Forensic support in MISP

Tools and visualization to support digital forensic expert

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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**\(^1\) 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).

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\(^1\)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.
**Benefits of using MISP**

- 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.
Challenges and implementations

- 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
Possibility to import Mactime files [done]
Pick only relevant files [done]
MISPObj ect 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]

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