Burp-UI Documentation

Release 0.5.0

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Contents

Burp-UI is a web-ui for Burp backup written in python with Flask and jQuery/Bootstrap. You may have a look at the README file first. There is also a dedicated FAQ.

CHAPTER 1

Documentation

Introduction

Burp-UI is a web-based interface for Burp. Its purpose is to give you a *nice* way to monitor your backups with some dashboards, but you will also have the ability to download files from backups and to configure your burp-server.

The project also provides a fully documented API so that you can develop any front-end you like on top of it. The core will take care of the communication with the burp server(s) for you.

Note: Although the Burp's author and I exchange a lot, our products are totally distinct. So I would like people to understand some issues might be related to Burp-UI, but some other might be related to Burp and I may not be able to help you in the later case. There is a dedicated mailing-list for Burp related issues. You can find details here

Compatibility

Burp version Backend	1	2
< 1.3.48		
1.3.48 => 1.4.40	X	
2.0.0 => 2.0.16		
2.0.18 => 2.0.X protocol 1		X
2.0.18 => 2.0.X protocol 2		X*

* The protocol 2 is in heavy development Burp side so the support in Burp-UI is best effort and all features (such as server-initiated restoration) are not available.

Known Issues

Because it's an Open Source project, people are free (and encouraged) to open issues in the bug-tracker. You will also find there the current opened issues.

There are also a few issues unrelated to the code itself:

1. SSH issue

People that would like to clone the repository over SSH will face an authentication failure even if they added a valid SSH key in their user settings. The reason is I only have *one* public IP address so I must use port redirections to have multiple SSH instances running. To fix the issue, you should configure your SSH client by adding the following lines in your `~/.ssh/config` file:

```
Host git.ziirish.me
   Port 2222
```

Requirements

Please note that, Burp-UI must be running on the same server that runs the burp-server for some features.

Note: At the moment, Burp-UI and this doc is mostly debian-centric but feel free to contribute for other distributions!

Python

Burp-UI is built against python 2.7. The support for python 2.6 has been removed since it is not supported anymore by the CPython core team. Unit tests are ran against python 2.7 and python 3.4. If you encounter compilation errors with one of these version, feel free to report them.

Libraries

Some libraries are required to be able to compile some requirements:

```
apt-get install libffi-dev libssl-dev python-dev python-pip
```

Debian Wheezy

It looks like some requirements are not automatically installed on *Debian Wheezy*. You can install them with the following command:

```
pip install "burp-ui[debian_wheezy]"
```

LDAP

For LDAP authentication (optional), we need extra dependencies. You can install them using the following command:

```
pip install "burp-ui[ldap_authentication]"
```

Redis

If you wish to use redis for Caching and/or managing uses sessions, you need additional dependencies:

```
pip install "burp-ui[gunicorn-extra]"
```

Celery

The celery worker also needs additional dependencies that you can install using:

```
pip install "burp-ui[celery]"
```

SQL

If you need persistent data, you will need additional dependencies as well:

```
pip install "burp-ui[sql]"
```

Now if you want to use a MySQL database, you will need the proper driver. For instance:

```
pip install mysqlclient
```

> **Warning:** The MySQL driver does not seem to play nicely with concurrency, you should set `preload=False` within your gunicorn config.

To use a PostgreSQL database, you need the `psycopg2` driver:

```
pip install psycopg2
```

> **Warning:** The PostgreSQL driver does not seem to play nicely with concurrency, you should set `preload=False` within your gunicorn config.

Limiter

If you want to rate-limit the API, you will need additional dependencies too:

```
pip install flask-limiter
```

Burp1

The burp1 backend supports burp versions from 1.3.48 to 1.4.40. With these versions of burp, the status port is only listening on the local machine loopback interface (ie. `localhost` or `127.0.0.1`). It means you *MUST* run Burp-UI on the same host that is running your burp server in order to be able to access burp's statistics. Alternatively, you can use a bui-agent.

Burp2

The burp2 backend supports only burp 2.0.18 and above. Some versions are known to contain critical issues resulting in a non-functional Burp-UI: 2.0.24, 2.0.26 and 2.0.30 If you are using an older version of burp2 Burp-UI will fail to start.

Getting started

The first thing to do before digging into Burp-UI is probably to read its architecture in order to understand how it works. Once it's done, you can refer to the installation page.

Installation

Burp-UI is written in Python with the Flask micro-framework. The easiest way to install Burp-UI is to use `pip`.

```
pip install burp-ui
```

You can setup various parameters in the burpui.cfg file. This file can be specified with the `-c` flag or should be present in `/etc/burp/burpui.cfg`. By default Burp-UI ships with a sample file located in `$INSTALLDIR/share/burpui/etc/burpui.sample.cfg`. (*$INSTALLDIR* defaults to */usr/local* when using pip **outside** a virtualenv)

Note: It is advised to copy the sample configuration in `/etc/burp/burpui.cfg` and to edit this file so that it is not overwritten on every upgrade.

Then you can run `burp-ui`: `burp-ui`

By default, `burp-ui` listens on localhost on port 5000.

You can then point your browser to http://127.0.0.1:5000/

Upgrade

In order to upgrade Burp-UI to the latest stable version, you can run the following command:

```
pip install --upgrade burp-ui
```

Note: If you encounter any issue after upgrading to the latest stable release, make sure you read the upgrading page.

Debian Wheezy

The version of `pip` available on *Debian Wheezy* does not support all the features needed to build and install the latest Burp-UI version.

Instead, you may want to run the following command either to install it from scratch or to upgrade your current version to the latest one:

```
easy_install --upgrade burp-ui
```

Basic usage

General Instructions

Restoration

Burp-UI tries to be as less intrusive as possible with Burp internals. In order to make the *online* restoration/download functionality work, you need to check a few things:

1. Provide the full path of the burp (client) binary file (field *burpbin* in burp-ui configuration)
2. Provide a burp-client configuration file (field *bconfcli* in burp-ui configuration)
3. Provide the full path of an empty directory where a temporary restoration will be made. This involves you have enough space left on that location on the server that runs Burp-UI
4. Launch Burp-UI with a user that can proceed restorations and that can write in the directory mentioned above
5. Make sure the client provided in 2. can restore files of other clients (option *restore_client* in burp-server configuration). The *restore_client* is the *cname* you provided in your client configuration file (see 2.)

Burp 2

When using the burp2 backend, Burp-UI can be executed on any machine as long as you can access the burp status port, but you will not be able to edit the burp server configuration file within the *settings* view of Burp-UI. You also need to configure a *restore_client* on your burp server corresponding to the client you will use through Burp-UI (see the *restoration procedure* above for details on how to do this)

Tools

Since *v0.5.0*, Burp-UI ships with some tools to help you configure both Burp and Burp-UI. Please refer to the bui-manage page for details.

Options

```
usage: burp-ui [-h] [-v] [-d] [-V] [-c <CONFIG>] [-l <FILE>]
               [-i <MIGRATIONSDIR>]
               ...

positional arguments:
  remaining

optional arguments:
  -h, --help            show this help message and exit
  -v, --verbose         increase output verbosity (e.g., -vv is more verbose
                        than -v)
  -d, --debug           enable debug mode
  -V, --version         print version and exit
  -c <CONFIG>, --config <CONFIG>
                        burp-ui configuration file
  -l <FILE>, --logfile <FILE>
                        output logs in defined file
  -i <MIGRATIONSDIR>, --migrations <MIGRATIONSDIR>
                        migrations directory
```

Note: Since *v0.4.0*, the *bind* and *port* options are not supported anymore. You can still force the port and listening address as explained bellow or you can have a look at the upgrading section of the documentation for further details.

Developer options

Since *v0.4.0*, Burp-UI uses the new Flask's *CLI* module. This change brings new options to help you debug your development environment:

```
Usage: flask run [OPTIONS]

  Runs a local development server for the Flask application.

  This local server is recommended for development purposes only but it can
  also be used for simple intranet deployments.  By default it will not
  support any sort of concurrency at all to simplify debugging.  This can be
  changed with the --with-threads option which will enable basic
  multithreading.

  The reloader and debugger are by default enabled if the debug flag of
  Flask is enabled and disabled otherwise.

Options:
  -h, --host TEXT                 The interface to bind to.
  -p, --port INTEGER              The port to bind to.
  --reload / --no-reload          Enable or disable the reloader.  By default
                                  the reloader is active if debug is enabled.
  --debugger / --no-debugger      Enable or disable the debugger.  By default
                                  the debugger is active if debug is enabled.
  --eager-loading / --lazy-loader
                                  Enable or disable eager loading.  By default
                                  eager loading is enabled if the reloader is
                                  disabled.
  --with-threads / --without-threads
                                  Enable or disable multithreading.
  --help                          Show this message and exit.
```

Some options are redundant with Burp-UI's one.

Example

By default, the embedded server listens on *127.0.0.1* on port *5000*, if you wish to change this, you would run something like:

```
burp-ui -- -h 0.0.0.0 -p 8080
```

Note: The `--` is mandatory.

Running

There are several ways to run Burp-UI. You can either use the embedded Flask's development server or you can use any of the deployement options provided by Flask.

Note: I personally focus on `gunicorn` support for production deployments

Sandboxing

If you want to play with Burp-UI to *PoC* it or if you are going to be the only user, you can absolutely use the embedded server. If you plan to run Burp-UI in production, then you should go with Gunicorn.

Option 1

You can run the embedded server with the following command:

```
burp-ui
```

By default, the server listens on *localhost:5000*. You can easily change this by adding the `-- -h x.x.x.x -p yyyy` options. See here for details.

Option 2

Prior to *v0.4.0*, you could specify the *bind* and *port* option within the Burp-UI configuration file. You can still use this behavior by running:

```
python -m burpui -m legacy [--help]
```

Note: Since *v0.5.0*, you can also use the `burp-ui-legacy` command to achieve the same thing.

Production

Like I said earlier, I recommend using Gunicorn for production deployments. You can refer to the dedicated gunicorn page of this documentation to know everything on how to Burp-UI through Gunicorn.

Going further

Please refer to the advanced usage page for details on how to use/customize Burp-UI.

Upgrading

This page is here to help you upgrading from previous versions of Burp-UI to the latest version. Each section presents major/breaking changes, new requirements and new options. For a complete list of changes, you may refer to the CHANGELOG page.

v0.5.0

- **Breaking** - The *standalone* option has been renamed to *single* to avoid confusion.
- **Breaking** - The `bui-agent` has now its own independent package to reduce dependencies, you can install it with the `pip install burp-ui-agent` command. Alternatively, there is now a `bui-agent-legacy` command provided by the `burp-ui` package.
- **Breaking** - The database schema evolved between *v0.4.0* and *v0.5.0*. In order to apply these modifications, you **MUST** run the `bui-manage db upgrade` command before restarting your Burp-UI application (if you are using celery, you must restart it too).
- **New** - The bui-manage tool brings two new commands: - `diag` whose documentation is available here - `sysinfo` whose documentation is available here

  More details on the Manage and Celery pages.

v0.4.0

- **Breaking** - Due to the use of the new Flask's embedded server, it is no longer possible to serve the application over SSL (HTTPS) anymore from within the Flask's server. You'll need to use a dedicated application server for this purpose such as gunicorn or a reverse-proxy. The *bind* and *port* option have also been removed due to the same reason.

  Or you can use the `python -m burpui -m legacy [--help]` command that **SHOULD** be backward compatible (but note that no further support will be provided since it is not the Flask's default behavior anymore).
- **Breaking** - The database schema evolved between *v0.3.0* and *v0.4.0*. In order to apply these modifications, you **MUST** run the `bui-manage db upgrade` command before restarting your Burp-UI application (if you are using celery, you must restart it too).

  More details on the Manage and Celery pages.
- **Breaking** - Plain text passwords are deprecated since *v0.3.0* and are now disabled by default. It means you should not manually add new users in your burp-ui configuration anymore with `login = password` but you should now use the bui-manage command instead.
- **Breaking** - The default *version* setting has been set to `2` instead of `1` since burp-2.0.54 is now the stable release.
- **New** - The `bui-manage` tool can now help you setup both Burp and Burp-UI.
- **New** - The SQL requirements have evolved, you **MUST** run `pip install --upgrade "burp-ui[sql]"` if you wish to keep using persistent storage.

v0.3.0

- **New** - `bui-manage` tool: This tool is used to setup database (see Manage).
- **New** - `bui-celery` tool: This tool is used to run a celery runner (see Celery).
- **Breaking** - Configuration file format changed. Colons (:) must be replaced by equals (=). Besides, some settings containing spaces should be surrounded by quotes. *Note*: The conversion is mostly automatic, but you should keep an eye on it though.
- **New** - Basic authentication backend now supports hashed passwords (*Note*: plain text passwords are now deprecated and the support will be dropped in *v0.4.0*). You can create new users with the `bui-manage` tool, passwords generated through this tool are hashed. *Note*: Starting with *v0.4.0*, plain text passwords will be automatically hashed.
- **New** - Local authentication backend allows you to login using local accounts through pam.

Advanced usage

Burp-UI has been written with modularity in mind. The aim is to support Burp from the stable to the latest versions. Burp exists in two major versions: 1.x.x and 2.x.x.

Both *Versions* are supported by Burp-UI thanks to its modular design. The consequence is you have various options in the configuration file to suite everybody needs.

There are also different modules to support *Authentication* and *ACL* within the web-interface.

> **Warning:** Burp-UI tries to be as less intrusive as possible, nevertheless it ships with the ability to manage Burp's configuration files. This feature **requires** Burp-UI to be launched on the **same** server that hosts your Burp instance. You also have to make sure the user that runs Burp-UI has **enough** privileges to edit those files.

Configuration

The burpui.cfg configuration file contains a `[Global]` section as follow:

```
[Global]
# burp server version 1 or 2
version = 2
# Handle multiple bui-servers or not
# If set to 'false', you will need to declare at least one 'Agent' section (see
# bellow)
single = true
# authentication plugin (mandatory)
# list the misc/auth directory to see the available backends
# to disable authentication you can set "auth = none"
# you can also chain multiple backends. Example: "auth = ldap,basic"
# the order will be respected unless you manually set a higher backend priority
auth = basic
# acl plugin
# list misc/acl directory to see the available backends
# default is no ACL
acl = basic
# You can change the prefix if you are behind a reverse-proxy under a custom
# root path. For example: /burpui
# You can also configure your reverse-proxy to announce the prefix through the
# 'X-Script-Name' header. In this case, the bellow prefix will be ignored in
# favour of the one announced by your reverse-proxy
prefix = none
```

Each option is commented, but here is a more detailed documentation:

- *version*: What version of Burp this Burp-UI instance manages. Can either be *1* or *2*. This parameter determines which backend is loaded at runtime.

  (see *Versions* for more details)

- *single*: Burp-UI can run in two different modes. If it runs in single mode (meaning you set this parameter to *true*), you can only address **one** Burp server of the version specified by the previous parameter.

  If this option is set to *false*, Burp-UI will run as a *proxy* allowing you to address multiple Burp servers. In this mode, you need to configure **at least one** *Agent* section in your configuration file. You also need to run one `bui-agent` per server.

  (see *Modes* for more details)

- *auth*: What *Authentication* backend to use.
- *acl*: What *ACL* module to use.
- *prefix*: You can host Burp-UI behind a sub-root path. See the gunicorn page for details.

There is also a `[UI]` section in which you can configure some *UI* parameters:

```
[UI]
# refresh interval of the pages in seconds
refresh = 180
# refresh interval of the live-monitoring page in seconds
liverefresh = 5
```

Each option is commented, but here is a more detailed documentation:

- *refresh*: Time in seconds between two refresh of the interface.
- *liverefresh*: Time in seconds between two refresh of the *live-monitor* page.

Production

The burpui.cfg configuration file contains a `[Production]` section as follow:

```
[Production]
# storage backend for session and cache
# may be either 'default' or 'redis'
storage = default
# session database to use
# may also be a backend url like: redis://localhost:6379/0
# if set to 'redis', the backend url defaults to:
# redis://<redis_host>:<redis_port>/0
# where <redis_host> is the host part, and <redis_port> is the port part of
# the below "redis" setting
session = default
# cache database to use
# may also be a backend url like: redis://localhost:6379/0
# if set to 'redis', the backend url defaults to:
# redis://<redis_host>:<redis_port>/1
# where <redis_host> is the host part, and <redis_port> is the port part of
# the below "redis" setting
cache = default
# redis server to connect to
redis = localhost:6379
# whether to use celery or not
# may also be a broker url like: redis://localhost:6379/0
# if set to "true", the broker url defaults to:
# redis://<redis_host>:<redis_port>/2
# where <redis_host> is the host part, and <redis_port> is the port part of
# the above "redis" setting
celery = false
# database url to store some persistent data
# none or a connect string supported by SQLAlchemy:
# http://docs.sqlalchemy.org/en/latest/core/engines.html#database-urls
# example: sqlite:////var/lib/burpui/store.db
database = none
# whether to rate limit the API or not
# may also be a redis url like: redis://localhost:6379/0
# if set to "true" or "redis" or "default", the url defaults to:
```

```
# redis://<redis_host>:<redis_port>/3
# where <redis_host> is the host part, and <redis_port> is the port part of
# the above "redis" setting
# Note: the limiter only applies to the API routes
limiter = false
# limiter ratio
# see https://flask-limiter.readthedocs.io/en/stable/#ratelimit-string
ratio = 60/minute
```

Experimental

There is a `[Experimental]` section for features that have not been deeply tested:

```
[Experimental]
## This section contains some experimental features that have not been deeply
## tested yet
# enable zip64 feature. Python doc says:
# « ZIP64 extensions are disabled by default because the default zip and unzip
# commands on Unix (the InfoZIP utilities) don't support these extensions. »
zip64 = false
```

These options are also available in the bui-agent configuration file.

Security

The `[Security]` section contains options to harden the security of the application:

```
[Security]
## This section contains some security options. Make sure you understand the
## security implications before changing these.
# list of 'root' paths allowed when sourcing files in the configuration.
# Set this to 'none' if you don't want any restrictions, keeping in mind this
# can lead to accessing sensible files. Defaults to '/etc/burp'.
# Note: you can have several paths separated by comas.
# Example: /etc/burp,/etc/burp.d
includes = /etc/burp
# if files already included in config do not respect the above restriction, we
# prune them
enforce = false
# enable certificates revocation
revoke = false
# remember_cookie duration in days
cookietime = 14
# whether to use a secure cookie for https or not. If set to false, cookies
# won't have the 'secure' flag.
# This setting is only useful when HTTPS is detected
scookie = true
# application secret to secure cookies. If you don't set anything, the default
# value is 'random' which will generate a new secret after every restart of your
# application. You can also set it to 'none' although this is not recommended.
appsecret = random
```

Some of these options are also available in the bui-agent configuration file.

Modes

Burp-UI provides two modes:

- *Single*
- *Multi-Agent*

These modes allow you to either access a single Burp server or multiple Burp servers hosted on separated hosts.

Single

This mode is the **default** and the easiest one. It can be activated by setting the *single* parameter in the `[Global]` section of your burpui.cfg file to *true*:

```
[Global]
single = true
```

That's all you need to do for this mode to work.

Multi-Agent

This mode allows you access multiple Burp servers through the bui-agent. The architecture is available on the bui-agent page.

To enable this mode, you need to set the *single* parameter of the `[Global]` section of your burpui.cfg file to *false*:

```
[Global]
single = false
```

Once this mode is enabled, you have to create **one** `[Agent]` section **per** agent you want to connect to in your burpui.cfg file:

```
# If you set single to 'false', add at least one section like this per
# bui-agent
[Agent:agent1]
# bui-agent address
host = 192.168.1.1
# bui-agent port
port = 10000
# bui-agent password
password = azerty
# enable SSL
ssl = true

[Agent:agent2]
# bui-agent address
host = 192.168.2.1
# bui-agent port
port = 10000
# bui-agent password
password = ytreza
# enable SSL
ssl = true
```

Note: The sections must be called `[Agent:<label>]` (case sensitive)

To configure your agents, please refer to the bui-agent page.

Versions

Burp-UI ships with two different backends:

- *Burp1*
- *Burp2*

These backends allow you to either connect to a Burp server version 1.x.x or 2.x.x.

Note: If you are using a Burp server version 2.x.x you **have** to use the *Burp2* backend, no matter what Burp's protocol you are using.

Burp1

Note: Make sure you have read and understood the requirements first.

The *burp-1* backend can be enabled by setting the *version* option to *1* in the `[Global]` section of your burpui.cfg file:

```
[Global]
version = 1
```

Now you can add *burp-1* backend specific options:

```
# burp1 backend specific options
[Burp1]
# burp status address (can only be '127.0.0.1' or '::1')
bhost = ::1
# burp status port
bport = 4972
# burp binary
burpbin = /usr/sbin/burp
# vss_strip binary
stripbin = /usr/sbin/vss_strip
# burp client configuration file used for the restoration (Default: None)
bconfcli = /etc/burp/burp.conf
# burp server configuration file used for the setting page
bconfsrv = /etc/burp/burp-server.conf
# temporary directory to use for restoration
tmpdir = /tmp
```

Each option is commented, but here is a more detailed documentation:

- *bhost*: The address of the Burp server. In burp-1.x.x, it can only be *127.0.0.1* or *::1*
- *bport*: The port of Burp's status port.
- *burpbin*: Path to the Burp binary (used for restorations).

- *stripbin*: Path to the Burp *vss_strip* binary (used for restorations).
- *bconfcli*: Path to the Burp client configuration file (see restoration).
- *bconfsrv*: Path to the Burp server configuration file.
- *tmpdir*: Path to a temporary directory where to perform restorations.

Burp2

Note: Make sure you have read and understood the requirements first.

Note: The gunicorn documentation may help you configuring your system.

The *burp-2* backend can be enabled by setting the *version* option to *2* in the `[Global]` section of your burpui.cfg file:

```
[Global]
version = 2
```

Now you can add *burp-2* backend specific options:

```
# burp2 backend specific options
[Burp2]
# burp binary
burpbin = /usr/sbin/burp
# vss_strip binary
stripbin = /usr/bin/vss_strip
# burp client configuration file used for the restoration (Default: None)
bconfcli = /etc/burp/burp.conf
# burp server configuration file used for the setting page
bconfsrv = /etc/burp/burp-server.conf
# temporary directory to use for restoration
tmpdir = /tmp
# how many time to wait for the monitor to answer (in seconds)
timeout = 5
```

Each option is commented, but here is a more detailed documentation:

- *burpbin*: Path to the Burp binary (used for restorations).
- *stripbin*: Path to the Burp *vss_strip* binary (used for restorations).
- *bconfcli*: Path to the Burp client configuration file (see restoration).
- *bconfsrv*: Path to the Burp server configuration file.
- *tmpdir*: Path to a temporary directory where to perform restorations.
- *timeout*: Time to wait for the monitor to answer in seconds.

Authentication

Burp-UI provides some authentication backends in order to restrict access only to granted users. There are currently three different backends:

- *LDAP*
- *Basic*
- *Local*

To disable the *authentication* backend, set the *auth* option of the `[Global]` section of your burpui.cfg file to *none*:

```
[Global]
auth = none
```

You can use multiple backends, they will be sorted by priority or in the order they are defined if no priority is found. If a user is present in several backends, the first one that matches both login and password will be used.

Example:

```
[Global]
auth = basic,ldap
```

LDAP

The *ldap* authentication backend has some dependencies, please refer to the requirements page. To enable this backend, you need to set the *auth* option of the `[Global]` section of your burpui.cfg file to *ldap*:

```
[Global]
auth = ldap
```

Now you can add *ldap* specific options:

```
# ldapauth specific options
[LDAP]
# Backend priority. Higher is first
priority = 1
# LDAP host
host = 127.0.0.1
# LDAP port
port = 389
# Encryption type to LDAP server (none, ssl or tls)
# - try tls if unsure, otherwise ssl on port 636
encryption = tls
# specifies if the server certificate must be validated, values can be:
#  - none (certificates are ignored)
#  - optional (not required, but validated if provided)
#  - required (required and validated)
validate = none
# SSL or TLS version to use, can be one of the following:
#  - SSLv2
#  - SSLv3
#  - SSLv23
#  - TLSv1
#  - TLSv1_1 (Available only with openssl version 1.0.1+, requires python 2.7.9 or␣
↪higher)
version = TLSv1
# the file containing the certificates of the certification authorities
cafile = none
# Attribute to use when searching the LDAP repository
#searchattr = sAMAccountName
searchattr = uid
```

```
# LDAP filter to find users in the LDAP repository
#  - {0} will be replaced by the search attribute
#  - {1} will be replaced by the login name
filter = (&({0}={1})(burpui=1))
#filter = (&({0}={1})(|(userAccountControl=512)(userAccountControl=66048)))
# LDAP base
base = "ou=users,dc=example,dc=com"
# Binddn to list existing users
binddn = "cn=admin,dc=example,dc=com"
# Bindpw to list existing users
bindpw = Sup3rS3cr3tPa$$w0rd
```

Note: The *host* options accepts URI style (ex: ldap://127.0.0.1:389)

Warning: The quotes (") around *base* and *binddn* are **MANDATORY**

Basic

In order for the *basic* authentication backend to be enabled, you need to set the *auth* option of the `[Global]` section of your burpui.cfg file to *basic*:

```
[Global]
auth = basic
```

Now you can add *basic* specific options:

```
# basicauth specific options
# Note: in case you leave this section commented, the default login/password
# is admin/admin
[BASIC]
# Backend priority. Higher is first
priority = 2
admin = pbkdf2:sha1:1000$12345678$password
user1 = pbkdf2:sha1:1000$87654321$otherpassword
```

Note: Each line defines a new user with the *key* as the username and the *value* as the password

Warning: Since *v0.3.0*, passwords must be hashed (see manage to know how to create new users with hashed passwords)

Local

In order for the *local* authentication backend to be enabled, you need to set the *auth* option of the `[Global]` section of your burpui.cfg file to *local*:

```
[Global]
auth = local
```

Now you can add *local* specific options:

```
# localauth specific options
# Note: if not running as root, then burp-ui must be run as group 'shadow' to
# allow PAM to work
[LOCAL]
# Backend priority. Higher is first
priority = 3
# List of local users allowed to login. If you don't set this setting, users
# with uid greater than limit will be able to login
users = user1,user2
# Minimum uid that will be allowed to login
limit = 1000
```

ACL

Burp-UI implements some mechanisms to restrict access on some resources only for some users. There is currently only one backend:

- *Basic ACL*

To disable the *acl* backend, set the *acl* option of the `[Global]` section of your burpui.cfg file to *none*:

```
[Global]
acl = none
```

Basic ACL

The *basic* acl backend can be enabled by setting the *acl* option of the `[Global]` section of your burpui.cfg file to *basic*:

```
[Global]
acl = basic
```

Now you can add *basic acl* specific options:

```
# basicacl specific options
# Note: in case you leave this section commented, the user 'admin' will have
# access to all clients whereas other users will only see the client that have
# the same name
[BASIC:ACL]
admin = user1,user2
# Please note the double-quotes and single-quotes on the following lines are
# mandatory!
# You can also overwrite the default behavior by specifying which clients a
# user can access
user3 = '["client4", "client5"]'
# In case you are not in a single mode, you can also specify which clients
# a user can access on a specific Agent
user4 = '{"agent1": ["client6", "client7"], "agent2": ["client8"]}'
```

Warning: The double-quotes and single-quotes are **MANDATORY**

By default, if a user is named `admin` it will be granted the admin role. Here are the default grants:

1. admin => you can do anything
2. non admin => you can only see the client that matches your username
3. custom => you can manually assign username to clients using the syntax `username = client1, client2` or `username = '{"agent1": ["client1-1"], "agent2": ["client2-3", "client2-4"]}'` (if you are running a multi-agent setup)

Manage

Since *v0.3.0*, Burp-UI ships with a tool called `bui-manage`. This tool allows you to create new users and to manage database migrations.

This tool is actually a wrapper script that interacts with the core of Burp-UI. You can use it like this:

```
bui-manage [wrapper options...] [--] <subcommand>
```

This page details the *subcommand* usage. The tool provides some inline help too:

```
bui-manage -h
usage: bui-manage [-h] [-c <CONFIG>] [-i <MIGRATIONSDIR>]
                  [-m <agent|server|worker|manage>]
                  ...

positional arguments:
  remaining

optional arguments:
  -h, --help            show this help message and exit
  -c <CONFIG>, --config <CONFIG>
                        burp-ui configuration file
  -i <MIGRATIONSDIR>, --migrations <MIGRATIONSDIR>
                        migrations directory
  -m <agent|server|worker|manage>, --mode <agent|server|worker|manage>
                        application mode
```

```
# note the -- used to separate the wrapper from the actual command
bui-manage -- --help
Usage: flask [OPTIONS] COMMAND [ARGS]...

  This shell command acts as general utility script for Flask applications.

  It loads the application configured (either through the FLASK_APP
  environment variable) and then provides commands either provided by the
  application or Flask itself.

  The most useful commands are the "run" and "shell" command.

  Example usage:

    $ export FLASK_APP=hello
    $ export FLASK_DEBUG=1
    $ flask run

Options:
  --help  Show this message and exit.
```

```
Commands:
  compile_translation  Compile translations.
  create_user          Create a new user.
  db                   Perform database migrations.
  init_translation     Initialize a new translation for the given...
  run                  Runs a development server.
  setup_burp           Setup burp client for burp-ui.
  shell                Runs a shell in the app context.
  update_translation   Update translation files.
```

Database

To manage database migration, you first need to enable database support within your configuration file (see Production section)

You will also need some extra requirements:

```
pip install --upgrade "burp-ui[sql]"
```

Then you just have to run the following command to have your database setup:

```
bui-manage db upgrade
```

If your configuration is not in a *common* location, you can specify it like this:

```
bui-manage -c path/to/burpui.cfg db upgrade
```

If you did not install Burp-UI in a *common* location or you want to run it without installing it directly through the sources, you may need to specify the location of the *migrations* scripts like this:

```
bui-manage -c path/to/burpui.cfg -i path/to/migrations db upgrade
```

Users

You can create new users using the `bui-manage` file like this:

```
bui-manage create_user <new_username>
```

By default, the script will create new users for the Basic authentication backend. Without further details, a new password will be generated. You can either provide a password through the command line or tell the script to ask you what to setup using either the `-p` or `-a` options.

Examples:

```
bui-manage create_user user1
[*] Adding 'user1' user...
[+] Generated password: 71VIanuJ
[+] Success: True

bui-manage create_user -p toto user2
[*] Adding 'user2' user...
[+] Success: True

bui-manage create_user -a user3
[*] Adding 'user3' user...
```

```
Password:
Confirm:
[+] Success: True
```

Configure

Since *v0.4.0*, the `bui-manage` tool is now able to help you setup both Burp and Burp-UI so they speak to each other.

The available options are:

```
bui-manage setup_burp --help

Usage: flask setup_burp [OPTIONS]

  Setup burp client for burp-ui.

Options:
  -b, --burp-conf-cli TEXT   Burp client configuration file
  -s, --burp-conf-serv TEXT  Burp server configuration file
  -c, --client TEXT          Name of the burp client that will be used by
                             Burp-UI (defaults to "bui")
  -h, --host TEXT            Address of the status server (defaults to "::1")
  -r, --redis TEXT           Redis URL to connect to
  -d, --database TEXT        Database to connect to for persistent storage
  -n, --dry                  Dry mode. Do not edit the files but display
                             changes
  --help                     Show this message and exit.
```

The script needs the Burp configuration files to be readable **AND** writable.

Note: This script was initially developped to setup the docker image. I do not guarantee to be able to support it out of the docker context.

Note: This script only supports Burp 2.0.x.

The docker image uses this script like this:

```
bui-manage -c $BURPUI_CONFIG setup_burp -b $BURP_CLIENT_CONFIG \
    -s $BURP_SERVER_CONFIG -h $BURP_SERVER_ADDR -c $BURPUI_CLIENT_NAME \
    -r $REDIS_SERVER -d $DATABASE_URL
```

Sysinfo

Note: This tool first appeard with Burp-UI *v0.5.0*.

This tool will help you to gather system informations in order to make a detailed bug report.

Example:

```
bui-manage sysinfo

Python version:  2.7.9
Burp-UI version: 0.5.0 (stable)
Single mode:     True
Backend version: 2
```

Diag

Note: This tool first appeard with Burp-UI *v0.5.0*.

This tool will help you detect misconfiguration. It will **not** modify your files, you will have to use the *Configure* tool for that.

The available options are:

```
bui-manage diag --help

Usage: flask diag [OPTIONS]

  Check Burp-UI is correctly setup

Options:
  -c, --client TEXT  Name of the burp client that will be used by Burp-UI
                     (defaults to "bui")
  -h, --host TEXT    Address of the status server (defaults to "::1")
  -t, --tips         Show you some tips
  --help             Show this message and exit.
```

Examples:

```
bui-manage diag

The cname of your burp client does not match: hydrogen != bui
The burp server address does not match: 127.0.0.1 != ::1
'max_status_children' is to low, you need to set it to 15 or more. Please edit your /
↪etc/burp/burp-server.conf file
Your burp client is not listed as a 'restore_client'. You won't be able to view other␣
↪clients stats!
For performance reasons, it is recommanded to enable the 'monitor_browse_cache'
Unable to find the /etc/burp/clientconfdir/bui file
Some errors have been found in your configuration. Please make sure you ran this␣
↪command with the right flags! (see --help for details)

bui-manage diag -c hydrogen -h 127.0.0.1 -t

'max_status_children' is to low, you need to set it to 15 or more. Please edit your /
↪etc/burp/burp-server.conf file
Your burp client is not listed as a 'restore_client'. You won't be able to view other␣
↪clients stats!
For performance reasons, it is recommanded to enable the 'monitor_browse_cache'
Well, if you are sure about your settings, you can run the following command to help␣
↪you setup your Burp-UI agent. (Note, the '--dry' flag is here to show you the␣
↪modifications that will be applied. Once you are OK with those, you can re-run the␣
↪command without the '--dry' flag):
```

```
> bui-manage setup_burp --host="127.0.0.1" --client="hydrogen" --dry
```

When your configuration is OK, you should see this message:

```
Congratulations! It seems everything is alright. Burp-UI should run without any issue␣
↪now.
```

Celery

Since *v0.3.0*, Burp-UI supports asynchronous operations thanks to Celery. In order to use this feature, you need to enable it in the configuration (see Production section)

You will also need some extra requirements:

```
pip install "burp-ui[celery]"
```

Celery needs a *Broker* to communicate between the workers and your application. I chose Redis so you will need a working Redis server (Basically you just need to run `apt-get install redis-server` on Debian based distributions)

Runner

Once everything is setup, you need to launch a worker. Burp-UI ships with a helper script called `bui-celery`. You can use it like this:

```
bui-celery --beat
```

If your configuration is not in a *common* location, you can specify it like this:

```
bui-celery -c path/to/burpui.cfg -- --beat
```

Note: A systemd service example file is shiped in the *contrib* directory

Note: The `--beat` option is recommended since some operations need to be executed periodically

Note: The usage of a database is recommended to keep a track of executed tasks

Gunicorn

Starting from *v0.0.6*, Burp-UI supports Gunicorn in order to handle multiple users simultaneously because some operations (like the online restoration) may take some time and thus may block any further requests. With Gunicorn, you have several workers that can proceed the requests so you can handle more users.

You need to install `gunicorn` and `gevent`:

```
pip install "burp-ui[gunicorn]"
```

You will then be able to launch Burp-UI this way:

```
gunicorn -k gevent -w 4 'burpui:create_app(conf="/path/to/burpui.cfg")'
```

This will listen to 127.0.0.1:8000 by default. See the `gunicorn` documentation for details.

You will need to add the `-b 0.0.0.0:5000` option in order to listen on all interfaces on port 5000 for instance.

When using `gunicorn`, the command line options are not available. Instead, you run the Burp-UI `create_app` method directly. Here are the parameters you can play with:

- conf: Path to the Burp-UI configuration file
- verbose: Verbosity level between 0 and 4
- logfile: Path to a logfile in order to log Burp-UI internal messages
- reverse_proxy: Whether we are behind a reverse-proxy or not (defaults to True)

Warning: You **MUST** set the *appsecret* option in your configuration file when using gunicorn. The default *magic* value 'random' cannot be used. If you don't change the settings the default value will be 'none' and your cookies won't be secured.

Advanced usage

Gunicorn supports further settings (see its documentation for details). For instance, you would probably like to use the `-c` flag with the sample configuration file bundled with Burp-UI in *contrib/gunicorn/burpui_gunicorn.py*.

Usage example:

```
gunicorn -c burpui_gunicorn.py 'burpui:create_app(conf="/etc/burp/burpui.cfg",logfile=
↪"/var/log/gunicorn/burp-ui_info.log")'
```

Daemon

If you wish to run Burp-UI as a daemon process, the recommanded way is to use Gunicorn.

Requirements

First of all, you'll need a dedicated user.

```
# create the burpui user
useradd -m -r -d /var/lib/burpui -c 'Burp-UI daemon user' burpui
mkdir /etc/burp
# copy the burp-ui sample configuration file
cp /usr/local/share/burpui/etc/burpui.sample.cfg /etc/burp/burpui.cfg
mkdir -p /var/log/gunicorn
chown -R burpui: /var/log/gunicorn
```

You will also need a custom client configuration and you will have to create the certificates accordingly:

```
# create the configuration file used by burp-ui
cat >/var/lib/burpui/burp.conf<<EOF
mode = client
port = 4971
status_port = 4972
server = 127.0.0.1
password = abcdefgh
cname = bui-agent1
pidfile = /var/lib/burpui/bui-agent1.client.pid
syslog = 0
stdout = 1
progress_counter = 1
ca_burp_ca = /usr/sbin/burp_ca
ca_csr_dir = /var/lib/burpui/CA-client
ssl_cert_ca = /var/lib/burpui/ssl_cert_ca-client.pem
ssl_cert = /var/lib/burpui/ssl_cert-client.pem
ssl_key = /var/lib/burpui/ssl_cert-client.key
ssl_peer_cn = burpserver
EOF
# generate the certificates
burp_ca --name bui-agent1 --ca burpCA --key --request --sign --batch
cp /etc/burp/ssl_cert_ca.pem /var/lib/burpui/ssl_cert_ca-client.pem
cp -a /etc/burp/CA/bui-agent1.crt /var/lib/burpui/ssl_cert-client.pem
cp -a /etc/burp/CA/bui-agent1.key /var/lib/burpui/ssl_cert-client.key
chown -R burpui: /var/lib/burpui/
```

Now you need to add the *bui-agent1* client to the authorized clients:

```
echo "password = abcdefgh" >/etc/burp/clientconfdir/bui-agent1
echo "restore_client = bui-agent1" >>/etc/burp/burp-server.conf
```

You will also need to increase the number of status clients by setting `max_status_children` to 15:

```
echo "max_status_children = 15" >>/etc/burp/burp-server.conf
```

Finally, make sure you set `bconfcli: /var/lib/burpui/burp.conf` in your Burp-UI configuration file (*/etc/burp/burpui.cfg*).

If you want to take advantage of *advanced* features such as client add/removal and configuration files edition, you should set the permissions accordingly Burp-side.

First of all, add the following lines in your */etc/burp/burp-server.conf*:

```
user = burpui
group = burpui
```

Then you need to fix some permissions:

```
chown -R burpui: /etc/burp/{burp-server.conf,burpui.cfg,CA,CA.cnf,clientconfdir,
↪dhfile.pem,ssl_cert_ca.pem,ssl_cert-server.key,ssl_cert-server.pem} /var/spool/burp
chgrp burpui /etc/burp
chmod g+rwx /etc/burp
```

Finally you can restart your `burp-server`.

Note: The above commands are meant for *default* setup. You may need to adapt the paths.

Debian-style

When installing the *gunicorn* package on debian, there is a handler script that is able to start several instances of Gunicorn as daemons.

All you need to do is installing the *gunicorn* package and adding a configuration file in */etc/gunicorn.d/*.

There is a sample configuration file available here.

```
# install the gunicorn package
apt-get install gunicorn
# copy the gunicorn sample configuration
cp /usr/local/share/burpui/contrib/gunicorn.d/burp-ui /etc/gunicorn.d/
# now restart gunicorn
service gunicorn restart
```

Systemd

If you are not running on debian or you prefer not to use the gunicorn debian package, the handler script may not be available. You will then have to create your own service. We can do this for systemd for example:

```
# copy the gunicorn configuration file
cp /usr/local/share/contrib/gunicorn/burpui_gunicorn.py /etc/burp/
# create the service file
cat >/etc/systemd/service/bui-gunicorn.service<<EOF
[Unit]
Description=Burp-UI gunicorn service
After=network.target

[Service]
User=burpui
Group=burpui
ExecStart=/usr/local/bin/gunicorn -c /etc/burp/burpui_gunicorn.py 'burpui:create_
↪app(conf="/etc/burp/burpui.cfg",logfile="/var/log/gunicorn/burp-ui_info.log")'

[Install]
WantedBy=multi-user.target
EOF
# enable the new service
systemctl enable bui-gunicorn.service
# start the service
systemctl start bui-gunicorn.service
```

Reverse-Proxy

You may want to add a reverse-proxy so Burp-UI can be accessed on port 80 (or 443) along with other applications.

Here is a sample configuration for Nginx:

```
server {
    listen 80;
    server_name burpui.example.com;

    access_log  /var/log/nginx/burpui.access.log;
    error_log   /var/log/nginx/burpui.error.log;
```

```
    location / {

        # you need to change this to "https", if you set "ssl" directive to "on"
        proxy_set_header   X-FORWARDED_PROTO http;
        proxy_set_header   Host              $http_host;
        proxy_set_header   X-Forwarded-For   $remote_addr;

        proxy_read_timeout 300;
        proxy_connect_timeout 300;

        proxy_pass http://localhost:5000;
    }
}
```

Sub-root path

You can host Burp-UI behind a sub-root path. For instance `/burpui`. To accomplish this, you can either setup your reverse-proxy to announce the desired *prefix*, or you can use the `prefix` option in your Burp-UI configuration file (see usage for details).

If you want to configure this reverse-proxy side, you need to announce the HTTP Header `X-Script-Name`.

Here is a sample configuration for Nginx:

```
server {
    listen 80;
    server_name example.com;

    access_log  /var/log/nginx/burpui.access.log;
    error_log   /var/log/nginx/burpui.error.log;

    location /burpui {

        # you need to change this to "https", if you set "ssl" directive to "on"
        proxy_set_header   X-FORWARDED_PROTO http;
        proxy_set_header   Host              $http_host;
        proxy_set_header   X-Forwarded-For   $remote_addr;
        # Our service is hosted behind the "/burpui" prefix
        proxy_set_header   X-Script-Name     /burpui;

        proxy_read_timeout 300;
        proxy_connect_timeout 300;

        proxy_pass http://localhost:5000;
    }
}
```

Apache sample:

```
ProxyPass /burp/ http://localhost:5000/burp/
ProxyPassReverse /burp/ http://localhost:5000/burp/
<Location /burp/>
    SetOutputFilter proxy-html
    ProxyPassReverse /burp/
    ProxyHTMLURLMap  http://localhost:5000/     /
    Require all granted
</Location>
```

Warning: If your *prefix* does not start with a '/', it will be ignored.

Production

We can consider the demo as a production example of what you can setup/expect in your environment. It is using Gunicorn along with Nginx as described above.

In order to improve performances, Redis can be used to cache sessions and various API calls. You can also enable the celery worker for asynchronous jobs. Additionally, you can enable the SQL storage.

The FAQ answers these questions:

- Why using redis?
- Why using SQL?
- Why using Celery?

See the production section of the usage page.

Docker

Since the *v0.4.0*, a docker image is provided. It ships with the latest stable release of Burp-UI and supports the celery worker introduced in *v0.3.0* if you link it to a redis container.

Introduction

All you need is docker and docker-compose. A *docker-compose.yml* file is provided. There are a few variables supported to setup your system:

- **BURPUI_CONFIG** - Specify where the Burp-UI configuration file is located. It defaults to "/etc/burp/burpui.cfg".
- **BURPUI_VERBOSE** - Specify the log verbosity (between 0 and 4). It defaults to 0.
- **BURPUI_CLIENT_NAME** - Specify the name of the burp client that will be used by Burp-UI. It defaults to "bui".
- **BURPUI_UID** - uid of the *burpui* user you want to map in your host. It defaults to 5337.
- **BURPUI_GID** - gid of the *burpui* group you want to map in your host. It defaults to 5337.
- **BURP_CLIENT_CONFIG** - Specify the path of the burp client configuration file to use for the Burp-UI client. It defaults to "/tmp/burp.conf". It means you won't have access to it outside of the container. It is intended to not override the */etc/burp/burp.conf* file if you already use it.
- **BURP_SERVER_CONFIG** - Specify the path of the burp-server configuration file. It defaults to "/etc/burp/burp-server.conf".
- **DATABASE_URL** - Specify the URL of the database to connect to. It defaults to "sqlite:////var/lib/burpui/store.db".
- **REDIS_SERVER** - Specify the address of the redis server. It defaults to "redis:6379".
- **BURP_SERVER_ADDR** - Specify the address of the burp-server status port. If set to "auto" (the default), we will use the address of the docker host. Make sure your status port is listening on this interface.
- **TIMEZONE** - Specify the timezone of your burp-server. It defaults to Europe/Paris.

The provided *docker-compose.yml* file suggests that you *mount* the */etc/burp* and */var/spool/burp* paths inside the container (this is automatic) so that Burp-UI is able to access some required files.

Requirements

The docker image only works with a burp server version 2.0.x.

Burp-UI will be launched with the user *burpui* inside the container. This user has the UID `$BURPUI_UID` and the GID `$BURPUI_GID` so you may want to create a user with the associated UID/GID in your host and make sure it has read **AND** write access to */etc/burp* and */var/spool/burp*.

For instance:

```
groupadd -g 5337 burpui
useradd -r -m -d /var/lib/burpui -c 'Burp-UI daemon user' -u 5337 -g 5337 burpui
```

Usage

All you have to do is to retrieve the *docker-compose.yml* file, edit the variables if needed and launch the docker containers. For instance you could do:

```
mkdir -p ~/workspace
cd ~/workspace
git clone https://git.ziirish.me/ziirish/burp-ui.git
cd burp-ui
docker-compose up -d
```

That's it. Really. Now profit and go to http://localhost:5000/

Troubleshooting

Here are some hints to help you troubleshoot your Burp-UI container.

Cannot launch burp process: Unable to spawn burp process

This means Burp-UI was not able to spawn a burp client that is able to communicate with the server. You can check the containers logs using the `docker-compose logs` command. If the output contains something like:

```
It looks like your burp server is not exposing it's status port in a way that is␣
↪reachable by Burp-UI!
You may want to set the 'status_address' setting with either '1.2.3.4', '::' or '0.0.
↪0.0' in the /etc/burp/burp-server.conf file in order to make Burp-UI work
```

It means your burp-server is not exposing its status port. The above output gives you the instructions to fix it.

Note: You'll have to restart your burp-server to bind to the new *status_address*

Other errors may be reported as well by the `docker-compose logs` command. Please read its output carefully.

If the error still occurs, you may need to investigate further. You can run these commands:

```
# docker-compose ps
Name                    Command               State            Ports
-----------------------------------------------------------------------------------
burpui_burpui_1   /app/init app:start              Up      127.0.0.1:5000->5000/tcp
burpui_redis_1    docker-entrypoint.sh redis ...   Up      6379/tcp
# docker exec -it burpui_burpui_1 /bin/bash
root@59d883806fc7:/# su - burpui
$ /usr/sbin/burp -c /tmp/burp.conf -a m
{ "logline": "Could not find ssl_cert_ca /etc/burp/ssl_cert_ca-client-bui.pem: No␣
↪such file or directory" }
{ "logline": "auth ok" }
{ "logline": "Server version: 2.0.52" }
{ "logline": "nocsr ok" }
{ "logline": "SSL is using cipher: DHE-RSA-AES256-GCM-SHA384 TLSv1.2 Kx=DH      ␣
↪Au=RSA  Enc=AESGCM(256) Mac=AEAD
" }
{ "logline": "Certificate doesn't verify." }
{ "logline": "check cert failed" }
```

In this case, we see a pem file is missing. You can usually fix this issue by running:

```
# ln -s /etc/burp/ssl_cert_ca.pem /etc/burp/ssl_cert_ca-client-bui.pem
```

bui-agent

The bui-agent is a kind of proxy between a Burp server and your Burp-UI server.

It is useful when you have several servers to monitor and/or when you don't want (or can't) install the full Burp-UI on your server.

Architecture

The architecture is described bellow:

```
+--------------------+       +--------------------+       +--------------------+     ␣
↪ +--------------------+
|                    |       |                    |       |                    |     ␣
↪ |                    |
|  burp-server 1     |       |  burp-server 2     |       |        ...         |     ␣
↪ |  burp-server n     |
|                    |       |                    |       |                    |     ␣
↪ |                    |
+--------------------+       +--------------------+       +--------------------+     ␣
↪ +--------------------+
|                    |       |                    |       |                    |     ␣
↪ |                    |
|                    |       |                    |       |                    |     ␣
↪ |                    |
|                    |       |                    |       |                    |     ␣
↪ |                    |
|                    |       |                    |       |                    |     ␣
↪ |                    |
| +----------------+ |       | +----------------+ |       | +----------------+ |     ␣
↪ | +----------------+ |
```

```
| |                 | |        | |                 | |        | |                 | |
↪ | |                 | |
| |  bui-agent 1    | |        | |  bui-agent 2    | |        | |       ...       | |
↪ | |  bui-agent n    | |
| |                 | |        | |                 | |        | |                 | |
↪ | |                 | |
| +-------^--------+ |        | +-------^--------+ |        | +--------^-------+ |
↪ | +-------^--------+ |
+---------|----------+        +---------|----------+        +----------|---------+
↪ +---------|----------+
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          |                              |      |                    | |
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          |                              |      |   front-server     | |
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          |                              |      | +----------------+ | |
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          |                              |      | |                | | |
↪           |
          |                             +--------+  burp-ui front +---+
↪           |
          +-------------------------------------+                +--------------------
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                                                 | +--------^-------+ |
                                                 +----------|---------+
                                                            |
                                                            |
                                                 +----------+---------+
                                                 |                    |
```

```
                                                  |      client        |
                                                  |                    |
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                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  |                    |
                                                  +--------------------+
```

Requirements

The agent is powered by gevent. In order to install it, you can run the following command:

```
pip install burp-ui-agent
```

Note: Starting with *v0.5.0*, the agent now has its own package.

Configuration

These agents must be launched on every server hosting a Burp instance you'd like to monitor.

They have a specific buiagent.cfg configuration file with a `[Global]` section as below:

```
[Global]
# On which port is the application listening
port = 10000
# On which address is the application listening
# '::' is the default for all IPv6
# set it to '0.0.0.0' if you want to listen on all IPv4 addresses
bind = ::
# enable SSL
ssl = true
# ssl cert
sslcert = /etc/burp/ssl_cert-server.pem
# ssl key
sslkey = /etc/burp/ssl_cert-server.key
# burp server version 1 or 2
version = 1
# agent password
password = password
```

Each option is commented, but here is a more detailed documentation:

- *port*: On which port is bui-agent listening.
- *bind*: On which address is bui-agent listening.
- *ssl*: Whether to communicate with the Burp-UI server over SSL or not.
- *sslcert*: What SSL certificate to use when SSL is enabled.

- *sslkey*: What SSL key to use when SSL is enabled.
- *version*: What version of Burp this bui-agent instance manages. (see Burp-UI versions for more details)
- *password*: The shared secret between the Burp-UI server and bui-agent.

As with Burp-UI, you need a specific section depending on the *version* value. Please refer to the Burp-UI versions section for more details.

Example

Here is a full usage example:

```
# On the server called 'agent1'
agent1:~$ bui-agent -c path/to/buiagent.cfg

# On the server called 'agent2'
agent2:~$ bui-agent -c path/to/buiagent.cfg

# On the server called 'front'
front:~$ burp-ui -c path/to/burpui.cfg
```

This example uses three servers. You then only need to point your browser to http://front:5000/ for instance, and the Burp-UI instance (front) will *proxify* the requests to the two agents for you.

Service

I have no plan to implement daemon features, but there are a lot of tools available to help you achieve such a behavior.

To run bui-agent as a service, a systemd file is provided. You can use it like this:

```
cp /usr/local/share/burpui/contrib/systemd/bui-agent.service /etc/systemd/system/
systemctl daemon-reload
systemctl enable bui-agent.service
systemctl start bui-agent.service
```

Architecture

This section is a must-read in order to understand what is going on between Burp and Burp-UI.

Both projects are lead by two different people so please report your issues to the right project.

The *Burp1* and *Burp2* backends behave slightly differently due to some changes in the core or Burp. You can refer to the Burp's documentation for details.

Burp 1.x

If you are running Burp 1.x, you **MUST** install Burp-UI on the same host (or at least setup a bui-agent locally). This limitation is due to the fact burp 1.x only exposes its *status port* (the port 4972 by default) to localhost (either 127.0.0.1 or ::1). Burp-UI then just opens a connexion to `localhost:4972` in order to communicate with Burp.

Here is a little illustration:

```
+-------------------------------------------+
|                                           |
|               Backup server               |
|                                           |
+-------------------------------------------+
|                                           |
|                                           |
|                                           |
|                                           |
|                                           |
|                                           |
|                                           |
|                                           |
| +-----------+              +------------+ |
| |  Burp-UI  |              |    Burp    | |
| +-----------+              +------------+ |
| |           |              |            | |
| |           |    :4972     |            | |
| |           +-------------->            | |
| |           |              |            | |
| |           |              |            | |
| +-----------+              +------------+ |
|                                           |
+-------------------------------------------+
```

Burp 2.x

If you are running Burp 2.x, you can host Burp-UI on a different server, but I don't recommend it if you wish to be able to use all the features.

The Burp 2.x *status port* has been completely reworked. It can now be published to remote hosts, but the *status protocol* is not compatible with 1.x.

The *status port* is now accessed through a Burp client thanks to the `-a m` flag. The client will then take care to open the connexion with the server securing the communication with SSL. The Burp server also supports basic *ACL* though the `restore_client` option.

By default, a client will only be able to view its own reports/stats. If you want to be able to monitor other clients, you need to be added as a `restore_client` for those clients (this can be done by editing the client configuration file in the *clientconfdir* directory on the server). Alternatively, you can add this option in the *burp-server.conf* file for this setting to be applied globally for all the clients.

Ok, now why did I tell you all this? Well, because the Burp-UI's backend for Burp 2.x is basically just a wrapper around `burp -a m`.

It means that when you start Burp-UI with `version = 2`, the command `<burpbin> -c <bconfcli> -a m` (where <*burpbin*> defaults to */usr/sbin/burp* and <*bconfcli*> defaults to */etc/burp/burpui.cfg*). Of course this command will be ran with the same permissions and privileges as Burp-UI itself.

And here is a little illustration to summarize all this:

```
+-----------------------------------------------+
|                                               |
|                 Backup server                 |
|                                               |
+-----------------------------------------------+
|                                               |
| +---------------------------------------------+ |
```

```
| |                    Burp-UI                   | |
| +----------------------------------------------+ |
| |                                              | |
| |                                              | |
| |           +----------------------+           | |
| |           |      burp -a m       |           | |
| |           +----------+-----------+           | |
| |                      |                       | |
| +----------------------------------------------+ |
|                        |                         |
| +---------------------v----------------------+ |
| |                                              | |
| |                    Burp                      | |
| |                                              | |
| +----------------------------------------------+ |
|                                                  |
+--------------------------------------------------+
```

Contributing

Contributions are welcome. You can help in any way you want, for instance by opening issues on the bug tracker, sending patches, etc.

There is also a dedicated website. Currently it only hosts a Discourse instance where you can discuss with each other. No need to create another account, the one you use in the bug tracker can be imported automatically!

Feel free to use it and post your tips and remarks.

The address is: https://burpui.ziirish.me/

You can financially support the project if you find it useful or if you would like to sponsor a feature. Details on my website.

Translating

Translations are very welcome! If you are willing to help, you will need some tools:

```
pip install Flask-Babel
```

Then you need to fork the project retrieve the sources:

```
git clone https://git.ziirish.me/<your_login>/burp-ui.git
cd burp-ui
```

You can have the list of available languages by running:

```
ls burpui/translations
```

New language

If your language is not listed, you can create a new translation running the following command:

```
./bui-manage init_translation <country_code> # where <country_code> can be "de", "ru",
↪ etc.
```

Update translation

If you want to update an existing (and/or un-complete) translation, you probably want to have a look at the *templates* files.

An un-translated file will contain things like:

```
<h1>Some title</h1>
```

The string *Some title* won't be translated as is. You need to update the template like this:

```
<h1>{{ _('Some title') }}</h1>
```

Then you can update the translation files with the following command:

```
./bui-manage update_translation
```

Translation

Now you can proceed the translation in the file *burpui/translations/<country_code>/LC_MESSAGES/messages.po*.

It looks like:

```
#: burpui/forms.py:18 burpui/templates/login.html:8
msgid "Username"
msgstr ""
```

You just have to put the translations in the *msgstr* line like:

```
#: burpui/forms.py:18 burpui/templates/login.html:8
msgid "Username"
msgstr "Utilisateur"
```

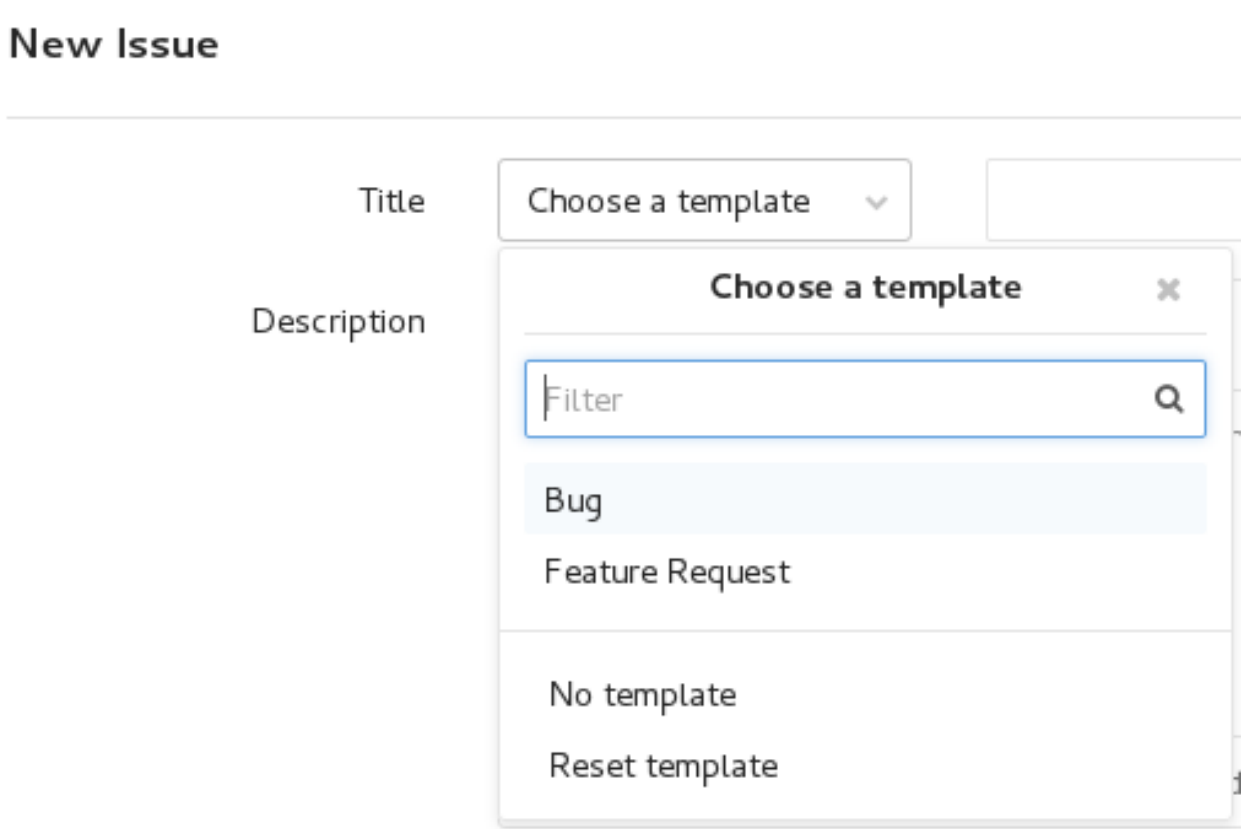
Once it's done, you can push the sources and create a Merge Request on GitLab:

```
git checkout -b translation-<country_code>
git add burpui/translations/<country_code>/LC_MESSAGES/messages.po
git commit -m "<country_code> translation"
git push -u origin translation-<country_code>
```

Issues / Bugs

If you find any issue while using `Burp-UI` please report it on the bug tracker. All issues should contain the used command line to reproduce the problem, the debug output and both versions of burp and `Burp-UI` you are using.

A Bug Report template is available directly in the Issue Tracker:



The template illustrate the commands to run in order to provide as much details as you can in order to help reproduce the issue.

If you are running `Burp-UI` bellow *v0.5.0*, you can get those informations using the following commands:

```
$ /usr/sbin/burp -v
burp-1.4.40
$ burp-ui -V -v
burp-ui: v0.1.0.dev (90deb82c7b0be35f1a70bb073c9926b5947c6a85)
$ burp-ui -v
```

Optionally your python version and your OS might be useful as well.

Questions

Ask questions in the discussion forum. Do not use the issue tracker for this purpose.

`Burp-UI` has extensive online documentation please read the doc.

Troubleshooting

In case you encounter troubles with `Burp-UI`, you should run it with the `-vvvv` flag and paste the relevant output within your bug-report. Please also give the version of `burp` **AND** `Burp-UI`. Since *v0.0.6* you can use the `-V` or `--version` flag in order to get your version number.

Merge / Pull requests

I would like you to use gitlab for your Merge requests in order to take advantage of the automated tests I have been working on. You can login/register on my personal gitlab server with your github account.

Development

You will find any development information on the developer guide page.

Changelog

0.5.0 (09/05/2017)

- **BREAKING**: the *standalone* option has been renamed to *single* for less confusion
- **BREAKING**: the `bui-agent` has now its own independent package to reduce dependencies
- Add: Spanish translation thanks to Pablo
- Add: reverse_proxy option while running through gunicorn
- Add: OS detection for burp 2
- Add: customizable reports
- Add: persistent storage for user preferences if SQL storage enabled
- Add: rate-limiting of the API
- Add: new `diag` and `sysinfo` commands to help you diagnose issues
- Improvement: the SQL storage will detect out-of-sync schemas and disable itself if needed (with a log message)
- Improvement: speedup the calendar view
- Improvement: more complete user panel (#185, #184, #182, #132)
- Fix: issue #186
- Fix: issue #192
- Fix: issue #194
- Fix: issue #196
- Fix: issue #198
- Fix: issue #210
- Various bugfix
- Full changelog

0.4.4 (01/02/2017)

- Fix: issue #193

0.4.3 (12/28/2016)

- Fix: issue #186
- Fix: issue #188
- Fix: issue #190
- Fix: missing configuration in docker image
- Fix: help troubleshooting some errors
- Fix: missing vss_strip binary
- Fix: encoding error that made unable to browse backups with burp1 backend

0.4.2 (12/16/2016)

- Fix: bui-agent was broken
- Fix: handle i18n exceptions
- Fix: enable db migration only when needed
- Fix: wrong escape in translation

0.4.1 (12/15/2016)

- **BREAKING**: Use the new Flask's embedded server by default means no more SSL (HTTPS) support without a dedicated application server
- Fix: issue #156
- Fix: issue #157
- Fix: issue #165
- Fix: issue #176
- Fix: issue #181
- Fix: issue #182
- Various bugfix
- Full changelog

0.4.0 (11/23/2016)

- **BREAKING**: The database schema evolved. In order to apply these modifications, you **MUST** run the `bui-manage db upgrade` command after upgrading
- **BREAKING**: Plain text passwords are deprecated since v0.3.0 and are now disabled by default
- **BREAKING**: The default *version* setting has been set to `2` instead of `1`
- Add: new bui-manage setup_burp command
- Add: new docker image
- Add: manage user sessions
- Add: French translation

- Fix: issue #151
- Fix: issue #154
- Fix: issue #158
- Fix: issue #163
- Fix: issue #164
- Fix: issue #166
- Fix: issue #169
- Fix: issue #171
- Fix: issue #172
- Fix: issue #173
- Fix: issue #174
- Various bugfix
- Full changelog

0.3.0 (08/15/2016)

- **BREAKING**: New configuration file format to allow further improvements (The conversion is automatic, but LDAP settings might need some attention)
- **BREAKING**: Passwords are now *salted* for the *BASIC* authentication backend (The conversion is automatic too)
- **BREAKING**: If you plan to use the SQL storage along with gunicorn, you **MUST** add the *–preload* parameter (see the *gunicorn.d/burp-ui* file)
- Add: Celery support for asynchronous tasks
- Add: SQLAlchemy support for persistent storage
- Add: RESTful restore
- Add: autoreload config
- Add: remember some user settings
- Add: client certificate revocation
- Add: new local authentication backend
- Add: new filters on history API call
- Add: implement backend keepalive
- Add: allow to *disable* server-initiated restoration
- Fix: disable Basic-Auth login from UI to prevent some bugs with sessions
- Fix: issue #134
- Fix: issue #135
- Fix: issue #137
- Fix: issue #138
- Fix: issue #145

- Fix: issue #148
- Improvement: new asynchronous backup-running API call
- Security: restrict files that can be sent by the agent
- Full changelog

0.2.1 (05/17/2016)

- Add: allow to edit a server-initiated restoration
- Add: allow to cancel a server-initiated restoration
- Add: support for Burp labels
- Add: server-initiated backups
- Add: support sub-root path
- Add: new Burp 2 settings
- Improvement: better logging system
- Improvement: new security options
- Fix: issue #109
- Fix: issue #113
- Fix: issue #114
- Fix: issue #117
- Fix: issue #123
- Doc
- Full changelog

0.1.3 (02/20/2016)

- Fix: issue #107
- Fix: issue #108

0.1.2 (02/18/2016)

- Fix: duration computation
- Fix: issue #104
- Fix: issue #105
- Fix: issue #106

0.1.1 (02/17/2016)

- Fix: burp2 backend issue
- Fix: Debian wheezy compatibility
- Fix: sample configuration files location
- Better calendar readability

0.1.0 (02/15/2016)

- Add: python 3 support
- Add: new fields in backup reports
- Add: server-side initiated restoration
- Add: percent done in overview
- Add: ability to chain multiple authentication backends
- Add: display versions within the interface
- Add: support for zip64
- Add: new report
- Add: new calendar view
- Add: "restart" option to debian init script thanks to @Larsen
- Add: Basic HTTP Authentication (mostly for the API)
- Add: self-documented API
- Fix: issue #81
- Fix: issue #87
- Fix: issue #88
- Fix: issue #92
- Fix: issue #95
- Fix: issue #99
- Fix: issue #100
- Fix: issue #101
- demo
- API refactoring
- Security fixes
- Bugfixes

0.0.7.3 (09/26/2015)

- Fix: issue #77
- Doc

0.0.7.2 (09/01/2015)

- Fix: issue #73
- Fix: issue #74
- Doc

0.0.7.1 (08/22/2015)

- Add: Burp-2 backend
- Add: sortable tables
- Add: ACL support
- Add: support client-side encrypted backups while performing an online restoration
- Add: multiple archive format
- Add: better Active Directory support
- Improvement: better config file parser
- Improvement: better logging with Gunicorn
- Improvement: full support of server configuration file + clientconfdir
- Fix: issue #35
- Fix: issue #37
- Fix: issue #41
- Fix: issue #42
- Fix: issue #46
- Fix: issue #49
- Fix: issue #53
- Fix: issue #54
- Fix: issue #59
- Fix: issue #62
- Fix: issue #68
- Fix: issue #69
- Fix: issue #70
- Fix: issue #71
- Fix: issue #72
- doc on readthedocs
- Two merge requests from Wade Fitzpatrick (!1 and !2)
- API refactoring
- Security fixes
- Bufixes

- Full changelog

0.0.6 (12/15/2014)

- Add: gunicorn support
- Add: init script for CentOS
- Add: init script for Debian
- Add: autofocus login field on login page
- Add: burp-server configuration panel
- Fix: issue #25
- Fix: issue #26
- Fix: issue #30
- Fix: issue #32
- Fix: issue #33
- Fix: issue #34
- Fix: issue #35
- Fix: issue #39
- Code cleanup
- Improve unit tests
- Bugfixes
- Full changelog

0.0.5 (09/22/2014)

- Add: multi-server support
- Fix bugs
- Full changelog

0.0.4 (09/07/2014)

- Add: ability to download files directly from the web interface
- Full changelog

0.0.3 (09/02/2014)

- Add: authentication
- Full changelog

0.0.2 (08/25/2014)

- Fix bugs
- Full changelog

0.0.1 (08/25/2014)

- Initial release

FAQ

Is there a demo somewhere?

Yes, you can play with Burp-UI at demo.burp-ui.org. Credentials are:

- *admin* / *admin* to play with Burp-UI as an administrator
- *demo* / *demo* to play with Burp-UI as a regular user

How to start using Burp-UI?

You may find all the basic informations to get started with Burp-UI in the README file and in this documentation. You can also read the step-by-step page for some detailed use-cases.

How does Burp-UI work?

The answer depends whether you are using burp 1.x or burp 2.x. Basically, Burp-UI tries to provide a consistent API between the *Frontend* (the UI) and the burp server. To do so, it implements two *Backends*: burp-1 and burp-2. You can select either of these with the version flag in your configuration.

You can also refer to the Architecture page of the documentation to know more about those backends.

How to configure my *firewall*?

When running Burp-UI in single mode, the embedded webserver listens on port **5000** on all interfaces.

The Burp-UI agents listen on port **10000** by default.

Of course those are configurable.

What are the default credentials?

The default login / password is *admin* / *admin* with the basic authentication backend.

How does the online restoration feature work?

The online restoration feature works the same way as if you were running the burp client yourself. It means Burp-UI runs the following command:

```
burp -a r -b <number> -C <client name> -r <regex> -d /tmp/XXX -c <bconfcli>
```

It then generates an archive based on the restored files.

Because of this workflow, and especially the use of the `-C` flag you need to tell your burp-server the client used by Burp-UI can perform a restoration for a different client. You can refer to the restoration section of this documentation along with the version section for more details.

What does the server-initiated restoration feature do and how to make it work?

This feature asks the server to perform a restoration on the client the next time it sees it.

In order for this feature to work, your client **MUST** allows the server to do that. You have to set `server_can_restore = 1` (which is the default value) in your client configuration file (usually */etc/burp/burp.conf*).

How can I start Burp-UI as a daemon?

There are several *init scripts* provided by some users available here.

Note: I do not (and cannot) support these scripts. Only the Gunicorn way is supported.

The recommended way to run Burp-UI in production is to use Gunicorn. You can refer to the gunicorn section of this documentation for more details.

How to setup a reverse-proxy in front of Burp-UI?

The only way to run Burp-UI behind a reverse-proxy is to use Gunicorn. You can refer to the gunicorn section of this documentation for more details.

Why don't I see all my clients using the burp-2 backend?

Starting with burp 2, you cannot see all the client through the status port unless you tell burp a particular client can see other clients statistics. See the general instructions for more details.

Are there any known issues?

There is a known issue section in this documentation.

I cannot find the `bui-agent` command anymore, where is it?

Since *v0.5.0*, the bui-agent has it's own package in order to reduce requirements. The agent does not need the Flask requirements and so on. You can now install it with the `pip install burp-ui-agent` command. Alternatively, there is now a `bui-agent-legacy` provided by the `burp-ui` package.

See the upgrading section for more details.

Why using redis?

Redis may be used for several things:

- store the sessions server side (by default sessions are stored client side in a secure cookie)
- cache some data
- monitor API usage for the rate limiter

All of these features are totally optional. Redis is also used by celery to interact between Burp-UI and the asynchronous worker.

Why using SQL?

The SQL database is currently used to keep a track of several meta-data. Since *v0.5.0*, the SQL database is able to store user preferences. Again, it is totally optional to use it.

Why using Celery?

Celery is used to run some asynchronous jobs such as reports computations or online restorations.

Computing reports asynchronously allows faster answer especially when you manage several dozens of clients.

Burp-UI does not seem to understand the *bind* and *port* options anymore, what should I do?

Since *v0.4.0*, the new Flask development server is used when running in *single* mode. The *bind* and *port* options are not read anymore. You can either run Burp-UI with the `-- -h x.x.x.x -p yyyy` flags or use the legacy launcher `python -m burpui -m legacy [--help]`. See the upgrading page for details.

Burp-UI does not work anymore since I upgraded it, what can I do?

Make sure you read the upgrading page in case some breaking changes occurred.

I am getting errors while restoring large files (>3GB), what should I do?

The default *zip* module does not support large files by default. You can either enable large file support by setting `zip64 = true` in the `[Experimental]` section. Alternatively, you can choose an other compression module by selecting an other extension while proceeding the restoration.

I see a lot of *cannot spawn burp process* errors, what can I do?

This error means Burp-UI is not able to communicate with the burp server. You should check your logs (both Burp-UI's and burp server's) to understand what is wrong. If you are using Gunicorn, it is possible you reached the limit of *status children*. You can safely increase the `max_status_children` setting in your *burp-server.conf* file to 15 (the default is 5). You can also check your *status port* is open and/or accessible by your client. To do so, you can run the `burp -a m` command.

How can I contribute?

You can refer to the contributing section of this documentation.

Step By Step

Although Burp-UI tries to make Burp accessible to everyone, both products have their complexity.

In this *Step by Step*, I would like to introduce you different use-cases with their associated configurations, descriptions and comments. In every case, we will consider neither Burp or Burp-UI are installed and describe the steps to setup your server from Scratch.

Note: Again, this part of the doc is mostly debian-centric. If some users are willing to adapt these examples with other distros I would be very thankful.

1. *Burp1 server* with Burp-UI
2. *Burp2 server* with Burp-UI

Burp1 server

In this scenario, we are going to install a Burp server version 1.4.40 which is the current stable version. We assume you are using the user *root* to run the following commands.

We begin with the installation of Burp itself.

First, we need some system requirements in order to compile Burp and to install Burp-UI:

```
apt-get update
apt-get install uthash-dev g++ make libssl-dev librsync-dev python2.7-dev \
git python-pip libffi-dev
```

Now we retrieve the Burp sources and then we compile and install it:

```
cd /usr/src
git clone https://github.com/grke/burp.git
cd burp
git checkout tags/1.4.40
./configure --disable-ipv6
make
make install
# we also install init scripts
cp debian/init /etc/init.d/burp
cat >/etc/default/burp<<EOF
RUN="yes"
DAEMON_ARGS="-c /etc/burp/burp-server.conf"
EOF
chmod +x /etc/init.d/burp
update-rc.d burp defaults
```

It is now time to install Burp-UI:

```
pip install --upgrade burp-ui
```

Now that everything is installed, let's configure our tools!

In order to perform online restorations, Burp-UI relies on a classical Burp client.

We need to define our client, and we also need to allow it to perform restorations for other clients. We will set it up globally. Our client will be named *bui*:

```
# burp-ui client's definition
cat >/etc/burp/clientconfdir/bui<<EOF
password = abcdefgh
EOF

# grant our client to perform restorations for others
echo "restore_client = bui" >>/etc/burp/burp-server.conf

# now we generate ou client configuration
cat >/etc/burp/burp.conf<<EOF
mode = client
port = 4971
server = 127.0.0.1
password = abcdefgh
cname = bui
pidfile = /var/run/burp.bui.pid
syslog = 0
stdout = 1
progress_counter = 1
ca_burp_ca = /usr/sbin/burp_ca
ca_csr_dir = /etc/burp/CA-client
# SSL certificate authority - same file on both server and client
ssl_cert_ca = /etc/burp/ssl_cert_ca-client.pem
# Client SSL certificate
ssl_cert = /etc/burp/ssl_cert-client.pem
# Client SSL key
ssl_key = /etc/burp/ssl_cert-client.key
# SSL key password
ssl_key_password = password
# Common name in the certificate that the server gives us
ssl_peer_cn = burpserver
# The following options specify exactly what to backup.
include = /home
EOF
```

Our Burp server is now set up, we can start it:

```
/etc/init.d/burp start
```

Now we can configure Burp-UI. The package comes with a default configuration and init scripts. We copy them at the right place:

```
cp /usr/local/share/burpui/contrib/debian/init.sh /etc/init.d/burp-ui
chmod +x /etc/init.d/burp-ui
update-rc.d burp-ui defaults
cp /usr/local/share/burpui/etc/burpui.sample.cfg /etc/burp/burpui.cfg
```

We have to edit the default configuration in order to work with a Burp-1 server:

```
sed -i "s/^version = .*/version = 1/" /etc/burp/burpui.cfg
```

The default configuration is plug and play for this case, we just have to start Burp-UI:

```
/etc/init.d/burp-ui start
```

Your server is now fully set-up, you can access Burp-UI by pointing your browser to: http://server_ip:5000/

The default user / password is: admin / admin

For further customization, you can refer to the usage page of this documentation.

Burp2 server

In this scenario, we are going to install a Burp server version 2.0.54. We assume you are using the user *root* to run the following commands.

We begin with the installation of Burp itself.

First, we need some system requirements in order to compile Burp and to install Burp-UI:

```
apt-get update
apt-get install uthash-dev g++ make libssl-dev librsync-dev python2.7-dev \
    git python-pip libffi-dev libyajl-dev libz-dev
```

Now we retrieve the Burp sources and then we compile and install it:

Note: There are now plenty of official and unofficial burp packages. See here for details.

```
cd /usr/src
git clone https://github.com/grke/burp.git
cd burp
git checkout tags/2.0.54
./configure --prefix=/usr --sysconfdir=/etc/burp --localstatedir=/var
make
make install
# we also install init scripts
cp debian/init /etc/init.d/burp
cat >/etc/default/burp<<EOF
RUN="yes"
DAEMON_ARGS="-c /etc/burp/burp-server.conf"
EOF
chmod +x /etc/init.d/burp
update-rc.d burp defaults
```

It is now time to install Burp-UI:

```
pip install --upgrade burp-ui
```

Now that everything is installed, let's configure our tools!

In order to perform online restorations, Burp-UI relies on a classical Burp client.

We need to define our client, and we also need to allow it to perform restorations for other clients. We will set it up globally. Our client will be named *bui*:

```
# burp-ui client's definition
cat >/etc/burp/clientconfdir/bui<<EOF
password = abcdefgh
EOF
```

```
# grant our client to perform restorations for others
echo "restore_client = bui" >>/etc/burp/burp-server.conf
# Burp 2 is able to cache the manifests for better performances
echo "monitor_browse_cache = 1" >>/etc/burp/burp-server.conf

# now we generate ou client configuration
cat >/etc/burp/burp.conf<<EOF
mode = client
port = 4971
status_port = 4972
server = ::1
password = abcdefgh
cname = bui
pidfile = /var/run/burp.bui.pid
syslog = 0
stdout = 1
progress_counter = 1
network_timeout = 72000
ca_burp_ca = /usr/sbin/burp_ca
ca_csr_dir = /etc/burp/CA-client
# SSL certificate authority - same file on both server and client
ssl_cert_ca = /etc/burp/ssl_cert_ca-client.pem
# Client SSL certificate
ssl_cert = /etc/burp/ssl_cert-client.pem
# Client SSL key
ssl_key = /etc/burp/ssl_cert-client.key
# SSL key password
ssl_key_password = password
# Common name in the certificate that the server gives us
ssl_peer_cn = burpserver
# The following options specify exactly what to backup.
include = /home
EOF
```

Our Burp server is now set up, we can start it:

```
/etc/init.d/burp start
```

Now we can configure Burp-UI. The package comes with a default configuration and init scripts. We copy them at the right place:

```
cp /usr/local/share/burpui/contrib/debian/init.sh /etc/init.d/burp-ui
chmod +x /etc/init.d/burp-ui
update-rc.d burp-ui defaults
cp /usr/local/share/burpui/etc/burpui.sample.cfg /etc/burp/burpui.cfg
```

That's it, the other default parameter should be able to handle such a setup. We can start Burp-UI:

```
/etc/init.d/burp-ui start
```

Your server is now fully set-up, you can access Burp-UI by pointing your browser to: http://server_ip:5000/

The default user / password is: admin / admin

For further customization, you can refer to the usage page of this documentation.

Developer Guide

Development

If you wish to use the latest and yet unstable version (eg. master), you can install it using `pip` too, but I would recommend you to use a `virtualenv`.

To do so, run the following commands:

```
mkdir /opt/bui-venv
pip install virtualenv
virtualenv /opt/bui-venv
source /opt/bui-venv/bin/activate
cd /tmp
# the .tar.gz works with both python 2 and python 3
wget https://git.ziirish.me/ziirish/burp-ui/builds/artifacts/master/download?
↪job=build:py2 -O burp-ui_build.zip
unzip burp-ui_build.zip
pip install --upgrade dist/burp-ui.*.tar.gz
```

You can uninstall/disable this Burp-UI setup by typing `deactivate` and removing the `/opt/bui-venv` directory.

Hacking

For those of you who would like to hack on the project, I have split out the repository to keep a copy of all the external dependencies (JS and CSS) in a git submodule.

In order to run local debugging, you need to retrieve this git submodule.

To do so, run the following commands:

```
git clone https://git.ziirish.me/ziirish/burp-ui.git
cd burp-ui
git submodule update --init
```

Before submitting your code, make sure the tests still run. To do that, you can use tox like this:

```
pip install tox
tox
```

By defaults, it will run tests against python 2.7, 3.4 and 3.6. However, you can choose the versions specifically like this:

```
tox -e py27
```

create_app

The `create_app` method is the most important. This is where the application is created. It is mostly used when running your application through `gunicorn`.

`burpui.`**`create_app`**(*conf=None*, *verbose=0*, *logfile=None*, ***kwargs*)

Initialize the whole application.

Parameters

- **`conf`** (*`str`*) – Configuration file to use

- **verbose** (*int*) – Set the verbosity level
- **logfile** (*str*) – Store the logs in the given file
- **kwargs** (*dict*) – Extra options: - gunicorn (bool): Enable gunicorn engine instead of flask's default. Default is True. - unittest (bool): Are we running tests (used for test only). Default is False. - debug (bool): Enable debug mode. Default is False. - cli (bool): Are we running the CLI. Default is False. - reverse_proxy (bool): Are we behind a reverse-proxy. Default is True if gunicorn is True

Returns A `burpui.server.BUIServer` object

API

Here are the different routes provided by the application. You can implement whatever front-end you like on top of it.

The API supports HTTP Basic authentication through the *Authorization* Header. By default, each authorization is only valid for **one** request (ie. the sessions are automatically revoked after each request complete). You can ask for reusable sessions though. Here are the HTTP headers supported:

- `X-Reuse-Session`: set it to `true` to be able to reuse sessions
- `X-Language`: set it to whatever supported language you want

Don't forget to call `/logout` once you're done if you choose to use reusable sessions.

GET /api/admin/auth/backends
Returns a list of backends

GET method provided by the webservice.

Returns Backends

PUT /api/admin/auth/users/ (*name*)

PUT /api/admin/auth/users
Create a new user

POST /api/admin/auth/users/ (*name*)

POST /api/admin/auth/users
Change user password

DELETE /api/admin/auth/users/ (*name*)

DELETE /api/admin/auth/users
Delete a user

GET /api/admin/auth/users/ (*name*)

GET /api/admin/auth/users
Returns a list of users

GET method provided by the webservice.

Returns Users

DELETE /api/admin/me/session/ (*id*)

DELETE /api/admin/me/session
Delete a given session

Note: `id` is mandatory

GET /api/admin/me/session/ (*id*)

GET /api/admin/me/session
Returns a list of sessions

GET method provided by the webservice.

Returns Sessions

PUT /api/preferences/ui
Create prefs

POST /api/preferences/ui
Change prefs

DELETE /api/preferences/ui
Delete prefs

GET /api/preferences/ui
Returns a list of prefs

GET method provided by the webservice.

Returns prefs

POST /api/settings/ (*server*) **/server-config/**
path: *conf*

POST /api/settings/ (*server*) **/server-config**

POST /api/settings/server-config/ (**path:** *conf*)

POST /api/settings/server-config
Saves the server configuration

GET /api/settings/ (*server*) **/server-config/**
path: *conf*

GET /api/settings/ (*server*) **/server-config**

GET /api/settings/server-config/ (**path:** *conf*)

GET /api/settings/server-config
Reads the server configuration

GET method provided by the webservice.

The *JSON* returned is:

```
{
  "boolean": [
    "daemon",
    "fork",
    "..."
  ],
  "defaults": {
    "address": "",
    "autoupgrade_dir": "",
    "ca_burp_ca": "",
    "ca_conf": "",
    "ca_name": "",
    "ca_server_name": "",
    "client_can_delete": true,
    "...": "..."
  },
  "integer": [
```

```
    "port",
    "status_port",
    "..."
  ],
  "multi": [
    "keep",
    "restore_client",
    "..."
  ],
  "placeholders": {
    "autoupgrade_dir": "path",
    "ca_burp_ca": "path",
    "ca_conf": "path",
    "ca_name": "name",
    "ca_server_name": "name",
    "client_can_delete": "0|1",
    "...": "..."
  },
  "results": {
    "boolean": [
      {
        "name": "hardlinked_archive",
        "value": false
      },
      {
        "name": "syslog",
        "value": true
      },
      { "...": "..." }
    ],
    "clients": [
      {
        "name": "testclient",
        "value": "/etc/burp/clientconfdir/testclient"
      }
    ],
    "common": [
      {
        "name": "mode",
        "value": "server"
      },
      {
        "name": "directory",
        "value": "/var/spool/burp"
      },
      { "...": "..." }
    ],
    "includes": [],
    "includes_ext": [],
    "integer": [
      {
        "name": "port",
        "value": 4971
      },
      {
        "name": "status_port",
        "value": 4972
      },
```

```
      { "...": "..." }
    ],
    "multi": [
      {
        "name": "keep",
        "value": [
          "7",
          "4"
        ]
      },
      { "...": "..." }
    ]
  },
  "server_doc": {
    "address": "Defines the main TCP address that the server listens on. The␣
↪default is either '::' or '0.0.0.0', dependent upon compile time options.",
    "...": "..."
  },
  "string": [
    "mode",
    "address",
    "..."
  ],
  "suggest": {
    "compression": [
      "gzip1",
      "gzip2",
      "gzip3",
      "gzip4",
      "gzip5",
      "gzip6",
      "gzip7",
      "gzip8",
      "gzip9"
    ],
    "mode": [
      "client",
      "server"
    ],
    "...": []
  }
}
```


Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above.

GET /api/settings/ (*server*) **/path-expander/** *client*

GET /api/settings/ (*server*) **/path-expander**

GET /api/settings/path-expander/ (*client*)

GET /api/settings/path-expander
Expends a given path

For instance if it's given a glob expression it will returns a list of files matching the expression.

GET /api/settings/ (*server*) **/clients**

GET /api/settings/clients
Returns a list of clients

GET /api/settings/ (*server*) **/options**

GET /api/settings/options
Returns various setting options

PUT /api/settings/ (*server*) **/config**

PUT /api/settings/config
Creates a new client

GET /api/clients/ (*server*) **/backup-running**

GET /api/clients/backup-running
Tells if a backup is running right now

GET method provided by the webservice.

The *JSON* returned is:

```
{
    "running": false
}
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above.

GET /api/clients/ (*server*) **/running/**
client

GET /api/clients/ (*server*) **/running**

GET /api/clients/running/ (*client*)

GET /api/clients/running
Returns a list of clients currently running a backup

GET method provided by the webservice.

The *JSON* returned is:

```
[ 'client1', 'client2' ]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **client** (*str*) – Ask a specific client in order to know if it is running a backup

Returns The *JSON* described above.

GET /api/clients/ (*server*) **/report**

GET /api/clients/report

Returns a global report about all the clients of a given server

GET method provided by the webservice.

The *JSON* returned is:

```
{
  "backups": [
    {
      "name": "client1",
      "number": 15
    },
    {
      "name": "client2",
      "number": 1
    }
  ],
  "clients": [
    {
      "name": "client1",
      "stats": {
        "total": 296377,
        "totsize": 57055793698,
        "os": "unknown"
      }
    },
    {
      "name": "client2",
      "stats": {
        "total": 3117,
        "totsize": 5345361,
        "os": "windows"
      }
    }
  ]
}
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above

GET /api/servers/report

Returns a global report about all the servers managed by Burp-UI

GET method provided by the webservice.

The *JSON* returned is:

```
{
  "backups": [
    {
      "name": "AGENT1",
      "number": 49
    }
  ],
```

```
  "servers": [
    {
      "name": "AGENT1",
      "number": {
        "os": {
          "linux": 4
        },
        "total": 349705,
        "totsize": 119400711726,
      }
    }
  ]
}
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients/servers you are authorized to.

Returns The *JSON* described above.

GET /api/clients/ (*server*) **/stats**

GET /api/clients/stats

Returns a list of clients with their states

GET method provided by the webservice.

The *JSON* returned is:

```
{
  [
    {
      "last": "2015-05-17 11:40:02",
      "name": "client1",
      "state": "idle",
      "phase": "phase1",
      "percent": 12,
    },
    {
      "last": "never",
      "name": "client2",
      "state": "idle",
      "phase": "phase2",
      "percent": 42,
    }
  ]
}
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above

GET /api/servers/stats

Returns a list of servers (agents) with basic stats

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    'alive': true,
    'clients': 2,
    'name': 'burp1',
  },
  {
    'alive': false,
    'clients': 0,
    'name': 'burp2',
  },
]
```

Returns The *JSON* described above.

GET /api/clients/ (*server*) **/all**

GET /api/clients/all

Returns a list of all clients with their associated Agent if any

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    "name": "client1",
    "agent": "agent1"
  },
  {
    "name": "client2",
    "agent": "agent1"
  },
  {
    "name": "client3",
    "agent": "agent2"
  }
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above

GET /api/admin/me

Returns the current user informations

GET method provided by the webservice.

Returns Users

GET /api/misc/languages

Returns a list of supported languages

GET method provided by the webservice.

The *JSON* returned is:

```
{
  "en": "English",
  "fr": "Français"
}
```

Returns The *JSON* described above.

GET /api/misc/ (*server*) **/counters/**
client

GET /api/misc/ (*server*) **/counters**

GET /api/misc/counters/ (*client*)

GET /api/misc/counters
Returns counters for a given client

GET method provided by the webservice.

Parameters

- **name** – the client name if any. You can also use the GET parameter

'name' to achieve the same thing

Returns Counters

GET /api/misc/ (*server*) **/monitor**

GET /api/misc/monitor
Returns a list of clients that are currently running a backup

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    'client': 'client1',
    'agent': 'burp1',
    'counters': {
        'phase': 2,
        'path': '/etc/some/configuration',
        '...': '...',
    },
  },
  {
    'client': 'client12',
    'agent': 'burp2',
    'counters': {
        'phase': 3,
        'path': '/etc/some/other/configuration',
        '...': '...',
    },
  },
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode

Returns The *JSON* described above

GET /api/misc/ (*server*) **/history/** *client*

GET /api/misc/history/ (*client*)

GET /api/misc/ (*server*) **/history**

GET /api/misc/history

Returns a list of calendars describing the backups that have been completed so far

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    "color": "#7C6F44",
    "events": [
      {
        "backup": "0000001",
        "end": "2015-01-25 13:32:04+01:00",
        "name": "toto-test",
        "start": "2015-01-25 13:32:00+01:00",
        "title": "Client: toto-test, Backup n°0000001",
        "url": "/client/toto-test"
      }
    ],
    "name": "toto-test",
    "textColor": "white"
  }
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **client** (*str*) – Which client to collect data from

Returns The *JSON* described above

POST /api/misc/alert

Propagate a message to the next screen (or whatever reads the session)

GET /api/misc/ (*server*) **/about**

GET /api/misc/about

Returns various informations about Burp-UI

GET /api/swagger.json

Render the Swagger specifications as JSON

GET /api/doc

Override this method to customize the documentation page

POST /api/settings/ (*server*) **/config/** *client***/path:** *conf*

POST /api/settings/config/ (*client*) **/**
path: *conf*

POST /api/settings/ (*server*) **/config/**
client

POST /api/settings/config/ (*client*)
Saves a given client configuration

DELETE /api/settings/ (*server*) **/config/**
*client***/path:** *conf*

DELETE /api/settings/config/ (*client*) **/**
path: *conf*

DELETE /api/settings/ (*server*) **/config/**
client

DELETE /api/settings/config/ (*client*)
Deletes a given client

GET /api/settings/ (*server*) **/config/**
*client***/path:** *conf*

GET /api/settings/config/ (*client*) **/**
path: *conf*

GET /api/settings/ (*server*) **/config/**
client

GET /api/settings/config/ (*client*)
Reads a given client configuration

PUT /api/restore/ (*server*) **/server-restore/**
*name***/int:** *backup*

PUT /api/restore/server-restore/ (*name*) **/**
int: *backup* Schedule a server-initiated restoration

PUT method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on
- **backup** (*int*) – The backup we are working on

Returns Status message (success or failure)

POST /api/restore/ (*server*) **/archive/**
*name***/int:** *backup*

POST /api/restore/archive/ (*name*) **/**
int: *backup* Performs an online restoration

POST method provided by the webservice. This method returns a `flask.Response` object.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on
- **backup** (*int*) – The backup we are working on

Returns A `flask.Response` object representing an archive of the restored files

GET /api/client/ (*server*) **/browseall/**
*name***/int:** *backup*

GET /api/client/browseall/ (*name*) **/**
int: *backup* Returns a list of all 'nodes' of a given backup

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    "date": "2015-05-21 14:54:49",
    "gid": "0",
    "inodes": "173",
    "selected": false,
    "expanded": false,
    "children": [],
    "mode": "drwxr-xr-x",
    "name": "/",
    "key": "/",
    "title": "/",
    "fullname": "/",
    "parent": "",
    "size": "12.0KiB",
    "type": "d",
    "uid": "0"
  }
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on
- **backup** (*int*) – The backup we are working on

Returns The *JSON* described above.

GET /api/client/ (*server*) **/browse/**
*name***/int:** *backup*

GET /api/client/browse/ (*name*) **/**
int: *backup* Returns a list of 'nodes' under a given path

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    "date": "2015-05-21 14:54:49",
    "gid": "0",
    "inodes": "173",
    "selected": false,
    "expanded": false,
    "children": [],
```

```
    "mode": "drwxr-xr-x",
    "name": "/",
    "key": "/",
    "title": "/",
    "fullname": "/",
    "parent": "",
    "size": "12.0KiB",
    "type": "d",
    "uid": "0"
  }
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on
- **backup** (*int*) – The backup we are working on

Returns The *JSON* described above.

GET /api/client/ (*server*) **/report/** *name***/int:** *backup*

GET /api/client/ (*server*) **/report/** *name*

GET /api/client/report/ (*name*) **/ int:** *backup*

GET /api/client/report/ (*name*)
Returns a global report of a given backup/client

GET method provided by the webservice.

The *JSON* returned is:

```
{
  "dir": {
    "changed": 0,
    "deleted": 0,
    "new": 394,
    "scanned": 394,
    "total": 394,
    "unchanged": 0
  },
  "duration": 5,
  "efs": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "encrypted": true,
  "end": 1422189124,
```

```
  "files": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "files_enc": {
    "changed": 0,
    "deleted": 0,
    "new": 1421,
    "scanned": 1421,
    "total": 1421,
    "unchanged": 0
  },
  "hardlink": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "meta": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "meta_enc": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "number": 1,
  "received": 1679304,
  "softlink": {
    "changed": 0,
    "deleted": 0,
    "new": 1302,
    "scanned": 1302,
    "total": 1302,
    "unchanged": 0
  },
  "special": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
```

```
  "start": 1422189119,
  "total": {
    "changed": 0,
    "deleted": 0,
    "new": 3117,
    "scanned": 3117,
    "total": 3117,
    "unchanged": 0
  },
  "totsize": 5345361,
  "vssfooter": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "vssfooter_enc": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "vssheader": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "vssheader_enc": {
    "changed": 0,
    "deleted": 0,
    "new": 0,
    "scanned": 0,
    "total": 0,
    "unchanged": 0
  },
  "windows": "false"
}
```


The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on
- **backup** (*int*) – The backup we are working on

Returns The *JSON* described above.

DELETE /api/restore/(*server*)**/server-restore/**
name

DELETE /api/restore/server-restore/ (*name*)
Remove the 'restore' file if present

DELETE method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns Status message (success or failure)

GET /api/restore/ (*server*) **/server-restore/**
name

GET /api/restore/server-restore/ (*name*)
Reads the content of the 'restore' file if present

GET method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns The content of the restore file

PUT /api/backup/ (*server*) **/do-server-backup/**
name

PUT /api/backup/do-server-backup/ (*name*)
Schedule a server-initiated backup

PUT method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns Status message (success or failure)

DELETE /api/backup/ (*server*) **/server-backup/**
name

DELETE /api/backup/server-backup/ (*name*)
Remove the 'backup' file if present

DELETE method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns Status message (success or failure)

GET /api/backup/ (*server*) **/server-backup/**
name

GET /api/backup/server-backup/ (*name*)
Tells if a 'backup' file is present

GET method provided by the webservice.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns True if the file is found

GET /api/client/ (*server*) **/stats/** *name*

GET /api/client/stats/ (*name*)

Returns a list of backups for a given client

GET method provided by the webservice.

The *JSON* returned is:

```
[
  {
    "date": "2015-01-25 13:32:00",
    "deletable": true,
    "encrypted": true,
    "received": 123,
    "size": 1234,
    "number": 1
  },
]
```

The output is filtered by the `burpui.misc.acl` module so that you only see stats about the clients you are authorized to.

Parameters

- **server** (*str*) – Which server to collect data from when in multi-agent mode
- **name** (*str*) – The client we are working on

Returns The *JSON* described above.

Backend

Here is the *backend* interface definition in order to implement a new backend.

class `burpui.misc.backend.interface.`**BUIbackend** (*server=None*, *conf=None*)

The *burpui.misc.backend.interface.BUIbackend* class provides a consistent interface backend for any `burp` server.

Parameters

- **server** (`burpui.server.BUIServer`) – `Flask` server instance in order to access logger and/or some global settings
- **conf** (*str*) – Configuration file to use

cancel_server_backup (*client=None*, *agent=None*)

The *burpui.misc.backend.interface.BUIbackend.cancel_server_backup()* function is used to delete the server-initiated backup file of a given client.

Parameters

- **client** (*str*) – The name of the client to look for
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

Example:

```
[[0, "Success"]]
```

cancel_server_restore (*client=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.cancel_server_restore()` function is used to delete the server-initiated restoration file of a given client.

Parameters

- **client** (*str*) – The name of the client to look for
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

Example:

```
[[0, "Success"]]
```

clients_list (*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.clients_list()` function is used to retrieve a list of clients with their configuration file.

Returns A list of clients with their configuration file

del_file (*path*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.del_file()` function is used to delete a file on a remote agent.

delete_client (*client=None*, *keepconf=False*, *delcert=False*, *revoke=False*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.delete_client()` function is used to delete a client from burp's configuration.

Parameters

- **client** (*str*) – The name of the client to remove
- **keepconf** (*bool*) – Whether to keep the conf (in order to just revoke/delete the certs for instance)
- **delcert** (*bool*) – Whether to delete the associated certificate
- **revoke** (*bool*) – Whether to revoke the associated certificate
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

expand_path (*path=None*, *source=None*, *client=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.expand_path()` function is used to expand path of file inclusions glob the user can set in the setting panel. This function is also a *proxy* for multi-agent setup.

Parameters

- **path** (*str*) – The glob/path to expand
- **source** (*str*) – In which file are we working
- **client** (*str*) – The client name when working on client files
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of files or an empty list

get_all_clients(*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_all_clients()` function returns a list containing all the clients with their states.

Parameters **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of clients

Example:

```
[
    {
        "last": "2015-10-02 08:20:03",
        "name": "client1",
        "state": "idle",
        "percent": null,
        "phase": null,
    },
    {
        "last": "2015-01-25 13:32:00",
        "name": "client2",
        "state": "idle"
        "percent": null,
        "phase": null,
    },
]
```

get_attr(*name*, *default=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_attr()` function returns the given attribute or default.

get_backup_logs(*number*, *client*, *forward=False*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_backup_logs()` function is used to retrieve the burp logs depending the burp-server version.

Parameters

- **number** (*int*) – Backup number to work on
- **client** (*str*) – Client name to work on
- **forward** (*bool*) – Is the client name needed in later process
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns Dict containing the backup log

Example:

```
{
    "dir": {
        "changed": 0,
        "deleted": 0,
        "new": 17,
        "scanned": 30246,
        "total": 30246,
        "unchanged": 30229
    },
    "duration": 436,
    "efs": {
```

```
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "encrypted": false,
    "end": 1443767237,
    "files": {
        "changed": 47,
        "deleted": 2,
        "new": 2,
        "scanned": 227377,
        "total": 227377,
        "unchanged": 227328
    },
    "files_enc": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "hardlink": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 28,
        "total": 28,
        "unchanged": 28
    },
    "meta": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 58,
        "total": 58,
        "unchanged": 58
    },
    "meta_enc": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "number": 576,
    "received": 11691704,
    "softlink": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 9909,
        "total": 9909,
        "unchanged": 9909
```

```
    },
    "special": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 1,
        "total": 1,
        "unchanged": 1
    },
    "start": 1443766801,
    "total": {
        "changed": 47,
        "deleted": 2,
        "new": 19,
        "scanned": 267619,
        "total": 267619,
        "unchanged": 267553
    },
    "totsize": 52047768383,
    "vssfooter": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "vssfooter_enc": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "vssheader": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "vssheader_enc": {
        "changed": 0,
        "deleted": 0,
        "new": 0,
        "scanned": 0,
        "total": 0,
        "unchanged": 0
    },
    "windows": "false"
}
```


get_client (*name=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_client()` function returns a list of dict representing the backups of a given client.

Parameters

- **name** (*str*) – Client name
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of backups

Example:

```
[
    {
        "date": "2015-01-25 13:32:00",
        "deletable": true,
        "encrypted": true,
        "number": "1",
        "received": 889818873,
        "size": 35612321050,
    }
]
```

get_client_filtered(*name=None*, *limit=-1*, *page=None*, *start=None*, *end=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_client_filtered()` function returns a list of dict representing the backups of a given client filtered by the given criteria.

Parameters

- **name** (*str*) – Client name
- **limit** (*int*) – Number of element to return, -1 for not limit
- **page** (*int*) – What page to retrieve
- **start** (*int*) – Return elements after this date
- **end** (*int*) – Return elements until this date
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of backups

Example:

```
[
    {
        "date": "2015-01-25 13:32:00",
        "deletable": true,
        "encrypted": true,
        "number": "1",
        "received": 889818873,
        "size": 35612321050,
    }
]
```

get_client_labels(*client=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_client_labels()` function returns a list of labels (if any) for a given client.

Note: Labels are only available since Burp 2.0.34

Parameters

- **client** (*str*) – The client for which you want the labels
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of labels or an empty list

get_client_version(*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_client_version()` function returns the client version used to connect to the server.

Parameters **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns Burp client version

get_clients_report(*clients*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_clients_report()` function returns the computed/compacted data to display clients report.

Parameters

- **clients** (*list*) – List of clients as returned by `burpui.misc.backend.interface.BUIbackend.get_all_clients()`
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A dict with the computed data

get_counters(*name=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_counters()` function returns a dict of counters for a given client while it performs a backup.

Parameters

- **name** (*str*) – Name of the client for which you'd like stats
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A dict of counters

get_file(*path*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_file()` function is used to retrieve a file on a remote agent.

get_parser(*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_parser()` function returns the parser of the current backend.

get_parser_attr(*attr=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_parser_attr()` function is used to retrieve some attributes from the Parser. This function is useful in multi-agent mode because the front-end needs to access the backend attributes through the agents.

Parameters

- **attr** (*str*) – Name of the attribute to retrieve
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns The requested attribute or an empty list

get_server_version(*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_server_version()` function returns the server version (if any).

Parameters **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns Burp server version

get_tree (*name=None*, *backup=None*, *root=None*, *level=-1*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.get_tree()` function returns a list of dict representing files/dir (with their attr) within a given path

Parameters

- **name** (*str*) – Client name
- **backup** (*int*) – Backup number
- **root** (*str*) – Root path to look into
- **level** (*int*) – Level of the tree relative to its root
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of files/dir within the given path with their attr

Example:

```
[
    {
        "date": "2015-01-23 20:00:07",
        "gid": "0",
        "inodes": "168",
        "mode": "drwxr-xr-x",
        "name": "/",
        "parent": "",
        "fullname": "/",
        "level": -1,
        "size": "12.0KiB",
        "type": "d",
        "uid": "0",
        "folder": True,
        "children": []
    }
]
```

is_backup_running (*name=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.is_backup_running()` functions tells you if a given client is currently performing a backup.

Parameters

- **name** (*str*) – Name of the client
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns True or False

is_one_backup_running (*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.is_one_backup_running()` function tells you if at least one backup is running.

Parameters **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of running clients

is_server_backup (*client=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.is_server_backup()` function is used to know if there is a server-initiated backup file in place.

Parameters

- **client** (*str*) – The name of the client to look for
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns True or False

is_server_restore(*client=None*, *agent=None*)

The *burpui.misc.backend.interface.BUIbackend.is_server_restore()* function is used to know if there is a server-initiated restoration file in place and retrieve its content in order to edit it.

Parameters

- **client** (*str*) – The name of the client to look for
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A dict representing the content of the server-initiated restoration file

read_conf_cli(*client=None*, *conf=None*, *agent=None*)

The *burpui.misc.backend.interface.BUIbackend.read_conf_cli()* function works the same way as the *burpui.misc.backend.interface.BUIbackend.read_conf_srv()* function but for the client config file.

read_conf_srv(*conf=None*, *agent=None*)

The *burpui.misc.backend.interface.BUIbackend.read_conf_srv()* function returns a dict of options present in the server config file.

Parameters

- **conf** (*str*) – Complementary configuration file (for instance, file inclusions)
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns Dict of options

Example:

```
{
    "boolean": [
        {
            "name": "hardlinked_archive",
            "value": false
        },
        {
            "name": "syslog",
            "value": true
        },
    ],
    "clients": [
        {
            "name": "client1",
            "value": "/etc/burp/clientconfdir/client1"
        },
        {
            "name": "client2",
            "value": "/etc/burp/clientconfdir/client2"
        },
    ],
    "common": [
        {
            "name": "mode",
            "value": "server"
        },
```

```
        {
            "name": "directory",
            "value": "/srv/burp"
        },
    ],
    "includes": [],
    "includes_ext": [],
    "integer": [
        {
            "name": "port",
            "value": 4971
        },
        {
            "name": "status_port",
            "value": 4972
        },
        {
            "name": "max_children",
            "value": 5
        },
        {
            "name": "max_status_children",
            "value": 5
        }
    ],
    "multi": [
        {
            "name": "keep",
            "value": [
                "7",
                "4",
                "4"
            ]
        },
        {
            "name": "timer_arg",
            "value": [
                "12h",
                "Mon,Tue,Thu,Fri,17,18,19,20,21,22,23",
                "Wed,Sat,Sun,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,
↪22,23"
            ]
        },
    ],
}
```


restore_files(*name=None*, *backup=None*, *files=None*, *strip=None*, *archive='zip'*, *password=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.restore_files()` function performs a restoration and returns a tuple containing the path of the generated archive and/or a message if an error happened.

Parameters

- **name** (*str*) – Client name
- **backup** (*int*) – Backup number
- **files** (*str*) – A string representing a list of files to restore

Example:

```
['/etc/passwd', '/etc/shadow']
```

Parameters

- **strip** (*int*) – Number of parent directories to strip while restoring files
- **archive** (*str*) – Format of the generated archive (may be zip, tar.gz or tar.bz2)
- **password** (*str*) – Password for encrypted backups
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A tuple with the generated archive path and/or an error message

revocation_enabled(*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.revocation_enabled()` function is used to know if the revocation feature is enabled or not.

Parameters **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns True or False

server_backup(*client=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.server_backup()` function is used to schedule a server-side initiated backup.

Parameters

- **client** (*str*) – Client name
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

server_restore(*client=None*, *backup=None*, *files=None*, *strip=None*, *force=None*, *prefix=None*, *restoreto=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.server_restore()` function is used to schedule a server-side initiated restoration.

Parameters

- **client** (*str*) – Client name
- **backup** (*int*) – Backup number
- **files** (*str*) – List of files to restore
- **strip** (*int*) – Number of leading path to strip
- **force** (*bool*) – Whether to force overriding files or not
- **prefix** (*str*) – Where to restore files
- **retoreto** – Restore on an other client
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

status(*query='\n'*, *timeout=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.status()` method is used to send queries to the Burp server

Parameters

- **query** (*str*) – Query to send to the server
- **timeout** (*int*) – Query timeout in seconds
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns The output returned by the server parsed as an array

Example:

```
[
    "client1        2       i       576 0 1443766803",
    "client2        2       i       1 0 1422189120",
]
```

store_conf_cli (*data*, *client=None*, *conf=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.store_conf_cli()` function works the same way as the `burpui.misc.backend.interface.BUIbackend.store_conf_srv()` function but for the client config file. It takes an extra parameter:

Parameters **client** (*str*) – Name of the client for which to apply this config

store_conf_srv (*data*, *conf=None*, *agent=None*)

The `burpui.misc.backend.interface.BUIbackend.store_conf_srv()` functions is used to save the new settings in the configuration file.

Parameters

- **data** (*dict*) – Data as sent by the web-form
- **conf** (*str*) – Force the file path (for file inclusions for instance)
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

Example:

```
[[0, "Success"]]
```

version (*agent=None*)

The `burpui.misc.backend.interface.BUIbackend.version()` function returns the version of the given agent.

Parser

Here is the *parser* interface definition in order to implement a new parser.

class burpui.misc.parser.interface.**BUIparser**

`burpui.misc.parser.interface.BUIparser` defines a generic interface for `burp` configuration files parser.

cancel_backup (*name=None*)

`burpui.misc.parser.interface.BUIparser.cancel_backup()` called by `burpui.misc.backend.interface.BUIbackend.cancel_server_backup()` in order to cancel a server-initiated backup.

Parameters **name** (*str*) – Client name

Returns A list of notifications to return to the UI (success or failure)

cancel_restore(*name=None*)

burpui.misc.parser.interface.BUIparser.cancel_restore() called by burpui.misc.backend.interface.BUIbackend.cancel_server_restore() in order to cancel a server-initiated restoration.

Parameters **name** (*str*) – Client name

Returns A list of notifications to return to the UI (success or failure)

is_client_revoked(*client=None*)

burpui.misc.parser.interface.BUIparser.is_client_revoked() is used to check if a given client has it's certificate revoked or not.

Parameters **client** (*str*) – The name of the client to check

Returns True or False

list_clients()

burpui.misc.parser.interface.BUIparser.list_clients() is used to retrieve a list of clients with their configuration file.

Returns A list of clients with their configuration file

param(*name*, *obj='server_conf'*, *client=None*)

burpui.misc.parser.interface.BUIparser.param() lookup for a given param in the conf.

Parameters

- **name** (*str*) – Param name
- **obj** (*str*) – Object to look param for
- **client** (*str*) – Search for a given client param

Returns The asked param

path_expander(*pattern=None*, *source=None*, *client=None*)

burpui.misc.parser.interface.BUIparser.path_expander() is used to expand path of file inclusions glob the user can set in the setting panel.

Parameters

- **pattern** (*str*) – The glob/path to expand
- **source** (*str*) – What file we are working in
- **client** (*str*) – The client name when working on client files

Returns A list of files or an empty list

read_backup(*name=None*)

burpui.misc.parser.interface.BUIparser.read_backup() called by burpui.misc.backend.interface.BUIbackend.is_server_backup() in order to test the existence of a server-initiated backup file.

Parameters **name** (*str*) – Client name

Returns A True if the file is found, else False.

read_client_conf(*client=None*, *conf=None*)

burpui.misc.parser.interface.BUIparser.read_client_conf() is called by burpui.misc.backend.interface.BUIbackend.read_conf_cli() in order to parse the burp-clients configuration files.

It works the same way as burpui.misc.parser.interface.BUIparser.read_server_conf()

read_restore(*name=None*)

burpui.misc.parser.interface.BUIparser.read_restore() called by *burpui.misc.backend.interface.BUIbackend.is_server_restore()* in order to read a server-initiated restoration file.

Parameters **name** (*str*) – Client name

Returns A dict describing the content of the file

read_server_conf(*conf=None*)

burpui.misc.parser.interface.BUIparser.read_server_conf() is called by *burpui.misc.backend.interface.BUIbackend.read_conf_srv()* in order to parse the burp-server configuration file.

Parameters **conf** (*str*) – Complementary configuration file (for instance, file inclusions)

Returns Dict of options

Example:

```
{
    "boolean": [
        {
            "name": "hardlinked_archive",
            "value": false
        },
        {
            "name": "syslog",
            "value": true
        },
    ],
    "clients": [
        {
            "name": "client1",
            "value": "/etc/burp/clientconfdir/client1"
        },
        {
            "name": "client2",
            "value": "/etc/burp/clientconfdir/client2"
        },
    ],
    "common": [
        {
            "name": "mode",
            "value": "server"
        },
        {
            "name": "directory",
            "value": "/srv/burp"
        },
    ],
    "includes": [],
    "includes_ext": [],
    "integer": [
        {
            "name": "port",
            "value": 4971
        },
        {
            "name": "status_port",
```

```
            "value": 4972
        },
        {
            "name": "max_children",
            "value": 5
        },
        {
            "name": "max_status_children",
            "value": 5
        }
    ],
    "multi": [
        {
            "name": "keep",
            "value": [
                "7",
                "4",
                "4"
            ]
        },
        {
            "name": "timer_arg",
            "value": [
                "12h",
                "Mon,Tue,Thu,Fri,17,18,19,20,21,22,23",
                "Wed,Sat,Sun,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,
↪22,23"
            ]
        },
    ],
}
```

remove_client (*client=None*, *keepconf=False*, *delcert=False*, *revoke=False*)

`burpui.misc.parser.interface.BUIparser.remove_client()` is used to delete a client from burp's configuration.

Parameters

- **client** (*str*) – The name of the client to remove
- **keepconf** – Whether to keep the conf (in order to just revoke/delete the cert)
- **keepconf** – bool
- **delcert** (*bool*) – Whether to delete the associated certificate
- **revoke** (*bool*) – Whether to revoke the associated certificate

Returns A list of notifications to return to the UI (success or failure)

server_initiated_backup (*name=None*)

`burpui.misc.parser.interface.BUIparser.server_initiated_backup()` called by `burpui.misc.backend.interface.BUIbackend.server_backup()` in order to create a server-initiated backup file.

Parameters **name** (*str*) – Client name

Returns A list of notifications to return to the UI (success or failure)

server_initiated_restoration (*name=None*, *backup=None*, *files=None*, *strip=None*, *force=None*, *prefix=None*, *restoreto=None*)

`burpui.misc.parser.interface.BUIparser.server_initiated_restoration()`

called by *burpui.misc.backend.interface.BUIbackend.server_restore()* in order to create server-initiated restoration file.

Parameters

- **name** (*str*) – Client name
- **backup** (*int*) – Backup number
- **files** (*str*) – List of files to restore
- **strip** (*int*) – Number of leading path to strip
- **force** (*bool*) – Whether to force overriding files or not
- **prefix** (*str*) – Where to restore files
- **agent** (*str*) – What server to ask (only in multi-agent mode)

Returns A list of notifications to return to the UI (success or failure)

store_client_conf (*data*, *client=None*, *conf=None*)

burpui.misc.parser.interface.BUIparser.store_client_conf() is used by burpui.misc.backend.BUIbackend.store_conf_cli().

It works the same way as *burpui.misc.parser.interface.BUIparser.store_conf()* with an extra parameter:

Parameters **client** (*str*) – Name of the client for which to apply this config

store_conf (*data*, *conf=None*, *client=None*, *mode='srv'*, *insecure=False*)

burpui.misc.parser.interface.BUIparser.store_conf() is used to store the configuration from the web-ui into the actual configuration files. It is used by burpui.misc.backend.BUIbackend.store_conf_srv().

Parameters

- **data** (*dict*) – Data sent by the web-form
- **conf** (*str*) – Force the file path (for file inclusions for instance)
- **client** (*str*) – Client name
- **mode** (*str*) – We actually use the same method for clients and server files
- **insecure** (*bool*) – Used for the CLI

Returns A list of notifications to return to the UI (success or failure)

Example:

```
[[0, "Success"]]
```

Auth

Here is the *auth* interface definition in order to implement a new authentication backend. It is composed by two classes.

class burpui.misc.auth.interface.**BUIhandler**

The *burpui.misc.auth.interface.BUIhandler* class maintains a list of Burp-UI users.

Parameters **app** (burpui.server.BUIServer) – Instance of the app we are running in

remove (*name*)
The `burpui.misc.auth.interface.BUIhandler.remove()` function allows to remove a user from the cache.

Parameters **name** (*str*) – Name of the user to remove

user (*name=None*, *refresh=False*)
The `burpui.misc.auth.interface.BUIhandler.user()` function returns the `flask_login:flask_login.UserMixin` object corresponding to the given user name.

Parameters

- **name** (*str*) – Name of the user
- **refresh** (*bool*) – Whether we need to re-create a fresh user or not

Returns `burpui.misc.auth.interface.BUIuser`

class burpui.misc.auth.interface.**BUIuser**
The `burpui.misc.auth.interface.BUIuser` class extends the `flask_login:flask_login.UserMixin` class.

is_active

Returns True if user is active, otherwise False

is_admin
If no ACL engine is loaded, every logged-in user will be granted admin rights :returns: True if the user is admin, otherwise False

is_authenticated

Returns True if a user is authenticated, otherwise False

login (*passwd=None*)
The `burpui.misc.auth.interface.BUIuser.login()` function checks if the profided username and password match.

Parameters **passwd** (*str*) – Password

Returns True if the name and password match, otherwise False

ACL

Here is the *acl* interface definition in order to implement a new acl backend. It is composed by two classes.

class burpui.misc.acl.interface.**BUIaclLoader** (*app=None*)
The `burpui.misc.acl.interface.BUIaclLoader` class is used to load the actual ACL backend

acl
Property to retrieve the backend

class burpui.misc.acl.interface.**BUIacl**
The `burpui.misc.acl.interface.BUIacl` class represents the ACL engine.

clients (*username=None*, *server=None*)
`burpui.misc.acl.interface.BUIacl.clients()` returns a list of allowed clients for a given user.

Parameters

- **username** (*str*) – Username to check
- **server** (*str*) – Server name. Used in multi-agent mode

Returns A list of clients

is_admin(*username=None*)

`burpui.misc.acl.interface.BUIacl.is_admin()` is used to know if a user has administrator rights.

Parameters **username** (*str*) – Username to check

Returns True if the user has admin rights, otherwise False

is_client_allowed(*username=None*, *client=None*, *server=None*)

`burpui.misc.acl.interface.BUIacl.is_client_allowed()` tells us if a given user has access to a given client on a given server.

Parameters

- **username** (*str*) – Username to check
- **client** (*str*) – Client to check
- **server** (*str*) – Server to check

Returns True if username is granted, otherwise False

servers(*username=None*)

`burpui.misc.acl.interface.BUIacl.servers()` returns a list of allowed servers for a given user.

Parameters **username** (*str*) – Username to check

Returns A list of servers

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