



Check Point
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SECURITY CHANGING DYNAMICS

From Known to Unknown

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Challenges for Cyber Security

New thinking required in Cyber Security

Why Checkpoint?



➤ Business Needs Are Changing Network

Out Sourcing

IoT

Information
Sharing

Cost Effective
Options

BYOD

24x7 Access/
Connectivity



If Network are evolving as Business need changes, the Cyber Security have to Evolve and stay

ONE STEP AHEAD

of ever changing Business Needs

➤ Threats Evolution



- **Known Exploits/Malware**

Done with Motivation for making their names and for Fame. Hence easy to detect and prevent with conventional solution such as NGFW

- **Unknown- Unknown** or Zero-Day Exploit/Malware

These attacks can be States sponsored or Competitor sponsored.

Main motive is to make money and to remain hidden as long as possible



- **Known- Unknown** Exploits/Malware

Interestingly 80 to 85% attacks are known attacks modified to avoid detection by conventional Security



There are known knowns

2012 vulnerabilities



2013 vulnerabilities



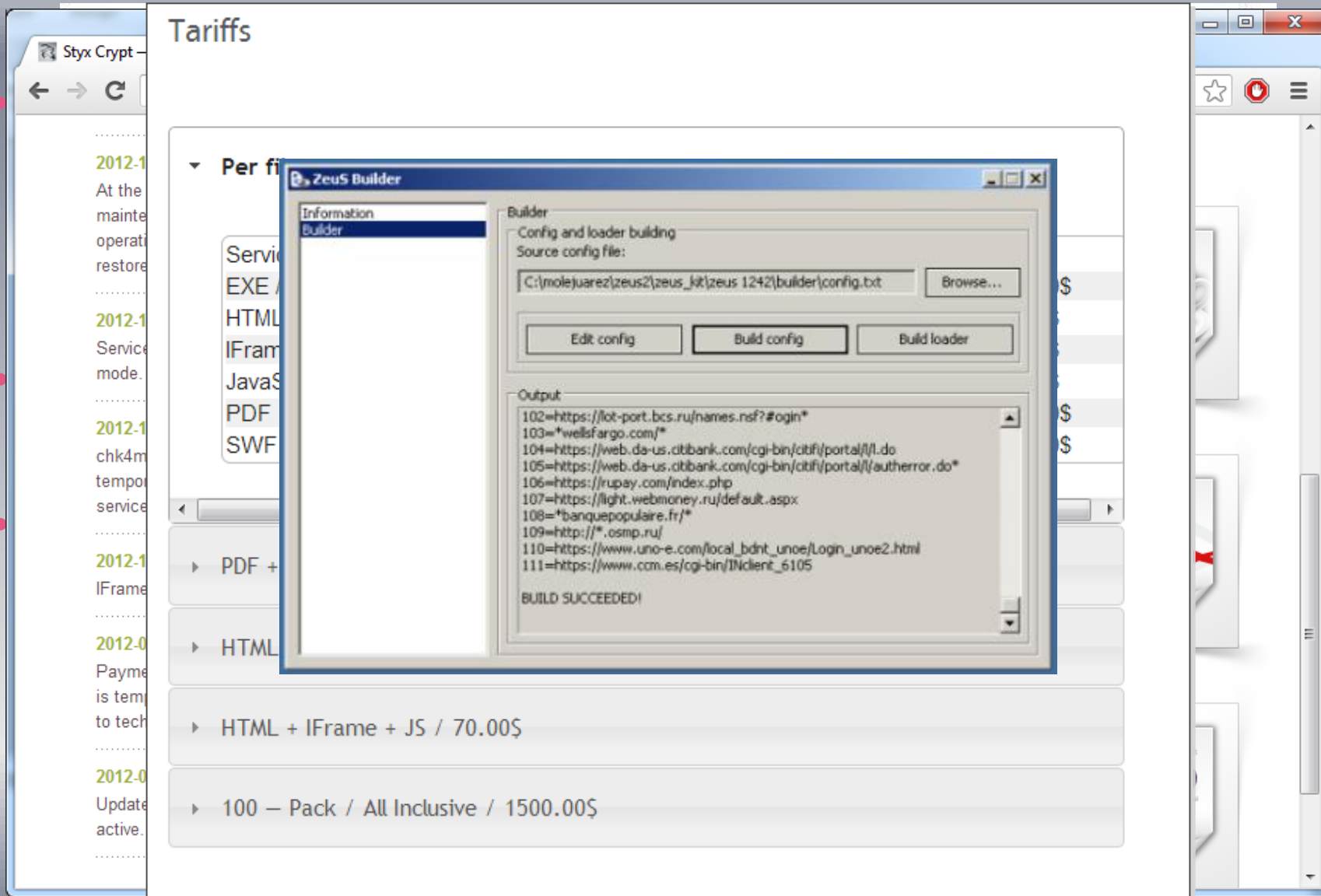
2014 vulnerabilities



Known Unknown Back Again!



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The screenshot shows a web browser window with a 'Tariffs' page. A 'Zeus Builder' dialog box is open, displaying the following information:

Zeus Builder

Information
Builder

Builder

Config and loader building
Source config file:
C:\molejuarez\zeus2\zeus_kit\zeus 1242\builder\config.txt

Edit config Build config Build loader

Output

```
102=https://lot-port.bcs.ru/names.nsf?#ogin*
103=*wellsfargo.com/*
104=https://web.da-us.ctibank.com/cgi-bin/citifi/portal/l/l.do
105=https://web.da-us.ctibank.com/cgi-bin/citifi/portal/l/autherror.do*
106=https://rupay.com/index.php
107=https://light.webmoney.ru/default.aspx
108=*banquepopulaire.fr/*
109=http://*.osmp.ru/
110=https://www.uno-e.com/local_bdnt_unoe/Login_unoe2.html
111=https://www.ccm.es/cgi-bin/INclent_6105
```

BUILD SUCCEEDED!

The background page shows a list of services and their prices:

- Service: PDF + IFrame
- Price: 70.00\$
- Service: HTML + IFrame + JS
- Price: 70.00\$
- Service: 100 – Pack / All Inclusive
- Price: 1500.00\$

THE GROWTH OF THE UNKNOWN MALWARE

Exploits

Botnets

Trojans

CVE

Bad URLs

THERE ARE MORE AND MORE
THINGS WE DON'T KNOW
ZERO DAY, APTS, UNKNOWN MALWARE

Virus

Signatures



New ways to deal with Know Unknowns?

Without looking at specific patterns

Static Analysis

Evaluating code without running it



Examine all possible execution paths



Slow and not scalable

Dynamic Analysis (sandbox)

Evaluating code during run-time



Faster and more accurate



You see what happens in that environment for a short time

Traditional Sandboxes are Slow



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INSPECTION TAKES TIME and LET FIRST FILE THROUGH

- As a result many sandboxes are deployed in non-blocking mode
- Allows malicious files to reach the user while the sandbox inspects the file in the background



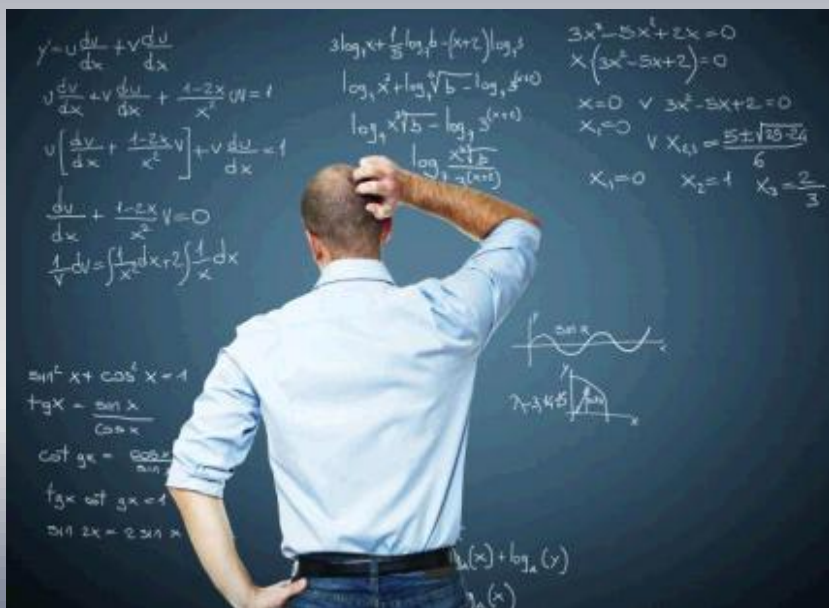


Sandbox detection/evasion

Anti-VM OUT, Anti-Analysis IN

Problem:
Malware drop anti-VM
technique and **focus** on
Anti-Analysis techniques

Solution:
Subvert the analysis
machine with a rootkit **before**
executing the malware



Staying One Step Ahead...



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**Highest
Catch Rate**

Evasion-
resistant
malware
detection

CPU-level
Detection



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SandBlast™

ZERO-DAY
PROTECTION



**Proactive
Prevention**

Deployable
in blocking
mode

Threat
Extraction

**Real-time Prevention Against Unknown
Malware, Zero-Day and Targeted Attacks**



Introducing SandBlast Agent Zero-Day Prevention for Endpoint

Block **UNKNOWN** and **ZERO-DAY ATTACKS** on your endpoints

**HIGHEST
CATCH RATE**

**THREAT
EMULATION**

Evasion resistant sandboxing at CPU- and OS-Level

**PROACTIVE
PREVENTION**

**THREAT
EXTRACTION**

Quick delivery of safe reconstructed content

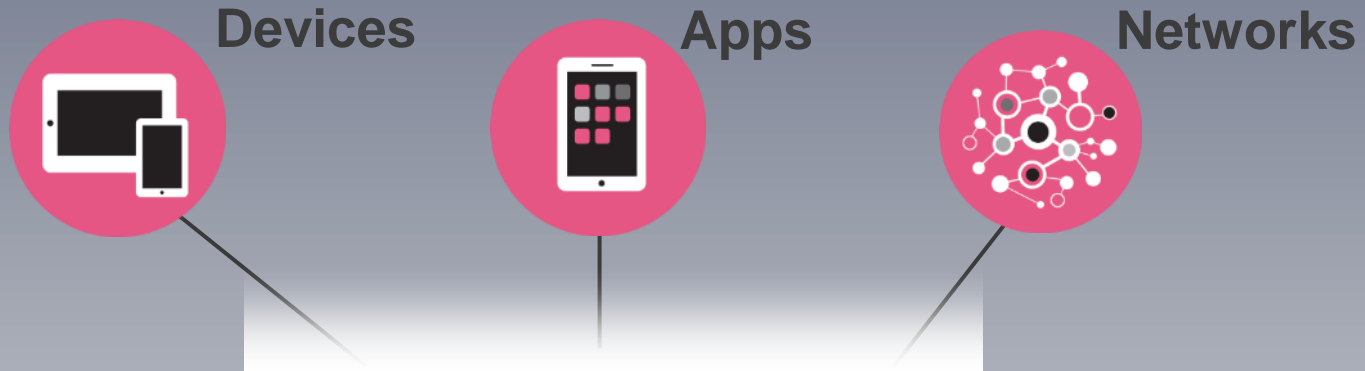
**NON-
INTRUSIVE**

Processing offloaded from endpoints to the cloud

Checkpoint Mobile Threat Prevention



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Mobile Threat Prevention



Solving the Mobile Security Gap

ADVANCED THREAT DETECTION AND MITIGATION

Check Point Mobile Threat Prevention



The Power to Prevent

On the Network

and

At the Endpoint



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MTP



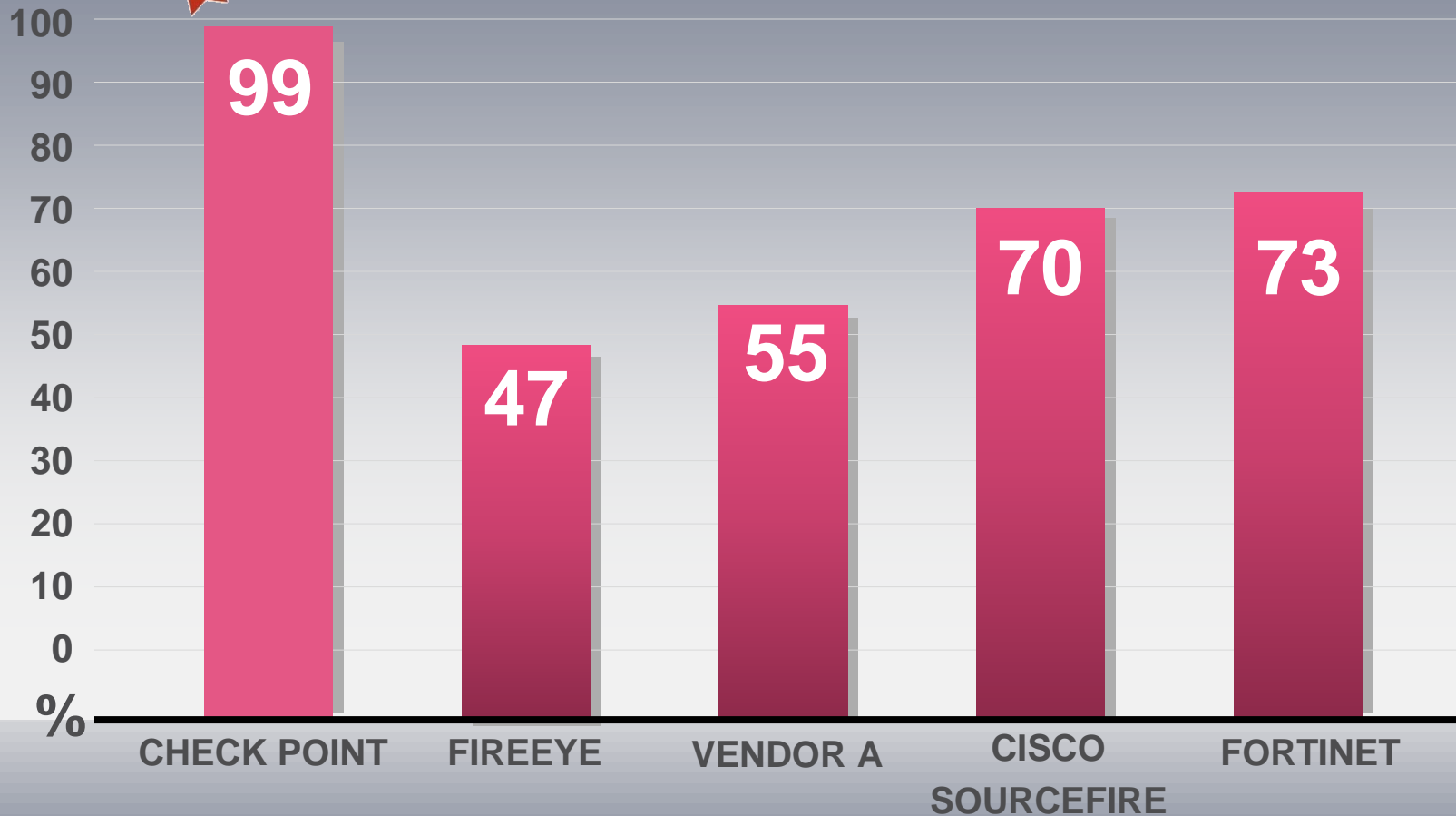
Catches More Malware. Proactive Prevention. Complete Integrated Protection.

The Insight to Understand Them.

Industry's best catch-rate



UNKNOWN THREATS



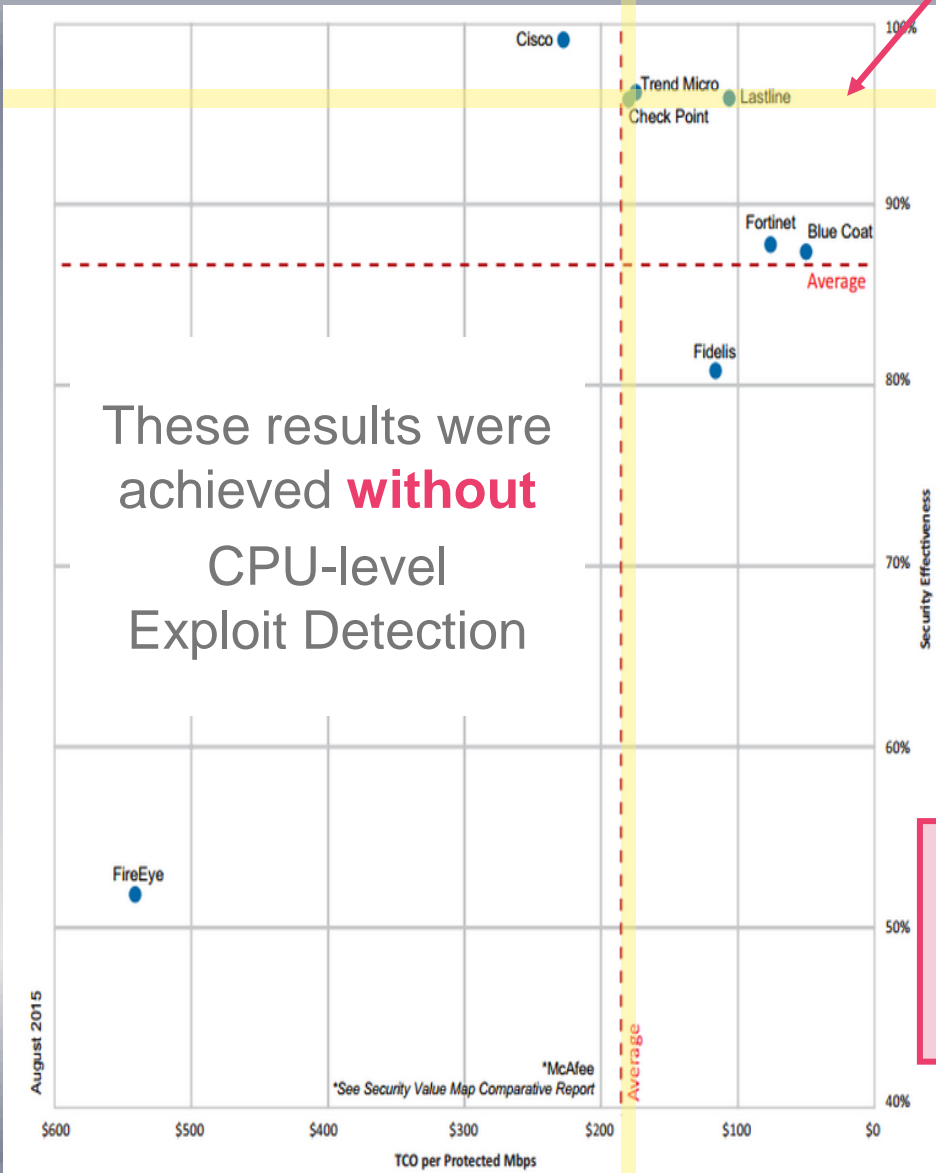
Source: Miercom APT Industry Assessment 2014

NSS Breach Detection Systems



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We cannot put a dot here...



NSS Names Check Point a Top Scoring Recommended Vendor For Sandboxing

UPDATED RESULTS: Industry Leading Value at \$27 / Mbps

but NSS can

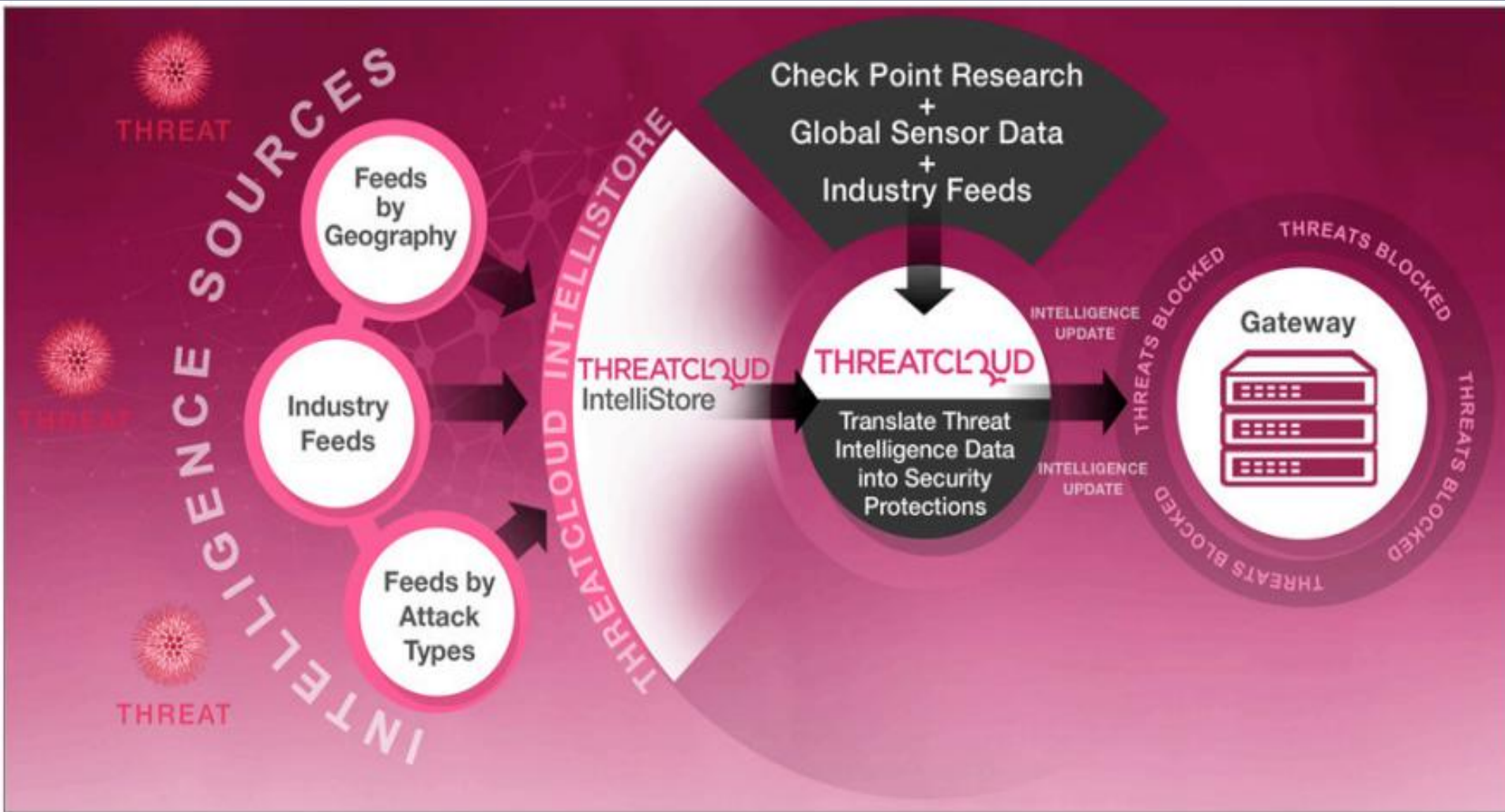
See NSS webcast at:

http://public.brighttalk.com/resource/core/89391/nss-bds-group-test-update-dec-2015_133131.pdf



System Layers – Private threat Cloud

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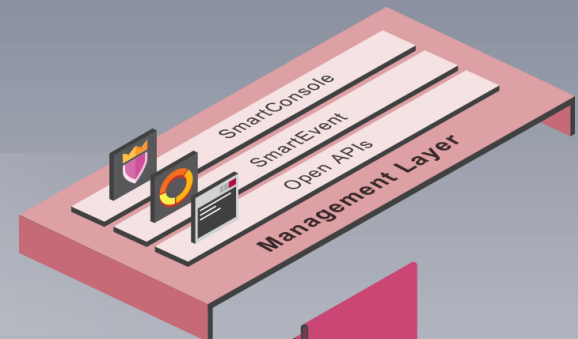


CHECK POINT SOFTWARE – DEFINED PROTECTION

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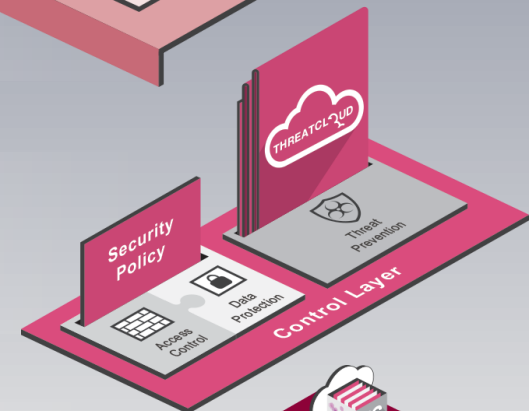
MANAGEMENT LAYER

Check Point Next Generation Security Management



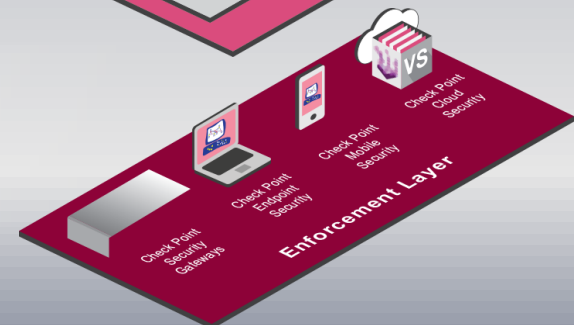
CONTROL LAYER

Next Generation Firewall, Threat Prevention, ThreatCloud™



ENFORCEMENT LAYER

Network, Host, Mobile, Cloud





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THANK YOU

