How information sharing is saving us

MISP project perspective

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vOPCDE#3



THE BRIGHT SIDE OF INFORMATION SHARING

- We build various information sharing communities (one is more than 1500 organisations with more than 4000 users). sharing and updating daily cybersecurity indicators, financial indicators or threats in both ways
- To achieve this we actively develop, maintain and support MISP (an open source threat sharing¹ platform)
- Beside the tools, practices, standard formats and classifications play an important role
- These practices need to be shared among the communities to support efficient collaboration

¹also called TIP, CTI platform. http://www.misp-project.org

HOW TO BE SUCCESSFUL IN BUILDING AN INFORMATION SHARING COMMUNITY?

There was never a plan. There was just a series of mistakes.

Robert Caro, journalist.

MISP AND STARTING FROM A PRACTICAL USE-CASE

- During a malware analysis workgroup in 2012, we discovered that we worked on the analysis of the same threat actor
- We wanted to share information in an easy and automated way to avoid duplication of work
- Christophe Vandeplas (then working at the CERT for the Belgian MoD) showed us his work on a platform that later became MISP
- A first version of the MISP Platform was used by the MALWG and the increasing feedback of users helped us to build an improved platform.
- MISP is now a community-driven development

Don't be abused by the legal framework. Use the legal the framework.

MISP Project²

²https://www.misp-project.org/compliance/

RELY ON OUR INSTINCTS TO IMMITATE OVER EXPECTING ADHERENCE TO RULES

- **Lead by example** the power of immitation
- Encourage improving by doing instead of blocking sharing with unrealistic quality controls
 - What should the information look like?
 - How should it be contextualise
 - ▶ What do you consider as useful information?
 - What tools did you use to get your conclusions?
- Side effect is that you will end up raising the capabilities of your constituents

HOW TO DEAL WITH ORGANISATIONS THAT ONLY "LEECH"?

- From our own communities, only about **30%** of the organisations **actively share data**
- We have come across some communities with sharing requirements
- In our experience, this sets you up for failure because:
 - Organisations losing access are the ones who would possibily benefit the most from it
 - Organisations that want to stay above the thresholds will start sharing junk / fake data
 - You lose organisations that might turn into valuable contributors in the future

SHARED LIBRARIES OF META-INFORMATION (GALAXIES)

- The MISPProject in co-operation with partners provides a curated list of galaxy information
- Can include information packages of different types, for example:
 - Threat actor information
 - Specialised information such as Ransomware, Exploit kits, etc
 - Methodology information such as preventative actions
 - Classification systems for methodologies used by adversaries
 ATT&CK or Misinformation Pattern
- Consider improving the default libraries or contributing your own (simple JSON format)
- If there is something you cannot share, run your own galaxies and share it out of bound with partners
- Pull requests are always welcome

COVID-19 MISP SHARING COMMUNITY EXAMPLE

- COVID-19 MISP is a MISP instance retrofitted for COVID-19³ info sharing
- We are focusing on two areas of sharing:
 - Medical information
 - Cyber threats related to / abusing COVID-19
 - ► Misinformation related to COVID-19
- Low barrier of entry, aiming for wide spread
- Already a massive community

³https://www.misp-project.org/covid-19-misp/

WHY?

- We are obviously interested on a personal level, as is everyone
- Information sharing is what we do anyway
- The tools that we are building are expanding our capabilities for the future
- Bridging different domains affected in different ways can reveal correlations

MODELLING NEW DATA STRUCTURES FOR COVID-19



We are rapidly building new models for the different COVID-19 related information sources

WHAT KIND OF INFORMATION SHARING COMMUNITIES EXIST RELYING ON MISP?

- A plethora of "cyber security"-related communities in CSIRTs, SOC and private exchange groups
- Specific financial sharing communities in the banking sector
- Border control information sharing communities
- Vulnerability disclosure sharing communities
- Intelligence community sharing community

CONTACT US IF YOU WANT TO BUILD YOUR SHARING COMMUNITY

- https://www.misp-project.org/
- https://www.misp-standard.org/
- https://github.com/MISP
- info@misp-project.org
- https://twitter.com/MISPProject