我們與弱點管理的距離

加入 CNA Program 以及
處理 PSIRT 弱點事件的實戰經驗

Robert Lai, EJ Feng

May 15, 2024

Key Takeaways

1

PSIRT

我們發展 PSIRT 面對的挑戰和解方

2

CNA

我們對於加入 CNA 的看法，以及加入後的觀點

3

SDL

從回應弱點到預防弱點

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Who We Are

Robert Lai

Lead Cybersecurity Engineer

Moxa 資安技術經理

主導 Moxa PSIRT 發展的品質與技術窗口

導入安全產品開發流程（IEC 62443 Part 4）

建立跨組織合作的資安政策與程序

EJ Feng

Senior Cybersecurity Engineer

Moxa 資深資安工程師

負責 Moxa PSIRT 與 CNA 弱點處理流程

協助 Moxa 成為台灣第 8 個 CVE 編號管理者
(CVE Numbering Authority, CNA)

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PSIRT

我們發展 PSIRT 面對的挑戰和解方

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資安發展里程碑

2018 2019 2020 2021 2022 2023 2024 2025

Cyber Security Response Team

Moxa Product Cybersecurity Response Team (Moxa PSIRT)

Moxa Secure Development Life-Cycle Procedure V1.1/2.0 certified by IECEE

Moxa Secure Development Life-Cycle Procedure V2.0 certified by ISCI

CVE Numbering Authority (CNA)

從回應資安事件轉換到滿足市場需求

V1.0: CSRT (Cyber Security Response Team)

Reason for establishment

Cybersecurity issue raised from ICS-CERT, NIST or other IT vulnerability

Development Strategy

Quick response to market once any cybersecurity issue raised

Achievement

Build 4 step process: Awareness, Investigation, Action, Response

Challenge

Risk assessment and vulnerability reproduction

V2.0: PSIRT (Product Security Incident Response Team)

Reason for establishment

Establishing a scalable and **market-expected** vulnerability response process.

Development Strategy

As a feedback loop for the **SDL process**.
Experts guide the team in addressing vulnerabilities from both a reactive and proactive perspective.

Achievement

Respond to vulnerability reports from the client side.
Management policies and processes for reinforcing vulnerability reproduction to vulnerability remediation verification.

Challenge

Vulnerability management of **third-party components**.

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基於標準發展的弱點管理政策

IEC 62443 Part 4-1 Practice 6 Defect Management			
Reviewing security-related issues	Assessing security-related issues	Addressing security-related issues	Disclosing security-related issues

FIRST PSIRT Services Framework v1.1			
Vulnerability Discovery	Vulnerability Triage	Vulnerability Remediation	Vulnerability Disclosure

ISO/IEC 30111 Vulnerability Handling Process			
Verification	Remediation development	Release	Post-release

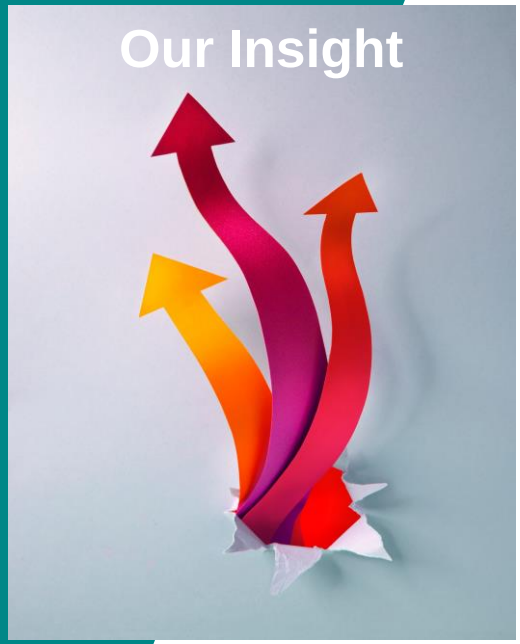
Product Security Incident Response Team 的日常

Awareness

Active Management

Vulnerability Fixes

Security Advisory



最大的挑戰

一邊開車，一邊修車

面對挑戰的解方

對齊使命和願景，課題分離

發展策略

先解決大家的痛點、再處理自己的議題

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我們對於加入 CNA 的看法，
以及加入後的觀點

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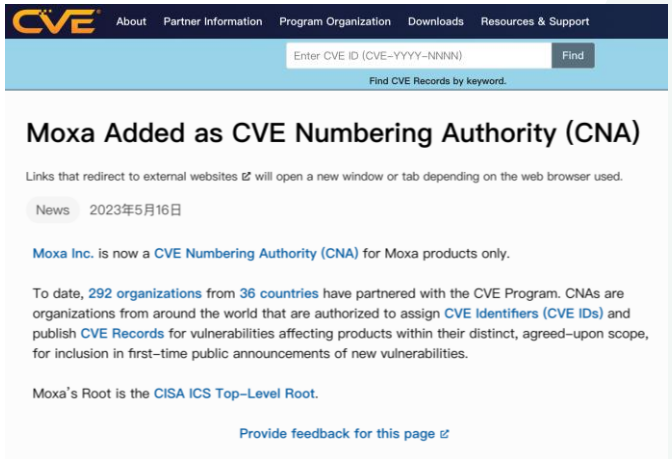
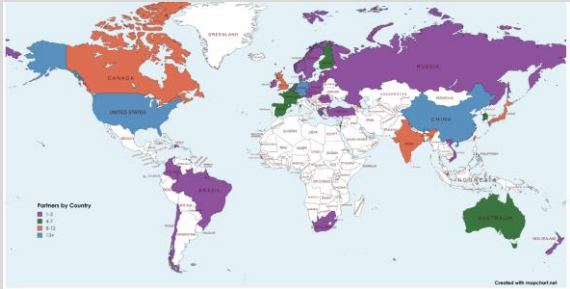
CNAs – PSIRT 團隊的全球肯定

- **Moxa PSIRT 於 2023 年 5 月正式成為台灣第 8 個 CNA，歸屬於美國 CISA (Root CNA) 管理下的 CNAs。**



Source: https://www.cve.org/Media/News/item/news/2023/05/16/Moxa-Added-as-CNA

Currently, there are only 367 organizations worldwide recognized as CNAs, with the majority in the USA (192), followed by China (22) and Germany (15). Taiwan currently has 9 CNAs.



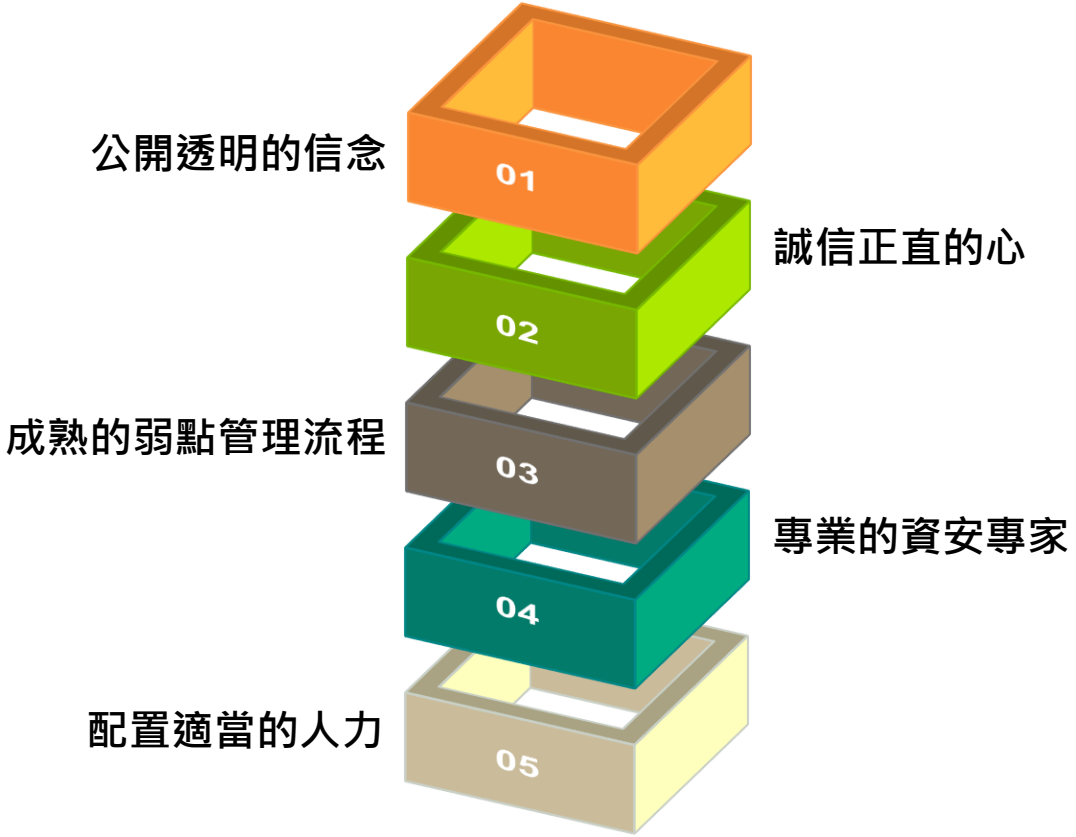
Australia: 5	Dominican Republic: 1	Latvia: 1	Slovak Republic: 2
Austria: 3	Estonia: 1	Lithuania: 1	South Africa: 1
Belgium: 2	Finland: 4	Netherlands: 6	South Korea: 7
Brazil: 2	France: 6	New Zealand: 2	Spain: 5
Canada: 8	Germany: 15	No country affiliation: 1	Sweden: 4
Chile: 1	Greece: 1	Norway: 2	Switzerland: 8
China: 22	India: 8	Poland: 1	Taiwan: 9
Colombia: 1	Ireland: 1	Romania: 1	Türkiye: 3
Czech Republic: 2	Israel: 9	Russia: 2	UK: 11
Denmark: 2	Japan: 12	Singapore: 2	USA: 192
			Vietnam: 1

https://www.cve.org/ProgramOrganization/CNAs

跨出舒適圈的第一步

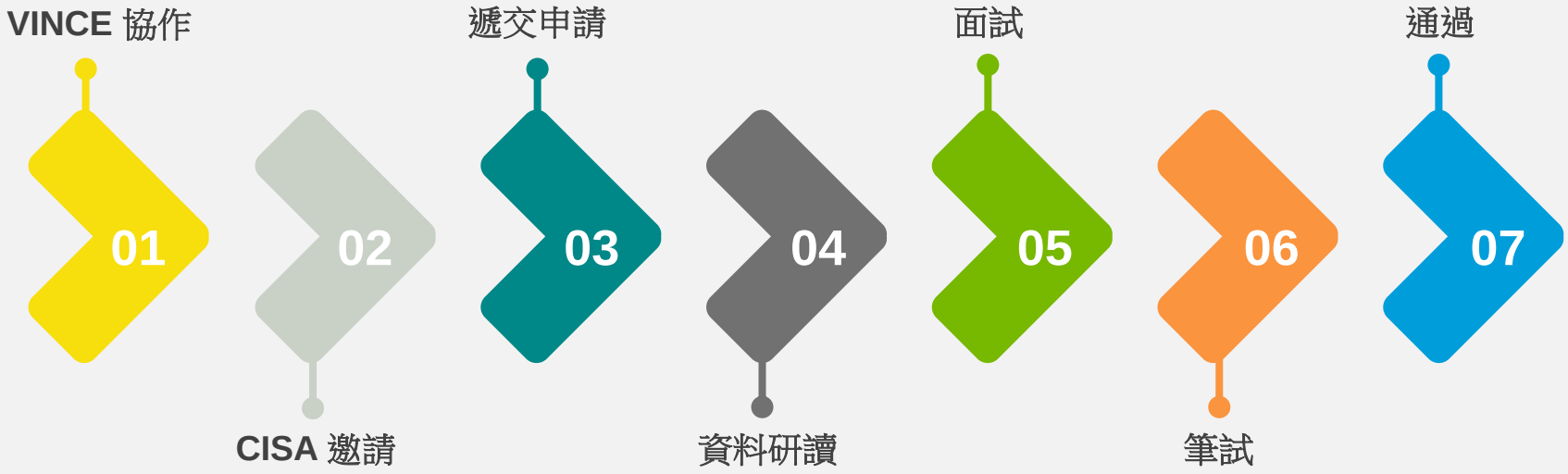
我們想加入 CNA 的原因

成為 CNA 之前要準備好的 5 件事



CNA 申請的過程，不會很久

我們加入 CNA 的過程



(以 Root CNA 是 CISA 為例)

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CVE® Numbering Authority (CNA) Operational Rules

Version 4.0

Effective August 8, 2024

Approved by CVE Board on May 8, 2024

責任

一定要遵守 CNA Rules

Source: https://www.cve.org/ResourcesSupport/AllResources/CNARules

成為 CNA 之後

實現 CVE 自由？

權利	義務
• 在自己負責的範圍發 CVE • 別的 CNA 不可侵犯你的領域 • 自行管理 CVE 資料 • 參加 CNA 活動	• 不可以吃案 (誠信正直) • 弱點揭露 (公開透明) • 更及時的回應 • 積極與通報者溝通

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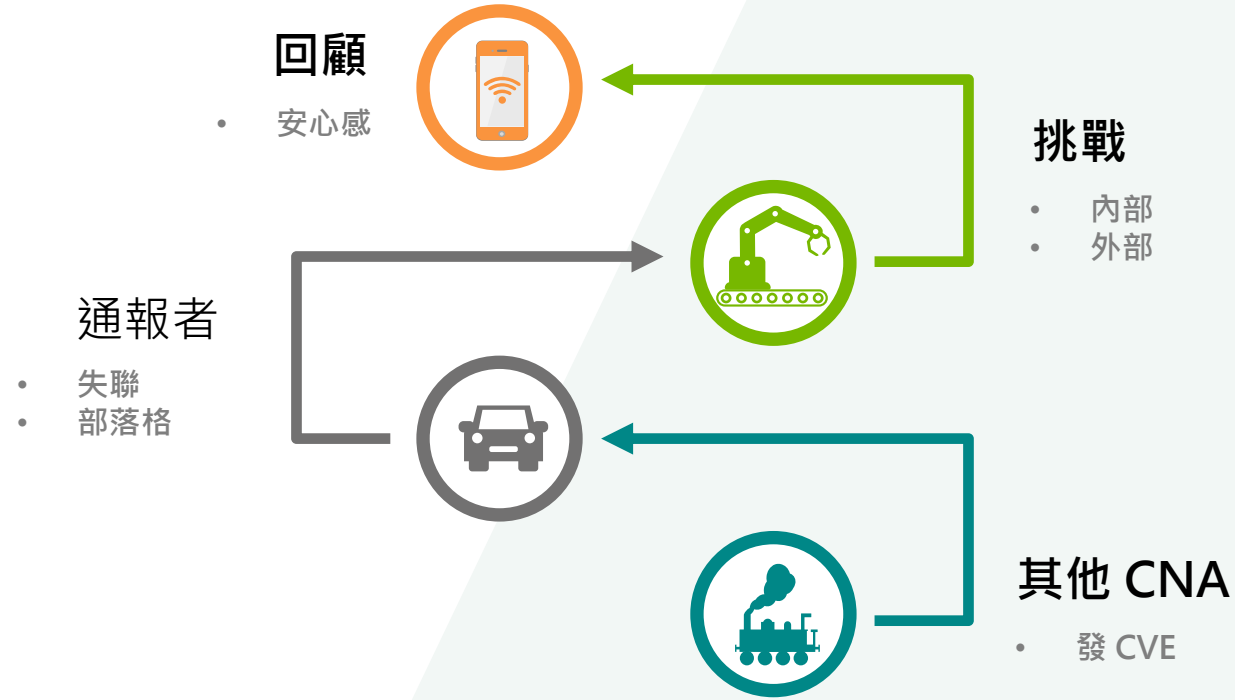
成為 CNA 之後 有趣的小故事分享



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SDL

從回應弱點到預防弱點

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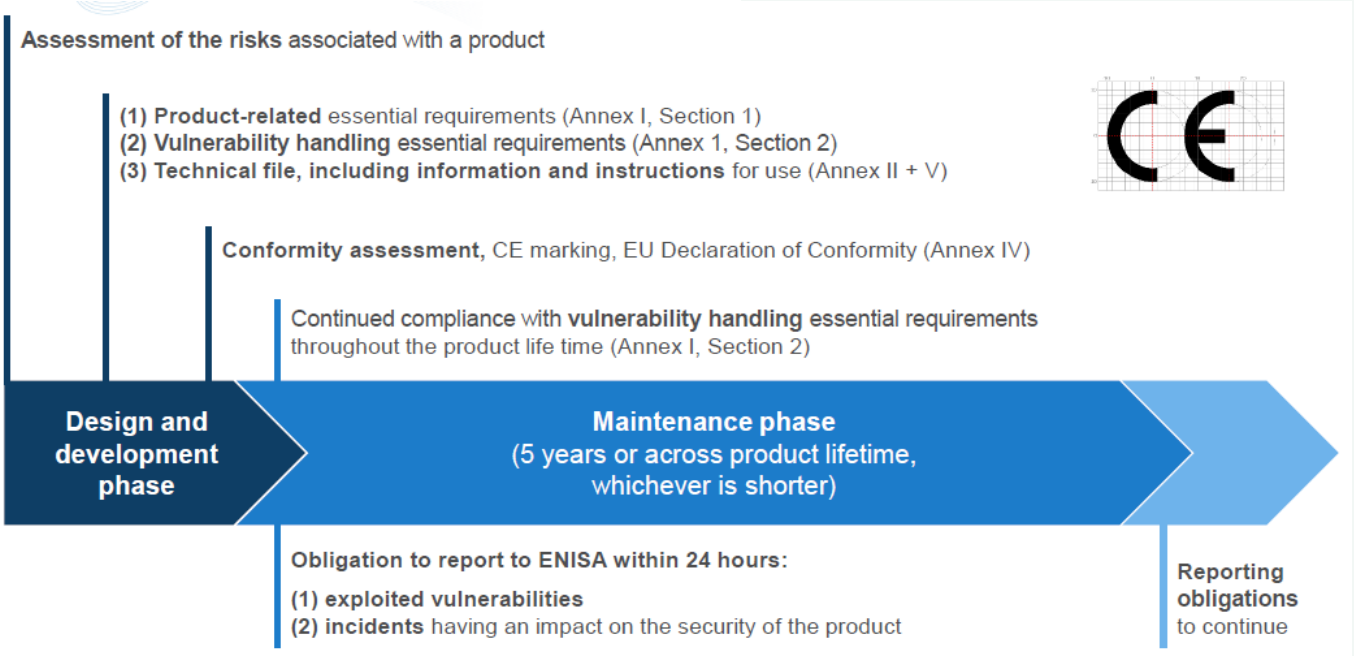
從被動回應到主動預防

SDL Process

Reason for establishment	**More and more demands are coming from the external.**
Development strategy	**Treating the evidentiary activities as short-term goals, learning from implementation.**
Achievement	**Certified products and processes**
Challenge	**Legacy products**

The Upcoming Challenges

Cyber Resilience Act and other regulations



Source: 01Policy-0 - DG CNECT - Cyber Resilience Act and NIS2.pdf (europa.eu)

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Review Key Takeaways

1

PSIRT

在策略規劃的節奏下，陪伴團隊（包含 PSIRT）成熟

2

CNA

成熟的弱點管理心態

3

SDL

取得小規模的勝利，再擴大戰果

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Thank You

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Reliable Networks ▲ Sincere Service