MISP Threat Intelligence Summit 0x04

MISP42SPLUNK

A Splunk App to work with MISP

https://github.com/remg427/

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Disclaimer: I am not a developer, code is “as-is”

A bit of context...and a challenge.

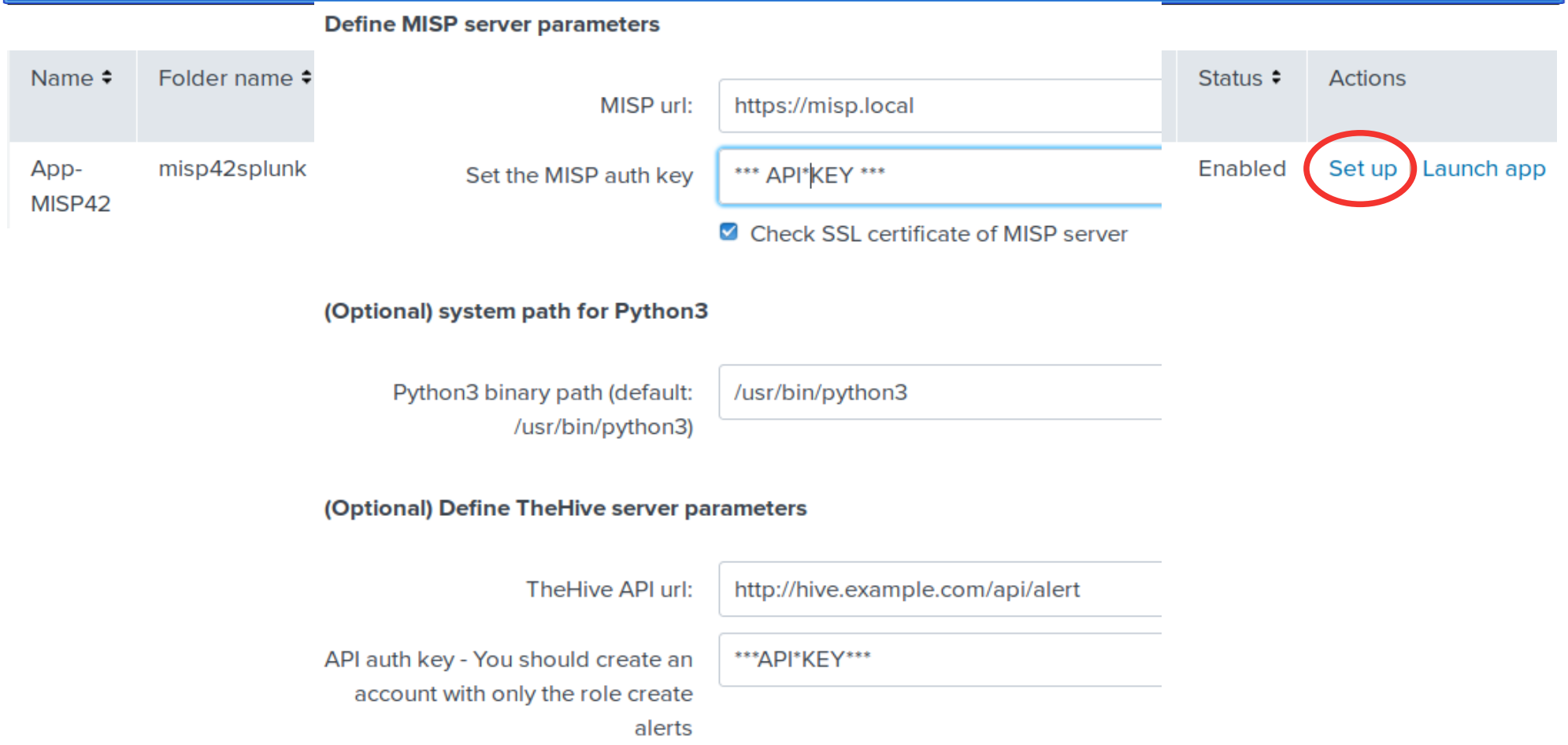
- Several interesting logs in Splunk:
  dns, proxy, email, ids, …
- So many events and attributes that could be used.
- Option 1: CSV files
  - Manual, scheduled scripts, etc.
  - Not flexible
- Option 2: make a Splunk App

Thanks @XME! https://blog.rootshell.be/2017/10/31/splunk-custom-search-command-searching-misp-iocs/

MISP42SPLUNK: an App easy to install

1) Install Python3
2) Install PyMISP > 2.4.95
3) Download
   https://github.com/remg427/misp42splunk/blob/master/misp42splunk.tar.gz
4) Splunk > Manage App > Install app from file
5) Restart Splunk
6) Splunk > Manage App > App-MISP42 > Set up
   - MISP URL
   - MISP authentication key
   - verify certificate?

MISP42SPLUNK – screen shots



MISP to Splunk – Custom Reporting command

- Use cases:
  - get IOC and update lookup tables
  - Get IOC and retro-hunt in logs
- Custom reporting command ==> first on the search line
  - Search:
    | mispgetioc <params>
  - Subsearch:

|mispgetioc (**[eventid=id] | [last=interval]**)
[onlyids=y|n]
[category=”CSV_string”]
[type=”CSV_string”]
[getuuid=y|n|Y|N|0|1]
[getorg=y|n|Y|N|0|1]
[tags=”CSV_string”]
**[not_tags=”CSV_string”]
[mispsrv=https://host:port]
[mispkey=misp-authorization-key]
[sslcheck=y|n]

MISP to Splunk – Custom Reporting command

- simple example

  | misp42splunk last=1d

- update a lookup table

  | misp42splunk last=1d type=domain | outputlookup domain.csv

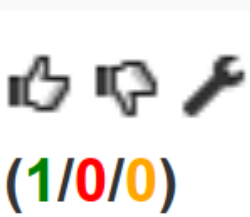
- retro hunting

```
index=dns
[ |mispgetioc last=24h onlyids=1 type="domain"
  |rename value AS dns_request_queried_domain
  |fields dns_request_queried_domain]

|stats count AS total by dns_request_queried_domain
```

MISP for SPLUNK – alerts actions

Create events in MISP ready to publish



Increment sighting counters

Type 0 = sighting
Type 1 = false positive

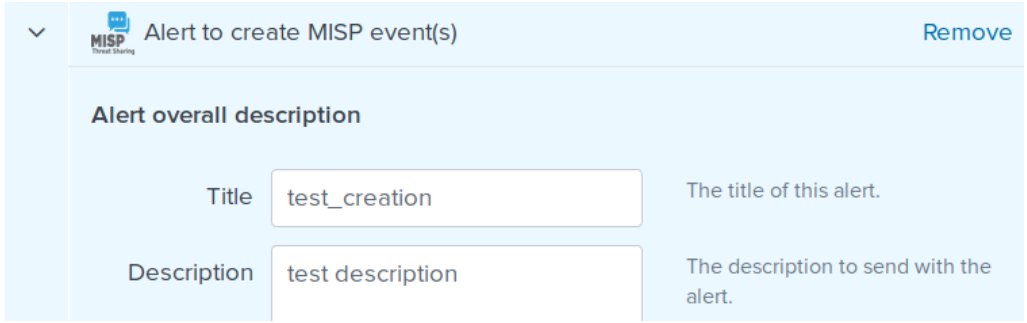
Bonus: create alerts in TheHive

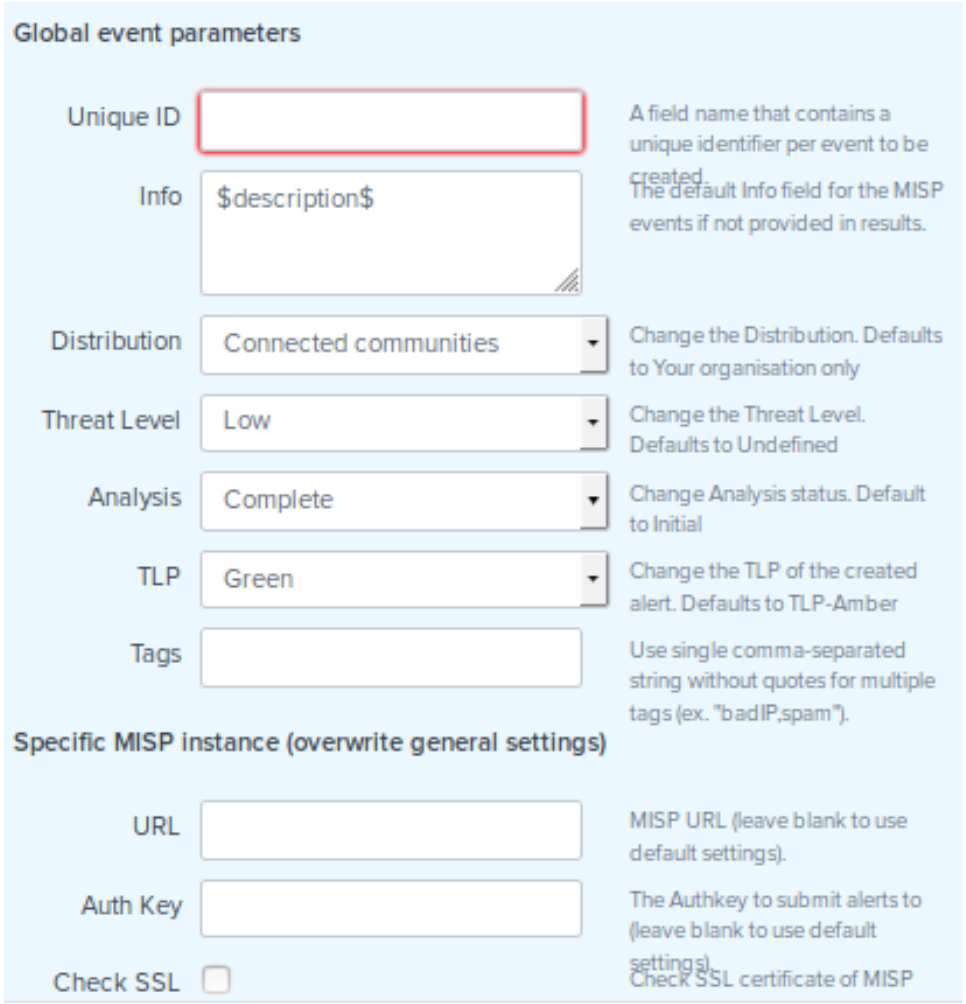
Alerts actions: Create events in MISP ready to publish

- Make a search

| table _time to_ids eventkey info category misp_* fo_* eo_* no_* (etc.)

- Set an action





Alerts actions: Create events from sandbox report

```
index=sandbox
| rex mode=sed field=_raw "s#\n# #g"
| eval eventkey=md5(src_user)
| dedup eventkey
| rename src_user AS eo_from
| eval alert_subject=spath(_raw,"alert.smtp-message.subject")
| eval eo_subject=replace(alert_subject,"\[WARNING.*\]","")
| eval src_url=spath(_raw,"alert.src.url")
| eval eo_attachment=if(match(src_url,"^hxxp"),"",if(match(src_url,"^ehdr"),"",src_url))
| eval misp_url=if(match(src_url,"^hxxp"),replace(src_url,"hxxp","http"),"")
| eval fo_filename=spath(_raw,"alert.explanation.malware-detected.malware{}.original")
| regex fo_filename!="ehdr$" | where isnotnull(fo_filename) OR  isnotnull(misp_url)
| eval fo_md5=spath(_raw,"alert.explanation.malware-detected.malware{}.md5sum")
| eval fo_sha256=spath(_raw,"alert.explanation.malware-detected.malware{}.sha256")
| eval misp_domain=spath(_raw,"alert.explanation.malware-detected.malware{}.domain")
| eval misp_address=spath(_raw,"alert.explanation.cnc-services.cnc-service{}.address")
| eval misp_hostname=mvdedup(address)
| eval info=if(isnotnull(fo_filename),"malspam with attachment","malspam")
| mvexpand hostname
| table eventkey _time info action eo_from eo_subject eo_attachment misp_url misp_domain misp_hostname fo_filename fo_md5 fo_sha256
```

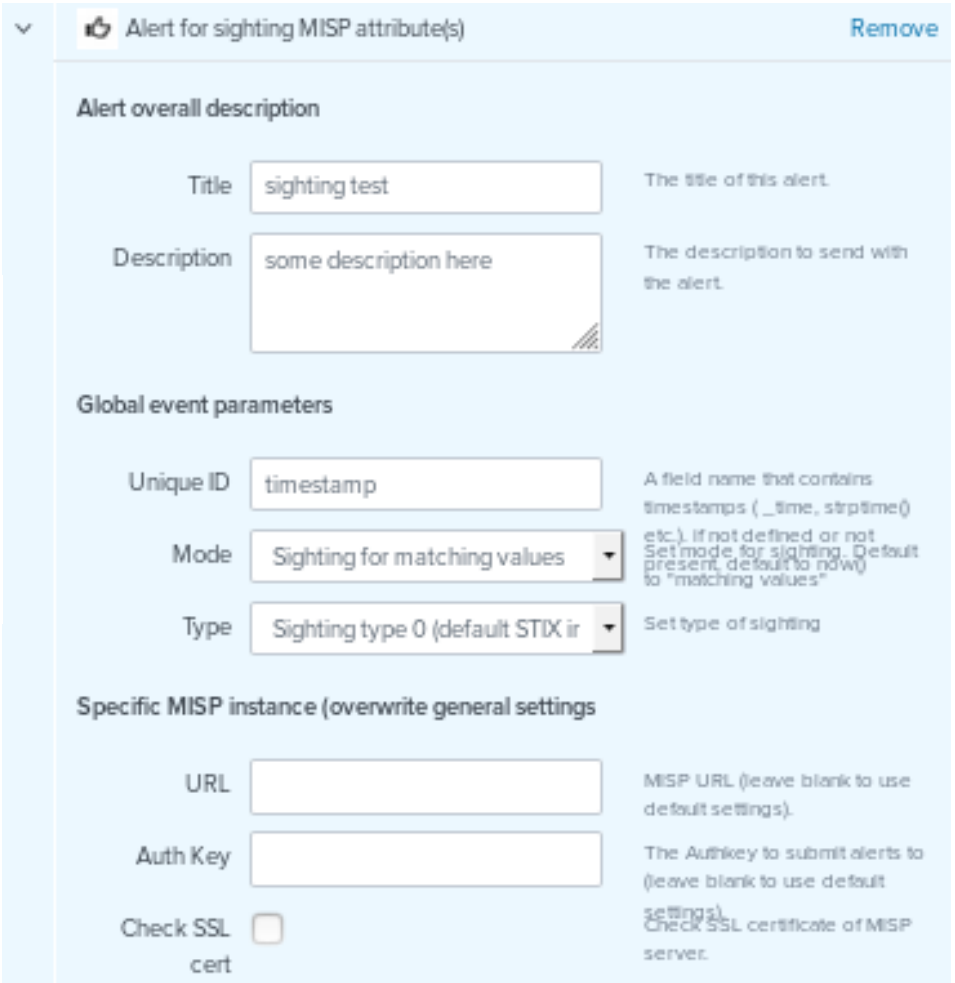
Alerts actions: Sighting on attributes

(1/0/0)

- Mode 1: by values
  - Make a search with
    - as many fields as you like
    - and a timestamp field.

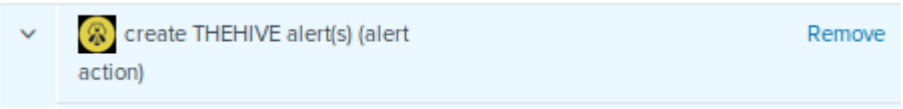
```
index=email
| dedup sender
| search [ | mispgetioc last=1d type=email-src
           | where type="email-src"
           | rename value AS sender
           |fields sender]
| rename message_subject AS  email_subject, file_name AS filename
| table _time mid sender mail_subject filename value
```

- Mode 2: by uuid
  - Make a search which includes uuid



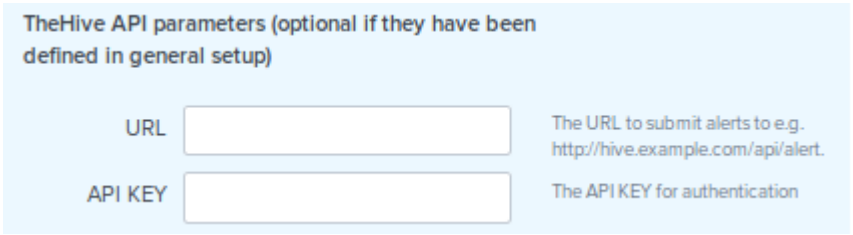
Alerts actions: Alerts in TheHive

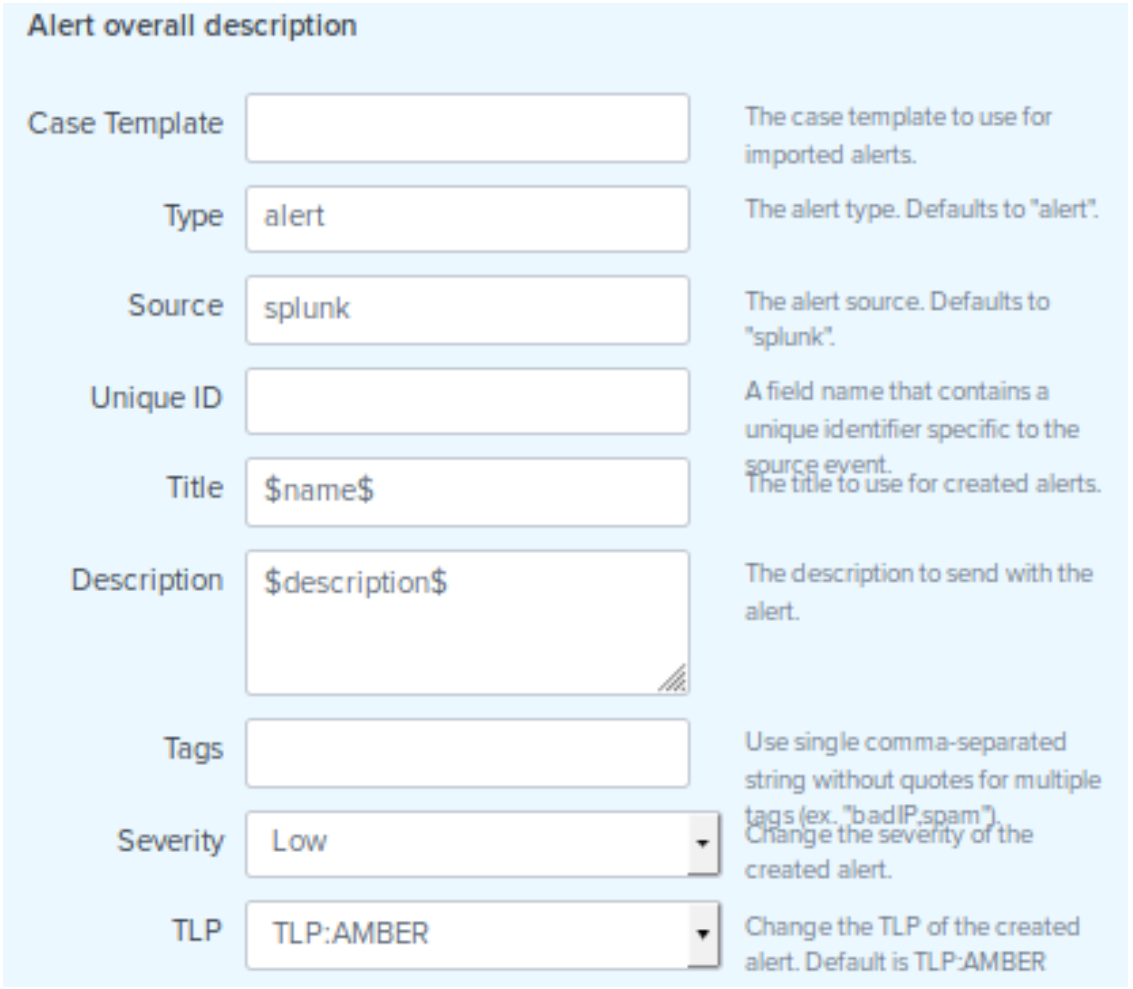
- Set an action



- Define parameters

- (optional) point to another instance





MISP42SPLUNK – Custom Streaming command

- Work in Progress for v4
- Use cases:
  Get MISP info on matching values
  - misp_json
  - misp_type
  - misp_value
  - misp_to_ids
  - misp_category
  - misp_uuid
  - misp_event_id
  - misp_comment

```
search something...
| mispquery field=<a_field>
    [onlyids=y|n]
    [get_comment=y|n]

    [mispsrv=https://host:port]
    [mispkey=misp-authorization-key]
    [sslcheck=y|n]
```