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GEN V

5세대 사이버 보안과 위험징후 분석을 통한 선제적 보안

한 승 수 | 보안 컨설턴트
체크포인트 코리아

WELCOME TO THE FUTURE OF
CYBER SECURITY
POWERED BY CHECK POINT INFINITY

CLOUD • MOBILE • THREAT PREVENTION

사이버 보안분야에서
어떤일이 일어나고 있을까요?

2017년의 사이버 보안이 시사하는 것들

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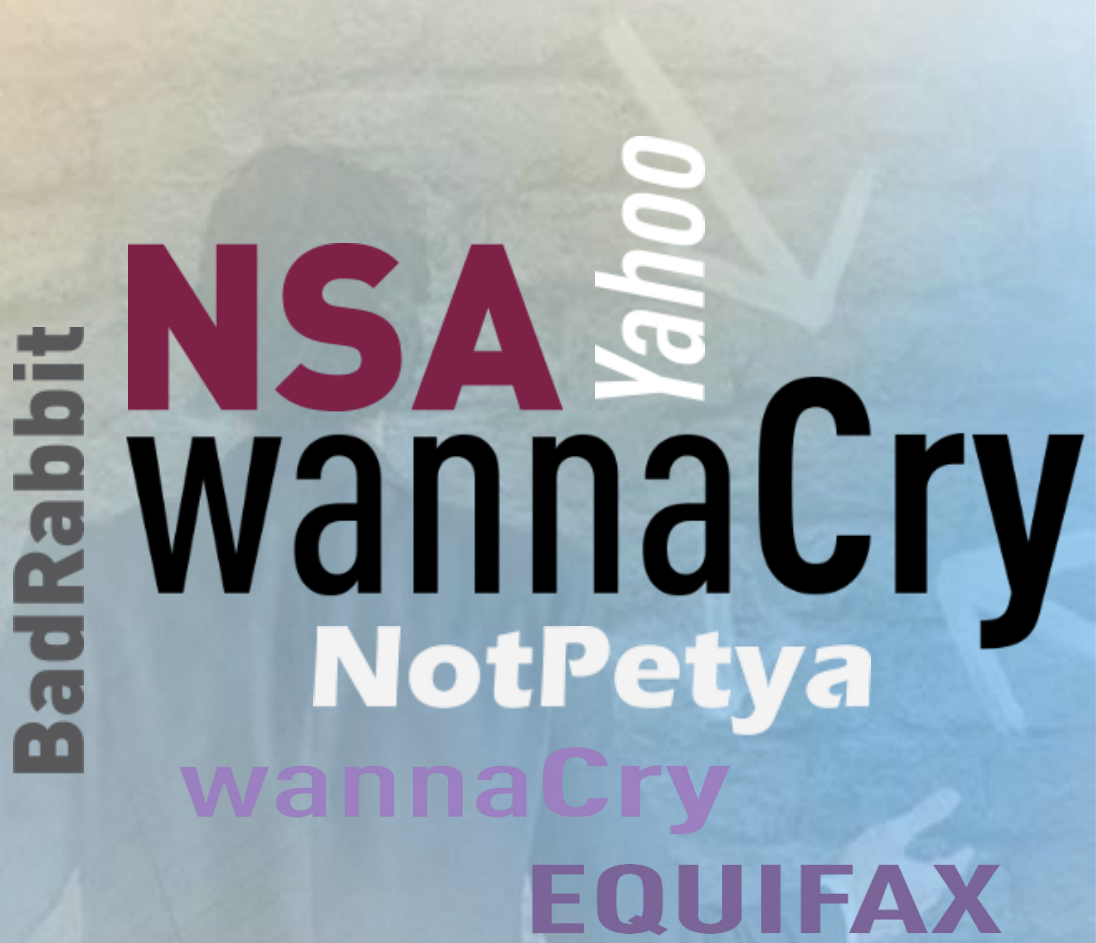
WannaCry
99개 국가에 걸쳐 수 천개 기업

NotPetya
한 국가를 전체적으로 다운시켰으며 60개 이상국가에 영향

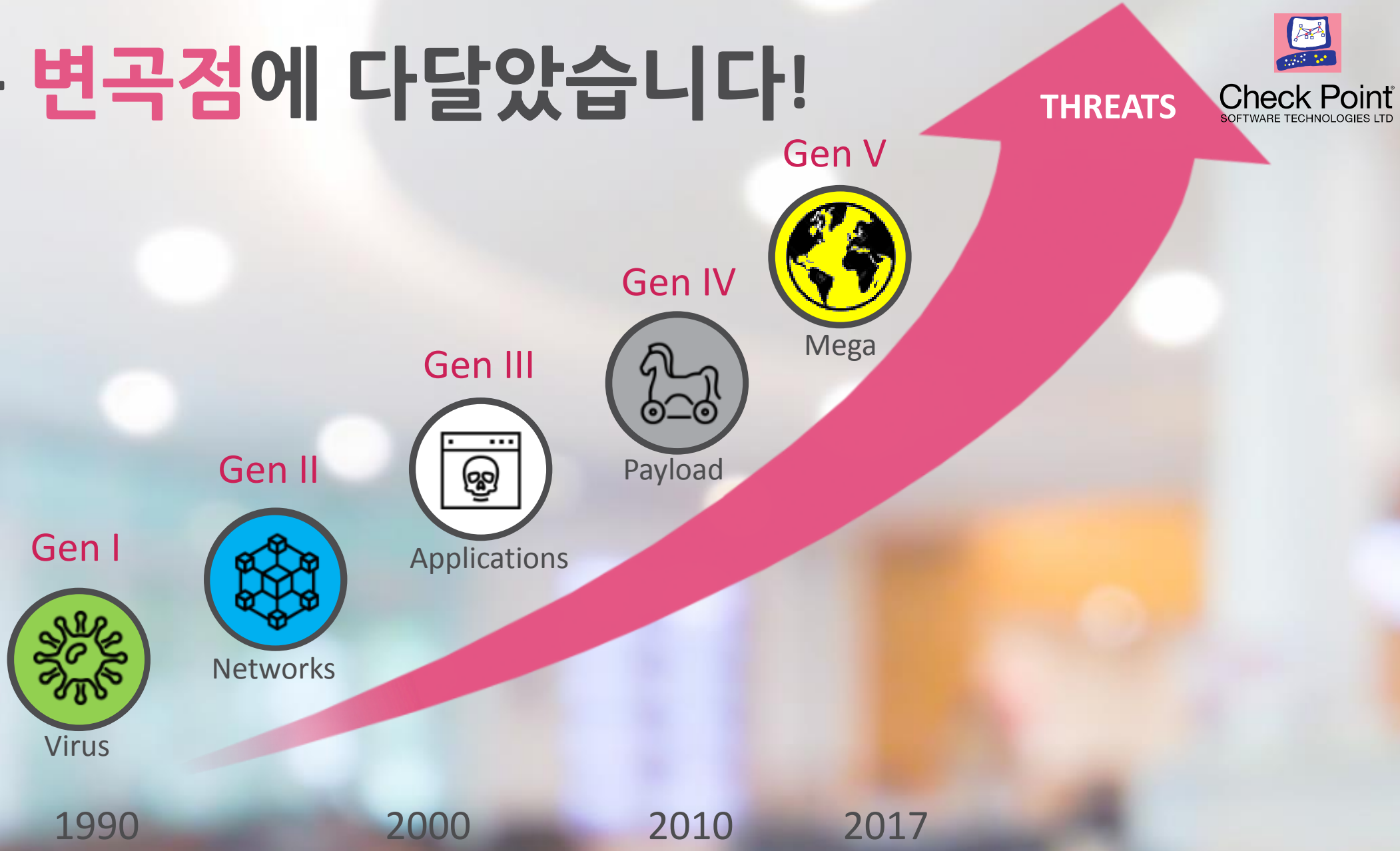


2018년 글로벌 리스크 리포트 - 세계경제포럼

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

우리는 변곡점에 다달았습니다!



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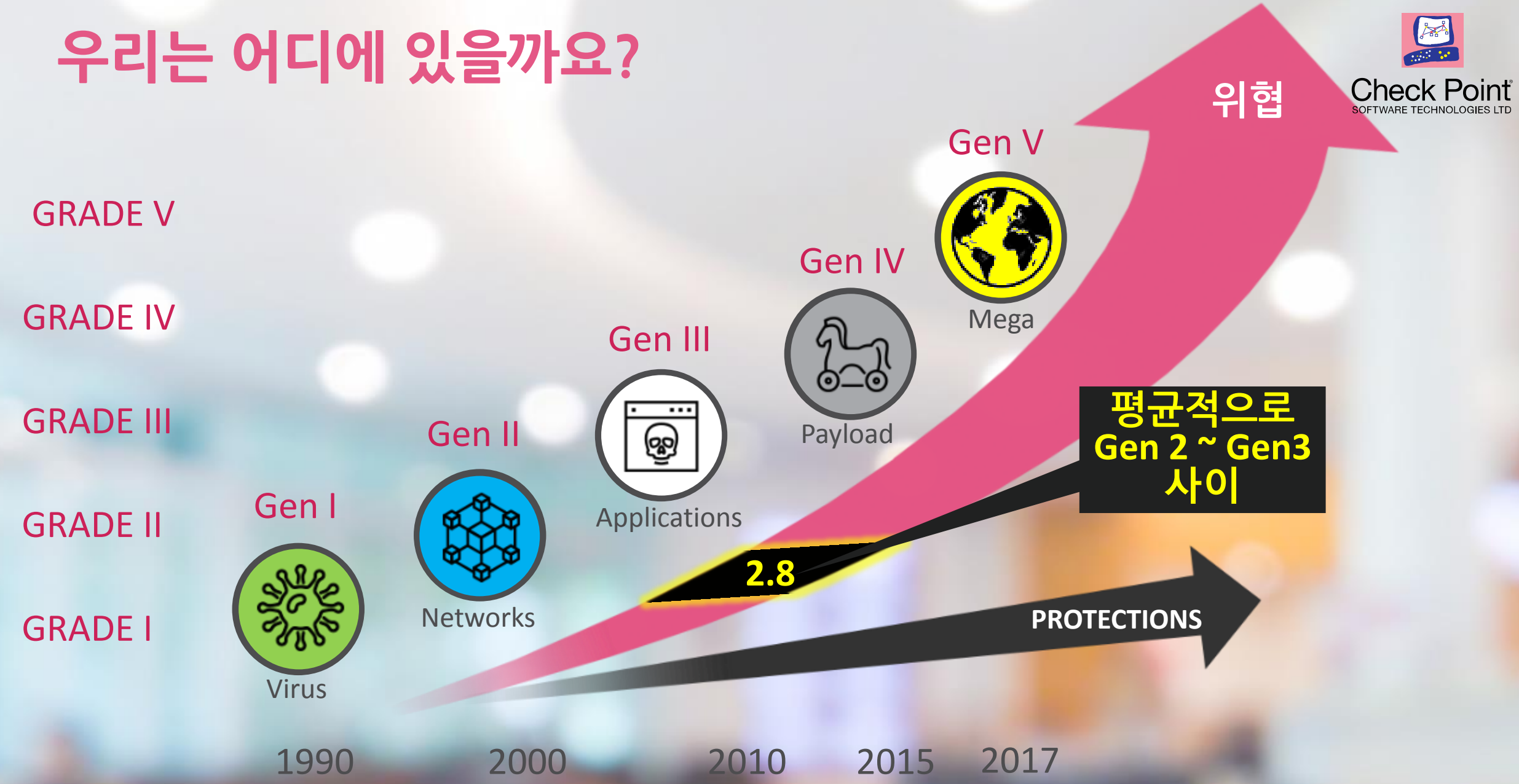
사이버 공격의 세대구분 및 특징

각 세대의 공격과 방어

우리는 어디에 있을까요?



2018 – GEN V 사이버 공격

대규모 (across country and industry)

멀티-벡터 (network, cloud, mobile)

정부기구가 후원하는 수준의 기술활용

GEN IV 방어는 충분치 않습니다!

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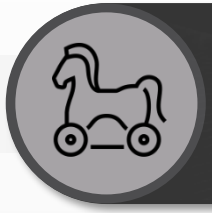
Gen IV



2010 -
Polymorphic Content

SandBoxing
and Anti-Bot

PAYLOAD

차단기반의 방어
(탐지에 그치지 않는)

실시간으로 동작

가장 약한 부분인 클라우드와 모바일을
포함하는 보안

MEGA ATTACK 시대를 대비하는
GEN 5 PROTECTION을 소개합니다

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어떤 요소들이 필요할까요?

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BEST SECURITY TECHNOLOGIES

GEN V를 실현하기

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우리가 어떻게 GEN V 보안으로 나갈 수 있을까요?

우리는 다양한 보안 기술이 필요 합니다

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우리는 다양한 보안 기술이 필요 합니다

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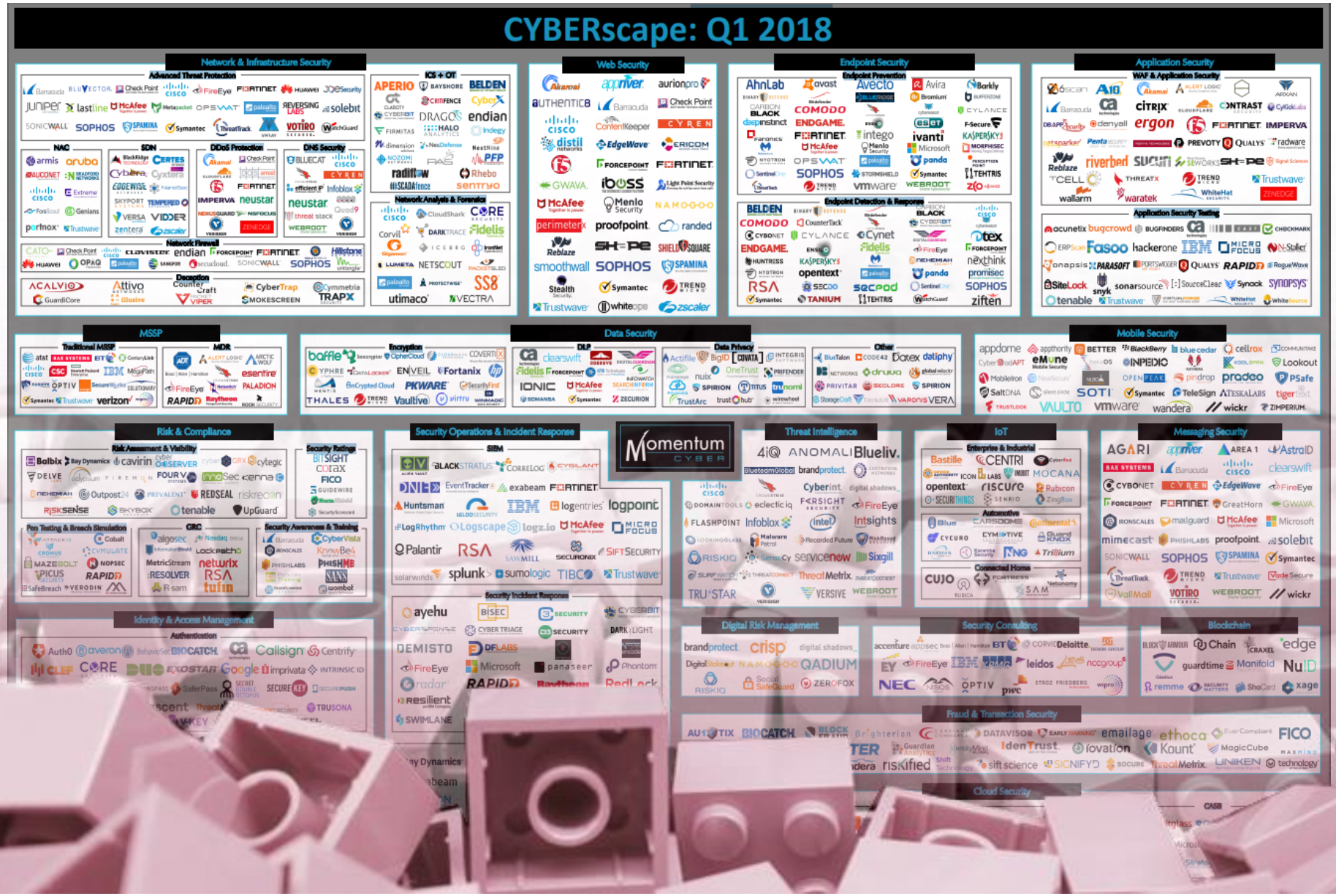

체크포인트 인피니티는 가능합니다

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네트워크, 클라우드 및 모바일 환경을
아우르는 최초의 통합형 보안으로 가장 높은 수준의
위협 방지 기능 제공

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클라우드

모바일

위협 방지
(Threat Prevention)

통합 시스템

엔터프라이즈를 위한
진보된 위협 차단 플랫폼

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샌드박스

THREAT EMULATION

특화된 탐지 엔진 30개

알려지지 않은 말웨어나
제로데이 공격들에 대한
탐지 및 차단 제공

무해화

THREAT EXTRACTION

지연없이 재구성된 안전한
파일을 전달

샌드박스 - CPU LEVEL 탐지

CPU 레벨에서 이상행위를 탐지하여 익스플로잇 시도를 차단

말웨어가 다운로드 되기 전에
그리고 우회 코드가 실행되기 전에..

무해화

THREAT EXTRACTION

파일을 안전하게 재구성하여
제공하며, 지연 발생 없음

유입되는 문서를 깨끗히 재구성

✓ 잠재적으로 위험한 컨텐츠를 제거하거나 PDF로 변환

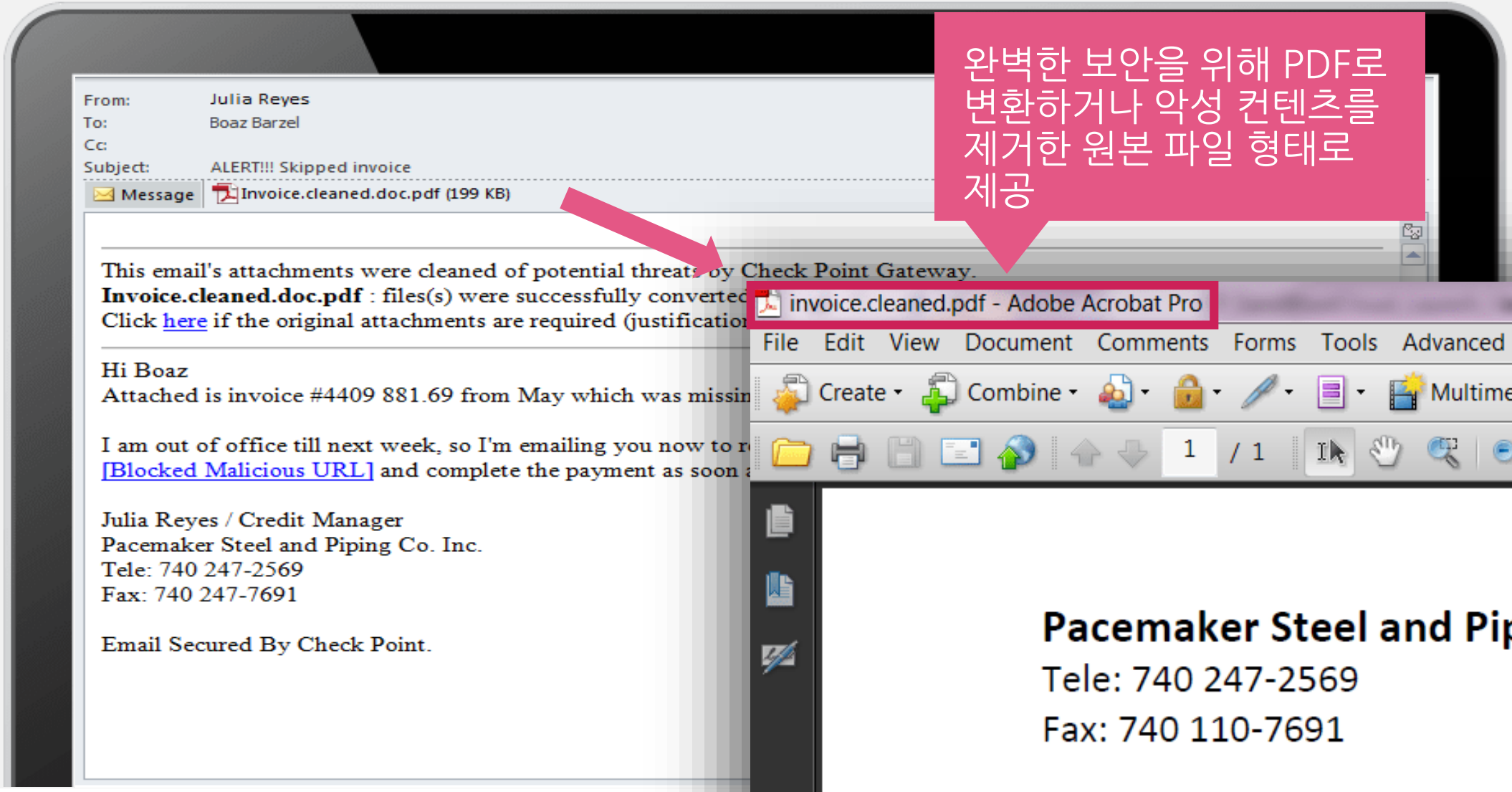
깨끗히 재구성된 문서는 수초내에 전달되며,
샌드박싱은 백그라운드에서 수행

에뮬레이션 결과가 “정상”인 경우
사용자가 직접 원본 파일 다운로드 가능

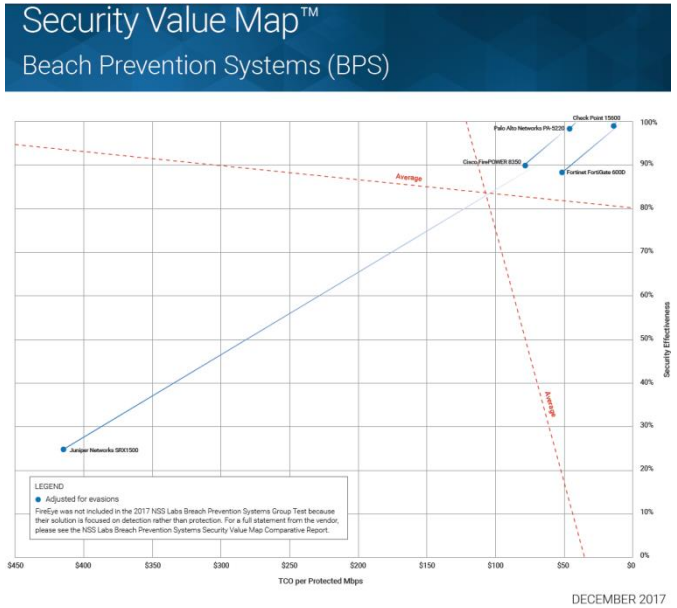
THREAT EXTRACTION DEMO

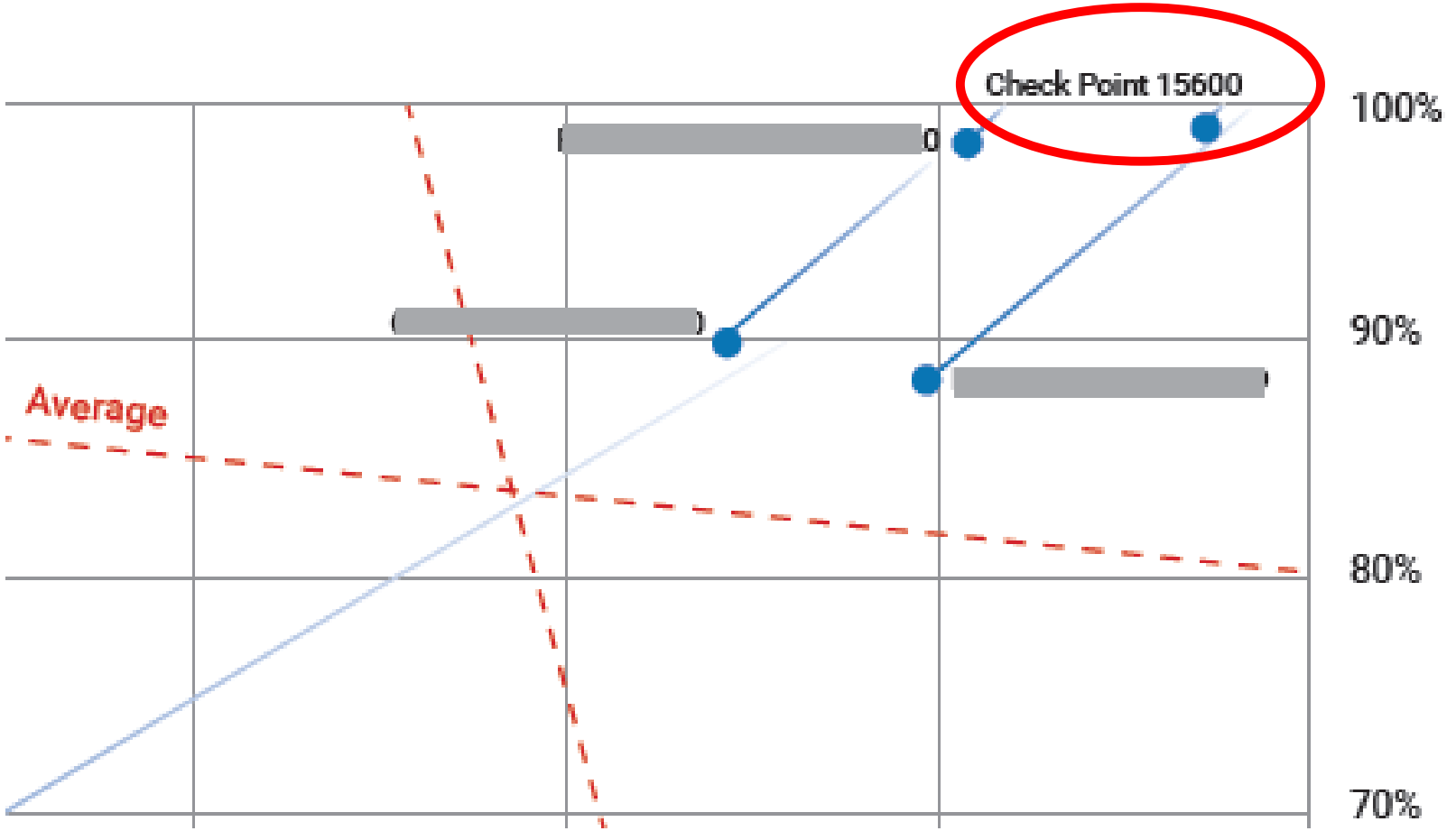
첨부 파일에 대한 즉각적인 보호

안전한 파일을 신속히 전달



NSS Labs의 Breach Prevention Systems Test (2017년 12월)





- ✓ 최고의 공격차단율과 제일 적은 총 소유 비용
- ✓ 체크포인트 데이터시트 대비 3배의 성능으로 평가 (15600, 9.2G)

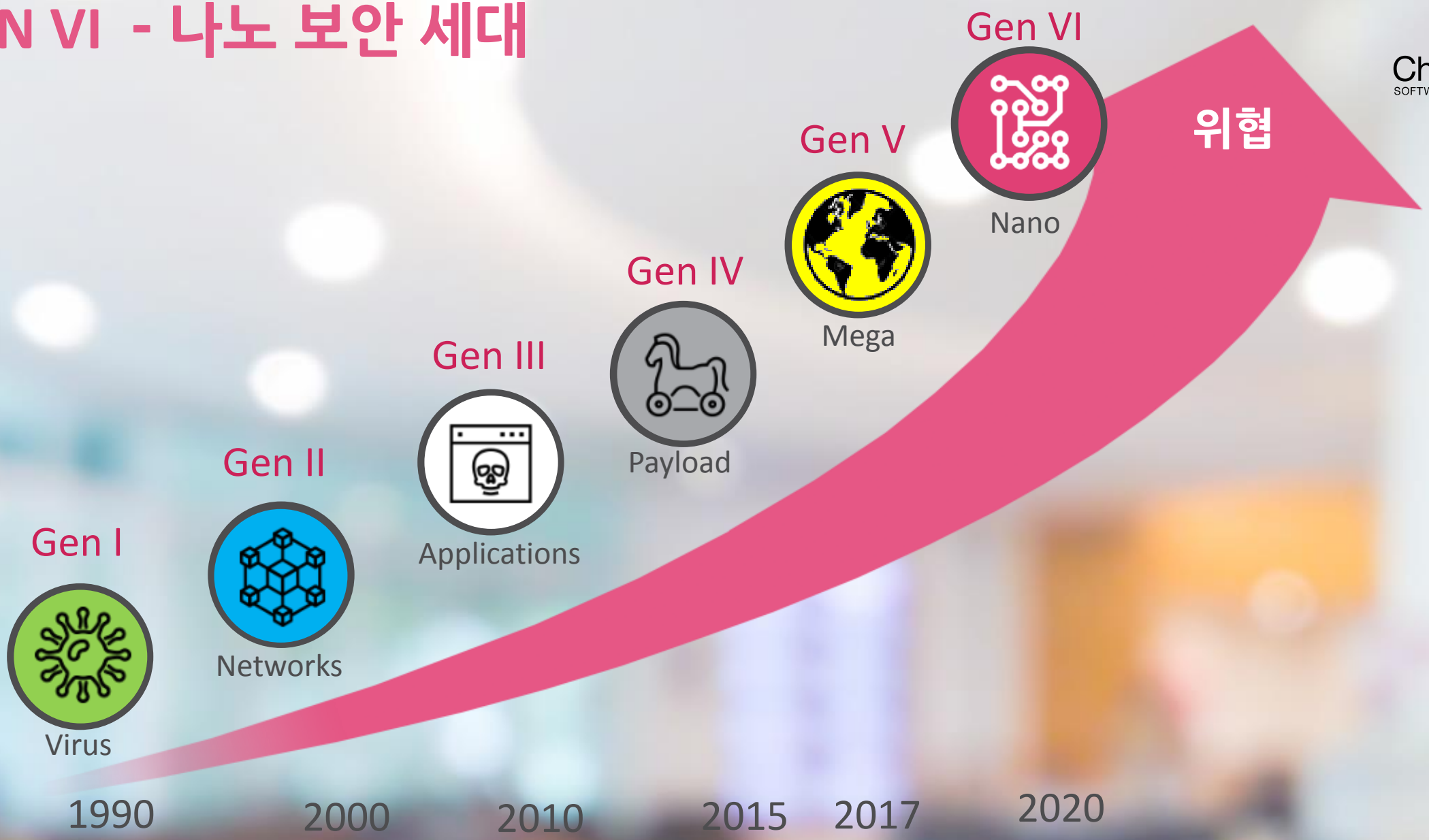
그리고 다음에는 어떤일이 일어날까요?

age of THINGS

"컴퓨터 네트워크"를 다루는 것에 그치지 않음

모든것이 서로 연결되고, 모든것이 타겟이 됨

GEN VI - 나노 보안 세대



age of THINGS

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GEN VI - 나노 보안을 소개합니다

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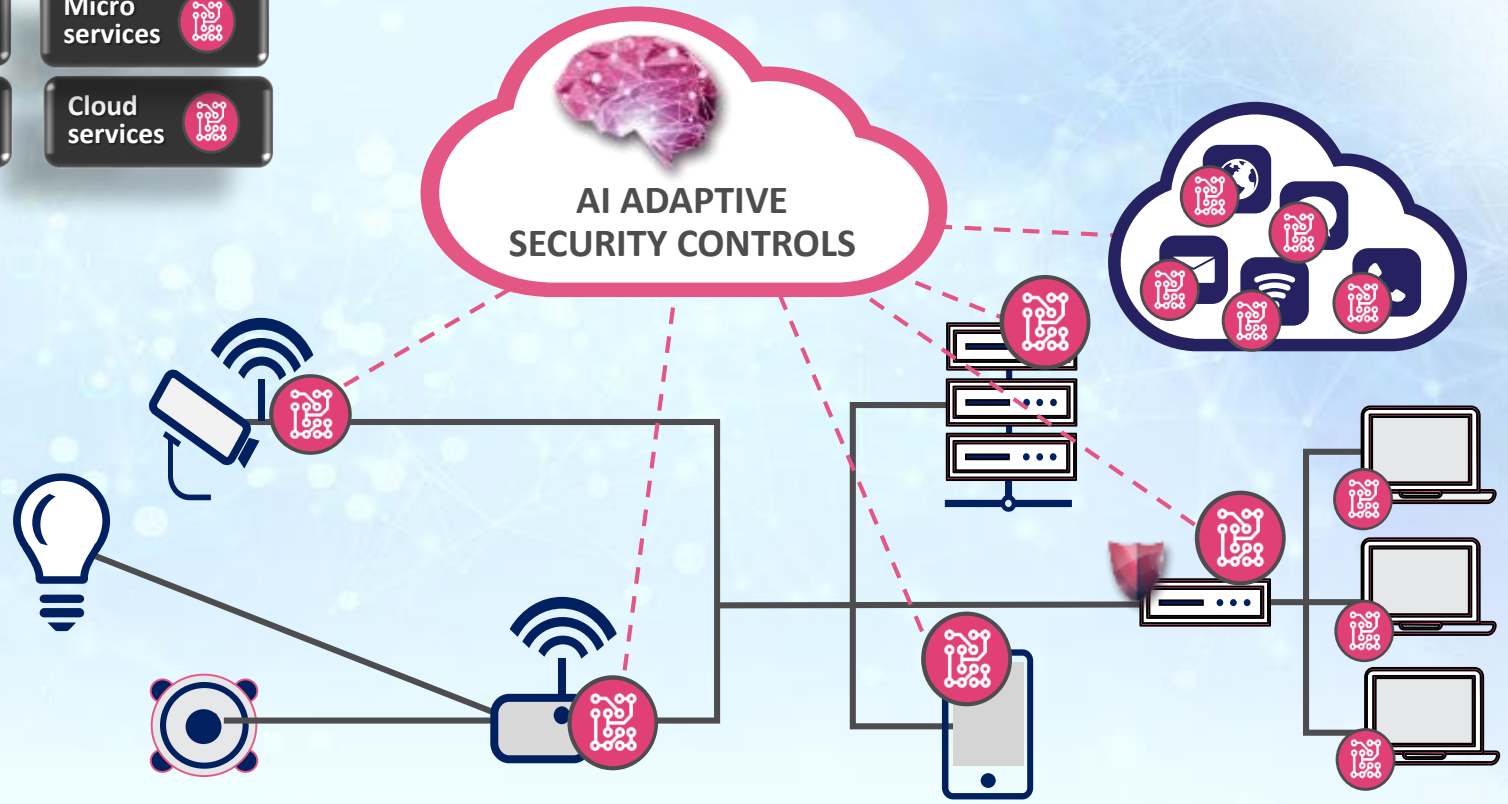
나노 에이전트

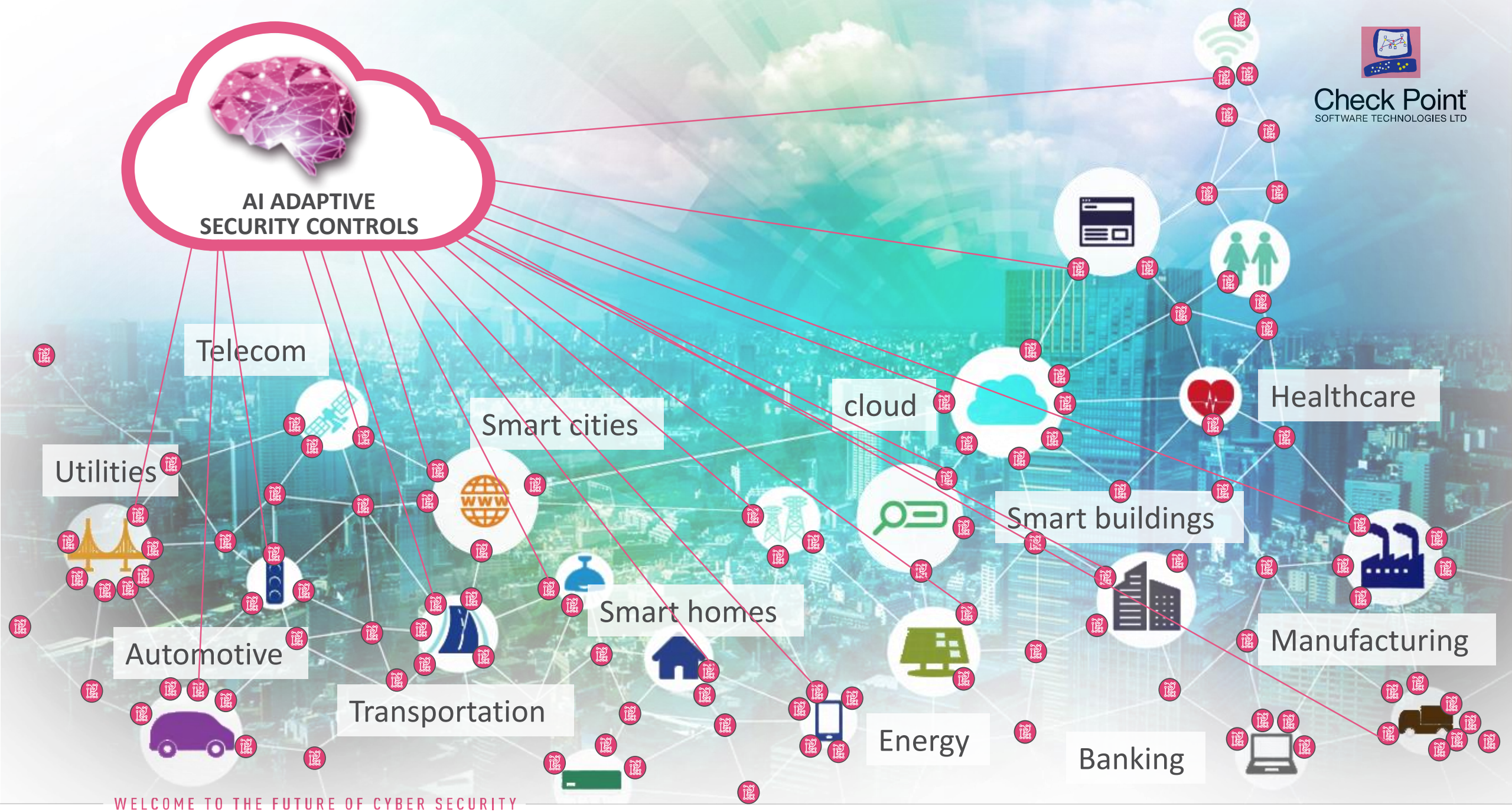
보안관련된 모든 속성을 통제하는
소프트웨어 플러그 인

- OS
- IoT devices
- Micro services
- Mobile OS
- Web Services
- Cloud services

인텔리전스와 컨트롤

AI에 기반한 예측 보안 지침





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선제적 보안을 위한
사이버 위협 인텔리전스

클리어, 딥 & 다크 웹

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클리어 웹

4 % of WWW **컨텐츠**
- Searchable
- Social media

딥 웹

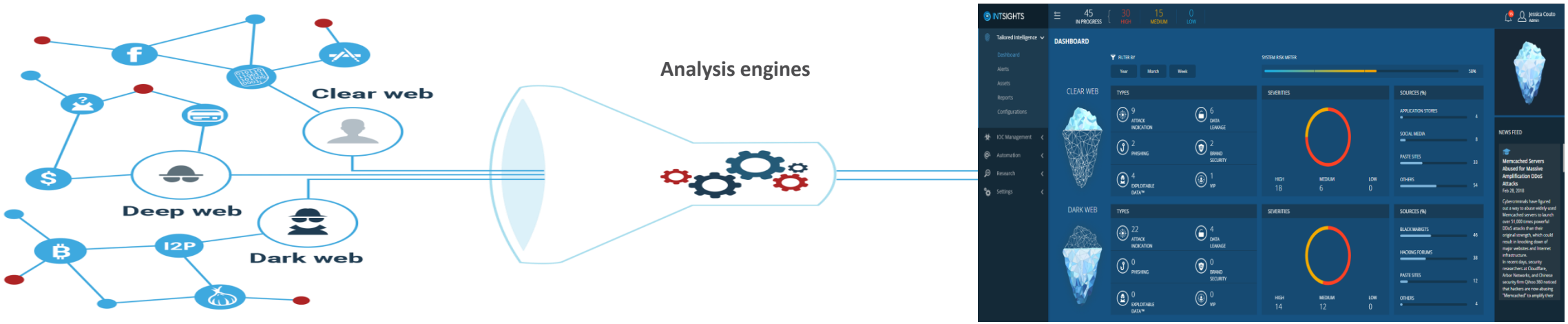
95 % of web **컨텐츠**
- Not searchable by most engines
- Password protected content

다크 웹

1 % of web **컨텐츠**
- Home to TOR, IRCs, BitTorrent, hacker forums, C2s, and more.
- ***공격이 준비되어 지고, 해킹 도구를 살 수 있으며, 정보가 거래되되고, 말웨어가 개발되고 테스트되고 판매되는 곳***

인텔리전스기반 보안

- **탐지** - Clear, Deep & Dark 웹 등 다양한 범위에 걸친 계속적인 스캐닝
- **분석** - 사이버 위협을 실시간으로 분석, 카테고리화 및 우선 순위 설정
- **경보 및 위협제거 방안**- 사이버 인텔리전스를 액션을 취할 수 있는 보안 alert로 변환하고 위협제거 방안 지원



Demo - THE STORY

홍 길 동 - XX 금융 CSO

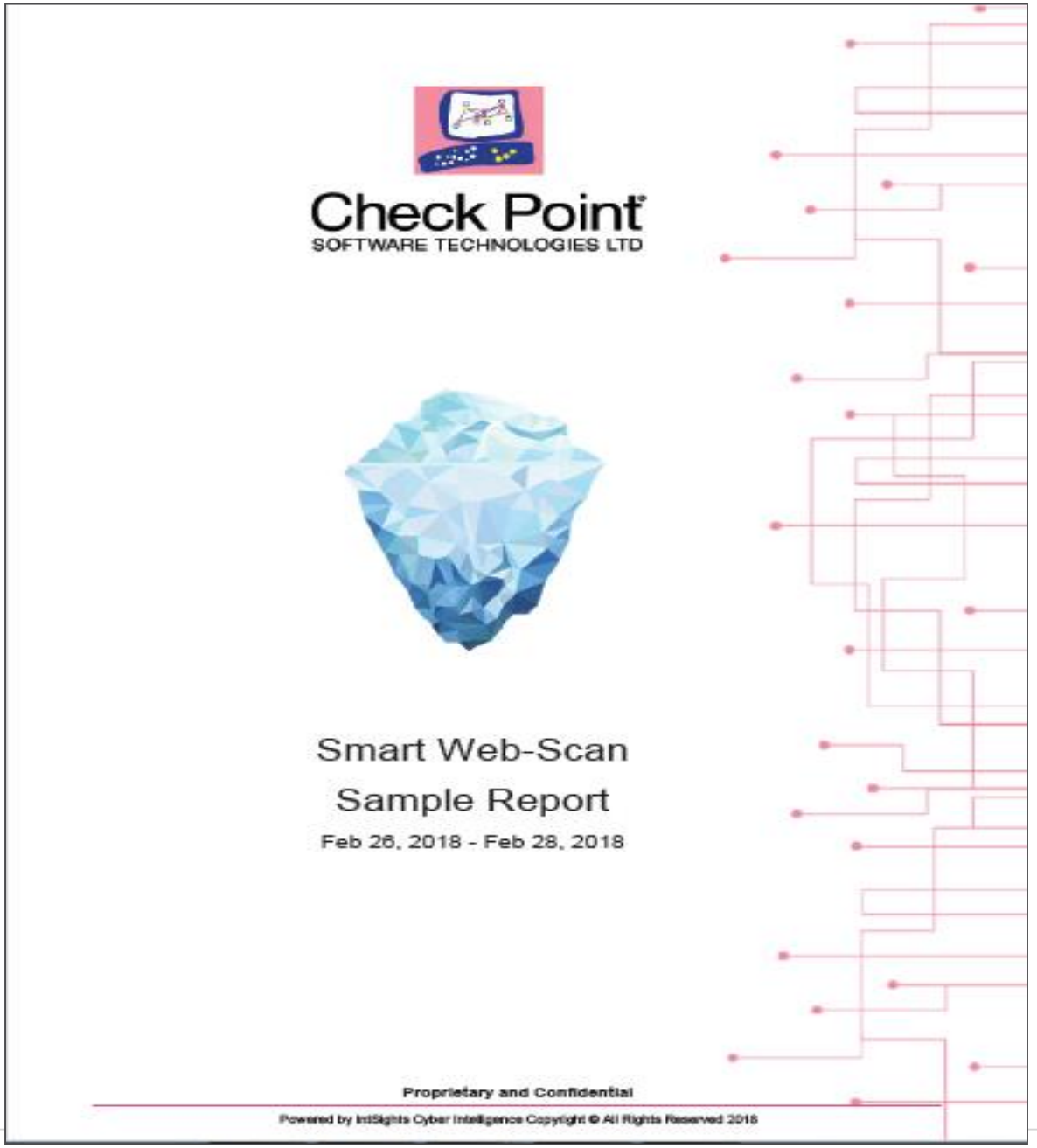
회사 SNS 사칭은?

회사 웹 사이트는 안전한가?

직원 정보 유출 사례는 없나?

우리회사에 대한 공격징후는 없나?

샘플 리포트



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Summary

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Background

The goal of this report is to provide a clear intelligence overview of the cyber threats your company was confronting during Feb 26, 2018 - Feb 28, 2018. The intelligence findings are based on alerts that were detected and provided via the portal. We scan thousands of sources in the Dark Web (closed networks characterized by underground activities) and many more in the Clear Web (The known-to- all web accessible by regular search engine), including black markets, hacking forums, search engines, paste sites, app stores etc.

This report shows the main alerts we detected among many others.

Alert Summary

Distribution of alerts by alert types and severity levels:

	Attack Indication	Data Leakage	Phishing	Brand Security	Exploitable Data	VIP	Total
High	18	9	1	2	1	1	32
Medium	13	1	1	0	3	0	18
Low	0	0	0	0	0	0	0
Total	31	10	2	2	4	1	50

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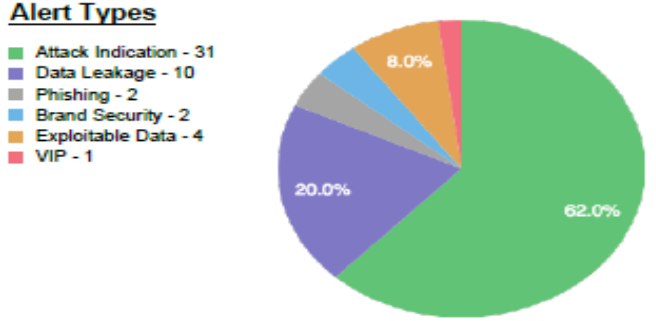
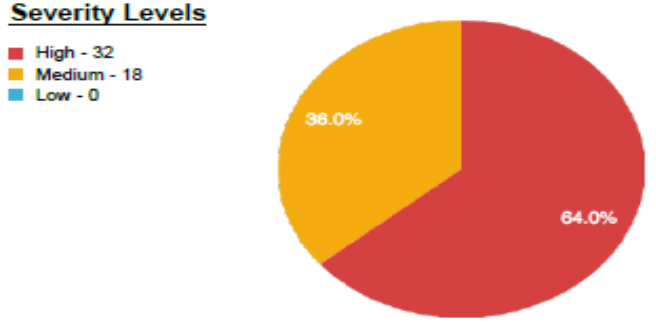
Statistics

Alert Types



Severity Levels



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Phishing

Phishing is one of the most common cyber-attacks. Since it takes advantage of the human factor it is very dangerous to any organization with any level of security. It seems that hackers take advantage of your brand in order to seduce its employees or customers to hand in sensitive information.

Highlighted Phishing alerts:

Severity	Source Date	Title	Source URL
Medium	Jan 30, 2018	Registered suspicious domain - '[redacted].com'	http://[redacted]
Medium	Dec 19, 2017	Registered suspicious domain - 'in[redacted].com'	http://in[redacted]
Medium	Jun 21, 2018	Registered suspicious domain - 'in[redacted].com.au'	http://in[redacted]
Medium	Jun 21, 2018	Registered suspicious domain - 'int[redacted]de'	http://inter[redacted]
Medium	Jun 21, 2018	Registered suspicious domain - 'int[redacted].ga'	http://in[redacted]
Medium	Jun 21, 2018	Registered suspicious domain - 'in[redacted].nl'	http://inte[redacted]nl

Data Leakage

Leaked sensitive data may cause direct damage to the company. Leakage of credentials or technical data can result in a data breach, while leakage of other sensitive information can result in a direct business damage.

Highlighted Data Leakage alerts:

Severity	Source Date	Title	Source URL
Medium	Nov 09, 2016	Dark Web - 35 login credentials of employees were leaked	N/A
Low	Nov 25, 2017	1 login credentials of employee were leaked	N/A
Low	Aug 30, 2016	Dark Web - 34 login credentials of employees were leaked	N/A
Low	Jun 02, 2016	Dark Web - 5 login credentials of employees were leaked	N/A
Low	May 30, 2016	Dark Web - 1 login credentials of employee were leaked	N/A
Low	May 18, 2016	Dark Web - 21 login credentials of employees were leaked	N/A

Brand Security

Fake social media profiles and fake mobile applications can be used for social engineering against the company employees and customers, in the purpose of phishing and/or scamming activities.

Highlighted Brand Security alerts:

Severity	Source Date	Title	Source URL
High	May 28, 2018	A suspicious mobile application was detected	http://apkpure.co/%EC%9D%B8%ED%84%B0%ED%8C%8C%...
Medium	Jun 21, 2018	Suspicious Google Plus account	https://plus.google.com/109797011807038902495?...
Medium	Jun 21, 2018	Suspicious Google Plus account	https://plus.google.com/112489762697961841086?...
Medium	Jun 21, 2018	Suspicious Instagram account	N/A
Medium	Sep 12, 2017	A suspicious mobile application was detected	http://apkpure.co/[redacted]
Medium	Jul 24, 2017	A malicious mobile application was detected	http://allfreeapk.com/[redacted],5...

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Attack Indication

Detection of upcoming cyber-attacks is crucial for effective security operations. In addition, it's important to detect the effects of past attacks, in order to understand the full scope of the damage and prepare for the next one.

Highlighted Attack Indication alerts:

Severity	Source Date	Title	Alert ID	Source URL
High	Jul 01, 2016	Company website is on an SQL Injection vulnera...	5a971afd8eceab00068c43e8	N/A
High	Invalid date	Company product was hacked	5a971afd8eceab00068c43ed	N/A
High	Jul 01, 2016	Dark Web - Company documents are offered for s...	5a971afe8eceab00068c43f4	N/A
High	Jul 03, 2016	Company employees are on a target list	5a971b0b8eceab00068c4471	N/A
Medium	Apr 13, 2017	Dark Web - Technology in use is targeted by...	5a971b318eceab00068c4599	N/A
Medium	Feb 28, 2018	Company domain is embedded in a malware code	5a971b218eceab00068c4524	N/A

VIP

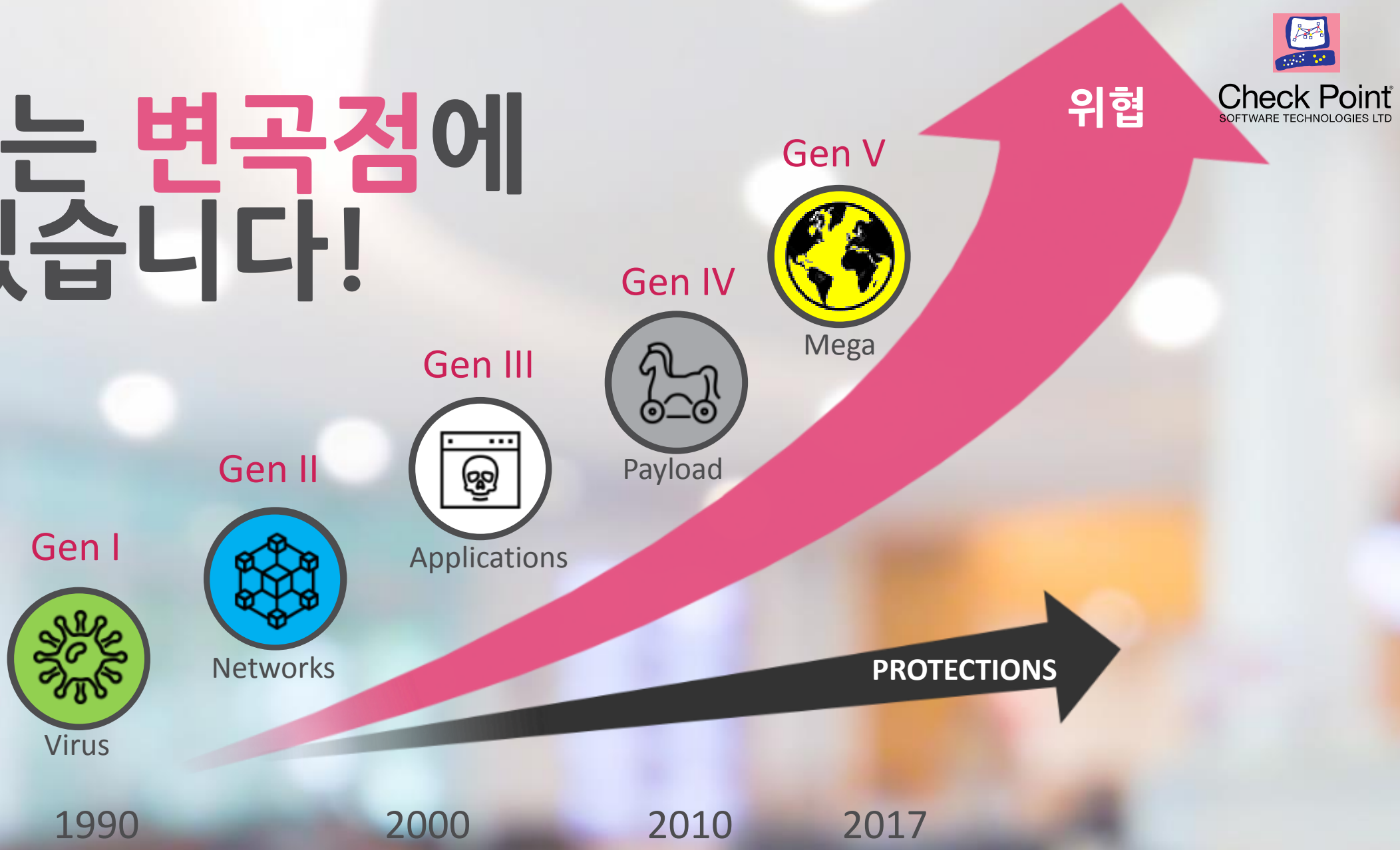
VIP are main targets of hacking because of their key positions and the sensitive data they are exposed to. Also, they can be targeted by frustrated customers and past employees, who seek to protest against the company activities.

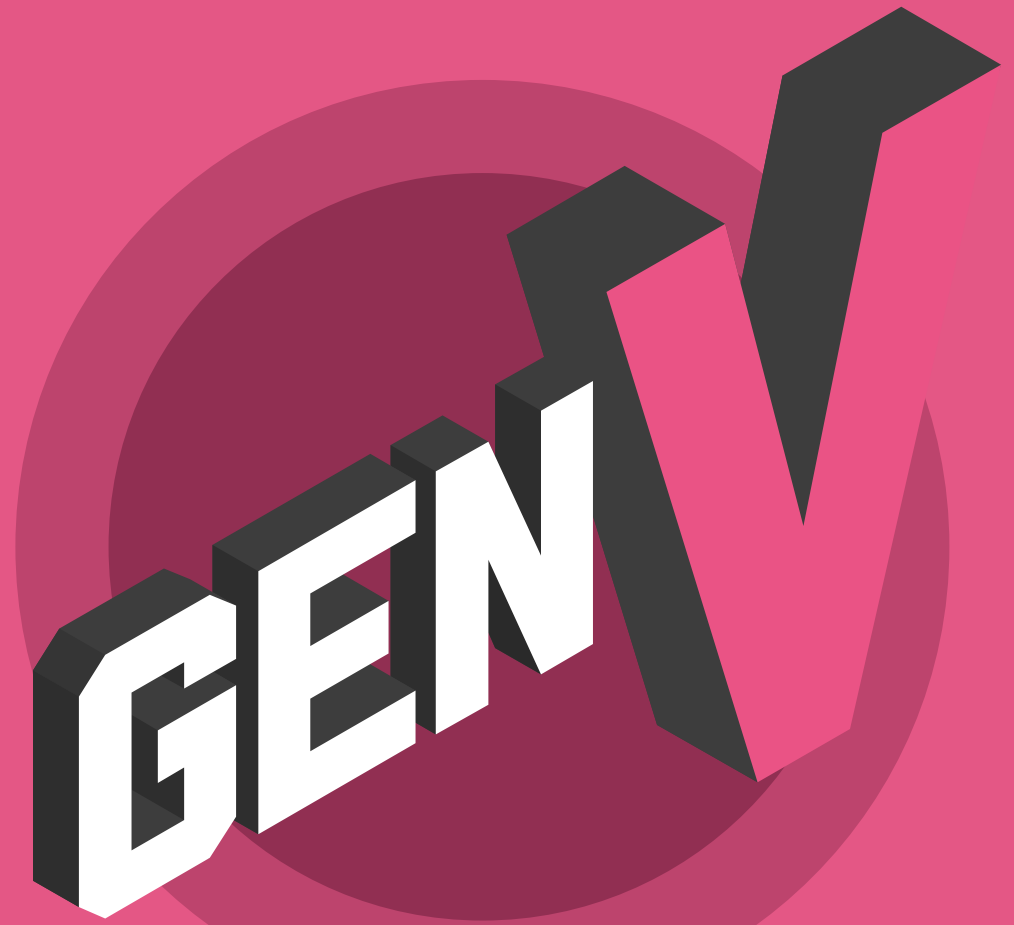
Highlighted VIP alerts:

Severity	Source Date	Title	Source URL
Medium	Nov 29, 2017	VIP - 1 login credentials of employee were leaked	N/A
Low	May 10, 2017	VIP - 1 login credentials of employee were leaked	N/A

SUMMARY

우리는 변곡점에 서 있습니다!





최고의 보안,
실시간 보호

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