

Cyber Threat Intelligence (CTI):

Automating information sharing with STIX, TAXII, CybOX

# Increasing Importance of Awareness of Data

Takahiro Kakumaru, CISSP

NEC Corporation

t-kakumaru@ap.jp.nec.com



# \Orchestrating a brighter world

NEC brings together and integrates technology and expertise to create the ICT-enabled society of tomorrow.

We collaborate closely with partners and customers around the world, orchestrating each project to ensure all its parts are fine-tuned to local needs.

Every day, our innovative solutions for society contribute to greater safety, security, efficiency and equality, and enable people to live brighter lives.

# Topics

Increasing importance of awareness of data in order to enhance current security posture

I. What could CTI change security posture?

---

II. Data handling is important to carry forward CTI

---

Takahiro Kakumaru, CISSP  
NEC Corporation  
Cyber Security Strategy Division

- Member of OASIS CTI-TC
- Advocate of CTI adoption

# I. What could CTI change security posture?

Enhancing awareness of data is key to make security possible

## 1. Large amount of data generate new intelligence

- Quantity turns to Quality by processing large amount of data and analyzing it.
- What data should we collect? What information should we transform?

## 2. Make security mechanisms more efficient if we share information

- CTI provides platform to exchange between organizations for better security controls.
- How should we connect information newly? Reforms to our attitudes as well.

## 3. Whether good or bad of AI would be depend on collected data

- CTI provides platform to collect data and information about cyber threat.
- Quality of intelligence source need to be looked after if we leverage AI.

## II. Data handling is important to carry forward CTI

To handle data properly, we should be aware of ...

### 1. Ensuring a variety of intelligence sources

- It is also important to utilize what we monitor, observe, and sight by ourselves in real time.

### 2. Clarifying ownership of shared data

- How to protect ownership of shared data? Taking on a contract is considerable.

### 3. Ensuring quality of data, information, and intelligence

- There are noise on data, bias on information, and morality on intelligence.

### 4. Ensuring security of data we treat

- Security include device security, system security, and vulnerability of human.

### 5. Understanding and adapting to legal systems of each country

- Legal systems are different for each country, e.g. EU Data Protection Directive.

# Topics

Increasing importance of awareness of data in order to enhance current security posture

## I. What could CTI change security posture?

- CTI provides platform to exchange, collect, and analyze.
- CTI requires not only technology, but also change of mind

## II. Data handling is important to carry forward CTI

- A variety of intelligence sources, and ownership of data.
- Quality of data, security of data, and aware of legal systems.

Takahiro Kakumaru, CISSP  
NEC Corporation

\ **Orchestrating** a brighter world

**NEC**