

## Content Rule

<https://campus.barracuda.com/doc/45026178/>

Rules are used to configure content-aware switching over incoming web traffic. Rules help analyze an HTTP request headers to make load balancing and caching policy decisions.

### To Create a Content Rule

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/content_rules			
<b>Method:</b> POST			
<b>Description:</b> Creates a content rule for the given service.			
Parameter Name	Data Type	Mandatory	Description
<b>Input Parameters:</b>			
name	Alphanumeric	Yes	A name for the content rule.
status	String	Optional	The status of the content rule. The values include: <ul style="list-style-type: none"> <li>• on</li> <li>• off</li> </ul>
web_firewall_policy	Enumeration	Optional	A web firewall policy to be associated with the content rule.. The enumerated values include: <ul style="list-style-type: none"> <li>• default</li> <li>• sharepoint</li> <li>• sharepoint2013</li> <li>• owa</li> <li>• owa2010</li> <li>• owa2013</li> <li>• oracle</li> </ul>
host_match	Alphanumeric	Yes	A host name to be matched against the host in the request header.
url_match	URL	Yes	A URL to be matched to the URL in the request header.
extended_match	String	Yes	An expression that consists of a combination of HTTP headers and/or query string parameters.  For information on how to write extended match expressions, refer to <a href="#">Extended Match Syntax Help</a> .
extended_match_sequence	Numeric	Yes	A number to indicate the order in which the extended match rule must be evaluated in the requests.

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

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules -u
'eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
OTlxM2FlliwidXNlci6ImFkbWluln0=\n:' -X POST -H Content-Type:application/json -d
'{"name":"rule1","host_match":"www.barracuda.com","url_match":"/index.html","extended_mat
ch":"*", "extended_match_sequence":5}'
```

**Response:**

```
{ "id": "rule1", "token": "eyJldCI6IjEzODAwNzY4NTgiLCJwYXNzd29yZCI6IjlyZThiZjZjYWFhYTY3MWQ
2YzcyNzhhNGI4\nZWE1YWYwliwidXNlci6ImFkbWluln0=\n" }
```

**To Retrieve Content Rules**

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/content_rules /v1/virtual_services/{virtual_service_id}/content_rules/{rule_id}			
<b>Method:</b> GET			
<b>Description:</b> Lists all content rules if “rule_id” is not specified.			
Parameter Name	Data Type	Mandatory	Description
<b>Input Parameters:</b>			
parameters	Alphanumeric	Optional	Any specific parameter name that needs to be retrieved. See <i>Example 2</i> .

**Example 1:****Request:**

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules/rule1 -u
'eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
OTlxM2FlliwidXNlci6ImFkbWluln0=\n:' -X GET
```

**Response:**

```
{ "lb_algorithm": "round_robin", "extended_match_sequence": "5", "name": "rule1", "host_match": "w
ww.barracuda.com", "comments": "", "extended_match": "*", "service_name": "demo_service", "url_
match": "/index.html", "id": "rule1", "servers": [], "token": "eyJldCI6IjEzODAwNzY4NTgiLCJwYXNzd29y
ZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\nZjZjYWFhYTY3MWQ2YzcyNzhhNGI4\nZWE1YWYwliwidXNlci6ImFkbWluln0=\n", "per
sistence_method": "NONE" }
```

**Example 2:****Request:**

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules/rule1 -u
'eyJldCI6IjE1MDE4NDAxMTciLCJwYXNzd29yZCI6IjdhNDQyN2I1ODAxMGM2MTBiYWM5NGRiNGVj\n
NTY3ZDFliwidXNlci6ImFkbWluln0=\n:' -X GET -G -d parameters=host_match,url_match
```

**Response:**

```
{"url_match":"/index.html","id":"rule1","token":"eyJldCI6IjE1MDQ0MDk2ODEiLCJwYXNzd29yZCI6
IjRkYmZlZjAyMDhjMzBIMDY1ODU3NGRIMTY0\nNTE2MDY4liwidXNlci6ImFkbWluln0=\n","host_m
atch":"www.barracuda.com"}
```

**To Update a Content Rule**

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/content_rules/{rule_id}			
<b>Method:</b> PUT			
<b>Description:</b> Updates the values of given parameters in the given content rule.			
Parameter Name	Data Type	Mandatory	Description
<b>Input Parameters:</b>			
status	String	Optional	The status of the content rule. The values include: <ul style="list-style-type: none"> <li>• on</li> <li>• off</li> </ul>
web_firewall_policy	Enumeration	Optional	A web firewall policy to be associated with the content rule. The enumerated values include: <ul style="list-style-type: none"> <li>• default</li> <li>• sharepoint</li> <li>• sharepoint2013</li> <li>• owa</li> <li>• owa2010</li> <li>• owa2013</li> <li>• oracle</li> </ul>
host_match	Alphanumeric	Optional	The host name to be matched against the host in the request header.
url_match	URL	Optional	The URL to be matched to the URL in the request header.

extended_match	String	Optional	<p>The expression that consists of a combination of HTTP headers and/or query string parameters. Updating extended match parameters value is shown in the example below. See <i>Example 2</i>.</p> <p>For information on how to write extended match expressions, refer to <a href="#">Extended Match Syntax Help</a>.</p>
extended_match_sequence	Numeric	Optional	<p>The number to indicate the order in which the extended match rule must be evaluated in the requests.</p>
load_balance.algorithm	Enumeration	Optional	<p>The algorithm to be used for load balancing. The enumerated values include:</p> <ul style="list-style-type: none"> <li>• round_robin</li> <li>• weighted_round_robin</li> <li>• least_requests</li> </ul>
load_balance.persistence_method	Enumeration	Optional	<p>The Persistence Method to be used to maintain the connection between a client and the first server that it connects to, even when the system is load balancing traffic.</p> <p>The enumerated values include:</p> <ul style="list-style-type: none"> <li>• none</li> <li>• source_ip               <ul style="list-style-type: none"> <li>◦ source_ip_netmask</li> </ul> </li> <li>• cookie_insert               <ul style="list-style-type: none"> <li>◦ persistence_cookie_name</li> <li>◦ persistence_cookie_domain</li> <li>◦ persistence_cookie_path</li> <li>◦ cookie_age</li> </ul> </li> <li>• cookie_passive               <ul style="list-style-type: none"> <li>◦ persistence_cookie_name</li> <li>◦ persistence_cookie_domain</li> <li>◦ persistence_cookie_path</li> <li>◦ cookie_age</li> </ul> </li> <li>• http_header               <ul style="list-style-type: none"> <li>◦ header_name</li> </ul> </li> <li>• url_parameter               <ul style="list-style-type: none"> <li>◦ parameter_name</li> </ul> </li> </ul>

load_balance.failover_method	Enumeration	Optional	<p>The failover method to be used when responding to a request which is persistent, but the server that must serve the request is failed or set to "Out-of-Service". The enumerated values include:</p> <ul style="list-style-type: none"> <li>• load_balance - The requests to be load balanced between the "alive" servers.</li> <li>• error - Sends "503 service unavailable" error message. This method is not supported for the persistence method "Source IP".</li> </ul>
load_balance.persistence_idle_timeout	Numeric	Optional	<p>The maximum idle time (in seconds) for a persistent connection. A client is directed to the same Real Server unless the connection is inactive for more than the specified number of seconds.</p>
source_ip_netmask	Numeric	Conditional	<p>A subnet mask to make subsequent connections from clients, from the same subnet go to the same Real Server.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>source_ip</i>.</p>
persistence_cookie_name	Alphanumeric	Conditional	<p>The name of the cookie that will be used for persistence.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>cookie_insert</i> or <i>cookie_passive</i>.</p>
persistence_cookie_path	URL	Optional	<p>The path property of the persistency cookie.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>cookie_insert</i> or <i>cookie_passive</i>.</p>
persistence_cookie_domain	Alphanumeric	Optional	<p>The domain name of the server of a persistency cookie.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>cookie_insert</i> or <i>cookie_passive</i>.</p>
cookie_age	Numeric	Conditional	<p>The expiry age of the persistence cookie in minutes.</p>

header_name	Alphanumeric	Conditional	<p>The name of the header for which the value needs to be checked in the HTTP requests.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>http_header</i>.</p>
parameter_name	Alphanumeric	Conditional	<p>The name of the parameter for which the value needs to be checked in the URL.</p> <p><b>Note:</b> This is required ONLY when <b>Persistence Method</b> is <i>url_parameter</i>.</p>
Comments	Alphanumeric		Description about the content rule.

**Example 1:****Request:**

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules/rule1 -u
'eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
OTIxM2FlliwidXNlcil6ImFkbWluln0=\n:' -X PUT -H Content-Type:application/json -d
'{"url_match":"/barracuda.html"}'
```

**Response:**

```
{"id":"rule1","token":"eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
1OWY2YmU1ZDc2\nOTI5OTg5IiwidXNlcil6ImFkbWluln0=\n"}
```

**Example 2:****Request:**

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules/rule1 -u
'eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
OTIxM2FlliwidXNlcil6ImFkbWluln0=\n:' -X PUT -H Content-Type:application/json -d
'{"url_match":"/*", "extended_match":"(Method eq GET) && (HTTP-Version eq HTTP/0.9) &&
(Header User-Agent eq mozilla)}'
```

**Response:**

```
{"id":"rule1","token":"eyJldCI6IjEzODAwNzQ0NjgiLCJwYXNzd29yZCI6IjY4MjdkMmNmY2MxYzI4ODY3ODU2NTM3NGQ1\n
1OWY2YmU1ZDc2\nOTI5OTg5IiwidXNlcil6ImFkbWluln0=\n"}
```

Y3ODU2NTM3NGQ1\nOTIxM2FlliwidXNlciI6ImFkbWluIn0=\n"}}

## To Delete a Content Rule

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/content_rules/{rule_id}
<b>Method:</b> DELETE
<b>Description:</b> Deletes the given content rule.

### Example:

### Request:

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/content_rules/rule1 -u 'eyJldCI6IjEzODAyMzczMDciLCJwYXNzd29yZCI6IjM1MGM0MDQxYzA1NTEwZTcwNmYwZDBmNmE5\nnNWMYnN2U5liwidXNlciI6ImFkbWluIn0=\n:' -X DELETE
```

### Response:

```
{"msg":"Successfully deleted","token":"eyJldCI6IjEzODAyMzk5NjciLCJwYXNzd29yZCI6ImNmNGUzYmM4OTUwMzI0NTg4OWEzMzM0ZjYz\nZmQ3MDZmliwidXNlciI6ImFkbWluIn0=\n"}}
```

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