Introduction

This bash script was written to synchronize WAF rule settings between company web applications. One of web application is taken as template and its rules are populating to other active web applications.

Initial configuration is:

**Bash script name:** copyWAF.sh

**Default Config file name**: copyWaf.conf

**Default Log file name:** copyWAF.log.<timestamp>

Config file put as example to execute script on test environment. It must be edited with actual parameters values. If log file is missing, it's created with default name. Timestamp is writing to the end of file name.

Dependencies

This script is using curl command for API HTTP requests posting

and jq lib for json output parsing.

Jq information: <http://stedolan.github.io/jq/>

Command-line parameters

Script could receive 2 command line parameters: **config file name** and **log file name**.

If config file parameter is not specified in command line, there is used default name.

If default config not found, script is asking all parameters in dialog during runtime.

Examples how to run a script:

1. Simple one

$ copyWAF.sh

1. With 1 command line param

$ copyWAF.sh copyWAF\_RC.conf

1. With 2 command line params

$ copyWAF.sh copyWAF\_RC.conf test.log

All error messages are printed to log file and to console output.

Info messages are printed to the log file and if parameter console=on, they are logging to console out as well.

Information about updated rules and execution errors could be found in log file with latest timestamp.

Config file parameters description:

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter name** | **Description** | **Is Required** | **Default value** |
| TOKEN\_HOME | Token home URL to receive access token for API calls by client id and client secret, example format: https://dojo-rc.zenedge.com/api/oauth/token | yes | - |
| API\_HOME | Web API home URL, example format: https://dojo-rc.zenedge.com/api/v2 | yes | - |
| client\_id | Client id security value to receive access token for API calls | yes | - |
| client\_secret | Client secret value to receive access token for API calls | yes | - |
| template\_webapp\_id | You need to pass id of template web application. WAF rules with its value will be copied from template web application to rest of webapps | yes | - |
| webapp\_to\_process\_id | Optional parameter in case you need to copy WAF rules from template webapp to particular web application. If this parameter missed, all company web applications will be updated | no | - |
| console | It’s on by default. All application output to log file will be visible in script console output. | no | on |
| is\_error\_command\_log | In addition to log output all API calls which executed with errors will be printed to special error command file. When script finished commands from this file could be copy&paste to terminal and executed manually. | no | on |
| error\_command\_file | File with all API calls run with error. Could be analyzed or executed manually. | no | ./error\_command.log |
| is\_execute\_with\_breakpoints | This option will ask user if he want to update or skip next application from application list. It’s allow to skip some of them or update particular ones. | no | on |

Questions and answers

Q: Where I can find client\_id and client\_secret values?

A: You need to login to portal by User who has “**Manage company API applications” permission “ON”**

**Go to “Manage Company”->”API Applications”**

**Add New Application or use existing one.**

**“ID” and “Secret” fields could be found in API Applications list.**

Q: **How I can find template web application id?**

A: **If you do not know template application id, just do not provide this parameter in the config file. Script asks you if you want to see list of all active web applications. If you agree, you can easily find template id in the list. Usually it looks same as web application name, but “.” are replaced by “-“ symbol.**