

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)

MISP PROJECT



2022-09-13

mail_to_misp

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)

MISP PROJECT



- 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

2022-09-13

mail_to_misp

└ 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

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

2022-09-13

mail_to_misp

└─ Features: Email handling

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

2022-09-13

mail_to_misp

└─ 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

■ 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

■ 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'  
...  
...
```

2022-09-13

mail_to_misp

└─ Installation

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'  
...
```

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>
```

2022-09-13

mail_to_misp

└─ 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>
```