apiosintDS

Release 2.0

Davide Baglieri

Jul 15, 2023

CONTENTS

Latest stable release is **v2.0** (*Changelog*)

apiosintDS is a python client library for public *API* lookup service over *OSINT* IoCs stored at DigitalSide Threat-Intel repository. It can be defined a **service as a library** tool designed to act both as a standard Python library to be included in your own Python application and as command line tool. Query can be performed against souspicious IPs, domains, urls and file hashes. Data stored has a 7 days retention.

DigitalSide Threat-Intel (also on GitHub.com) shares a set of **Open Source Cyber Threat Intellegence** information, monstly based on malware analysis and compromised URLs, IPs and domains. The purpose of the project is to develop and test new wayes to hunt, analyze, collect and share relevants sets of IoCs to be used by SOC/CSIRT/CERT with minimun effort.

This library has been specially designed for people and organizations don't want to import the whole DigitalSide Threat-Intel dataset and prefer to use it as an on demand service.

CHAPTER

ONE

WELCOME TO APIOSINTDS'S DOCUMENTATION!

Documentation contents

1.1 Installation guide

1.1.1 Install python > 3.5.2

Make sure you installed on your system python > 3.5.2. Try typing `python3` on your terminal.

```
~$ python3
Python 3.6.8 (default, Oct  7 2019, 12:59:55)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

1.1.2 Install from sources

Make sure you installed `python3-setuptools` and `git` packages on your system. If not, install missings according your distribution.

```
~$ cd /your/path/src/
~$ git clone https://github.com/davidonzo/apiosintDS.git
~$ cd apiosintDS/
~$ python3 -m pip install .
```

1.1.3 Install via pip3

Make sure you installed `python3-pip` package on your system. If not, install it according your distribution.

```
~$ pip3 install apiosintDS
```

1.1.4 Windows support

The library has never been tested on Windows platform. Actually only UNIX system are supported.

1.2 Usage via command line (CLI)

```
~$ apiosintDS [-h] [-e [IPv4|domain|url|hash]] [-f /path/to/file.txt] [-st]
              [-o /path/to/output.json] [-p] [-nc] [-v] [-c] [-cd /path/to/cachedir]
              [-ct [0-9]] [-cc] [-ld /path/to/git/clone/Threat-Intel/]
              [-l /path/to/logfile.log]  [-ll [DEBUG|INFO|WARNING|ERROR|CRITICAL]]
              [-lc] [-i] [-s] [-vv]
```

1.2.1 Command line options

-h, --help
Show the help and exit.

Type
boolean

Default
`False`

-e, --entity
Single item to search. Supported entities are IPv4/FQDN/URLs or file hashes in MD5, SHA1 or SHA256 format.

Type
string

Default
`None`

Allowed
`[IPv4|domain|url|hash(['md5', 'sha1', 'sha256'])]`

Note: It can't be used in combination with the `--file` option.

-f, --file
Path to file containing entities to search. Supported entities are IPv4/FQDN/URLs and file hashes (MD5, SHA1, SHA256). Insert one item per row.

Type
string

Default
`None`

Example
`/path/to/file.txt`

Note: It can't be used in combination with the `--entity` option.

-st, --stix
Download and parse additional information from online STIX report.

Type
boolean

Default
`False`

Note: STIX2 reports may be not available due to data retention policy.

-o, --output Path to output file. If not specified the output will be redirect to the system `STDOUT`.

Type
string

Default
`STDOUT`

Example
`/path/to/output.json`

Note: It can't be used in combination with the `--pretty` option.

-p, --pretty Show results in terminal with a little bit of formatting applied.

Type
boolean

Default
`False`

Note: Default output format is `JSON`. Data displayed in pretty view does not cover all informations included in the JSON response format.

-nc, --nocolor Supress colors in –pretty output. For accessibility purpose.

Type
boolean

Default
`False`

-v, --verbose Include unmatched results in report.

Type
boolean

Default
`False`

-c, --cache Enable cache mode. Downloaded lists will be stored and won't be downloaded untile the cache timeout is reached.

Type
boolean

Default
`False`

-cd, --cachedirectory The cache directory where the script check for cached lists files and where them will be stored on cache creation or update.

Type
string

Default
`System tmp directory`

Example
`/path/to/cachedir`

Note: Must be specified the same every script run unless your are using the system temp directory.

-ct, --cachetimeout
Define the cache timeout in hours.

Type
integer

Default
`4`

Note: `0` is allowed but means no timeout. Default value is `4` hours. This option needs to be used in combination with `--cache` option configured to `True`.

-cc, --clearcache
Force the script to download updated lists even if the `--cachetimeout` period has not yet been reached.

Type
boolean

Default
`False`

Note: Must be used in combination with `--cache`

-ld, --localdirectory
Absolute path to the 'Threat-Intel' directory related to a local project clone. Searches are performed against local data.

Type
string

Default
`False`

Example
`/path/to/git/clone/Threat-Intel/`

Note: Before using this option, clone the GitHub project in a file system where the library has read permissions. Don't forget to use `--depth=1` and `--branch=master` options if you don't want to download all project commits.

```
$ cd /path/to/git/clone/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
```

When this option is in use, all cache related options are ignored. To update data in your local repository destroy the existing data and clone it again.

```
$ cd /path/to/git/clone/
$ rm -rf Threat-Intel/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
```

-l, --logfile Define the log file path.

Type
string

Default
`NONE`

Example
`/path/to/logfile.log`

Note: No log file is created by default. `STDOUT` is used instead.

-ll, --loglevel Define the log level.

Type
enum

Default
`DEBUG`

Allowed
`[DEBUG|INFO|WARNING|ERROR|CRITICAL]`

-lc, --logconsole Suppress log messages to the console's `STDOUT`.

Type
boolean

Default
`False`

-i, --info Print information about the library.

Type
boolean

Default
`False`

-s, --schema Display the response json schema.

Type
boolean

Default
`False`

-vv, --version Show the library version.

Type
boolean

Default
`False`

1.3 Command Line examples

```
~$ apiosintDS
usage: apiosintDS [-h] [-e [IPv4|domain|url|hash]] [-f /path/to/file.txt] [-st]
                  [-o /path/to/output.json] [-p] [-nc] [-v]
                  [-c] [-cd /path/to/cachedir] [-ct [0-9]] [-cc]
                  [-ld /path/to/git/clone/Threat-Intel/] [-ll␣
↪[DEBUG|INFO|WARNING|ERROR|CRITICAL]]
                  [-l /path/to/logfile.log] [-lc] [-i] [-s] [-vv]
apiosintDS: error: No targets selected! Please, specify one option between --entity and -
↪-file.
Try option -h or --help.
```

1.3.1 One item using `--pretty`

```
$ apiosintDS -e h[REMOVED]p://193.35.18.147/bins/k.arm -st -p -nc
                _            _       _   ____  ____
   __ _ _ __ (_) ___  ___(_)_ __ | |_|  _ \/ ___|
  / _` | '_ \| |/ _ \/ __| | '_ \| __| | | \___ \
 | (_| | |_) | | (_) \__ \ | | | | |_| |_| |___) |
  \__,_| .__/|_|\___/|___/_|_| |_|\__|____/|____/ v.2.0
       |_|OSINT.DigitalSide.IT Threat-Intel Repository

 Submission summary
  ---------------------------------------------------------
 | Items parsed: 1 | Items submitted: 1 | Items found: 1 |
  ---------------------------------------------------------
 | Invalid(s):   0 | URL(s):          1 | URL(s):      1 |
 | Duplicate(s): 0 | Hash(es):        0 | Hash(es):    0 |
 | Not found:    0 | Domain(s):       0 | Domain(s):   0 |
 |                 | IP(s):           0 | IP(s):       0 |
  ---------------------------------------------------------
  ------------------------------------------------------------------------------
 | hXXp://193.35.18.147/bins/k.arm                                              |
  ------------------------------------------------------------------------------
 | TLP:white | First Seen 2023-07-06 07:36:02 | Last Seen 2023-07-06 07:36:02 |
  ------------------------------------------------------------------------------
 | Filename: k.arm                                                              |
  ------------------------------------------------------------------------------
 | MD5:    bc152acad73829358847e5f5bbf3edc0                                     |
 | SHA1:   f2e26e44709ba5a9766c3c00226bdb663ede5957                             |
 | SHA256: c8b0e1c5fa98bb407fe5bd3f2760b0ec2e5e33db0cee10a0085cac4505ef16cc     |
  ------------------------------------------------------------------------------
 | Size: 244647 | Type: application/x-executable | Observed: 1 | VT: 34/61      |
  ------------------------------------------------------------------------------
 | Observation time frame: N/A                                                  |
  ------------------------------------------------------------------------------
 | STIX network indicators: URLs => 1 | Domains => 0 | IPs: 1                   |
  ------------------------------------------------------------------------------
  Online Reports (availability depends on data retention)
  -> MISP EVENT: https://osint.digitalside.it/Threat-Intel/digitalside-misp-feed/
```

(continues on next page)

(continued from previous page)

```
↪f5e313d2-3d64-4d0f-af77-37a925bcd08f.json
  -> MISP CSV:   https://osint.digitalside.it/Threat-Intel/csv/f5e313d2-3d64-4d0f-af77-
↪37a925bcd08f.csv
  -> DS Report:  https://osint.digitalside.it/report/bc152acad73829358847e5f5bbf3edc0.
↪html
  -> STIX:       https://osint.digitalside.it/Threat-Intel/stix2/
↪bc152acad73829358847e5f5bbf3edc0.json
################################################################################
```

1.3.2 Multiple items using `--file` with `--pretty` output

Example file ioc.txt.

```
~$ cat ioc.txt
7cb796c875cccc9233d82854a4e2fdf0
monke.re
```

Response.

```
~$ apiosintDS -f ioc.txt -p -nc -st


              _           _       _   ____  ____
   __ _ _ __ (_) ___  ___(_)_ __ | |_|  _ \/ ___|
  / _` | '_ \| |/ _ \/ __| | '_ \| __| | | \___ \
 | (_| | |_) | | (_) \__ \ | | | | |_| |_| |___) |
  \__,_| .__/|_|\___/|___/_|_| |_|\__|____/|____/ v.2.0
       |_|OSINT.DigitalSide.IT Threat-Intel Repository

 Submission summary
  ---------------------------------------------------------
 | Items parsed: 2 | Items submitted: 2 | Items found: 2 |
  ---------------------------------------------------------
 | Invalid(s):   0 | URL(s):          0 | URL(s):      0 |
 | Duplicate(s): 0 | Hash(es):        1 | Hash(es):    1 |
 | Not found:    0 | Domain(s):       1 | Domain(s):   1 |
 |                 | IP(s):           0 | IP(s):       0 |
  ---------------------------------------------------------
  ------------------------------------------------------------------------------
 | 7cb796c875cccc9233d82854a4e2fdf0                                             |
  ------------------------------------------------------------------------------
 | TLP:white | First Seen 2023-07-04 09:33:03 | Last Seen 2023-07-04 09:33:03 |
  ------------------------------------------------------------------------------
 | Filename: plugmanzx.exe                                                      |
  ------------------------------------------------------------------------------
 | MD5:    7cb796c875cccc9233d82854a4e2fdf0                                     |
 | SHA1:   158514acfa87d0b99e2af07a28004480bbf66e83                             |
 | SHA256: 49e64d72d5ed4fb7967da4b6851d94cdceffe4ba0316587767a13901fe580239     |
  ------------------------------------------------------------------------------
 | Size: 924672 | Type: application/x-dosexec | Observed: 1 | VT: 32/71       |
  ------------------------------------------------------------------------------
 | Observation time frame: N/A                                                  |
```

(continues on next page)

(continued from previous page)

```
 ------------------------------------------------------------------------------
| STIX network indicators: URLs => 1 | Domains => 0 | IPs: 1                  |
 ------------------------------------------------------------------------------
 Online Reports (availability depends on data retention)
 -> MISP EVENT: https://osint.digitalside.it/Threat-Intel/digitalside-misp-feed/
↪d6146389-4294-4a41-b4ca-6e74c74b7f8b.json
 -> MISP CSV:   https://osint.digitalside.it/Threat-Intel/csv/d6146389-4294-4a41-b4ca-
↪6e74c74b7f8b.csv
 -> DS Report:  https://osint.digitalside.it/report/7cb796c875cccc9233d82854a4e2fdf0.
↪html
 -> STIX:       https://osint.digitalside.it/Threat-Intel/stix2/
↪7cb796c875cccc9233d82854a4e2fdf0.json
##############################################################################

 ------------------------------------------------------------------------------
| monke[.]re - Related URL(s) 2                                                |
 ------------------------------------------------------------------------------
 ------------------------------------------------------------------------------
| hXXp://monke.re/arm7                                                         |
 ------------------------------------------------------------------------------
| TLP:white | First Seen 2023-07-06 23:51:01 | Last Seen 2023-07-06 23:51:01 |
 ------------------------------------------------------------------------------
| Filename: arm7                                                               |
 ------------------------------------------------------------------------------
| MD5:    318323c9da34bf25833f7da32eab23d6                                     |
| SHA1:   e2bb927b08ebcbaad8f304d02309af776312c9bf                             |
| SHA256: bb1f9e108daa389e62b79067d1cdbef548f9934c9cc85a92565da7063cf36f89     |
 ------------------------------------------------------------------------------
| Size: 57148 | Type: application/x-executable | Observed: 1 | VT: 14/61     |
 ------------------------------------------------------------------------------
| Observation time frame: N/A                                                  |
 ------------------------------------------------------------------------------
| STIX network indicators: URLs => 1 | Domains => 1 | IPs: 0                  |
 ------------------------------------------------------------------------------
 Online Reports (availability depends on data retention)
 -> MISP EVENT: https://osint.digitalside.it/Threat-Intel/digitalside-misp-feed/
↪f83d06e6-aa2f-452e-a19d-59d40e874355.json
 -> MISP CSV:   https://osint.digitalside.it/Threat-Intel/csv/f83d06e6-aa2f-452e-a19d-
↪59d40e874355.csv
 -> DS Report:  https://osint.digitalside.it/report/318323c9da34bf25833f7da32eab23d6.
↪html
 -> STIX:       https://osint.digitalside.it/Threat-Intel/stix2/
↪318323c9da34bf25833f7da32eab23d6.json
 ------------------------------------------------------------------------------
| hXXp://monke.re/mips                                                         |
 ------------------------------------------------------------------------------
| TLP:white | First Seen 2023-07-07 00:31:02 | Last Seen 2023-07-07 00:31:02 |
 ------------------------------------------------------------------------------
| Filename: mips                                                               |
 ------------------------------------------------------------------------------
| MD5:    579081f528d9279a87b298b9838c377b                                     |
| SHA1:   45048073aad5997881dffe41e32f9b17beb1c2e1                             |
```

(continues on next page)

(continued from previous page)

```
 | SHA256: 8186a1d140631e6391978c08c35e01efb58963f65a86fddf7dec44eec7681c6b   |
  ---------------------------------------------------------------------------
 | Size: 48272 | Type: application/x-executable | Observed: 1 | VT: 12/61     |
  ---------------------------------------------------------------------------
 | Observation time frame: N/A                                               |
  ---------------------------------------------------------------------------
 | STIX network indicators: URLs => 1 | Domains => 1 | IPs: 0                |
  ---------------------------------------------------------------------------
  Online Reports (availability depends on data retention)
  -> MISP EVENT: https://osint.digitalside.it/Threat-Intel/digitalside-misp-feed/
↪d01c2ad1-0e2c-4b26-9725-f8a86025bd75.json
  -> MISP CSV:   https://osint.digitalside.it/Threat-Intel/csv/d01c2ad1-0e2c-4b26-9725-
↪f8a86025bd75.csv
  -> DS Report:  https://osint.digitalside.it/report/579081f528d9279a87b298b9838c377b.
↪html
  -> STIX:       https://osint.digitalside.it/Threat-Intel/stix2/
↪579081f528d9279a87b298b9838c377b.json
##############################################################################################
↪##########################################
```

1.3.3 Multiple items using `--file` with `JSON` output

Example file ioc.txt.

```
~$ cat ioc.txt
7cb796c875cccc9233d82854a4e2fdf0
monke.re
```

Response.

```
~$ apiosintDS -f ioc.txt -st

{
    "domain": {
        "items": [
            {
                "item": "monke.re",
                "response": true,
                "response_text": "Item found in latestdomains.txt list",
                "related_urls": [
                    {
                        "url": "h[REMOVED]p://monke.re/arm7",
                        "hashes": {
                            "md5": "318323c9da34bf25833f7da32eab23d6",
                            "sha1": "e2bb927b08ebcbaad8f304d02309af776312c9bf",
                            "sha256":
↪"bb1f9e108daa389e62b79067d1cdbef548f9934c9cc85a92565da7063cf36f89"
                        },
                        "online_reports": {
                            "MISP_EVENT": "https://osint.digitalside.it/Threat-Intel/
↪digitalside-misp-feed/f83d06e6-aa2f-452e-a19d-59d40e874355.json",
```

(continues on next page)

(continued from previous page)


```
                            "MISP_CSV": "https://osint.digitalside.it/Threat-Intel/csv/
↪f83d06e6-aa2f-452e-a19d-59d40e874355.csv",
                            "OSINTDS_REPORT": "https://osint.digitalside.it/report/
↪318323c9da34bf25833f7da32eab23d6.html",
                            "STIX": "https://osint.digitalside.it/Threat-Intel/stix2/
↪318323c9da34bf25833f7da32eab23d6.json",
                            "STIXDETAILS": {
                                "observed_time_frame": false,
                                "indicators_count": {
                                    "hashes": 3,
                                    "urls": 1,
                                    "domains": 1,
                                    "ipv4": 0
                                },
                                "tlp": "white",
                                "first_observed": "2023-07-06 23:51:01",
                                "last_observed": "2023-07-06 23:51:01",
                                "virus_total": {
                                    "vt_detection_ratio": "14/61",
                                    "vt_report": "https://www.virustotal.com/gui/file/
↪bb1f9e108daa389e62b79067d1cdbef548f9934c9cc85a92565da7063cf36f89/detection"
                                },
                                "filename": "arm7",
                                "filesize": 57148,
                                "mime_type": "application/x-executable",
                                "number_observed": 1
                            }
                        }
                    },
                    {
                        "url": "h[REMOVED]p://monke.re/mips",
                        "hashes": {
                            "md5": "579081f528d9279a87b298b9838c377b",
                            "sha1": "45048073aad5997881dffe41e32f9b17beb1c2e1",
                            "sha256":
↪"8186a1d140631e6391978c08c35e01efb58963f65a86fddf7dec44eec7681c6b"
                        },
                        "online_reports": {
                            "MISP_EVENT": "https://osint.digitalside.it/Threat-Intel/
↪digitalside-misp-feed/d01c2ad1-0e2c-4b26-9725-f8a86025bd75.json",
                            "MISP_CSV": "https://osint.digitalside.it/Threat-Intel/csv/
↪d01c2ad1-0e2c-4b26-9725-f8a86025bd75.csv",
                            "OSINTDS_REPORT": "https://osint.digitalside.it/report/
↪579081f528d9279a87b298b9838c377b.html",
                            "STIX": "https://osint.digitalside.it/Threat-Intel/stix2/
↪579081f528d9279a87b298b9838c377b.json",
                            "STIXDETAILS": {
                                "observed_time_frame": false,
                                "indicators_count": {
                                    "hashes": 3,
                                    "urls": 1,
                                    "domains": 1,
```


(continues on next page)

(continued from previous page)


```
                                    "ipv4": 0
                                },
                                "tlp": "white",
                                "first_observed": "2023-07-07 00:31:02",
                                "last_observed": "2023-07-07 00:31:02",
                                "virus_total": {
                                    "vt_detection_ratio": "12/61",
                                    "vt_report": "https://www.virustotal.com/gui/file/
↪8186a1d140631e6391978c08c35e01efb58963f65a86fddf7dec44eec7681c6b/detection"
                                },
                                "filename": "mips",
                                "filesize": 48272,
                                "mime_type": "application/x-executable",
                                "number_observed": 1
                            }
                        }
                    }
                ]
            }
        ],
        "statistics": {
            "itemsFound": 1,
            "itemsSubmitted": 1
        },
        "list": {
            "file": "latestdomains.txt",
            "date": "2023-07-07 08:03:07+02:00",
            "url": "https://raw.githubusercontent.com/davidonzo/Threat-Intel/master/
↪lists/latestdomains.txt"
        }
    },
    "hash": {
        "items": [
            {
                "item": "7cb796c875cccc9233d82854a4e2fdf0",
                "response": true,
                "response_text": "Item found in latesthashes.json list",
                "hashes": {
                    "md5": "7cb796c875cccc9233d82854a4e2fdf0",
                    "sha1": "158514acfa87d0b99e2af07a28004480bbf66e83",
                    "sha256":
↪"49e64d72d5ed4fb7967da4b6851d94cdceffe4ba0316587767a13901fe580239"
                },
                "online_reports": {
                    "MISP_EVENT": "https://osint.digitalside.it/Threat-Intel/digitalside-
↪misp-feed/d6146389-4294-4a41-b4ca-6e74c74b7f8b.json",
                    "MISP_CSV": "https://osint.digitalside.it/Threat-Intel/csv/d6146389-
↪4294-4a41-b4ca-6e74c74b7f8b.csv",
                    "OSINTDS_REPORT": "https://osint.digitalside.it/report/
↪7cb796c875cccc9233d82854a4e2fdf0.html",
                    "STIX": "https://osint.digitalside.it/Threat-Intel/stix2/
↪7cb796c875cccc9233d82854a4e2fdf0.json",
```


(continues on next page)

(continued from previous page)


```
                    "STIXDETAILS": {
                        "observed_time_frame": false,
                        "indicators_count": {
                            "hashes": 3,
                            "urls": 1,
                            "domains": 0,
                            "ipv4": 1
                        },
                        "tlp": "white",
                        "first_observed": "2023-07-04 09:33:03",
                        "last_observed": "2023-07-04 09:33:03",
                        "virus_total": {
                            "vt_detection_ratio": "32/71",
                            "vt_report": "https://www.virustotal.com/gui/file/
↪49e64d72d5ed4fb7967da4b6851d94cdceffe4ba0316587767a13901fe580239/detection"
                        },
                        "filename": "plugmanzx.exe",
                        "filesize": 924672,
                        "mime_type": "application/x-dosexec",
                        "number_observed": 1
                    }
                },
                "related_urls": [
                    "h[REMOVED]p://185.246.220.60/plugmanzx.exe"
                ]
            }
        ],
        "statistics": {
            "itemsFound": 1,
            "itemsSubmitted": 1
        },
        "list": {
            "file": "latesthashes.json",
            "date": "2023-07-07 08:03:29+02:00",
            "url": "https://raw.githubusercontent.com/davidonzo/Threat-Intel/master/
↪lists/latesthashes.json"
        }
    },
    "generalstatistics": {
        "url": 0,
        "ip": 0,
        "domain": 1,
        "hash": 1,
        "invalid": 0,
        "duplicates": 0,
        "itemsFound": 2,
        "itemsSubmitted": 2,
        "urlfound": 0,
        "ipfound": 0,
        "domainfound": 1,
        "hashfound": 1
    },
```


(continues on next page)

(continued from previous page)

```
    "apiosintDSversion": "apiosintDS v.2.0"
}
```

1.4 Using as Python library

Below a few examples of how to use **apiosintDS** in your code.

```
#!/usr/bin/env python3
from apiosintDS import apiosintDS

try:
        OSINTCHECK = apiosintDS.request(
                                        entities=['192.168.1.54',

↪'0a2d170abbf5031566377b01431e3b82d3426301',
                                                  'somehost.ext',
                                                  'http://www.example.com/malicious.exe
↪'],
                                        stix=True
                                        cache=True,
                                        cachedirectory="/tmp",
                                        verbose=True)
        print(OSINTCHECK) # print dict results
except ValueError as e:
        print(e) # some error
```

1.4.1 Module contents

apiosintDS.**request**(*entities=list*, *stix=False*, *cache=False*, *cachedirectory=None*, *clearcache=False*, *cachetimeout=False*, *verbose=False*, *loglevel='DEBUG'*, *logconsole=True*, *logfile=False*, *localdirectory=False*, **args*, ***kwargs*)

Uniq method to query the service. Return a `dict` that can be validated against the json schema returned by the `apiosintDS.schema()` method.

Parameters

entities List of entities to be submitted. One per row.

Type
list

Default
None

Allowed
`[IPv4|domain|url|hash(['md5', 'sha1', 'sha256'])]`

stix Dowload and parse additional information from online STIX report.

Type
boolean

Default
`False`

Note: STIX2 reports may be not available due to data retention policy.

cache Enable cache mode. Downloaded lists will be stored and won't be downloaded untile the cache timeout is reached.

Type
boolean

Default
`False`

cachedirectory The cache directory where the script check for cached lists files and where them will be stored on cache creation or update.

Type
string

Default
`System tmp directory`

Example
`/path/to/cachedir`

Note: Must be specified the same every script run unless your are using the system temp directory.

clearcache Force the script to download updated lists even if the *cachetimeout* period has not yet been reached.

Type
boolean

Default
`False`

Note: Must be used in combination with *cache*

cachetimeout Define the cache timeout in hours.

Type
integer

Default
`4`

Note: `0` is allowed but means no timeout. Default value is `4` hours. This option needs to be used in combination with *cache* option configured to True.

verbose Include unmatched results in report.

Type
boolean

Default
`False`

loglevel Define the log level.

Type
enum

Default
`DEBUG`

Allowed
`[DEBUG|INFO|WARNING|ERROR|CRITICAL]`

logconsole Suppress log messages to the console's `STDOUT`.

Type
boolean

Default
`True`

logfile Define the log file path.

Type
string

Default
`False`

Example
`/path/to/logfile.log`

Note: No log file is created by default. `STDOUT` is used instead.

---

localdirectory Absolute path to the 'Threat-Intel' directory related to a local project clone. Searches are performed against local data.

Type
string

Default
`False`

Example
`/path/to/git/clone/Threat-Intel/`

Note: Before using this option, clone the GitHub project in a file system where the library has read permissions. Don't forget to use *–depth=1* and *–branch=master* options if you don't want to download all project commits.

```
$ cd /path/to/git/clone/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
```

When this option is in use, all cache related options are ignored. To update data in your local repository destroy the existing data and clone it again.

```
$ cd /path/to/git/clone/
$ rm -rf Threat-Intel/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
```

apiosintDS.**schema**()

Return an object containing the `json` schema.

1.5 apiosintDS MISP Module

apiosintDS is included as enrichment module in the official MISP-Modules repository. This guide assume you have your MISP instance up and running with MISP Modules correctly initializated.

The module has been specially designed for people and organizations don't want to subscribe the DigitalSide Threat-Intel MISP Feed and prefer to query it as an on demand service.

Warning: If DigitalSide Threat-Intel MISP Feed is enabled and regulary fetched by your MISP instance, don't use this plugin. All information retrivable by the plugin are just included in your MISP events dataset. The MISP correlation engine should be used instead.

1.5.1 Input / Output

Module type MISP module type.

Module-type
`['hover', 'expansion']`

Input The module runs against the following MISP attributes type.

Input-attributes
`["domain", "domain|ip", "hostname", "ip-dst", "ip-src", "ip-dst|port", "ip-src|port"] ["url", "md5", "sha1", "sha256", "filename|md5", "filename|sha1", "filename|sha256"]`

Output The module returns the following MISP attributes type.

Output-attributes
`["domain", "ip-dst", "url", "comment", "md5", "sha1", "sha256", "link", "text"]`

1.5.2 Configuration

Go to your MISP web interface and login with a user account able to edit plugins configuration. Once logged in go to `Administration >> Server Settings & Maintenance >> Plugin` and select the `Enrichment` tab. Put in the search input filter `apiosintds` in order to show only the needed configuration settings.

Enrichment

Recommended	Plugin.Enrichment_apiosintds_enabled	false	[**Enable or disable the apiosintds module.**] On demand
Recommended	Plugin.Enrichment_apiosintds_restrict	ORGNAME	Restrict the apiosintds module to the given organisation.
Recommended	Plugin.Enrichment_apiosintds_STIX2_details	yes	Set this required module specific setting.
Recommended	Plugin.Enrichment_apiosintds_import_related	yes	Set this required module specific setting.
Recommended	Plugin.Enrichment_apiosintds_cache	false	Set this required module specific setting.
Recommended	Plugin.Enrichment_apiosintds_cache_directory	false	Set this required module specific setting.
Recommended	Plugin.Enrichment_apiosintds_cache_timeout_h	4	Set this required module specific setting.
Recommended	Plugin.Enrichment_apiosintds_local_directory	/usr/local/src/Threat-Intel	Set this required module specific setting.

Plugin.Enrichment_apiosintds_enabled MISP internal configuration to enable or disable the module.

Type
boolean

Default
`false`

Note: To enable the plugint configure the valute to `true`.

Plugin.Enrichment_apiosintds_restrict Restrict the plugin use to a single organization.

Type
enum

Default
`No organization selected`

Allowed
`ORG in the given MISP instance`

Plugin.Enrichment_apiosintds_STIX2_details Download and parse additional information from online STIX report.

Type
enum

Default
`no`

Allowed
`[yes|no]`

Note: STIX2 reports may be not available due to data retention policy.

Plugin.Enrichment_apiosintds_import_related Parse and include in the results related items.

Type
enum

Default
`no`

Allowed
`[yes|no]`

Note: Is strongly reccommended to configure it to `yes` to obtain best results.

Plugin_Enrichment_apiosintds_cache Enable cache mode. Downloaded lists will be stored and won't be downloaded untile the cache timeout is reached.

Type
enum

Default
`no`

Allowed
`[yes|no]`

Plugin_Enrichment_apiosintds_cache_directory The cache directory where the script check for cached list files and where them will be stored on cache cache creation or update.

Type
string

Default
`None`

Example
`/path/to/cachedir`

Note: Read and write permissions are required for the system user running the MISP instance (depends on your installation configuration, should be one between `www-data`, `misp`, `apache`, others...)

Plugin_Enrichment_apiosintds_cache_timeout_h Define the cache timeout in hours.

Type
integer

Default
`4`

Note: `0` is allowed but means no timeout. Default value is `4` hours. This option needs to be used in combination with `apiosintds_cache` option configured to True.

Plugin_Enrichment_apiosintds_local_directory Absolute path to the "Threat-Intel" directory related to a local project clone. Searches are performed against local data.

Type
string

Default
`Empty`

Example
`/path/to/git/clone/Threat-Intel/`

Note: Before using this option, clone the GitHub project in a file system where the library has read permissions. Don't forget to use *–depth=1* and *–branch=master* options if you don't want to download all project commits.

Make sure the system user running the MISP instance has read permissions on the directory.

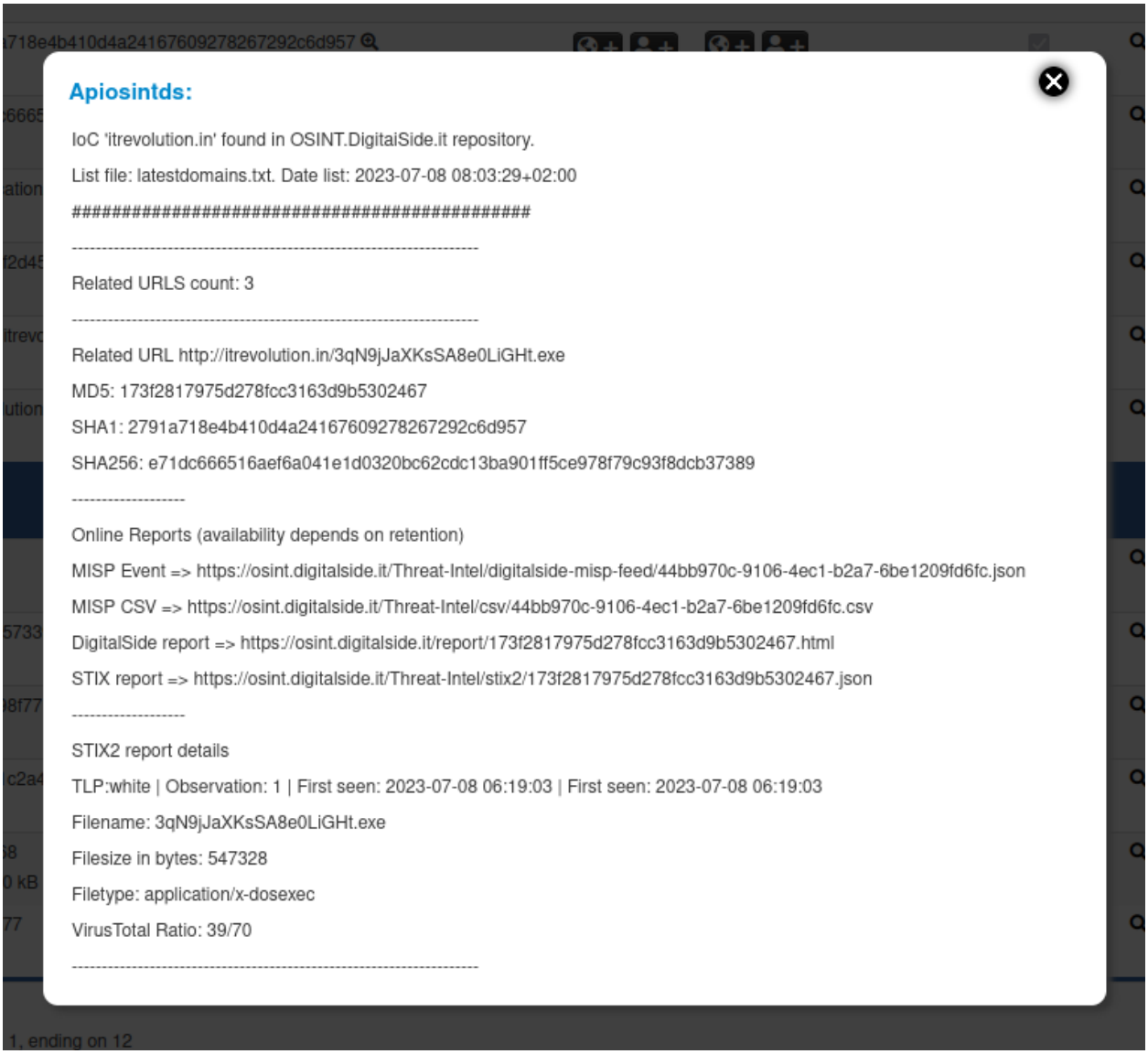
```
$ cd /path/to/git/clone/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
$ chown -R $MISP_SYSTEM_USER:$MISP_SYSTEM_GROUP Threat-Intel
```

When this option is in use, all cache related options are ignored. To update data in your local repository destroy the existing data and clone it again.

```
$ cd /path/to/git/clone/
$ rm -rf Threat-Intel/
$ git clone --depth=1 --branch=master https://github.com/davidonzo/Threat-Intel.git
$ chown -R $MISP_SYSTEM_USER:$MISP_SYSTEM_GROUP Threat-Intel
```

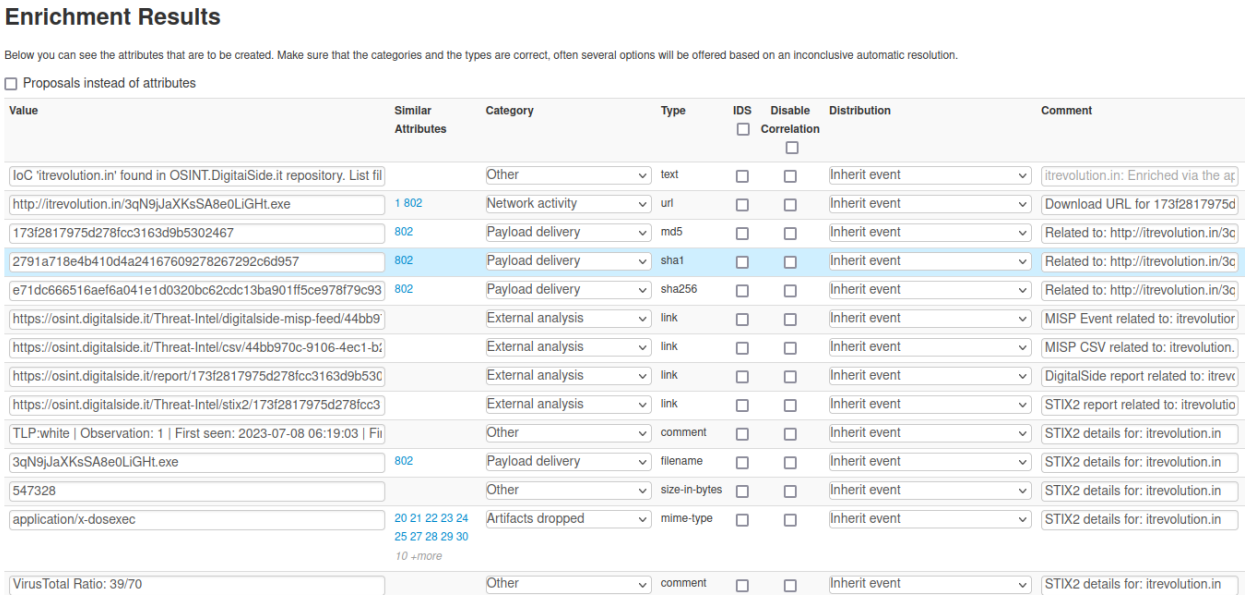
1.5.3 Usage: hover

Using the module as `hover` plugin retrived data will be displayed as follow.



1.5.4 Usage: enrichment

Using the module as `enrichment` plugin retrived data will be imported as follow.



1.6 Changelog

1.6.1 2.0.1 (2023-07-07)

- Bug fix to stix reports cache management

1.6.2 2.0 (2023-07-07)

- Many minor bug fixes
- Implemented python `getLogger` as suggested in issue #2
- Added `--stix` option. Dowload and parse additional information from online STIX report.
- Added `--pretty` option. Show results in terminal with a little bit of formatting applied.
- Added `--nocolor` option. Suppers colors in –pretty output. For accessibility purpose.
- Added `--cachetimeout` option. Define the cache timeout in hours.
- Added `--localdirectory` option. Absolute path to the 'Threat-Intel' directory related to a local project clone. Searches are performed against local data.
- Added `--logfile` option. Define the log file path.
- Added `--loglevel` option. Define the log level.
- Added `--logconsole` option. Suppress log messages to the console's *STDOUT*.
- Added `--version` option. Show the library version.
- Improved `apiosintDS.request` method according new available options.
- New MISP Module plugin version

- Documentation updated

1.6.3 1.8.2 (2019-10-25)

- Bug fix for cache management of latesthashes.txt list

1.6.4 1.8 (2019-10-22)

- Added MD5/SHA1/SHA256 strings as entity to search
- Added lookup to hash files for hash entities
- Added support su hash lookup for related urls detected
- Minor bug fixes
- New schema json for response

1.6.5 1.7 (2019-10-20)

- Added support to be used as standard python library
- Added docs
- Minor bug fixes

1.6.6 1.6 (2019-10-13)

- Not a real new release. Just added support to pip.

1.6.7 1.6 (2019-10-13)

- First release for python library version usable as CLI tool.
- Added Cache support
- Multiple IoCs submission via text file
- Output management
- New schema response

1.6.8 1.0 (2019-10-07)

- Released version 1.0 published on DigitalSide Threat-Intel repository.

1.7 License

INDEX

Symbols

C

E

I

L

M

O

P

S

V