MISP

INTELLIGENCE SHARING

mail_to_misp

Connect your mail infrastructure to MISP to create events based on the information contained within mails

CIRCL / Team MISP Project

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Context

- You receive emails with IoC's inside
- How to create an event out of it?
- Create event manually and copy paste
- $\rightarrow$ This works once or twice
- Forwarding the email would be nice
- $\rightarrow$ mail_to_misp

Features: Email handling

- Extraction of URLs and IP addresses and port numbers
- Extraction of hostnames from URLs
- Extraction of hashes (MD5, SHA1, SHA256)
- DNS expansion
- Subject filters
- Refanging of URLs ('hxxp://...')
- ... and more

Features: Support MISP features

- Add tags automatically
- Ignore 'whitelisted' domains
- Configurable list of attributes not to enable the IDS flag
- DNS expansion
- Automatically create 'external analysis' links based on filter list (e.g. VirusTotal, malwr.com)
- Automatically filter out attributes that are on a server side warning list
- Support for value sighting
- ... and more

Implementation

- Legacy
  - Email → Apple Mail → Mail rule → AppleScript → AppleScript → mail_to_misp → PyMISP → MISP
  - Email → Thunderbird → Mail rule → filterscript → thunderbird_wrapper → mail_to_misp → PyMISP → MISP
- Postfix and others
  - Email → mail_to_misp

Installation

- mail_to_misp
  1. `git clone git://github.com/MISP/mail_to_misp.git`
  2. Install dependencies - See Github site

- MTA (Postfix or alike)
  1. Setup a new email address in the aliases file (e.g. /etc/aliases)
     `misp_handler: "|/path/to/mail_to_misp.py -"`
  2. Rebuild the DB
     `sudo newaliases`
  3. Configure mail_to_misp_config.py

```
misp_url = 'http://127.0.0.1/'
misp_key = 's5jPWCIud36Z8XHgsiCVI7SaL1XsMTyfEsN45tTe'
misp_verifycert = True
body_config_prefix = 'm2m'
...
...
```

Exercise: mail_2_misp.py

- Bonus: https://github.com/MISP/mail_to_misp_test

```
./mail_to_misp.py -r mail_to_misp_test/simple_forward.eml
```

- Bonus: Fake-SMTPD spamtrap

```
./fake_smtp.py

telnet 127.0.0.1 2526
    Trying 127.0.0.1...
    Connected to 127.0.0.1.
    Escape character is '^]'.
    220 misp Python SMTP 1.1
    helo misp
    250 misp
    mail from: mikel
    250 OK
    rcpt to: m2m
    250 OK
    data
    354 End data with <CR><LF>.<CR><LF>
```