Practical Information Sharing between Law Enforcement and CSIRT communities using MISP

E.101

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MISP Project
https://www.misp-project.org/

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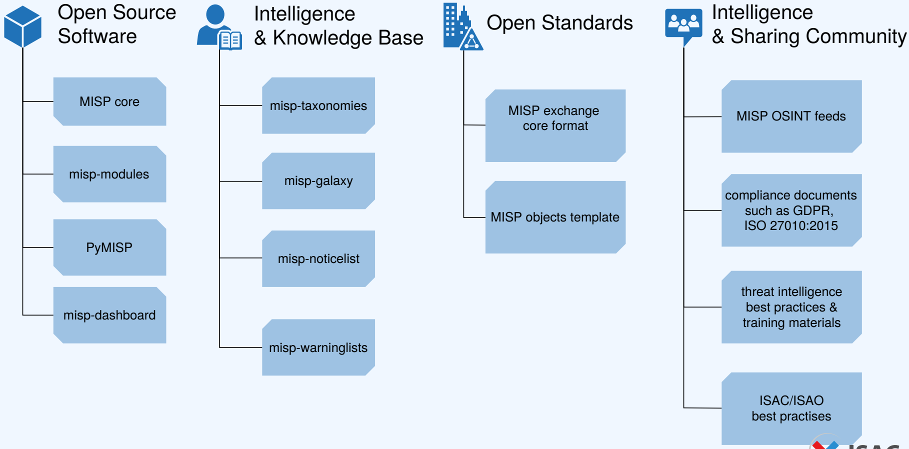
MISP - Open Source Threat Intelligence Platform

- MISP is an open source software (can be self-hosted or cloud-based) **information sharing and exchange platform**
- It enables analysts from different sectors/orgs to create, collaborate on and share information
- The information shared can then be used to find correlations as well as automatically be fed into **protective tools or processes**
- The software is widely used by CERTs, ISACs, Intelligence Community, military organisations, private sector organisations and researchers since 2012
- CIRCL is both the main driving force behind the tool's **development** as well as some of the largest information **sharing communities** worldwide

MISP Project Overview



Open Source Software

- MISP core
- misp-modules
- PyMISP
- misp-dashboard

Intelligence & Knowledge Base

- misp-taxonomies
- misp-galaxy
- misp-noticelist
- misp-warninglists

Open Standards

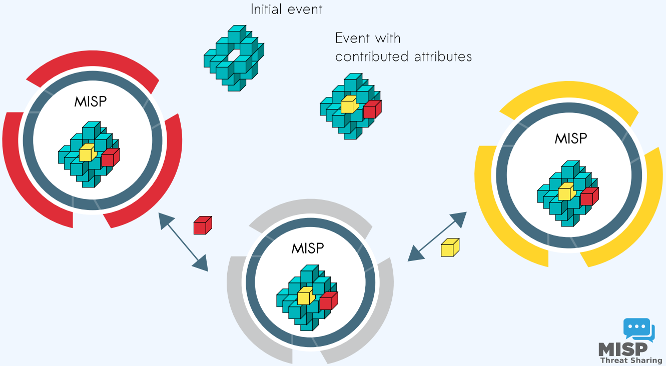
- MISP exchange core format
- MISP objects template

Intelligence & Sharing Community

- MISP OSINT feeds
- compliance documents such as GDPR, ISO 27010:2015
- threat intelligence best practices & training materials
- ISAC/ISAO best practises

MISP core distributed sharing functionality

- MISP's core functionality is sharing where everyone can be a consumer and/or a contributor/producer.
- Quick benefit without the obligation to contribute.
- Low barrier access to get acquainted to the system.



DFIR and MISP digital evidences

- **Share analysis and report** of digital forensic evidences.
- **Propose changes** to existing analysis or report.
- Extending existing event with additional evidences for local or limited use (sharing can be defined at event level or attribute level).
- **Evaluate correlations**[1] of evidences against external or existing attributes.
- **Report sighting** such as false-positive or true-positive (e.g. a partner/analyst has seen a similar indicator).

[1] MISP has a flexible correlation engine which can correlate on 1-to-1 value but also 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 getting actionable information from CSIRTs/CERTs networks or security researchers.
- **Bridging LE communities with other communities**. Sharing groups can be created (and managed) between cross-sectors to support specific use-cases.
- **MISP standard format** is a flexible format which can be extended by the users who use the MISP platform. A MISP object template can be created in 30 minutes and directly share information with your model towards existing communities.

Future of Information Sharing

- MISP is a long-term project (started in 2012) and since **information sharing is becoming more essential** than ever to thwart threats, we have long-term plans for the project as the project is used in various critical information exchange communities.
- We hope to have the means to be the enablers and the interface for real cross-sectorial sharing and support the organisations facing hybrid threats.
- Tools, open standards and interoperable software (e.g. DFIR tools) are driving forces behind resilient information exchange communities.
- Getting ideas and practical **use-cases from LE community** is vital, don’t hesitate to interact.