

# MAIL\_TO\_MISP

CONNECT YOUR MAIL INFRASTRUCTURE TO MISP TO

CIRCL / TEAM MISP PROJECT

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

NSPA



2022-08-03

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

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└ Context

CONTEXT

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

- 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: 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

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## ■ 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

### └ 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 = 's5jPWClud36Z8XHgsiCVI7SaL1XsMTyfEsN45tTe'
misp_verifycert = True
body_config_prefix = 'm2m'
...
...
```

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└─ Installation

INSTALLATION

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misp_verifycert = True
body_config_prefix = 'm2m'
...
```

# EXERCISE: MAIL\_2\_MISP.PY

- Bonus:  
[https://github.com/MISP/mail\\_to\\_misp\\_test](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>
```

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└ Exercise: mail\_2\_misp.py

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>
```