

## Server

<https://campus.barracuda.com/doc/45025488/>

A server object can be used to configure the networking information of the backend server to be hosted on the Barracuda Web Application Firewall. Multiple real servers can be added and configured to load balance the incoming traffic for a service.

### Adding a Server

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/servers			
<b>Method:</b> POST			
<b>Description:</b> Adds a server with the given values.			
Parameter Name	Data Type	Mandatory	Description
<b>Input Parameters:</b>			
name	Alphanumeric	Yes	A name to identify this server.
identifier	Enumeration	Yes	The way to be used by the Barracuda Web Application Firewall to identify the server. The enumerated values include: <ul style="list-style-type: none"> <li>hostname</li> <li>ip_address</li> </ul>
address_version	Enumeration	Yes	The internet protocol version to be used. The enumerated values include: <ul style="list-style-type: none"> <li>ipv4</li> <li>ipv6</li> </ul>
ip_address	Alphanumeric	Conditional	The IP address of the server. This is required when <b>identifier</b> is set to <i>ip_address</i> .
hostname	Alphanumeric	Conditional	The hostname of the server. This is required when <b>identifier</b> is set to <i>hostname</i> .
port	Numeric	Yes	The port number of the server.
status	Enumeration	Optional	The status for the server to handle the requests. The enumerated values include: <ul style="list-style-type: none"> <li>out_of_service_sticky</li> <li>in_service</li> <li>out_of_service_all</li> <li>out_of_service_maintenance</li> </ul>

backup_server	String	Optional	<p>Determines whether to designate this server as a last resort server to be used when all other servers configured under the service fail. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul> <p>Note: If <b>backup_server</b> is set to yes, the <b>weight</b> value automatically resets to zero (0) and modifying this value will not take effect on the server.</p>
weight	Numeric	Optional	<p>The weight for the server. This is applicable only when the <b>Load Balancing Algorithm</b> is set to <i>weighted_round_robin</i>.</p>

**Example:**

**Request:**

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/servers -u 'eyJldCI6IjEzODAwNz6ImFkbWluln0=\n:' -X POST -H Content-Type:application/json -d '{"address_version":"ipv4","name":"demo_server","ip_address":"10.11.11.11","port":80}'
```

**Response:**

```
{"id":"demo_server","token":"eyJldCI6IjEzODAwdXNlciI6ImFkbWluln0=\n"}
```

## Retrieving Servers

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/servers /v1/virtual_services/{virtual_service_id}/servers/{server_id}			
<b>Method:</b> GET			
<b>Description:</b> Lists all servers if “server_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/servers/demo_server -u
```

```
'eyJldCI6IjEzNlci6ImFkbWluln0=\n:' -X GET
```

**Response:**

```
{
  "in_band_health_checks": {
    "max_http_errors": "0",
    "max_refused": "10",
    "max_timeout_failure": "10",
    "max_other_failure": "10"
  },
  "out_of_band_health_checks": {
    "enable_OOB_health_checks": "1",
    "interval": "10"
  },
  "status": "in-service",
  "client_impersonation": "0",
  "application_layer_health_check": {
    "additional_headers": [

],
    "status_code": "200",
    "url": null,
    "method": "GET",
    "match_content_string": null
  },
  "max_request": "1000",
  "max_establishing_connections": "100",
  "comments": "",
  "backup_server": "0",
  "max_connections": "10000",
  "timeout": "300000",
  "weight": "1",
  "ip_address": "10.11.11.11",
  "id": "demo_server",
  "token": "eyJldCI6IjM0IiwidXNlci6ImFkbWluln0=\n",
  "source_ip_to_connect": null,
  "ssl": {
    "enable_https": "0",
    "client_certificate": null,
    "enable_ssl_3": "1",
    "validate_certificate": "0",
    "enable_tls_1": "1"
  },
  "name": "demo_server",
```

```
"port": "80",
"connection_pooling": {
"enable_connection_pooling": "1",
"keepalive_timeout": "900000"
},
"max_keepalive_requests": "0",
"max_spare_connections": "0"
}
```

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

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/servers/demo_server -u
'eyJldCI6IjE1XNlciI6ImFkbWluIn0=\n:' -X GET -G -d parameters=connection_pooling,ssl
```

**Response:**

```
{
"connection_pooling": {
"enable_connection_pooling": "yes",
"keepalive_timeout": "900000"
},
"ssl": {
"enable_https": "no",
"enable_tls_1_1": "yes",
"client_certificate": null,
"enable_ssl_3": "yes",
"validate_certificate": "yes",
"enable_tls_1_2": "yes",
"enable_tls_1": "yes"
},
"id": "demo_server",
"token": "eyJldCI6IjE1MkNlciI6ImFkbWluIn0=\n"
}
```

## Updating a Server

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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 need to be modified. For information on JSON requests, see **Request**

**Syntax.**

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/servers/{server_id}			
<b>Method:</b> PUT			
<b>Description:</b> Updates the values of given parameters in the given server.			
Parameter Name	Data Type	Mandatory	Description
<b>Input Parameters:</b>			
name	Alphanumeric	Optional	The name of the server.
identifier	Enumeration	Optional	The way to be used by the Barracuda Web Application Firewall to identify the server. The enumerated values include: <ul style="list-style-type: none"> <li>hostname</li> <li>ip_address</li> </ul>
address_version	Enumeration	Optional	The internet protocol version to be used. The enumerated values include: <ul style="list-style-type: none"> <li>ipv4</li> <li>ipv6</li> </ul>
ip_address	Alphanumeric	Optional	The IP address of the server. This is required when <b>identifier</b> is set to <i>ip_address</i> .
Hostname	Alphanumeric	Optional	The hostname of the server. This is required when <b>identifier</b> is set to <i>hostname</i> .
Port	Numeric	Optional	The port number of the server.
Status	Enumeration	Optional	The status for the server to handle the requests. The enumerated values include: <ul style="list-style-type: none"> <li>out_of_service_sticky</li> <li>in_service</li> <li>out_of_service_all</li> <li>•</li> <li>out_of_service_maintenance</li> </ul>

backup_server	String	Optional	<p>Determines whether to designate this server as a last resort server to be used when all other servers configured under the service fail. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul> <p>Note: If <b>backup_server</b> is set to yes, the <b>weight</b> value automatically resets to zero (0) and modifying this value will not take effect on the server.</p>
Weight	Numeric	Optional	<p>The weight for the server. This is applicable only when the <b>Load Balancing Algorithm</b> is set to <i>weighted_round_robin</i>.</p>
ssl.enable_https	Enumeration	Optional	<p>The SSL status for backend connections. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.enable_ssl_3	String	Optional	<p>SSL 3.0 protocol to be used by the clients to establish the connection to the server. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.enable_tls_1	String	Optional	<p>TLS 1.0 protocol to be used by the clients to establish the connection to the server. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.enable_tls_1_1	String	Optional	<p>TLS 1.1 protocol to be used by the clients to establish the connection to the server. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.enable_tls_1_2	String	Optional	<p>TLS 1.2 protocol to be used by the clients to establish the connection to the server. The values include:</p> <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>

ssl.enable_sni	Enumeration	Optional	When set to <b>Yes</b> , the Barracuda Web Application Firewall allows a client to request a certificate for a specific domain from a web server. It can be used if multiple virtual HTTP domains with different certificates are hosted on one server. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.client_certificate	String	Optional	The certificate to be used when the server requires client authentication.
ssl.validate_certificate	String	Optional	Determines whether to validate the server certificate. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
ssl.enable_ssl_compatibility_mode	String	Optional	Determines whether to enforce compatibility with legacy servers. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
in_band_health_checks.max_http_errors	Numeric	Optional	The maximum number of HTTP error responses to be allowed per 1024 requests before marking the server as out of service.
in_band_health_checks.max_refused	Numeric	Optional	The maximum number of connection refused errors to be allowed per 1024 connections before marking the server as out-of-service (default is 10).
in_band_health_checks.max_other_failure	Numeric	Optional	The maximum number of connection time-out errors to be allowed per 1024 connections before marking the server as out-of-service (default is 10).
in_band_health_checks.max_timeout_failure	Numeric	Optional	The maximum number of other errors to be allowed per 1024 connections before marking the server as out-of-service (default is 10).

out_of_band_health_checks.enable_OOB_health_checks	String	Optional	The status of Out-of-Band monitoring. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
out_of_band_health_checks.interval	Numeric	Optional	The interval time (in seconds) between the probes sent by the Barracuda Web Application Firewall to the server to determine the health status.
application_layer_health_check.additional_headers	Alphanumeric	Optional	Any additional headers to be sent with the OOB HTTP request.
application_layer_health_check.status_code	Numeric	Optional	The expected HTTP response status code.
application_layer_health_check.url	URL	Optional	The URL to be used in the HTTP request to determine the server health.
application_layer_health_check.method	Enumeration	Optional	The method to be used for the HTTP request. The enumerated values include: <ul style="list-style-type: none"> <li>• POST</li> <li>• GET</li> <li>• HEAD</li> </ul>
application_layer_health_check.match_content_string	String	Optional	The string that needs to be matched in the response. If specified, the response must contain the string. If the response does not contain the string, the probe is deemed unsuccessful, and the server will be marked out-of-service.
connection_pooling.enable_connection_pooling	String	Optional	The connection pooling status. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
connection_pooling.keepalive_timeout	Numeric	Optional	The time in milliseconds to time out a connection that was used at least once. This is the maximum amount of time a connection is kept alive. This value is applicable per 1024 connections, where a time-out error had occurred before turning off the server.



advanced_configuration.max_connections	Numeric	Optional	The maximum number of connections established to the server at any time.
advanced_configuration.max_requests	Numeric	Optional	The maximum number of requests that can be queued.
advanced_configuration.max_keepalive_requests	Numeric	Optional	The maximum number of requests retained on a persistent connection before the connection is shut down (if the server does not close the connection first).
advanced_configuration.max_establishing_connections	Numeric	Optional	The maximum number of simultaneous connections that can be established to the server.
advanced_configuration.max_spare_connections	Numeric	Optional	The maximum number of pre-allocated connections.
advanced_configuration.timeout	Numeric	Optional	The time in milliseconds to time out an unused connection.
advanced_configuration.client_impersonation	String	Optional	Specifies if the Barracuda Web Application Firewall uses the client IP address as the source IP address to communicate to the servers. The values include: <ul style="list-style-type: none"> <li>• yes</li> <li>• no</li> </ul>
advanced_configuration.source_ip_to_connect	Alphanumeric	Optional	The IP address to be used by the Barracuda Web Application Firewall to communicate with the server. It can be WAN IP address, LAN IP address or a custom virtual interface IP address in the Vsite. If <b>client_impersonation</b> is set to yes, then this IP is used only for Out of Band Health checks.  Note: If the server is reachable through a static route configured in the Vsite, the custom virtual interface defined in that Vsite should be specified in <b>source_ip_to_connect</b> .

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

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/servers/demo_server -u 'eyJldCI6IjEzODAwdXNlciI6ImFkbWluIn0=\n:' -X PUT -H Content-Type:application/json -d '{"ssl":{"enable_https":0},"status":"in-service"}'
```

**Response:**

```
{"id":"demo_server","token":"eyJldCI6IjEzODAwdXNlciI6ImFkbWluIn0=\n"}
```

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

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/aert/servers/Server1 -u 'eyJldCI6IjE0NTkicil6ImFkbWluIn0=\n:' -X PUT -H Content-Type:application/json -d '{"enable_ssl_compatibility_mode":"yes"}'
```

**Response:**

```
{"id":"Server1","token":"eyJldCI6IjE0NTkicil6ImFkbWluIn0=\n"}
```

## Deleting a Server

<b>URL:</b> /v1/virtual_services/{virtual_service_id}/servers/{server_id}
<b>Method:</b> DELETE
<b>Description:</b> Deletes the given server configured under the given service.

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

```
curl http://192.168.0.1:8000/restapi/v1/virtual_services/demo_service/servers/demo_server -u 'eyJldCI6IjEzODAwdXNlciI6ImFkbWluIn0=\n:admin' -X DELETE
```

**Response:**

```
{"msg":"Successfully deleted","token":"eyJldCIRIiwidXNlciI6ImFkbWluIn0=\n"}
```

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