

## REST API Examples

<https://campus.barracuda.com/doc/96011777/>

This article provides a few examples on how to use the Barracuda Web Application Firewall REST APIs:

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## Virtual Service

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### To Create a Virtual Service

#### Example: Creating a HTTP Service

##### Request:

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/services " -H "Content-Type: application/json" -u "eyJldCI6liOGUxNDQ2OTM4ZjRkIn0=\n:" -d {
"address-version": "IPv4",
"app-id": "app1",
"comments": "This is a demo service",
"ip-address": "10.36.73.154",
"mask": "255.255.255.0",
"name": "service_app1",
"port": "80",
"type": "HTTP"
}
```

##### Response:

```
{"id":"service_app1","token":"eyJ1c2ZXQiOiIxNjI2MDg1NDc3In0=\n","msg":"Successfully created."}
```

#### Example: Creating a HTTPS Service

##### Request:

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/services " -H "Content-Type: application/json" -u "eyJldCkNjQzNjZiOGUxNDQ2OTM4ZjRkIn0=\n:" -d ' {
```

```
"address-version": "IPv4",
"app-id": "app1-https",
"comments": "This is a demo service",
"ip-address": "10.36.73.154",
"mask": "255.255.255.0",
"name": "service_app1_secure",
"port": "443",
"certificate": "test_cert",
"type": "HTTPS"
}'
```

**Response:**

```
{"id":"service_app1_secure","token":"eyJldCNlciI6ImFkbWluIn0=\n","msg":"Successfully
created."}
```

**To Retrieve a Virtual Service****Example:****Request:**

```
curl -X GET "http://10.36.73.160:8000/restapi/v3.2/services/service_app1" -H "Content-Type:
application/json" -u "eyJldCI6IjE2xNDQ2OTM4ZjRkIn0=\n:"
```

**Response:**

```
{
"data": {
"service_app1": {
"captcha Settings": {
"recaptcha-domain": [

],
"recaptcha-type": "CAPTCHA"
},
"Instant SSL": {
"status": "Off",
"sharepoint-rewrite-support": "Off",
"secure-site-domain": [

]
},
}
```

```
"SSL OSCP": {
  "responder-url": "",
  "certificate": "",
  "enable": "No"
},
"WaaS Account Details": {
  "waas-account-id": "0",
  "waas-account-serial": "1623473"
},
"Server": {

},
"mask": "255.255.255.255",
"type": "HTTP",
"session-timeout": "60",
"Caching": {
  "status": "Off",
  "ignore-request-headers": "No",
  "cache-negative-response": "No",
  "file-extensions": [

],
  "ignore-response-headers": "No",
  "min-size": "256",
  "expiry-age": "60",
  "max-size": "256"
},
"Comment Spam": {
  "exception-patterns": [

],
  "parameter": [

]
},
"ip-address": "10.36.73.154",
"Rule Group": {

},
"vsite": "default",
"status": "On"....."rate-control-pool": "NONE",
"mode": "Passive",
"web-firewall-policy": "default",
"client-ip-addr-header": "",
"trusted-hosts-group": "",
"trusted-hosts-action": "Default"
```

```
}  
}  
,  
"object": "Service",  
"token": "eyJ1c2VQOiOilxNjl2MDg1ODkyln0=\n"  
}
```

(The above response is snipped)

### To Update a Virtual Service

In this REST API call, the parameters can be passed in a Simple JSON request or a Nested JSON request based on the parameters that needs to be modified. For information on JSON requests, see Request Syntax.

#### Example:

#### Request:

```
curl -X PUT "http://10.36.73.160:8000/restapi/v3.2/services/service_app1 " -H "Content-Type: application/json" -u "eyJldCI6IjGUxNDQ2OTM4ZjRkl0=\n:" -d '{"enable-access-logs": "Yes"}'
```

#### Response:

```
{"id": "service_app1", "msg": "Configuration updated", "token": "eyJldCI6YjdiOTgzNjExln0=\n"}
```

### To Delete a Virtual Service

#### Example:

#### Request:

```
curl -X DELETE "http://10.36.73.160:8000/restapi/v3.2/services/service_app1" -u "eyJwYXNzQiOilxNjl2MDg5Njcwln0=\n:"
```

#### Response:

```
{"token": "eyJldCI6IjE2Mil6ImFkbWluln0=\n", "msg": "Successfully deleted."}
```

---

## Real Server

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### To Create a Real Server

**Example:****Request:**

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/services/service_app1/servers" -H  
"Content-Type: application/json" -u "eyJldCI6ljNDQ2OTM4ZjRkIn0=\n:" -d
```

```
{  
  "ip-address": "10.1.1.1",  
  "name": "real_server_1",  
  "identifier": "IP Address",  
  "port": "80",  
  "address-version": "IPv4",  
  "comments": "Real Server"  
}
```

**Response:**

```
{"msg":"Successfully created.,"token":"eyJ1c2VyNjl2MDg3ODE5In0=\n","id":"real_server_1"}
```

### To Retrieve all Real Servers for a Service

**Example:****Request:**

```
curl -X GET "http://10.36.73.160:8000/restapi/v3.2/services/service_app1/servers" -u  
"eyJldCUxNDQ2OTM4ZjRkIn0=\n:"
```

**Response:**

```
{  
  "data": {  
    "real_server_1": {  
      "Out of Band Health Checks": {
```

```
"interval": "10",
"enable-oob-health-checks": "Yes"
},
"Load Balancing": {
"backup-server": "No",
"weight": "1"
},
"hostname": "",
"name": "real_server_1",
"ip-address": "10.1.1.1",
"identifier": "IP Address",
"port": "80",
"status": "In Service",
"Advanced Configuration": {
"max-spare-connections": "0",
"timeout": "300000",
"max-establishing-connections": "100",
"max-requests": "1000",
"source-ip-to-connect": "",
"max-keepalive-requests": "0",
"max-connections": "10000",
"client-impersonation": "No"
},
"SSL Policy": {
"enable-ssl-compatibility-mode": "No",
"validate-certificate": "Yes",
"enable-https": "No",
"enable-tls-1": "No",
"enable-ssl-3": "No",
"enable-tls-1-3": "No",
"enable-tls-1-1": "Yes",
"enable-http2-server": "No",
"client-certificate": "",
"enable-sni": "No",
"enable-tls-1-2": "Yes"
},
"Application Layer Health Checks": {
"method": "GET",
"url": "",
"status-code": "200",
"match-content-string": "",
"domain": "",
"additional-headers": [
]
},
}
```

```
"In Band Health Checks": {
  "max-timeout-failure": "10",
  "max-other-failure": "10",
  "max-http-errors": "0",
  "max-refused": "10"
},
"Connection Pooling": {
  "enable-connection-pooling": "Yes",
  "keepalive-timeout": "900000"
},
"address-version": "IPv4",
"resolved-ips": "",
"comments": "Real Server"
}
},
"object": "Server",
"token": "eyJldCI6MTRIZjQ1ZTEzIn0=\n",
"Service": "service_app1"
}
```

### To Update a Real Server

#### Example:

#### Request:

```
curl -X PUT "http://10.36.73.160:8000/restapi/v3.2/services/service_app1/servers/real_server_1 "
-H "Content-Type: application/json" -u "eyJldCI6IQTM4ZjRkIn0=\n:" -d '{"status": "Out of Service
Maintenance" }'
```

#### Response:

```
{"token": "eyJldCI6lEZjQ2YTFFkIn0=\n", "msg": "Configuration updated", "id": "real_server_1" }
```

### To Delete a Real Server

#### Example:

#### Request:

```
curl -X DELETE
```



```
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/servers/real_server_1 " -u  
"eyJldCI6M4ZjRkln0=\n:"
```

**Response:**

```
{"token":"eyJ1c2xNjl2MDg4MzAwln0=\n","msg":"Successfully deleted."}
```

## Content Rule

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### To Create a Content Rule

**Example:****Request:**

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules" -H  
"Content-Type: application/json" -u "eyJldCI6IjE2OTM4ZjRkln0=\n:" -d
```

```
{  
  "comments": "Content Rule 1",  
  "extended-match": "*",  
  "mode": "Passive",  
  "url-match": "/index.html",  
  "extended-match-sequence": "1",  
  "name": "Content_rule_1",  
  "web-firewall-policy": "default",  
  "host-match": "*"  
}
```

**Response:**

```
{"id":"Content_rule_1","msg":"Successfully created.,"token":"eyJldCI6IjE2OTM4ZjRkln0=\n"}
```

### To Retrieve a Content Rule

**Example:****Request:**

```
curl -X GET
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1" -u
"eyJldClxN4ZjRkln0=\n:"
```

**Response:**

```
{
  "data": {
    "Content_rule_1": {
      "extended-match": "*",
      "app-id": "Content_rule_1",
      "Compression": {
        "compress-unknown-content-types": "No",
        "status": "Off",
        "min-size": "8192",
        "content-types": [

        ]
      },
      "extended-match-sequence": "1",
      "url-match": "/index.html",
      "host-match": "*",
      "comments": "Content Rule 1",
      "web-firewall-policy": "default",
      "Logging": {
        "access-log": "Enable"
      },
      "status": "On",
      "Advanced Client Analysis": {
        "advanced-analysis": "Same as Service"
      },
      "Rule Group Server count": 0,
      "name": "Content_rule_1",
      "Caching": {
        "cache-negative-responses": "No",
        "max-size": "256",
        "expiry-age": "60",
        "min-size": "256",
        "ignore-response-headers": "No",
        "file-extensions": [

        ],
        "ignore-request-headers": "No",
        "status": "Off"
      },
    }
  }
}
```

```

"captcha Settings": {
  "rg-recaptcha-domain": [

  ],
  "recaptcha-type": "CAPTCHA"
},
"mode": "Passive",
"Load Balancing": {
  "header-name": "",
  "persistence-cookie-name": "persistence",
  "persistence-method": "None",
  "persistence-idle-timeout": "600",
  "failover-method": "Load Balance",
  "persistence-cookie-domain": "",
  "parameter-name": "",
  "source-ip-netmask": "",
  "persistence-cookie-path": "",
  "lb-algorithm": "Round Robin",
  "cookie-age": ""
},
"Rule Group Server": {

}
}
},
"object": "Rule Group",
"token": "eyJ1c2VyYjNjI2MDg4NjY1In0=\n",
"Service": "service_app1"
}

```

### To Update a Content Rule

#### Example:

#### Request:

```

curl -X PUT
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1" -H
"Content-Type: application/json" -u "eyJldCI6IjE2MDg4ZjRkIn0=\n:" -d '{"mode": "Active"}'

```

#### Response:

```

{"id":"Content_rule_1","msg":"Configuration updated","token":"eyJldCI6IjE2MDg4ZjRkIn0=\n"}

```

## To Delete a Content Rule

**Example:****Request:**

```
curl -X DELETE
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1" -u
"eyJldCI6IjEViZTU0ZDg4ZDZlIn0=\n:"
```

**Response:**

```
{"msg":"Successfully deleted.,"token":"eyJldCNlci6ImFkbWluln0=\n"}
```

## Rule Group Server

### To Create a Rule Group Server

**Example:****Request:**

```
curl -X POST
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1/content-rule-servers" -H "Content-Type: application/json" -u "eyJldCI6IjEiZDg4ZDZlIn0=\n:" -d
```

```
{
  "identifier": "Hostname",
  "name": "content_rule_server",
  "hostname": "www.cudanet.com",
  "port": "80",
  "comments": "Server using the hostname identifier"
}
```

**Response:**

```
{"id":"content_rule_server","token":"eyJldCI6ImJkczZWQ5In0=\n","msg":"Successfully created."}
```

## To Retrieve a Rule Group Server

### Example:

### Request:

```
curl -X GET
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1/content-rule-servers" -u "eyJldCI6IDg4ZDZlIn0=\n:"
```

### Response:

```
{
  "Service": "service_app1",
  "Rule Group": "Content_rule_1",
  "token": "eyJTZjliwiZXQiOiIxNjI2MDg5MTYyIn0=\n",
  "object": "Rule Group Server",
  "data": {
    "content_rule_server": {
      "hostname": "www.cudanet.com",
      "Load Balancing": {
        "backup-server": "No",
        "weight": "1"
      },
      "Out of Band Health Checks": {
        "enable-oob-health-checks": "On",
        "interval": "10"
      },
      "ip-address": "18.144.102.70",
      "name": "content_rule_server",
      "SSL Policy": {
        "validate-certificate": "Yes",
        "enable-ssl-compatibility-mode": "No",
        "enable-sni": "No",
        "enable-tls-1-2": "Yes",
        "client-certificate": "",
        "enable-ssl-3": "No",
        "enable-http2-server": "No",
        "enable-tls-1-3": "No",
        "enable-tls-1-1": "Yes",
        "enable-tls-1": "No",
        "enable-https": "Off"
      },
      "Advanced Configuration": {
```

```
"client-impersonation": "No",
"max-keepalive-requests": "0",
"max-connections": "10000",
"source-ip-to-connect": "",
"max-establishing-connections": "100",
"max-requests": "1000",
"timeout": "300000",
"max-spare-connections": "0"
},
"status": "In Service",
"port": "80",
"identifier": "Hostname",
"comments": "Server using the hostname identifier",
"resolved-ips": "",
"address-version": "IPv4",
"In Band Health Checks": {
"max-timeout-failure": "10",
"max-other-failure": "10",
"max-http-errors": "0",
"max-refused": "10"
},
"Connection Pooling": {
"enable-connection-pooling": "Yes",
"keepalive-timeout": "900000"
},
"Application Layer Health Checks": {
"match-content-string": "",
"status-code": "200",
"url": "",
"method": "GET",
"additional-headers": [

],
"domain": ""
}
}
}
}
```

### To Update a Rule Group Server

#### Example:

**Request:**

```
curl -X PUT
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1/content-rule-servers/content_rule_server" -H "Content-Type: application/json" -u
"eyJldCI6Ij0ZDg4ZDZlIn0=\n:" -d '{"port": "8888"}'
```

**Response:**

```
{"msg": "Configuration
updated", "token": "eyJldCI6IzYmI0NzEwMDk2In0=\n", "id": "content_rule_server"}
```

**To Delete a Rule Group Server****Example:****Request:**

```
curl -X DELETE
"http://10.36.73.160:8000/restapi/v3.2/services/service_app1/content-rules/Content_rule_1/content-rule-servers/content_rule_server" -u "eyJldCI6iZTU0ZDg4ZDZlIn0=\n:"
```

**Response:**

```
{"msg": "Successfully deleted.", "token": "eyJldCI6IjDNmZWE0ZDZjIn0=\n"}
```

**Logs**

The maximum number of logs that can be fetched at a time using Logs REST API is 1,00,000.

**To Fetch Logs**

By default, 20 logs are fetched at a time.

**Example:****Request:**

```
curl http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs -X GET -u
"eyJ3MTMwMDYyIn0=\n:"
```

**Response:**

```
{
"token": "eyJwYXNzd29yZCc5ODM4In0=\n",
"object": "Web Firewall Logs",
"data": [
{
"client-ip": "99.66.160.6",
"severity": "Alert",
"proxy-port": 38008,
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"date": "2021-07-27",
"client-port": 38008,
"country-code": "US",
"session-id": "",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"service-port": 80,
"client-type": "Unknown",
"url": "/",
"service-app-id": "rule1",
"id": "17ae6f29352-f061ec01",
"attack-detail": "Key=\"username\" Length=\"8\"",
"host": "99.66.160.6",
"attack": "Max Key Length Exceeded",
"risk-score": 120,
"method": "POST",
"protocol": "HTTP",
"service-name": "service1",
"query-string": "\n",
"rule": "service1:host_test",
"follow-up-action": "None",
"rule-type": "JSON Profile",
"service-ip": "99.66.160.6",
"client-risk-score": 0,
"authenticated-user": "",
"proxy-ip": "99.66.160.6",
"referer": "",
```



```
"time": "00:51:35.29",
"attack-category": "JSON Violations"
},
{
"service-ip": "99.66.160.6",
"rule-type": "JSON Profile",
"follow-up-action": "None",
"rule": "service1:host_test",
"service-name": "",
"query-string": "\\-\\\"",
"time": "00:51:35.29",
"referer": "",
"attack-category": "JSON Violations",
"proxy-ip": "99.66.160.6",
"authenticated-user": "",
"client-risk-score": 0,
"service-app-id": "rule1",
"url": "/",
"service-port": 80,
"client-type": "Unknown",
"date": "2021-07-27",
"client-port": 38008,
"country-code": "US",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"session-id": "",
"action": "LOG",
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"severity": "Alert",
"proxy-port": 38008,
"client-ip": "99.66.160.6",
"method": "POST",
"protocol": "HTTP",
"risk-score": 180,
"host": "99.66.160.6",
"attack": "Max Value Length Exceeded",
"attack-detail": "Key=\"username\" Length=\"4\"",
"id": "17ae6f29352-f061ec01"
}
]
}
```

### To Fetch a Log using the Log ID

**Example:****Request:**

```
curl http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs/17abee19ff6-12679b22 -X GET -u"eyJ1c2Vy3MTMwMDYyln0=\n:"
```

**Response:**

```
{
  "token": "eyJ1cTY3NzYwln0=\n",
  "object": "Web Firewall Logs",
  "data": [
    {
      "id": "17abee19ff6-12679b22",
      "attack-detail": "Key=\"username\" Length=\"8\"",
      "attack": "Max Key Length Exceeded",
      "host": "99.66.160.6",
      "risk-score": 120,
      "method": "POST",
      "protocol": "HTTP",
      "client-ip": "99.66.160.6",
      "proxy-port": 41726,
      "severity": "Alert",
      "user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
      "action": "DENY",
      "date": "2021-07-19",
      "client-port": 41726,
      "country-code": "US",
      "client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
      "session-id": "",
      "service-port": 80,
      "client-type": "Unknown",
      "service-app-id": "service1",
      "url": "/",
      "client-risk-score": 0,
      "authenticated-user": "",
      "proxy-ip": "99.66.160.6",
      "time": "06:08:15.480",
      "referer": "",
      "attack-category": "JSON Violations",
      "service-name": "service1",
      "query-string": "\-\"",
      "rule": "service1:reco_6666cd76f96956469e7be39d750cc7d9_post",
      "follow-up-action": "None",
    }
  ]
}
```

```
"rule-type": "JSON Profile",
"service-ip": "99.66.160.6"
}
]
}
```

## To Fetch a Parameter Value from a Log

### Example:

### Request:

```
curl
http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs?parameters=service-name,time,date
-X GET -u"eyJ1c2ODI3MTMwMDYyln0=\n:"
```

### Response:

```
{
"token": "eyJ1c2VzZkzYTY3NzYwln0=\n",

"object": "Web Firewall Logs",
"data": [
{
"date": "2021-07-27",
"service-name": "service1",
"time": "00:51:35.29"
},
{
"date": "2021-07-27",
"service-name": "",
"time": "00:51:35.29"
}
]
}
```

## To Apply a Filter on Logs

### Example:

### Request:

```
curl http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs?filters=[{"field":"client-ip",
"operator":"is equal to", "values":["99.66.160.6"]}]-X GET -u"eyJ1cODI3MTMwMDYyIn0=\n:"
```

**Response:**

```
{
  "token": "eyJ1c2VyI3NzYwIn0=\n",
  "object": "Web Firewall Logs",
  "data": [
    {
      "service-ip": "99.66.160.6",
      "follow-up-action": "None",
      "rule-type": "JSON Profile",
      "query-string": "\"-\\"",
      "service-name": "service1",
      "rule": "service1:host_test",
      "attack-category": "JSON Violations",
      "time": "00:51:35.29",
      "referer": "",
      "proxy-ip": "99.66.160.6",
      "client-risk-score": 0,
      "authenticated-user": "",
      "service-app-id": "rule1",
      "url": "/",
      "client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
      "country-code": "US",
      "session-id": "",
      "client-port": 38008,
      "date": "2021-07-27",
      "client-type": "Unknown",
      "service-port": 80,
      "user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
      "action": "LOG",
      "client-ip": "99.66.160.6",
      "proxy-port": 38008,
      "severity": "Alert",
      "protocol": "HTTP",
      "method": "POST",
      "risk-score": 120,
      "attack-detail": "Key=\"username\" Length=\"8\"",
      "attack": "Max Key Length Exceeded",
      "host": "99.66.160.6",
      "id": "17ae6f29352-f061ec01"
    }
  ]
}
```

```
"risk-score": 180,  
"protocol": "HTTP",  
"method": "POST",  
"id": "17ae6f29352-f061ec01",  
"attack-detail": "Key=\"username\" Length=\"4\"",  
"attack": "Max Value Length Exceeded",  
"host": "99.66.160.6",  
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",  
"country-code": "US",  
"session-id": "",  
"client-port": 38008,  
"date": "2021-07-27",  
"client-type": "Unknown",  
"service-port": 80,  
"url": "/",  
"service-app-id": "rule1",  
"client-ip": "99.66.160.6",  
"severity": "Alert",  
"proxy-port": 38008,  
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",  
"action": "LOG",  
"attack-category": "JSON Violations",  
"time": "00:51:35.29",  
"referer": "",  
"client-risk-score": 0,  
"authenticated-user": "",  
"proxy-ip": "99.66.160.6",  
"service-ip": "99.66.160.6",  
"query-string": "-\"",  
"service-name": "",  
"rule": "service1:host_test",  
"follow-up-action": "None",  
"rule-type": "JSON Profile"  
}  
]  
}
```

### To Apply Multiple Filters on Logs

#### Example:

#### Request:

```
curl http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs?filters=[{"field":"client-ip",
```

```
"operator": "is equal to", "values": ["99.66.160.6"]}, {"field": "attack-category", "operator": "in (comma-separated)", "values": ["Limits Violation", "XSS Injections"]}] -X GET -u "eyJ1DI3MTMwMDYyIn0=\n:"
```

**Response:**

```
{
  "object": "Web Firewall Logs",
  "data": [
    {
      "id": "17ad24ea025-b16e7850",
      "attack-detail": "type=\"cross-site-scripting\" pattern=\"script-tag\" token=\"<script>\" header=\"test\" value=\"<script></script>\"",
      "host": "99.66.160.6",
      "attack": "Cross-Site Scripting in Header",
      "risk-score": 140,
      "method": "GET",
      "protocol": "HTTP",
      "client-ip": "99.66.160.6",
      "proxy-port": 39710,
      "severity": "Alert",
      "user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
      "action": "DENY",
      "date": "2021-07-23",
      "client-port": 39710,
      "session-id": "",
      "country-code": "US",
      "client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
      "service-port": 80,
      "client-type": "Unknown",
      "service-app-id": "service1",
      "url": "/",
      "client-risk-score": 0,
      "authenticated-user": "",
      "proxy-ip": "99.66.160.6",
      "referer": "",
      "time": "00:40:06.54",
      "attack-category": "XSS Injections",
      "service-name": "service1",
      "query-string": "\n-\n",
      "rule": "service1:star-acl",
      "follow-up-action": "None",
      "rule-type": "Header ACL",
      "service-ip": "99.66.160.6"
    }
  ],
}
```

```
{
  "url": "/",
  "service-app-id": "service1",
  "client-type": "Unknown",
  "service-port": 80,
  "client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
  "session-id": "",
  "country-code": "US",
  "date": "2021-07-19",
  "client-port": 59208,
  "action": "LOG",
  "user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
  "proxy-port": 59208,
  "severity": "Alert",
  "client-ip": "99.66.160.6",
  "protocol": "HTTP",
  "method": "GET",
  "risk-score": 140,
  "attack": "Cross-Site Scripting in Parameter",
  "host": "99.66.160.6",
  "attack-detail": "type=\"cross-site-scripting\" pattern=\"script-tag\" token=\"<script>\" Parameter=\"id\" value=\"<script>alert(hi)</script>\"",
  "id": "17abdef8c11-126bdc27",
  "service-ip": "99.66.160.6",
  "rule-type": "Global",
  "follow-up-action": "None",
  "rule": "security-policy",
  "query-string": "id=<script>alert(hi)</script>",
  "service-name": "",
  "attack-category": "XSS Injections",
  "referrer": "",
  "time": "01:43:50.676",
  "proxy-ip": "99.66.160.6",
  "client-risk-score": 0,
  "authenticated-user": ""
},
{
  "risk-score": 140,
  "protocol": "HTTP",
  "method": "GET",
  "id": "17aaa07aabf-9997b68",
  "attack-detail": "type=\"cross-site-scripting\" pattern=\"script-tag\" token=\"<script>\" Parameter=\"id\" value=\"<script>alert(hi)</script>\"",
  "attack": "Cross-Site Scripting in Parameter",
  "host": "99.66.160.6",
  "country-code": "US",
```

```
"session-id": "",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"client-port": 40418,
"date": "2021-07-15",
"client-type": "Unknown",
"service-port": 80,
"url": "/",
"service-app-id": "service1",
"client-ip": "99.66.160.6",
"severity": "Alert",
"proxy-port": 40418,
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"attack-category": "XSS Injections",
"referrer": "",
"time": "04:57:47.71",
"authenticated-user": "",
"client-risk-score": 0,
"proxy-ip": "99.66.160.6",
"service-ip": "99.66.160.6",
"query-string": "id=<script>alert(hi)</script>",
"service-name": "service1",
"rule": "security-policy",
"follow-up-action": "None",
"rule-type": "Global"
},
{
"risk-score": 140,
"protocol": "HTTP",
"method": "GET",
"id": "17aaa078717-1098b55d",
"attack-detail": "type=\"cross-site-scripting\" pattern=\"script-tag\" token=\"<script>\"
Parameter=\"id\" value=\"<script>alert(hi)</script>\"",
"host": "99.66.160.6",
"attack": "Cross-Site Scripting in Parameter",
"session-id": "",
"country-code": "US",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"date": "2021-07-15",
"client-port": 40406,
"client-type": "Unknown",
"service-port": 80,
"service-app-id": "service1",
"url": "/",
"client-ip": "99.66.160.6",
"proxy-port": 40406,
```



```
"severity": "Alert",
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"attack-category": "XSS Injections",
"referer": "",
"time": "04:57:37.947",
"authenticated-user": "",
"client-risk-score": 0,
"proxy-ip": "99.66.160.6",
"service-ip": "99.66.160.6",
"query-string": "id=<script>alert(hi)</script>",
"service-name": "",
"rule": "security-policy",
"follow-up-action": "None",
"rule-type": "Global"
}
],
"token": "eyJwYXNzd29MzgxMTA2In0=\n"
}
```

### To Apply the Limit and Offset

#### Example:

#### Request:

```
curl http://10.36.68.52:8000/restapi/v3.2/logs/web-firewall-logs?limit=4&offset=2 -X GET -u
"eyJ1c2VyljTMwMDYyIn0=\n:"
```

#### Response:

```
{
"data": [
{
"risk-score": 120,
"method": "POST",
"protocol": "HTTP",
"id": "17ae3bb7701-e2614918",
"attack-detail": "Key=\"username\" Length=\"8\"",
"host": "99.66.160.6",
"attack": "Max Key Length Exceeded",
"date": "2021-07-26",
"client-port": 45912,
```

```
"session-id": "",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"country-code": "US",
"service-port": 80,
"client-type": "Unknown",
"url": "/",
"service-app-id": "rule1",
"client-ip": "99.66.160.6",
"severity": "Alert",
"proxy-port": 45912,
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"referer": "",
"time": "09:52:31.619",
"attack-category": "JSON Violations",
"client-risk-score": 0,
"authenticated-user": "",
"proxy-ip": "99.66.160.6",
"service-ip": "99.66.160.6",
"service-name": "service1",
"query-string": "\\-\\",
"rule": "service1:host_test",
"follow-up-action": "None",
"rule-type": "JSON Profile"
},
{
"time": "09:52:31.619",
"referer": "",
"attack-category": "JSON Violations",
"proxy-ip": "99.66.160.6",
"authenticated-user": "",
"client-risk-score": 0,
"service-ip": "99.66.160.6",
"follow-up-action": "None",
"rule-type": "JSON Profile",
"service-name": "",
"query-string": "\\-\\",
"rule": "service1:host\_test",
"method": "POST",
"protocol": "HTTP",
"risk-score": 180,
"attack-detail": "Key=\\\"username\\\" Length=\\\"4\\\"",
"attack": "Max Value Length Exceeded",
"host": "99.66.160.6",
"id": "17ae3bb7701-e2614918",
"service-app-id": "rule1",
```

```
"url": "/",
"client-port": 45912,
"date": "2021-07-26",
"session-id": "",
"client-fingerprint": "g_bceec223e740c7b5424b26a01c028ef91",
"country-code": "US",
"service-port": 80,
"client-type": "Unknown",
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"client-ip": "99.66.160.6",
"proxy-port": 45912,
"severity": "Alert"
},
{
"service-ip": "99.66.160.6",
"rule": "service1:host\_test",
"service-name": "service1",
"query-string": "\\-\\",
"rule-type": "JSON Profile",
"follow-up-action": "None",
"referer": "",
"time": "07:37:23.999",
"attack-category": "JSON Violations",
"client-risk-score": 0,
"authenticated-user": "",
"proxy-ip": "99.66.160.6",
"service-port": 80,
"client-type": "Unknown",
"client-port": 38612,
"date": "2021-07-26",
"session-id": "",
"client-fingerprint": "g_bceec223e740c7b5424b26a01c028ef91",
"country-code": "US",
"url": "/",
"service-app-id": "rule1",
"proxy-port": 38612,
"severity": "Alert",
"client-ip": "99.66.160.6",
"action": "LOG",
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"risk-score": 120,
"method": "POST",
"protocol": "HTTP",
"id": "17ae33fc09e-10608df0",
"attack": "Max Key Length Exceeded",
```

```
"host": "99.66.160.6",
"attack-detail": "Key=\"username\" Length=\"8\""
},
{
"client-ip": "99.66.160.6",
"severity": "Alert",
"proxy-port": 38550,
"user-agent": "curl/7.15.3 (i686-pc-linux-gnu) libcurl/7.15.3 OpenSSL/0.9.8c zlib/1.2.7",
"action": "LOG",
"country-code": "US",
"session-id": "",
"client-fingerprint": "g_bcec223e740c7b5424b26a01c028ef91",
"date": "2021-07-26",
"client-port": 38550,
"client-type": "Unknown",
"service-port": 80,
"url": "/",
"service-app-id": "rule1",
"id": "17ae33ea5a7-d677625",
"attack-detail": "Key=\"username\" Length=\"8\"",
"host": "99.66.160.6",
"attack": "Max Key Length Exceeded",
"risk-score": 120,
"protocol": "HTTP",
"method": "POST",
"query-string": "\"-\"",
"service-name": "",
"rule": "service1:host_test",
"follow-up-action": "None",
"rule-type": "JSON Profile",
"service-ip": "99.66.160.6",
"authenticated-user": "",
"client-risk-score": 0,
"proxy-ip": "99.66.160.6",
"attack-category": "JSON Violations",
"time": "07:36:11.562",
"referer": ""
}
],
"object": "Web Firewall Logs",
"token": "eyJwYXNz3MzgxNjl1ln0=\n"
}
```

## Certificates

When uploading a certificate, the certificate and key must be converted to a Base64-encoded format to use it as a JSON value in v3.1 API.

### To Upload a Trusted CA Certificate

#### Example

#### Request:

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/certificates/trusted-ca-certificate" -H "accept: application/json" -u "eyJldCI6NGEwYzNiIn0=\n:barracuda" -H "Content-Type: application/json" -d '{ "certificate": "LS0tLSNSEF4Q3pBSk", "name": "TEST" }'
```

#### Response:

```
{"token":"eyJ1c2DU5NGNln0=\n","id":"TEST","msg":"Successfully created."}
```

### To Upload a Trusted Server Certificate

#### Example:

#### Request:

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/certificates/trusted-server-certificate" -H "accept: application/json" -u "eyJldCI6NGEwYzNiIn0=\n:barracuda" -H "Content-Type: application/json" -d '{ "name": "TRUSTEDSERVER", "certificate": "LS0tLS1VUFNSEF4Q3pBSk" }'
```

#### Response:

```
{"token":"eyJ1c2MDU5NGNln0=\n","id":"TRUSTEDSERVER","msg":"Successfully created."}
```

## To Upload a Self-Signed Certificate

### Example:

### Request:

```
curl -X POST "http://10.36.73.160:8000/restapi/v3.2/certificates/signed-certificate" -H "accept: application/json" -u "eyJldCI6NGEwYzNiIn0=\n:barracuda" -H "Content-Type: application/json" -d '{ "certificate-password": "LS0tLS1VUFNSEF4Q3pBSk", "cert-type": "signed", "schedule-renewal-day": "15 days", "key-type": "RSA", "assign-associated-key": "", "signed-certificate": "LS0tLS1NSEF4Q3pBSk", "intermediary-certificates": [LS0tLS1NSEF4Q3pBSk], "auto-renew-cert": "Yes", "name": "TESTUPLOAD", "certificate-type": "PEM Certificate", "certificate-key": "LS0tLSNSEF4Q3pBSk", "allow-private-key-export": "Yes" }'
```

### Response:

```
{"token":"eyJ1c2MDU5NGNiIn0=\n","id":"TESTUPLOAD","msg":"Successfully created."}
```

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