

## Cybersecurity measures to stay ahead of attackers

Minimise damage against increasingly large-scale and sophisticated cyber-attacks

#Business Resilience

### サイバー攻撃の被害極小化に向けて

Minimizing the damage caused by cyberattack

#### ①新たな侵入手口の発見

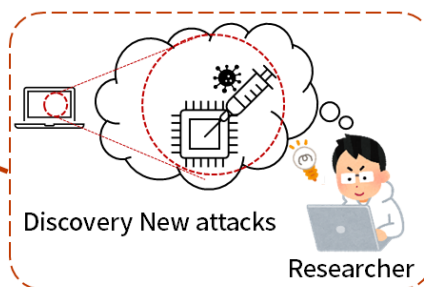
Discovering New Intrusion Methods

攻撃者よりも早く

新しい攻撃手法を発見

Discovering New Attack Methods

Faster than Attacker



#### ②侵入経路の調査

Investigation of the Intrusion Point

攻撃者よりも早く

攻撃対象となり得る端末を調査

Investigating Potential Attack Targets

Faster than Attacker



Investigate  
Vulnerable  
Devices



#### ③指示役を特定

Identifying the leader

大規模攻撃の司令塔を

素早く特定

Identifying Controllers  
of Large-scale Attacks



Analyze  
Network Flow

Identify  
C2 Servers



### ///Technical Issue

Measures against known attacks cannot minimize damage from exploitation of unaddressed vulnerabilities or large-scale attacks.

### ///Research Goal

Minimize attack damage by establishing technologies to discover vulnerabilities and attack sources, and quickly implement measures.

#### ---Technology

- ①New methods to covertly execute malicious code in benign processes.
- ②Unique IPv6 port scan based on co-occurrence of ports usage trends.
- ③Techniques to identify attack controllers with AI and graph mining from network flow.

#### ---Applicable Business

In the field of cybersecurity, this can be used for

- ①red team to defense its own organization (Technology establishment: Q1 FY2025)
- ②vulnerability assessment for IPv6 hosts (Technology establishment: Q3 FY2024)
- ③self-defense and threat intelligence service (Service available from NTT Security (KK). Update release: Q1 FY2025)

#### ---Novelty

- ①Detection evasion in 87.5% security products.
- ②Approximately 3x higher discovery rate than existing scanning methods.
- ③More than 30% of the results are detected earlier (Max. 1 month) than market threat information.