

CHƯƠNG 5

NEXT GENERATION IPS

10/2/2021

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Content

2

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- Agile Security
- Next Gen IPS?
- How to deploy NG-IPS?

Content

3

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- **Agile Security**
- Next Gen IPS?
- How to deploy NG-IPS?

IT Environments are Changing Rapidly

4

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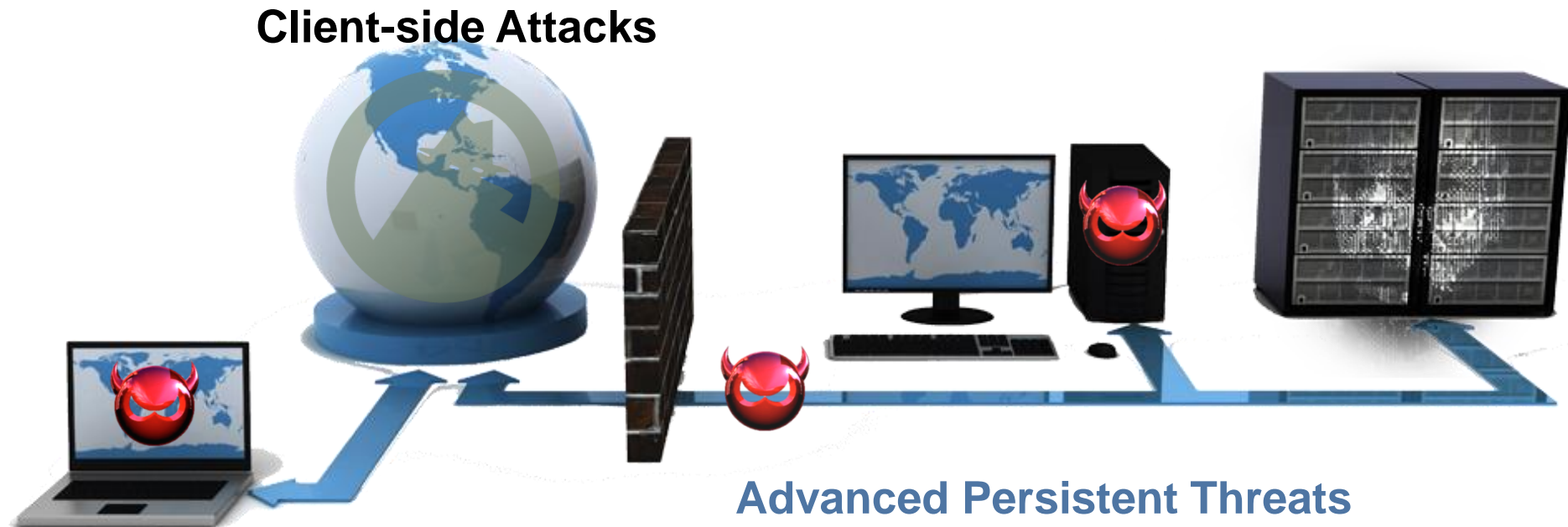


Threats are Increasingly Complex

5

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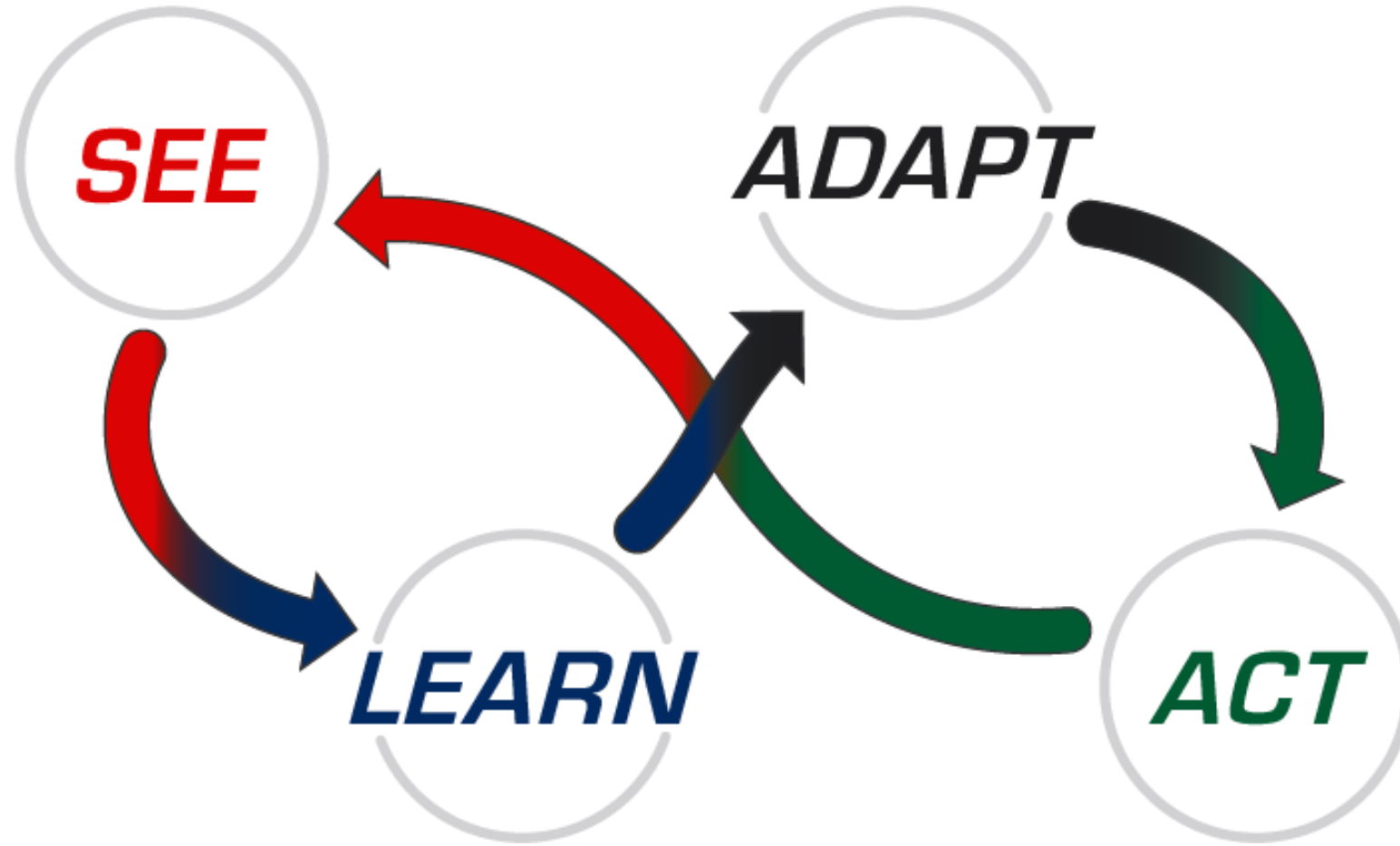
Targeted | Organized | Relentless | Innovative



Agile Security

6

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...a continuous process to respond to continuous change.

You Can't Protect What You Can't See

7

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Breadth: who, what, where, when

Depth: as much detail as you need

Real-time data

See everything in one place



Threats



Devices



Applications



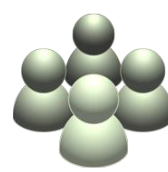
Network



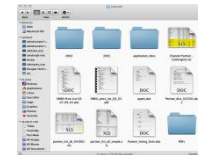
Vulnerabilities



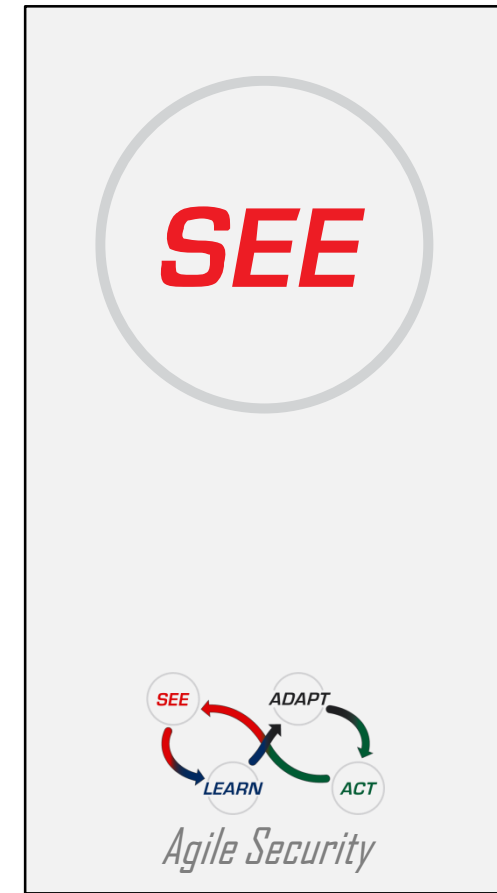
OS



Users



Files



Sourcefire provides information superiority

Leverage Awareness For Knowledge

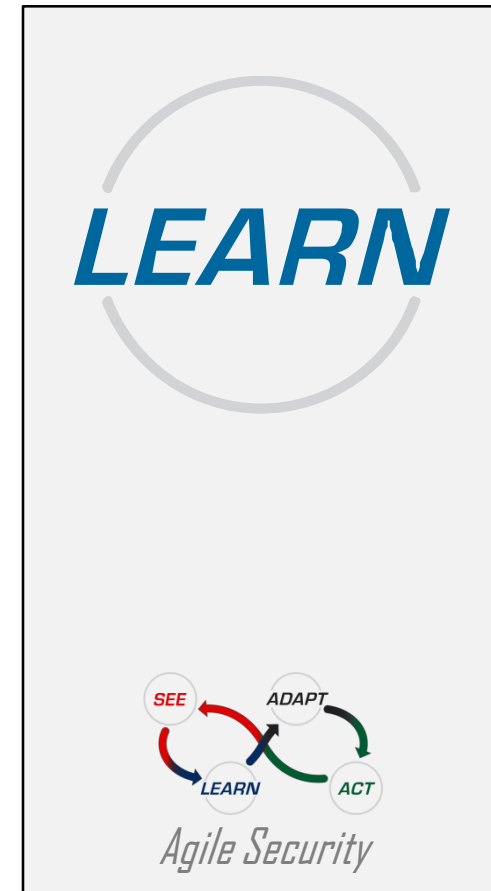
8

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Gain insight into the reality of your IT and security posture

Get smarter by applying intelligence

Correlate, prioritize, decide



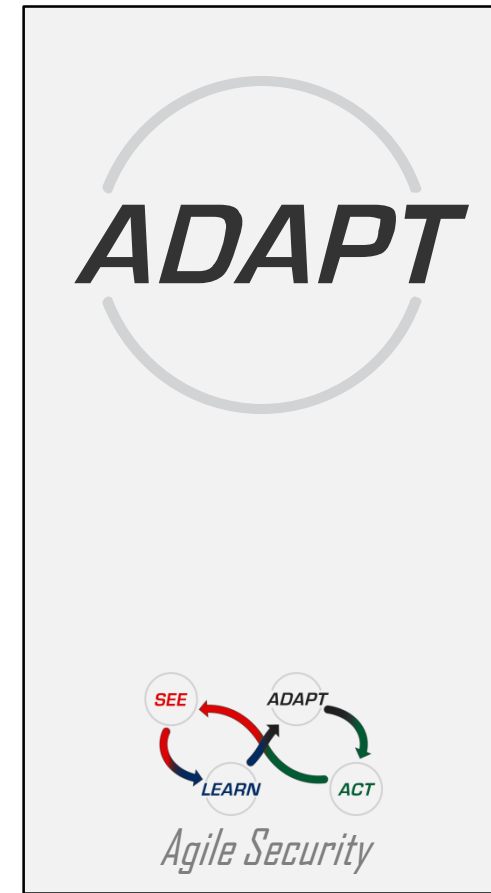
Collective intelligence elevates overall defense

Change is Constant

9

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Automatically optimize defenses
Lock down your network to policy
Leverage open architecture
Configure custom fit security



Sourcefire invented customized security & self-tuning

Act Decisively & Efficiently

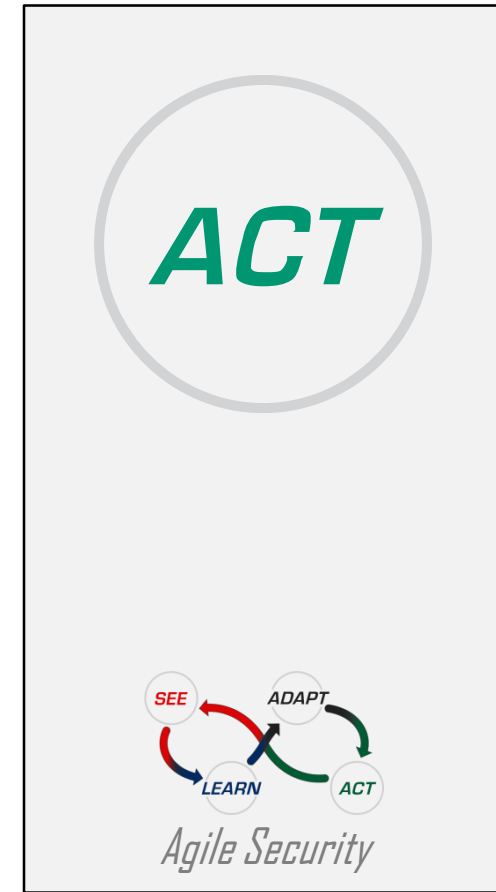
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Block, alert, log, modify, quarantine,
remediate

Respond via automation

Reduce the 'noise'



Superior protection through intelligence & automation

Content

11

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- Agile Security
- **Next Gen IPS?**
- How to deploy NG-IPS?

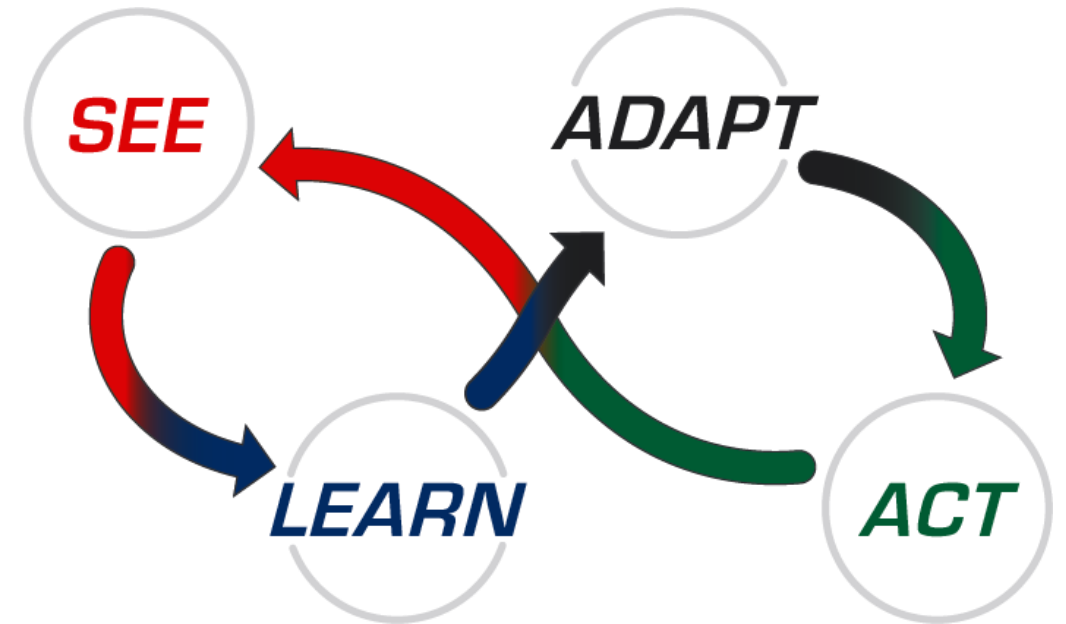
Next Generation IPS

12

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Next-Gen IPS (NGIPS)

- Standard first-gen IPS
- Application awareness
- Content awareness
- Full-stack visibility
- Context awareness



Gartner

“Next-generation network IPS will be incorporated within a next-generation firewall, but most next-generation firewall products currently include first-generation IPS capabilities.”

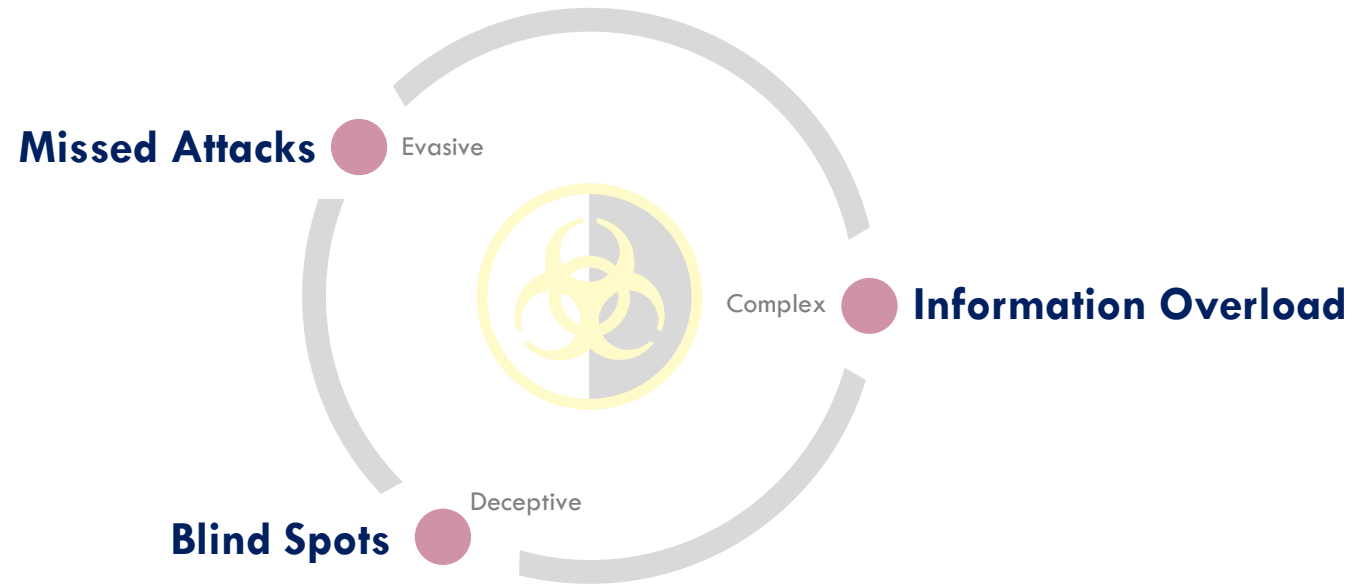
Source: “Defining Next-Generation Network Intrusion Prevention,” Gartner, October 7, 2011.

“Defining the Next-Generation Firewall,” Gartner, October 12, 2009

Traditional Threat Inspection

13

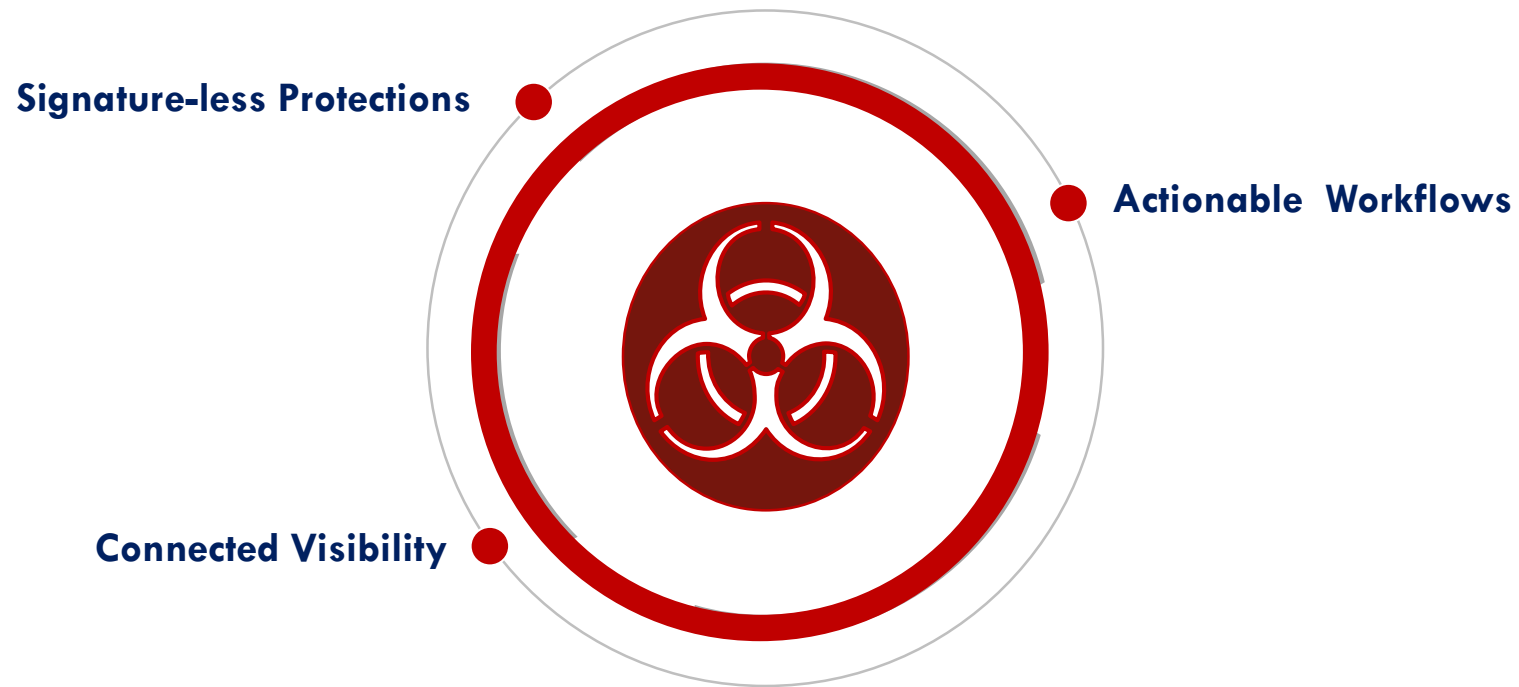
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Advanced Targeted Attack Prevention

14

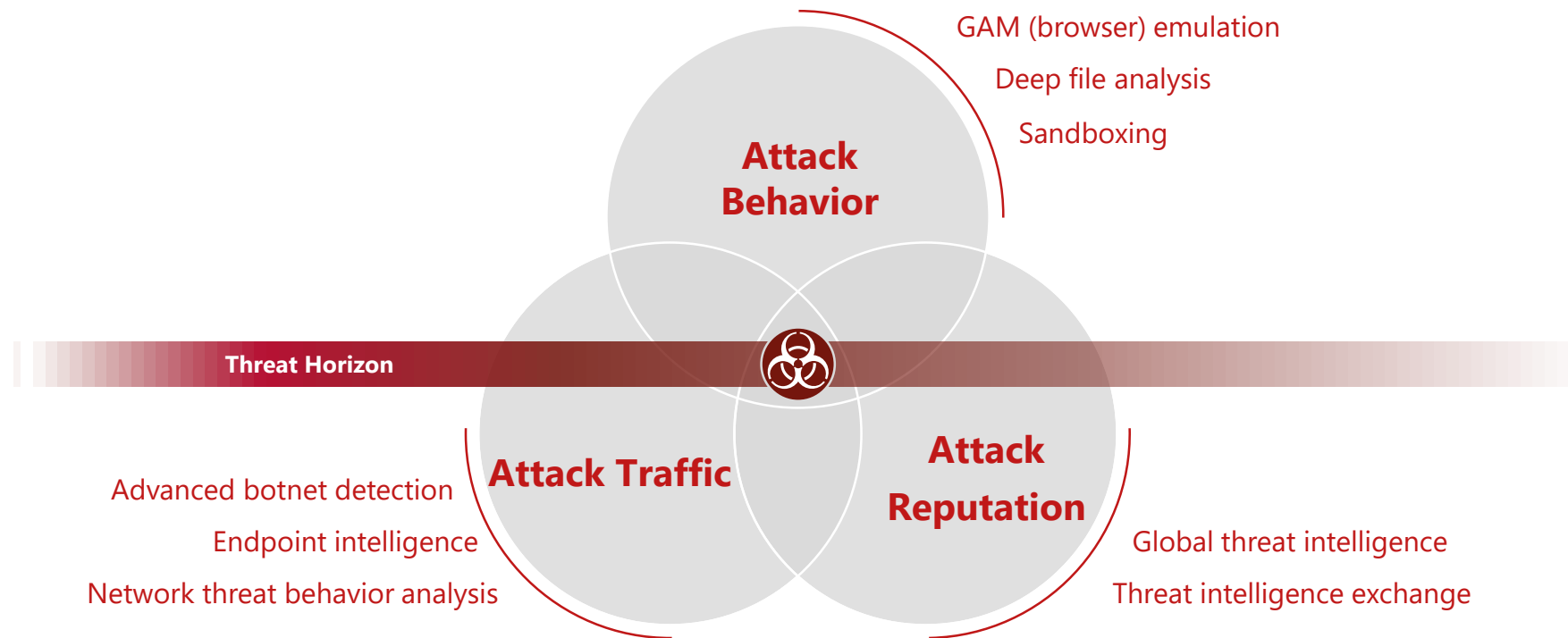
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Approach to Signature-less Inspection

15

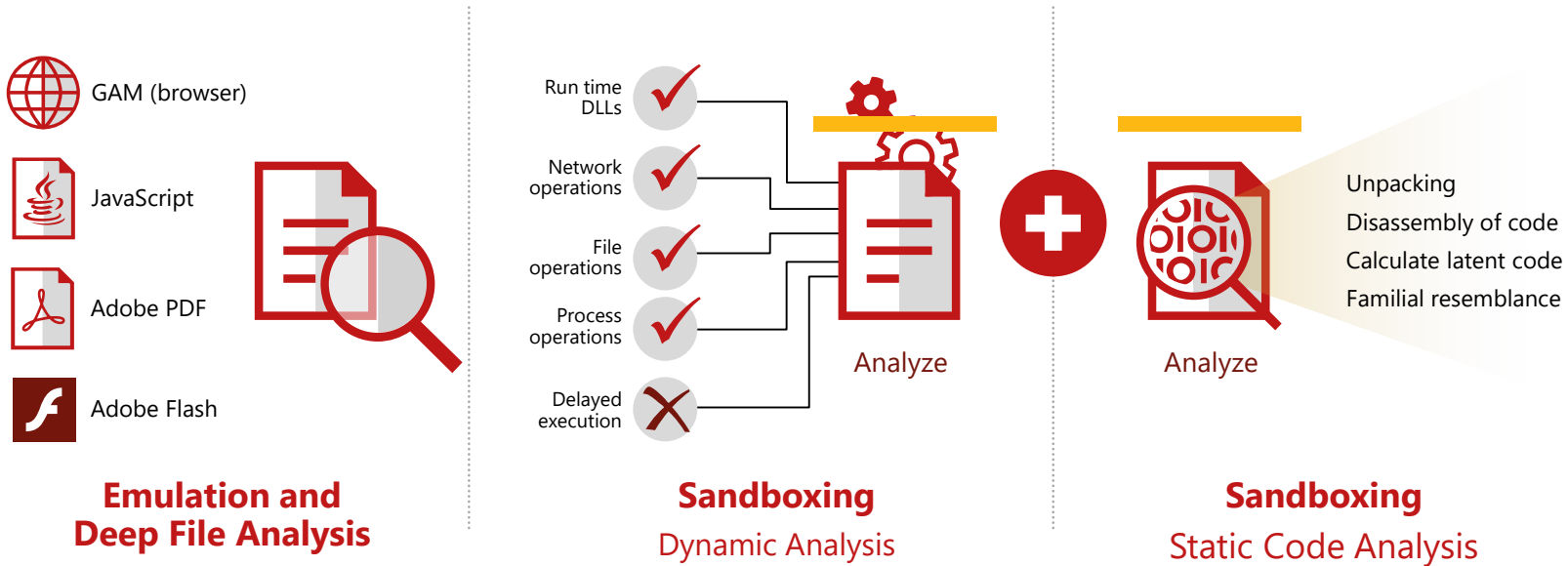
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Understand Attack Behavior

16

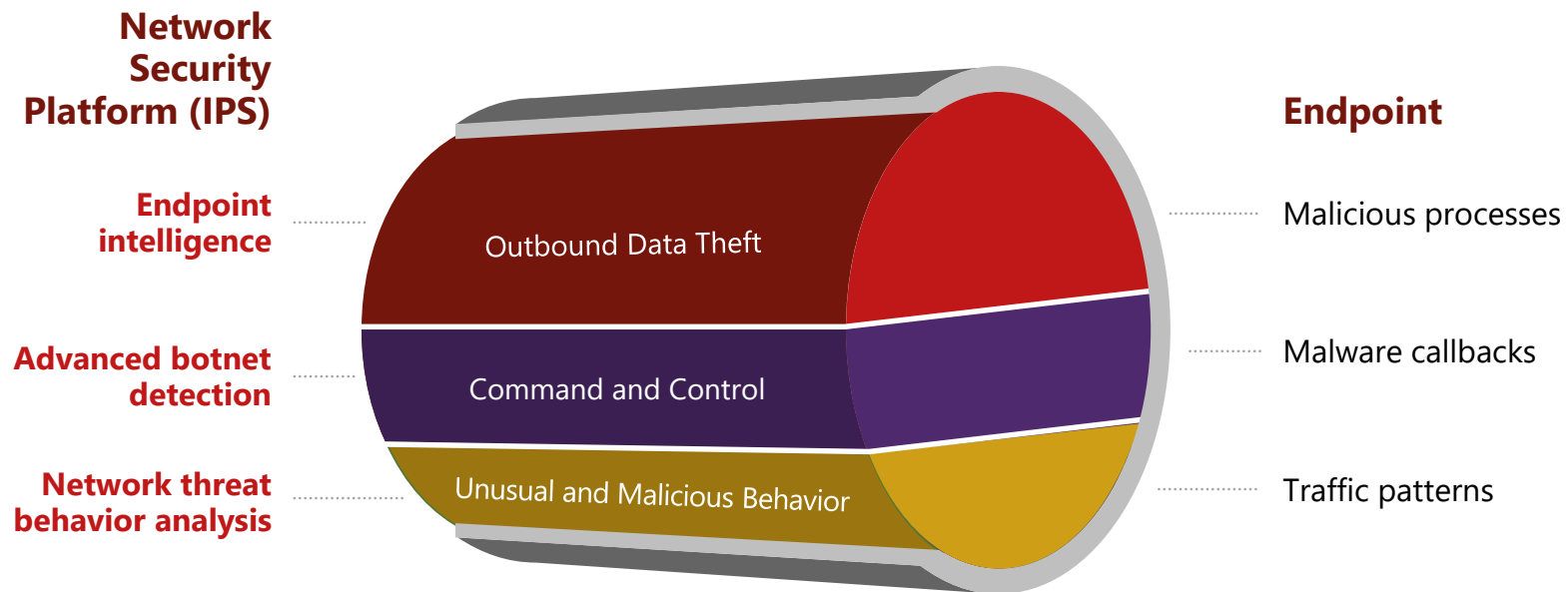
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Find Stealthy Attack Traffic

17

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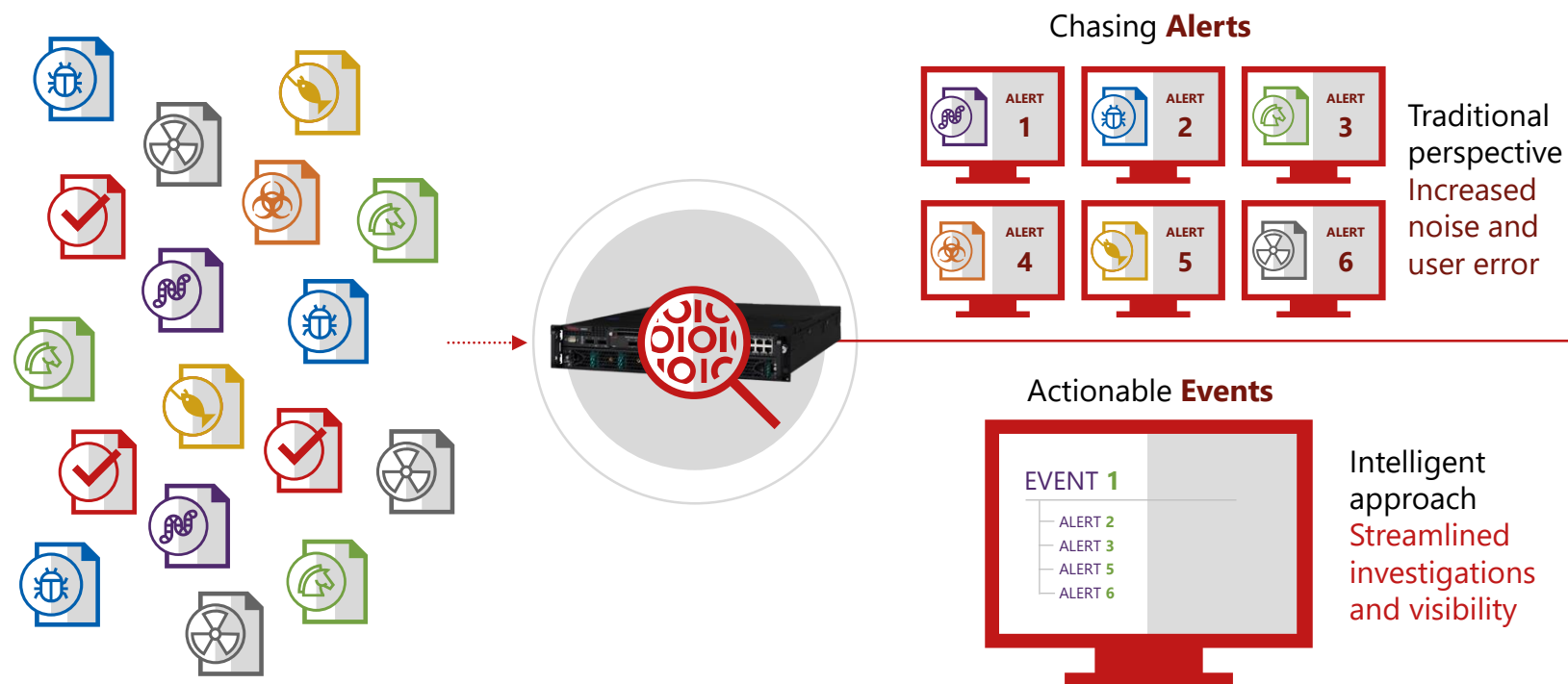


Approach to Actionable Workflows

Discover Breaches Faster

18

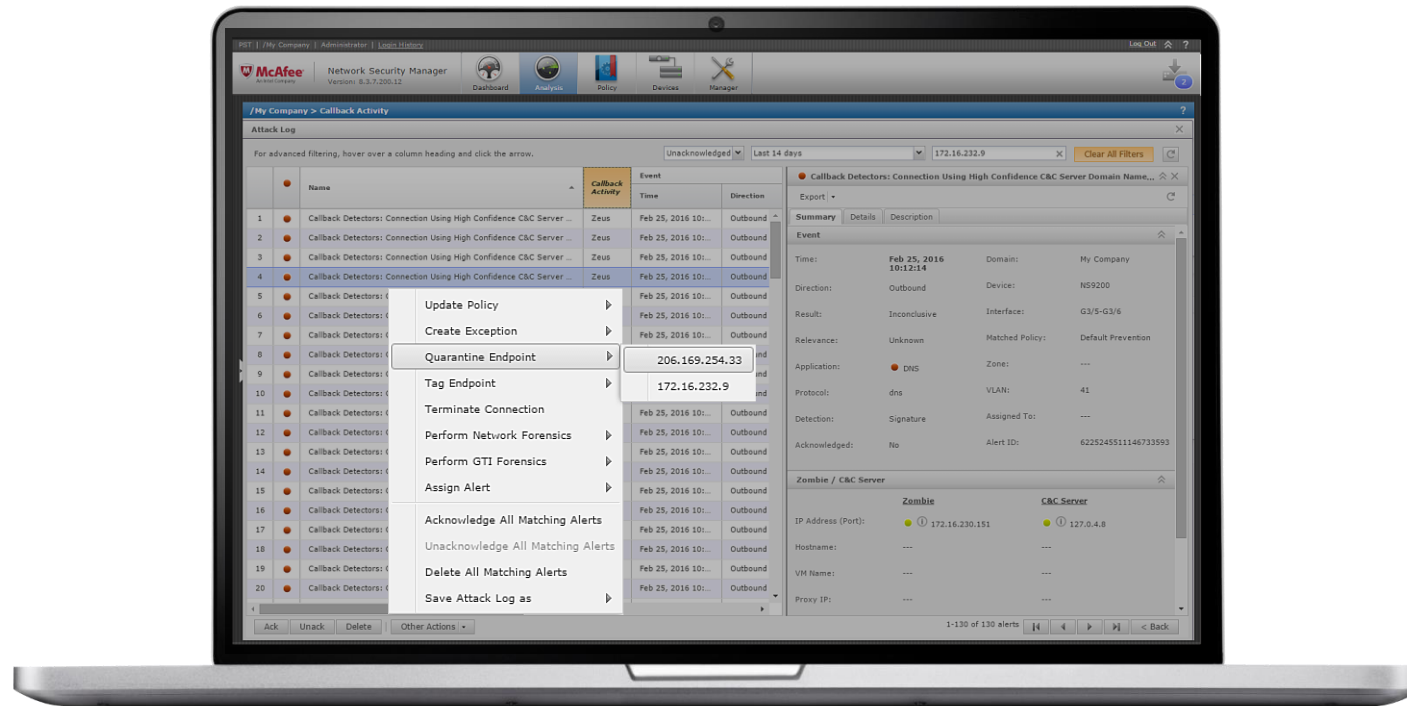
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Stop Malware Callback Activity

19

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Identify
top callback activity

Drill down
on infected systems

Understand
impact of infection

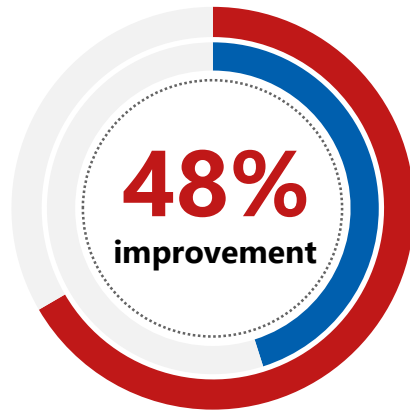
Take action
to quarantine endpoints

The Right Data at the Right Time

20

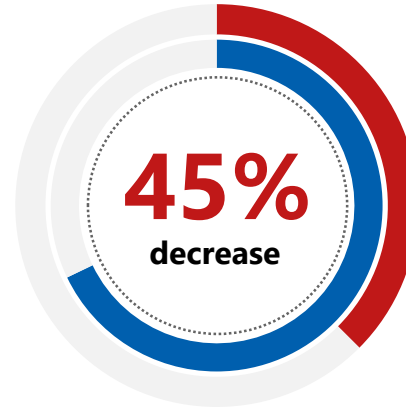
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Threat Visibility



in identifying threats
before they become events

Incident Response



in user-impacting breaches
and malware incidents

■ McAfee

■ Non McAfee

"We can identify
threats before they
become events with
McAfee NSP...we're
probably at about

98%
proactive
identification

now, versus
78% before."

 **IDC** Business Value of
Network IPS, Feb 2015

Problems We Want to Solve for the Cloud

21

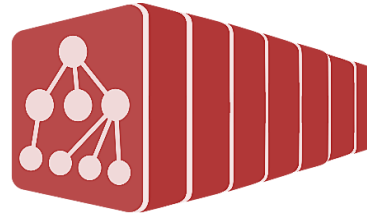
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Visibility



"Shadow IT makes it difficult to track systems, leaving them vulnerable to breaches."

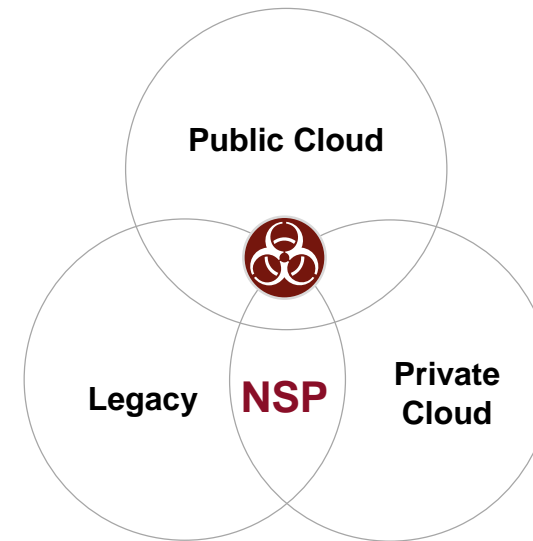
Cloud Scale



"Are my security controls at cloud scale or a choke point?"

"Security comes with cost of performance?"

Single Pane of Glass



Virtual Network Security Platform (vNSP)

22

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Built for the Cloud



- Inline IPS/IDS
- Security group
- AutoScale
- CloudTrail/VPC logs

Built in Security



- Delivered with CloudFormation Template
- Ansible/Chef/Puppet

Load Balanced



- Automatic client based load balancer
- Integrated with AutoScale

Virtual Overlay Network



- Micro-segmentation across heterogeneous cloud
- App fencing

Low OpEx/CapEX



- Ready for orchestration
- Live update of sensors & agents
- Flexible license

Single Console



- Single NSM to manage appliance, OpenStack, VMware & AWS
- Manage from AWS or on-prem
- Monitor user access across cloud

Scale Security into the Virtual Data Center

23

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Industry Proven IPS inspection

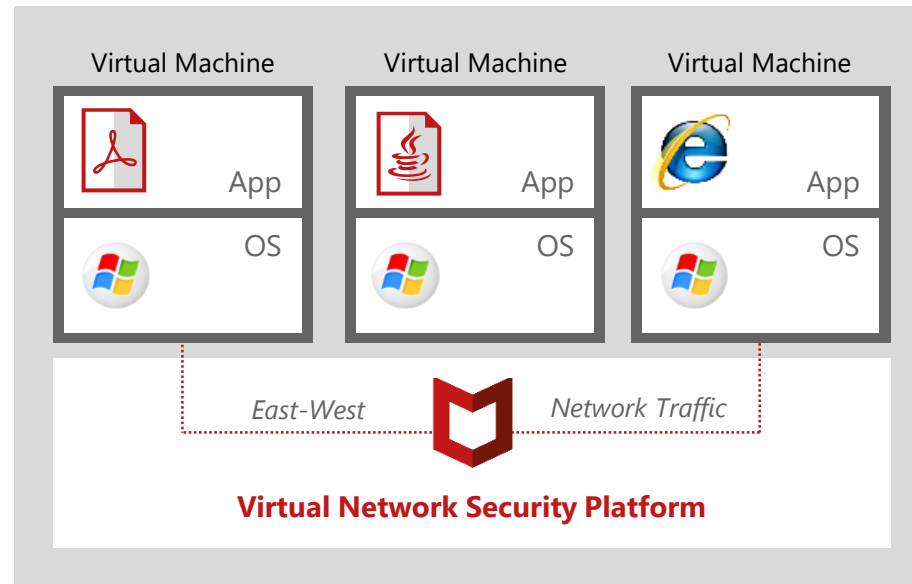
Gartner Leader and NSS recommended

Next Generation Features

Application control, DDoS, callback detection, ATD, endpoint and threat intelligence

Multiple Deployment Modes

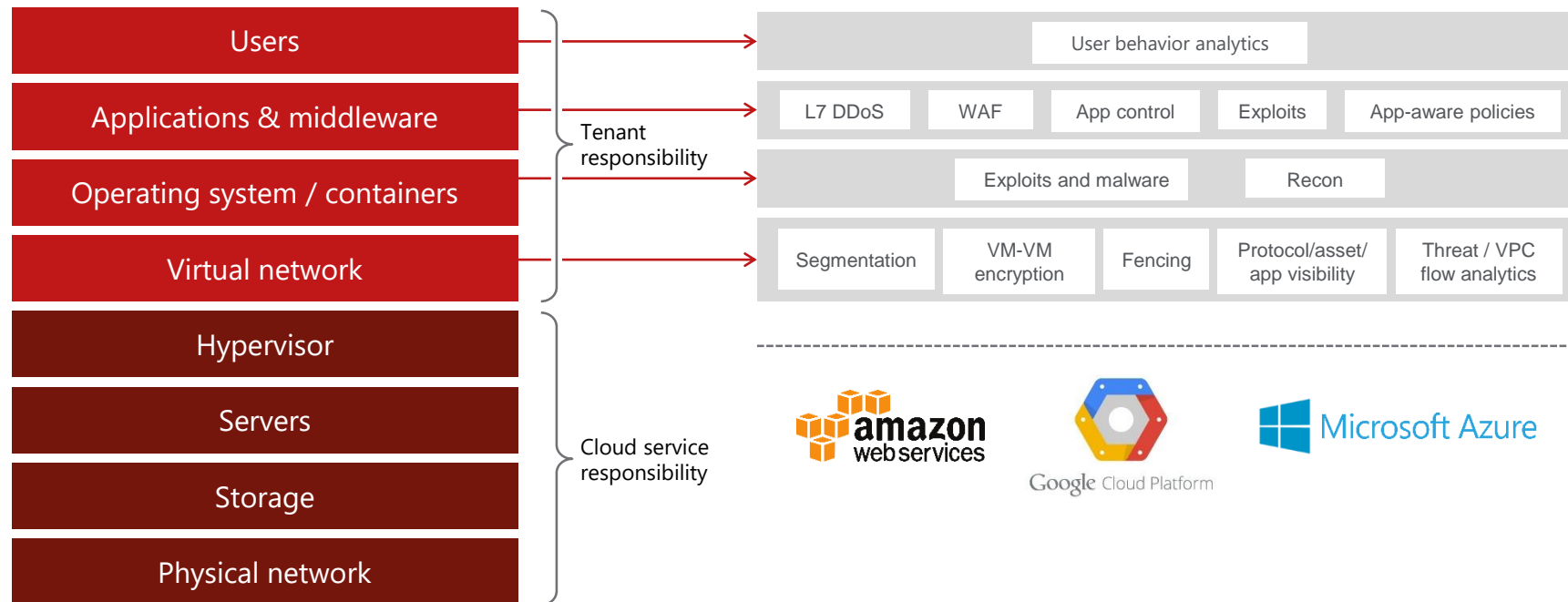
Support for SDN Controller (NSX) or dedicated installations.



Security in the Public Cloud

24

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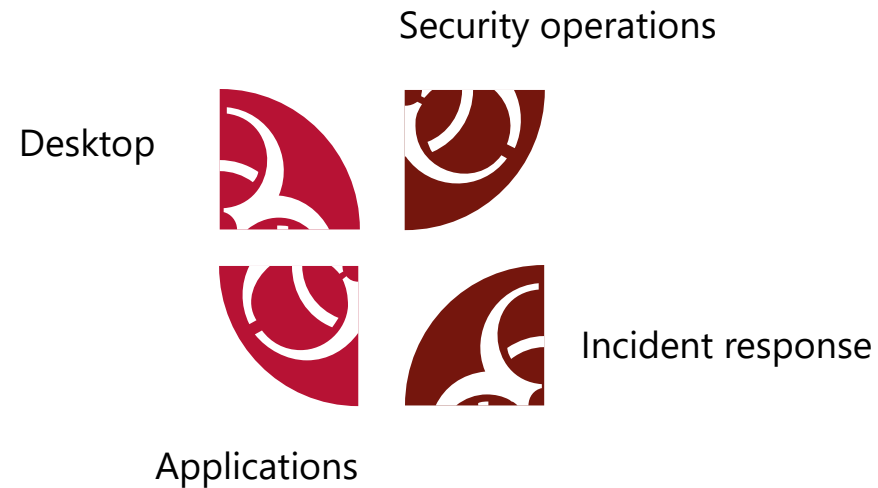


Approach to Connected Visibility

Fragmented Visibility

25

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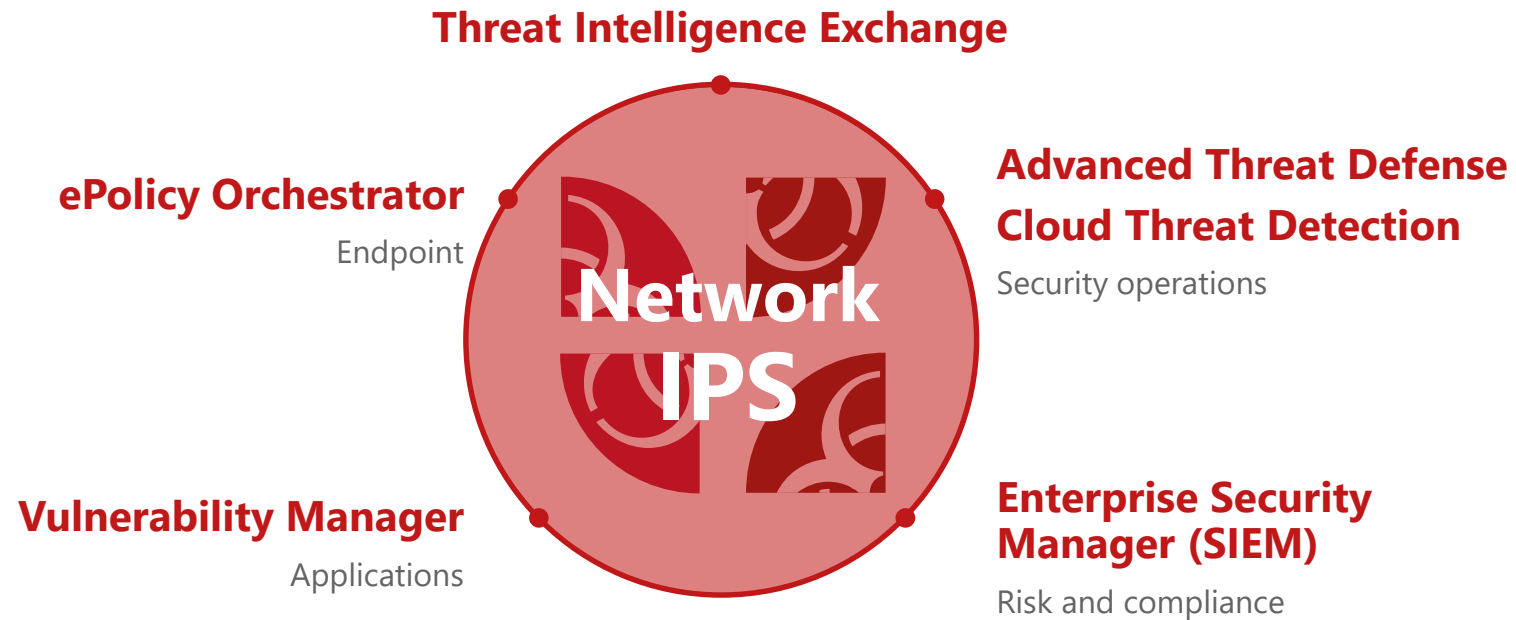


Connected Visibility

Break down data silos

26

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27

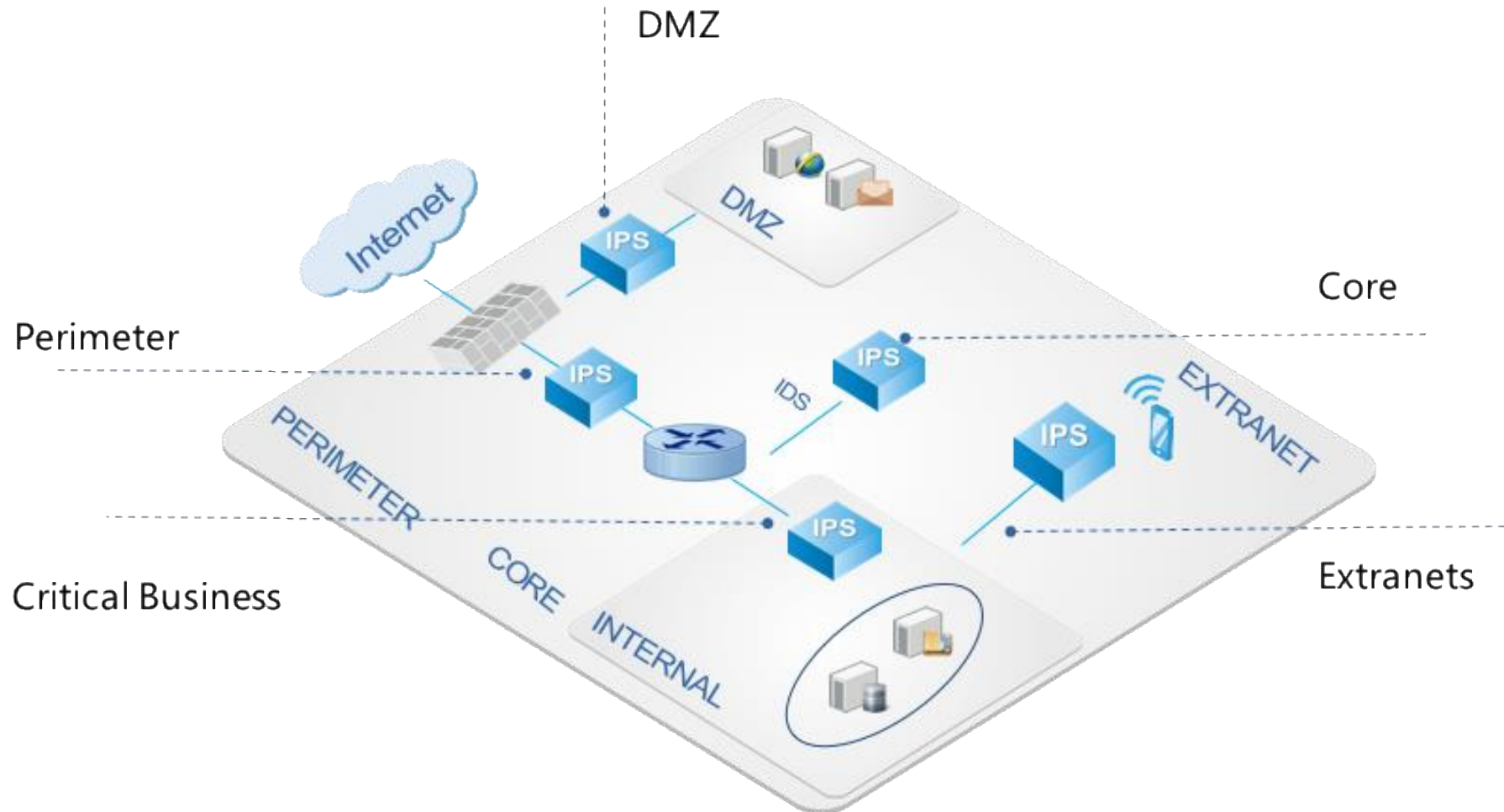
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Deployment Scenarios

28

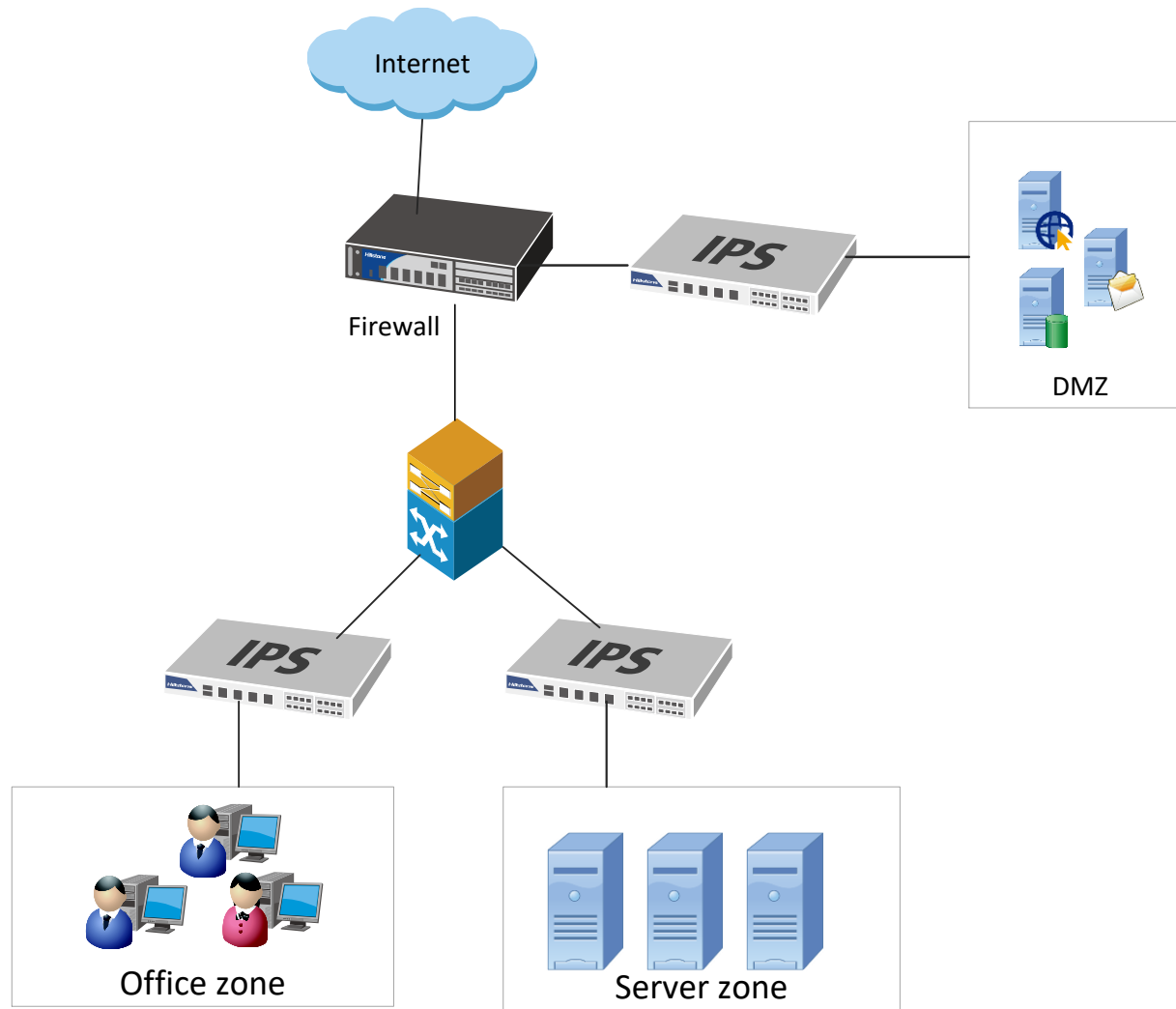
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Deployment in Enterprises

29

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Requirements

- ☐ Protection against sophisticated attacks
- ☐ Insight into network environment

Solutions

- ☐ Strong defensive capabilities
- ☐ Deep visibility from L2 – L7
- ☐ Unknown threat detection
- ☐ Automated analysis and

Products

- ☐ S Series

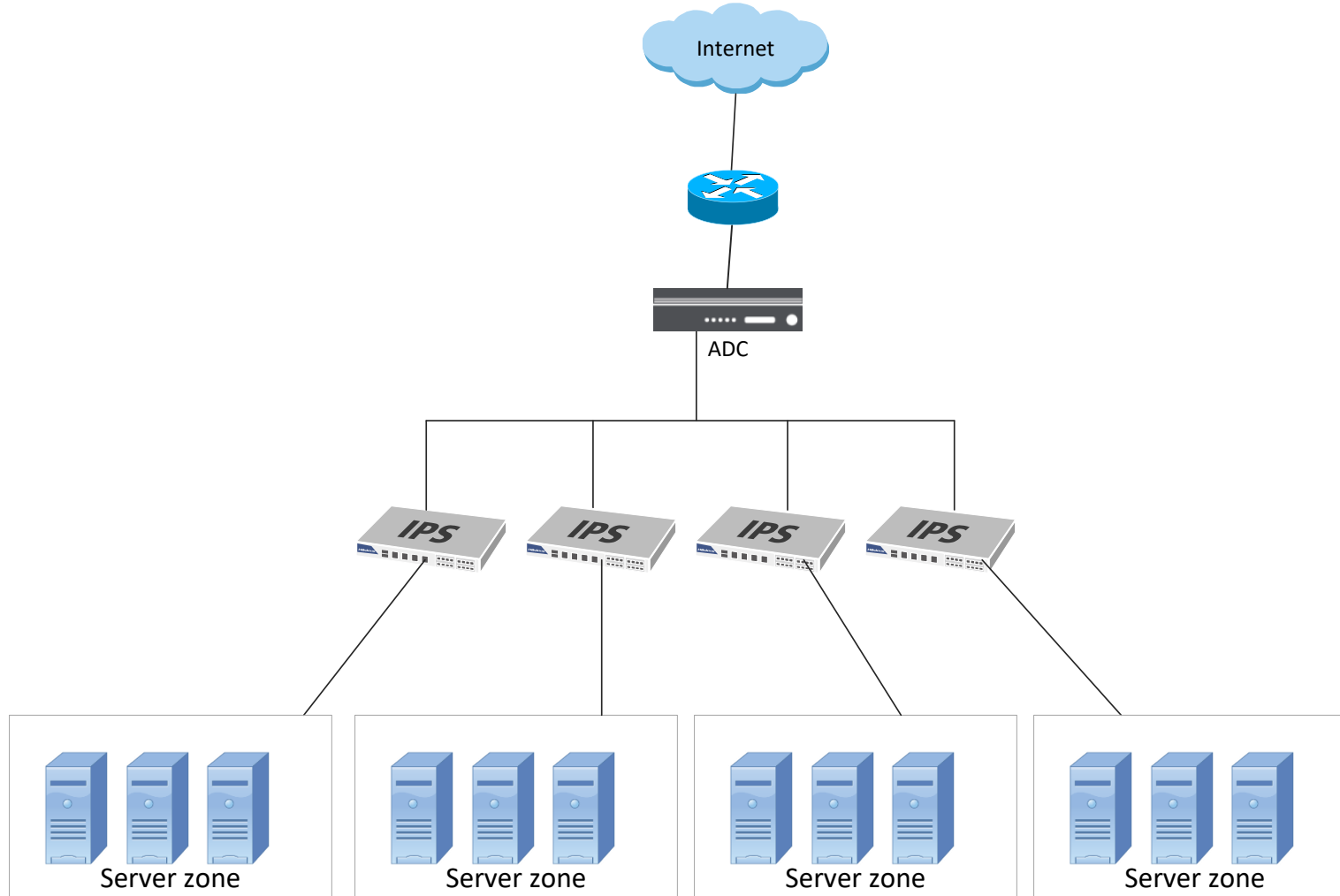
Market

- ☐ Education
- ☐ Enterprises
- ☐ Government

Deployment in Service Provider/Data

30

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Requirements

- ☐ Protection against sophisticated attacks
- ☐ High performance

Solutions

- ☐ Integrate with ADC
- ☐ Strong defensive capabilities
- ☐ Deep visibility from L2 – L7
- ☐ Unknown threat detection
- ☐ Automated analysis and

Products

- ☐ S-Series

Market

- ☐ Service Provider
- ☐ Data Center

Question ???