : "description",
      "name" : "eip_ipv4_n_w_allow",
      "rule_id" : "ffe9af47-d893-483b-86e3-ee5242e8cb15",
      "service" : {
        "dest_port" : "0",
        "protocol" : -1,
        "source_port" : "0",
        "type" : 0
      },
      "source" : {
        "address_set_id" : "48bfb09b-6f3a-4371-8ddb-05d5d7148bcc",
        "address_set_name" : "ip_group",
        "address_type" : 0,
        "type" : 1
      },
      "status" : 1,
      "type" : "0"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```java
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListAclRulesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAclRulesRequest request = new ListAclRulesRequest();
        request.withObjectId("<object_id>");
        request.withType(ListAclRulesRequest.TypeEnum.NUMBER_<type>);
        request.withIp("<ip>");
        request.withName("<name>");
        request.withDirection(<direction>);
        request.withStatus(ListAclRulesRequest.StatusEnum.NUMBER_<status>);
        request.withActionType(ListAclRulesRequest.ActionTypeEnum.NUMBER_<action_type>);
        request.withAddressType(ListAclRulesRequest.AddressTypeEnum.NUMBER_<address_type>);
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withTagsId("<tags_id>");
        request.withSource("<source>");
        request.withDestination("<destination>");
        request.withService("<service>");
        request.withApplication("<application>");
        try {
            ListAclRulesResponse response = client.listAclRules(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAclRulesRequest()
        request.object_id = "<object_id>"
        request.type = <type>
        request.ip = "<ip>"
        request.name = "<name>"
        request.direction = <direction>
        request.status = <status>
        request.action_type = <action_type>
        request.address_type = <address_type>
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.tags_id = "<tags_id>"
        request.source = "<source>"
        request.destination = "<destination>"
        request.service = "<service>"
        request.application = "<application>"
        response = client.list_acl_rules(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAclRulesRequest{}
    request.ObjectId = "<object_id>"
    typeRequest:= model.GetListAclRulesRequestTypeEnum().<TYPE>
    request.Type = &typeRequest
    ipRequest:= "<ip>"
    request.Ip = &ipRequest
    nameRequest:= "<name>"
    request.Name = &nameRequest
    directionRequest:= int32(<direction>)
    request.Direction = &directionRequest
    statusRequest:= model.GetListAclRulesRequestStatusEnum().<STATUS>
    request.Status = &statusRequest
    actionTypeRequest:= model.GetListAclRulesRequestActionTypeEnum().<ACTION_TYPE>
    request.ActionType = &actionTypeRequest
    addressTypeRequest:= model.GetListAclRulesRequestAddressTypeEnum().<ADDRESS_TYPE>
    request.AddressType = &addressTypeRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    tagsIdRequest:= "<tags_id>"
    request.TagsId = &tagsIdRequest
    sourceRequest:= "<source>"
    request.Source = &sourceRequest
    destinationRequest:= "<destination>"
    request.Destination = &destinationRequest
    serviceRequest:= "<service>"
    request.Service = &serviceRequest
    applicationRequest:= "<application>"
    request.Application = &applicationRequest
    response, err := client.ListAclRules(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.3.9 查询规则标签

功能介绍

查询规则标签

调用方法

请参见**如何调用API**。

URI

GET /v2/{project_id}/cfw-acl/tags

表 4-174 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 **4-175** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	是	Integer	每页显示个数，范围为1-1024

请求参数

表 **4-176** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-177** 响应 Body 参数

参数	参数类型	描述
data	**HttpGetAclTagResponseData** object	获取规则标签数据

表 4-178 HttpGetAclTagResponseData

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	总数
records	Array of **TagsVO** objects	标签列表

表 4-179 TagsVO

参数	参数类型	描述
tag_id	String	标签id
tag_key	String	标签键
tag_value	String	标签值

请求示例

查询项目id为14181c1245cf4fd786824efe1e2b9388的防火墙id为546af3f8-88e9-47f2-a205-2346d7090925的已有acl标签。

```
https://{Endpoint}/v2/14181c1245cf4fd786824efe1e2b9388/cfw-acl/tags?
limit=1000&offset=0&fw_instance_id=546af3f8-88e9-47f2-
a205-2346d7090925&enterprise_project_id=default
```

响应示例

状态码： 200

查询规则标签返回值

```
{
  "data" : {
    "limit" : 1000,
    "offset" : 0,
    "records" : [ {
      "tag_id" : "98fdf013-e7ad-4581-9c71-6de04c76a18f",
      "tag_key" : "1",
      "tag_value" : "1"
    }, {
      "tag_id" : "36e6fbfe-7fcd-48be-872b-4f6074e1e4e8",
      "tag_key" : "1",
      "tag_value" : "2"
    }, {
      "tag_id" : "0bf41046-6587-42f2-8399-a6864022b504",
      "tag_key" : "测试",
      "tag_value" : "测试"
    } ],
    "total" : 3
    }
}
```

状态码

状态码	描述
200	查询规则标签返回值

错误码

请参见**错误码**。

4.3.10 获取规则击中次数

功能介绍

获取规则击中次数

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/acl-rule/count

表 4-180 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-181 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-182** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-183** 请求 Body 参数

参数	是否必选	参数类型	描述
rule_ids	是	Array of strings	规则id列表

响应参数

状态码： 200

表 **4-184** 响应 Body 参数

参数	参数类型	描述
data	**RuleHitCountRecords** object	规则击中次数记录

表 **4-185** RuleHitCountRecords

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
total	Integer	总数
records	Array of **RuleHitCountObject** objects	规则击中次数列表

表 4-186 RuleHitCountObject

参数	参数类型	描述
rule_id	String	规则id
rule_hit_count	Integer	规则击中次数

请求示例

查询项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965命中次数

```
https://{Endpoint}/v1/0b2179bbe180d3762fb0c01a2d5725c7/acl-rule/count

{
  "rule_ids" : [ "59ff6bd9-0a76-41ec-9650-380086069965" ]
}
```

响应示例

状态码： 200

获取规则击中次数响应

```
{
  "data" : {
    "limit" : 1,
    "offset" : 1,
    "records" : [ {
      "rule_hit_count" : 0,
      "rule_id" : "59ff6bd9-0a76-41ec-9650-380086069965"
    } ],
    "total" : 1
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

查询项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965命中次数

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListAclRuleHitCountSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAclRuleHitCountRequest request = new ListAclRuleHitCountRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        ListRuleHitCountDto body = new ListRuleHitCountDto();
        List<String> listbodyRuleIds = new ArrayList<>();
        listbodyRuleIds.add("59ff6bd9-0a76-41ec-9650-380086069965");
        body.withRuleIds(listbodyRuleIds);
        request.withBody(body);
        try {
            ListAclRuleHitCountResponse response = client.listAclRuleHitCount(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

查询项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965命中次数

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAclRuleHitCountRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listRuleIdsbody = [
            "59ff6bd9-0a76-41ec-9650-380086069965"
        ]
        request.body = ListRuleHitCountDto(
            rule_ids=listRuleIdsbody
        )
        response = client.list_acl_rule_hit_count(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

查询项目id为0b2179bbe180d3762fb0c01a2d5725c7中acl规则id为59ff6bd9-0a76-41ec-9650-380086069965命中次数

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAclRuleHitCountRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    var listRuleIdsbody = []string{
        "59ff6bd9-0a76-41ec-9650-380086069965",
    }
    request.Body = &model.ListRuleHitCountDto{
        RuleIds: listRuleIdsbody,
    }
    response, err := client.ListAclRuleHitCount(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	获取规则击中次数响应
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.4 黑白名单管理

4.4.1 创建黑白名单规则

功能介绍

创建黑白名单规则

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/black-white-list

表 4-187 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-188 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口接口获得，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-189 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-190 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
list_type	是	Integer	黑白名单类型4：黑名单，5：白名单
direction	是	Integer	地址方向0：源地址1：目的地址
address_type	是	Integer	Ip地址类型 0：ipv4,1:ipv6
address	是	String	地址类型

参数	是否必选	参数类型	描述
protocol	是	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
port	是	String	目的端口
description	否	String	描述

响应参数

状态码： 200

表 4-191 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	添加黑白名单响应data

表 4-192 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-193 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

给项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的对象添加方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp的白名单

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/black-white-list

{
  "object_id" : "cfebd347-b655-4b84-b938-3c54317599b2",
  "list_type" : 5,
  "direction" : 0,
  "address" : "1.1.1.1",
  "protocol" : 6,
  "port" : "1",
  "address_type" : 0
}
```

响应示例

状态码： 200

添加黑白名单响应

```
{
  "data" : {
    "id" : "2eee3fe8-0b9b-49ac-8e7f-eaafa321e99a",
    "name" : "test"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的对象添加方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp的白名单

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class AddBlackWhiteListSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddBlackWhiteListRequest request = new AddBlackWhiteListRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddBlackWhiteListDto body = new AddBlackWhiteListDto();
        body.withPort("1");
        body.withProtocol(6);
        body.withAddress("1.1.1.1");
        body.withAddressType(0);
        body.withDirection(0);
        body.withListType(5);
        body.withObjectId("cfebd347-b655-4b84-b938-3c54317599b2");
        request.withBody(body);
        try {
            AddBlackWhiteListResponse response = client.addBlackWhiteList(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的对象添加方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp的白名单

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddBlackWhiteListRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = AddBlackWhiteListDto(
            port="1",
            protocol=6,
            address="1.1.1.1",
            address_type=0,
            direction=0,
            list_type=5,
            object_id="cfebd347-b655-4b84-b938-3c54317599b2"
        )
        response = client.add_black_white_list(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的对象添加方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp的白名单

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddBlackWhiteListRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    request.Body = &model.AddBlackWhiteListDto{
        Port: "1",
        Protocol: int32(6),
        Address: "1.1.1.1",
        AddressType: int32(0),
        Direction: int32(0),
        ListType: int32(5),
        ObjectId: "cfebd347-b655-4b84-b938-3c54317599b2",
    }
    response, err := client.AddBlackWhiteList(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加黑白名单响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.4.2 更新黑白名单列表

功能介绍

更新黑白名单列表

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/black-white-list/{list_id}

表 **4-194** 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
list_id	是	String	黑白名单列表id

表 **4-195** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-196** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-197** 请求 Body 参数

参数	是否必选	参数类型	描述
direction	否	Integer	地址方向0：源地址1：目的地址
address_type	否	Integer	地址类型0：ipv4,1:ipv6
address	是	String	ip地址
protocol	否	Integer	协议类型:TCP为6, UDP为17,ICMP为1,ICMPV6为58,ANY为-1

参数	是否必选	参数类型	描述
port	否	String	端口
description	否	String	描述

响应参数

状态码： 200

表 **4-198** 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	更新黑白名单响应data

表 **4-199** IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 **4-200** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

更新项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的白名单为方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/black-white-list/
9d80d070b6d44942af73c9c3d38e042b
```

```
{
  "object_id" : "cfebd347-b655-4b84-b938-3c54317599b2",
  "list_type" : 5,
  "direction" : 0,
  "address" : "1.1.1.1",
  "protocol" : 6,
  "port" : "1",
  "address_type" : 0
}
```

响应示例

状态码： 200

更新黑白名单响应

```
{
  "data" : {
    "id" : "2eee3fe8-0b9b-49ac-8e7f-eaafa321e99a",
    "name" : "test"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的白名单为方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateBlackWhiteListSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateBlackWhiteListRequest request = new UpdateBlackWhiteListRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        UpdateBlackWhiteListDto body = new UpdateBlackWhiteListDto();
        body.withPort("1");
        body.withProtocol(6);
        body.withAddress("1.1.1.1");
        body.withAddressType(0);
        body.withDirection(0);
        request.withBody(body);
        try {
            UpdateBlackWhiteListResponse response = client.updateBlackWhiteList(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的白名单为方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateBlackWhiteListRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = UpdateBlackWhiteListDto(
            port="1",
            protocol=6,
            address="1.1.1.1",
            address_type=0,
            direction=0
        )
        response = client.update_black_white_list(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2的白名单为方向为源地址，地址为1.1.1.1，协议类型为tcp，端口为1的ipv4的tcp

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateBlackWhiteListRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    portUpdateBlackWhiteListDto:= "1"
    protocolUpdateBlackWhiteListDto:= int32(6)
    addressTypeUpdateBlackWhiteListDto:= int32(0)
    directionUpdateBlackWhiteListDto:= int32(0)
    request.Body = &model.UpdateBlackWhiteListDto{
        Port: &portUpdateBlackWhiteListDto,
        Protocol: &protocolUpdateBlackWhiteListDto,
        Address: "1.1.1.1",
        AddressType: &addressTypeUpdateBlackWhiteListDto,
        Direction: &directionUpdateBlackWhiteListDto,
    }
    response, err := client.UpdateBlackWhiteList(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	更新黑白名单响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.4.3 删除黑白名单规则

功能介绍

删除黑白名单规则

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/black-white-list/{list_id}

表 4-201 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

参数	是否必选	参数类型	描述
list_id	是	String	黑白名单id

表 4-202 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-203 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-204 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	删除黑白名单响应data

表 **4-205** IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 **4-206** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429下的黑白名单id为2eee3fe8-0b9b-49ac-8e7f-eaafa321e99a的黑白名单

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/black-white-list/2eee3fe8-0b9b-49ac-8e7f-
eaafa321e99a
```

响应示例

状态码： 200

删除黑白名单响应

```
{
  "data" : {
    "id" : "2eee3fe8-0b9b-49ac-8e7f-eaafa321e99a"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

状态码

状态码	描述
200	删除黑白名单响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.4.4 查询黑白名单列表

功能介绍

查询黑白名单列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/black-white-lists

表 4-207 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-208 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用**查询防火墙实例接口**，type为0的为互联网边界防护对象id。

参数	是否必选	参数类型	描述
list_type	是	Integer	黑白名单类型4：黑名单，5：白名单 枚举值： ● **4** ● **5**
address_type	否	Integer	IP地址类型0：ipv4,1:ipv6
address	否	String	ip地址
port	否	String	端口
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-209** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-210 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询黑白名单返回值

表 4-211 data

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	查询的总条数
records	Array of **records** objects	黑白名单记录

表 4-212 records

参数	参数类型	描述
list_id	String	黑白名单列表id
direction	Integer	黑白地址方向0：源地址1：目的地址
address_type	Integer	IP地址类型0：ipv4,1:ipv6
address	String	ip地址
protocol	Integer	协议类型:TCP为6,UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
port	String	端口
description	String	描述

状态码： 400

表 4-213 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**

参数	参数类型	描述
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429防护对象id为cfebd347-b655-4b84-b938-3c54317599b2第一页的白名单，查询条数为5条

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/black-white-lists?object_id=cfebd347-
b655-4b84-b938-3c54317599b2&limit=10&offset=0&list_type=5
```

响应示例

状态码： 200

查询黑白名单列表返回值

```
{
  "data" : {
    "limit" : 10,
    "offset" : 0,
    "records" : [ {
      "address" : "1.1.1.1",
      "address_type" : 0,
      "description" : "",
      "direction" : 0,
      "list_id" : "1310d401-daf5-44f2-8276-f79e1643984d",
      "protocol" : 6
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListBlackWhiteListsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListBlackWhiteListsRequest request = new ListBlackWhiteListsRequest();
        request.withObjectId("<object_id>");
        request.withListType(ListBlackWhiteListsRequest.ListTypeEnum.NUMBER_<list_type>);
        request.withAddressType(<address_type>);
        request.withAddress("<address>");
        request.withPort("<port>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListBlackWhiteListsResponse response = client.listBlackWhiteLists(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security 
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment 
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this 
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)
    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListBlackWhiteListsRequest()
        request.object_id = "<object_id>"
        request.list_type = <list_type>
        request.address_type = <address_type>
        request.address = "<address>"
        request.port = "<port>"
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_black_white_lists(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBlackWhiteListsRequest{}
    request.ObjectId = "<object_id>"
    request.ListType = model.GetListBlackWhiteListsRequestListTypeEnum().<LIST_TYPE>
    addressTypeRequest:= int32(<address_type>)
    request.AddressType = &addressTypeRequest
    addressRequest:= "<address>"
    request.Address = &addressRequest
    portRequest:= "<port>"
    request.Port = &portRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.ListBlackWhiteLists(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询黑白名单列表返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5 地址组管理

4.5.1 添加地址组

功能介绍

添加地址组

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/address-set

表 4-214 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-215 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-216 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-217 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。
name	是	String	地址组名称
description	否	String	地址组描述

参数	是否必选	参数类型	描述
address_type	否	Integer	地址类型0 ipv4,1 ipv6 枚举值： ● **0** ● **1**

响应参数

状态码： 200

表 4-218 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	添加地址组返回数据

表 4-219 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-220 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

添加项目id为14181c1245cf4fd786824efe1e2b9388，防护对象 id为1530de8a-522d-4771-9067-9fa4e2f53b48，名称为ceshi的ipV4的地址组。

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/address-set

{
  "object_id" : "1530de8a-522d-4771-9067-9fa4e2f53b48",
  "name" : "ceshi",
  "description" : "",
  "address_type" : 0
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "9dffcd62-23bf-4456-83fa-80fa0fee47db"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00900020",
  "error_msg" : "地址组超过最大数量限制"
}
```

SDK 代码示例

SDK代码示例如下。

Java

添加项目id为14181c1245cf4fd786824efe1e2b9388，防护对象 id为1530de8a-522d-4771-9067-9fa4e2f53b48，名称为ceshi的ipV4的地址组。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class AddAddressSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);
        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddAddressSetRequest request = new AddAddressSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddAddressSetDto body = new AddAddressSetDto();
        body.withAddressType(AddAddressSetDto.AddressTypeEnum.NUMBER_0);
        body.withDescription("");
        body.withName("ceshi");
        body.withObjectId("1530de8a-522d-4771-9067-9fa4e2f53b48");
        request.withBody(body);
        try {
            AddAddressSetResponse response = client.addAddressSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

添加项目id为14181c1245cf4fd786824efe1e2b9388，防护对象 id为1530de8a-522d-4771-9067-9fa4e2f53b48，名称为ceshi的ipV4的地址组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddAddressSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = AddAddressSetDto(
            address_type=0,
            description="",
            name="ceshi",
            object_id="1530de8a-522d-4771-9067-9fa4e2f53b48"
        )
        response = client.add_address_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

添加项目id为14181c1245cf4fd786824efe1e2b9388，防护对象 id为1530de8a-522d-4771-9067-9fa4e2f53b48，名称为ceshi的ipV4的地址组。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddAddressSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    addressTypeAddAddressSetDto:= model.GetAddAddressSetDtoAddressTypeEnum().E_0
    descriptionAddAddressSetDto:= ""
    request.Body = &model.AddAddressSetDto{
        AddressType: &addressTypeAddAddressSetDto,
        Description: &descriptionAddAddressSetDto,
        Name: "ceshi",
        ObjectId: "1530de8a-522d-4771-9067-9fa4e2f53b48",
    }
    response, err := client.AddAddressSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5.2 添加地址组成员

功能介绍

添加地址组成员

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/address-items

表 4-221 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-222 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-223 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-224 请求 Body 参数

参数	是否必选	参数类型	描述
set_id	否	String	地址组id
address_items	否	Array of **address_items** objects	地址组成员信息

表 4-225 address_items

参数	是否必选	参数类型	描述
name	是	String	地址名称
address_type	否	Integer	地址类型0 ipv4,1 ipv6
address	否	String	地址组ip信息
description	否	String	地址组成员描述

响应参数

状态码： 200

表 **4-226** 响应 Body 参数

参数	参数类型	描述
data	**AddressItems** object	添加地址组成员返回数据

表 **4-227** AddressItems

参数	参数类型	描述
items	Array of **IdObject** objects	地址组成员id列表
covered_ip	Array of **CoveredIPVO** objects	覆盖ip列表

表 **4-228** IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

表 **4-229** CoveredIPVO

参数	参数类型	描述
ip	String	ip地址
covered_Ip	String	覆盖ip地址。

状态码： 400

表 **4-230** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**

参数	参数类型	描述
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的set_id为8773c082-2a6c-4529-939a-edc28ef1a67c添加ip地址为2.2.2.2，名称为ceshi的地址组成员

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-items

{
  "set_id" : "8773c082-2a6c-4529-939a-edc28ef1a67c",
  "address_items" : [ {
    "description" : "",
    "name" : "ceshi",
    "address" : "2.2.2.2"
  } ]
}
```

响应示例

状态码： 200

添加地址组成员返回值

```
{
  "data" : {
    "covered_ip" : [ ],
    "items" : [ {
      "id" : "65cb47fc-e666-4af4-8c2c-1fbd2f4b1eae"
    } ]
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200001",
  "error_msg" : "空参数错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的set_id为8773c082-2a6c-4529-939a-edc28ef1a67c添加ip地址为2.2.2.2，名称为ceshi的地址组成员

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddAddressItemSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddAddressItemRequest request = new AddAddressItemRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddAddressItemsInfoDto body = new AddAddressItemsInfoDto();
        List<AddAddressItemsInfoDtoAddressItems> listbodyAddressItems = new ArrayList<>();
        listbodyAddressItems.add(
            new AddAddressItemsInfoDtoAddressItems()
                .withName("ceshi")
                .withAddress("2.2.2.2")
                .withDescription("")
        );
        body.withAddressItems(listbodyAddressItems);
        body.withSetId("8773c082-2a6c-4529-939a-edc28ef1a67c");
        request.withBody(body);
        try {
            AddAddressItemResponse response = client.addAddressItem(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的set_id为8773c082-2a6c-4529-939a-edc28ef1a67c添加ip地址为2.2.2.2，名称为ceshi的地址组成员

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddAddressItemRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listAddressItemsbody = [
            AddAddressItemsInfoDtoAddressItems(
                name="ceshi",
                address="2.2.2.2",
                description=""
            )
        ]
        request.body = AddAddressItemsInfoDto(
            address_items=listAddressItemsbody,
            set_id="8773c082-2a6c-4529-939a-edc28ef1a67c"
        )
        response = client.add_address_item(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的set_id为8773c082-2a6c-4529-939a-edc28ef1a67c添加ip地址为2.2.2.2，名称为ceshi的地址组成员

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddAddressItemRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    addressAddressItems:= "2.2.2.2"
    descriptionAddressItems:= ""
    var listAddressItemsbody = []model.AddAddressItemsInfoDtoAddressItems{
        {
            Name: "ceshi",
            Address: &addressAddressItems,
            Description: &descriptionAddressItems,
        },
    }
    setIdAddAddressItemsInfoDto:= "8773c082-2a6c-4529-939a-edc28ef1a67c"
    request.Body = &model.AddAddressItemsInfoDto{
        AddressItems: &listAddressItemsbody,
        SetId: &setIdAddAddressItemsInfoDto,
    }
    response, err := client.AddAddressItem(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加地址组成员返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5.3 删除地址组

功能介绍

删除地址组

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/address-sets/{set_id}

表 4-231 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	地址组id

表 4-232 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-233 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-234 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	删除地址组返回数据

表 4-235 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-236 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-sets/
cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16",
    "name" : "test"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200004",
  "error_msg" : "所删除资源被引用，删除失败"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteAddressSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAddressSetRequest request = new DeleteAddressSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteAddressSetResponse response = client.deleteAddressSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAddressSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_address_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAddressSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.DeleteAddressSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.5.4 删除地址组成员

功能介绍

删除地址组成员

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/address-items/{item_id}

表 4-237 路径参数

参数	是否必选	参数类型	描述
item_id	是	String	地址组成员id
project_id	是	String	租户项目id

表 4-238 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-239 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-240 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	删除地址组成员id数据

表 4-241 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-242 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组成员id为65cb47fc-e666-4af4-8c2c-1fbd2f4b1eae的地址组成员

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-items/65cb47fc-
e666-4af4-8c2c-1fbd2f4b1eae
```

响应示例

状态码： 200

删除地址组成员返回值

```
{
  "data" : {
    "id" : "65cb47fc-e666-4af4-8c2c-1fbd2f4b1eae",
    "name" : "test"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```java
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteAddressItemSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteAddressItemRequest request = new DeleteAddressItemRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteAddressItemResponse response = client.deleteAddressItem(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteAddressItemRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_address_item(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
```

```
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteAddressItemRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.DeleteAddressItem(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	删除地址组成员返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5.5 批量删除地址组成员

功能介绍

批量删除地址组成员

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/address-items

表 4-243 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-244 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-245 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-246 请求 Body 参数

参数	是否必选	参数类型	描述
set_id	是	String	地址组id
address_item_ids	是	Array of strings	地址组成员id列表

响应参数

状态码： 200

表 4-247 响应 Body 参数

参数	参数类型	描述
data	Array of strings	批量删除地址组成员id列表

请求示例

删除项目9d80d070b6d44942af73c9c3d38e0429地址组id为e4884376-7efb-40e7-b98b-13668d6f8b85下的地址组成员id为d072ad2e-033c-40a9-b0b5-751f9c2943a6

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-items?
fw_instance_id=7a004e79-0b8b-4679-ab20-267f3946e8ba&enterprise_project_id=default

{
  "set_id" : "e4884376-7efb-40e7-b98b-13668d6f8b85",
  "address_item_ids" : [ "d072ad2e-033c-40a9-b0b5-751f9c2943a6" ]
}
```

响应示例

状态码： 200

批量删除地址组成员返回值

```
{
  "data" : [ "d072ad2e-033c-40a9-b0b5-751f9c2943a6" ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除项目9d80d070b6d44942af73c9c3d38e0429地址组id为e4884376-7efb-40e7-b98b-13668d6f8b85下的地址组成员id为d072ad2e-033c-40a9-b0b5-751f9c2943a6

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteAddressItemsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteAddressItemsRequest request = new BatchDeleteAddressItemsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        DeleteAddressItemsInfoDto body = new DeleteAddressItemsInfoDto();
        List<String> listbodyAddressItemIds = new ArrayList<>();
        listbodyAddressItemIds.add("d072ad2e-033c-40a9-b0b5-751f9c2943a6");
        body.withAddressItemIds(listbodyAddressItemIds);
        body.withSetId("e4884376-7efb-40e7-b98b-13668d6f8b85");
        request.withBody(body);
        try {
            BatchDeleteAddressItemsResponse response = client.batchDeleteAddressItems(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除项目9d80d070b6d44942af73c9c3d38e0429地址组id为e4884376-7efb-40e7-b98b-13668d6f8b85下的地址组成员id为d072ad2e-033c-40a9-b0b5-751f9c2943a6

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteAddressItemsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listAddressItemIdsbody = [
            "d072ad2e-033c-40a9-b0b5-751f9c2943a6"
        ]
        request.body = DeleteAddressItemsInfoDto(
            address_item_ids=listAddressItemIdsbody,
            set_id="e4884376-7efb-40e7-b98b-13668d6f8b85"
        )
        response = client.batch_delete_address_items(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除项目9d80d070b6d44942af73c9c3d38e0429地址组id为e4884376-7efb-40e7-b98b-13668d6f8b85下的地址组成员id为d072ad2e-033c-40a9-b0b5-751f9c2943a6

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteAddressItemsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    var listAddressItemIdsbody = []string{
        "d072ad2e-033c-40a9-b0b5-751f9c2943a6",
    }
    request.Body = &model.DeleteAddressItemsInfoDto{
        AddressItemIds: listAddressItemIdsbody,
        SetId: "e4884376-7efb-40e7-b98b-13668d6f8b85",
    }
    response, err := client.BatchDeleteAddressItems(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
```

```
  }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	批量删除地址组成员返回值

错误码

请参见**错误码**。

4.5.6 更新地址组信息

功能介绍

更新地址组信息

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/address-sets/{set_id}

表 4-248 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	地址组id

表 4-249 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-250 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-251 请求 Body 参数

参数	是否必选	参数类型	描述
name	否	String	地址组名称
description	否	String	地址组描述

响应参数

状态码： 200

表 4-252 响应 Body 参数

参数	参数类型	描述
data	**UpdateAddressSetResponseData** object	更新地址组返回数据

表 **4-253** UpdateAddressSetResponseData

参数	参数类型	描述
id	String	Id

状态码： 400

表 **4-254** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组的名称改为ABCD。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-sets/
cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16

{
  "name" : "ABCD",
  "description" : ""
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组的名称改为ABCD。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateAddressSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateAddressSetRequest request = new UpdateAddressSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        UpdateAddressSetDto body = new UpdateAddressSetDto();
        body.withDescription("");
        body.withName("ABCD");
        request.withBody(body);
        try {
            UpdateAddressSetResponse response = client.updateAddressSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组的名称改为ABCD。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAddressSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = UpdateAddressSetDto(
            description="",
            name="ABCD"
        )
        response = client.update_address_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组的名称改为ABCD。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
```

```
  auth := basic.NewCredentialsBuilder().
      WithAk(ak).
      WithSk(sk).
      Build()

  client := cfw.NewCfwClient(
      cfw.CfwClientBuilder().
          WithRegion(region.ValueOf("<YOUR REGION>")).
          WithCredential(auth).
          Build())

  request := &model.UpdateAddressSetRequest{}
  enterpriseProjectIdRequest:= "<enterprise_project_id>"
  request.EnterpriseProjectId = &enterpriseProjectIdRequest
  fwInstanceIdRequest:= "<fw_instance_id>"
  request.FwInstanceId = &fwInstanceIdRequest
  descriptionUpdateAddressSetDto:= ""
  nameUpdateAddressSetDto:= "ABCD"
  request.Body = &model.UpdateAddressSetDto{
      Description: &descriptionUpdateAddressSetDto,
      Name: &nameUpdateAddressSetDto,
  }
  response, err := client.UpdateAddressSet(request)
  if err == nil {
      fmt.Printf("%+v\n", response)
  } else {
      fmt.Println(err)
  }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5.7 查询地址组列表

功能介绍

查询地址组列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/address-sets

表 4-255 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-256 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用**查询防火墙实例接口**，type为0的为互联网边界防护对象id。
key_word	否	String	关键字
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
address	否	String	ip地址
address_type	否	Integer	地址类型0 ipv4,1 ipv6 枚举值： ● **0** ● **1**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
query_address_set_type	否	Integer	查询地址组类型，0表示自定义地址组，1表示预定义地址组
address_set_type	否	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组

请求参数

表 **4-257** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-258** 响应 Body 参数

参数	参数类型	描述
data	data object	查询地址组列表返回数据

表 **4-259** data

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024

参数	参数类型	描述
total	Integer	总数
records	Array of **records** objects	地址组列表

表 **4-260** records

参数	参数类型	描述
set_id	String	地址组id
ref_count	Integer	引用次数
description	String	描述信息
name	String	地址组名称
address_type	Integer	地址类型0 ipv4,1 ipv6
object_id	String	互联网边界防护对象id，可通过调用**查询防火墙实例接口**，type为0的为互联网边界防护对象id。
address_set_type	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组

状态码： 400

表 **4-261** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为5c69cf330cda42369cbd726ee1bc5e76，防护对象id为8a41d6a5-f215-428a-a76c-dc923b5d599a的第一页的ip地址组信息

```
https://{Endpoint}/v1/5c69cf330cda42369cbd726ee1bc5e76/address-sets?object_id=8a41d6a5-f215-428a-
a76c-dc923b5d599a&limit=10&offset=0
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "limit" : 10,
    "offset" : 0,
    "records" : [ {
      "address_set_type" : 0,
      "object_id" : "cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16",
      "address_type" : 0,
      "description" : "",
      "name" : "test",
      "ref_count" : 0,
      "set_id" : "50da1eff-e58d-4380-b899-a78f94137d3b"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.5.8 查询地址组详细信息

功能介绍

查询地址组详细

调用方法

请参见如何调用API。

URI

GET /v1/{project_id}/address-sets/{set_id}

表 4-262 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	地址组id

表 4-263 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
query_address_set_type	否	Integer	查询地址组类型，0表示自定义地址组，1表示预定义地址组

请求参数

表 4-264 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-265** 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询地址组详情数据

表 **4-266** data

参数	参数类型	描述
id	String	地址组id
name	String	地址组名称
description	String	地址组描述
address_set_type	Integer	地址组类型，0表示自定义地址组，1表示WAF回源IP地址组，2表示DDoS回源IP地址组，3表示NAT64转换地址组
address_type	Integer	地址类型0 ipv4,1 ipv6 枚举值： ● **0** ● **1**

状态码： 400

表 **4-267** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，地址组id为cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16的地址组的详情

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-sets/
cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "address_set_type" : 0,
    "address_type" : 0,
    "description" : "",
    "id" : "cf18f0b1-0ce7-4eb8-83b6-4b33c8448e16",
    "name" : "ABC"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListAddressSetDetailSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAddressSetDetailRequest request = new ListAddressSetDetailRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withQueryAddressSetType(<query_address_set_type>);
        try {
            ListAddressSetDetailResponse response = client.listAddressSetDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAddressSetDetailRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.query_address_set_type = <query_address_set_type>
        response = client.list_address_set_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAddressSetDetailRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    queryAddressSetTypeRequest:= int32(<query_address_set_type>)
    request.QueryAddressSetType = &queryAddressSetTypeRequest
    response, err := client.ListAddressSetDetail(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.5.9 查询地址组成员

功能介绍

查询地址组成员

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/address-items

表 4-268 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-269 Query 参数

参数	是否必选	参数类型	描述
set_id	是	String	地址组id
key_word	否	String	关键字
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
address	否	String	ip地址
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
query_address_set_type	否	Integer	查询地址组类型，0表示自定义地址组，1表示预定义地址组

请求参数

表 **4-270** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-271** 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询地址组成员返回数据

表 **4-272** data

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	总数
set_id	String	地址组id
records	Array of **records** objects	成员信息

表 **4-273** records

参数	参数类型	描述
item_id	String	地址组成员id
name	String	地址组成员name
description	String	描述
address_type	Integer	地址组类型，0 ipv4,1 ipv6

参数	参数类型	描述
address	String	地址组

状态码： 400

表 **4-274** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429的项目的地址组id为8773c082-2a6c-4529-939a-edc28ef1a67c的地址组成员信息

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/address-items?
set_id=8773c082-2a6c-4529-939a-edc28ef1a67c&limit=10&offset=0
```

响应示例

状态码： 200

查询地址组成员返回值

```
{
  "data" : {
    "limit" : 10,
    "offset" : 0,
    "records" : [ {
      "address" : "1.1.1.1",
      "address_type" : 0,
      "description" : "",
      "item_id" : "294fab71-34bf-4858-a380-8f7530e1c816"
    } ],
    "set_id" : "8773c082-2a6c-4529-939a-edc28ef1a67c",
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListAddressItemsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAddressItemsRequest request = new ListAddressItemsRequest();
        request.withSetId("<set_id>");
        request.withKeyWord("<key_word>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withAddress("<address>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withQueryAddressSetType(<query_address_set_type>);
        try {
            ListAddressItemsResponse response = client.listAddressItems(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAddressItemsRequest()
        request.set_id = "<set_id>"
        request.key_word = "<key_word>"
        request.limit = <limit>
        request.offset = <offset>
        request.address = "<address>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.query_address_set_type = <query_address_set_type>
        response = client.list_address_items(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAddressItemsRequest{}
    request.SetId = "<set_id>"
    keyWordRequest:= "<key_word>"
    request.KeyWord = &keyWordRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    addressRequest:= "<address>"
    request.Address = &addressRequest
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    queryAddressSetTypeRequest:= int32(<query_address_set_type>)
    request.QueryAddressSetType = &queryAddressSetTypeRequest
    response, err := client.ListAddressItems(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询地址组成员返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6 服务组管理

4.6.1 新建服务组

功能介绍

创建服务组

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/service-set

表 **4-275** 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 **4-276** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-277** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-278 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。
name	是	String	服务组名称 最小长度：**1** 最大长度：**255**
description	否	String	服务组描述信息 最小长度：**1** 最大长度：**255**

响应参数

状态码： 200

表 4-279 响应 Body 参数

参数	参数类型	描述
data	**data** object	object

表 4-280 data

参数	参数类型	描述
id	String	防护对象id

状态码： 400

表 4-281 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

添加项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象为cfebd347-b655-4b84-b938-3c54317599b2，名称为ceshi的服务组。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-set

{
  "object_id" : "cfebd347-b655-4b84-b938-3c54317599b2",
  "name" : "ceshi",
  "description" : ""
}
```

响应示例

状态码： 200

新建服务组返回值

```
{
  "data" : {
    "id" : "221cfdca-3abf-4c30-ab0d-516a03c70866"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200024",
  "error_msg" : "超出最大数量限制"
}
```

SDK 代码示例

SDK代码示例如下。

Java

添加项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象为cfebd347-b655-4b84-b938-3c54317599b2，名称为ceshi的服务组。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class AddServiceSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddServiceSetRequest request = new AddServiceSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddServiceSetUsingPOSTRequestBody body = new AddServiceSetUsingPOSTRequestBody();
        body.withDescription("");
        body.withName("ceshi");
        body.withObjectId("cfebd347-b655-4b84-b938-3c54317599b2");
        request.withBody(body);
        try {
            AddServiceSetResponse response = client.addServiceSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

添加项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象为cfebd347-b655-4b84-b938-3c54317599b2，名称为ceshi的服务组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddServiceSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = AddServiceSetUsingPOSTRequestBody(
            description="",
            name="ceshi",
            object_id="cfebd347-b655-4b84-b938-3c54317599b2"
        )
        response = client.add_service_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

添加项目id为9d80d070b6d44942af73c9c3d38e0429，防护对象为cfebd347-b655-4b84-b938-3c54317599b2，名称为ceshi的服务组。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddServiceSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    descriptionAddServiceSetUsingPostRequestBody:= ""
    request.Body = &model.AddServiceSetUsingPostRequestBody{
        Description: &descriptionAddServiceSetUsingPostRequestBody,
        Name: "ceshi",
        ObjectId: "cfebd347-b655-4b84-b938-3c54317599b2",
    }
    response, err := client.AddServiceSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	新建服务组返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.2 新建服务成员

功能介绍

批量添加服务组成员

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/service-items

表 4-282 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 **4-283** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-284** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-285** 请求 Body 参数

参数	是否必选	参数类型	描述
set_id	是	String	服务组id
service_items	是	Array of **service_items** objects	添加服务组成员

表 **4-286** service_items

参数	是否必选	参数类型	描述
protocol	是	Integer	协议类型:TCP为6，UDP为17，ICMP为1，ICMPV6为58，ANY为-1，手动类型不为空，自动类型为空
source_port	是	String	源端口
dest_port	是	String	目的端口

参数	是否必选	参数类型	描述
description	否	String	服务成员描述

响应参数

状态码： 200

表 4-287 响应 Body 参数

参数	参数类型	描述
data	**ServiceItemIds** object	新建服务组成员返回数据

表 4-288 ServiceItemIds

参数	参数类型	描述
items	Array of **items** objects	服务组成员id列表

表 4-289 items

参数	参数类型	描述
id	String	id值

状态码： 400

表 4-290 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目添加名称为ceshi的服务组成员，描述为添加服务组成员

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-items

{
  "set_id" : "7cdebed3-af07-494e-a3c2-b88bb8d58b57",
  "service_items" : [ {
    "description" : "添加服务组成员",
    "name" : "ceshi",
    "dest_port" : "1",
    "source_port" : "1",
    "protocol" : 6
  } ]
}
```

响应示例

状态码： 200

添加服务组成员返回值

```
{
  "data" : {
    "items" : [ {
      "id" : "cc41c4af-86e8-4ed2-80ad-87d399aeaed0"
    } ]
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200001",
  "error_msg" : "空参数错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目添加名称为ceshi的服务组成员，描述为添加服务组成员

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddServiceItemsSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddServiceItemsRequest request = new AddServiceItemsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddServiceItemsUsingPOSTRequestBody body = new AddServiceItemsUsingPOSTRequestBody();
        List<AddServiceItemsUsingPOSTRequestBodyServiceItems> listbodyServiceItems = new ArrayList<>();
        listbodyServiceItems.add(
            new AddServiceItemsUsingPOSTRequestBodyServiceItems()
                .withProtocol(6)
                .withSourcePort("1")
                .withDestPort("1")
                .withDescription("添加服务组成员")
        );
        body.withServiceItems(listbodyServiceItems);
        body.withSetId("7cdebed3-af07-494e-a3c2-b88bb8d58b57");
        request.withBody(body);
        try {
            AddServiceItemsResponse response = client.addServiceItems(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目添加名称为ceshi的服务组成员，描述为添加服务组成员

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddServiceItemsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listServiceItemsbody = [
            AddServiceItemsUsingPOSTRequestBodyServiceItems(
                protocol=6,
                source_port="1",
                dest_port="1",
                description="添加服务组成员"
            )
        ]
        request.body = AddServiceItemsUsingPOSTRequestBody(
            service_items=listServiceItemsbody,
            set_id="7cdebed3-af07-494e-a3c2-b88bb8d58b57"
        )
        response = client.add_service_items(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目添加名称为ceshi的服务组成员，描述为添加服务组成员

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
    request := &model.AddServiceItemsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    descriptionServiceItems:= "添加服务组成员"
    var listServiceItemsbody = []model.AddServiceItemsUsingPostRequestBodyServiceItems{
        {
            Protocol: int32(6),
            SourcePort: "1",
            DestPort: "1",
            Description: &descriptionServiceItems,
        },
    }
    request.Body = &model.AddServiceItemsUsingPostRequestBody{
        ServiceItems: listServiceItemsbody,
        SetId: "7cdebed3-af07-494e-a3c2-b88bb8d58b57",
    }
    response, err := client.AddServiceItems(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加服务组成员返回值
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.3 删除服务组

功能介绍

删除服务组

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/service-sets/{set_id}

表 4-291 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	服务集合id

表 4-292 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-293 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-294 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	删除服务组返回数据

表 4-295 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-296 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429，服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的服务组

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-sets/221cfdca-3abf-4c30-ab0d-516a03c70866
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "221cfdca-3abf-4c30-ab0d-516a03c70866",
    "name" : "test"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200004",
  "error_msg" : "所删除资源被引用，删除失败"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteServiceSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteServiceSetRequest request = new DeleteServiceSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteServiceSetResponse response = client.deleteServiceSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteServiceSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_service_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteServiceSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.DeleteServiceSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.4 删除服务成员

功能介绍

删除服务组成员

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/service-items/{item_id}

表 4-297 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

参数	是否必选	参数类型	描述
item_id	是	String	服务组成员id

表 4-298 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-299 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-300 响应 Body 参数

参数	参数类型	描述
data	IdObject object	删除服务组成员数据

表 4-301 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

状态码： 400

表 4-302 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429，服务组成员id为6b37ed55-1e21-46a5-a7dc-a59ef418d359的服务组成员

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-items/6b37ed55-1e21-46a5-a7dc-a59ef418d359
```

响应示例

状态码： 200

删除服务组成员返回信息

```
{
  "data" : {
    "id" : "26f562c4-fe11-43d0-9654-f54298d5b12e"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteServiceItemSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteServiceItemRequest request = new DeleteServiceItemRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteServiceItemResponse response = client.deleteServiceItem(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteServiceItemRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_service_item(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteServiceItemRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.DeleteServiceItem(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	删除服务组成员返回信息
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.5 批量删除服务组成员信息

功能介绍

批量删除服务组成员信息

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/service-items

表 4-303 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-304 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-305 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-306 请求 Body 参数

参数	是否必选	参数类型	描述
set_id	是	String	服务组id
service_item_ids	是	Array of strings	服务组成员id列表

响应参数

状态码： 200

表 4-307 响应 Body 参数

参数	参数类型	描述
data	Array of strings	批量删除服务组成员id列表

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为688faf62-20fc-4ca6-b9f9-6fbc518df5ae下的服务组成员f837f7ae-22c9-449d-a99c-4be24533e243

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-items?
fw_instance_id=7a004e79-0b8b-4679-ab20-267f3946e8ba&enterprise_project_id=default

{
  "set_id" : "688faf62-20fc-4ca6-b9f9-6fbc518df5ae",
  "service_item_ids" : [ "f837f7ae-22c9-449d-a99c-4be24533e243" ]
}
```

响应示例

状态码： 200

批量删除服务组成员返回值

```
{
  "data" : [ "f837f7ae-22c9-449d-a99c-4be24533e243" ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为688faf62-20fc-4ca6-b9f9-6fbc518df5ae下的服务组成员f837f7ae-22c9-449d-a99c-4be24533e243

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteServiceItemsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
```

```
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteServiceItemsRequest request = new BatchDeleteServiceItemsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        DeleteServiceItemDto body = new DeleteServiceItemDto();
        List<String> listbodyServiceItemIds = new ArrayList<>();
        listbodyServiceItemIds.add("f837f7ae-22c9-449d-a99c-4be24533e243");
        body.withServiceItemIds(listbodyServiceItemIds);
        body.withSetId("688faf62-20fc-4ca6-b9f9-6fbc518df5ae");
        request.withBody(body);
        try {
            BatchDeleteServiceItemsResponse response = client.batchDeleteServiceItems(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为688faf62-20fc-4ca6-b9f9-6fbc518df5ae下的服务组成员f837f7ae-22c9-449d-a99c-4be24533e243

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteServiceItemsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listServiceItemIdsbody = [
            "f837f7ae-22c9-449d-a99c-4be24533e243"
        ]
        request.body = DeleteServiceItemDto(
            service_item_ids=listServiceItemIdsbody,
            set_id="688faf62-20fc-4ca6-b9f9-6fbc518df5ae"
        )
        response = client.batch_delete_service_items(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为688faf62-20fc-4ca6-b9f9-6fbc518df5ae下的服务组成员f837f7ae-22c9-449d-a99c-4be24533e243

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteServiceItemsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    var listServiceItemIdsbody = []string{
        "f837f7ae-22c9-449d-a99c-4be24533e243",
    }
    request.Body = &model.DeleteServiceItemDto{
        ServiceItemIds: listServiceItemIdsbody,
        SetId: "688faf62-20fc-4ca6-b9f9-6fbc518df5ae",
    }
    response, err := client.BatchDeleteServiceItems(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	批量删除服务组成员返回值

错误码

请参见**错误码**。

4.6.6 修改服务组

功能介绍

更新服务组

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/service-sets/{set_id}

表 4-308 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	服务组id

表 4-309 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-310** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-311** 请求 Body 参数

参数	是否必选	参数类型	描述
name	否	String	服务组名称 最小长度：**1** 最大长度：**255**
description	否	String	服务组描述信息 最小长度：**1** 最大长度：**255**

响应参数

状态码： 200

表 **4-312** 响应 Body 参数

参数	参数类型	描述
data	**data** object	object

表 **4-313** data

参数	参数类型	描述
id	String	防护对象id

状态码： 400

表 **4-314** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

更新项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的名称改为ceshi2，描述改为描述

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-sets/221cfdca-3abf-4c30-ab0d-516a03c70866

{
  "name" : "ceshi2",
  "description" : "描述"
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "221cfdca-3abf-4c30-ab0d-516a03c70866"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的名称改为ceshi2，描述改为描述

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateServiceSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateServiceSetRequest request = new UpdateServiceSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        UpdateServiceSetUsingPUTRequestBody body = new UpdateServiceSetUsingPUTRequestBody();
        body.withDescription("描述");
        body.withName("ceshi2");
        request.withBody(body);
        try {
            UpdateServiceSetResponse response = client.updateServiceSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的名称改为ceshi2，描述改为描述

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateServiceSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = UpdateServiceSetUsingPUTRequestBody(
            description="描述",
            name="ceshi2"
        )
        response = client.update_service_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为9d80d070b6d44942af73c9c3d38e0429的服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的名称改为ceshi2，描述改为描述

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateServiceSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    descriptionUpdateServiceSetUsingPutRequestBody:= "描述"
    nameUpdateServiceSetUsingPutRequestBody:= "ceshi2"
    request.Body = &model.UpdateServiceSetUsingPutRequestBody{
        Description: &descriptionUpdateServiceSetUsingPutRequestBody,
        Name: &nameUpdateServiceSetUsingPutRequestBody,
    }
    response, err := client.UpdateServiceSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.7 获取服务组列表

功能介绍

获取服务组列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/service-sets

表 4-315 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-316 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用**查询防火墙实例接口**，type为0的为互联网边界防护对象id。
key_word	否	String	关键字
limit	是	Integer	每页查询个数，范围为1-1024 最小值：**1** 最大值：**1024**
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0 最小值：**0**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

参数	是否必选	参数类型	描述
query_service_set_type	否	Integer	查询服务组类型，0表示自定义服务组，1表示预定义服务组

请求参数

表 4-317 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-318 响应 Body 参数

参数	参数类型	描述
data	**ServiceSetRecords** object	查询服务组列表返回值

表 4-319 ServiceSetRecords

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	查询总数
records	Array of **ServiceSet** objects	服务组列表

表 **4-320** ServiceSet

参数	参数类型	描述
set_id	String	服务组id
name	String	名称
description	String	描述
service_set_type	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库
ref_count	Integer	引用次数
project_id	String	项目id
protocols	Array of integers	协议类型列表

状态码： 400

表 **4-321** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为2349ba469daf4b7daf268bb0261d18b0的项目的防护对象id为a37bb4eb-c49e-4e88-bf77-944a75b0ce8a的第一页服务组列表信息

```
https://{Endpoint}/v1/2349ba469daf4b7daf268bb0261d18b0/service-sets?object_id=a37bb4eb-c49e-4e88-bf77-944a75b0ce8a&limit=10&offset=0
```

响应示例

状态码： 200

查询服务组信息响应

```
{
  "data" : {
    "limit" : 50,
    "offset" : 0,
    "records" : [ {
      "name" : "test",
      "project_id" : "2349ba469daf4b7daf268bb0261d18b0",
      "protocols" : [ 6 ],
      "ref_count" : 2,
      "service_set_type" : 0,
      "set_id" : "6f475bad-5d33-45d1-98f8-c79f2f308d5a"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListServiceSetsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListServiceSetsRequest request = new ListServiceSetsRequest();
        request.withObjectId("<object_id>");
        request.withKeyWord("<key_word>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withQueryServiceSetType(<query_service_set_type>);
        try {
            ListServiceSetsResponse response = client.listServiceSets(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListServiceSetsRequest()
        request.object_id = "<object_id>"
        request.key_word = "<key_word>"
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.query_service_set_type = <query_service_set_type>
        response = client.list_service_sets(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListServiceSetsRequest{}
    request.ObjectId = "<object_id>"
    keyWordRequest:= "<key_word>"
    request.KeyWord = &keyWordRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    queryServiceSetTypeRequest:= int32(<query_service_set_type>)
    request.QueryServiceSetType = &queryServiceSetTypeRequest
    response, err := client.ListServiceSets(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询服务组信息响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.8 查询服务组详情

功能介绍

查询服务组细节

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/service-sets/{set_id}

表 4-322 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	服务组id

表 4-323 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
query_service_set_type	否	Integer	查询服务组类型，0表示自定义服务组，1表示预定义服务组

请求参数

表 **4-324** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-325** 响应 Body 参数

参数	参数类型	描述
data	**ServiceSetDetailResponseDto** object	服务组详情数据

表 **4-326** ServiceSetDetailResponseDto

参数	参数类型	描述
id	String	服务组id
name	String	服务组名称 最小长度：**1** 最大长度：**255**
description	String	服务组描述信息 最小长度：**1** 最大长度：**255**
service_set_type	Integer	服务组类型，0表示自定义服务组，1表示常用WEB服务，2表示常用远程登录和PING，3表示常用数据库

状态码： 400

表 4-327 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，服务组id为221cfdca-3abf-4c30-ab0d-516a03c70866的服务组的细节

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-sets/221cfdca-3abf-4c30-ab0d-516a03c70866
```

响应示例

状态码： 200

查询服务组成员详情响应

```
{
  "data" : {
    "service_set_type" : 0,
    "id" : "221cfdca-3abf-4c30-ab0d-516a03c70866",
    "name" : "ceshi2"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;
```

```
public class ListServiceSetDetailSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListServiceSetDetailRequest request = new ListServiceSetDetailRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withQueryServiceSetType(<query_service_set_type>);
        try {
            ListServiceSetDetailResponse response = client.listServiceSetDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListServiceSetDetailRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.query_service_set_type = <query_service_set_type>
        response = client.list_service_set_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListServiceSetDetailRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    queryServiceSetTypeRequest:= int32(<query_service_set_type>)
    request.QueryServiceSetType = &queryServiceSetTypeRequest
    response, err := client.ListServiceSetDetail(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询服务组成员详情响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.6.9 查询服务成员列表

功能介绍

查询服务组成员列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/service-items

表 4-328 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-329 Query 参数

参数	是否必选	参数类型	描述
set_id	是	String	服务组id
key_word	否	String	查询字段
limit	是	Integer	每页显示个数，范围为1-1024

参数	是否必选	参数类型	描述
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
query_service_set_type	否	Integer	查询服务组类型，0表示自定义服务组，1表示预定义服务组。仅当set_id为预定义服务组id时生效

请求参数

表 **4-330** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-331** 响应 Body 参数

参数	参数类型	描述
data	**data** object	服务组成员列表

表 **4-332** data

参数	参数类型	描述
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
limit	Integer	每页显示个数，范围为1-1024
total	Integer	记录的总数
set_id	String	服务组id
records	Array of **records** objects	记录

表 **4-333** records

参数	参数类型	描述
item_id	String	服务成员id
protocol	Integer	协议类型:TCP为6,UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
source_port	String	源端口
dest_port	String	目的端口
description	String	服务成员描述

状态码： 400

表 **4-334** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，服务组id为7cdebed3-af07-494e-a3c2-b88bb8d58b57的服务组成员列表

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/service-items?set_id=7cdebed3-af07-494e-a3c2-b88bb8d58b57&limit=10&offset=0
```

响应示例

状态码： 200

服务组成员列表返回值

```
{
  "data" : {
    "limit" : 10,
    "offset" : 0,
    "records" : [ {
      "dest_port" : "0",
      "item_id" : "805b711d-c558-41e3-aab1-a4b8c3f1f90b",
      "description" : "",
      "protocol" : 1,
      "source_port" : "0"
    } ],
    "set_id" : "7cdebed3-af07-494e-a3c2-b88bb8d58b57",
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00200005",
  "error_msg" : "操作内容不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListServiceItemsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);
        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListServiceItemsRequest request = new ListServiceItemsRequest();
        request.withSetId("<set_id>");
        request.withKeyWord("<key_word>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withQueryServiceSetType(<query_service_set_type>);
        try {
            ListServiceItemsResponse response = client.listServiceItems(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListServiceItemsRequest()
        request.set_id = "<set_id>"
        request.key_word = "<key_word>"
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.query_service_set_type = <query_service_set_type>
        response = client.list_service_items(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListServiceItemsRequest{}
    request.SetId = "<set_id>"
    keyWordRequest:= "<key_word>"
    request.KeyWord = &keyWordRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    queryServiceSetTypeRequest:= int32(<query_service_set_type>)
    request.QueryServiceSetType = &queryServiceSetTypeRequest
    response, err := client.ListServiceItems(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	服务组成员列表返回值

状态码	描述
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.7 域名解析及域名组管理

4.7.1 添加域名组

功能介绍

添加域名组

调用方法

请参见如何调用API。

URI

POST /v1/{project_id}/domain-set

表 4-335 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-336 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-337 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-338 请求 Body 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
object_id	是	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。
name	是	String	域名组名称
description	否	String	描述
domain_names	是	Array of **DomainSetInfoDto** objects	域名信息列表
domain_set_type	是	Integer	域名组类型，0表示应用域名组，1表示网络域名组

表 4-339 DomainSetInfoDto

参数	是否必选	参数类型	描述
domain_name	是	String	域名
description	否	String	描述

响应参数

状态码： 200

表 4-340 响应 Body 参数

参数	参数类型	描述
data	**DomainSetResponseData** object	添加域名组返回data

表 4-341 DomainSetResponseData

参数	参数类型	描述
id	String	域名组id
name	String	域名组名称

请求示例

向项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925添加域名组，域名组名称为test，域名组内域名为www.aaa.com，防护对象id为fde07429-2e02-45c0-a85f-4f1cacea24d2，域名组类型为应用域名组。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/domain-set?
fw_instance_id=546af3f8-88e9-47f2-a205-2346d7090925&enterprise_project_id=default

{
  "name" : "test",
  "domain_set_type" : 0,
  "description" : "",
  "domain_names" : [ {
    "domain_name" : "www.aaa.com",
    "description" : ""
  } ],
  "fw_instance_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
  "object_id" : "fde07429-2e02-45c0-a85f-4f1cacea24d2"
}
```

响应示例

状态码： 200

添加域名组返回值

```
{
  "data" : {
    "id" : "e43db369-a863-45ed-8850-58d6b571b1ab",
    "name" : "test"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

向项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925添加域名组，域名组名称为test，域名组内域名为www.aaa.com，防护对象id为fde07429-2e02-45c0-a85f-4f1cacea24d2，域名组类型为应用域名组。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddDomainSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddDomainSetRequest request = new AddDomainSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddDomainSetInfoDto body = new AddDomainSetInfoDto();
        [](model.DomainSetInfoDto) listbodyDomainNames = new ArrayList<>();
        listbodyDomainNames.add(
            new DomainSetInfoDto()
                .withDomainName("www.aaa.com")
                .withDescription("")
        );
        body.withDomainSetType(0);
        body.withDomainNames(listbodyDomainNames);
        body.withDescription("");
        body.withName("test");
        body.withObjectId("fde07429-2e02-45c0-a85f-4f1cacea24d2");
        body.withFwInstanceId("546af3f8-88e9-47f2-a205-2346d7090925");
        request.withBody(body);
        try {
            AddDomainSetResponse response = client.addDomainSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

向项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925添加域名组，域名组名称为test，域名组内域名为www.aaa.com，防护对象id为fde07429-2e02-45c0-a85f-4f1cacea24d2，域名组类型为应用域名组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddDomainSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listDomainNamesbody = [
            DomainSetInfoDto(
                domain_name="www.aaa.com",
                description=""
            )
        ]
        request.body = AddDomainSetInfoDto(
            domain_set_type=0,
            domain_names=listDomainNamesbody,
            description="",
            name="test",
            object_id="fde07429-2e02-45c0-a85f-4f1cacea24d2",
            fw_instance_id="546af3f8-88e9-47f2-a205-2346d7090925"
        )
        response = client.add_domain_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

向项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925添加域名组，域名组名称为test，域名组内域名为www.aaa.com，防护对象id为fde07429-2e02-45c0-a85f-4f1cacea24d2，域名组类型为应用域名组。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddDomainSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    descriptionDomainNames:= ""
    var listDomainNamesbody = []model.DomainSetInfoDto{
        {
            DomainName: "www.aaa.com",
            Description: &descriptionDomainNames,
        },
    }
    descriptionAddDomainSetInfoDto:= ""
    request.Body = &model.AddDomainSetInfoDto{
        DomainSetType: int32(0),
        DomainNames: listDomainNamesbody,
        Description: &descriptionAddDomainSetInfoDto,
        Name: "test",
        ObjectId: "fde07429-2e02-45c0-a85f-4f1cacea24d2",
        FwInstanceId: "546af3f8-88e9-47f2-a205-2346d7090925",
    }
    response, err := client.AddDomainSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加域名组返回值

错误码

请参见**错误码**。

4.7.2 删除域名组

功能介绍

删除域名组

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/domain-set/{set_id}

表 4-342 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	域名组id

表 4-343 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-344 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-345 响应 Body 参数

参数	参数类型	描述
data	**DomainSetResponseData** object	删除域名组返回值data

表 4-346 DomainSetResponseData

参数	参数类型	描述
id	String	域名组id
name	String	域名组名称

请求示例

删除项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为7a004e79-0b8b-4679-ab20-267f3946e8ba下的域名组，域名组id为89bce6a4-9b59-4d7a-b5f9-cac5ac16d88a

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/domain-set/89bce6a4-9b59-4d7a-b5f9-
cac5ac16d88a?fw_instance_id=7a004e79-0b8b-4679-ab20-267f3946e8ba&enterprise_project_id=default
```

响应示例

状态码： 200

删除域名组返回值

```
{
  "data" : {
    "id" : "89bce6a4-9b59-4d7a-b5f9-cac5ac16d88a",
    "name" : "test"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class DeleteDomainSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteDomainSetRequest request = new DeleteDomainSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            DeleteDomainSetResponse response = client.deleteDomainSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteDomainSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.delete_domain_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteDomainSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    response, err := client.DeleteDomainSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	删除域名组返回值

错误码

请参见**错误码**。

4.7.3 更新域名组

功能介绍

更新域名组

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/domain-set/{set_id}

表 4-347 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	域名组id

表 4-348 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口。

请求参数

表 4-349 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-350 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	域名组名称UUID
description	否	String	描述

响应参数

状态码： 200

表 4-351 响应 Body 参数

参数	参数类型	描述
data	DomainSetResponseData object	更新的域名组返回值data

表 4-352 DomainSetResponseData

参数	参数类型	描述
id	String	域名组id
name	String	域名组名称

请求示例

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的防火墙id为7a004e79-0b8b-4679-ab20-267f3946e8ba的域名组id为94da194d-24b2-4f60-919e-cf0bc76c75b3，修改名称为test。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/domain-set/94da194d-24b2-4f60-919e-
cf0bc76c75b3?fw_instance_id=7a004e79-0b8b-4679-ab20-267f3946e8ba&enterprise_project_id=default

{
  "name" : "test",
  "description" : ""
}
```

响应示例

状态码： 200

更新域名组返回值

```
{
  "data" : {
    "id" : "94da194d-24b2-4f60-919e-cf0bc76c75b3",
    "name" : "test"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的防火墙id为7a004e79-0b8b-4679-ab20-267f3946e8ba的域名组id为94da194d-24b2-4f60-919e-cf0bc76c75b3，修改名称为test。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateDomainSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateDomainSetRequest request = new UpdateDomainSetRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        UpdateDomainSetInfoDto body = new UpdateDomainSetInfoDto();
        body.withDescription("");
        body.withName("test");
        request.withBody(body);
        try {
            UpdateDomainSetResponse response = client.updateDomainSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的防火墙id为7a004e79-0b8b-4679-ab20-267f3946e8ba的域名组id为94da194d-24b2-4f60-919e-cf0bc76c75b3，修改名称为test。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateDomainSetRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = UpdateDomainSetInfoDto(
            description="",
            name="test"
        )
        response = client.update_domain_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为9d80d070b6d44942af73c9c3d38e0429下的防火墙id为7a004e79-0b8b-4679-ab20-267f3946e8ba的域名组id为94da194d-24b2-4f60-919e-cf0bc76c75b3，修改名称为test。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateDomainSetRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    descriptionUpdateDomainSetInfoDto:= ""
    request.Body = &model.UpdateDomainSetInfoDto{
        Description: &descriptionUpdateDomainSetInfoDto,
        Name: "test",
    }
    response, err := client.UpdateDomainSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	更新域名组返回值

错误码

请参见**错误码**。

4.7.4 更新 dns 服务器列表

功能介绍

更新dns服务器列表

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/dns/servers

表 4-353 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-354 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口获得，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。若object_Id非空，默认返回object_Id对应墙的信息；填写时object_Id需要属于fw_instance_Id对应的墙。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-355 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-356 请求 Body 参数

参数	是否必选	参数类型	描述
dns_server	是	Array of **dns_server** objects	DNS服务器
health_check_domain_name	否	String	健康检查域名

表 4-357 dns_server

参数	是否必选	参数类型	描述
server_ip	否	String	DNS服务器IP

参数	是否必选	参数类型	描述
is_customized	否	Integer	是否是用户自定义的dns服务器，0否 1是
is_applied	否	Integer	是否应用，0否 1是

响应参数

状态码： 200

表 4-358 响应 Body 参数

参数	参数类型	描述
data	Array of strings	域名服务器列表

状态码： 400

表 4-359 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

更新项目id为2349ba469daf4b7daf268bb0261d18b0的dns解析器的设置，服务器ip为8.8.8.8，默认服务器，更新为使用，服务器ip为192.168.0.2，非默认服务器，更新为非使用

```
https://{Endpoint}/v1/2349ba469daf4b7daf268bb0261d18b0/dns/servers

{
  "dns_server" : [ {
    "server_ip" : "8.8.8.8",
    "is_customized" : 0,
    "is_applied" : 1
  }, {
    "server_ip" : "192.168.0.2",
    "is_customized" : 1,
    "is_applied" : 0
  } ]
}
```

响应示例

状态码： 200

更新Dns服务器响应

```
{
  "data" : [ "100.95.150.83", "114.114.114.114", "223.5.5.5", "223.6.6.6", "119.29.29.29", "8.8.8.8",
"100.79.1.250", "100.79.1.240" ]
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.01000001",
  "error_msg" : "DNS服务器IP重复"
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为2349ba469daf4b7daf268bb0261d18b0的dns解析器的设置，服务器ip为8.8.8.8，默认服务器，更新为使用，服务器ip为192.168.0.2，非默认服务器，更新为非使用

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateDnsServersSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateDnsServersRequest request = new UpdateDnsServersRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        UpdateDnsServersRequestBody body = new UpdateDnsServersRequestBody();
        List<UpdateDnsServersRequestBodyDnsServer> listbodyDnsServer = new ArrayList<>();
        listbodyDnsServer.add(
            new UpdateDnsServersRequestBodyDnsServer()
                .withServerIp("8.8.8.8")
                .withIsCustomized(0)
                .withIsApplied(1)
        );
        listbodyDnsServer.add(
            new UpdateDnsServersRequestBodyDnsServer()
                .withServerIp("192.168.0.2")
                .withIsCustomized(1)
                .withIsApplied(0)
        );
        body.withDnsServer(listbodyDnsServer);
        request.withBody(body);
        try {
            UpdateDnsServersResponse response = client.updateDnsServers(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为2349ba469daf4b7daf268bb0261d18b0的dns解析器的设置，服务器ip为8.8.8.8，默认服务器，更新为使用，服务器ip为192.168.0.2，非默认服务器，更新为非使用

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateDnsServersRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        listDnsServerbody = [
            UpdateDnsServersRequestBodyDnsServer(
                server_ip="8.8.8.8",
                is_customized=0,
                is_applied=1
            ),
            UpdateDnsServersRequestBodyDnsServer(
                server_ip="192.168.0.2",
                is_customized=1,
                is_applied=0
            )
        ]
        request.body = UpdateDnsServersRequestBody(
            dns_server=listDnsServerbody
        )
        response = client.update_dns_servers(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为2349ba469daf4b7daf268bb0261d18b0的dns解析器的设置，服务器ip为8.8.8.8，默认服务器，更新为使用，服务器ip为192.168.0.2，非默认服务器，更新为非使用

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateDnsServersRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    serverIpDnsServer:= "8.8.8.8"
    isCustomizedDnsServer:= int32(0)
    isAppliedDnsServer:= int32(1)
    serverIpDnsServer1:= "192.168.0.2"
    isCustomizedDnsServer1:= int32(1)
    isAppliedDnsServer1:= int32(0)
    var listDnsServerbody = []model.UpdateDnsServersRequestBodyDnsServer{
        {
            ServerIp: &serverIpDnsServer,
            IsCustomized: &isCustomizedDnsServer,
            IsApplied: &isAppliedDnsServer,
        },
        {
            ServerIp: &serverIpDnsServer1,
            IsCustomized: &isCustomizedDnsServer1,
            IsApplied: &isAppliedDnsServer1,
        },
    }
    request.Body = &model.UpdateDnsServersRequestBody{
        DnsServer: listDnsServerbody,
    }
    response, err := client.UpdateDnsServers(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	更新Dns服务器响应
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.7.5 查询域名组列表

功能介绍

查询域名组列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/domain-sets

表 4-360 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-361 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
object_id	是	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。
key_word	否	String	关键字
domain_set_type	否	Integer	域名组类型，0表示应用域名组，1表示网络域名组
config_status	否	Integer	配置状态

请求参数

表 4-362 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-363 响应 Body 参数

参数	参数类型	描述
data	**ListDomainsetsResponseData** object	查询域名组返回值列表data

表 4-364 ListDomainsetsResponseData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
total	Integer	总数
records	Array of **DomainSetVo** objects	域名组列表

表 4-365 DomainSetVo

参数	参数类型	描述
set_id	String	域名组id
name	String	域名组名称
description	String	描述
ref_count	Integer	引用次数

参数	参数类型	描述
domain_set_type	Integer	域名组类型，0表示应用域名组，1表示网络域名组
config_status	Integer	配置状态
message	String	异常信息
rules	Array of **UseRuleVO** objects	使用规则id列表

表 4-366 UseRuleVO

参数	参数类型	描述
id	String	规则id
name	String	规则名称

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429下的防火墙 id为546af3f8-88e9-47f2-a205-2346d7090925下的域名组列表，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/domain-sets?
fw_instance_id=546af3f8-88e9-47f2-
a205-2346d7090925&enterprise_project_id=default&limit=50&offset=0&object_id=ae42418e-
f077-41a0-9d3b-5b2f5ad9102b
```

响应示例

状态码： 200

查询域名组返回值

```
{
  "data" : {
    "limit" : 50,
    "offset" : 0,
    "records" : [ {
      "config_status" : 3,
      "description" : "",
      "domain_set_type" : 0,
      "name" : "ccdd",
      "ref_count" : 0,
      "set_id" : "e43db369-a863-45ed-8850-58d6b571b1ab"
    } ],
    "total" : 1
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListDomainSetsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListDomainSetsRequest request = new ListDomainSetsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withObjectId("<object_id>");
        request.withKeyWord("<key_word>");
        request.withDomainSetType(<domain_set_type>);
        request.withConfigStatus(<config_status>);
        try {
            ListDomainSetsResponse response = client.listDomainSets(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *
```

```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListDomainSetsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.limit = <limit>
        request.offset = <offset>
        request.object_id = "<object_id>"
        request.key_word = "<key_word>"
        request.domain_set_type = <domain_set_type>
        request.config_status = <config_status>
        response = client.list_domain_sets(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListDomainSetsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    request.ObjectId = "<object_id>"
    keyWordRequest:= "<key_word>"
    request.KeyWord = &keyWordRequest
    domainSetTypeRequest:= int32(<domain_set_type>)
    request.DomainSetType = &domainSetTypeRequest
    configStatusRequest:= int32(<config_status>)
    request.ConfigStatus = &configStatusRequest
    response, err := client.ListDomainSets(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询域名组返回值

错误码

请参见**错误码**。

4.7.6 查询 dns 服务器列表

功能介绍

查询dns服务器列表

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/dns/servers

表 4-367 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-368 Query 参数

参数	是否必选	参数类型	描述
limit	否	Integer	每页显示个数，范围为1-1024
offset	否	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口接口获得，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。若object_Id非空，默认返回object_Id对应墙的信息；填写时object_Id需要属于fw_instance_Id对应的墙。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-369 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-370 响应 Body 参数

参数	参数类型	描述
data	Array of **DnsServersResponseDTO** objects	dns服务器列表

参数	参数类型	描述
total	Integer	dns服务器总数

表 **4-371** DnsServersResponseDTO

参数	参数类型	描述
id	Integer	id
is_applied	Integer	是否应用，0否 1是
is_customized	Integer	是否是用户自定义的dns服务器，0否 1是
server_ip	String	DNS服务器IP
health_check_domain_name	String	健康检查域名

请求示例

获取项目id为2349ba469daf4b7daf268bb0261d18b0的dns服务器列表

```
https://{Endpoint}/v1/2349ba469daf4b7daf268bb0261d18b0/dns/servers
```

响应示例

状态码： 200

获取dns服务器响应

```
{
  "data" : [ {
    "health_check_domain_name" : "sslstatic.xiaoyusan.com",
    "id" : 20165,
    "is_applied" : 0,
    "is_customized" : 1,
    "server_ip" : "0.0.0.0"
  }, {
    "health_check_domain_name" : "sslstatic.xiaoyusan.com",
    "id" : 14190,
    "is_applied" : 1,
    "is_customized" : 0,
    "server_ip" : "100.79.1.240"
  } ],
  "total" : 2
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListDnsServersSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListDnsServersRequest request = new ListDnsServersRequest();
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        try {
            ListDnsServersResponse response = client.listDnsServers(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListDnsServersRequest()
        request.limit = <limit>
        request.offset = <offset>
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        response = client.list_dns_servers(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListDnsServersRequest{}
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    response, err := client.ListDnsServers(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	获取dns服务器响应
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.7.7 查询域名解析 ip 地址

功能介绍

测试域名有效性

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/domain/parse/{domain_name}

表 4-372 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
domain_name	是	String	域名

表 **4-373** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
address_type	否	Integer	地址类型，0 ipv4,1 ipv6

请求参数

表 **4-374** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-375** 响应 Body 参数

参数	参数类型	描述
data	Array of strings	域名id列表

状态码： 400

表 **4-376** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

测试项目id为5c69cf330cda42369cbd726ee1bc5e76的项目下的ceshi.com域名是否有效。

```
https://{Endpoint}/v1/5c69cf330cda42369cbd726ee1bc5e76/domain/parse/ceshi.com
```

响应示例

状态码： 200

查询域名有效性返回值

```
{
  "data" : [ "192.168.88.85", "192.168.88.50", "192.168.88.22", "192.168.88.87", "192.168.88.86", 
"192.168.5.1", "192.168.88.88", "192.168.88.90", "192.168.88.83", "192.168.88.84" ]
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00109004",
  "error_msg" : "HTTP请求错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListDomainParseDetailSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListDomainParseDetailRequest request = new ListDomainParseDetailRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withAddressType(<address_type>);
        try {
            ListDomainParseDetailResponse response = client.listDomainParseDetail(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListDomainParseDetailRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.address_type = <address_type>
        response = client.list_domain_parse_detail(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListDomainParseDetailRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    addressTypeRequest:= int32(<address_type>)
    request.AddressType = &addressTypeRequest
    response, err := client.ListDomainParseDetail(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询域名有效性返回值

状态码	描述
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见错误码。

4.7.8 获取域名组下域名列表

功能介绍

获取域名组下域名列表

调用方法

请参见如何调用API。

URI

GET /v1/{project_id}/domain-set/domains/{domain_set_id}

表 4-377 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID
domain_set_id	是	String	域名组id

表 4-378 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
domain_name	否	String	域名名称
object_Id	否	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。

请求参数

表 **4-379** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-380** 响应 Body 参数

参数	参数类型	描述
data	**ListDomainResponseData** object	查询域名返回值data

表 **4-381** ListDomainResponseData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
project_id	String	租户项目id
records	Array of **DomainInfo** objects	域名信息列表
set_id	String	域名组id
total	Integer	总数

表 **4-382** DomainInfo

参数	参数类型	描述
domain_address_id	String	域名地址id
domain_name	String	域名
description	String	描述
dns_ips	Array of strings	域名服务器列表

请求示例

查询项目id为14181c1245cf4fd786824efe1e2b9388下的域名列表，域名组id为78719348-6d79-477e-acec-676a29842ab2，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925。

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/domain-set/domains/78719348-6d79-477e-
acec-676a29842ab2?fw_instance_id=546af3f8-88e9-47f2-
a205-2346d7090925&enterprise_project_id=default&limit=200&offset=0
```

响应示例

状态码： 200

查询域名返回值

```
{
  "data" : {
    "limit" : 200,
    "offset" : 0,
    "project_id" : "14181c1245cf4fd786824efe1e2b9388",
    "records" : [ {
      "description" : "",
      "domain_address_id" : "6718279e-9761-4623-a48d-b16957b19e1b",
      "domain_name" : "www.test.com"
    } ],
    "set_id" : "78719348-6d79-477e-acec-676a29842ab2",
    "total" : 1
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListDomainsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListDomainsRequest request = new ListDomainsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        request.withDomainName("<domain_name>");
        request.withObjectId("<object_Id>");
        try {
            ListDomainsResponse response = client.listDomains(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListDomainsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.limit = <limit>
        request.offset = <offset>
        request.domain_name = "<domain_name>"
        request.object_id = "<object_Id>"
        response = client.list_domains(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListDomainsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    domainNameRequest:= "<domain_name>"
    request.DomainName = &domainNameRequest
    objectIdRequest:= "<object_Id>"
    request.ObjectId = &objectIdRequest
    response, err := client.ListDomains(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询域名返回值

错误码

请参见**错误码**。

4.7.9 添加域名列表

功能介绍

添加域名列表

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/domain-set/domains/{set_id}

表 4-383 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	域名组id

表 4-384 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-385 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-386 请求 Body 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

参数	是否必选	参数类型	描述
object_id	是	String	互联网边界防护对象id，可通过调用查询防火墙实例接口，type为0的为互联网边界防护对象id。
domain_names	是	Array of DomainSetInfoDto objects	域名列表

表 4-387 DomainSetInfoDto

参数	是否必选	参数类型	描述
domain_name	是	String	域名
description	否	String	描述

响应参数

状态码： 200

表 4-388 响应 Body 参数

参数	参数类型	描述
data	DomainSetResponseData object	域名组返回值数据

表 4-389 DomainSetResponseData

参数	参数类型	描述
id	String	域名组id
name	String	域名组名称

请求示例

给项目id为14181c1245cf4fd786824efe1e2b9388下的域名组添加域名，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名为www.bnm.com和www.vbc.com

```
https://{Endpoint}v1/14181c1245cf4fd786824efe1e2b9388/domain-set/domains/78719348-6d79-477e-
acec-676a29842ab2?fw_instance_id=546af3f8-88e9-47f2-a205-2346d7090925&enterprise_project_id=default
```

```
{
  "domain_names" : [ {
    "description" : "",
    "domain_name" : "www.bnm.com"
  }, {
    "description" : "",
    "domain_name" : "www.vbc.com"
  } ],
  "fw_instance_id" : "546af3f8-88e9-47f2-a205-2346d7090925",
  "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
}
```

响应示例

状态码： 200

添加域名返回值

```
{
  "data" : {
    "id" : "78719348-6d79-477e-acec-676a29842ab2",
    "name" : "test26"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为14181c1245cf4fd786824efe1e2b9388下的域名组添加域名，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名为www.bnm.com和www.vbc.com

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddDomainsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);
        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddDomainsRequest request = new AddDomainsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        AddDomainListDto body = new AddDomainListDto();
        List<DomainSetInfoDto> listbodyDomainNames = new ArrayList<>();
        listbodyDomainNames.add(
            new DomainSetInfoDto()
                .withDomainName("www.bnm.com")
                .withDescription("")
        );
        listbodyDomainNames.add(
            new DomainSetInfoDto()
                .withDomainName("www.vbc.com")
                .withDescription("")
        );
        body.withDomainNames(listbodyDomainNames);
        body.withObjectId("ae42418e-f077-41a0-9d3b-5b2f5ad9102b");
        body.withFwInstanceId("546af3f8-88e9-47f2-a205-2346d7090925");
        request.withBody(body);
        try {
            AddDomainsResponse response = client.addDomains(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为14181c1245cf4fd786824efe1e2b9388下的域名组添加域名，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名为www.bnm.com和www.vbc.com

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddDomainsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        listDomainNamesbody = [
            DomainSetInfoDto(
                domain_name="www.bnm.com",
                description=""
            ),
            DomainSetInfoDto(
                domain_name="www.vbc.com",
                description=""
            )
        ]
        request.body = AddDomainListDto(
            domain_names=listDomainNamesbody,
            object_id="ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
            fw_instance_id="546af3f8-88e9-47f2-a205-2346d7090925"
        )
        response = client.add_domains(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为14181c1245cf4fd786824efe1e2b9388下的域名组添加域名，防火墙id为546af3f8-88e9-47f2-a205-2346d7090925，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名为www.bnm.com和www.vbc.com

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
    request := &model.AddDomainsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    descriptionDomainNames:= ""
    descriptionDomainNames1:= ""
    var listDomainNamesbody = []model.DomainSetInfoDto{
        {
            DomainName: "www.bnm.com",
            Description: &descriptionDomainNames,
        },
        {
            DomainName: "www.vbc.com",
            Description: &descriptionDomainNames1,
        },
    }
    request.Body = &model.AddDomainListDto{
        DomainNames: listDomainNamesbody,
        ObjectId: "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
        FwInstanceId: "546af3f8-88e9-47f2-a205-2346d7090925",
    }
    response, err := client.AddDomains(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加域名返回值

错误码

请参见**错误码**。

4.7.10 删除域名列表

功能介绍

删除域名列表

调用方法

请参见**如何调用API**。

URI

DELETE /v1/{project_id}/domain-set/domains/{set_id}

表 **4-390** 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id
set_id	是	String	域名组id

表 **4-391** Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 **4-392** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-393** 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
domain_address_ids	是	Array of strings	域名id列表

响应参数

状态码： 200

表 **4-394** 响应 Body 参数

参数	参数类型	描述
data	**DomainSetResponseData** object	删除域名列表返回值

表 **4-395** DomainSetResponseData

参数	参数类型	描述
id	String	域名组id
name	String	域名组名称

请求示例

项目id为14181c1245cf4fd786824efe1e2b9388的项目，删除防火墙id为546af3f8-88e9-47f2-a205-2346d7090925的防火墙下的域名组域名，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名列表为"b9c23ad8-16d2-4f14-894f-29250c5d27e5", "c36f9462-467b-4303-9734-f9abc38ddb95"

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/domain-set/domains/78719348-6d79-477e-acec-676a29842ab2?fw_instance_id=546af3f8-88e9-47f2-a205-2346d7090925&enterprise_project_id=default

{
  "domain_address_ids" : [ "b9c23ad8-16d2-4f14-894f-29250c5d27e5", "c36f9462-467b-4303-9734-f9abc38ddb95" ],
  "object_id" : "ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
}
```

响应示例

状态码： 200

删除域名列表返回值

```
{
  "data" : {
    "id" : "78719348-6d79-477e-acec-676a29842ab2",
    "name" : "test26"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

项目id为14181c1245cf4fd786824efe1e2b9388的项目，删除防火墙id为546af3f8-88e9-47f2-a205-2346d7090925的防火墙下的域名组域名，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477eacec-676a29842ab2，域名列表为"b9c23ad8-16d2-4f14-894f-29250c5d27e5", "c36f9462-467b-4303-9734-f9abc38ddb95"

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteDomainsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteDomainsRequest request = new DeleteDomainsRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        DeleteDomainDto body = new DeleteDomainDto();
        List<String> listbodyDomainAddressIds = new ArrayList<>();
        listbodyDomainAddressIds.add("b9c23ad8-16d2-4f14-894f-29250c5d27e5");
        listbodyDomainAddressIds.add("c36f9462-467b-4303-9734-f9abc38ddb95");
        body.withDomainAddressIds(listbodyDomainAddressIds);
        body.withObjectId("ae42418e-f077-41a0-9d3b-5b2f5ad9102b");
        request.withBody(body);
        try {
            DeleteDomainsResponse response = client.deleteDomains(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

项目id为14181c1245cf4fd786824efe1e2b9388的项目，删除防火墙id为546af3f8-88e9-47f2-a205-2346d7090925的防火墙下的域名组域名，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477eacec-676a29842ab2，域名列表为"b9c23ad8-16d2-4f14-894f-29250c5d27e5", "c36f9462-467b-4303-9734-f9abc38ddb95"

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteDomainsRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        listDomainAddressIdsbody = [
            "b9c23ad8-16d2-4f14-894f-29250c5d27e5",
            "c36f9462-467b-4303-9734-f9abc38ddb95"
        ]
        request.body = DeleteDomainDto(
            domain_address_ids=listDomainAddressIdsbody,
            object_id="ae42418e-f077-41a0-9d3b-5b2f5ad9102b"
        )
        response = client.delete_domains(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

项目id为14181c1245cf4fd786824efe1e2b9388的项目，删除防火墙id为546af3f8-88e9-47f2-a205-2346d7090925的防火墙下的域名组域名，防护对象id为ae42418e-f077-41a0-9d3b-5b2f5ad9102b，域名组id为78719348-6d79-477e-acec-676a29842ab2，域名列表为"b9c23ad8-16d2-4f14-894f-29250c5d27e5", "c36f9462-467b-4303-9734-f9abc38ddb95"

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteDomainsRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    var listDomainAddressIdsbody = []string{
        "b9c23ad8-16d2-4f14-894f-29250c5d27e5",
        "c36f9462-467b-4303-9734-f9abc38ddb95",
    }
    request.Body = &model.DeleteDomainDto{
        DomainAddressIds: listDomainAddressIdsbody,
        ObjectId: "ae42418e-f077-41a0-9d3b-5b2f5ad9102b",
    }
    response, err := client.DeleteDomains(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	删除域名列表返回值

错误码

请参见错误码。

4.8 IPS 管理

4.8.1 查询 IPS 特性开关状态

功能介绍

查询IPS特性开关状态

调用方法

请参见如何调用API。

URI

GET /v1/{project_id}/ips/switch

表 4-396 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目ID

表 4-397 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-398 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-399 响应 Body 参数

参数	参数类型	描述
data	**IpsSwitchResponseDTO** object	ips开关data

表 4-400 IpsSwitchResponseDTO

参数	参数类型	描述
id	String	ips开关id
basic_defense_status	Integer	基础防御状态
virtual_patches_status	Integer	虚拟补丁状态

请求示例

通过租户id14181c1245cf4fd786824efe1e2b9388查询当前租户的补丁开启状态，用来加载入侵防御页面的虚拟补丁的开关状态。

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/ips/switch?fw_instance_id=546af3f8-88e9-47f2-a205-2346d7090925&enterprise_project_id=default&object_id=cfebd347-b655-4b84-b938-3c54317599b2
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "basic_defense_status" : 1,
    "id" : "cefe80aa-83e4-4308-99aa-f9b6c816de00",
    "virtual_patches_status" : 0
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListIpsSwitchStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListIpsSwitchStatusRequest request = new ListIpsSwitchStatusRequest();
        request.withObjectId("<object_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListIpsSwitchStatusResponse response = client.listIpsSwitchStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)
    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListIpsSwitchStatusRequest()
        request.object_id = "<object_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_ips_switch_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListIpsSwitchStatusRequest{}
    request.ObjectId = "<object_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.ListIpsSwitchStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.8.2 IPS 特性开关操作

功能介绍

切换开关状态

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/ips/switch

表 4-401 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	project_id

表 4-402 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 **4-403** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）
X-Language	否	String	语言头部，默认为zh-cn，如需使用英文，请选择en-us

表 **4-404** 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
ips_type	是	Integer	补丁类型，仅支持虚拟补丁，值为2。 枚举值： ● **1** ● **2**
status	是	Integer	ips特性开关状态

响应参数

状态码： 200

表 **4-405** 响应 Body 参数

参数	参数类型	描述
data	**data** object	object

表 **4-406** data

参数	参数类型	描述
id	String	防护对象id

请求示例

ips开关接口，该接口是租户界面通过开关控制引擎的基础补丁和虚拟补丁的开闭状态。以下示例为开启项目id为14181c1245cf4fd786824efe1e2b9388，防护对象id为1530de8a-522d-4771-9067-9fa4e2f53b48的基础补丁开关。

```
https://{Endpoint}/v1/14181c1245cf4fd786824efe1e2b9388/ips/switch?fw_instance_id=546af3f8-88e9-47f2-
a205-2346d7090925&enterprise_project_id=default

{
  "ips_type" : 1,
  "object_id" : "1530de8a-522d-4771-9067-9fa4e2f53b48",
  "status" : 1
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "1530de8a-522d-4771-9067-9fa4e2f53b48"
  },
  "trace_id" : "358144a9885ff55100aa63cb0d0e1039"
}
```

SDK 代码示例

SDK代码示例如下。

Java

ips开关接口，该接口是租户界面通过开关控制引擎的基础补丁和虚拟补丁的开闭状态。以下示例为开启项目id为14181c1245cf4fd786824efe1e2b9388，防护对象id为1530de8a-522d-4771-9067-9fa4e2f53b48的基础补丁开关。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ChangeIpsSwitchStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeIpsSwitchStatusRequest request = new ChangeIpsSwitchStatusRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        IpsSwitchDTO body = new IpsSwitchDTO();
        body.withStatus(1);
        body.withIpsType(IpsSwitchDTO.IpsTypeEnum.NUMBER_1);
        body.withObjectId("1530de8a-522d-4771-9067-9fa4e2f53b48");
        request.withBody(body);
        try {
            ChangeIpsSwitchStatusResponse response = client.changeIpsSwitchStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

ips开关接口，该接口是租户界面通过开关控制引擎的基础补丁和虚拟补丁的开闭状态。以下示例为开启项目id为14181c1245cf4fd786824efe1e2b9388，防护对象id为1530de8a-522d-4771-9067-9fa4e2f53b48的基础补丁开关。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeIpsSwitchStatusRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = IpsSwitchDTO(
            status=1,
            ips_type=1,
            object_id="1530de8a-522d-4771-9067-9fa4e2f53b48"
        )
        response = client.change_ips_switch_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

ips开关接口，该接口是租户界面通过开关控制引擎的基础补丁和虚拟补丁的开闭状态。以下示例为开启项目id为14181c1245cf4fd786824efe1e2b9388，防护对象id为1530de8a-522d-4771-9067-9fa4e2f53b48的基础补丁开关。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeIpsSwitchStatusRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    request.Body = &model.IpsSwitchDto{
        Status: int32(1),
        IpsType: model.GetIpsSwitchDtoIpsTypeEnum().E_1,
        ObjectId: "1530de8a-522d-4771-9067-9fa4e2f53b48",
    }
    response, err := client.ChangeIpsSwitchStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.8.3 查询防护模式

功能介绍

查询防护模式

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/ips/protect

表 4-407 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-408 Query 参数

参数	是否必选	参数类型	描述
object_id	是	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-409 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-410** 响应 Body 参数

参数	参数类型	描述
data	**IpsProtectModeObject** object	ips防护模式数据

表 **4-411** IpsProtectModeObject

参数	参数类型	描述
id	String	ips防护模式id
mode	Integer	ips防护模式，0：观察模式，1：严格模式，2：中等模式，3：宽松模式

状态码： 400

表 **4-412** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429的ips防护模式。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/ips/protect?
fw_instance_id=546af3f8-88e9-47f2-
a205-2346d7090925&enterprise_project_id=default&object_id=cfebd347-b655-4b84-b938-3c54317599b2
```

响应示例

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListIpsProtectModeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListIpsProtectModeRequest request = new ListIpsProtectModeRequest();
        request.withObjectId("<object_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        try {
            ListIpsProtectModeResponse response = client.listIpsProtectMode(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *
```

```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListIpsProtectModeRequest()
        request.object_id = "<object_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        response = client.list_ips_protect_mode(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListIpsProtectModeRequest{}
    request.ObjectId = "<object_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    response, err := client.ListIpsProtectMode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.8.4 切换防护模式

功能介绍

切换防护模式

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/ips/protect

表 4-413 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-414 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-415 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-416 请求 Body 参数

参数	是否必选	参数类型	描述
object_id	否	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
mode	否	Integer	ips防护模式，0：观察模式，1：严格模式，2：中等模式，3：宽松模式

响应参数

状态码： 200

表 **4-417** 响应 Body 参数

参数	参数类型	描述
data	**data** object	object

表 **4-418** data

参数	参数类型	描述
id	String	防护对象id

状态码： 400

表 **4-419** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护id为cfebd347-b655-4b84-b938-3c54317599b2的防护对象下发拦截模式为严格的防护模式。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/ips/protect

{
  "object_id" : "cfebd347-b655-4b84-b938-3c54317599b2",
  "mode" : 1
}
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "id" : "cfebd347-b655-4b84-b938-3c54317599b2"
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.0020016",
  "error_msg" : "实例状态错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护id为cfebd347-b655-4b84-b938-3c54317599b2的防护对象下发拦截模式为严格的防护模式。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ChangeIpsProtectModeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ChangeIpsProtectModeRequest request = new ChangeIpsProtectModeRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        IpsProtectDTO body = new IpsProtectDTO();
        body.withMode(1);
        body.withObjectId("cfebd347-b655-4b84-b938-3c54317599b2");
        request.withBody(body);
        try {
            ChangeIpsProtectModeResponse response = client.changeIpsProtectMode(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护id为cfebd347-b655-4b84-b938-3c54317599b2的防护对象下发拦截模式为严格的防护模式。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeIpsProtectModeRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.body = IpsProtectDTO(
            mode=1,
            object_id="cfebd347-b655-4b84-b938-3c54317599b2"
        )
        response = client.change_ips_protect_mode(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为9d80d070b6d44942af73c9c3d38e0429的项目下的防护id为cfebd347-b655-4b84-b938-3c54317599b2的防护对象下发拦截模式为严格的防护模式。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeIpsProtectModeRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    modeIpsProtectDto:= int32(1)
    objectIdIpsProtectDto:= "cfebd347-b655-4b84-b938-3c54317599b2"
    request.Body = &model.IpsProtectDto{
        Mode: &modeIpsProtectDto,
        ObjectId: &objectIdIpsProtectDto,
    }
    response, err := client.ChangeIpsProtectMode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.9 日志管理

4.9.1 获取日志配置

功能介绍

获取日志配置

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/cfw/logs/configuration

表 4-420 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-421 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-422 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值)

响应参数

状态码： 200

表 4-423 响应 Body 参数

参数	参数类型	描述
data	**LogConfigDto** object	日志配置数据

表 4-424 LogConfigDto

参数	参数类型	描述
fw_instance_id	String	防火墙id
lts_enable	Integer	是否开启LTS
lts_log_group_id	String	LTS日志分组id
lts_attack_log_stream_id	String	攻击日志流id
lts_attack_log_stream_enable	Integer	是否开启攻击日志流
lts_access_log_stream_id	String	访问控制日志流id
lts_access_log_stream_enable	Integer	是否开启访问控制流
lts_flow_log_stream_id	String	流量日志id
lts_flow_log_stream_enable	Integer	是否开启流量日志

请求示例

查询项目id为408972e72dcd4c1a9b033e955802a36b下的防火墙id为4e113415-7811-4bb3-bf5e-eb835953f7d4的防火墙的日志配置。

```
https://{Endpoint}/v1/408972e72dcd4c1a9b033e955802a36b/cfw/logs/configuration?
fw_instance_id=4e113415-7811-4bb3-bf5e-eb835953f7d4&enterprise_project_id=default
```

响应示例

状态码： 200

日志配置DTO

```
{
  "data" : {
    "fw_instance_id" : "4df2bcd1-6299-4fba-8e71-8d50ea807090",
    "lts_access_log_stream_enable" : 0,
    "lts_attack_log_stream_enable" : 0,
    "lts_enable" : 0,
    "lts_flow_log_stream_enable" : 0,
    "lts_log_group_id" : "d783ce42-7f56-4c2d-9a96-b1043d016f5a"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListLogConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListLogConfigRequest request = new ListLogConfigRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        try {
            ListLogConfigResponse response = client.listLogConfig(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLogConfigRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        response = client.list_log_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
```

```
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListLogConfigRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    response, err := client.ListLogConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	日志配置DTO

错误码

请参见**错误码**。

4.9.2 创建日志配置

功能介绍

创建日志配置

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/cfw/logs/configuration

表 4-425 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-426 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-427 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-428 请求 Body 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙id
lts_enable	是	Integer	是否开启LTS
lts_log_group_id	是	String	LTS日志分组id
lts_attack_log_stream_id	否	String	攻击日志流id
lts_attack_log_stream_enable	是	Integer	是否开启攻击日志流
lts_access_log_stream_id	否	String	访问控制日志流id
lts_access_log_stream_enable	是	Integer	是否开启访问控制流
lts_flow_log_stream_id	否	String	流量日志id

参数	是否必选	参数类型	描述
lts_flow_log_stream_enable	是	Integer	是否开启流量日志

响应参数

状态码： 200

表 4-429 响应 Body 参数

参数	参数类型	描述
data	String	添加日志配置返回值

请求示例

给项目id为408972e72dcd4c1a9b033e955802a36b下的防火墙4d6c860a-0338-49e8-ac64-fcaeb4182ba5添加日志流配置，lts分组id为20282428-a8f9-4e75-8246-165e64cf8ba8，访问控制日志流关闭，流量日志流关闭，攻击日志流关闭，lts关闭。

```
https://{Endpoint}/v1/408972e72dcd4c1a9b033e955802a36b/cfw/logs/configuration?
fw_instance_id=4d6c860a-0338-49e8-ac64-fcaeb4182ba5&enterprise_project_id=default

{
  "fw_instance_id" : "4d6c860a-0338-49e8-ac64-fcaeb4182ba5",
  "lts_enable" : 0,
  "lts_log_group_id" : "20282428-a8f9-4e75-8246-165e64cf8ba8",
  "lts_attack_log_stream_enable" : 0,
  "lts_access_log_stream_enable" : 0,
  "lts_flow_log_stream_enable" : 0
}
```

响应示例

状态码： 200

添加日志配置返回值

```
{
  "data" : "4d6c860a-0338-49e8-ac64-fcaeb4182ba5"
}
```

SDK 代码示例

SDK代码示例如下。

Java

给项目id为408972e72dcd4c1a9b033e955802a36b下的防火墙4d6c860a-0338-49e8-ac64-fcaeb4182ba5添加日志流配置，lts分组id为20282428-a8f9-4e75-8246-165e64cf8ba8，访问控制日志流关闭，流量日志流关闭，攻击日志流关闭，lts关闭。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class AddLogConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great 
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or 
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running 
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        AddLogConfigRequest request = new AddLogConfigRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        LogConfigDto body = new LogConfigDto();
        body.withLtsFlowLogStreamEnable(0);
        body.withLtsAccessLogStreamEnable(0);
        body.withLtsAttackLogStreamEnable(0);
        body.withLtsLogGroupId("20282428-a8f9-4e75-8246-165e64cf8ba8");
        body.withLtsEnable(0);
        body.withFwInstanceId("4d6c860a-0338-49e8-ac64-fcaeb4182ba5");
        request.withBody(body);
        try {
            AddLogConfigResponse response = client.addLogConfig(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

给项目id为408972e72dcd4c1a9b033e955802a36b下的防火墙4d6c860a-0338-49e8-ac64-fcaeb4182ba5添加日志流配置，lts分组id为20282428-a8f9-4e75-8246-165e64cf8ba8，访问控制日志流关闭，流量日志流关闭，攻击日志流关闭，lts关闭。

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddLogConfigRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.body = LogConfigDto(
            lts_flow_log_stream_enable=0,
            lts_access_log_stream_enable=0,
            lts_attack_log_stream_enable=0,
            lts_log_group_id="20282428-a8f9-4e75-8246-165e64cf8ba8",
            lts_enable=0,
            fw_instance_id="4d6c860a-0338-49e8-ac64-fcaeb4182ba5"
        )
        response = client.add_log_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

给项目id为408972e72dcd4c1a9b033e955802a36b下的防火墙4d6c860a-0338-49e8-ac64-fcaeb4182ba5添加日志流配置，lts分组id为20282428-a8f9-4e75-8246-165e64cf8ba8，访问控制日志流关闭，流量日志流关闭，攻击日志流关闭，lts关闭。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AddLogConfigRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.Body = &model.LogConfigDto{
        LtsFlowLogStreamEnable: int32(0),
        LtsAccessLogStreamEnable: int32(0),
        LtsAttackLogStreamEnable: int32(0),
        LtsLogGroupId: "20282428-a8f9-4e75-8246-165e64cf8ba8",
        LtsEnable: int32(0),
        FwInstanceId: "4d6c860a-0338-49e8-ac64-fcaeb4182ba5",
    }
    response, err := client.AddLogConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	添加日志配置返回值

错误码

请参见**错误码**。

4.9.3 更新日志配置

功能介绍

更新日志配置

调用方法

请参见**如何调用API**。

URI

PUT /v1/{project_id}/cfw/logs/configuration

表 4-430 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-431 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-432 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-433 请求 Body 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙id
lts_enable	是	Integer	是否开启LTS
lts_log_group_id	是	String	LTS日志分组id
lts_attack_log_stream_id	否	String	攻击日志流id

参数	是否必选	参数类型	描述
lts_attack_log_stream_enable	是	Integer	是否开启攻击日志流
lts_access_log_stream_id	否	String	访问控制日志流id
lts_access_log_stream_enable	是	Integer	是否开启访问控制流
lts_flow_log_stream_id	否	String	流量日志id
lts_flow_log_stream_enable	是	Integer	是否开启流量日志

响应参数

状态码： 200

表 4-434 响应 Body 参数

参数	参数类型	描述
data	String	日志配置id

请求示例

更新项目id为408972e72dcd4c1a9b033e955802a36b的防火墙id为22c4a5db-504c-471f-8187-5192bc11de0b的防火墙的日志配置，lts日志配置为关闭，流日志、访问控制日志、攻击日志设置为关闭。

```
https://{Endpoint}/v1/408972e72dcd4c1a9b033e955802a36b/cfw/logs/configuration?
fw_instance_id=22c4a5db-504c-471f-8187-5192bc11de0b&enterprise_project_id=default

{
  "fw_instance_id" : "22c4a5db-504c-471f-8187-5192bc11de0b",
  "lts_enable" : 0,
  "lts_log_group_id" : "20282428-a8f9-4e75-8246-165e64cf8ba8",
  "lts_attack_log_stream_enable" : 0,
  "lts_access_log_stream_enable" : 0,
  "lts_flow_log_stream_enable" : 0
}
```

响应示例

状态码： 200

更新日志配置返回值

```
{
  "data" : "4e113415-7811-4bb3-bf5e-eb835953f7d4"
}
```

SDK 代码示例

SDK代码示例如下。

Java

更新项目id为408972e72dcd4c1a9b033e955802a36b的防火墙id为22c4a5db-504c-471f-8187-5192bc11de0b的防火墙的日志配置，lts日志配置为关闭，流日志、访问控制日志、攻击日志设置为关闭。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class UpdateLogConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateLogConfigRequest request = new UpdateLogConfigRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        LogConfigDto body = new LogConfigDto();
        body.withLtsFlowLogStreamEnable(0);
        body.withLtsAccessLogStreamEnable(0);
        body.withLtsAttackLogStreamEnable(0);
        body.withLtsLogGroupId("20282428-a8f9-4e75-8246-165e64cf8ba8");
        body.withLtsEnable(0);
        body.withFwInstanceId("22c4a5db-504c-471f-8187-5192bc11de0b");
        request.withBody(body);
        try {
            UpdateLogConfigResponse response = client.updateLogConfig(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

更新项目id为408972e72dcd4c1a9b033e955802a36b的防火墙id为22c4a5db-504c-471f-8187-5192bc11de0b的防火墙的日志配置，lts日志配置为关闭，流日志、访问控制日志、攻击日志设置为关闭。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateLogConfigRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.body = LogConfigDto(
            lts_flow_log_stream_enable=0,
            lts_access_log_stream_enable=0,
            lts_attack_log_stream_enable=0,
            lts_log_group_id="20282428-a8f9-4e75-8246-165e64cf8ba8",
            lts_enable=0,
            fw_instance_id="22c4a5db-504c-471f-8187-5192bc11de0b"
        )
        response = client.update_log_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

更新项目id为408972e72dcd4c1a9b033e955802a36b的防火墙id为22c4a5db-504c-471f-8187-5192bc11de0b的防火墙的日志配置，lts日志配置为关闭，流日志、访问控制日志、攻击日志设置为关闭。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateLogConfigRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.Body = &model.LogConfigDto{
        LtsFlowLogStreamEnable: int32(0),
        LtsAccessLogStreamEnable: int32(0),
        LtsAttackLogStreamEnable: int32(0),
        LtsLogGroupId: "20282428-a8f9-4e75-8246-165e64cf8ba8",
        LtsEnable: int32(0),
        FwInstanceId: "22c4a5db-504c-471f-8187-5192bc11de0b",
    }
    response, err := client.UpdateLogConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	更新日志配置返回值

错误码

请参见**错误码**。

4.9.4 查询流日志

功能介绍

查询流日志

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/cfw/logs/flow

表 4-435 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-436 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**。
direction	否	String	方向，包含in2out，out2in
log_type	否	String	日志类型包括：internet，vpc，nat 枚举值： ● **internet** ● **vpc** ● **nat**
start_time	是	Long	开始时间，以毫秒为单位的时间戳，如1718936272648
end_time	是	Long	结束时间，以毫秒为单位的时间戳，如1718936272648
src_ip	否	String	源IP
src_port	否	Integer	源端口 最小值：**0** 最大值：**65535**
dst_ip	否	String	目的IP

参数	是否必选	参数类型	描述
dst_port	否	Integer	目的端口 最小值：**0** 最大值：**65535**
protocol	否	String	协议类型，包含TCP,UDP,ICMP,ICMPV6等。
app	否	String	应用协议
log_id	否	String	文档ID,第一页为空，其他页不为空，其他页可取上一次查询最后一条数据的log_id
next_date	否	Long	下个日期，当是第一页时为空，不是第一页时不为空，其他页可取上一次查询最后一条数据的start_time
offset	否	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于0，首页时为空，非首页时不为空
limit	是	Integer	每页显示个数，范围为1-1024 最小值：**1** 最大值：**1024**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
dst_host	否	String	目的主机
src_region_name	否	String	源region名称
dst_region_name	否	String	目的region名称
src_province_name	否	String	源省份名称
dst_province_name	否	String	目的省份名称
src_city_name	否	String	源城市名称
dst_city_name	否	String	目的城市名称

请求参数

表 4-437 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-438 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询流日志返回值

表 4-439 data

参数	参数类型	描述
total	Integer	返回数量
limit	Integer	每页显示个数，范围为1-1024
records	Array of **records** objects	记录

表 4-440 records

参数	参数类型	描述
bytes	Double	字节
direction	String	方向，有内到外和外到内两种 枚举值： ● **out2in** ● **in2out**
packets	Integer	包
start_time	Long	开始时间，以毫秒为单位的时间戳，如1718936272648

参数	参数类型	描述
end_time	Long	结束时间，以毫秒为单位的时间戳，如1718936272648
log_id	String	文档ID
src_ip	String	源IP
src_port	Integer	源端口
dst_ip	String	目的IP
app	String	应用协议
dst_port	Integer	目的端口
protocol	String	协议类型:TCP为6,UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
dst_host	String	目标主机
dst_region_id	String	目的地域id
dst_region_name	String	目的地域名称
src_region_id	String	源地域id
src_region_name	String	源地域名称
dst_province_id	String	目的省份id
dst_province_name	String	目的省份名称
dst_city_id	String	目的城市id
dst_city_name	String	目的城市名称
src_province_id	String	源省份id
src_province_name	String	源省份名称
src_city_id	String	源城市id
src_city_name	String	源城市名称

状态码： 400

表 **4-441** 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429防火墙id为2af58b7c-893c-4453-a984-bdd9b1bd6318，起点时间为1663555012000，终点时间为1664159798000的首页的流日志。

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/cfw/logs/flow?
fw_instance_id=2af58b7c-893c-4453-a984-
bdd9b1bd6318&start_time=1663555012000&end_time=1664159798000&limit=10
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "limit" : 10,
    "records" : [ {
      "app" : "SSH",
      "bytes" : 34.5,
      "direction" : "out2in",
      "dst_ip" : "100.95.148.49",
      "dst_port" : 22,
      "end_time" : 1664155493000,
      "log_id" : "76354",
      "packets" : 25,
      "protocol" : "TCP",
      "src_ip" : "100.93.27.17",
      "src_port" : 49634,
      "start_time" : 1664155428000,
      "src_province_id" : "source province id",
      "src_province_name" : "source province name",
      "src_city_id" : "source city id",
      "src_city_name" : "source city name",
      "dst_province_id" : "dst province id",
      "dst_province_name" : "dst province name",
      "dst_city_id" : "dst city id",
      "dst_city_name" : "dst city name"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00500002",
  "error_msg" : "时间间距错误"
}
```

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.9.5 查询访问控制日志

功能介绍

查询访问控制日志

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/cfw/logs/access-control

表 4-442 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-443 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口。
rule_id	否	String	规则ID
start_time	是	Long	开始时间，以毫秒为单位的时间戳，如1718936272648
end_time	是	Long	结束时间，以毫秒为单位的时间戳，如1718936272648
src_ip	否	String	源IP
src_port	否	Integer	源端口
dst_ip	否	String	目的IP
dst_port	否	Integer	目的端口
protocol	否	String	协议类型，包含TCP, UDP,ICMP,ICMPV6等。
app	否	String	应用协议
log_id	否	String	文档ID,第一页为空，其他页不为空，其他页可取上一次查询最后一条数据的log_id
next_date	否	Integer	下个日期，当是第一页时为空，不是第一页时不为空，其他页可取上一次查询最后一条数据的start_time
offset	否	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于0，首页时为空，非首页时不为空
limit	是	Integer	每页显示个数，范围为1-1024
log_type	否	String	日志类型包括：internet，vpc，nat 枚举值： ● **internet** ● **nat** ● **vpc**
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
dst_host	否	String	目标主机

参数	是否必选	参数类型	描述
rule_name	否	String	规则名称
action	否	String	动作包含permit，deny
src_region_name	否	String	源region名称
dst_region_name	否	String	目的region名称
src_province_name	否	String	源省份名称
dst_province_name	否	String	目的省份名称
src_city_name	否	String	源城市名称
dst_city_name	否	String	目的城市名称

请求参数

表 4-444 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-445 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询访问控制日志返回数据

表 4-446 data

参数	参数类型	描述
total	Integer	返回数量

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024
records	Array of **records** objects	记录

表 4-447 records

参数	参数类型	描述
action	String	动作0：permit,1：deny
rule_name	String	规则名称
rule_id	String	规则ID
hit_time	Long	命中时间，以毫秒为单位的时间戳，如1718936272648
src_region_id	String	源区域id
src_region_name	String	源区域name
dst_region_id	String	目的区域id
dst_region_name	String	目的区域name
log_id	String	文档ID
src_ip	String	源IP
src_port	Integer	源端口
dst_ip	String	目的IP
dst_port	Integer	目的端口
protocol	String	协议类型:TCP为6,UDP为17,ICMP为1,ICMPV6为58,ANY为-1,手动类型不为空，自动类型为空
app	String	应用协议
dst_host	String	目标主机
src_province_id	String	源省份id
src_province_name	String	源省份名称
src_city_id	String	源城市id
src_city_name	String	源城市名称

参数	参数类型	描述
dst_province_id	String	目的省份id
dst_province_name	String	目的省份名称
dst_city_id	String	目的城市id
dst_city_name	String	目的城市名称

状态码： 400

表 4-448 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429，防火墙id为2af58b7c-893c-4453-a984-bdd9b1bd6318，开始时间为1664159069544，结束时间为1664162669544，初始位置为0的第一页的数据

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/cfw/logs/access-control?
fw_instance_id=2af58b7c-893c-4453-a984-
bdd9b1bd6318&start_time=1664159069544&end_time=1664162669544&limit=10
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "limit" : 10,
    "records" : [ {
      "action" : "deny",
      "app" : "PING",
      "dst_ip" : "100.85.216.211",
      "dst_port" : 59,
      "hit_time" : 1664164255000,
      "log_id" : "46032",
      "protocol" : "ICMP: ECHO_REQUEST",
      "rule_id" : "c755be1c-4b92-4ae7-a15e-c2d02b152538",
      "rule_name" : "eip_ipv4_w_n_default_deny",
      "src_ip" : "100.95.148.49",
      "src_port" : 24954,
      "src_province_id" : "source province id",
      "src_province_name" : "source province name",
      "src_city_id" : "source city id",
      "src_city_name" : "source city name",
      "dst_province_id" : "dst province id",
      "dst_province_name" : "dst province name",
      "dst_city_id" : "dst city id",
      "dst_city_name" : "dst city name"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "CFW.00500002",
  "error_msg" : "时间间距错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListAccessControlLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAccessControlLogsRequest request = new ListAccessControlLogsRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withRuleId("<rule_id>");
        request.withStartTime(<start_time>L);
        request.withEndTime(<end_time>L);
        request.withSrcIp("<src_ip>");
        request.withSrcPort(<src_port>);
        request.withDstIp("<dst_ip>");
        request.withDstPort(<dst_port>);
        request.withProtocol("<protocol>");
        request.withApp("<app>");
        request.withLogId("<log_id>");
        request.withNextDate(<next_date>);
        request.withOffset(<offset>);
        request.withLimit(<limit>);
        request.withLogType(ListAccessControlLogsRequest.LogTypeEnum.fromValue("<log_type>"));
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withDstHost("<dst_host>");
        request.withRuleName("<rule_name>");
        request.withAction("<action>");
        request.withSrcRegionName("<src_region_name>");
        request.withDstRegionName("<dst_region_name>");
        request.withSrcProvinceName("<src_province_name>");
        request.withDstProvinceName("<dst_province_name>");
        request.withSrcCityName("<src_city_name>");
        request.withDstCityName("<dst_city_name>");
        try {
            ListAccessControlLogsResponse response = client.listAccessControlLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAccessControlLogsRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.rule_id = "<rule_id>"
        request.start_time = <start_time>
        request.end_time = <end_time>
        request.src_ip = "<src_ip>"
        request.src_port = <src_port>
        request.dst_ip = "<dst_ip>"
        request.dst_port = <dst_port>
        request.protocol = "<protocol>"
        request.app = "<app>"
        request.log_id = "<log_id>"
        request.next_date = <next_date>
        request.offset = <offset>
        request.limit = <limit>
        request.log_type = "<log_type>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.dst_host = "<dst_host>"
        request.rule_name = "<rule_name>"
        request.action = "<action>"
        request.src_region_name = "<src_region_name>"
        request.dst_region_name = "<dst_region_name>"
        request.src_province_name = "<src_province_name>"
        request.dst_province_name = "<dst_province_name>"
        request.src_city_name = "<src_city_name>"
        request.dst_city_name = "<dst_city_name>"
        response = client.list_access_control_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAccessControlLogsRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    ruleIdRequest:= "<rule_id>"
    request.RuleId = &ruleIdRequest
    request.StartTime = int64(<start_time>)
    request.EndTime = int64(<end_time>)
    srcIpRequest:= "<src_ip>"
    request.SrcIp = &srcIpRequest
    srcPortRequest:= int32(<src_port>)
    request.SrcPort = &srcPortRequest
    dstIpRequest:= "<dst_ip>"
    request.DstIp = &dstIpRequest
    dstPortRequest:= int32(<dst_port>)
    request.DstPort = &dstPortRequest
    protocolRequest:= "<protocol>"
    request.Protocol = &protocolRequest
    appRequest:= "<app>"
    request.App = &appRequest
    logIdRequest:= "<log_id>"
    request.LogId = &logIdRequest
    nextDateRequest:= int32(<next_date>)
    request.NextDate = &nextDateRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    request.Limit = int32(<limit>)
    logTypeRequest:= model.GetListAccessControlLogsRequestLogTypeEnum().<LOG_TYPE>
    request.LogType = &logTypeRequest
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    dstHostRequest:= "<dst_host>"
    request.DstHost = &dstHostRequest
    ruleNameRequest:= "<rule_name>"
    request.RuleName = &ruleNameRequest
    actionRequest:= "<action>"
    request.Action = &actionRequest
    srcRegionNameRequest:= "<src_region_name>"
    request.SrcRegionName = &srcRegionNameRequest
    dstRegionNameRequest:= "<dst_region_name>"
    request.DstRegionName = &dstRegionNameRequest
    srcProvinceNameRequest:= "<src_province_name>"
    request.SrcProvinceName = &srcProvinceNameRequest
    dstProvinceNameRequest:= "<dst_province_name>"
    request.DstProvinceName = &dstProvinceNameRequest
    srcCityNameRequest:= "<src_city_name>"
    request.SrcCityName = &srcCityNameRequest
    dstCityNameRequest:= "<dst_city_name>"
    request.DstCityName = &dstCityNameRequest
    response, err := client.ListAccessControlLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found

状态码	描述
500	Internal Server Error

错误码

请参见错误码。

4.9.6 查询攻击日志

功能介绍

查询攻击日志

调用方法

请参见如何调用API。

URI

GET /v1/{project_id}/cfw/logs/attack

表 4-449 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-450 Query 参数

参数	是否必选	参数类型	描述
start_time	是	Long	开始时间，以毫秒为单位的时间戳，如1718936272648
end_time	是	Long	结束时间，以毫秒为单位的时间戳，如1718936272648
src_ip	否	String	源IP
src_port	否	Integer	源端口号 最小值：**0** 最大值：**65535**
dst_ip	否	String	目的IP
dst_port	否	Integer	目的端口号 最小值：**0** 最大值：**65535**

参数	是否必选	参数类型	描述
protocol	否	String	协议类型，包含TCP, UDP,ICMP,ICMPV6等。
app	否	String	应用协议
log_id	否	String	文档ID,第一页为空，其他页不为空，其他页可取上一次查询最后一条数据的log_id
next_date	否	Long	下个日期，当是第一页时为空，不是第一页时不为空，其他页可取上一次查询最后一条数据的event_time
offset	否	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于0，首页时为空，非首页时不为空
limit	是	Integer	每页显示个数，范围为1-1024
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口。
action	否	String	动作包含permit，deny
direction	否	String	方向，包含in2out，out2in
attack_type	否	String	入侵事件类型
attack_rule	否	String	入侵事件规则
level	否	String	威胁等级，包括CRITICAL、HIGH、MEDIUM、LOW
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。
dst_host	否	String	目标主机
log_type	否	String	日志类型包括：internet，vpc，nat 枚举值： ● **internet** ● **nat** ● **vpc**
attack_rule_id	否	String	入侵事件id
src_region_name	否	String	源region名称

参数	是否必选	参数类型	描述
dst_region_name	否	String	目的region名称
src_province_name	否	String	源省份名称
dst_province_name	否	String	目的省份名称
src_city_name	否	String	源城市名称
dst_city_name	否	String	目的城市名称

请求参数

表 **4-451** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-452** 响应 Body 参数

参数	参数类型	描述
data	**data** object	查询攻击日志返回值

表 **4-453** data

参数	参数类型	描述
total	Integer	返回数量
limit	Integer	每页显示个数，范围为1-1024
records	Array of **records** objects	记录

表 **4-454** records

参数	参数类型	描述
direction	String	方向，有内到外和外到内两种 枚举值： ● **out2in** ● **in2out**
action	String	动作
event_time	Long	事件时间，以毫秒为单位的时间戳，如1718936272648
attack_type	String	攻击类型
attack_rule	String	攻击规则
level	String	威胁等级
source	String	来源
packet_length	Long	报文长度
attack_rule_id	String	攻击规则id
hit_time	Long	命中时间，以毫秒为单位的时间戳，如1718936272648
log_id	String	日志ID
src_ip	String	源IP
src_port	Integer	源端口 最小值：**0** 最大值：**65535**
dst_ip	String	目的IP
dst_port	Integer	目的端口 最小值：**0** 最大值：**65535**
protocol	String	协议
packet	String	攻击日志报文
app	String	应用协议
packetMessages	Array of **PacketMessage** objects	攻击报文信息
src_region_id	String	源区域id
src_region_name	String	源区域名称

参数	参数类型	描述
dst_region_id	String	目的区域id
dst_region_name	String	目的区域名称
src_province_id	String	源省份id
src_province_name	String	源省份名称
src_city_id	String	源城市id
src_city_name	String	源城市名称
dst_province_id	String	目的省份id
dst_province_name	String	目的省份名称
dst_city_id	String	目的城市id
dst_city_name	String	目的城市名称

表 4-455 PacketMessage

参数	参数类型	描述
hex_index	String	16进制index
hexs	Array of strings	16进制数列
utf8_String	String	utf_8字符串

状态码： 400

表 4-456 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码 最小长度：**8** 最大长度：**36**
error_msg	String	错误描述 最小长度：**2** 最大长度：**512**

请求示例

查询项目id为9d80d070b6d44942af73c9c3d38e0429防火墙id为2af58b7c-893c-4453-a984-bdd9b1bd6318初始时间为1663567058000，结束时间为1664171765000的第一页数据，查询条数为10条

```
https://{Endpoint}/v1/9d80d070b6d44942af73c9c3d38e0429/cfw/logs/attack?
fw_instance_id=2af58b7c-893c-4453-a984-
bdd9b1bd6318&start_time=1663567058000&end_time=1664171765000&limit=10
```

响应示例

状态码： 200

OK

```
{
  "data" : {
    "limit" : 10,
    "records" : [ {
      "action" : "deny",
      "app" : "HTTP",
      "attack_rule" : "Tool Nmap Web Server Probe Detected",
      "attack_rule_id" : "336154",
      "attack_type" : "Web Attack",
      "direction" : "out2in",
      "dst_ip" : "100.95.148.49",
      "dst_port" : 8080,
      "event_time" : 1664146216000,
      "level" : "MEDIUM",
      "log_id" : "15591",
      "packet" : "+hZUZMhV+hY/AaHMCABFKABpXPNAADAGof1kVe6QZF
+UMcTQH5B0wdaz888+uoAYAOVyNQAAAQEICjrmikVb9JLCR0VUIC9uaWNlJTIwcG9ydHMlMkMvVHJpJTZFaX
R5LnR4dCUyZWJhayBIVFRQLzEuMA0KDQo=",
      "packetMessages" : [ {
        "hex_index" : "00000000",
        "hexs" : [ "fa", "16", "54", "64", "c8", "55", "fa", "16", "3f", "01", "a1", "cc", "08", "00", "45", "28" ],
        "utf8_String" : ".\u0016Td.U.\u0016?.....E("
      }, {
        "hex_index" : "00000010",
        "hexs" : [ "00", "69", "5c", "f3", "40", "00", "30", "06", "a1", "fd", "64", "55", "ee", "90", "64", "5f" ],
        "utf8_String" : ".i\\.@.0...dU.d_"
      }, {
        "hex_index" : "00000020",
        "hexs" : [ "94", "31", "c4", "d0", "1f", "90", "74", "c1", "d6", "b3", "f3", "cf", "3e", "ba", "80", "18" ],
        "utf8_String" : ".1..\u001F.t...>..."
      }, {
        "hex_index" : "00000030",
        "hexs" : [ "00", "e5", "72", "35", "00", "00", "01", "01", "08", "0a", "3a", "e6", "8a", "45", "5b", "f4" ],
        "utf8_String" : "..r5......:.E[."
      }, {
        "hex_index" : "00000040",
        "hexs" : [ "92", "c2", "47", "45", "54", "20", "2f", "6e", "69", "63", "65", "25", "32", "30", "70", "6f" ],
        "utf8_String" : "..GET /nice%20po"
      }, {
        "hex_index" : "00000050",
        "hexs" : [ "72", "74", "73", "25", "32", "43", "2f", "54", "72", "69", "25", "36", "45", "69", "74", "79" ],
        "utf8_String" : "rts%2C/Tri%6Eity"
      }, {
        "hex_index" : "00000060",
        "hexs" : [ "2e", "74", "78", "74", "25", "32", "65", "62", "61", "6b", "20", "48", "54", "54", "50", "2f" ],
        "utf8_String" : ".txt%2ebak HTTP/"
      }, {
        "hex_index" : "00000070",
        "hexs" : [ "31", "2e", "30", "0d", "0a", "0d", "0a" ],
        "utf8_String" : "1.0\r.\r."
      } ],
      "packet_length" : 119,
      "protocol" : "TCP",
      "source" : "0",
      "src_ip" : "100.85.238.144",
      "src_port" : 50384,
      "src_province_id" : "source province id",
      "src_province_name" : "source province name",
      "src_city_id" : "source city id",
      "src_city_name" : "source city name",
      "dst_province_id" : "dst province id",
      "dst_province_name" : "dst province name",
      "dst_city_id" : "dst city id",
      "dst_city_name" : "dst city name"
    } ],
    "total" : 1
  }
}
```

状态码： 400

Bad Request

```
{
  "error_code" : "00500002",
  "error_msg" : "时间间距错误"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListAttackLogsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAttackLogsRequest request = new ListAttackLogsRequest();
        request.withStartTime(<start_time>L);
        request.withEndTime(<end_time>L);
        request.withSrcIp("<src_ip>");
        request.withSrcPort(<src_port>);
        request.withDstIp("<dst_ip>");
        request.withDstPort(<dst_port>);
        request.withProtocol("<protocol>");
        request.withApp("<app>");
        request.withLogId("<log_id>");
        request.withNextDate(<next_date>L);
        request.withOffset(<offset>);
        request.withLimit(<limit>);
        request.withFwInstanceId("<fw_instance_id>");
        request.withAction("<action>");
        request.withDirection("<direction>");
        request.withAttackType("<attack_type>");
        request.withAttackRule("<attack_rule>");
        request.withLevel("<level>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withDstHost("<dst_host>");
        request.withLogType(ListAttackLogsRequest.LogTypeEnum.fromValue("<log_type>"));
        request.withAttackRuleId("<attack_rule_id>");
        request.withSrcRegionName("<src_region_name>");
        request.withDstRegionName("<dst_region_name>");
        request.withSrcProvinceName("<src_province_name>");
        request.withDstProvinceName("<dst_province_name>");
        request.withSrcCityName("<src_city_name>");
        request.withDstCityName("<dst_city_name>");
        try {
            ListAttackLogsResponse response = client.listAttackLogs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAttackLogsRequest()
        request.start_time = <start_time>
        request.end_time = <end_time>
        request.src_ip = "<src_ip>"
        request.src_port = <src_port>
        request.dst_ip = "<dst_ip>"
        request.dst_port = <dst_port>
        request.protocol = "<protocol>"
        request.app = "<app>"
        request.log_id = "<log_id>"
        request.next_date = <next_date>
        request.offset = <offset>
        request.limit = <limit>
        request.fw_instance_id = "<fw_instance_id>"
        request.action = "<action>"
        request.direction = "<direction>"
        request.attack_type = "<attack_type>"
        request.attack_rule = "<attack_rule>"
        request.level = "<level>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.dst_host = "<dst_host>"
        request.log_type = "<log_type>"
        request.attack_rule_id = "<attack_rule_id>"
        request.src_region_name = "<src_region_name>"
        request.dst_region_name = "<dst_region_name>"
        request.src_province_name = "<src_province_name>"
        request.dst_province_name = "<dst_province_name>"
        request.src_city_name = "<src_city_name>"
        request.dst_city_name = "<dst_city_name>"
        response = client.list_attack_logs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
    request := &model.ListAttackLogsRequest{}
    request.StartTime = int64(<start_time>)
    request.EndTime = int64(<end_time>)
    srcIpRequest:= "<src_ip>"
    request.SrcIp = &srcIpRequest
    srcPortRequest:= int32(<src_port>)
    request.SrcPort = &srcPortRequest
    dstIpRequest:= "<dst_ip>"
    request.DstIp = &dstIpRequest
    dstPortRequest:= int32(<dst_port>)
    request.DstPort = &dstPortRequest
    protocolRequest:= "<protocol>"
    request.Protocol = &protocolRequest
    appRequest:= "<app>"
    request.App = &appRequest
    logIdRequest:= "<log_id>"
    request.LogId = &logIdRequest
    nextDateRequest:= int64(<next_date>)
    request.NextDate = &nextDateRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    request.Limit = int32(<limit>)
    request.FwInstanceId = "<fw_instance_id>"
    actionRequest:= "<action>"
    request.Action = &actionRequest
    directionRequest:= "<direction>"
    request.Direction = &directionRequest
    attackTypeRequest:= "<attack_type>"
    request.AttackType = &attackTypeRequest
    attackRuleRequest:= "<attack_rule>"
    request.AttackRule = &attackRuleRequest
    levelRequest:= "<level>"
    request.Level = &levelRequest
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    dstHostRequest:= "<dst_host>"
    request.DstHost = &dstHostRequest
    logTypeRequest:= model.GetListAttackLogsRequestLogTypeEnum().<LOG_TYPE>
    request.LogType = &logTypeRequest
    attackRuleIdRequest:= "<attack_rule_id>"
    request.AttackRuleId = &attackRuleIdRequest
    srcRegionNameRequest:= "<src_region_name>"
    request.SrcRegionName = &srcRegionNameRequest
    dstRegionNameRequest:= "<dst_region_name>"
    request.DstRegionName = &dstRegionNameRequest
    srcProvinceNameRequest:= "<src_province_name>"
    request.SrcProvinceName = &srcProvinceNameRequest
    dstProvinceNameRequest:= "<dst_province_name>"
    request.DstProvinceName = &dstProvinceNameRequest
    srcCityNameRequest:= "<src_city_name>"
    request.SrcCityName = &srcCityNameRequest
    dstCityNameRequest:= "<dst_city_name>"
    request.DstCityName = &dstCityNameRequest
    response, err := client.ListAttackLogs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	OK
400	Bad Request
401	Unauthorized
403	Forbidden
404	Not Found
500	Internal Server Error

错误码

请参见**错误码**。

4.10 抓包管理

4.10.1 查询抓包任务

功能介绍

查询抓包任务

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/capture-task

表 4-457 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-458 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	否	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
limit	是	Integer	每页显示个数，范围为1-1024
offset	是	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0

请求参数

表 **4-459** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 **4-460** 响应 Body 参数

参数	参数类型	描述
data	Array of **HttpQueryCaptureTaskResponseData** objects	查询抓包任务返回值。

表 **4-461** HttpQueryCaptureTaskResponseData

参数	参数类型	描述
limit	Integer	每页显示个数，范围为1-1024

参数	参数类型	描述
object_id	String	防护对象id，是创建云防火墙后用于区分互联网边界防护和VPC边界防护的标志id，可通过调用查询防火墙实例接口，注意type为0的为互联网边界防护对象id，type为1的为VPC边界防护对象id。
offset	Integer	偏移量：指定返回记录的开始位置，必须为数字，取值范围为大于或等于0，默认0
project_id	String	租户project_id
total	Long	抓包任务总数
records	Array of CaptureTaskVO objects	抓包任务列表

表 **4-462** CaptureTaskVO

参数	参数类型	描述
capture_size	String	抓包大小
created_date	String	抓包创建时间
dest_address	String	目的地址
dest_address_type	Integer	目的地址类型0 ipv4,1 ipv6
dest_port	String	目的端口
duration	Integer	抓包时长
is_deleted	Integer	是否被删除，0否 1是
max_packets	Integer	最大抓包数
modified_date	String	修改日期
name	String	抓包任务名称
protocol	Integer	协议类型:TCP为6，UDP为17，ICMP为1，ICMPV6为58，ANY为-1，手动类型不为空，自动类型为空
remaining_days	Integer	剩余保留天数
source_address	String	源地址
source_address_type	Integer	源地址类型0 ipv4,1 ipv6

参数	参数类型	描述
source_port	String	源端口
status	Integer	抓包任务状态
task_id	String	抓包任务id

请求示例

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4查询50条抓包任务。

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/capture-task?
fw_instance_id=ebf891cd-2163-48a0-9963-6309f99dd3c4&enterprise_project_id=default&limit=50&offset=0
```

响应示例

状态码： 200

查询抓包任务返回值

```
{
  "data" : {
    "limit" : 50,
    "offset" : 0,
    "records" : [ {
      "capture_size" : "--",
      "created_date" : "2024/06/04 11:23:50",
      "dest_address" : "2.2.2.2",
      "dest_address_type" : 0,
      "dest_port" : "",
      "duration" : 3,
      "is_deleted" : 0,
      "max_packets" : 100000,
      "modified_date" : "2024/06/04 11:23:50",
      "name" : "zhuabaotest",
      "protocol" : -1,
      "remaining_days" : 7,
      "source_address" : "1.1.1.1",
      "source_address_type" : 0,
      "source_port" : "",
      "status" : 2,
      "task_id" : "24e6bb6d-d335-48fd-b9c7-bbaaa851d209"
    } ],
    "total" : 1
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class ListCaptureTaskSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListCaptureTaskRequest request = new ListCaptureTaskRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        request.withLimit(<limit>);
        request.withOffset(<offset>);
        try {
            ListCaptureTaskResponse response = client.listCaptureTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListCaptureTaskRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        request.limit = <limit>
        request.offset = <offset>
        response = client.list_capture_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCaptureTaskRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    fwInstanceIdRequest:= "<fw_instance_id>"
    request.FwInstanceId = &fwInstanceIdRequest
    request.Limit = int32(<limit>)
    request.Offset = int32(<offset>)
    response, err := client.ListCaptureTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	查询抓包任务返回值

错误码

请参见**错误码**。

4.10.2 创建抓包任务

功能介绍

创建抓包任务

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/capture-task

表 4-463 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-464 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

请求参数

表 4-465 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	否	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-466 请求 Body 参数

参数	是否必选	参数类型	描述
destination	是	**CaptureRuleAddressDto** object	抓包规则目的地址请求体
duration	是	Integer	抓包时长
max_packets	是	Integer	最大抓包数 最大值：**1000000**
name	是	String	抓包任务名称
service	是	**CaptureServiceDto** object	抓包任务服务请求体
source	是	**CaptureRuleAddressDto** object	抓包规则源地址请求体

表 4-467 CaptureServiceDto

参数	是否必选	参数类型	描述
dest_port	否	String	目的端口
protocol	是	Integer	协议类型:TCP为6，UDP为17，ICMP为1，ICMPV6为58，ANY为-1，手动类型不为空，自动类型为空
source_port	否	String	源端口

表 4-468 CaptureRuleAddressDto

参数	是否必选	参数类型	描述
address	是	String	地址
address_type	是	Integer	目的地址类型0 ipv4,1 ipv6
type	是	Integer	输入地址类型，目前只支持0，手工输入类型

响应参数

状态码： 200

表 4-469 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	创建抓包任务id信息

表 4-470 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

请求示例

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4添加抓包任务，任务名称为zhuabaotest，最大抓包数为100000，抓包时长为3分钟，剩余保留天数为7天，源地址协议为tcp协

议，地址类型为ipv4，地址为1.1.1.1，端口号为1-65535，目的地址协议为tcp协议，地址类型为ipv4，地址为2.2.2.2，端口号为1-65535。

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/capture-task?
fw_instance_id=ebf891cd-2163-48a0-9963-6309f99dd3c4&enterprise_project_id=default

{
  "name" : "zhuabaotest",
  "max_packets" : 100000,
  "duration" : 3,
  "hold_day" : 7,
  "source" : {
    "type" : 0,
    "address_type" : 0,
    "address" : "1.1.1.1"
  },
  "destination" : {
    "type" : 0,
    "address_type" : 0,
    "address" : "2.2.2.2"
  },
  "service" : {
    "protocol" : -1,
    "source_port" : "",
    "dest_port" : ""
  }
}
```

响应示例

状态码： 200

创建抓包任务返回值

```
{
  "data" : {
    "id" : "ebf891cd-2163-48a0-9963-6309f99dd3c4",
    "name" : "test"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4添加抓包任务，任务名称为zhuabaotest，最大抓包数为100000，抓包时长为3分钟，剩余保留天数为7天，源地址协议为tcp协议，地址类型为ipv4，地址为1.1.1.1，端口号为1-65535，目的地址协议为tcp协议，地址类型为ipv4，地址为2.2.2.2，端口号为1-65535。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;
```

```
public class CreateCaptureTaskSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateCaptureTaskRequest request = new CreateCaptureTaskRequest();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        request.withFwInstanceId("<fw_instance_id>");
        CaptureTaskDto body = new CaptureTaskDto();
        CaptureRuleAddressDto sourcebody = new CaptureRuleAddressDto();
        sourcebody.withAddress("1.1.1.1")
            .withAddressType(0)
            .withType(0);
        CaptureServiceDto servicebody = new CaptureServiceDto();
        servicebody.withDestPort("")
            .withProtocol(-1)
            .withSourcePort("");
        CaptureRuleAddressDto destinationbody = new CaptureRuleAddressDto();
        destinationbody.withAddress("2.2.2.2")
            .withAddressType(0)
            .withType(0);
        body.withSource(sourcebody);
        body.withService(servicebody);
        body.withName("zhuabaotest");
        body.withMaxPackets(100000);
        body.withDuration(3);
        body.withDestination(destinationbody);
        request.withBody(body);
        try {
            CreateCaptureTaskResponse response = client.createCaptureTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4添加抓包任务，任务名称为zhuabaotest，最大抓包数为100000，抓包时长为3分钟，剩余保留天数为7天，源地址协议为tcp协议，地址类型为ipv4，地址为1.1.1.1，端口号为1-65535，目的地址协议为tcp协议，地址类型为ipv4，地址为2.2.2.2，端口号为1-65535。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateCaptureTaskRequest()
        request.enterprise_project_id = "<enterprise_project_id>"
        request.fw_instance_id = "<fw_instance_id>"
        sourcebody = CaptureRuleAddressDto(
            address="1.1.1.1",
            address_type=0,
            type=0
        )
        servicebody = CaptureServiceDto(
            dest_port="",
            protocol=-1,
            source_port=""
        )
        destinationbody = CaptureRuleAddressDto(
            address="2.2.2.2",
            address_type=0,
            type=0
        )
        request.body = CaptureTaskDto(
            source=sourcebody,
            service=servicebody,
            name="zhuabaotest",
            max_packets=100000,
            duration=3,
            destination=destinationbody
        )
        response = client.create_capture_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4添加抓包任务，任务名称为zhuabaotest，最大抓包数为100000，抓包时长为3分钟，剩余保留天数为7天，源地址协议为tcp协议，地址类型为ipv4，地址为1.1.1.1，端口号为1-65535，目的地址协议为tcp协议，地址类型为ipv4，地址为2.2.2.2，端口号为1-65535。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateCaptureTaskRequest{}
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    request.FwInstanceId = "<fw_instance_id>"
    sourcebody := &model.CaptureRuleAddressDto{
        Address: "1.1.1.1",
        AddressType: int32(0),
        Type: int32(0),
    }
    destPortService:= ""
    sourcePortService:= ""
    servicebody := &model.CaptureServiceDto{
        DestPort: &destPortService,
        Protocol: int32(-1),
        SourcePort: &sourcePortService,
    }
    destinationbody := &model.CaptureRuleAddressDto{
        Address: "2.2.2.2",
        AddressType: int32(0),
        Type: int32(0),
    }
    request.Body = &model.CaptureTaskDto{
        Source: sourcebody,
        Service: servicebody,
        Name: "zhuabaotest",
        MaxPackets: int32(100000),
        Duration: int32(3),
        Destination: destinationbody,
    }
    response, err := client.CreateCaptureTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	创建抓包任务返回值

错误码

请参见**错误码**。

4.10.3 删除抓包任务

功能介绍

删除抓包任务

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/capture-task/batch-delete

表 4-471 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-472 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 **4-473** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	否	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 **4-474** 请求 Body 参数

参数	是否必选	参数类型	描述
task_ids	是	Array of strings	抓包任务id列表

响应参数

状态码： 200

表 **4-475** 响应 Body 参数

参数	参数类型	描述
data	**IdObject** object	删除抓包任务id信息

表 **4-476** IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

请求示例

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4删除抓包任务，抓包任务id为24e6bb6d-d335-48fd-b9c7-bbaaa851d209.

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/capture-task/batch-delete?
fw_instance_id=ebf891cd-2163-48a0-9963-6309f99dd3c4&enterprise_project_id=default

{
  "task_ids" : [ "24e6bb6d-d335-48fd-b9c7-bbaaa851d209" ]
}
```

响应示例

状态码： 200

删除抓包任务返回值

```
{
  "data" : {
    "id" : "ebf891cd-2163-48a0-9963-6309f99dd3c4",
    "name" : "test"
  }
}
```

状态码

状态码	描述
200	删除抓包任务返回值

错误码

请参见**错误码**。

4.10.4 获取抓包任务结果

功能介绍

获取抓包任务结果

调用方法

请参见**如何调用API**。

URI

GET /v1/{project_id}/capture-task/capture-result

表 4-477 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-478 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用**查询防火墙实例接口**，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
task_id	是	String	抓包任务id
type	否	Integer	是否指定公网ip下载，0：无限制，1：指定公网ip下载
ip	否	Array	指定公网ip
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-479 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	否	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

响应参数

状态码： 200

表 4-480 响应 Body 参数

参数	参数类型	描述
data	**CaptureResultUrlVO** object	抓包结果url

表 4-481 CaptureResultUrlVO

参数	参数类型	描述
captcha	String	下载链接提取码
expires	Long	下载链接过期时间
file_list	Array of **CaptureFile** objects	抓包文件列表
request_header	**HostHeaderInfo** object	主机请求头
url	String	下载链接

表 4-482 CaptureFile

参数	参数类型	描述
file_name	String	文件名称
url	String	下载链接
file_path	String	文件路径

表 4-483 HostHeaderInfo

参数	参数类型	描述
Host	String	主机

请求示例

查询项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4下的抓包任务结果。

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/capture-task/capture-result?
fw_instance_id=14f99b45-47df-4e40-aa5d-
cf3700ce9c8b&enterprise_project_id=default&task_id=ea47d7f9-8b93-45de-978d-b4bf0613cfed&type=0
```

响应示例

状态码： 200

获取抓包结果

```
{
  "data" : {
    "captcha" : "696821",
    "expires" : 30,
    "url" : "testurl"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;

import java.util.List;
import java.util.ArrayList;

public class ListCaptureResultSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        ListCaptureResultRequest request = new ListCaptureResultRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withTaskId("<task_id>");
        request.withType(<type>);
        request.withIp();
        request.withEnterpriseProjectId("<enterprise_project_id>");
        try {
            ListCaptureResultResponse response = client.listCaptureResult(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListCaptureResultRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.task_id = "<task_id>"
        request.type = <type>
        request.ip = 
        request.enterprise_project_id = "<enterprise_project_id>"
        response = client.list_capture_result(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListCaptureResultRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    request.TaskId = "<task_id>"
    typeRequest:= int32(<type>)
    request.Type = &typeRequest
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    response, err := client.ListCaptureResult(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	获取抓包结果

错误码

请参见**错误码**。

4.10.5 取消抓包任务

功能介绍

取消抓包任务

调用方法

请参见**如何调用API**。

URI

POST /v1/{project_id}/capture-task/stop

表 4-484 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户项目id

表 4-485 Query 参数

参数	是否必选	参数类型	描述
fw_instance_id	是	String	防火墙实例id，创建云防火墙后用于标志防火墙由系统自动生成的标志id，可通过调用查询防火墙实例接口，默认情况下，fw_instance_Id为空时，返回账号下第一个墙的信息；fw_instance_Id非空时，返回与fw_instance_Id对应墙的信息。
enterprise_project_id	否	String	企业项目id，用户支持企业项目后，由企业项目生成的id。

请求参数

表 4-486 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	否	String	用户Token。 通过调用IAM服务获取用户Token接口获取（响应消息头中X-Subject-Token的值）

表 4-487 请求 Body 参数

参数	是否必选	参数类型	描述
task_id	否	String	抓包任务id

响应参数

状态码： 200

表 4-488 响应 Body 参数

参数	参数类型	描述
data	IdObject object	停止抓包任务id信息

表 4-489 IdObject

参数	参数类型	描述
id	String	id值
name	String	名称

请求示例

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4停止任务id为1dcddab3-7d79-4a56-9e67-4aa0962b98ad的抓包任务。

```
https://{Endpoint}/v1/09bb24e6fe80d23d2fa2c010b53b418c/capture-task/stop?
fw_instance_id=ebf891cd-2163-48a0-9963-6309f99dd3c4&enterprise_project_id=default

{
  "task_id" : "1dcddab3-7d79-4a56-9e67-4aa0962b98ad"
}
```

响应示例

状态码： 200

截止抓包任务返回值

```
{
  "data" : {
    "id" : "ebf891cd-2163-48a0-9963-6309f99dd3c4",
    "name" : "test"
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4停止任务id为1dcddab3-7d79-4a56-9e67-4aa0962b98ad的抓包任务。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.cfw.v1.region.CfwRegion;
import com.huaweicloud.sdk.cfw.v1.*;
import com.huaweicloud.sdk.cfw.v1.model.*;


public class CancelCaptureTaskSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
                .withAk(ak)
                .withSk(sk);

        CfwClient client = CfwClient.newBuilder()
                .withCredential(auth)
                .withRegion(CfwRegion.valueOf("<YOUR REGION>"))
                .build();
        CancelCaptureTaskRequest request = new CancelCaptureTaskRequest();
        request.withFwInstanceId("<fw_instance_id>");
        request.withEnterpriseProjectId("<enterprise_project_id>");
        CancelCaptureTaskDto body = new CancelCaptureTaskDto();
        body.withTaskId("1dcddab3-7d79-4a56-9e67-4aa0962b98ad");
        request.withBody(body);
        try {
            CancelCaptureTaskResponse response = client.cancelCaptureTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4停止任务id为1dcddab3-7d79-4a56-9e67-4aa0962b98ad的抓包任务。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkcfw.v1.region.cfw_region import CfwRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkcfw.v1 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]

    credentials = BasicCredentials(ak, sk)

    client = CfwClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(CfwRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CancelCaptureTaskRequest()
        request.fw_instance_id = "<fw_instance_id>"
        request.enterprise_project_id = "<enterprise_project_id>"
        request.body = CancelCaptureTaskDto(
            task_id="1dcddab3-7d79-4a56-9e67-4aa0962b98ad"
        )
        response = client.cancel_capture_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

向项目id为09bb24e6fe80d23d2fa2c010b53b418c，防火墙id为ebf891cd-2163-48a0-9963-6309f99dd3c4停止任务id为1dcddab3-7d79-4a56-9e67-4aa0962b98ad的抓包任务。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    cfw "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/cfw/v1/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := cfw.NewCfwClient(
        cfw.CfwClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CancelCaptureTaskRequest{}
    request.FwInstanceId = "<fw_instance_id>"
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    taskIdCancelCaptureTaskDto:= "1dcddab3-7d79-4a56-9e67-4aa0962b98ad"
    request.Body = &model.CancelCaptureTaskDto{
        TaskId: &taskIdCancelCaptureTaskDto,
    }
    response, err := client.CancelCaptureTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见**API Explorer**的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	截止抓包任务返回值

错误码

请参见**错误码**。

A 附录

A.1 状态码

- 正常

状态码	描述	说明
200	OK	请求成功。

- 异常

状态码	描述	说明
400	Bad Request	错误的请求。
401	Unauthorized	请求未授权。
403	Forbidden	禁止访问。
404	Not Found	网页未找到。
500	Internal Server Error	系统内部错误。

A.2 错误码

当您调用API时，如果遇到“APIGW”开头的错误码，请参见**API网关错误码**进行处理。

状态码	错误码	错误信息	描述	处理措施
400	CFW.00109004	HTTP请求错误	HTTP请求错误	请稍后重试或联系技术支持
400	CFW.00200001	空参数错误	空参数错误	请联系技术支持。

状态码	错误码	错误信息	描述	处理措施
400	CFW.00200004	所删除资源被引用，删除失败	所删除资源被引用，删除失败	请联系技术支持。
400	CFW.00200005	操作内容不存在	操作内容不存在	请联系技术支持
400	CFW.00200007	Name冲突	Name冲突	请重新命名。
400	CFW.00200009	已存在相同的参数	已存在相同的参数	请联系技术支持。
400	CFW.00200010	配置类型错误	配置类型错误	请联系技术支持。
400	CFW.00200011	不支持批量操作	不支持批量操作	请联系技术支持。
400	CFW.00200013	组装URI错误	组装URI错误	请联系技术支持。
400	CFW.00200020	增加的ACL规则数量不能超过20个	增加的ACL规则数量不能超过20个	请减少添加acl规则数量。
400	CFW.00200022	黑白名单禁止配置全部IP段	黑白名单禁止配置全部IP段	请明确黑白名单ip地址段。
400	CFW.00200023	后台升级任务超过限制，请稍后再试	后台升级任务超过限制，请稍后再试	请联系技术支持。
400	CFW.00200024	超出最大数量限制	超出最大数量限制	请联系技术支持。
400	CFW.00200025	长连接时间超出范围	长连接时间超出范围	请确保长连接规则时长从一秒到一千天。
400	CFW.00200026	长连接规则数目到达限制	长连接规则数目到达限制	请删除一些长连接规则。
400	CFW.00200027	acl地址错误	acl地址错误	请确保acl规则地址符合规范。
400	CFW.00200028	地址类型不一致	地址类型不一致	请确保地址类型一致。
400	CFW.00200030	地址类型错误	地址类型错误	请联系技术支持。
400	CFW.00200032	引擎不支持IPv6	引擎不支持IPv6	请联系技术支持

状态码	错误码	错误信息	描述	处理措施
400	CFW.00200036	不允许更改为私网网段	不允许更改为私网网段	请联系技术支持。
400	CFW.00200041	地址参数为null	地址参数为null	请添加地址类型参数。
400	CFW.00200016	实例状态错误	实例状态错误	请联系技术支持。
400	CFW.00200110	不能操作基础防御	不能操作基础防御	请联系技术支持。
400	CFW.00300001	命令解析异常	命令解析异常	请联系技术支持。
400	CFW.00400002	无需操作	无需操作	请联系技术支持。
400	CFW.00400004	成员已存在	成员已存在	请删除一些服务组成员。
400	CFW.00400006	清除规则击中次数参数错误	清除规则击中次数参数错误	请检查并确认参数值是否合法。
400	CFW.00400007	添加规则类型不一致	添加规则类型不一致	请确保添加规则类型一致。
400	CFW.00400008	防护对象不存在	防护对象不存在	请联系技术支持。
400	CFW.00400009	泛域名防护规则超过数量限制	泛域名防护规则超过数量限制	请删除一些泛域名防护规则。
400	CFW.00400010	长连接不支持的协议	长连接不支持的协议	请确保规则协议属于TCP,UDP。
400	CFW.00400011	黑白名单信息重复	黑白名单信息重复	请确保添加不同的黑白名单。
400	CFW.00400012	东西向防护不存在,不能下发私网ip黑白名单	东西向防护不存在,不能下发私网ip黑白名单	请添加东西向防护。
400	CFW.00400013	黑白名单超过最大数量2000条	黑白名单超过最大数量2000条	请删除一些黑白名单。
400	CFW.00500002	时间间距错误	时间间距错误	请联系技术支持。
400	CFW.00500004	页码跳转间距过大	页码跳转间距过大	请联系技术支持。

状态码	错误码	错误信息	描述	处理措施
400	CFW.00600003	HTTP响应状态码异常	HTTP响应状态码异常	请联系技术支持。
400	CFW.00700001	关联ER不存在	关联ER不存在	请检查er是否存在。
400	CFW.00700002	关联VPC不存在	关联VPC不存在	请检查vpc是否存在。
400	CFW.00700003	关联子网网段冲突	关联子网网段冲突。	请确保创建子网与现有vpc下子网网段不重合。
400	CFW.00700004	子网创建失败	子网创建失败。	请联系技术支持。
400	CFW.00700007	ER创建VPC连接失败	ER创建VPC连接失败	请联系技术支持
400	CFW.00700012	修改路由失败	修改路由失败	请联系技术支持。
400	CFW.00700015	查询VPC配额信息失败	查询VPC配额信息失败。	请联系技术支持。
400	CFW.00700016	VPC可创建路由表配额不足	VPC可创建路由表配额不足	请删除vpc下已有路由表。
400	CFW.00800001	查询ETCD异常	查询ETCD异常	请联系技术支持。
400	CFW.00800002	删除ETCD异常	删除ETCD异常	请联系技术支持。
400	CFW.00800003	插入ETCD异常	插入ETCD异常	请联系技术支持。
400	CFW.00900016	导入任务进行中，请任务结束后再操作	导入任务进行中，请任务结束后再操作	请等待一些时间，直至导入任务结束。
400	CFW.00900020	地址组超过最大数量限制	地址组超过最大数量限制	请删除一些地址组。
400	CFW.00900030	整体服务数量到达限制	整体服务数量到达限制	请删除一些服务组成员。
400	CFW.01100008	集群扩容中不允许下发配置	集群扩容中不允许下发配置	请联系技术支持。

A.3 获取项目 ID

调用 API 获取项目 ID

项目ID可以通过调用查询指定条件下的项目信息API获取。

获取项目ID的接口为“GET https://{Endpoint}/v3/projects”，其中{Endpoint}为IAM的终端节点，可以从地区和终端节点获取。接口的认证鉴权请参见认证鉴权。

响应示例如下，其中projects下的“id”即为项目ID。

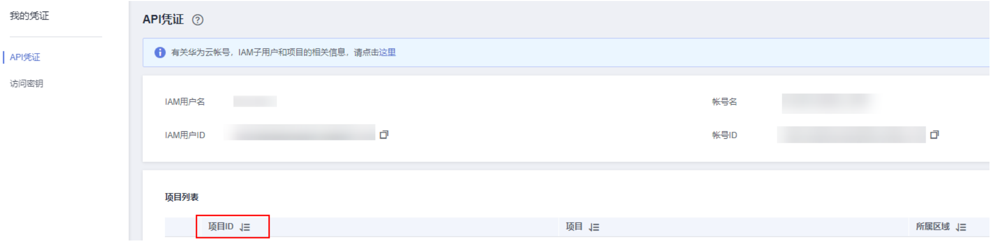
```
{
    "projects": [
        {
            "domain_id": "65382450e8f64ac0870cd180d14e684b",
            "is_domain": false,
            "parent_id": "65382450e8f64ac0870cd180d14e684b",
            "name": "xxxxxxxx",
            "description": "",
            "links": {
                "next": null,
                "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"
    }
}
```

从控制台获取项目 ID

在调用接口的时候，部分URL中需要填入项目编号，所以需要获取到项目编号。项目编号获取步骤如下：

1. 登录管理控制台。
2. 单击用户名，在下拉列表中单击“我的凭证”。
3. 在“API凭证”页面的项目列表中查看项目ID。

图 A-1 查看项目 ID



有关华为云帐号，IAM子用户和项目的相关信息，请点击这里

IAM用户名 [redacted]
帐号名 [redacted]
IAM用户ID [redacted]
帐号ID [redacted]

项目列表

项目ID	项目	所属区域

B 修订记录

发布日期	修改说明
2024-06-28	第四次正式发布。 新增以下接口： ● 标签创建接口 ● 删除标签 ● “抓包管理”章节下全部接口。
2023-12-15	第三次正式发布： 新增以下接口： ● 创建防火墙 ● 获取CFW任务执行状态 ● 删除防火墙 ● 获取日志配置 ● 创建日志配置 ● 更新日志配置
2023-10-13	第二次正式发布。 新增以下接口： ● 查询防火墙列表 ● 批量更新规则动作 ● 查询规则标签 ● “域名解析及域名组管理”章节下全部接口。
2022-11-30	第一次正式发布。