



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

These are instructions to help understand and implement the Barracuda API capability available on the Barracuda Spam Firewall in the version 3.0 firmware series. This is an extension of the API released in the version 2.3 firmware series and contains many new features and enhancements. If you have any questions after reading this document, please call us at 408-342-5400 or email us at support@barracudanetworks.com. Note: the API is only available on certain models. Please check with your sales representative if you are uncertain whether the model you are considering has the API feature.

What is the Barracuda API?

The Barracuda Spam Firewall API is a set of six CGI scripts that can be accessed to administer the Barracuda in a remote manner. This is useful for tasks that happen often and can be difficult to perform one-by-one in the web GUI. An example of one such task is adding a domain to the list of allowed domains on the Barracuda.

The API works through manipulation of variables inside of the configuration. To view the available variables and your current configuration, navigate to ADVANCED->Configuration Backup/Restore in the web GUI. Backup the configuration file and open it in any editor that supports UNIX file format (for instance WordPad if you are under Windows).

Access to these remote administration capabilities, is limited to a trusted IP list which can be configured under in BASIC->Administration in the web GUI in the "Allowed SNMP and API Management IP/Range" section. These scripts are accessible only to the addresses in that list.

The six available scripts are:

- **config_get.cgi**: This script is used to return the contents of a variable.
- **config_set.cgi**: This script is used to set the contents of a variable.
- **config_add.cgi**: This script is used to add an entry to a list variable (or add users).
- **config_delete.cgi**: This script is used to remove an entry from a list variable (or delete users).
- **config_search.cgi**: This script is used to obtain a row index for a value in a list variable.
- **config_reload.cgi**: This script is used to reload the configuration settings. This script must be called after making changes with the other scripts in order for your new settings to be utilized.

The rest of this document provides an overview the basic usage of each script, along with its possible output. At the end, a sample section is provided with various scenarios and some basic requests to accomplish the desired tasks.



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Request/Response from the API

Request: These scripts are called just like any other URL using an HTTP GET. Each API takes its own set of parameters in the URL that will be detailed in the section for each API below. To make the request, use the base URL of your Barracuda that you use for connecting to the web GUI and append the script you wish to use. For example: http://barracuda.mydomain.com:8000/cgi-bin/config_get.cgi

Response: The response from the scripts is in the form of XML. The XML output will appear as follows for a successful request or for a request that has an error.

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <scana_block_level>9</scana_block_level>
</config>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <Error>
    <Code>500</Code>
    <String>No such variable in configuration.</String>
  </Error>
</config>
```



Barracuda API – 3.0 Firmware

Barracuda Spam Firewall

Using config_get.cgi

Variables Allowed: The following variables are utilized by the config_get CGI script. Append these variables to the URL in standard HTTP GET request format.

- **variable** :: This is a required parameter that tells the API which variable to return.
- **list** :: This is an optional parameter that tells the API to return a list of variables available on the system.
- **list_users** :: This is an optional parameter that tells the API to return the current list of user accounts on the system.
- **account** :: This is an optional parameter that tells the API to lookup *variable* in the specified per-user account instead of in the global configuration.

Successful Output: If the variable requested is a variable with only a single value the output will be different than the output for a variable that is a list. The two types of requests and results are shown below.

```
http://barracuda/cgi-bin/config_get.cgi?variable=scana_block_level  
Gets the global block level
```

```
<?xml version="1.0" encoding="UTF-8" ?>  
<config>  
  <scana_block_level>9</scana_block_level>  
</config>
```

```
http://barracuda/cgi-bin/config_get.cgi?variable=mta_relay_domain  
Gets the allowed domain list for the system
```

```
<?xml version="1.0" encoding="UTF-8" ?>  
<config>  
  <mta_relay_domain>domain1.com</mta_relay_domain>  
  <mta_relay_domain>domain2.com</mta_relay_domain>  
  <mta_relay_domain>domain3.com</mta_relay_domain>  
  <mta_relay_domain>domain4.com</mta_relay_domain>  
  <mta_relay_domain>domain5.com</mta_relay_domain>  
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_get script.

- **500** :: No such variable in configuration.
 - *This error is given if the variable requested is not present in the global configuration, or the per-user configuration if an account was specified.*
- **501** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Using config_set.cgi

Variables Allowed: The following variables are utilized by the config_set CGI script. Append these variables to the URL in standard HTTP GET request format.

- **variable** :: This is a required parameter that tells the API which variable to return.
- **value** :: This is a required parameter that tells the API what value to set for *variable*.
- **account** :: This is an optional parameter that tells the API to set *variable* in the specified per-user account instead of in the global configuration.
- **row** :: This is an optional parameter that tells the API to set the *value* for the given row inside of *variable* (Note: This is only needed if the *variable* you wish to set is a list variable, and is the zero based index of the value to override).

Successful Output: If the variable requested is a list variable, the call must indicate the row you wish to manipulate. This row can be found by performing a **config_search** API call to request the row index for a given value in a list variable. This row is a zero based index. Samples of both request types are shown below as well as the successful output.

```
http://barracuda/cgi-bin/config\_get.cgi?variable=scana\_block\_level&value=4
```

Sets the global block level

```
http://barracuda/cgi-bin/config_set.cgi?variable=mta_relay_domain&value=mydomain.com&row=4
```

Sets the last row in the allowed domain list from the config_get example earlier (was domain5.com)

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <Result>200: OK</Result>
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_set script.

- **800** :: No such variable in configuration.
 - *This error is given if the variable requested is not present in the global configuration, or the per-user configuration if an account was specified.*
- **801** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*
- **802** :: Variable is a list, so you must provide the row index to alter.
 - *This error is given if a list variable is specified and no row index to set given.*
- **803** :: You must provide a value to set.
 - *This error is given if no value was specified in the HTTP request.*
- **804** ::
 - *This is a custom error message and will tell you if the value you tried to set was not valid for the configuration type (example: trying to set an IP address to a text value).*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Using config_add.cgi

Variables Allowed: The following variables are utilized by the config_add CGI script. Append these variables to the URL in standard HTTP GET request format.

- **variable** :: This is a required parameter that tells the API which variable to add to.
- **value** :: This is a required parameter that tells the API what value to set for *variable*.
- **account** :: This is an optional parameter that tells the API to add to the *variable* in the specified per-user account instead of in the global configuration.
- **variable2** :: This is an optional parameter that is used to specify the second variable if the main variable is unique across two variables instead of by itself.
- **value2** :: This is an optional parameter that tells the API what value to set for *variable2*.
- **create** :: This is an optional parameter that if set tells the API to create the *account* specified if it does not currently exist on the system.

Successful Output: If the variable being manipulated is not a list variable, the call will fail. If the variable being manipulated is not unique by itself, then variable2 must be specified. Samples of both request types, as well as a request to create a user account, are shown below with the successful output.

```
http://barracuda/cgi-bin/config_add.cgi?variable=mta_relay_domain&value=domain6.com
```

Adds another domain to the list of allowed domains

```
http://barracuda/cgi-bin/config_add.cgi?account=newuser@domain.com&create=1
```

Creates the above user if they don't already exist (no welcome message is sent – you will need to set the user's password)

```
http://barracuda/cgi-bin/config_add.cgi?variable=mta_trusted_relay_address&value=1.1.1.1&variable2=mta_trusted_relay_netmask&value2=255.0.0.0
```

Adds a new IP range to the list of white-listed IP addresses on the system

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <Result>200: OK</Result>
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_add script.

- **700** :: No such variable in configuration.
 - *This error is given if the variable requested is not present in the global configuration, or the per-user configuration if an account was specified.*
- **701** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*
- **702** :: Value already exists in variable.
 - *This error is given if a value was specified and it is already present in the variable.*
- **703** :: Variable is not a list.
 - *This error is given if the variable specified is not a list variable.*
- **704** :: You must provide a value to add.
 - *This error is given if the variable specified does not have an associated value.*
- **705** :: Variable is not the primary key.



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

- *This error is given if the variable specified is not the primary value but a secondary variable associated with another variable.*
- **706** :: Variable is not unique by itself.
 - *This error is given if the variable specified is not unique alone and needs a second variable.*
- **707** ::
 - *This is error message is returned if the value you tried to set was not valid for the configuration type (example: trying to set an IP address to a text value).*
- **708** :: Account Created
 - *This is status message is returned if the account was successfully created when you use config_add to create an account.*
- **709** :: Unable to validate account.
 - *This is error message is returned if the account was unable to be validated through recipient verification when the request was submitted.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Using config_delete.cgi

Variables Allowed: The following variables are utilized by the config_delete CGI script. Append these variables to the URL in standard HTTP GET request format.

- **variable** :: This is a required parameter that tells the API which variable to delete from.
- **value** :: This is a required parameter that tells the API what value to delete for *variable*.
- **account** :: This is an optional parameter that tells the API to delete from the *variable* in the specified per-user account instead of in the global configuration.
- **variable2** :: This is an optional parameter that is used to specify the second variable if the main variable is unique across two variables instead of by itself.
- **value2** :: This is an optional parameter that tells the API what value to use for *variable2*.
- **remove** :: This is an optional parameter that if set tells the API to remove the *account* specified if it currently exists on the system.

Successful Output: If the variable being manipulated is not a list variable, the call will fail. If the variable being manipulated is not unique by itself, then variable2 must be specified. Samples of both request types, as well as an account removal, are shown below with the successful output.

```
http://barracuda/cgi-bin/config_delete.cgi?variable=mta_relay_domain&value=domain6.com
```

Remove a domain from the list of allowed domains

```
http://barracuda/cgi-bin/config_delete.cgi?account=olduser@domain.com&remove=1
```

Remove a per-user account from the system

```
http://barracuda/cgi-bin/config_delete.cgi?variable=mta_trusted_relay_address&value=1.1.1.1&variable2=mta_trusted_relay_netmask&value2=255.0.0.0
```

Removes an IP range from the list of white-listed IP addresses on the system

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <Result > 200: OK </Result >
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_add script.

- **600** :: No such variable in configuration.
 - *This error is given if the variable requested is not present in the global configuration, or the per-user configuration if an account was specified.*
- **601** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*
- **602** :: No such value in variable.
 - *This error is given if a value was specified and it is not present in the variable.*
- **603** :: Variable is not a list.
 - *This error is given if the variable specified is not a list variable.*
- **604** :: You must provide a value to delete.
 - *This error is given if the variable specified does not have an associated value.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

- **605** :: Variable is not the primary key.
 - *This error is given if the variable specified is not the primary value but a secondary variable associated with another variable.*
- **606** :: Variable is not unique by itself.
 - *This error is given if the variable specified is not unique alone and needs a second variable.*
- **607** :: Account removed from system.
 - *This error is given if the remove option caused an account to be removed from the system.
Note: this will remove all settings and quarantine mail for the given account.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Using config_search.cgi

Variables Allowed: The following variables are utilized by the config_search CGI script. Append these variables to the URL in standard HTTP GET request format.

- **variable** :: This is a required parameter that tells the API which variable to lookup.
- **value** :: This is a required parameter that tells the API which value to look for inside for the variable.
- **account** :: This is an optional parameter that tells the API to lookup the *value* for the *variable* in the specified per-user account instead of in the global configuration.

Successful Output: The output of a successful call is a colon separated value-row pair inside an XML tag for the desired variable - results are shown below.

```
http://barracuda/cgi-bin/config_search.cgi?variable=mta_relay_domain&value=domain2.com  
Gets the index of domain2.com from the earlier config_get example
```

```
<?xml version="1.0" encoding="UTF-8" ?>  
<config>  
  <mta_relay_domain>domain2.com: 1</mta_relay_domain>  
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_search script.

- **900** :: No such variable in configuration.
 - *This error is given if the variable requested is not present in the global configuration, or the per-user configuration if an account was specified.*
- **901** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*
- **902** :: Variable is not a list.
 - *This error is given if the variable specified is not a list variable.*
- **903** :: No such value in variable.
 - *This error is given if a value was specified and it is not present in the variable.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Using config_reload.cgi

Variables Allowed: The following variables are utilized by the config_reload CGI script. Append these variables to the URL in standard HTTP GET request format.

- **account** :: This is an optional parameter that tells the API to reload the settings for the specified per-user account instead of the global configuration.

Successful Output: The output of a successful call is a simple 200 OK response - results are shown below.

http://barracuda/cgi-bin/config_reload.cgi

Reload the settings on the Barracuda and restart any necessary processes

```
<?xml version="1.0" encoding="UTF-8" ?>
<config>
  <Result>200: OK</Result>
</config>
```

Possible Error Codes: The error output format is the same as shown in the **Request/Response from the API** section. The following error codes are possible from the config_reload script.

- **101** :: Account does not exist.
 - *This error is given if the account requested does not exist on the system with per-user settings.*



Barracuda API – 3.0 Firmware Barracuda Spam Firewall

Problem/Solution Scenarios for the API

Problem: You need to browse the list of variables available for manipulation.

Solution: The following API call will return a list of variables on the system that you can manipulate.

Call http://barracuda/cgi-bin/config_get.cgi?list=1

Problem: You need to browse the list of users currently on the system.

Solution: The following API call will return a list of users currently on the system.

Call http://barracuda/cgi-bin/config_get.cgi?list_users=1

Problem: Your user base needs to be pre-populated so that no welcome emails are sent to your users.

Solution: The following steps can be taken to pre-populate the users on the system.

For each user on the system that needs to be created replace **NEWUSER** with the email address of the user and **PASSWD** with that user's password

Call http://barracuda/cgi-bin/config_add.cgi?create=1&account=NEWUSER

Call http://barracuda/cgi-bin/config_set.cgi?account=NEWUSER&variable=user_password&value=PASSWD

Call http://barracuda/cgi-bin/config_reload.cgi?account=NEWUSER

End For

Problem: You need to add 5 new domains and set the destination mail server for each domain

Solution: The following steps can be taken to add new domains onto the system.

For each domain that needs to be added replace **DOMAIN** with the new domain and **SERVER** with the mail server host for that domain and **INDEX** with the result of the call to [config_search](#)

Call http://barracuda/cgi-bin/config_add.cgi?variable=mta_relay_domain&value=DOMAIN

Call http://barracuda/cgi-bin/config_search.cgi?variable=mta_relay_domain&value=DOMAIN

Call http://barracuda/cgi-bin/config_set.cgi?variable=mta_relay_advanced_host&row=INDEX&value=SERVER

End For

Call http://barracuda/cgi-bin/config_reload.cgi