



Check Point®
SOFTWARE TECHNOLOGIES LTD

透過網路安全措施成就IOT連通世界

Infinity Total Protection

楊敦凱 Danny Yang | 技術顧問
2018.3.13

WELCOME TO THE FUTURE OF
CYBER SECURITY

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INFINITY

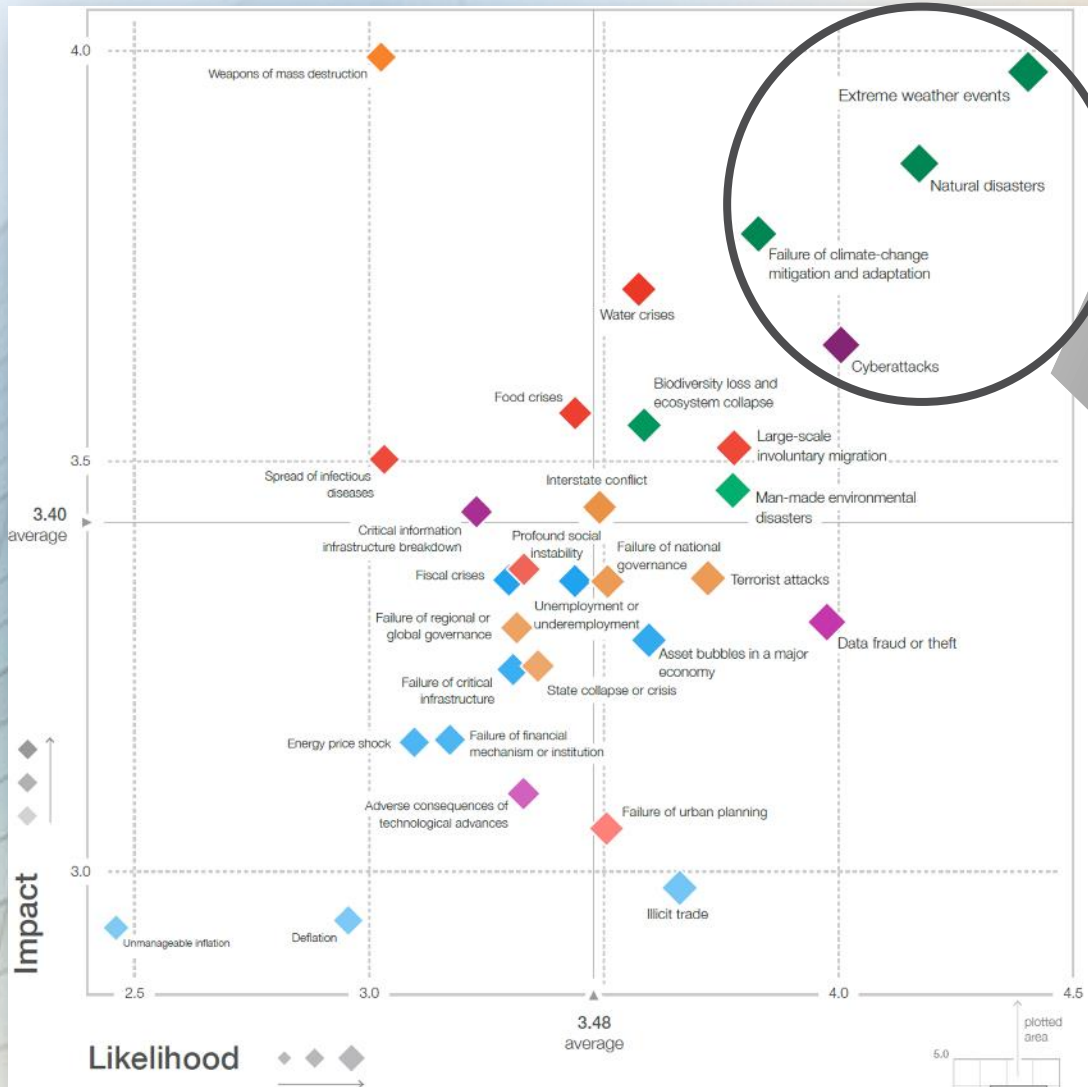
CLOUD • MOBILE • THREAT PREVENTION



Agenda

- 萬物連網的未來安全風險
- 第五代網路安全及威脅現況
- Infinity Total Protection安全架構

2018 世界經濟論壇:全球風險報告



Top 5 Global Risks in Terms of Likelihood

	2016	2017	2018
1st	Large-scale involuntary migration	Extreme weather events	Extreme weather events
2nd	Extreme weather events	Large-scale involuntary migration	Natural disasters
3rd	Failure of climate-change mitigation and adaptation	Major natural disasters	Cyberattacks
4th	Interstate conflict with regional consequences	Large-scale terrorist attacks	Data fraud or theft
5th	Major natural catastrophes	Massive incident of data fraud/theft	Failure of climate-change mitigation and adaptation



全新IT世代 物聯網來了

萬物相連，更多攻擊目標!

不僅限於個人電腦或主機...





IoT的意義...

Internet of Threat!

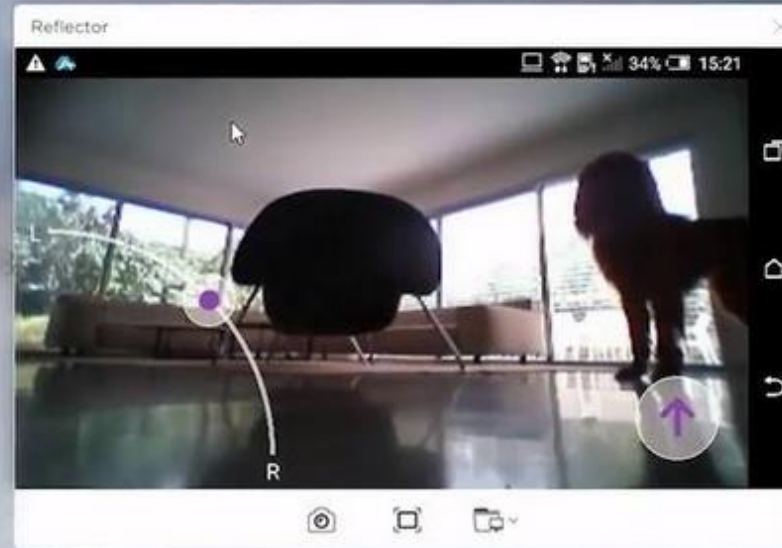
Forbes / Security / #CyberSecurity

Time To Update Your Vacuum Cleaner -- Hack Turns LG Robot Hoover Into A Spy



Security flaw in LG IoT software left home appliances vulnerable

THIS IS
WHAT THE
HACKER
SEES



Facts About Side Channel Analysis And Intel® Products



FACTS ABOUT THE NEW SECURITY RESEARCH FINDINGS AND INTEL® PRODUCTS

- [Overview](#)
- [Resources](#)
- [Frequently asked questions](#)

2018年初重大安全漏洞: Spectre & Meltdown

OVERVIEW

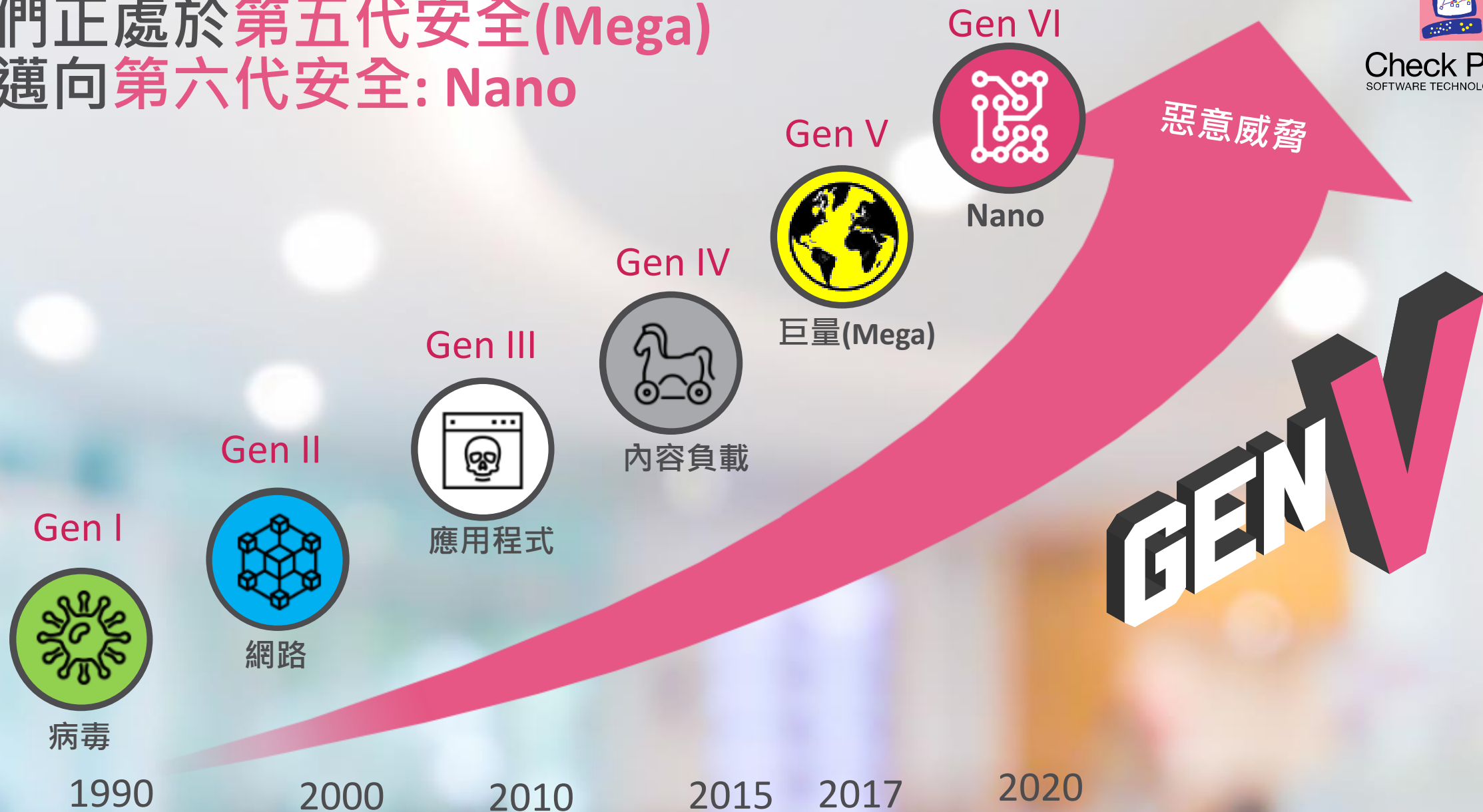
On January 3, 2018 a team of security researchers [disclosed](#) several software analysis methods that, when used for malicious purposes, have the potential to improperly gather sensitive data from many types of computing devices with many different vendors' processors and operating systems.

Intel is committed to product and customer security and to responsible disclosure. We worked closely with many other technology companies, including AMD, ARM Holdings and several operating system vendors, to develop an industry-wide approach to mitigate this issue promptly and constructively.

我們正處於第五代安全(Mega) 並邁向第六代安全: Nano



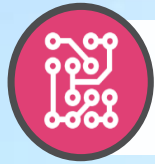
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IoT安全未來式: 第六代NANO安全

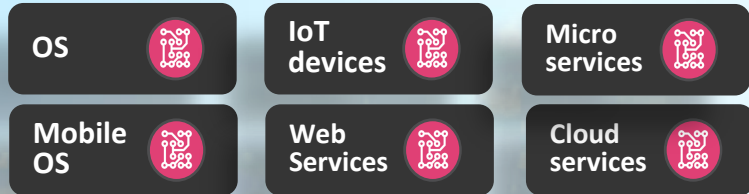


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NANO 代理程式

(開放原始碼) 軟體插件
控制所有裝置安全屬性

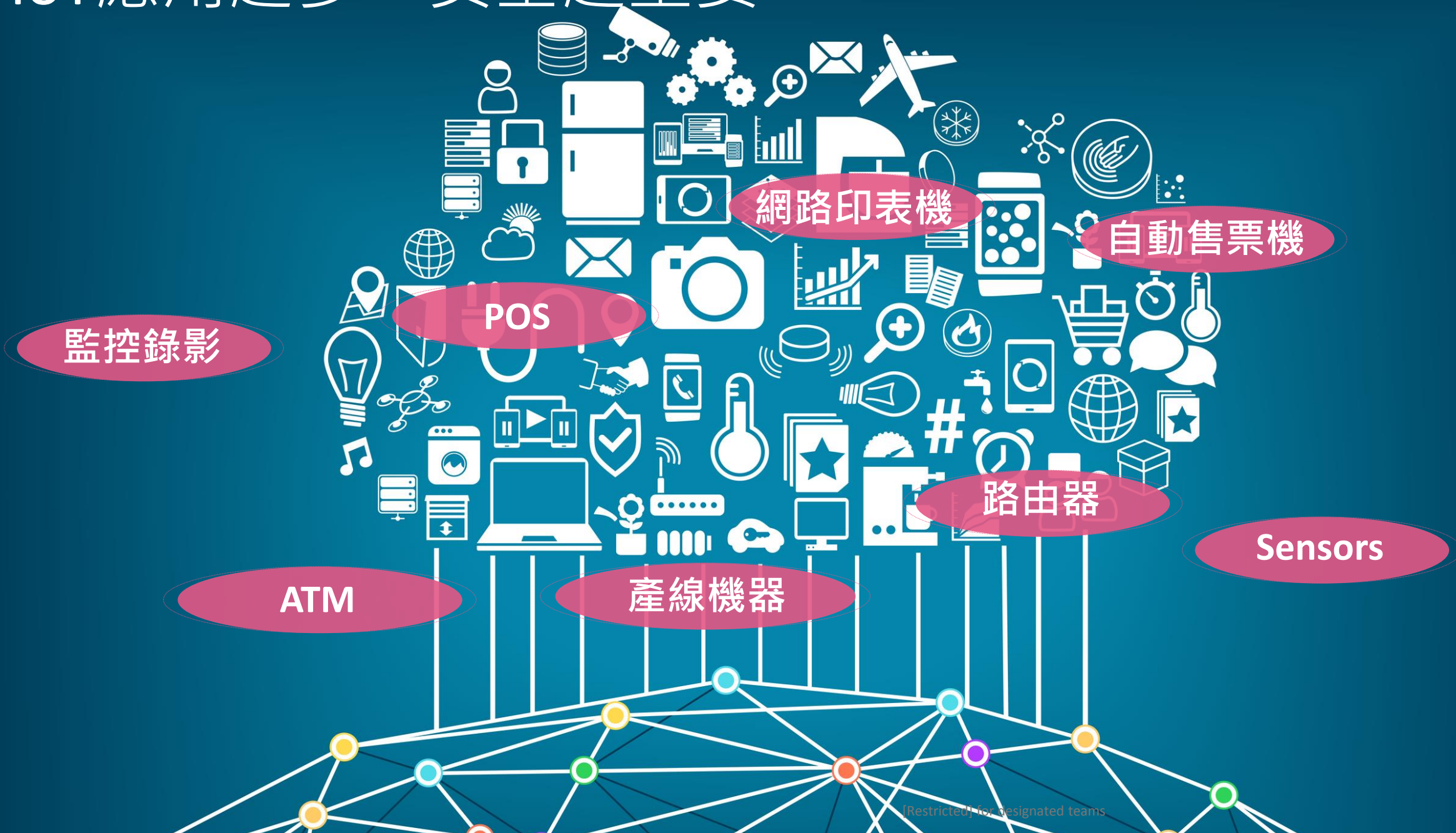


人工智慧威脅引擎與中央管理

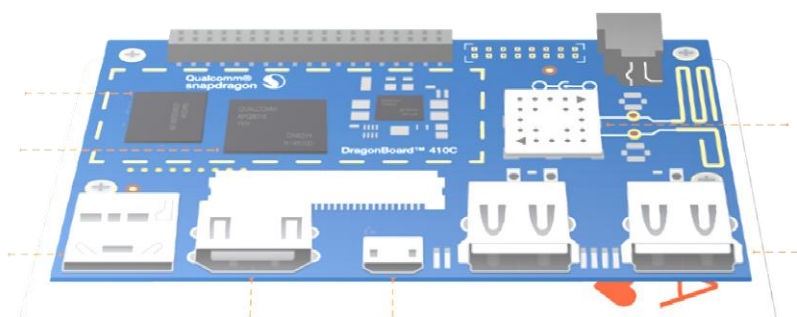
基於可分享的威脅智能分析
自動化安全管理政策



IoT應用越多，安全越重要



全面保護未來安全： 嵌入式安全系統與IoT網路閘道



全新IT世代 物聯網安全



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AI智能引擎
自適性的安全控制

電信

公用事業

自駕車

交通運輸

智慧城市

智慧家庭

雲

能源

智能建築

金融服務

醫療服務

科技製造



回到2018年... 去年嚴重資安事件敲響全球安全警鐘?

WannaCry

全球數千家企業，逾百國受害

French-elections

BadRabbit

NSA
Yahoo
WannaCry

NotPetya

wannaCry

EQUIFAX

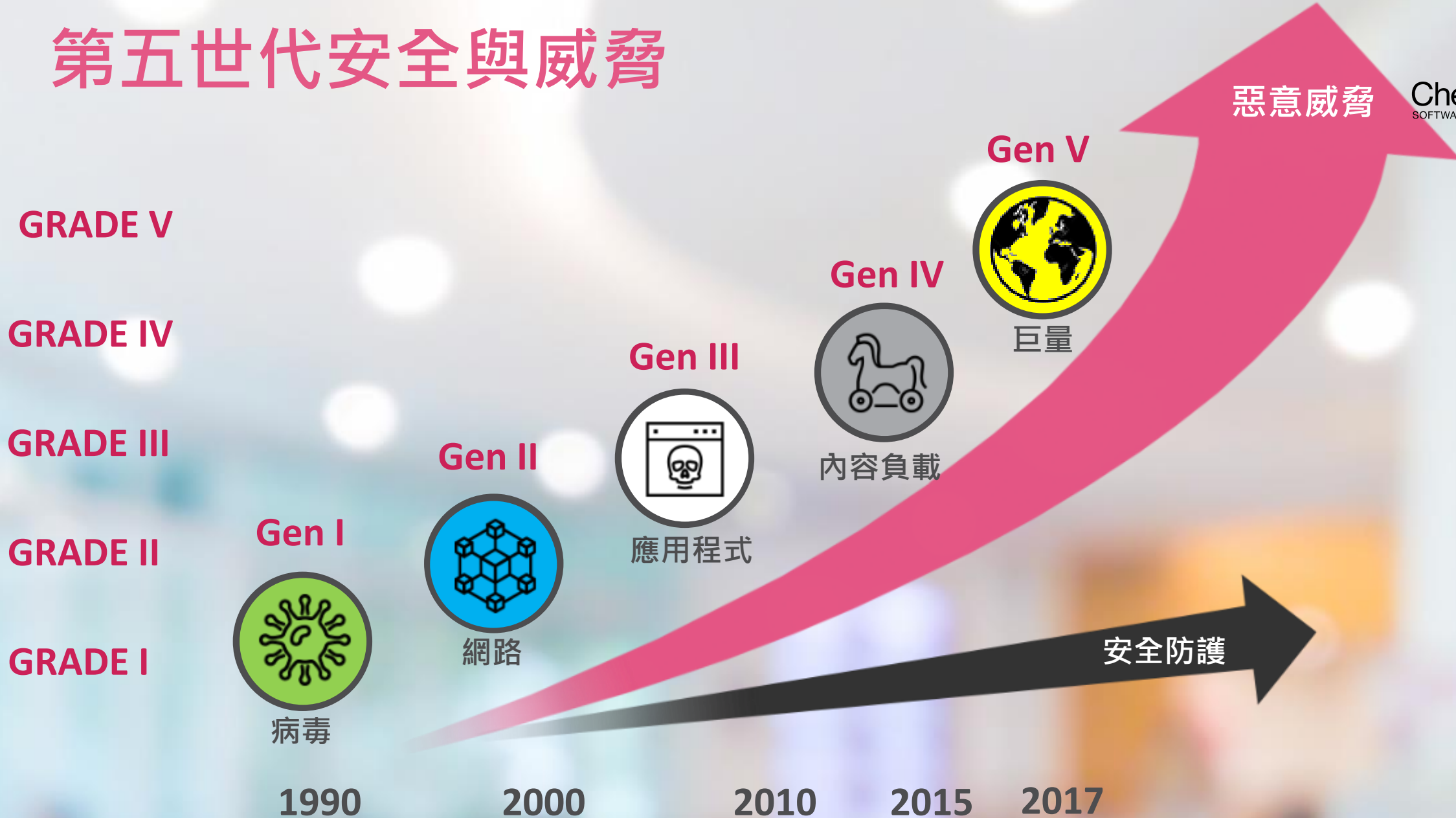
NotPetya

橫掃歐美60餘國，幾近癱瘓烏克蘭

第五世代安全與威脅



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惡意威脅

Gen V



巨量

Gen IV



內容負載

Gen III



應用程式

Gen II



網路

Gen I



病毒

安全防護

1990

2000

2010

2015

2017



第五代安全威脅: 巨量攻擊(Mega)



多重破口
(網路, 端點, 行動)



超巨規模



快速擴散



國家級別



橫跨產業



龐大損害



不同世代威脅與安全防護對照

Gen I

100%
of
businesses

1980'後期 -
PC攻擊 - 單點破壞

防毒軟體

Gen II

100%
of
businesses

1990'中期 -
外部網路攻擊

防火牆

Gen III

50%
of
businesses

2000s -
應用程式漏洞與系統弱點

入侵偵測系統(IPS)

Gen IV

7%
of
businesses

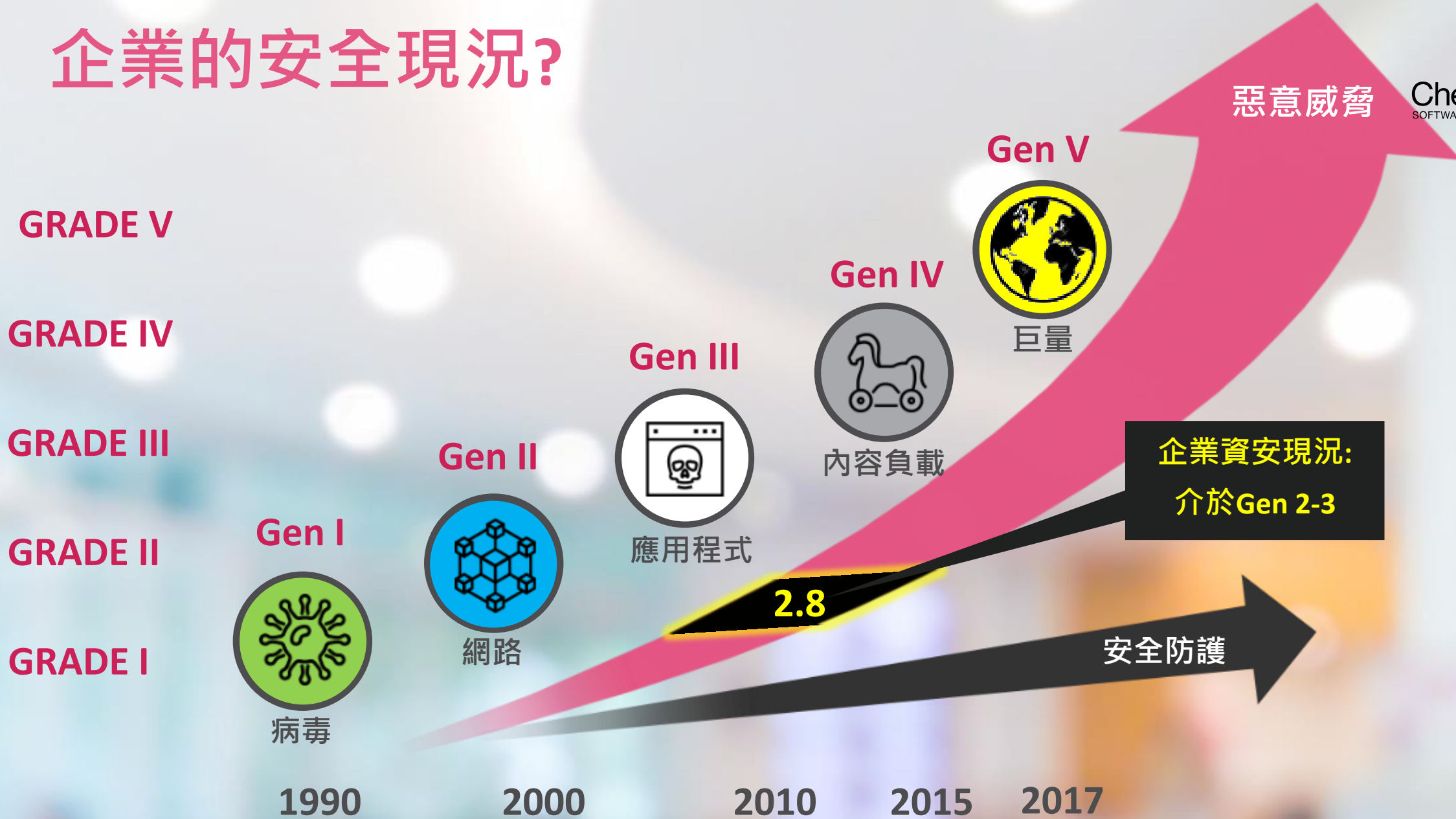
2010 -
多元型態惡意內容

沙箱檢測與殭屍防護

企業的安全現況?



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企業資安現況:
介於Gen 2-3

安全防護

即使已導入GEN IV 安全保護...可能還不夠!



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Gen IV



內容負載

2010 -
多元型態惡意內容

與殭屍防護

立即防禦威脅

GEN IV

全面防堵所有安全突破口:
雲、端點、網路、行動裝置

如何有效導入第五代安全架構?



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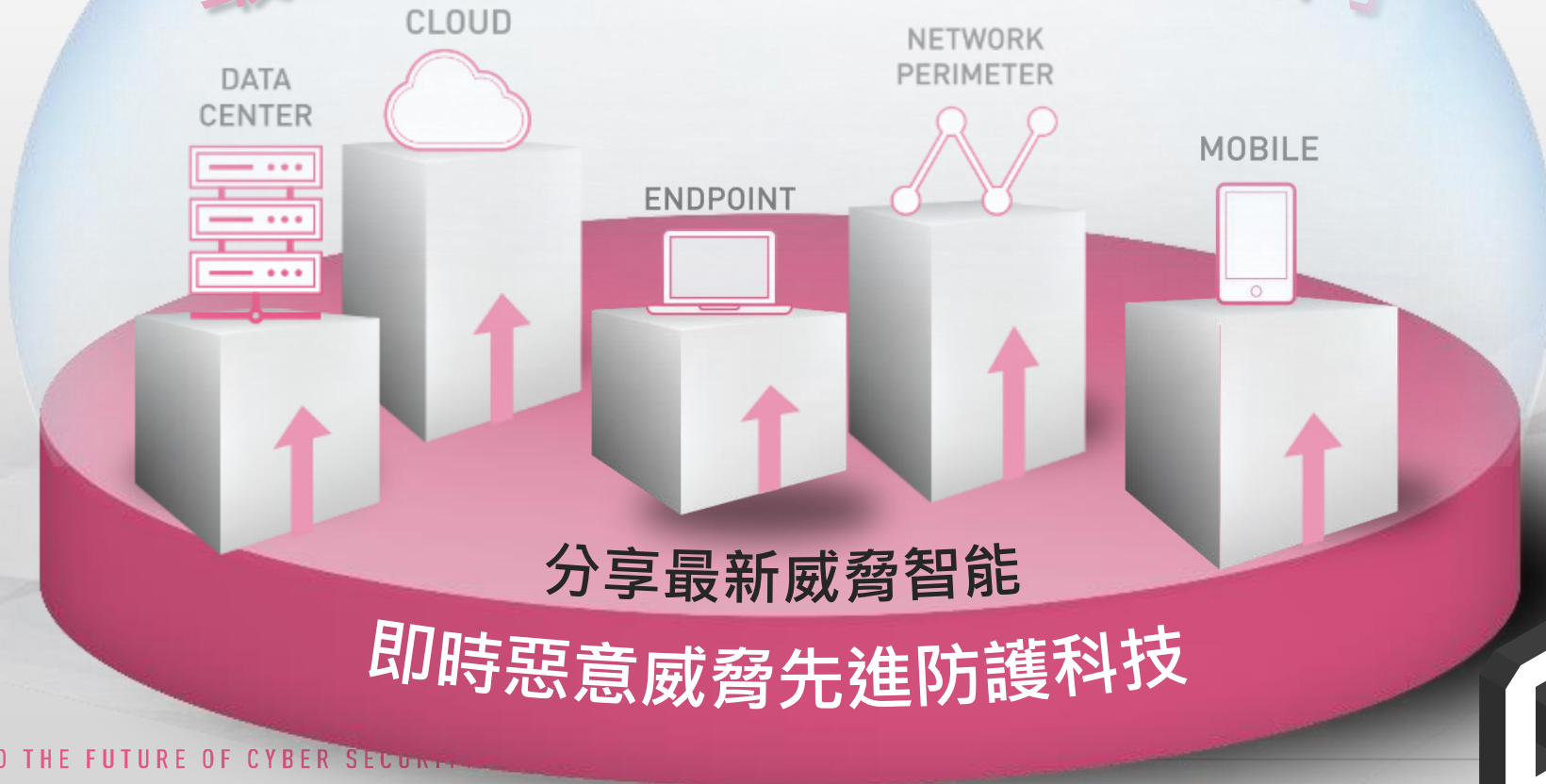


快速建構第五代安全模型



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智能統合管理介面
最佳安全方案防護所有面向



GEN5

是縱深防禦? 還是疊床架屋的拼裝安全?



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從現在開始，重新省思安全定義



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保護企業IT投資 訂定未來安全標準

Incident Response

Threat Extraction

Human Behavioral Analytics

DGA Detector

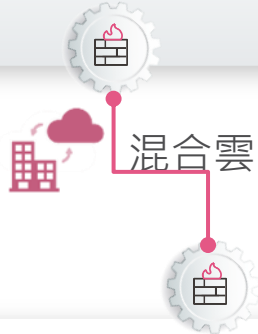
Data Encryption

Check Point Infinity Total Protection 安全架構



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雲端服務



邊際網路與資料中心



行動裝置



端點設備



分享即時威脅情資與智能

THREATCLOUD

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整合安全管理

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全球最大人工智能威脅引擎

THREATCLOUD

全球高達15萬台設備事件反饋

快速編譯威脅情資分析

即時安全特徵更新

500,000,000+
惡意檔案與站台資料

700,000 +
每日惡意程式偵測量

250,000,000
駭客中繼站

17,000,000
每週惡意攻擊
事件偵測量

11,000,000
惡意程式行為分析與
威脅特徵碼

最先進惡意威脅
數據資料庫





APT安全防護技術領導者



2017 'Recommended' vendor
Breach Prevention System



100% malware catch rate
Highest detection
Rate of malicious URLs



Security product of the



2015, 2016 and 2017
'recommended' vendor
Breach detection systems test



Best advanced persistent
threat (APT) protection



Leader
Automated malware analysis





Summary

- IoT安全風險與Nano Security
- 第五代安全防護要點
 - 即時防護、情資共享、整合管理
- 重新構思企業安全架構-Infinity





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THANK YOU

透過網路安全措施成就IoT連通世界

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