

RSA[®]Conference2018

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#RSAC

SESSION ID: SPO3-T07

HOW CLOUD, MOBILITY AND SHIFTING APP ARCHITECTURES WILL TRANSFORM SECURITY: GAINING THE HOME-COURT ADVANTAGE

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VMware

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Forecasted
Growth in Overall IT Spend



4.5%

\$3.7 Trillion in 2018

Gartner Press Release, Gartner Says Global IT Spending to Reach \$3.7 Trillion in 2018, January 16, 2018

Growth in
Security Spend



10.2%
(since 2017)

\$91.4 Billion in 2018

Source: IDC, Worldwide Semiannual Security Spending Guide, #US42570018, March 2018

Increase in
Security Losses

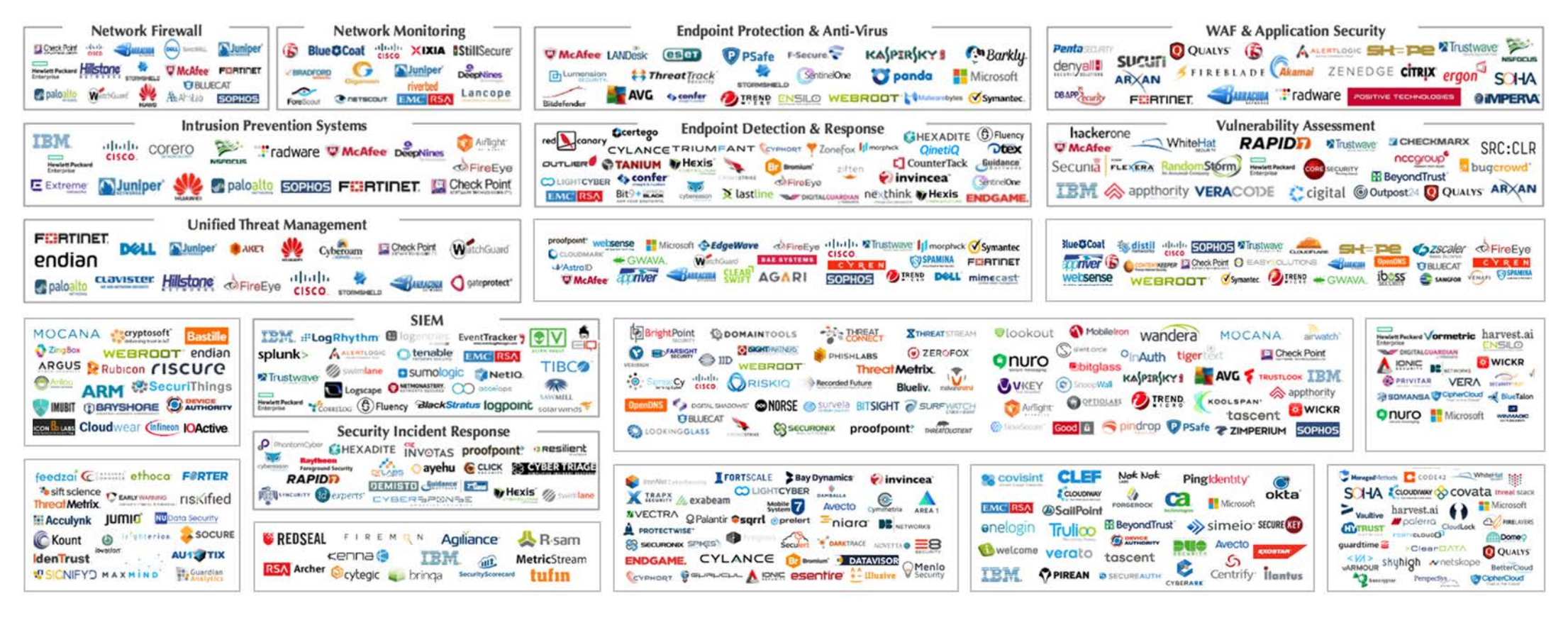


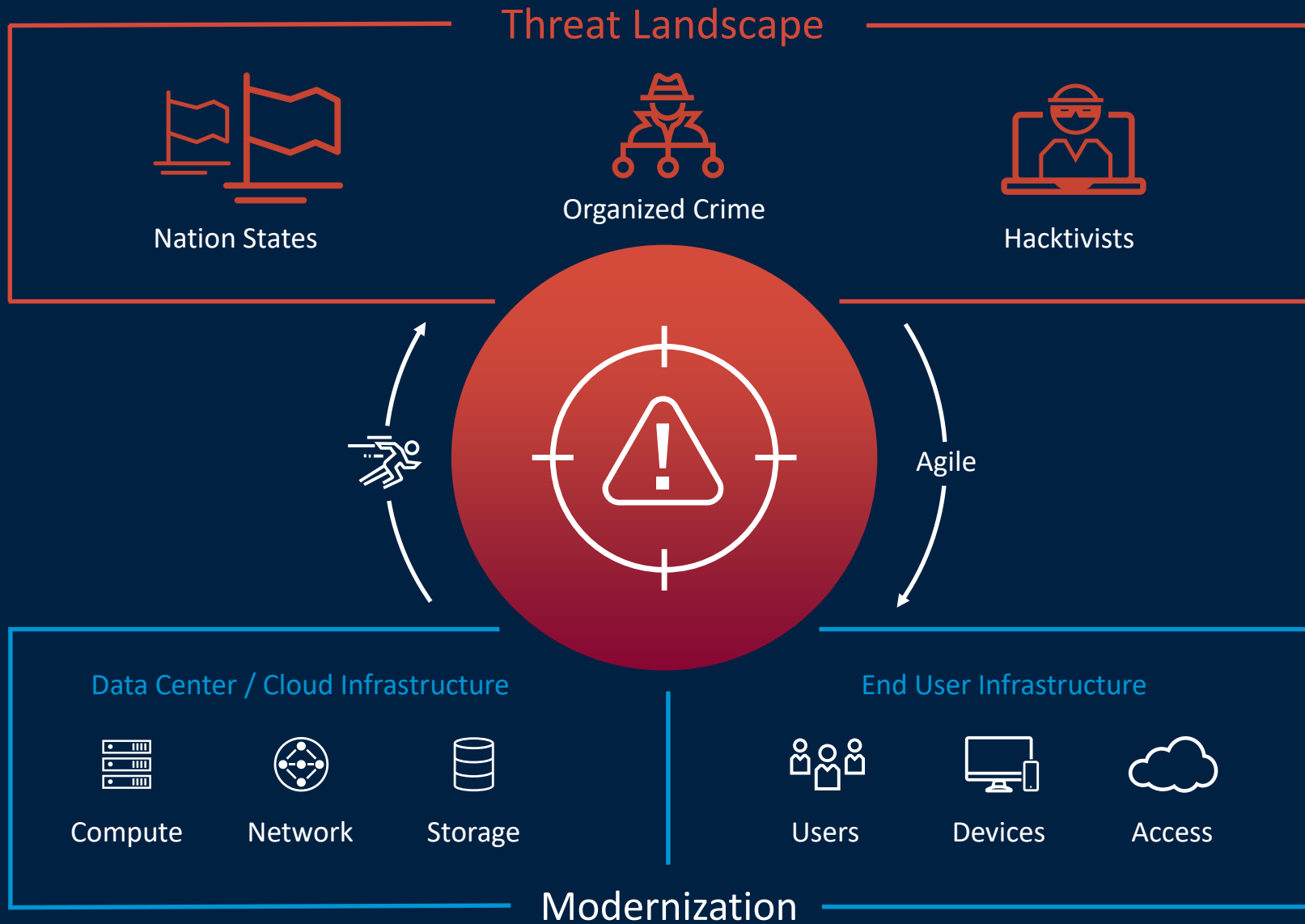
26%
(since 2014)

\$600 Billion in 2017

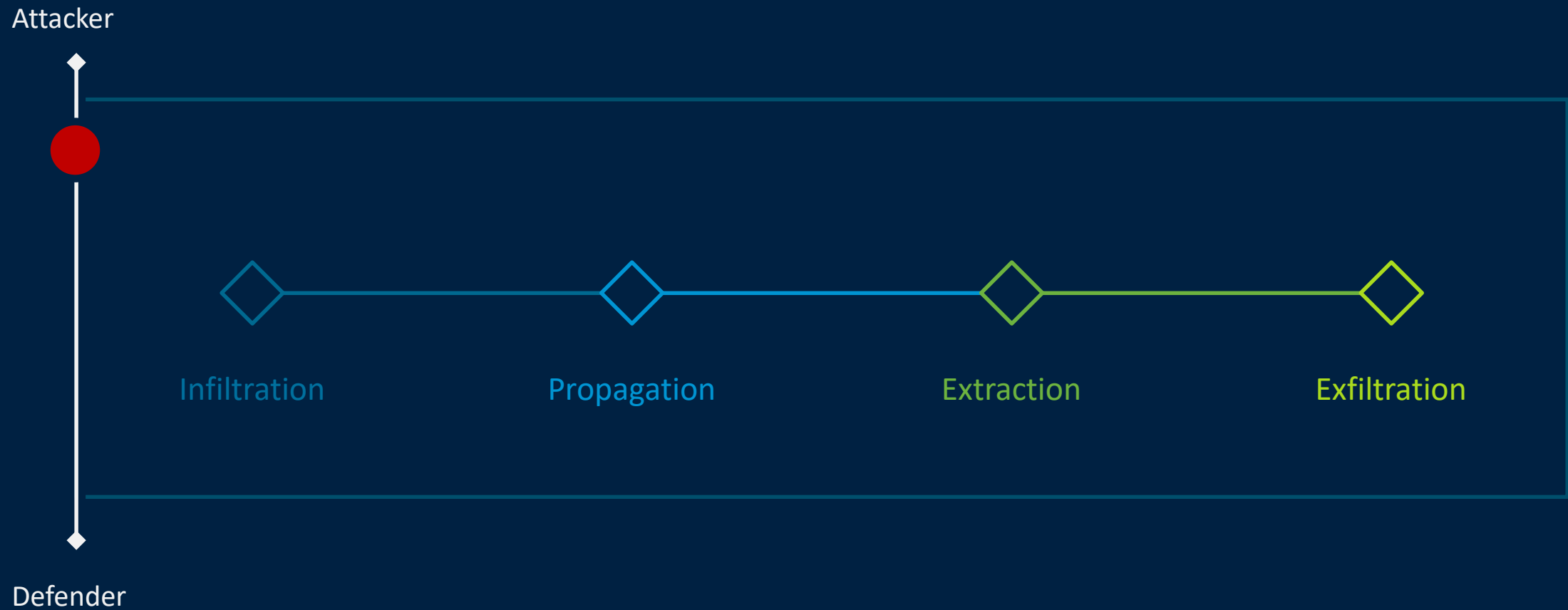
Source: Center for Strategic and Int'l Studies, Economic Impact of Cybercrime, February, 2018

Security Controls

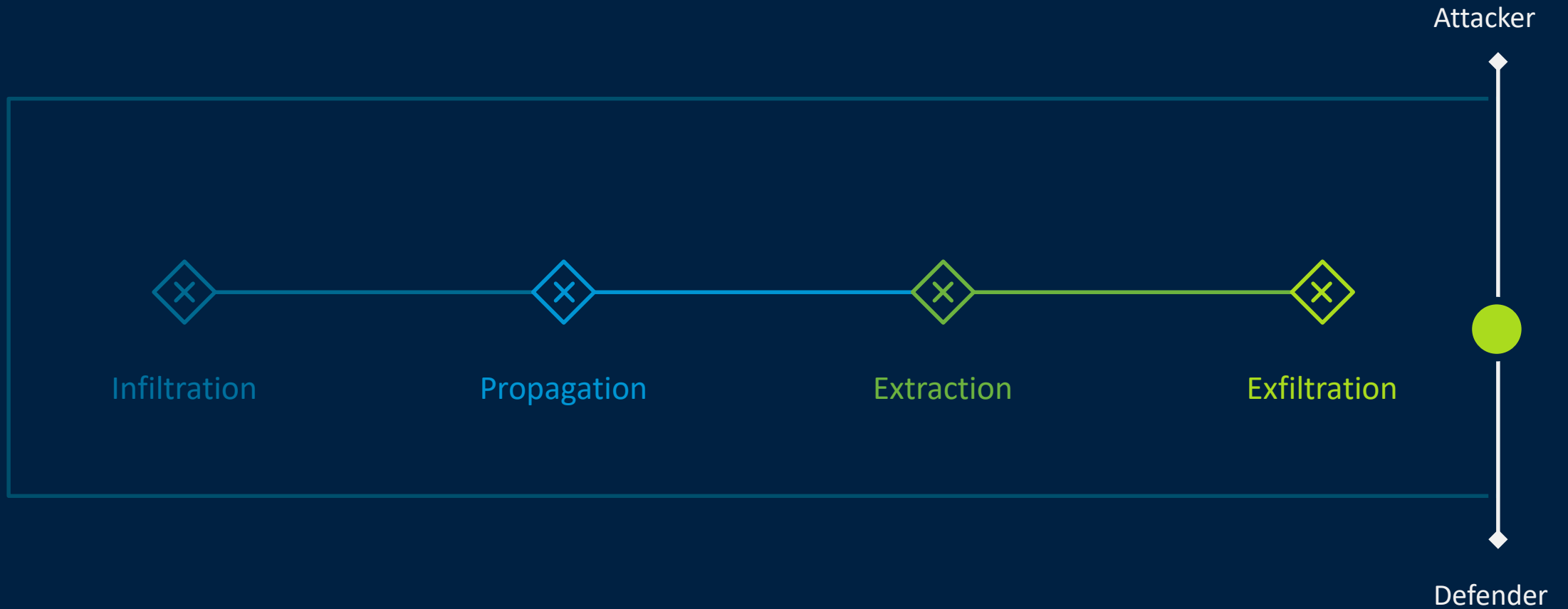




Dynamics of an Attack



Dynamics of an Attack



Home-court advantage

noun

the advantage that you have over an opponent when a sports contest takes place at your own sports field or court.

Macmillan Dictionary



Home-court advantage

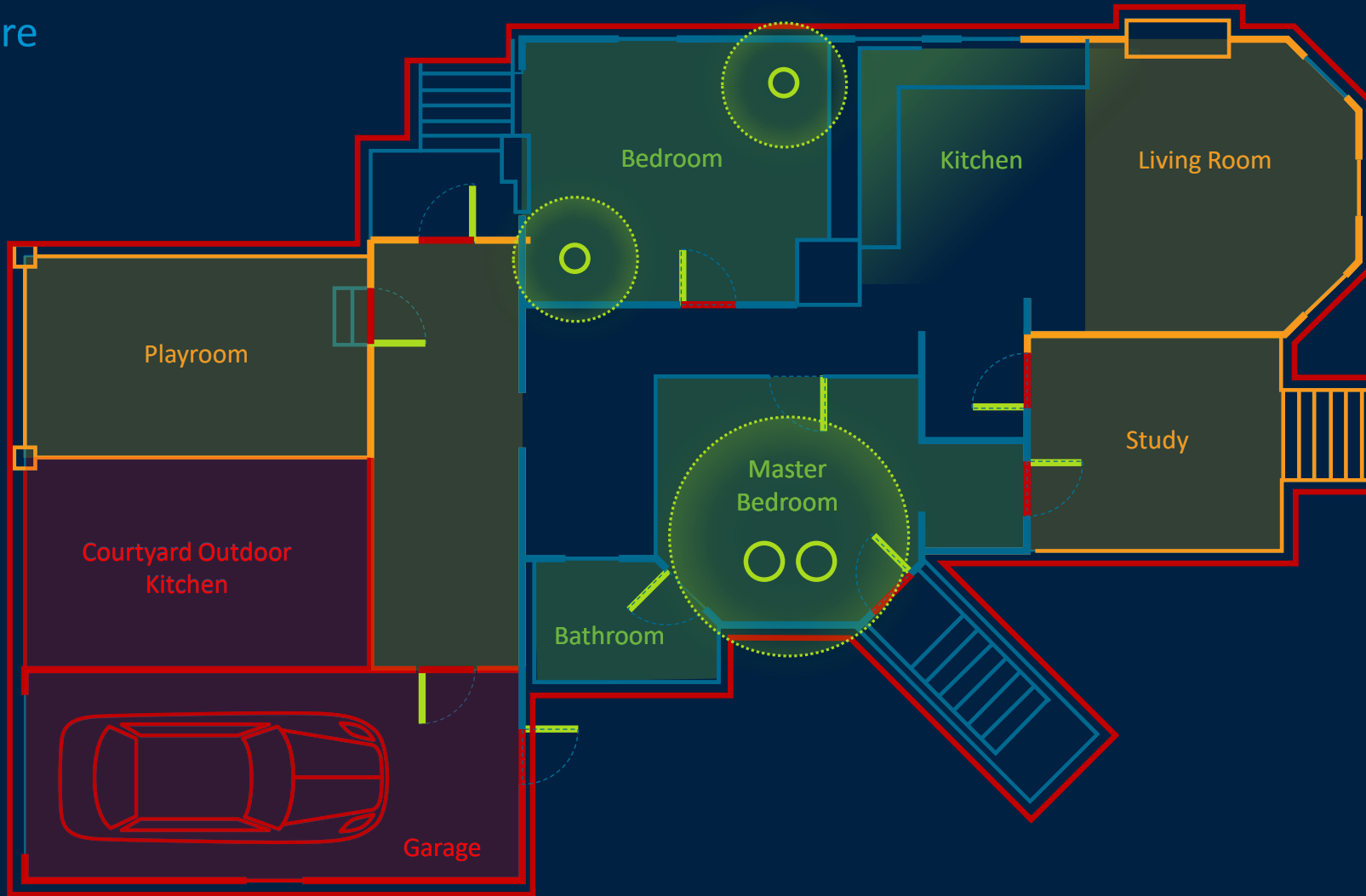
Home-Court Advantage



Home-Court Advantage Comes From...

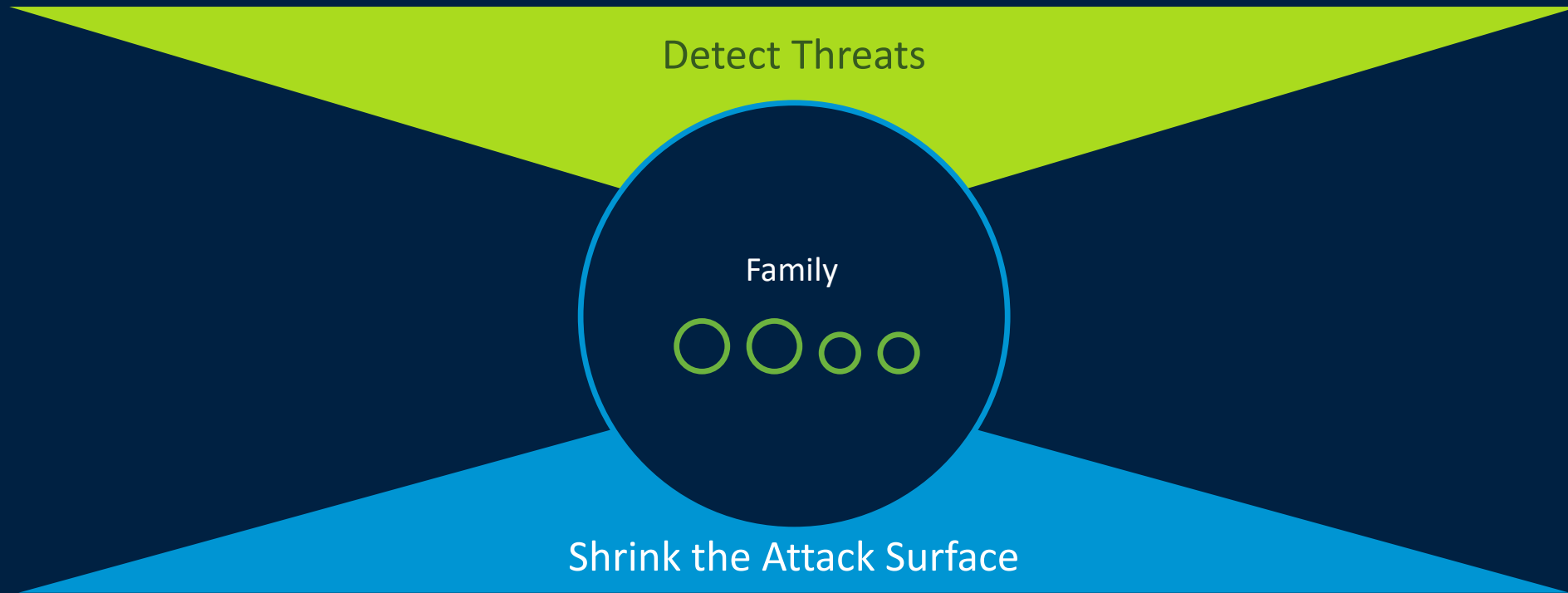
Understanding how your family uses your home, and using that context to shrink your security posture

Family



If You Want Home-Court Advantage

Take advantage of what you know better than an attacker



Why don't we get home-court advantage in cyber security?

We Keep All the Lights On, and All the Rooms Open





We See Through an Infrastructure Lens

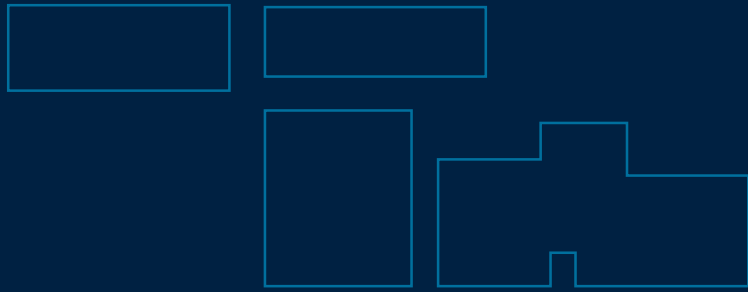
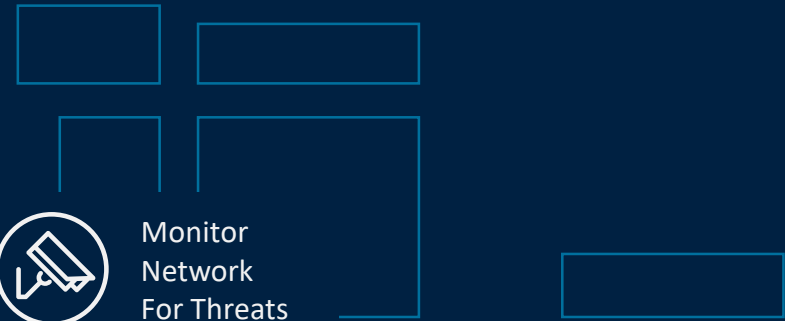
 Monitor
Perimeter
For Threats



 Monitor
Endpoint
For Threats



 Monitor
Network
For Threats



If We Compartmentalize at All, it's Aligned to an Infrastructure Lens





Threat

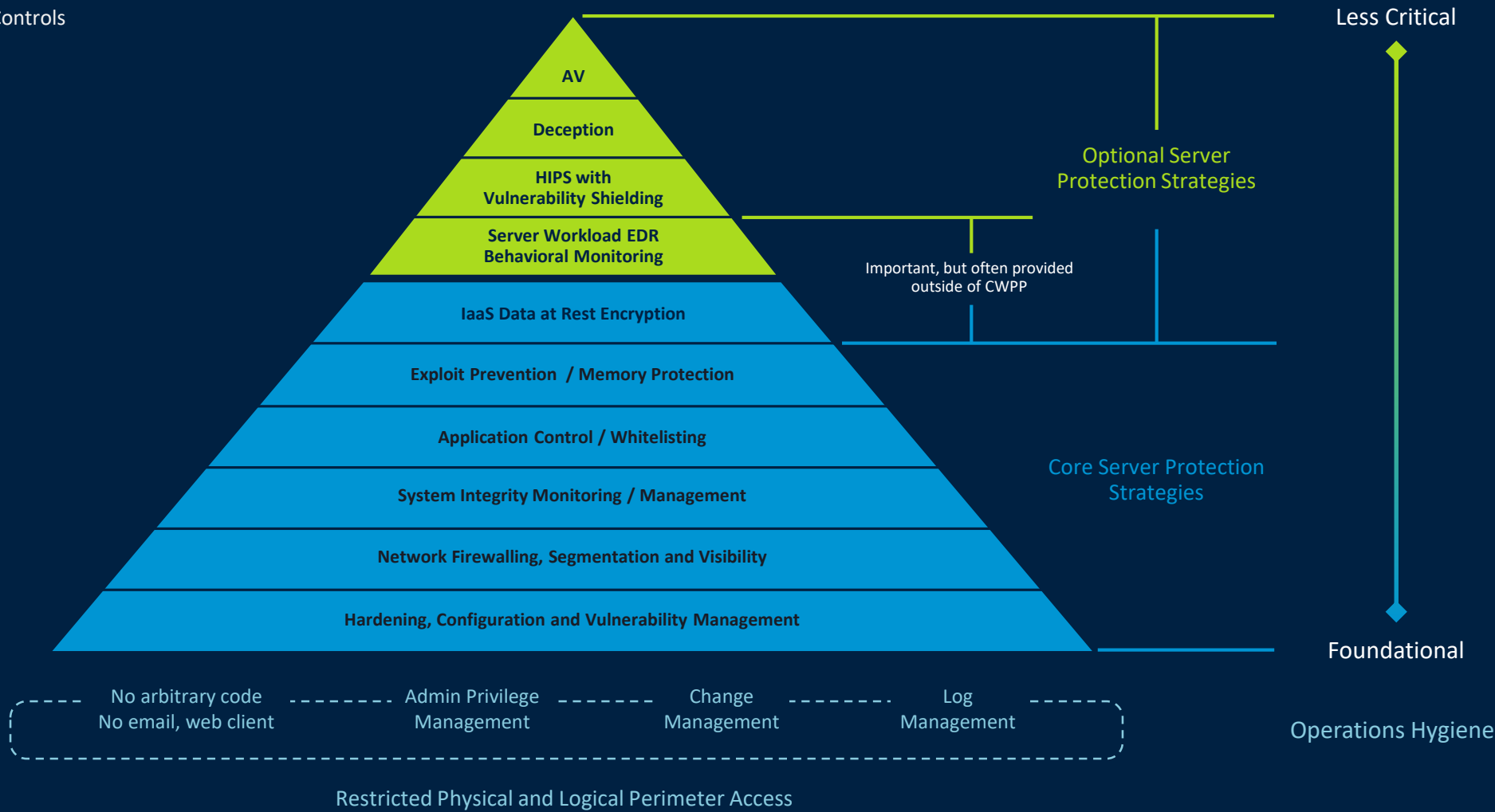


Posture

We Should Focus More on Core Protection Strategies

Gartner Market Guide for Cloud Workload Protection Framework

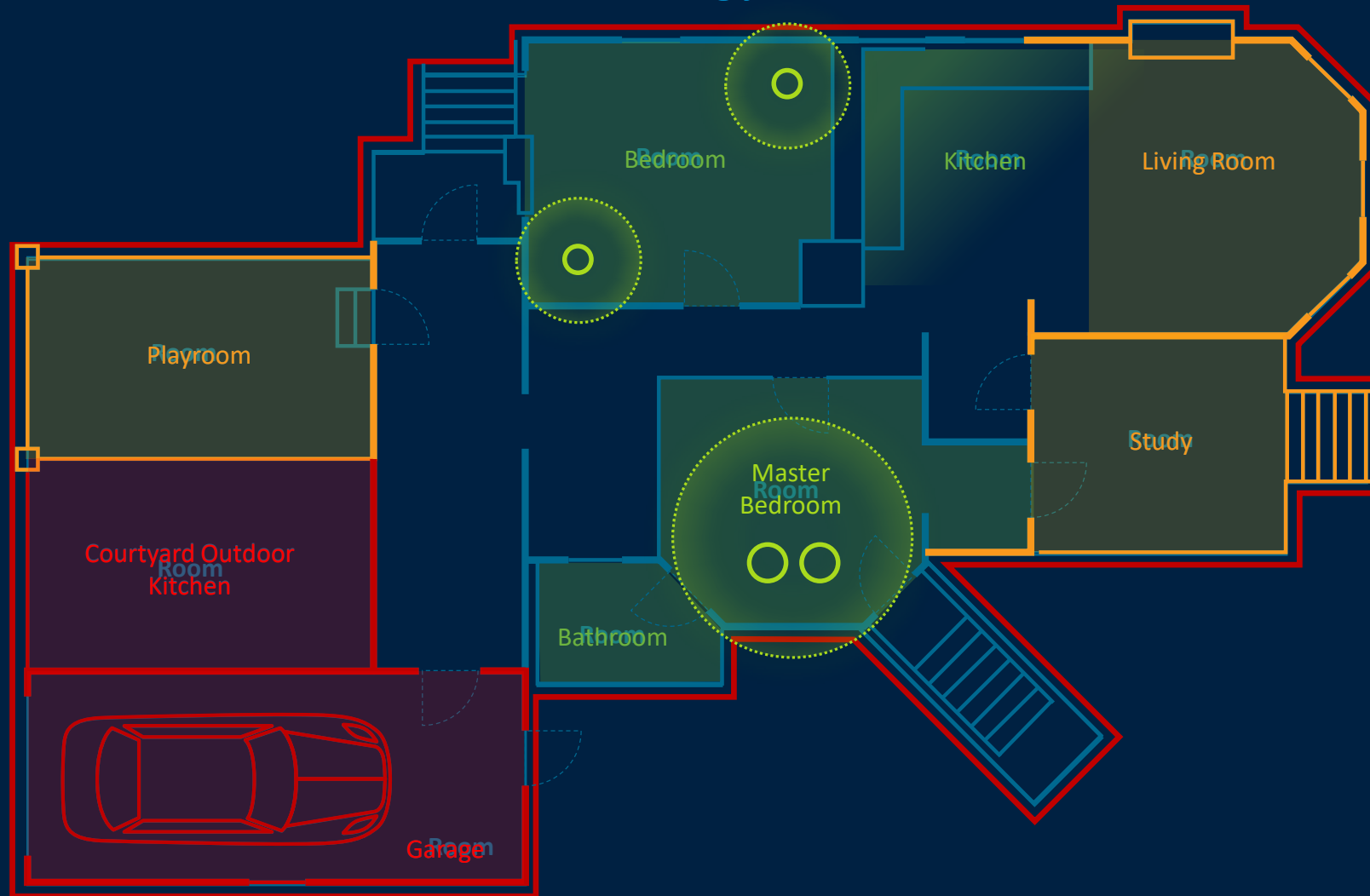
Figure 1. Cloud Workload Protection Controls Hierarchy, © 2018 Gartner, Inc.



And We Should Focus on Applications and Data

And how they use the infrastructure – versus focusing just on the infrastructure

Family





Cyber Threats

Residual Risk



Apps



Data



Micro-Segmentation



Least Privilege



Encryption



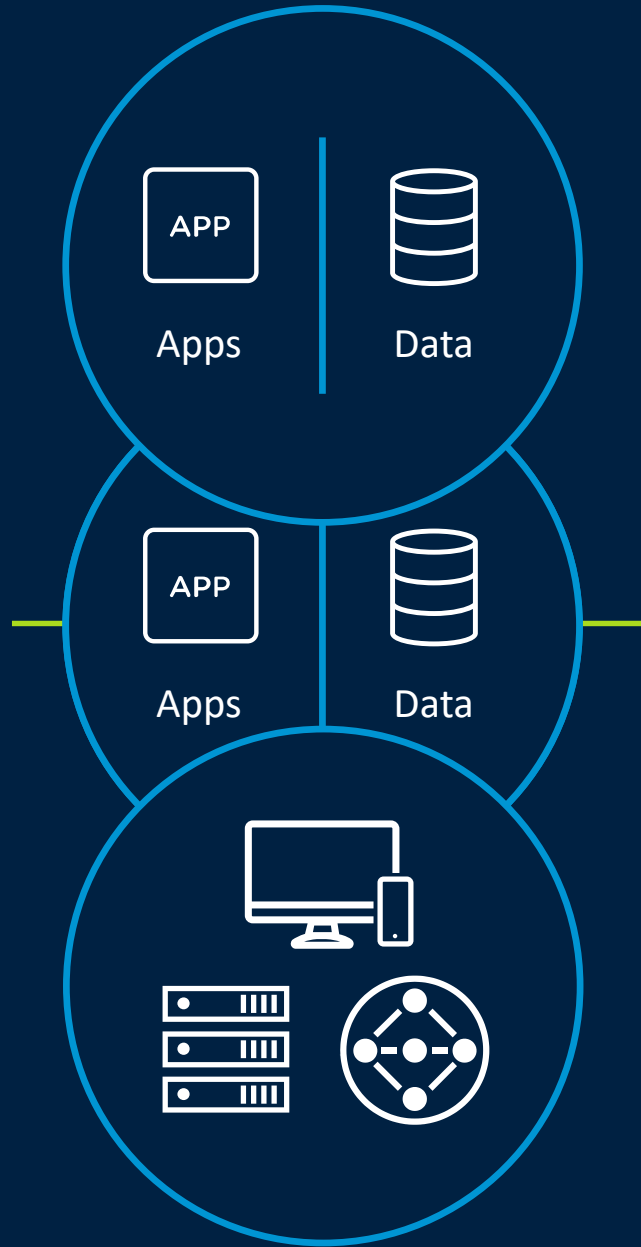
Multi-Factor Authentication

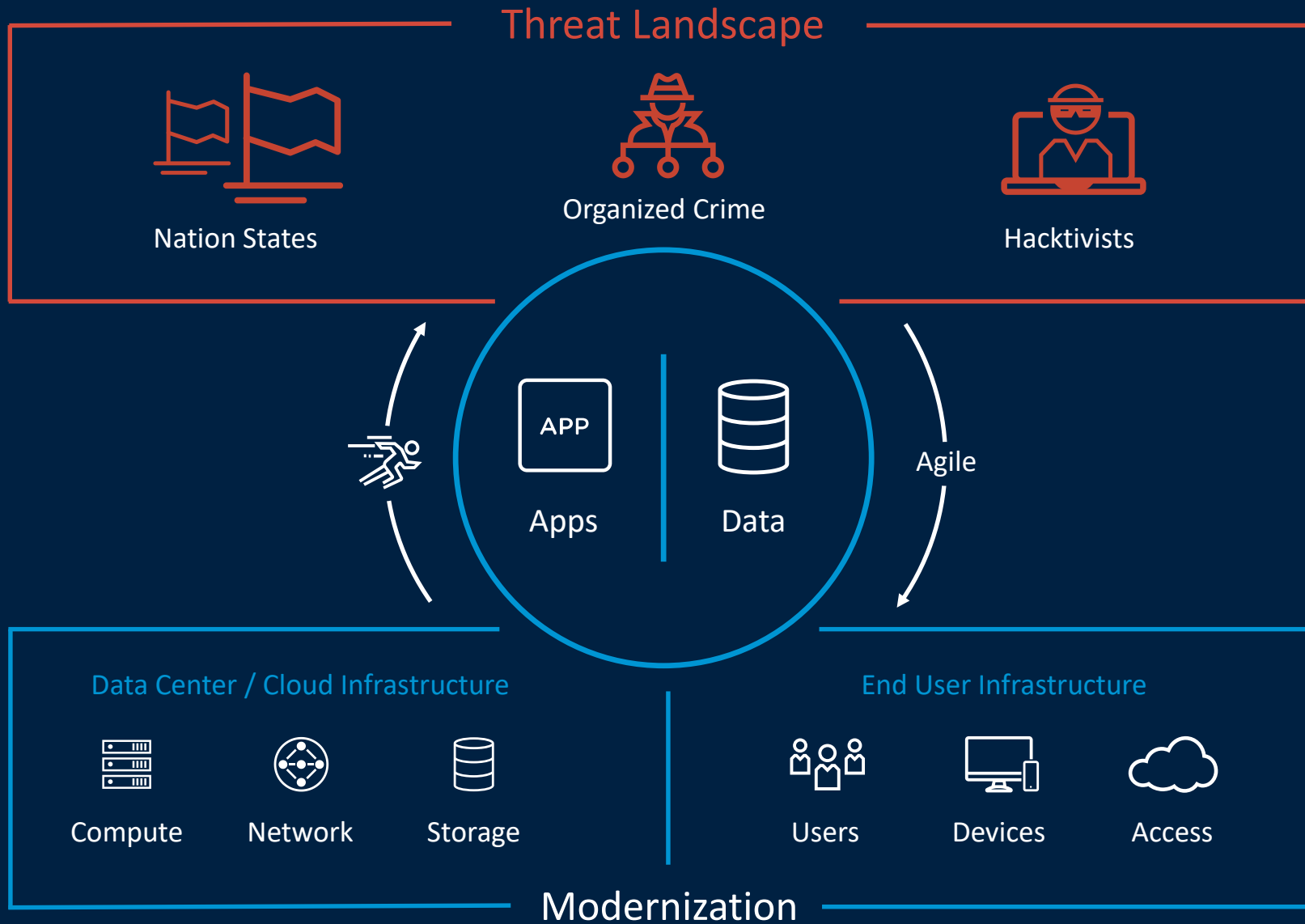


Patching

Cyber Hygiene

Attack Surface







Compute



Network



Storage



Users



Devices



Access

Cloud & Mobile
Infrastructure

Can the unique properties of
cloud and mobile be
the solution versus the problem?



Virtualization



Mobility







Cyber Threats

Residual Risk

Home-court advantage



Apps



Data

Home-court advantage



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Encryption



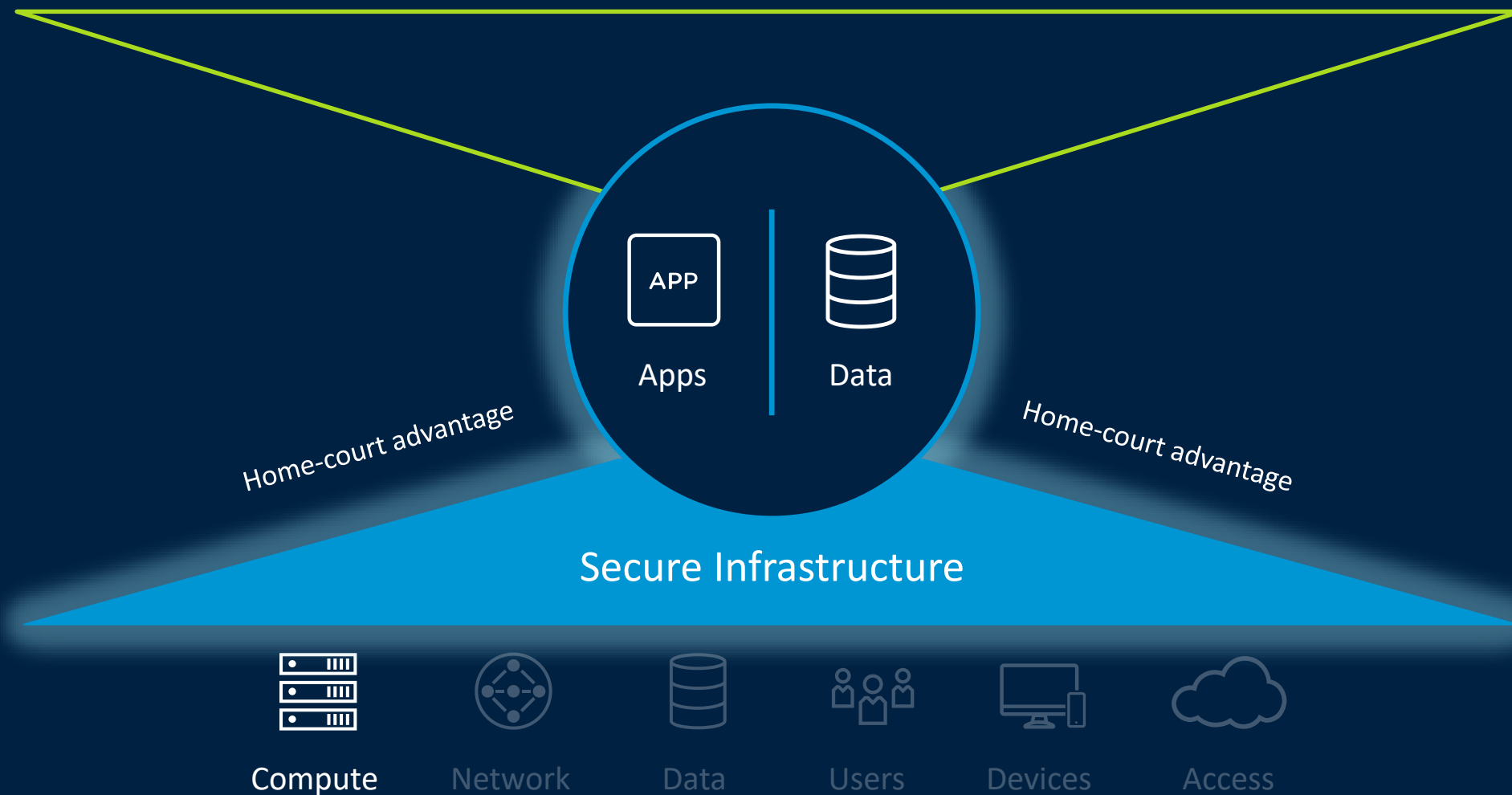
Multi-Factor Authentication



Patching

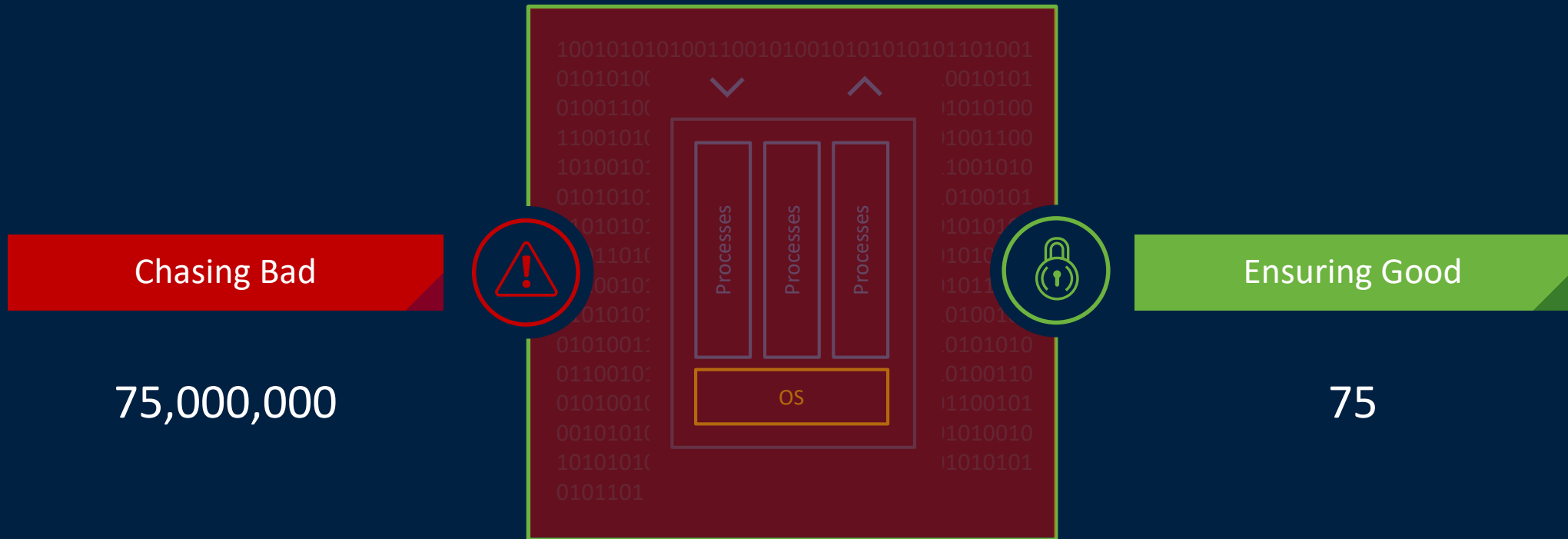
Cyber Hygiene

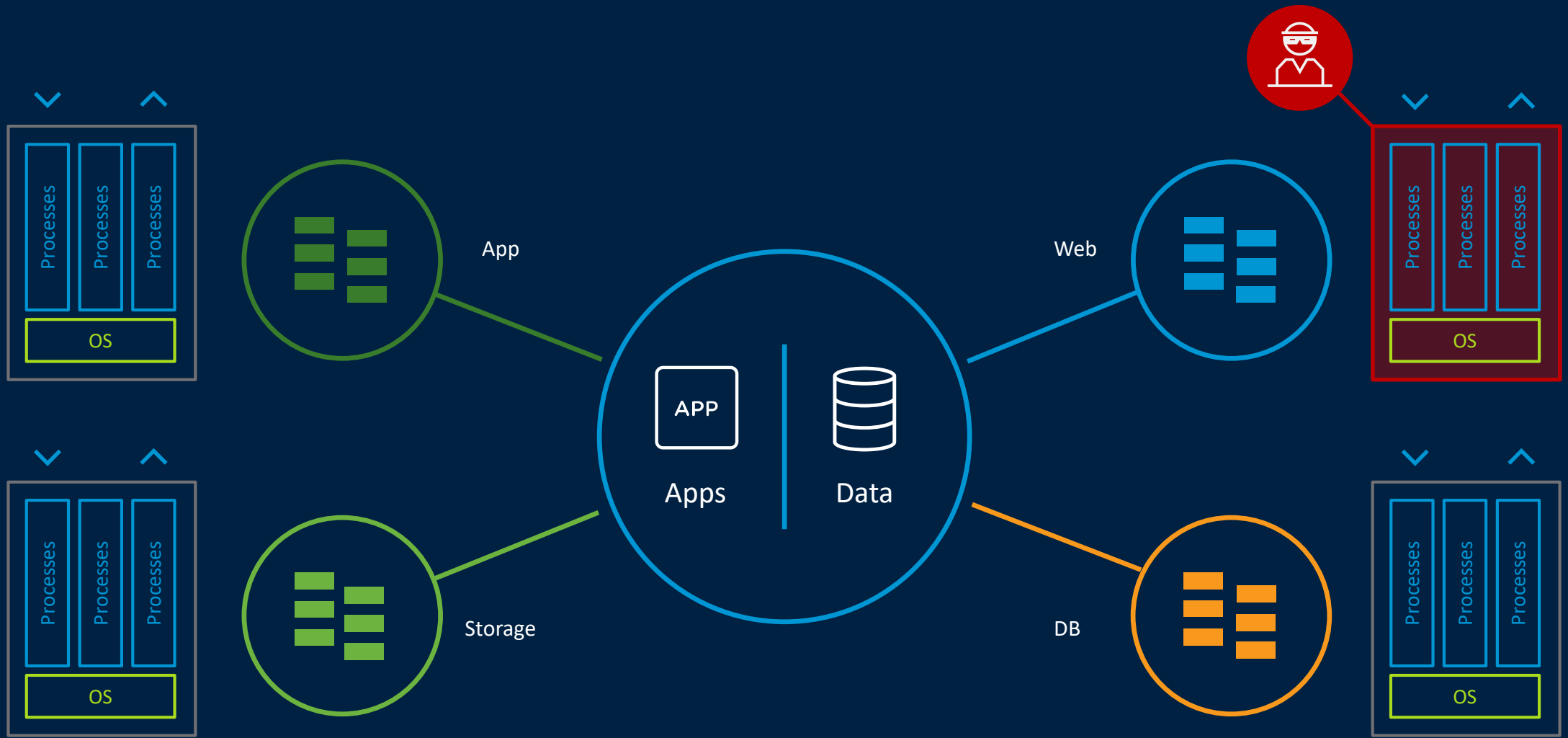
Attack Surface



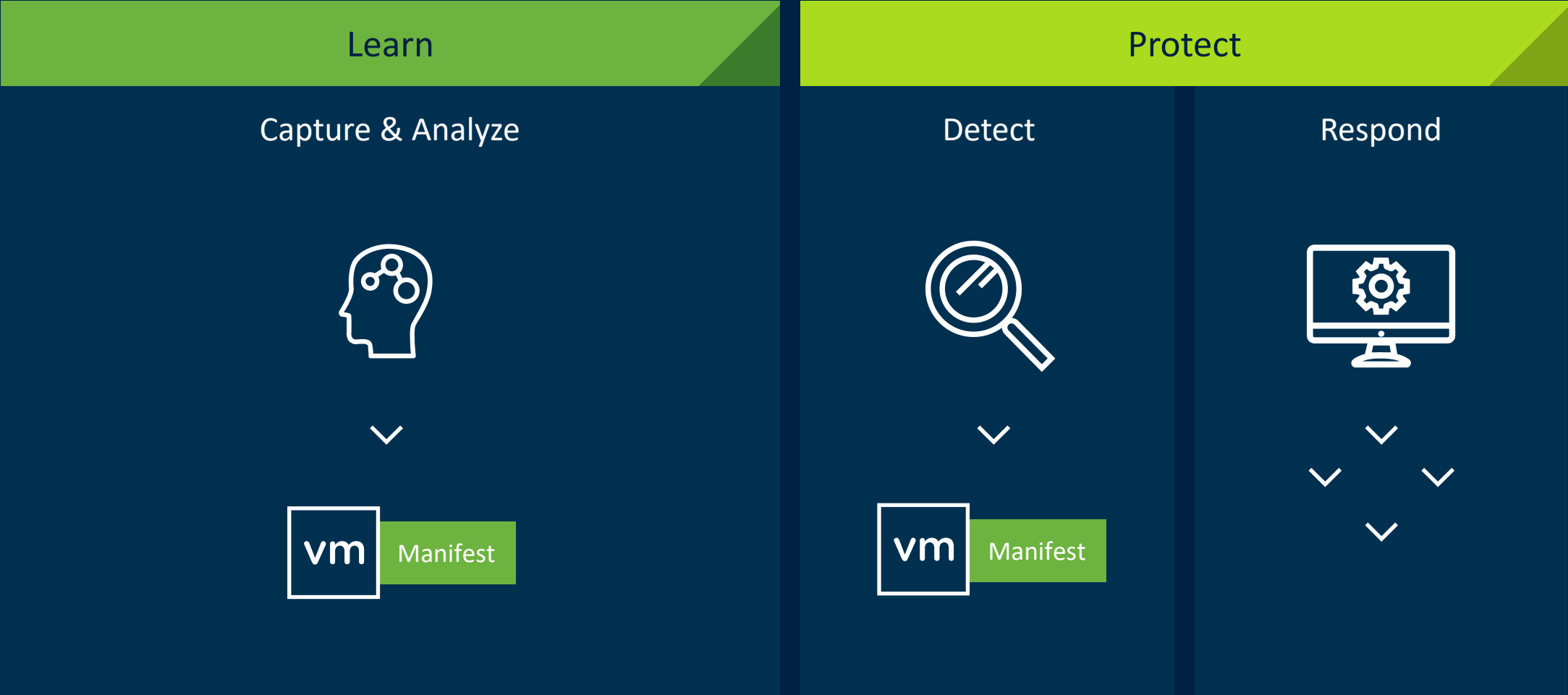
Changing the Application Security Model

From chasing bad to ensuring good

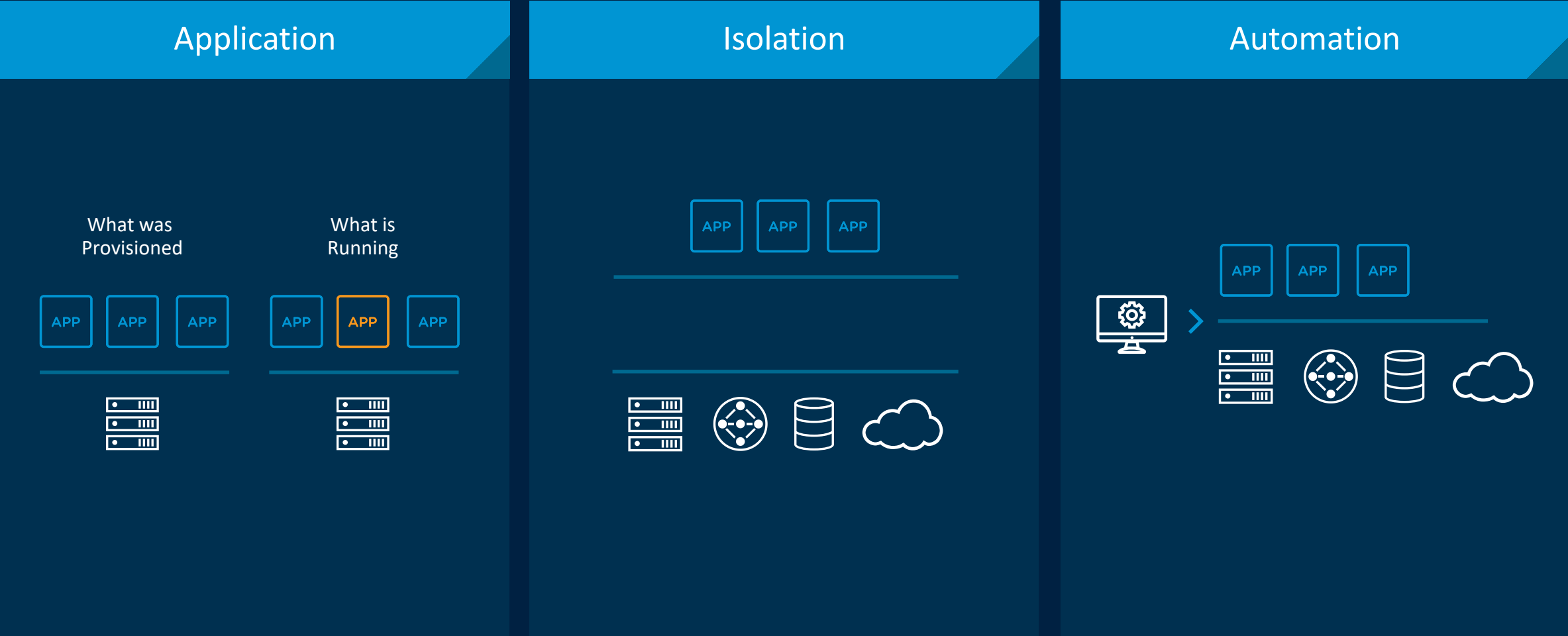




Protecting Applications in Virtualized and Cloud Environments

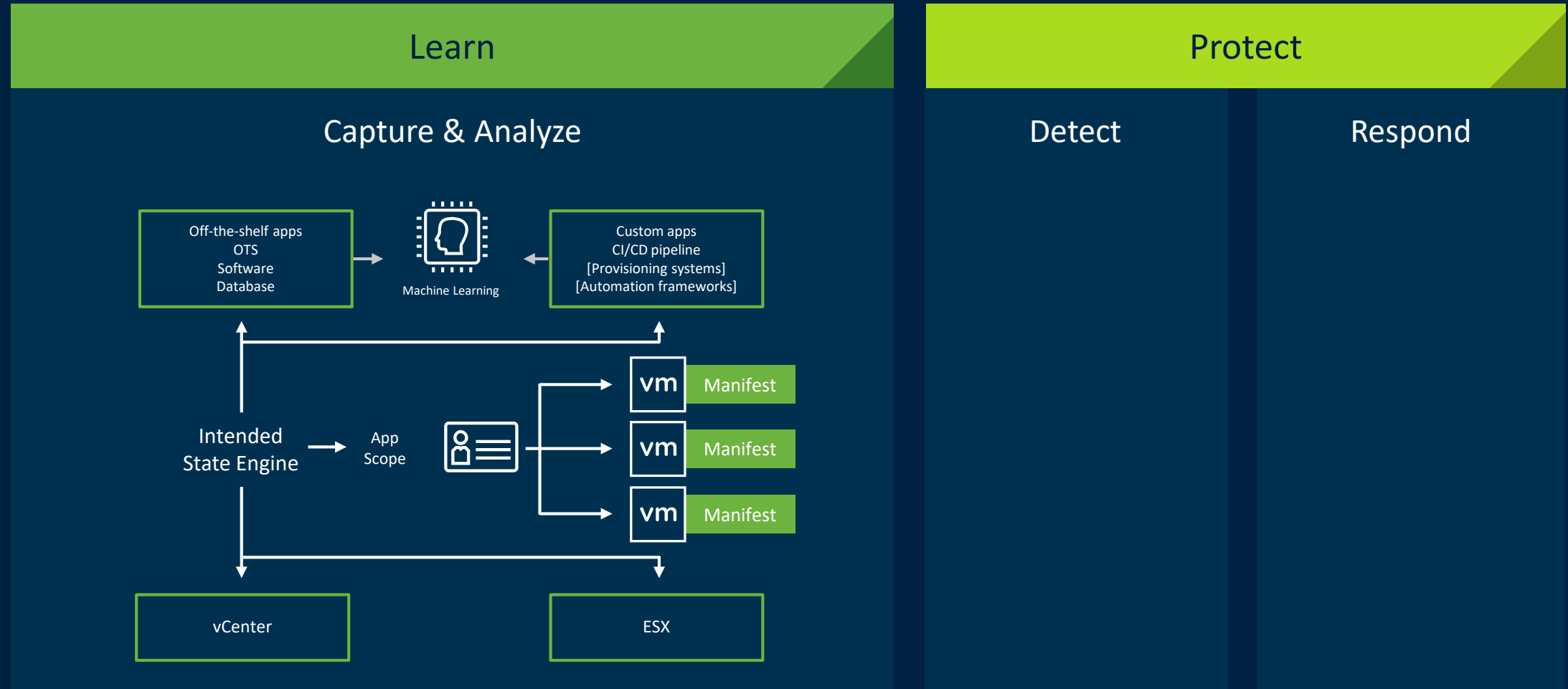


Uniquely Leverage the Hypervisor



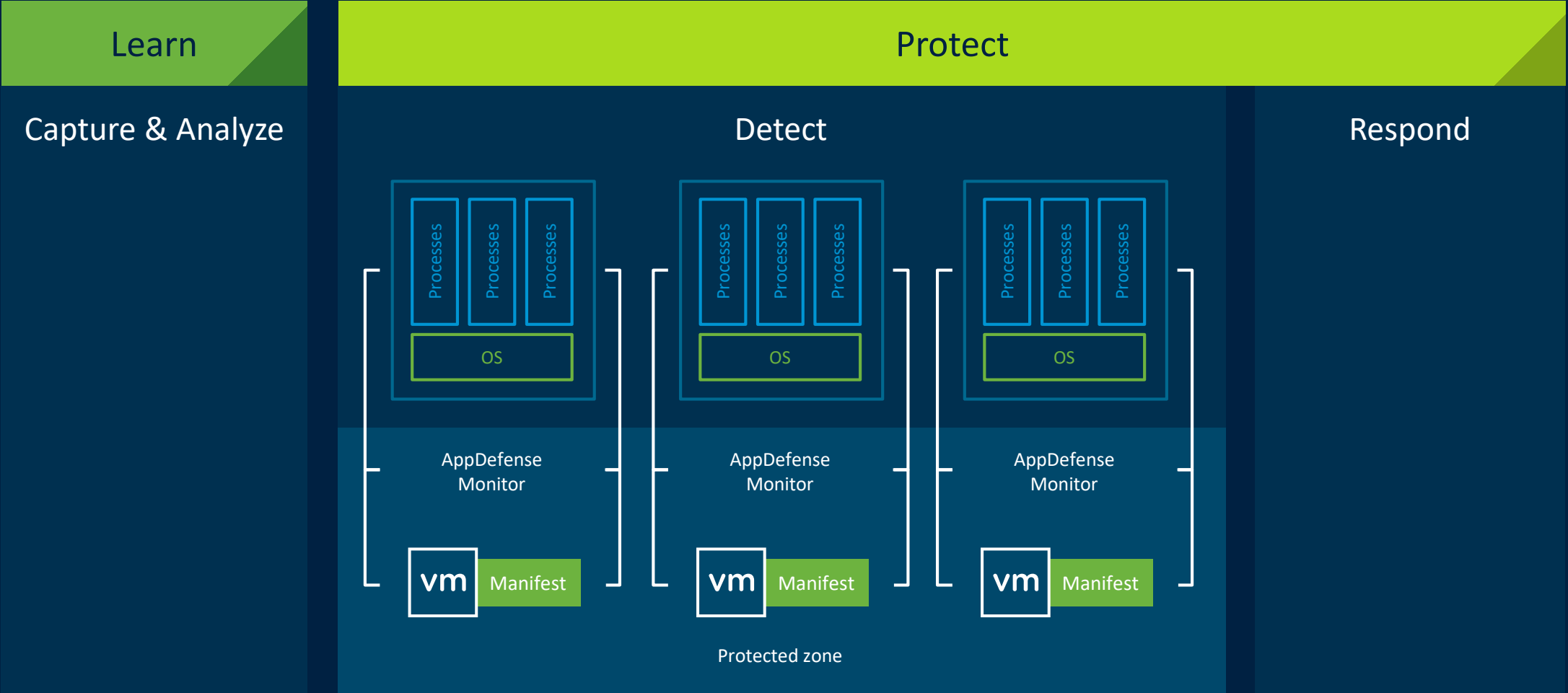
Capture & Analyze

Capture the purpose and intended state of applications and VMs



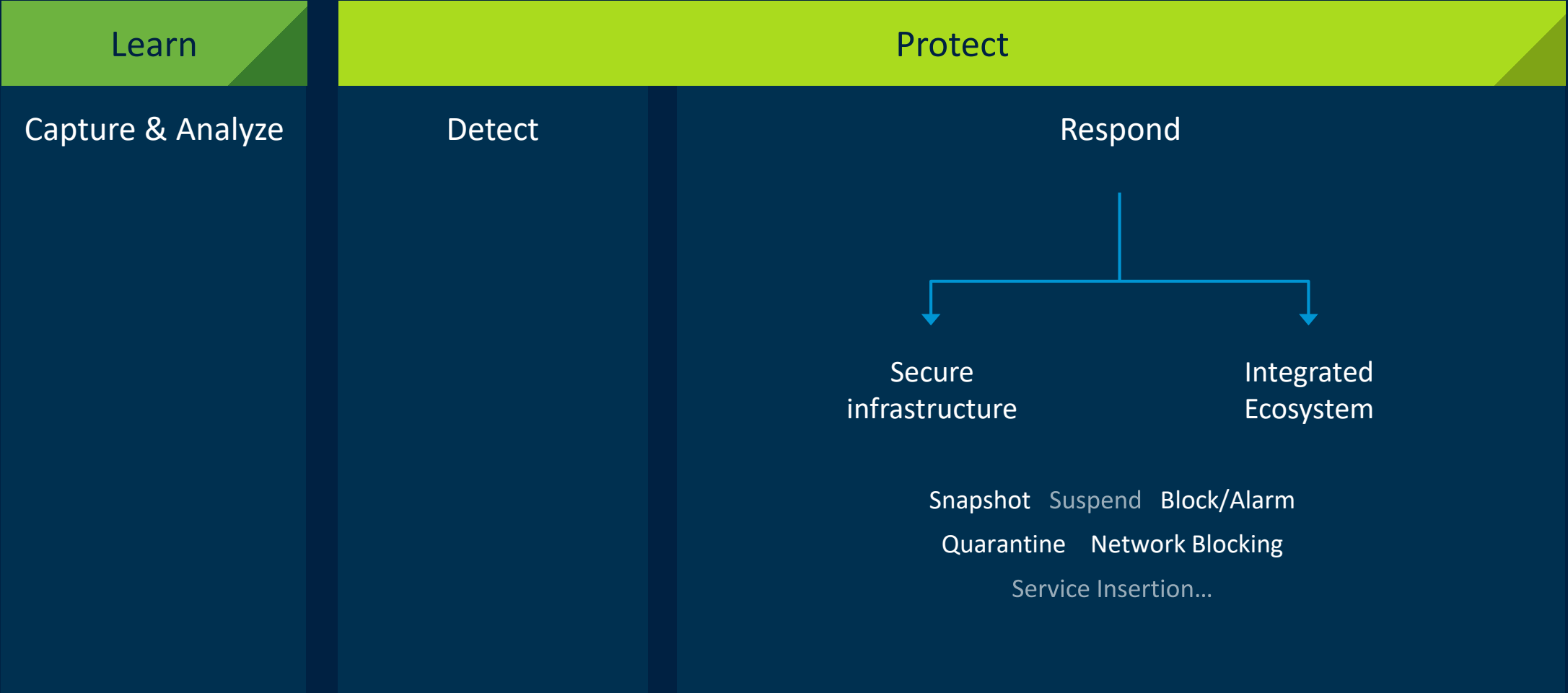
Detect

Runtime application attestation and secure manifest store



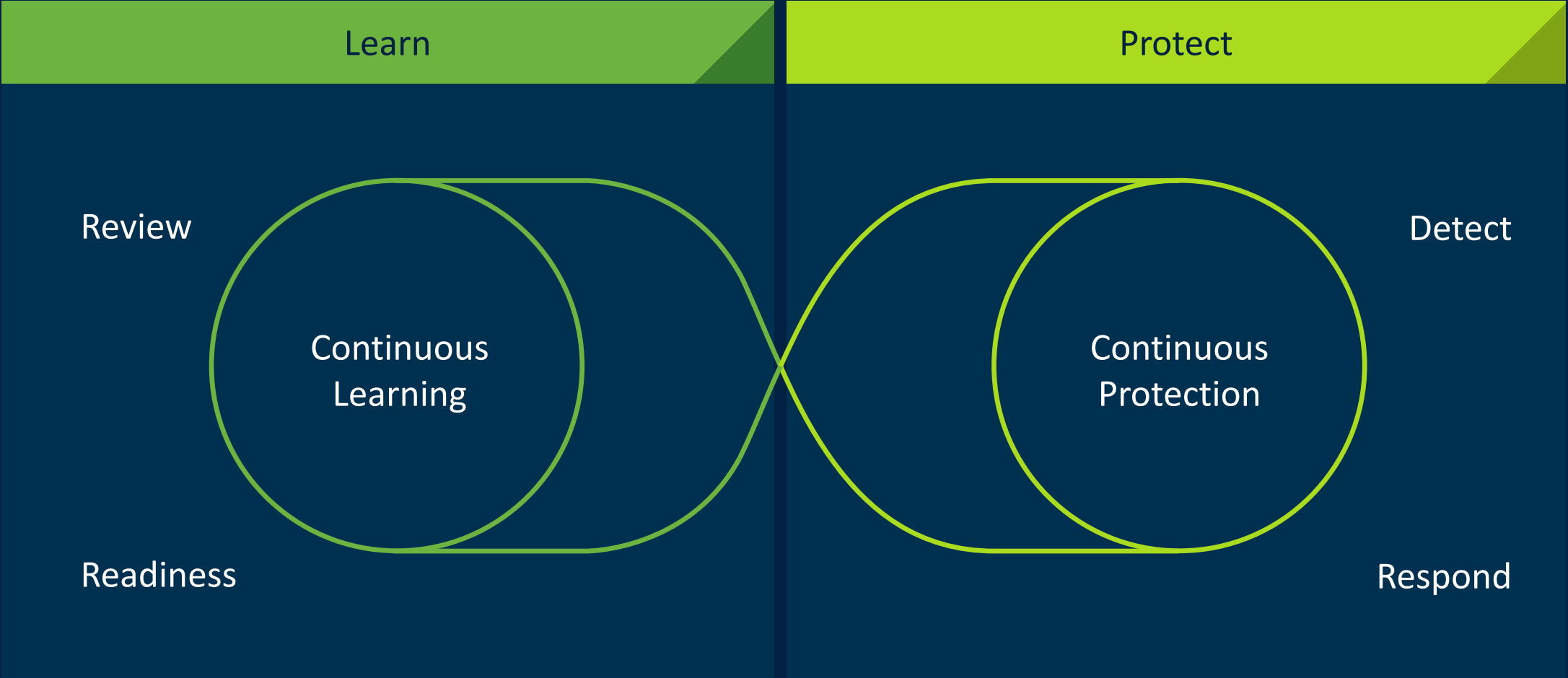
Respond

Orchestrated incident response routines for the SOC



Review and Readiness

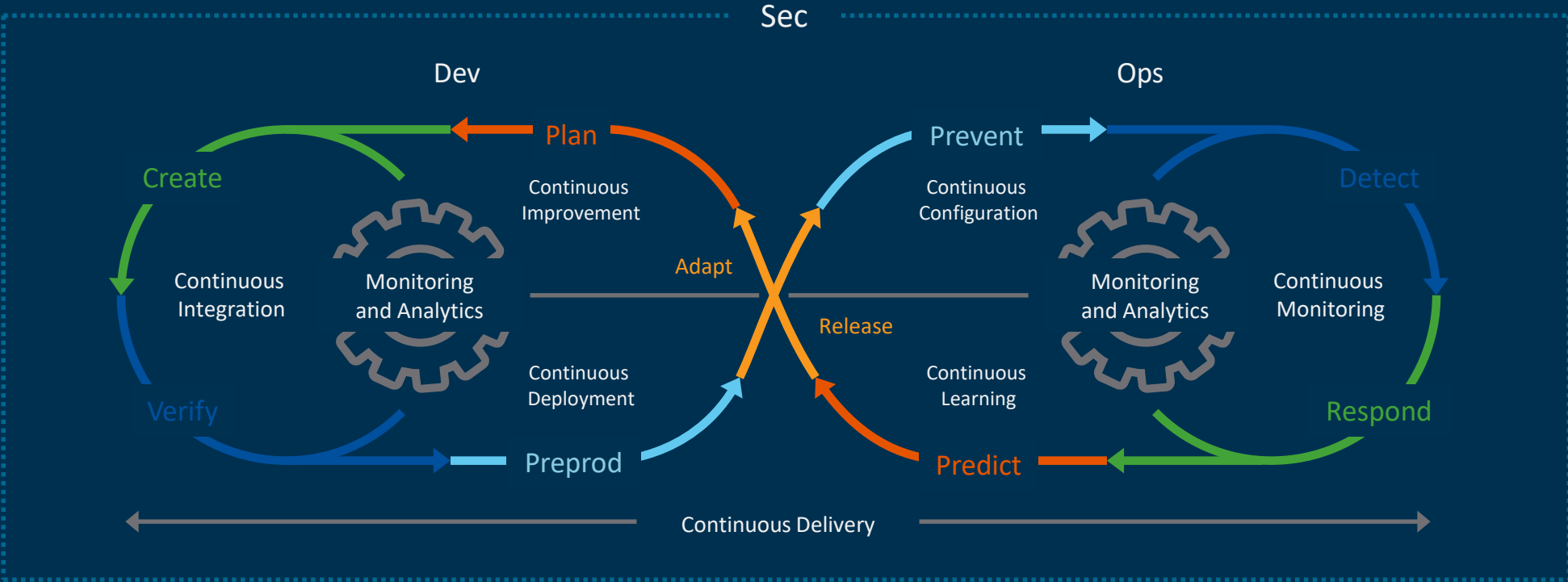
Collaboration between security teams and application teams



Review and Readiness

Collaboration Between Security Teams and Application Teams

Figure 2: DevSecOps: Secure Development as a Continuous Improvement Process © 2017 Gartner, Inc.



Demo

Security Controls



Apps



Data



Secure Infrastructure



Compute



Network



Data



Users



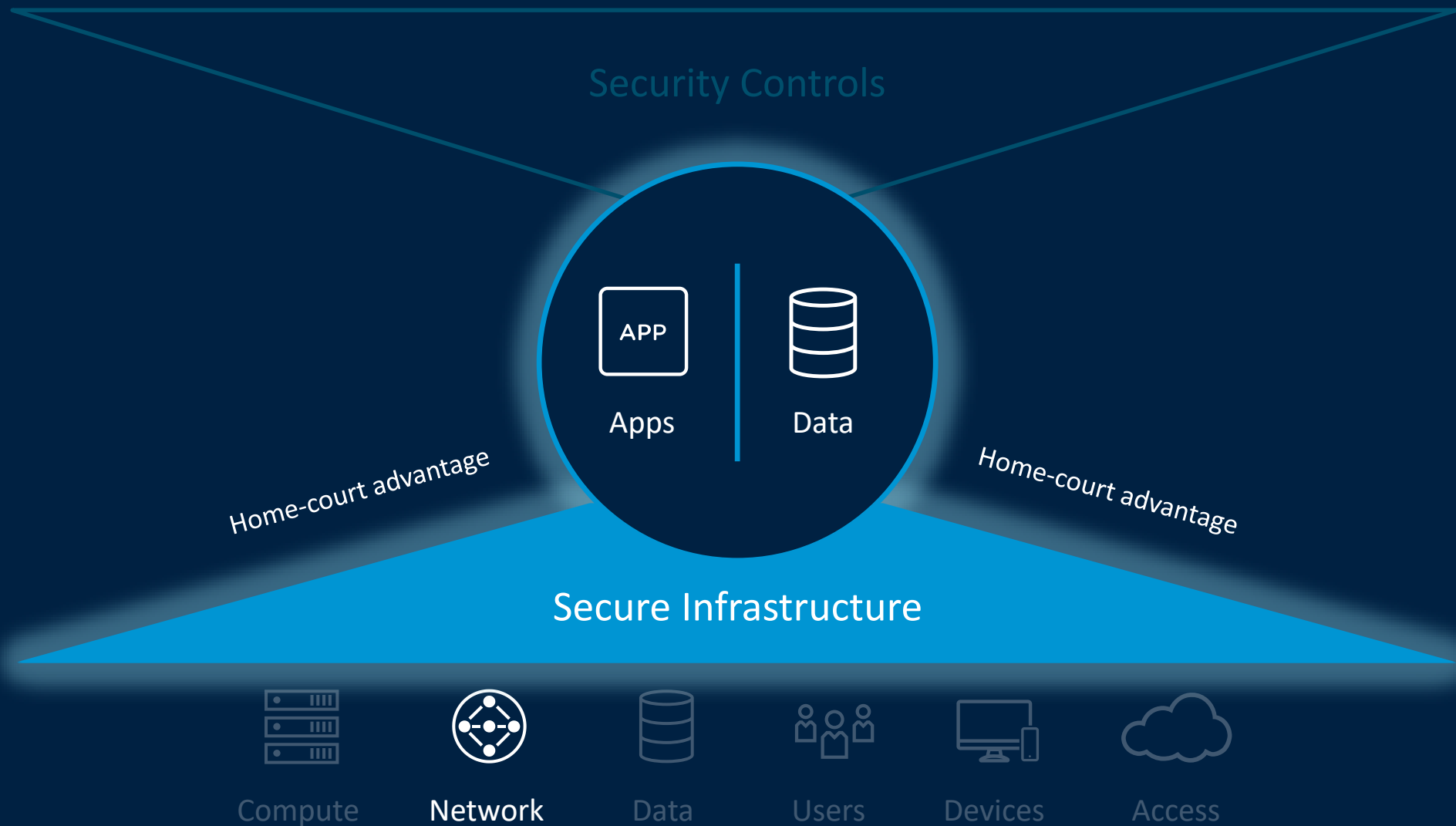
Devices

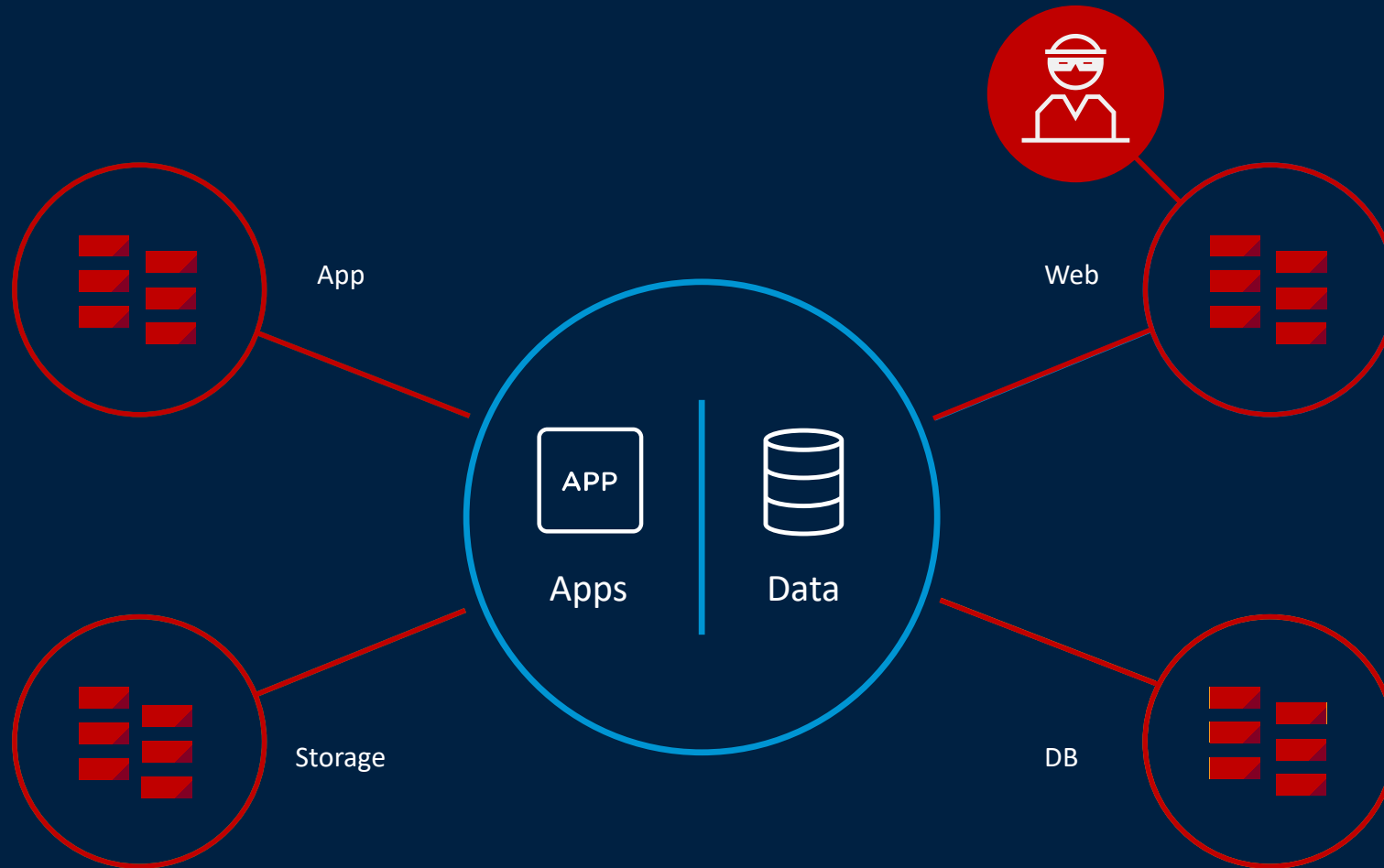


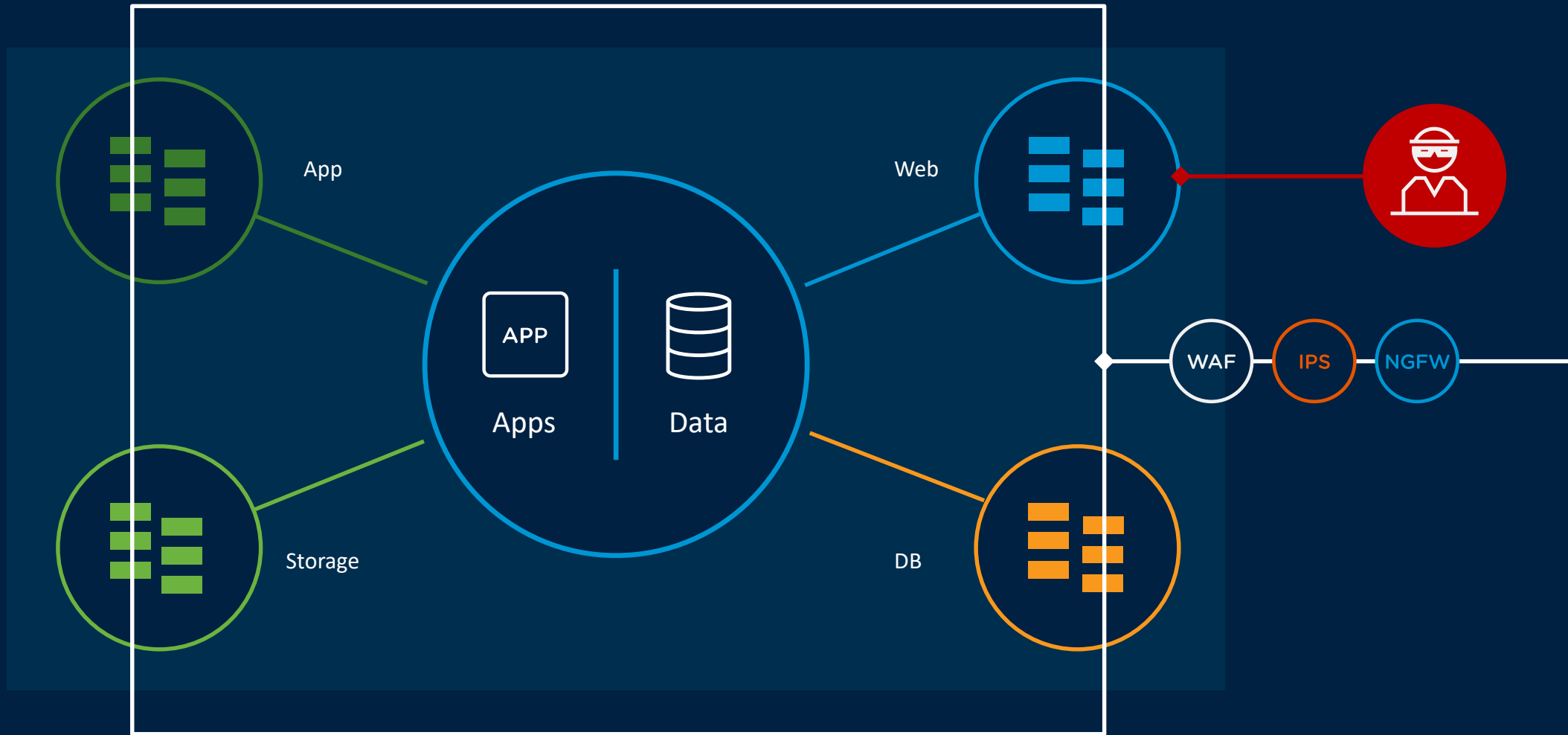
Access

Enabling Richer Security Controls









Security Controls



Apps



Data



Secure Infrastructure



Compute



Network



Data



Users

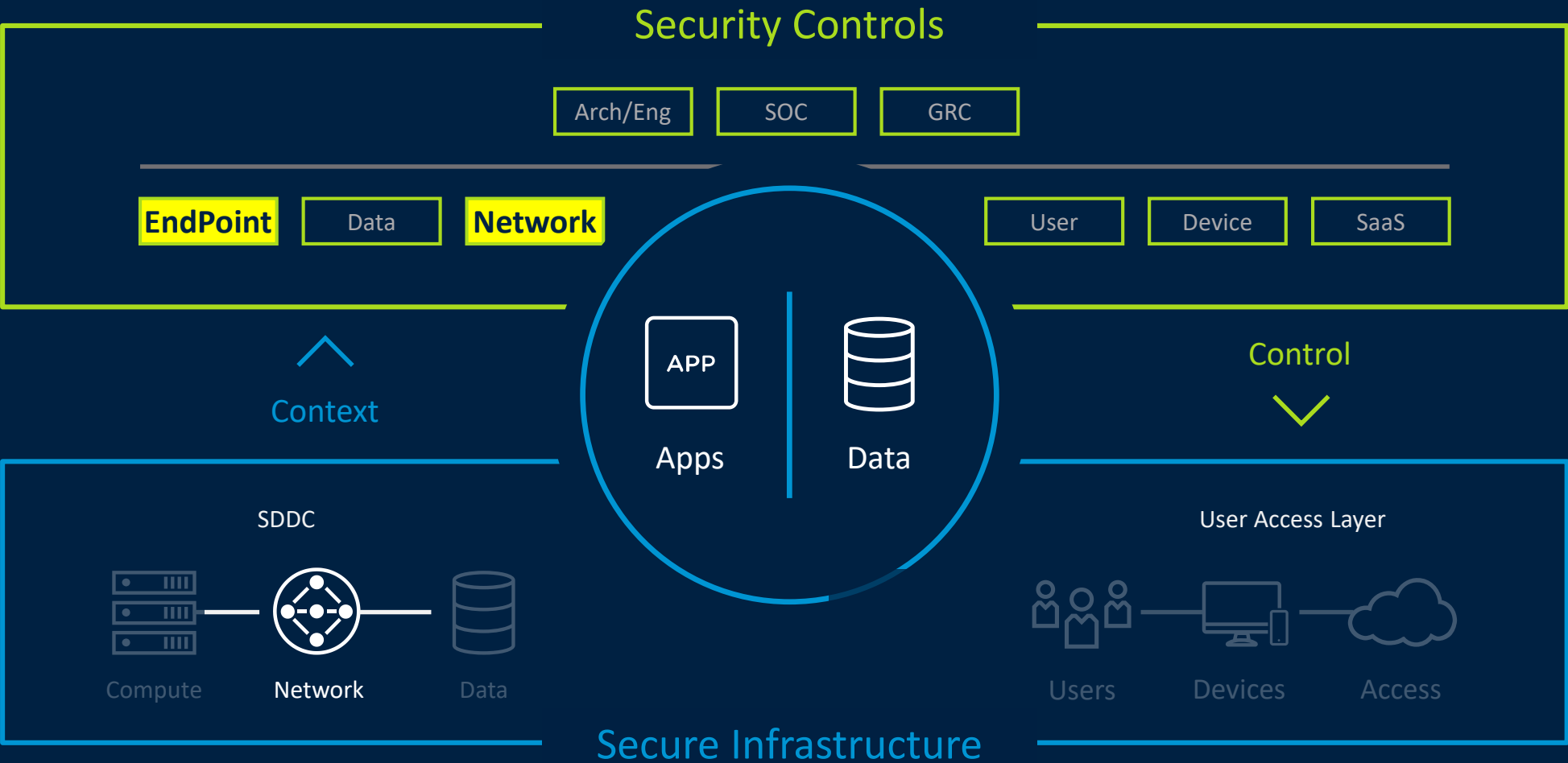


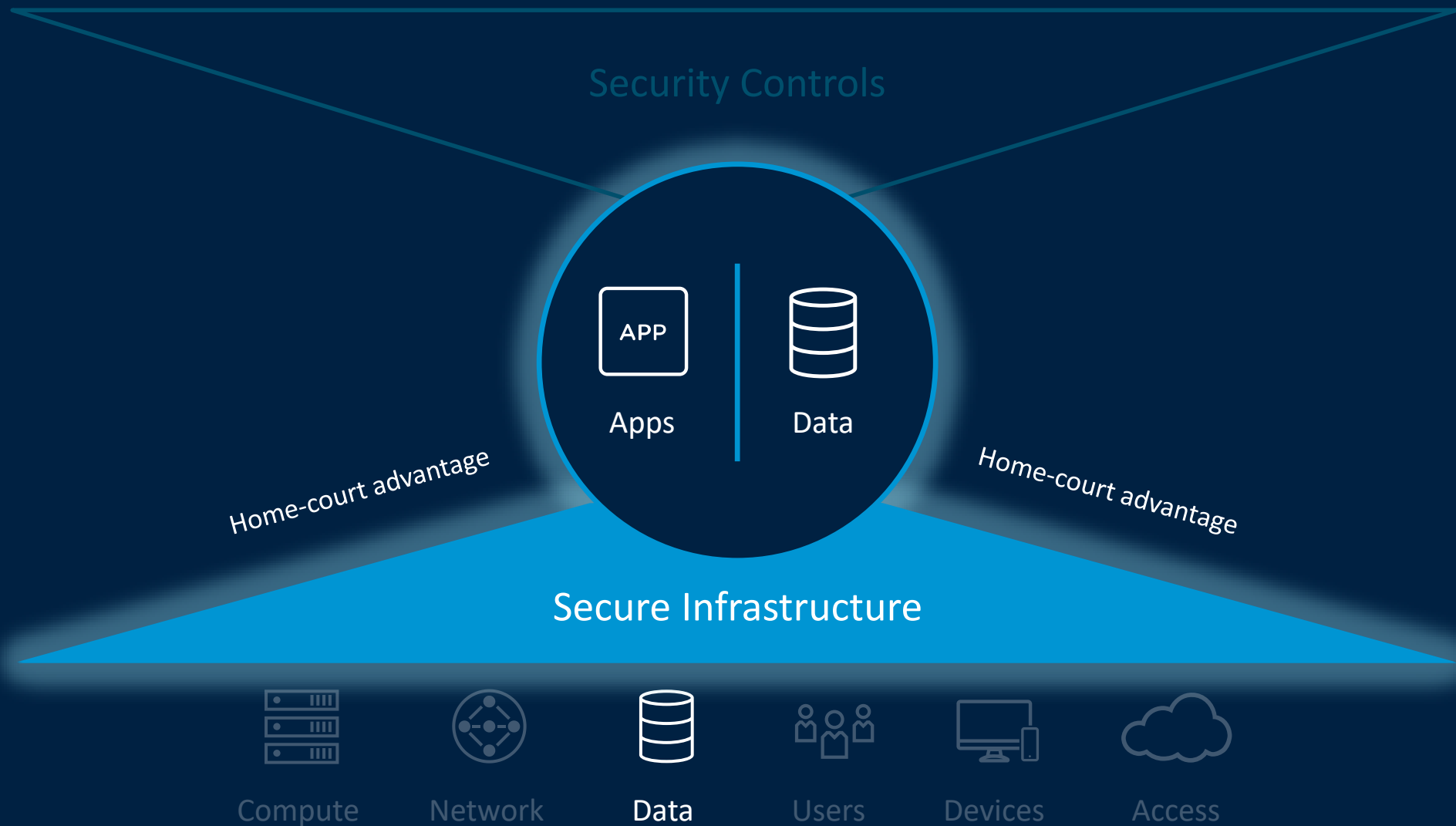
Devices

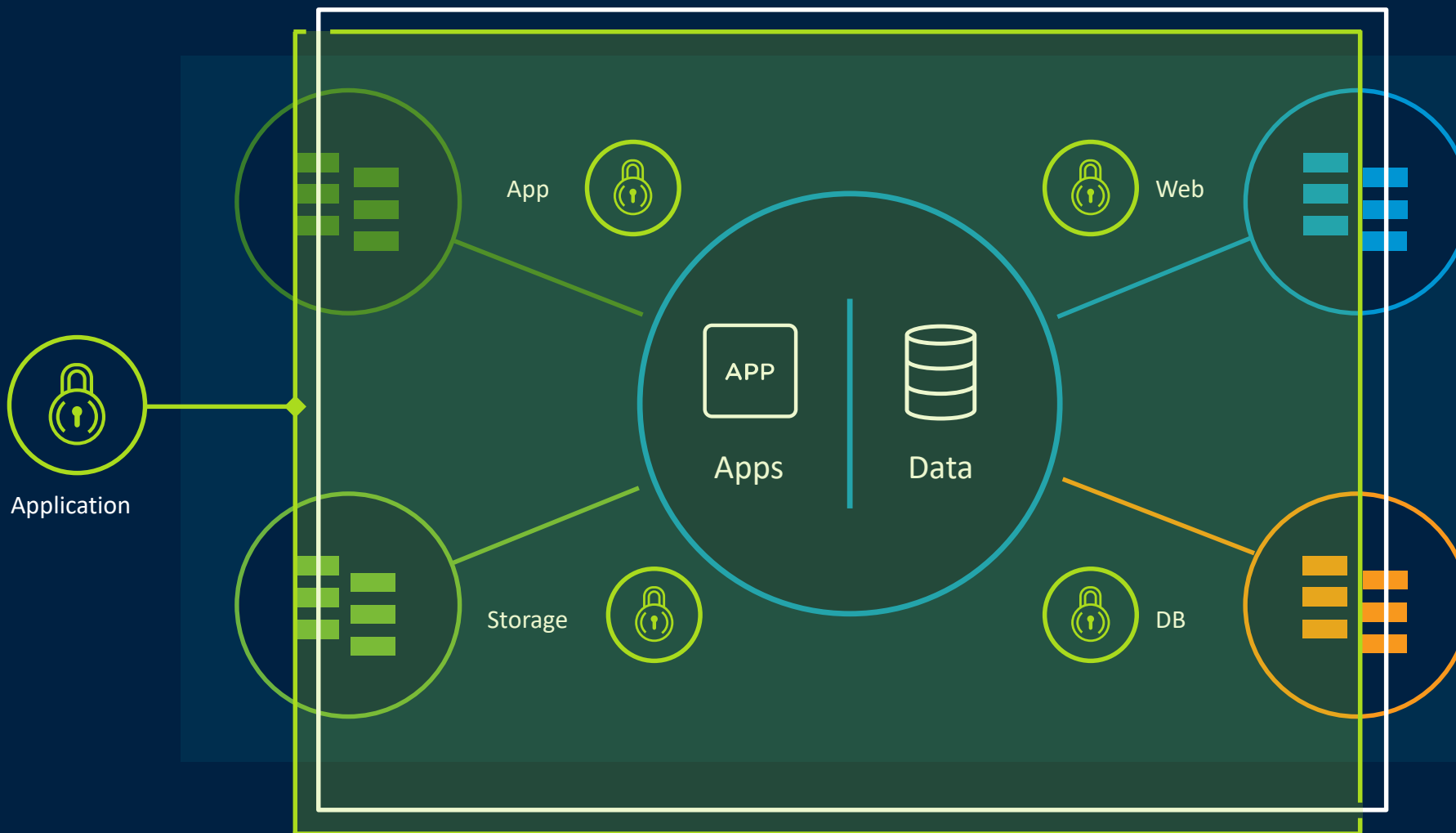


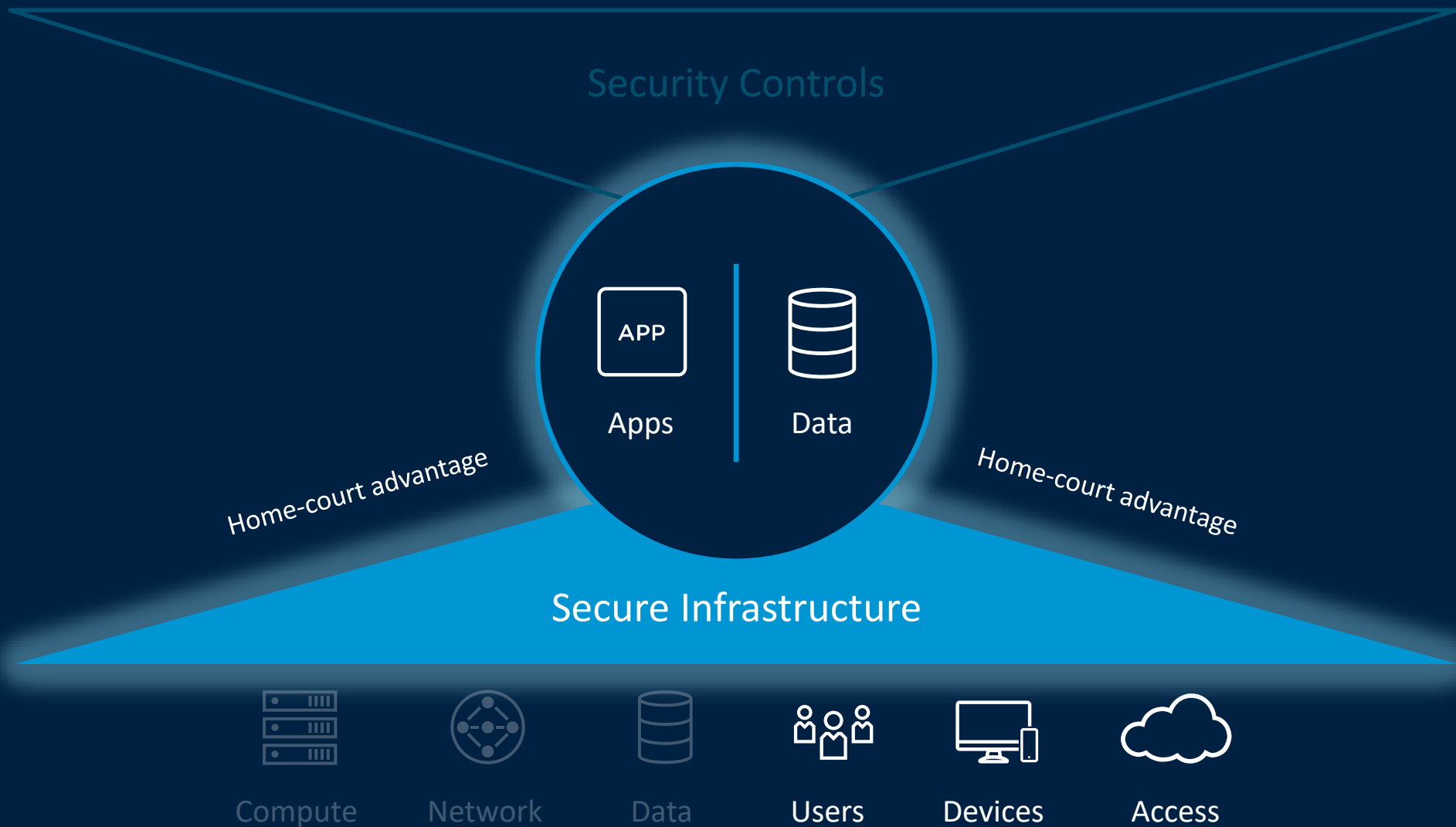
Access

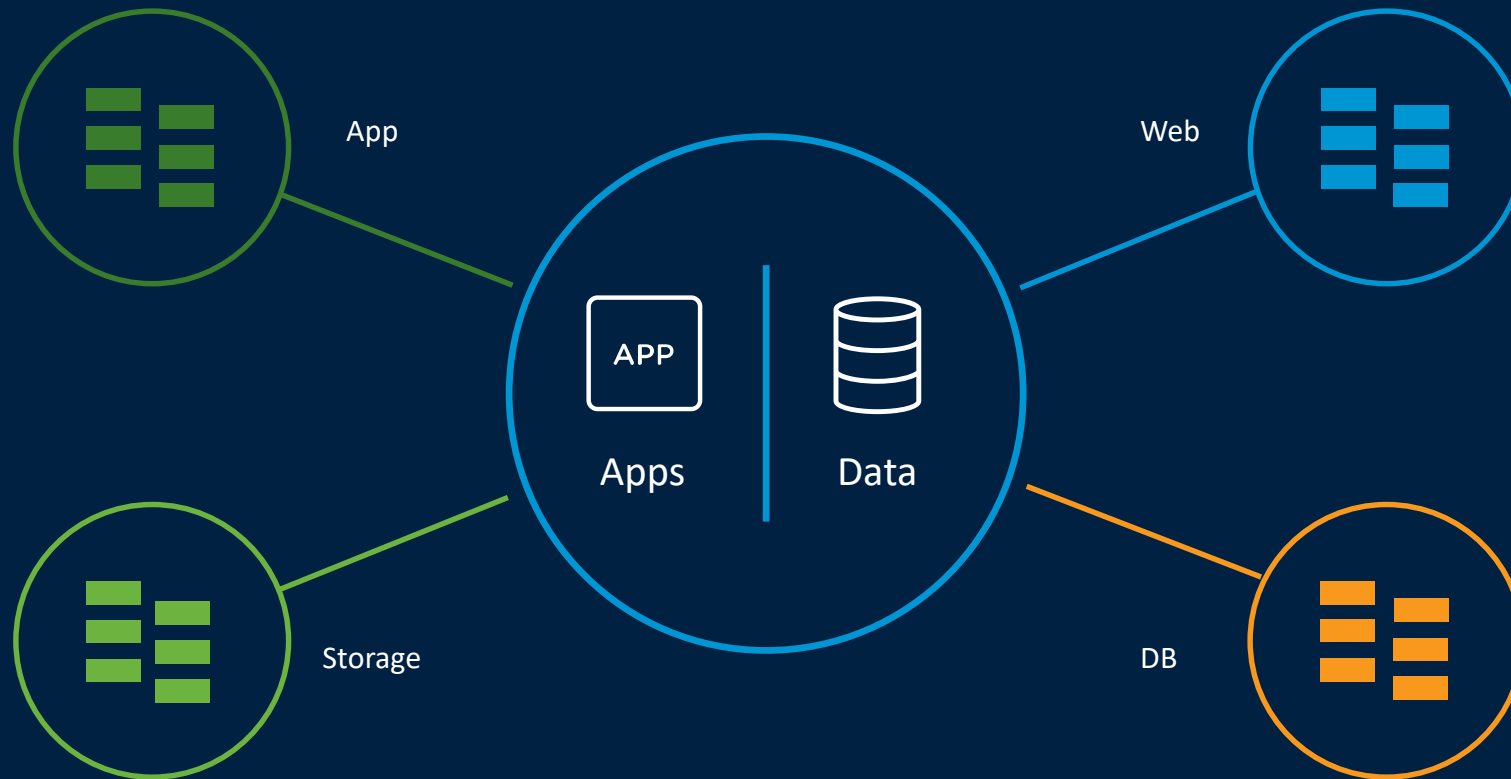
Enabling Richer Security Controls





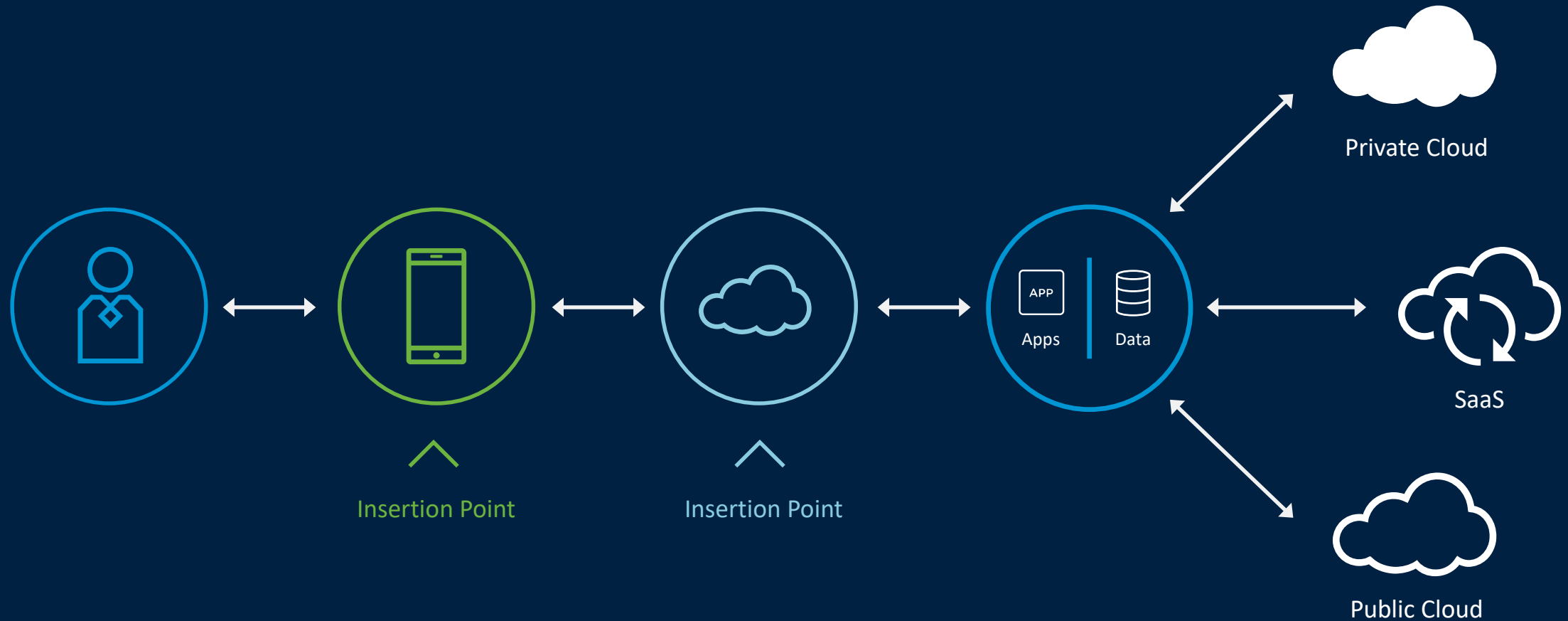


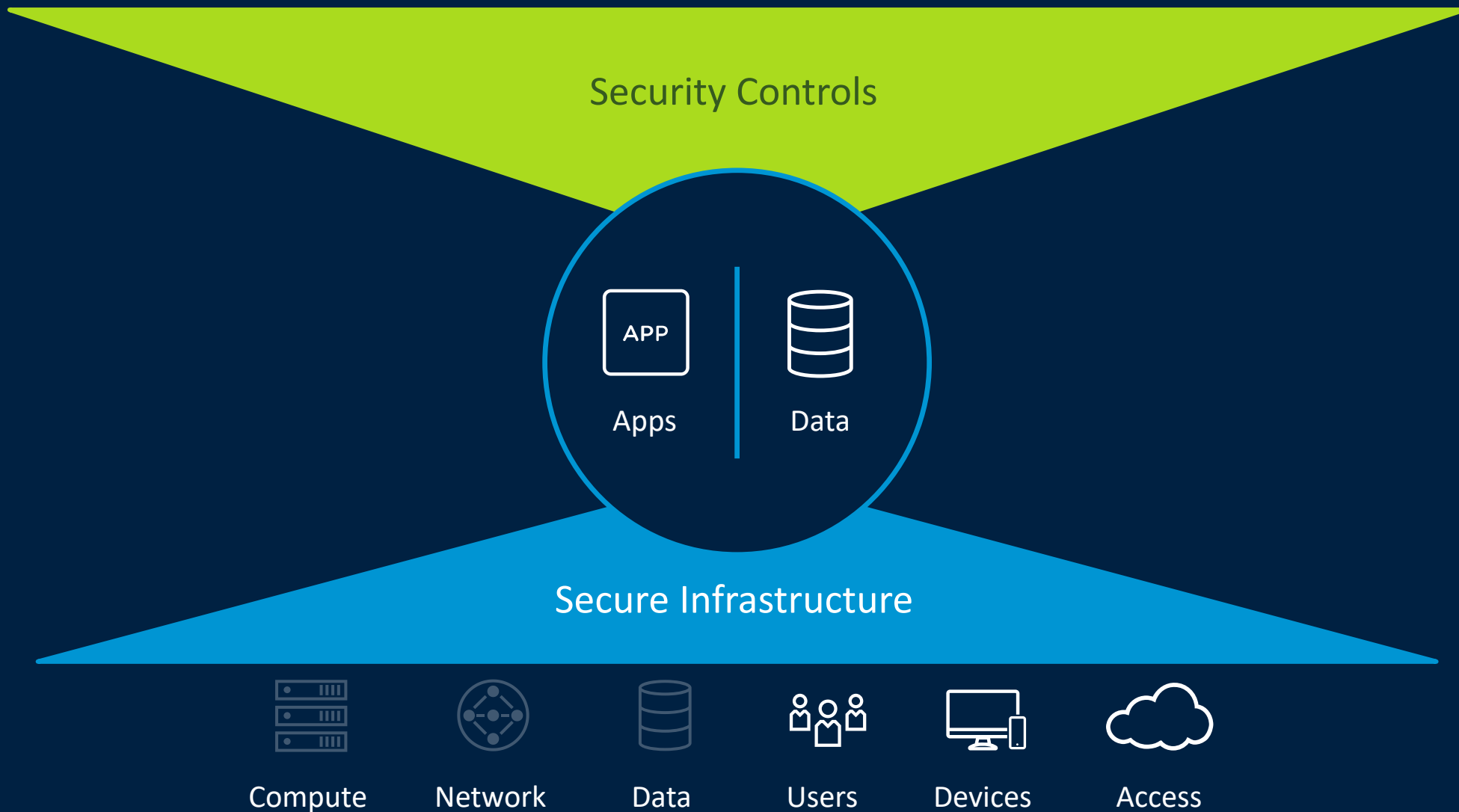




Validate and Verify

Right user + right device + right app



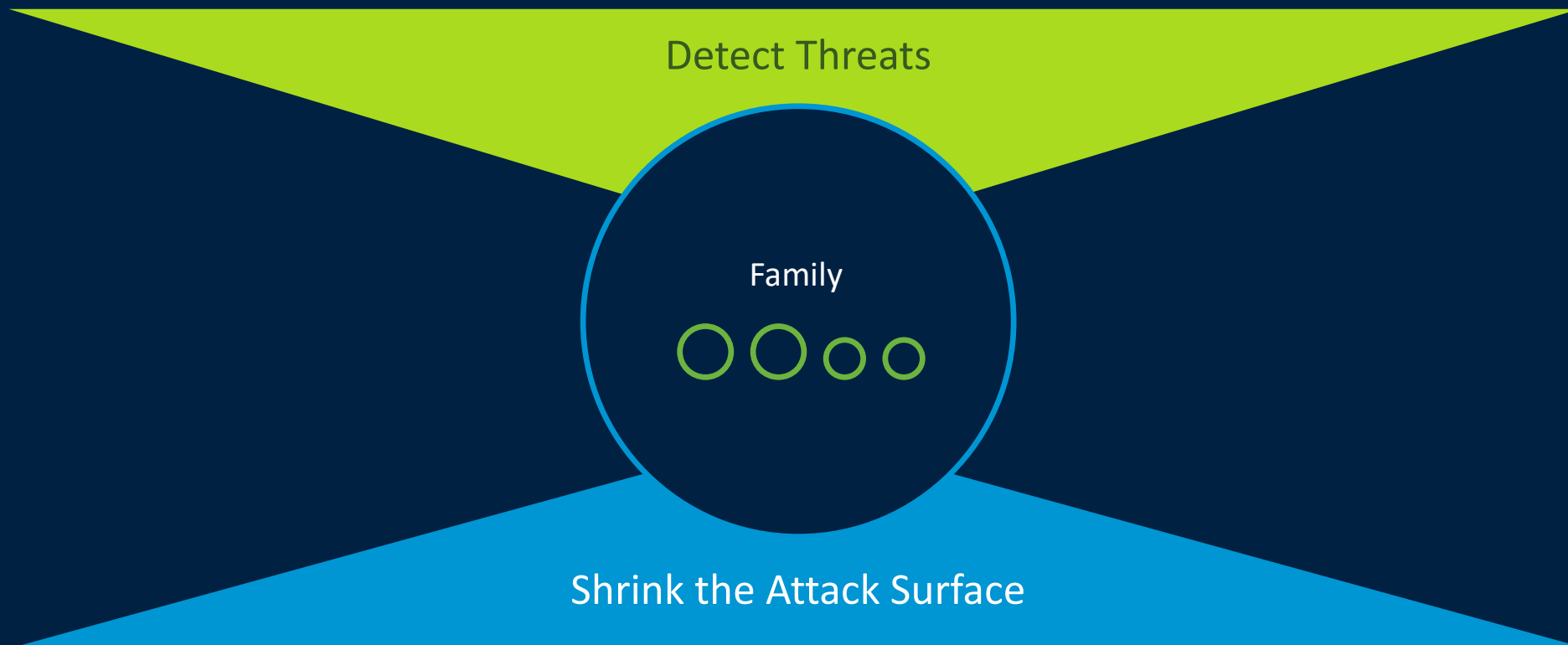


Enabling Richer Security Controls



If You Want Home-Court Advantage

Take advantage of what you know better than an attacker





Cyber Threats

Residual Risk



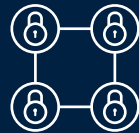
Micro-Segmentation



Least Privilege



Encryption



Multi-Factor Authentication

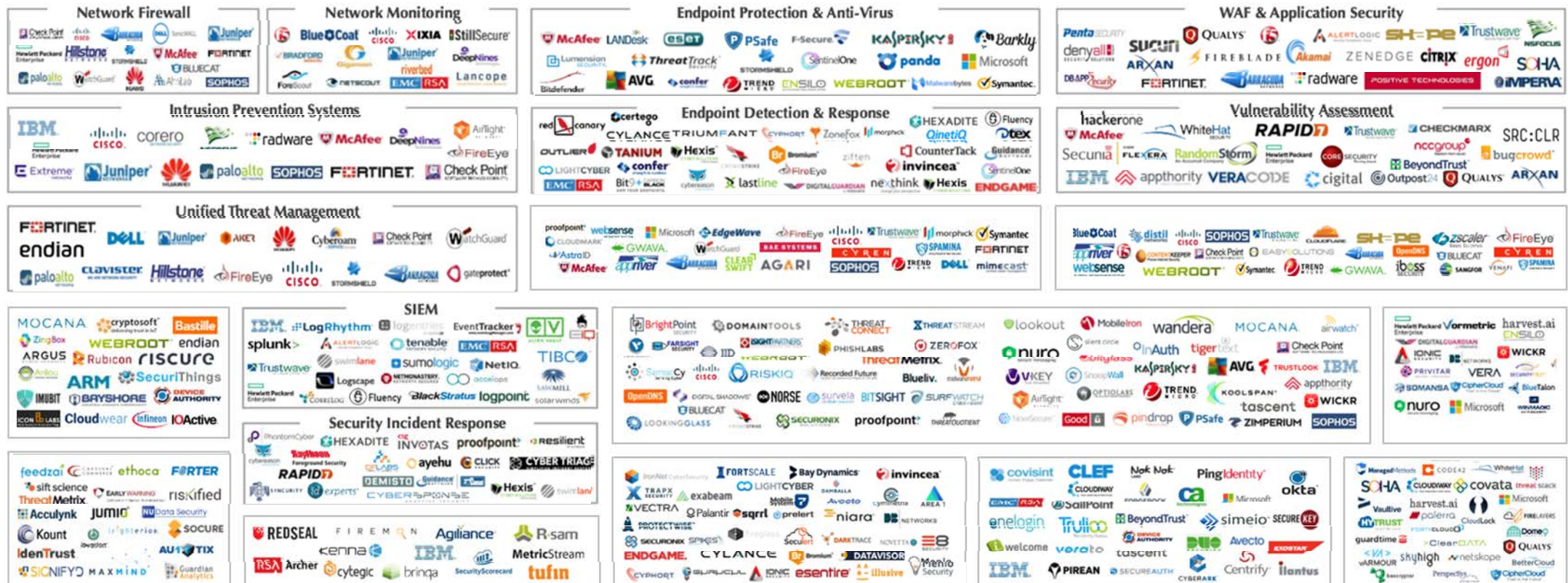


Patching

Cyber Hygiene

Attack Surface

Transforming CYBERSecurity





Compute



Network



Data



Users



Devices



Access

Secure
Infrastructure

Go beyond:

Securing

Cloud & Mobility

To using:

Cloud & Mobility

to

Secure

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Transforming CYBERSecurity

