Check Point
SOFTWARE TECHNOLOGIES LTD

IS YOUR CLOUD SECURE?

Why advanced threat prevention security needs to be part of your cloud strategy

Greg Thomas| Security Engineer

WELCOME TO THE FUTURE OF
CYBER SECURITY

POWERED BY CHECK POINT INFINITY

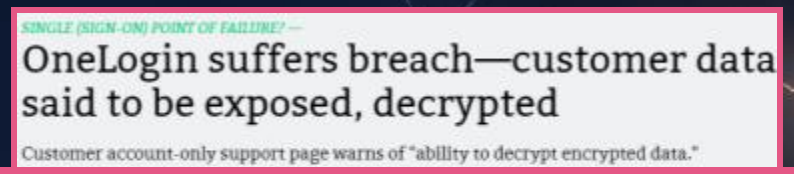
CLOUD • MOBILE • THREAT PREVENTION

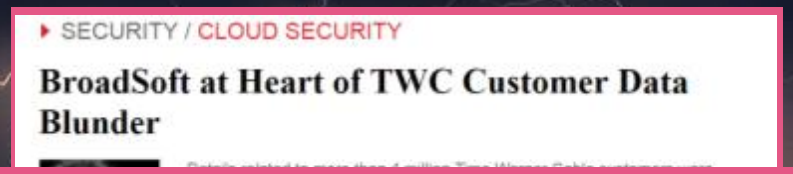
"I think that you will all agree that ***we are living in most interesting times.*** *I never remember myself a time in which our history was so full, in which day by day brought us new objects of interest, and, let me say also,* ***new objects for anxiety****."*

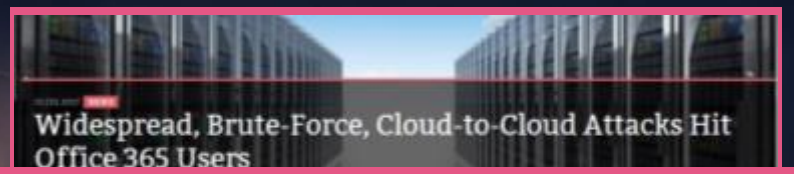
Joseph Chamberlain, Bristol, England, 1898

CURRENT STATE OF CLOUD SECURITY

NOT EVERY CLOUD HAS A SILVER LINING







And the hits just keep on coming . . .

Help Net Security
September 20, 2017

Number of lost, stolen or compromised records increased by 164%

Compared to the last six months of 2016, the number of lost, stolen or compromised records increased by 164%. A large portion came from the 22 largest data breaches, each involving more than one million compromised records. Of the 918 data breaches more than 500 (59% of all breaches) had an unknown or unaccounted number of compromised data records.

Most of the industries the Breach Level Index tracks had more than a 100% increase in the number of compromised, stolen or lost records. Education witnessed one of the largest increases in breaches up by 103% with an increase of over 4,000% in the number of records. This is the result of a malicious insider attack compromising millions of records from one of China's largest comprehensive private educational companies.

Healthcare had a relatively similar amount of breaches compared to the last six months of 2016, but stolen, lost or compromised records increased 423%. The

HOW EXPOSED ARE WE *REALLY* IN THE CLOUD?

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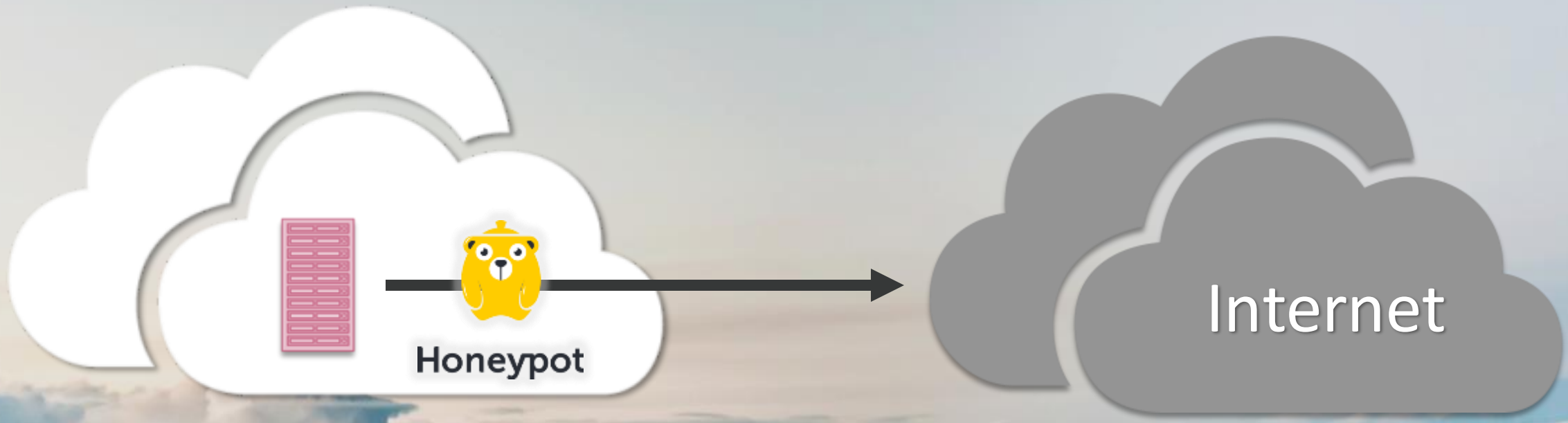
HOW LONG IS A MALWARE SIGNATURE VALID?

99% of malware hashes are seen for **58 seconds** or less

Public Cloud - IAAS

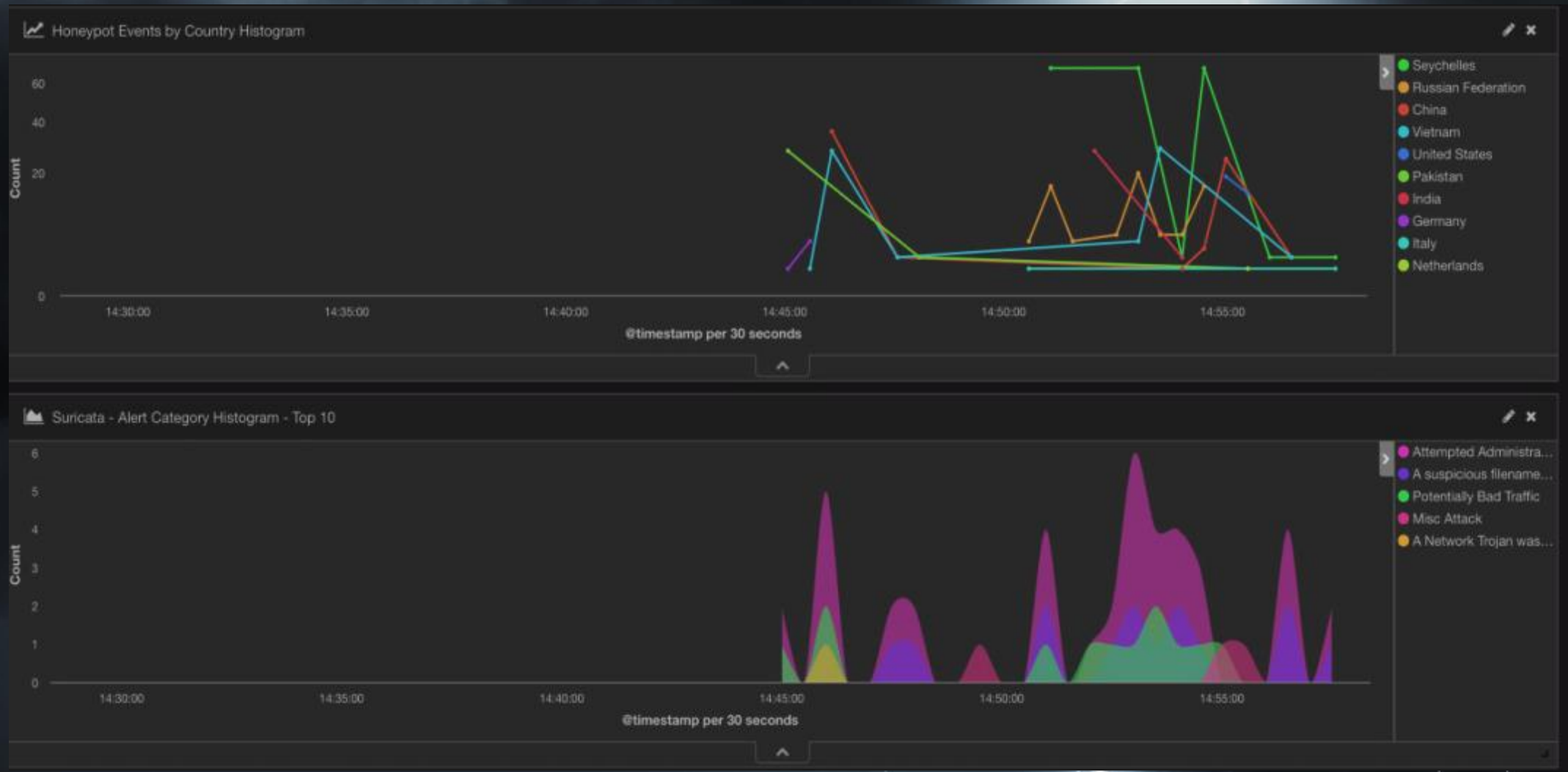
Public IAAS

OUR CLOUD ENVIRONMENT



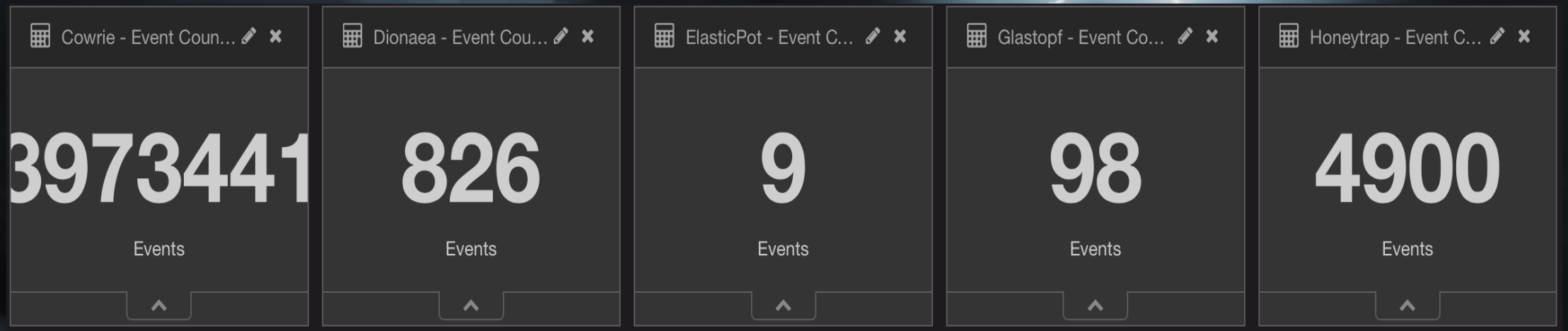
WITHIN THE FIRST 15 MINUTES

Houston we have a problem . . .



AFTER 7 DAYS . . .

Oh won't you please be my neighbor . . .



~4 million attacks recorded!

WHAT ABOUT

REAL CUSTOMER

ENVIRONMENTS?

CASE STUDY 1: GLOBAL TELCO

THE WRONG WAY TO PROMOTE A NEW SMART PHONE

- Copy their premises-based network in the cloud with auto-scaling
- Campaign success! Infrastructure doubles every day since it was launched
- After 5 days – something's not quite right . . .
- Unknown process ID'd and running . . .
- Welcome to the wonderful world of Bitcoin Mining!
- Admin console exposure on web server led to attack

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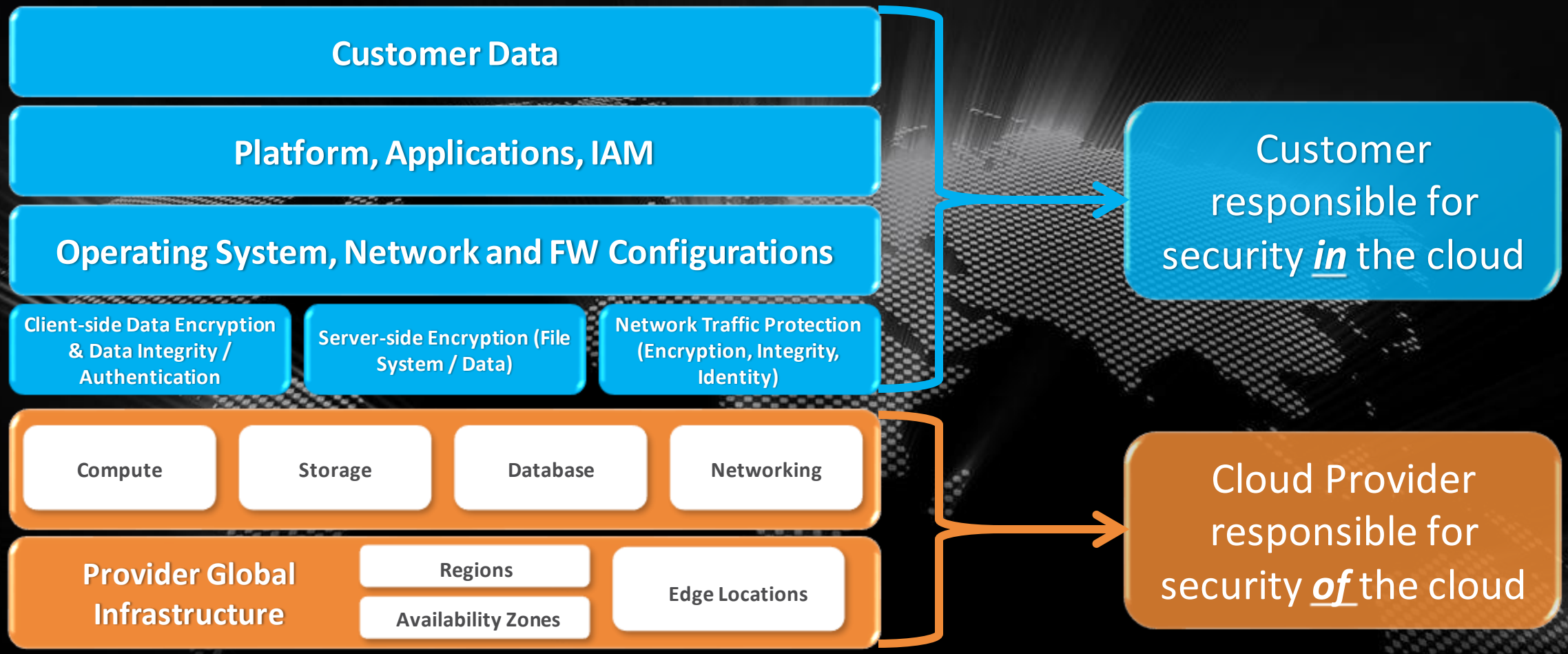
WHO'S RESPONSIBLE FOR PUBLIC CLOUD SECURITY?

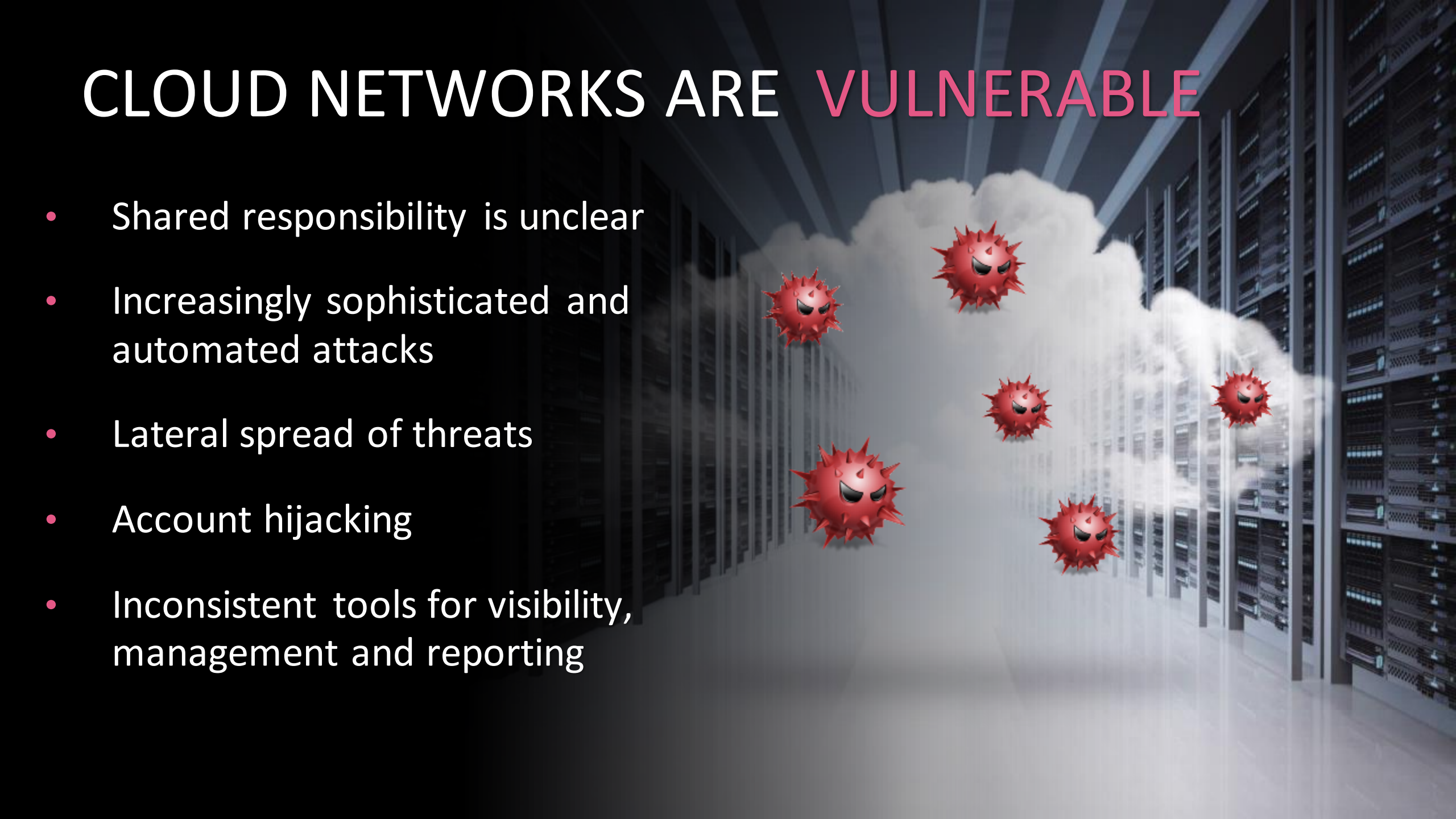
IT'S A SHARED RESPONSIBILITY

CLOUD = SHARED RESPONSIBILITY



CLOUD NETWORKS ARE VULNERABLE

- Shared responsibility is unclear
- Increasingly sophisticated and automated attacks
- Lateral spread of threats
- Account hijacking
- Inconsistent tools for visibility, management and reporting



LEGACY SECURITY ARCHITECTURE IS NOT DESIGNED FOR CLOUD

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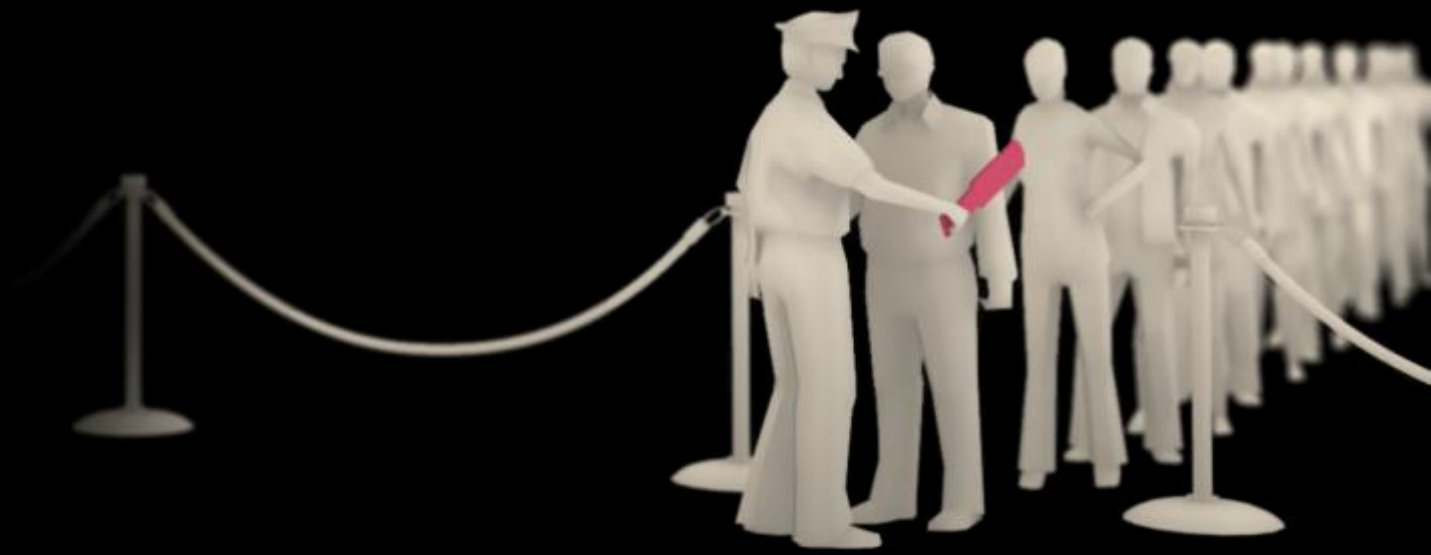
- Cloud applications are everywhere
  Perimeter security is not enough – we need security inside the cloud

- Cloud applications are elastic
  Legacy security is static

- DevOps wants agile environment
  Security is a showstopper



CLOUD SECURITY RECOMMENDATIONS

1. COMPREHENSIVE PROTECTIONS

Prevent attacks against cloud applications, data and workloads

2. EASE OF OPERATIONS

One-click deployment, auto-provisioning templates

3. CONSUME & CONTRIBUTE CONTEXT

Adjust to dynamic nature of cloud

4. CENTRALIZED MANAGEMENT

Single pane-of-glass experience across all clouds

CLOUDGUARD IAAS ADVANCED PROTECTION

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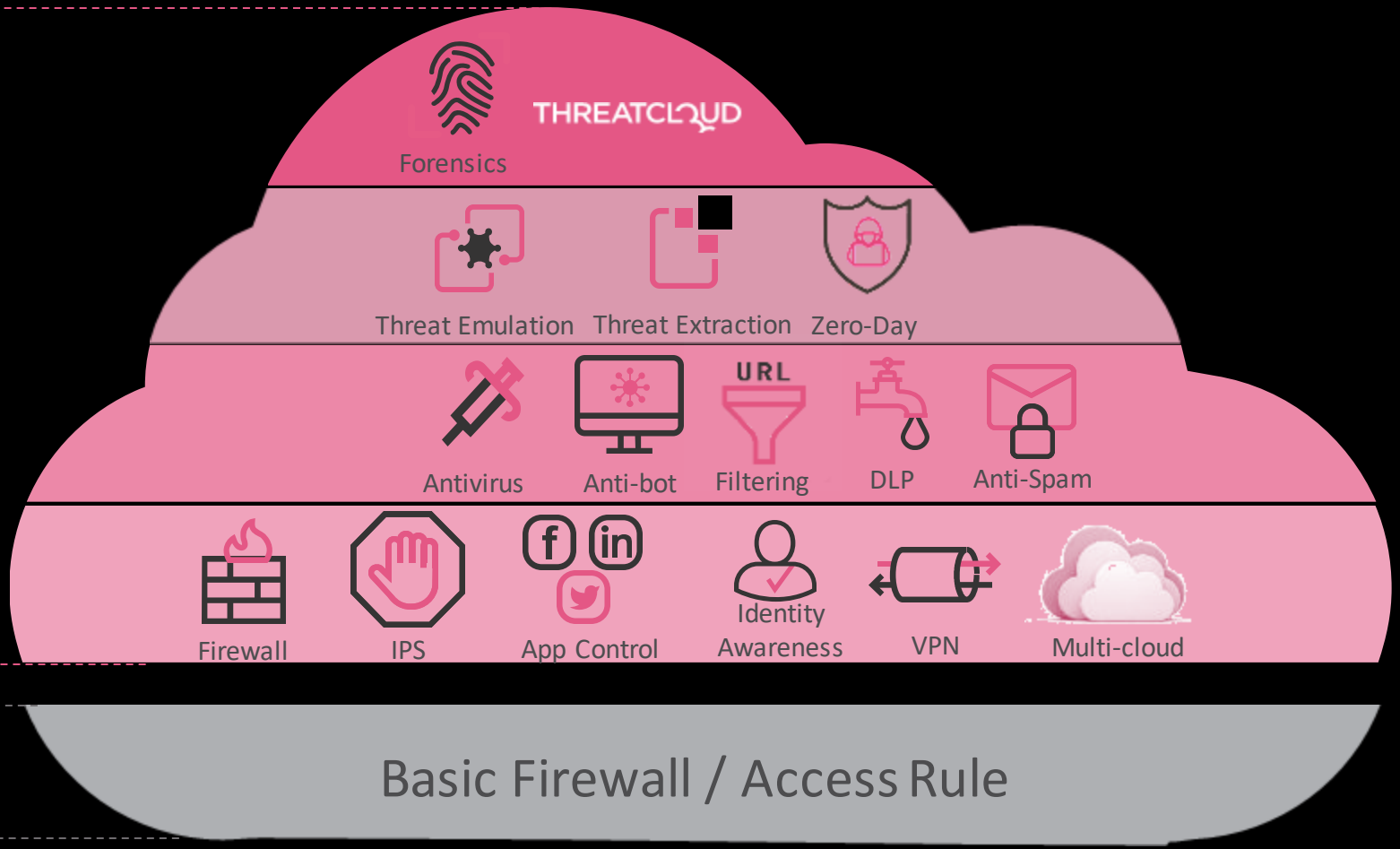
CHECK POINT CloudGuard IaaS



Google Cloud · ORACLE CLOUD · aws · Azure · Alibaba Cloud

70% OF ENTERPRISES ADOPTED CLOUD APPLICATIONS*

ARE WE SECURED?

*Gartner

THE CASE OF A FINANCIAL INSTITUTION

Moved its email to the cloud

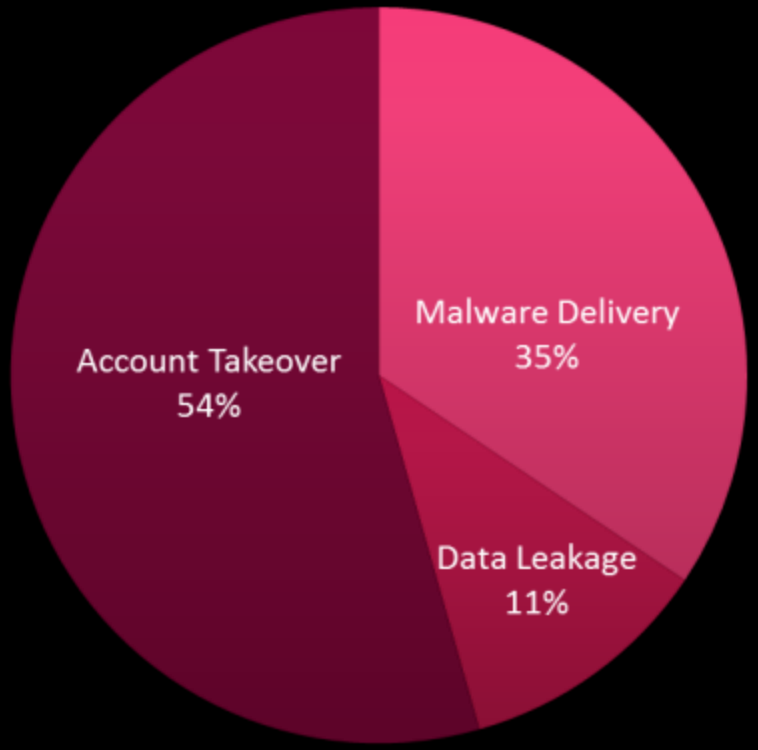
Office 365

Customers received email invoices with fake bank accounts

Emails were sent by hackers who took over an email account

$2M Stolen

90% of SaaS breaches are caused by hacking.
50% of the breaches are through account takeover.



Source: Check Point Q1-3-2017 Incident response Statistics, n=250, cloud = 55%

Malware Delivery Data Leakage Account Hijacked

INTRODUCING CHECK POINT CLOUDGUARD

PROTECTING ANY CLOUD, ANY SERVICE, ANYWHERE

COMPREHENSIVE SECURITY ARCHITECTURE

CLOUDGUARD – MICRO SEGMENTATION

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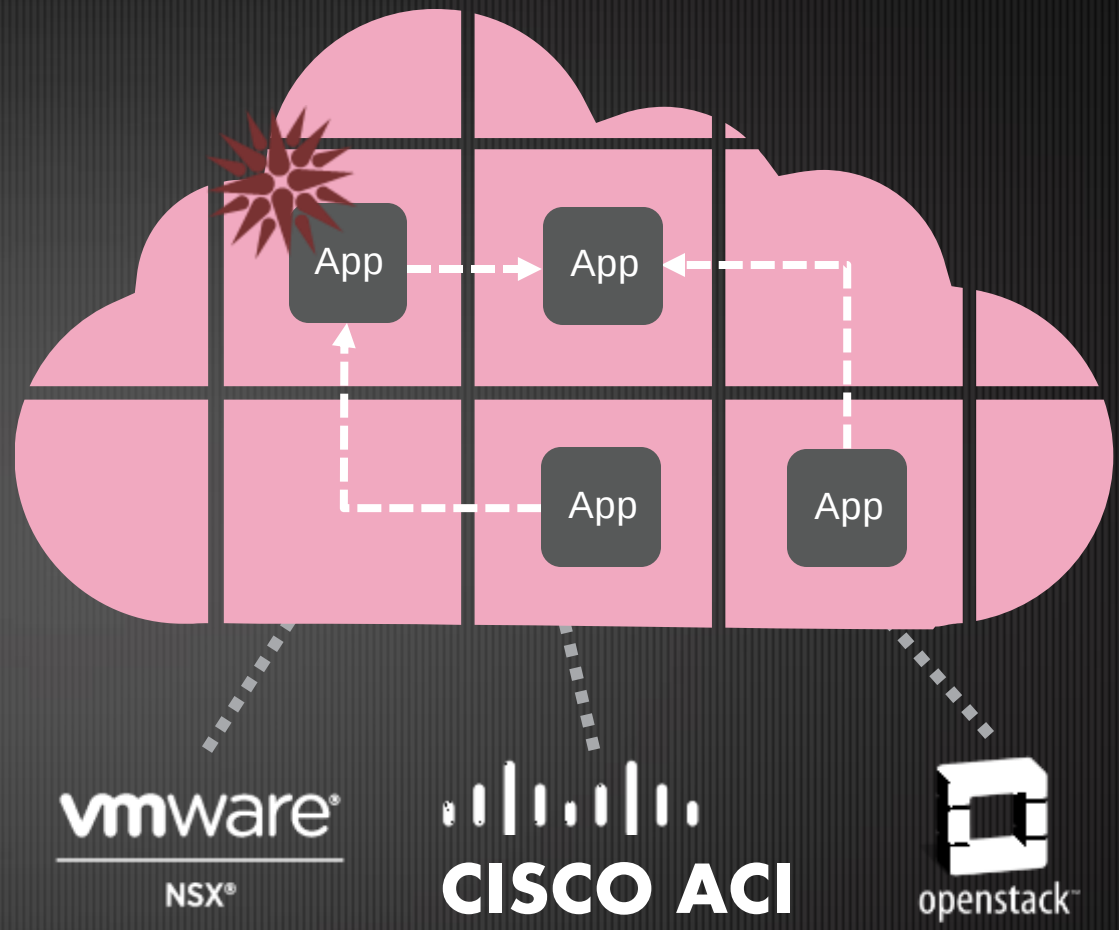
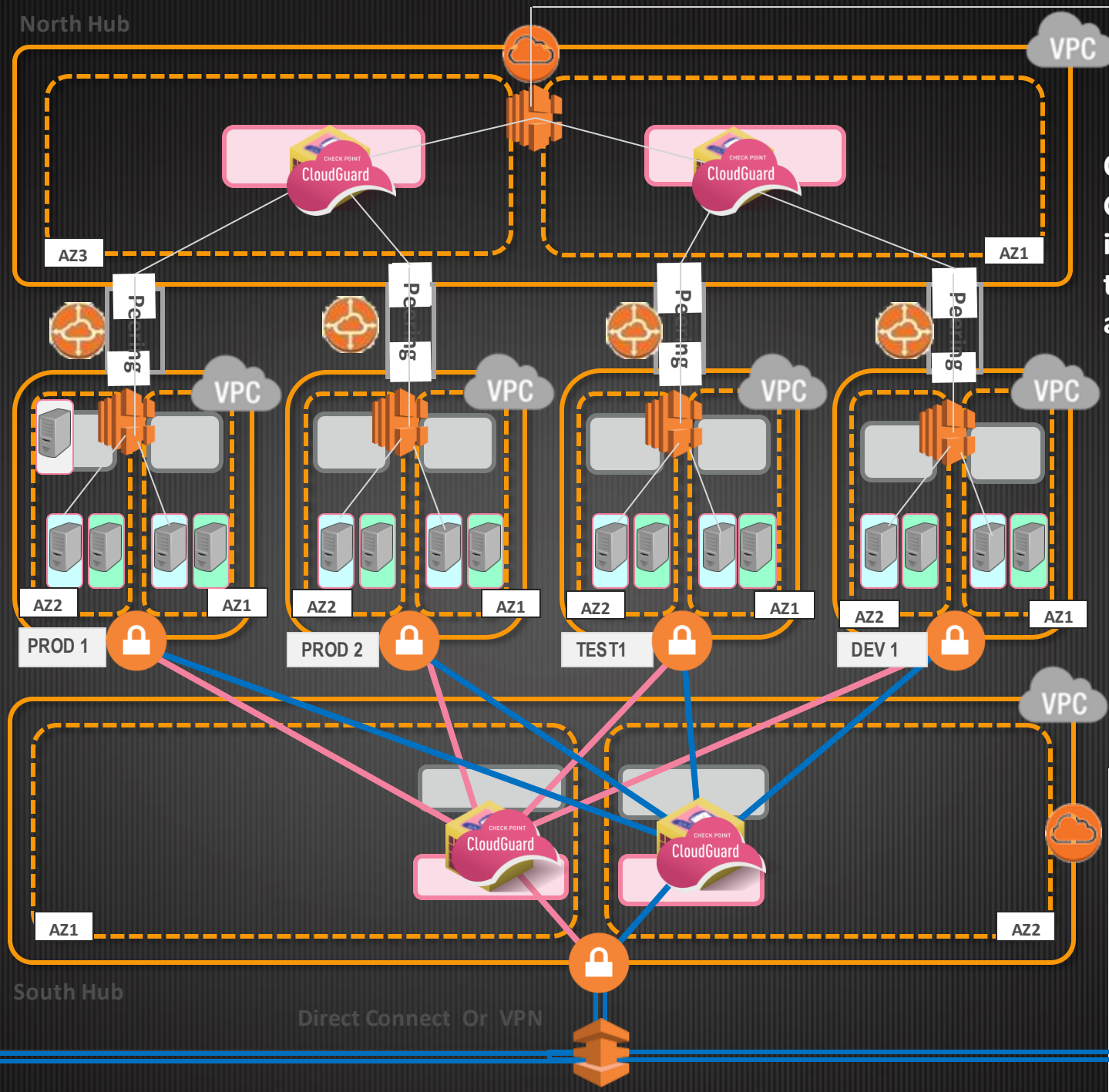
Micro segment the Cloud with advanced protection between applications with tight Integration to SDN



Check Point Security Blueprint

On the South Hub , Cloud Guard Transit Gateways inspect internal traffic moving between VPCs for East-West Threat Prevention, as well as traffic between the Datacenter or MPLS network and the cloud.

Direct Connect or VPN links connect to Transit Gateways



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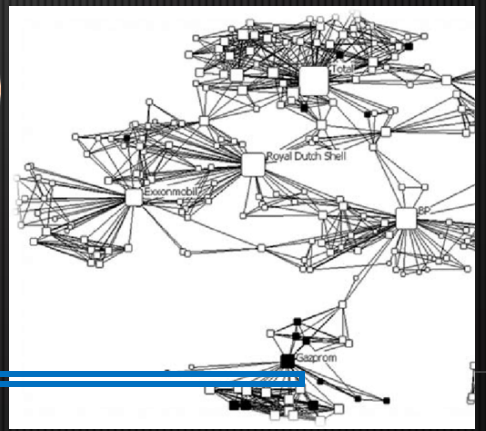
On the North Hub a Cloud Guard auto scale group inspects Internet inbound traffic to Public facing applications/websites.



MOBILE

SandBlast MOBILE

- App Protection
- Network Protection
- Device Protection

Capsule WorkSpace/Docs

- Remote Access
- Secure Business data
- Protect docs everywhere

ENDPOINT

SandBlast AGENT

- Threat Prevention
- Anti-Ransomware
- Forensics

Access/Data Security

- Access Control
- Secure Media
- Secure Documents

Threat Intelligence

THREATCLOUD GEN V

MGMT - R80

CLOUD

servicenow

Infrastructure

CloudGuard IaaS

- Advanced Threat Prevention
- Adaptive Security
- Automation and Orchestration
- Cross Cloud Dynamic Policies
- Multi-Cloud

Microsoft Azure, Azure Stack, VMware NSX, OpenStack, aws

Applications

CloudGuard SaaS

- Zero-Day Threat Protection
- Sensitive Data Protection
- End-to-end SaaS Security
- Identity Protection

Office 365, Salesforce, Dropbox, Google Apps

Hybrid Cloud

HEADQUARTERS

- Multi Layered Security
- Advanced Threat Prevention
- Inbound Outbound Access Control
- Data Protection

- Access Control
- Advanced Threat Prevention
- Segmentation

BRANCH

VPN IDA

LAN

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THANK YOU

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