# FORENSIC SUPPORT IN MISP TOOLS AND VISUALIZATION TO SUPPORT DIGITAL

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### DFIR AND MISP DIGITAL EVIDENCES

- Share analyses and reports of digital forensic evidences.
- **Propose changes** to existing analyses or reports.
- Extending existing events with additional evidences for local or use in limited distribution sharing (sharing can be defined at event level or attribute level).
- Evaluate correlations<sup>1</sup> of evidences against external or local attributes.
- Report sightings such as false-positive or true-positive (e.g. a partner/analyst has seen a similar indicator).

<sup>&</sup>lt;sup>1</sup>MISP has a flexible correlation engine which can correlate on 1-to-1 value matches, but also on fuzzy hashing (e.g. ssdeep) or CIDR block matching.

- LE can leverage the long-standing experience in information sharing and bridge their use-cases with MISP's information sharing mechanisms.
- Accessing existing MISP information sharing communities by receiving actionable information from CSIRT/CERT networks or security researchers.
- Bridging LE communities with other communities. Sharing groups can be created (and managed) cross-sectors to support specific use-cases.
- The MISP standard is a flexible format which can be extended by users using the MISP platform. A MISP object template can be created in under 30 minutes, allowing users to rapidly share information using their own data-models with existing communities.

#### Standard sharing mechanism for forensic cases

- MISP allows for the efficient collaborative analysis of digital evidences
- Correlation on certain attributes
- Importing disk images and file system data activity (Mactime)
  - Development of an adaptable import tool: From Mactime to MISP Mactime object
- Create, modify and visualise the timeline of events
  - Development of a flexible timeline system at the event level

## FORENSIC IMPORT (MISP 2.4.98)

Import analysis file	
Analysis file Choose File test.txt Upload	

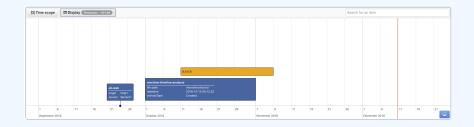
Create Objects

#### Select text for further analysis

Select	Filepath	File Size	Activity Type	Time Accessed	Permissions
	c.r/rrwxrwxrwx	Ххх			00
<b>e</b>	/DCIM/11106/_MG_0125.JPG(deleted)	3541836	Accessed	Sun Jun 02 2013 00:00:00	r/rrwxrwxrwx
<b>e</b>	/DCIM/11106/_MG_0125.JPG(deleted)	3541836	Created,Modified	Sun Jun 02 2013 15:42:32	r/rrwxrwxrwx
<b>e</b>	/DCIM/11106/IMG_0126.JPG	2255115	Created,Modified	Sun Jun 02 2013 15:42:46	r/rrwxrwxrwx
	/DCIM/CANONMSC/M0111.CTG	884	Created,Modified	Sun Jun 02 2013 15:44:08	r/rrwxrwxrwx
	/CANON_DC(Volume	0	Modified	Sun Jun 02 2013 16:33:04	r/rrwxrwxrwx
<b>e</b>	/DCIM/11106/IMG_0126.JPG	2255115	Accessed	Sat Feb 06 2016 00:00:00	r/rrwxrwxrwx

- Possibility to import Mactime files [done]
- Pick only relevant files [done]
- MISPObject will be created [done]

# DATA VISUALIZATION (MISP ZOIDBERG BRANCH)



- View: start-date only, spanning and search [dev-branch]
- Manipulate: Edit, Drag and Expand [dev-branch]
- Others: Timezone support [dev-branch]

 $\rightarrow$  For now [dev-branch], supports up to **micro-seconds** in the database and up to **milliseconds** in the web interface.