MISP

INTELLIGENCE SHARING

MISP feeds - A simple and secure approach to generate, select and collect intelligence

Providing ready-to-use threat intelligence in MISP standard format

CIRCL / Team MISP Project

TLP:WHITE

http://www.misp-project.org/

Twitter: *@MISPProject*

CRI MISP 2024

MISP Feed - Basics

MISP Feeds provide a way to

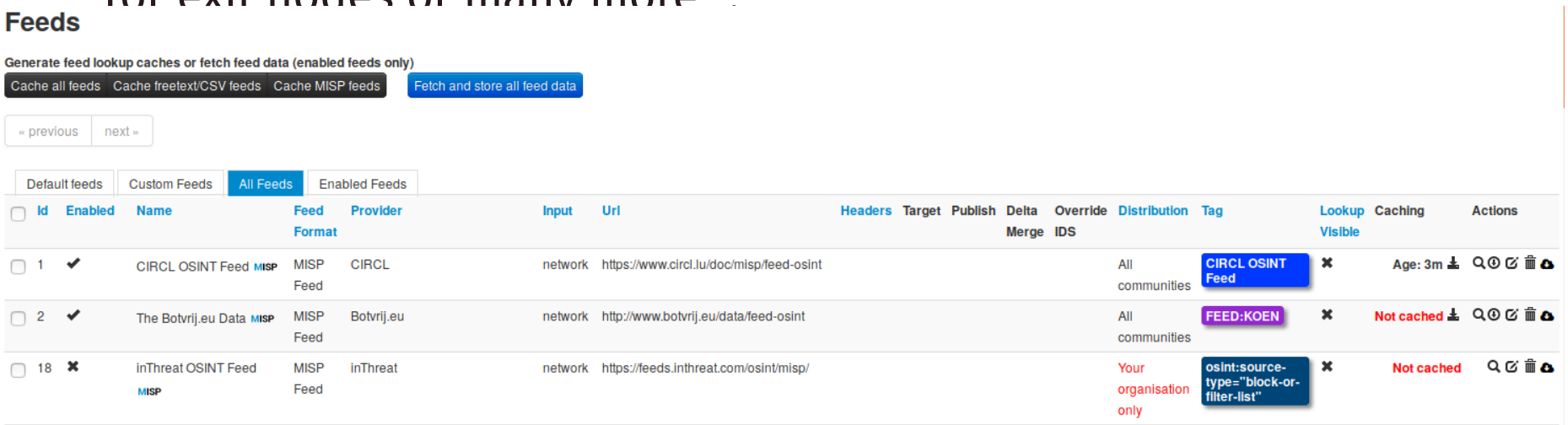
- **Exchange information via any transports** (e.g. HTTP, TLS, USB keys)
- Preview events along with their attributes, objects
- Select and import events
- **Correlate attributes using caching**

MISP Feeds have the following advantages

- Feeds work without the need of MISP synchronisation (reducing attack surface and complexity to a static directory with the events)
- **Feeds can be produced without a MISP instance** (e.g. security devices, honeypot sensors)

Feed - Overview

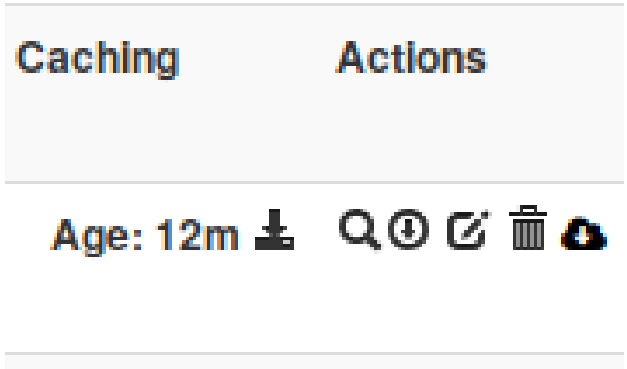
- By default, MISP is bundled with ∼50 default feeds (MISP feeds, CSV or freetext feeds) which are not enabled by default and described in a simple JSON file[1].
- The feeds include CIRCL OSINT feed but also feeds like abuse.ch, Tor exit nodes or many more [2].



[1] https://github.com/MISP/MISP/blob/2.4/app/files/feed-metadata/defaults.json

[2] http://www.misp-project.org/feeds/

Feed - Operations



- Cache feed attributes for correlation (not imported but visible in MISP)
- Disable feed
- Explore remote events
- Fetch all events (imported in MISP as event)
- Edit the feed configuration (e.g. authentication, URL,...)
- Remove feed
- Download feed metadata (to share feed details)

Feed - Creation using PyMISP `feed generator`

`feed generator` fetches events (matching some filtering) from a MISP instance and construct the manifest (defined in *MISP core format*) needed to export data.

Particularly,

- Used to generate the **CIRCL OSINT feed**
- Export events as json based on tags, organisation, events, ...
- Automatically update the dumps and the metadata file
- Comparable to a lighweight **TAXII interface**

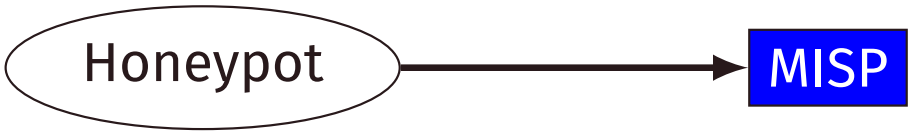
Feed generator - configuration file

```
1  url = 'your/misp/url'
2  key = 'YourAPIKey'
3  ssl = True
4  outputdir = 'output_directory'
5
6  filters = {
7      'tag':'tlp:white|feed-export|!privint',
8      'org':'CIRCL'
9  }
10 # the above would generate a feed for all events created by CIRCL,
       tagged tlp:white and/or feed-export but exclude anything
       tagged privint
11
12 valid_attribute_distribution_levels = ['0', '1', '2', '3', '4', '5
       ']
13 # 0: Your Organisation Only
14 # 4: Sharing Group
15 # 5: Inherit Event
16
```

Real-time **Feed generator - Purpose**

The PyMISP feed generator is great but may be inadequate or ineficient:

- Batch import of attributes/objects
- Data producer doesn't have a MISP instance at hand and only wants to **produce a directly consumable feed**:



ip-src
payload-delivery
url
malware
...

Real-time **Feed generator - Usage**

- `generator.py` exposes a class allowing to generate a MISP feed in real-time
- Each items can be appended on daily generated events

Example:

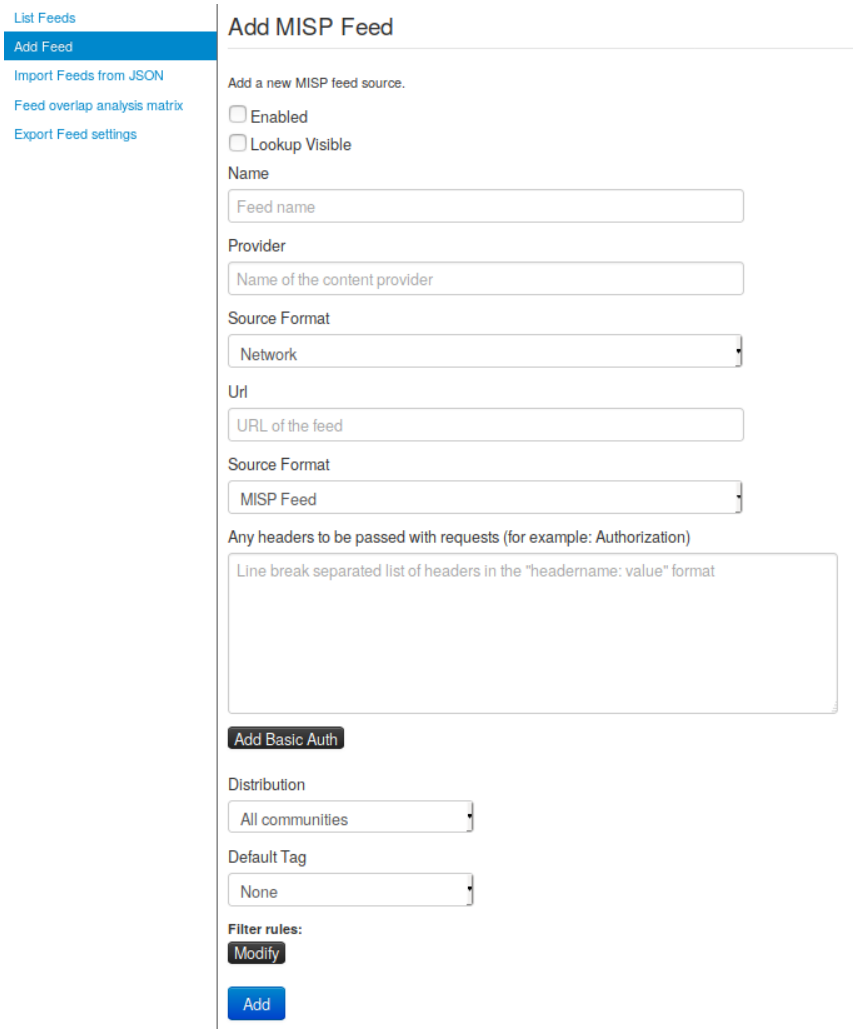
```
#  Init generator
generator = FeedGenerator()

#  Adding an attribute to the daily event
attr_type = "ip-src"
attr_value = "8.8.8.8"
additional_data = {}
generator.add_attribute_to_event(attr_type,
                                 attr_value,
                                 **additional_data)
```

Real-time **Feed generator - Usage (2)**

```
#  Adding a MISP object (cowrie) to the daily event
obj_name = "cowrie"
obj_data = {
    "session": "session_id",
    "username": "admin",
    "password": "admin",
    "protocol": "telnet"
    }
generator.add_object_to_event(obj_name, **obj_data)
```

Adding custom feed to MISP



- Enabled
- Lookup visible
- Name
- Provider
- Source Format
- Url
- Source Format
- Headers
- Distribution
- Default Tag
- Filter rules

Q&A

- https://github.com/MISP/PyMISP
- https://github.com/MISP/
- We welcome new functionalities and pull requests.