

MISP FEEDS - A SIMPLE AND SECURE APPROACH TO GENERATE, SELECT AND COLLECT INTELLIGENCE

PROVIDING READY-TO-USE THREAT INTELLIGENCE IN

CIRCL / TEAM MISP PROJECT
TLP:WHITE

[HTTP://WWW.MISP-PROJECT.ORG/](http://www.misp-project.org/)
TWITTER: *@MISPPROJECT*

MISP PROJECT

2022-09-13

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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)

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MISP Feed - Basics

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Feeds can be used to produce output from various security devices

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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 file¹.
- The feeds include CIRCL OSINT feed but also feeds like abuse.ch, Tor exit nodes or many more².

Feeds

Generate feed lookup caches or fetch feed data (enabled feeds only)

Cache all feeds

Cache freetext/CSV feeds

Cache MISP feeds

Fetch and store all feed data

← previous

next →

Default feeds

Custom Feeds

All Feeds

Enabled Feeds

<input type="checkbox"/>	Id	Enabled	Name	Feed Format	Provider	Input	Uri	Headers	Target	Publish Merge	Delta	Override IDS	Distribution	Tag	Lookup Visible	Caching	Actions
<input type="checkbox"/>	1	<input checked="" type="checkbox"/>	CIRCL OSINT Feed	MISP Feed	CIRCL	network	https://www.circl.lu/doc/misp/feed-osint						All communities	CIRCL OSINT Feed	<input checked="" type="checkbox"/>	Age: 3m	🔍 📄 🗑️ 🔄
<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	The Botvrij.eu Data	MISP Feed	Botvrij.eu	network	http://www.botvrij.eu/data/feed-osint						All communities	FEED:KOEN	<input checked="" type="checkbox"/>	Not cached	🔍 📄 🗑️ 🔄
<input type="checkbox"/>	18	<input checked="" type="checkbox"/>	InThreat OSINT Feed	MISP Feed	InThreat	network	https://feeds.inthreat.com/osint/misp/						Your organisation only	osint:source-type="block-or-filter-list"	<input checked="" type="checkbox"/>	Not cached	🔍 📄 🗑️ 🔄

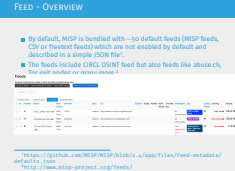
¹<https://github.com/MISP/MISP/blob/2.4/app/files/feed-metadata/defaults.json>

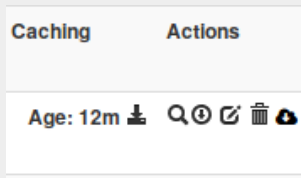
²<http://www.misp-project.org/feeds/>

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Feed - Overview



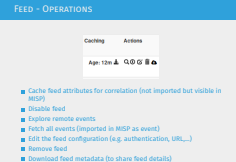


- Cache feed attributes for correlation (not imported but visible in MISP)
- Disable feed
- Explore remote events
- Fetch all events (imported in MISP as event)
- Edit the feed configuration (e.g. authentication, URL,...)
- Remove feed
- Download feed metadata (to share feed details)

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Feed - Operations

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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 lightweight **TAXII interface**

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└─ Feed - Creation using PyMISP feed generator

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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
```

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└─ Feed generator - configuration file

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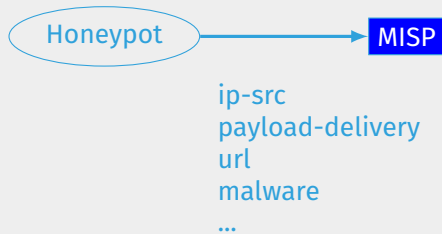
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Real-time FEED GENERATOR - PURPOSE

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

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



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

Example:

```
1 # Init generator
2 generator = FeedGenerator()
3
4 # Adding an attribute to the daily event
5 attr_type = "ip-src"
6 attr_value = "8.8.8.8"
7 additional_data = {}
8 generator.add_attribute_to_event(attr_type,
9                                 attr_value,
10                                **additional_data)
```

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                                attr_value,
                                **additional_data)
```



```
1 # Adding a MISP object (cowrie) to the daily event
2 obj_name = "cowrie"
3 obj_data = {
4     "session": "session_id",
5     "username": "admin",
6     "password": "admin",
7     "protocol": "telnet"
8 }
9 generator.add_object_to_event(obj_name, **obj_data)
```

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└ Real-time Feed generator - Usage (2)

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```

ADDING CUSTOM FEED TO MISP

The screenshot shows the 'Add MISP Feed' form in the MISP interface. On the left is a sidebar with links: 'List Feeds', 'Add Feed' (highlighted), 'Import Feeds from JSON', 'Feed overlap analysis matrix', and 'Export Feed settings'. The main form area has the title 'Add MISP Feed' and a sub-header 'Add a new MISP feed source.' Below this are several fields: 'Enabled' (checkbox), 'Lookup Visible' (checkbox), 'Name' (text input with placeholder 'Feed name'), 'Provider' (text input with placeholder 'Name of the content provider'), 'Source Format' (dropdown menu with 'Network' selected), 'Url' (text input with placeholder 'URL of the feed'), 'Source Format' (dropdown menu with 'MISP Feed' selected), and 'Any headers to be passed with requests (for example: Authorization)' (text area with placeholder 'Line break separated list of headers in the "headername: value" format'). There is a button 'Add Basic Auth' above the headers field. Below the headers field are 'Distribution' (dropdown with 'All communities' selected) and 'Default Tag' (dropdown with 'None' selected). At the bottom, there is a 'Filter rules:' section with a 'Modify' button and an 'Add' button.

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

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└ Adding custom feed to MISP

A small thumbnail version of the 'Add MISP Feed' form, showing the same fields and layout as the main screenshot.



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

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└─ Q&A



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