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Security with NSX

Greater security in the digital business age

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Greece , Cyprus & Malta

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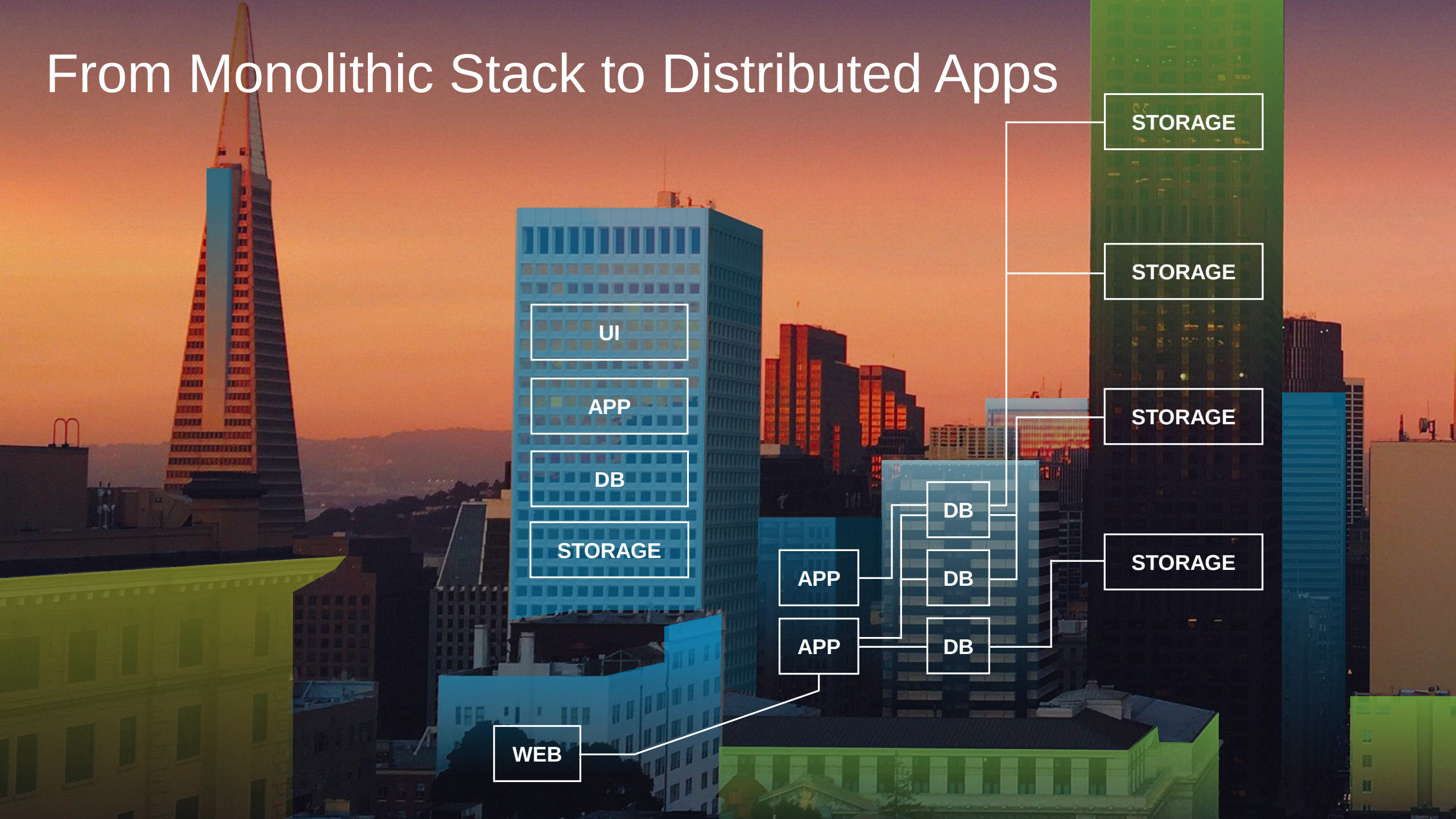
Business demands

- Deliver applications faster to improve time to market
- Decrease business risk in an environment of advanced persistent threats
- Control costs and reduce complexity

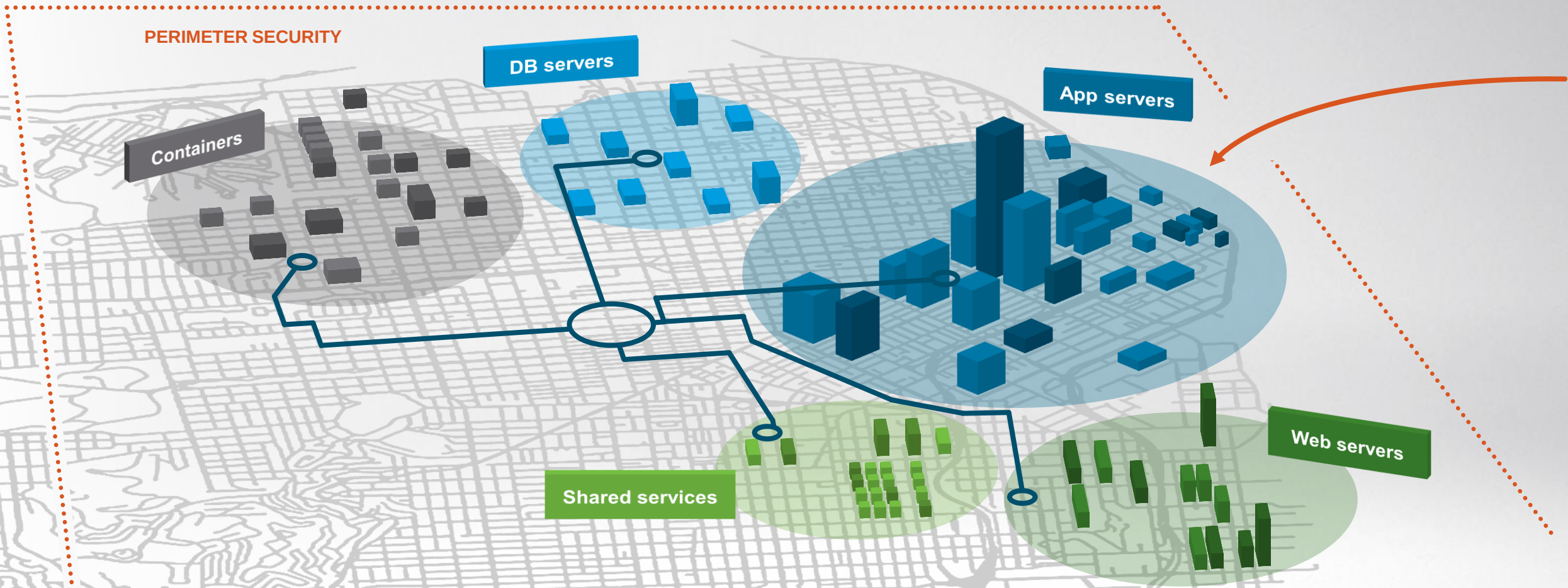
"**By 2020, 60% of digital businesses will suffer major service failures** due to the inability of IT security teams to manage digital risk."

Gartner, "Special Report: Cybersecurity at the Speed of Digital Business," May 2016.

From Monolithic Stack to Distributed Apps



The application is a network



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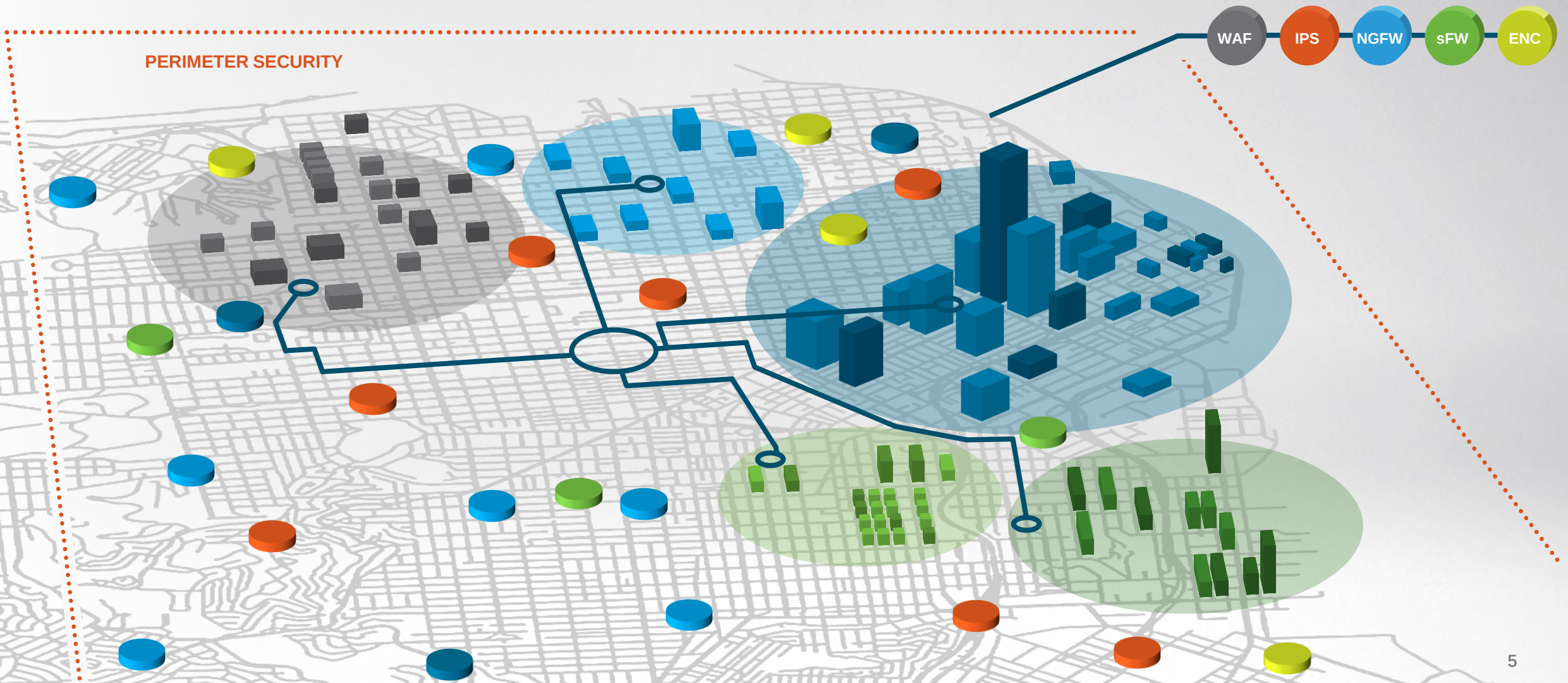
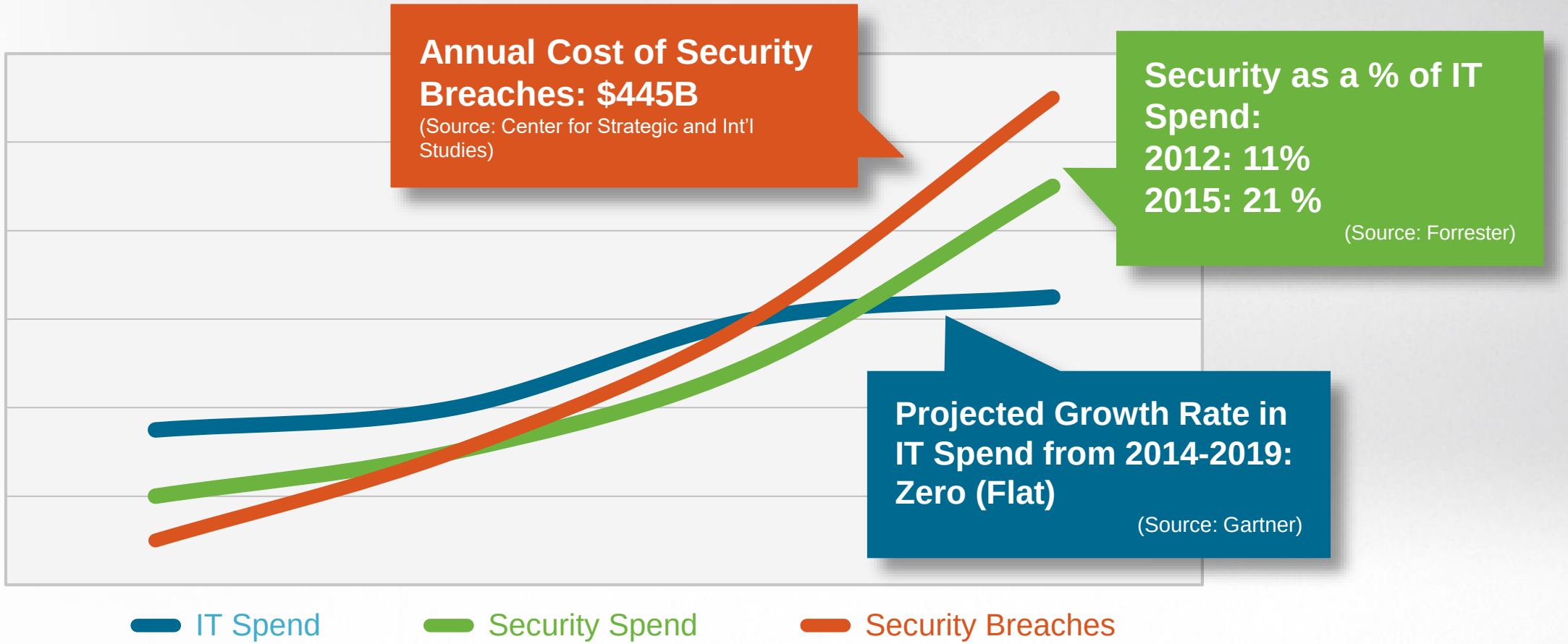


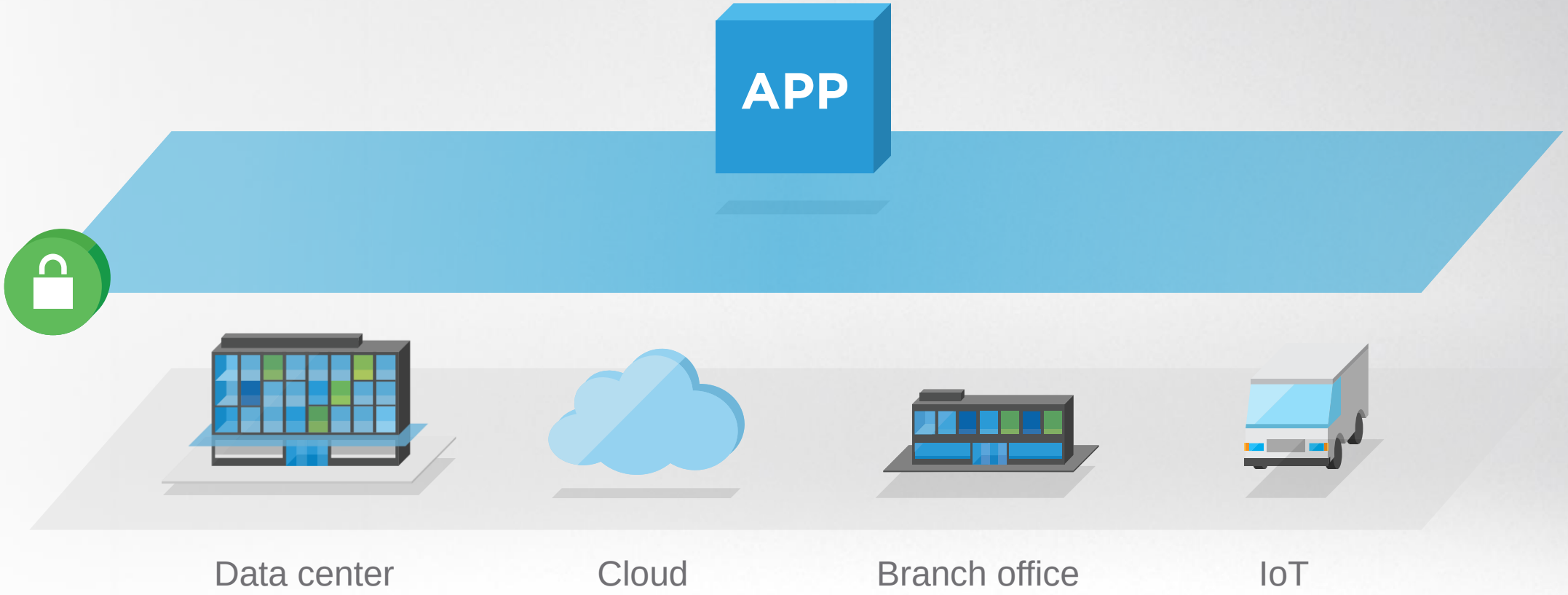
Our approach is not working

Security investments are increasing, yet the cost of breaches are rising faster



Network virtualization - a point of alignment

Abstracting networking and security from the underlying infrastructure



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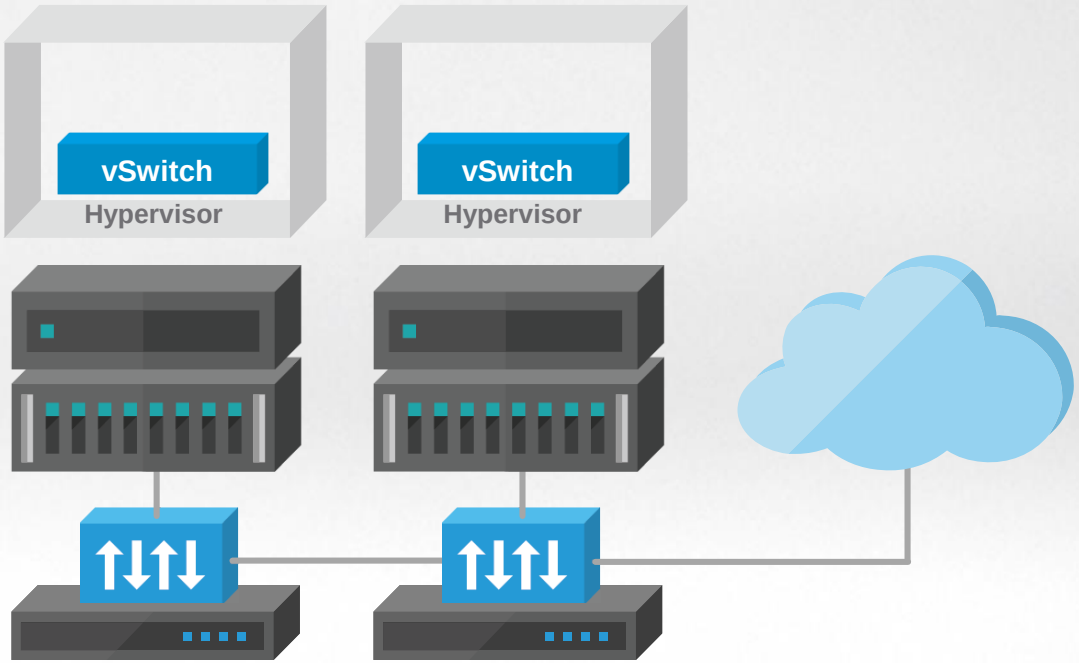
NSX value proposition

- Virtualization layer
- Network, storage, compute



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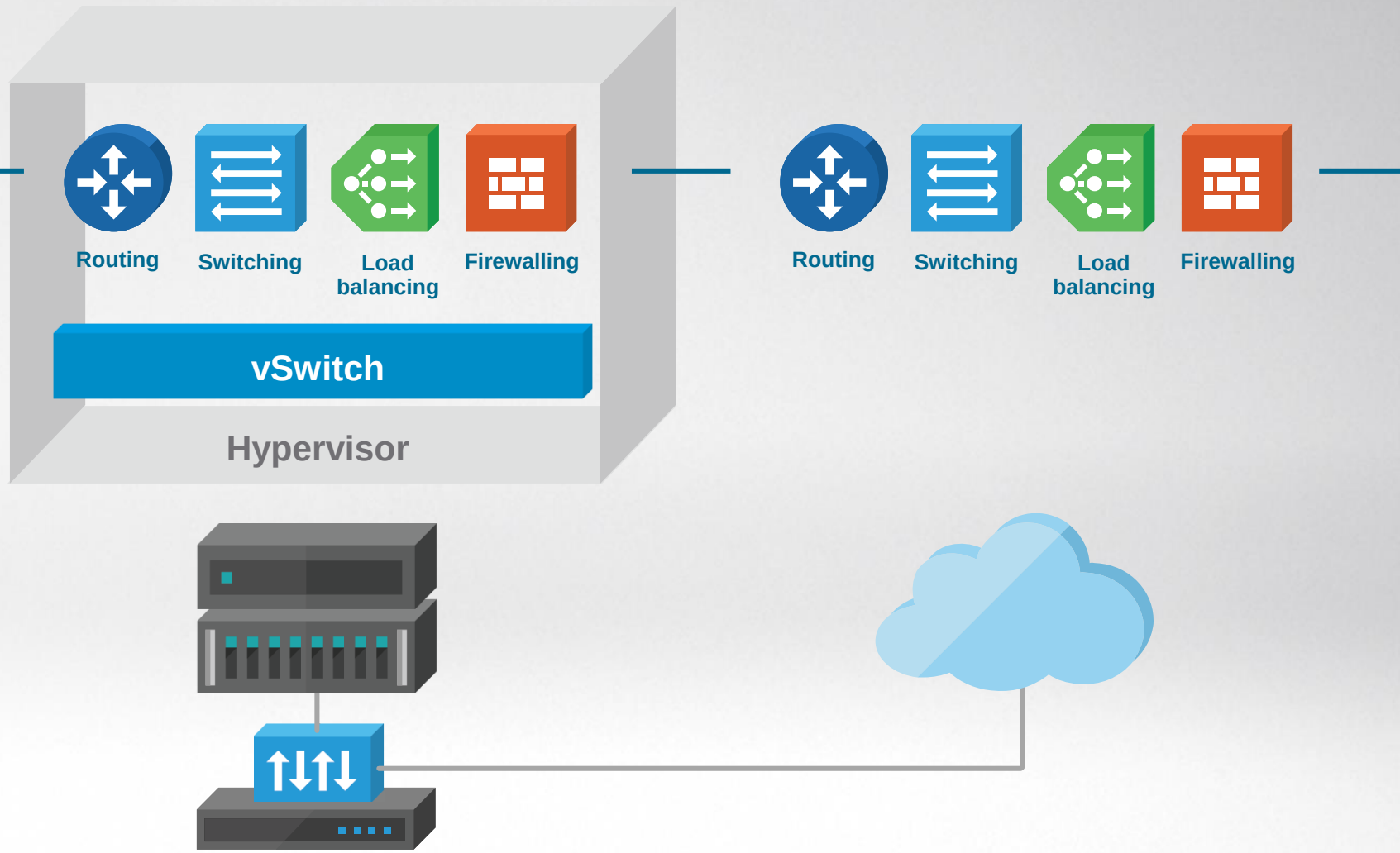
NSX value proposition

Network and security services

- In-hypervisor (on-prem)
- as a Service (cloud)
- Hardware/Cloud independent



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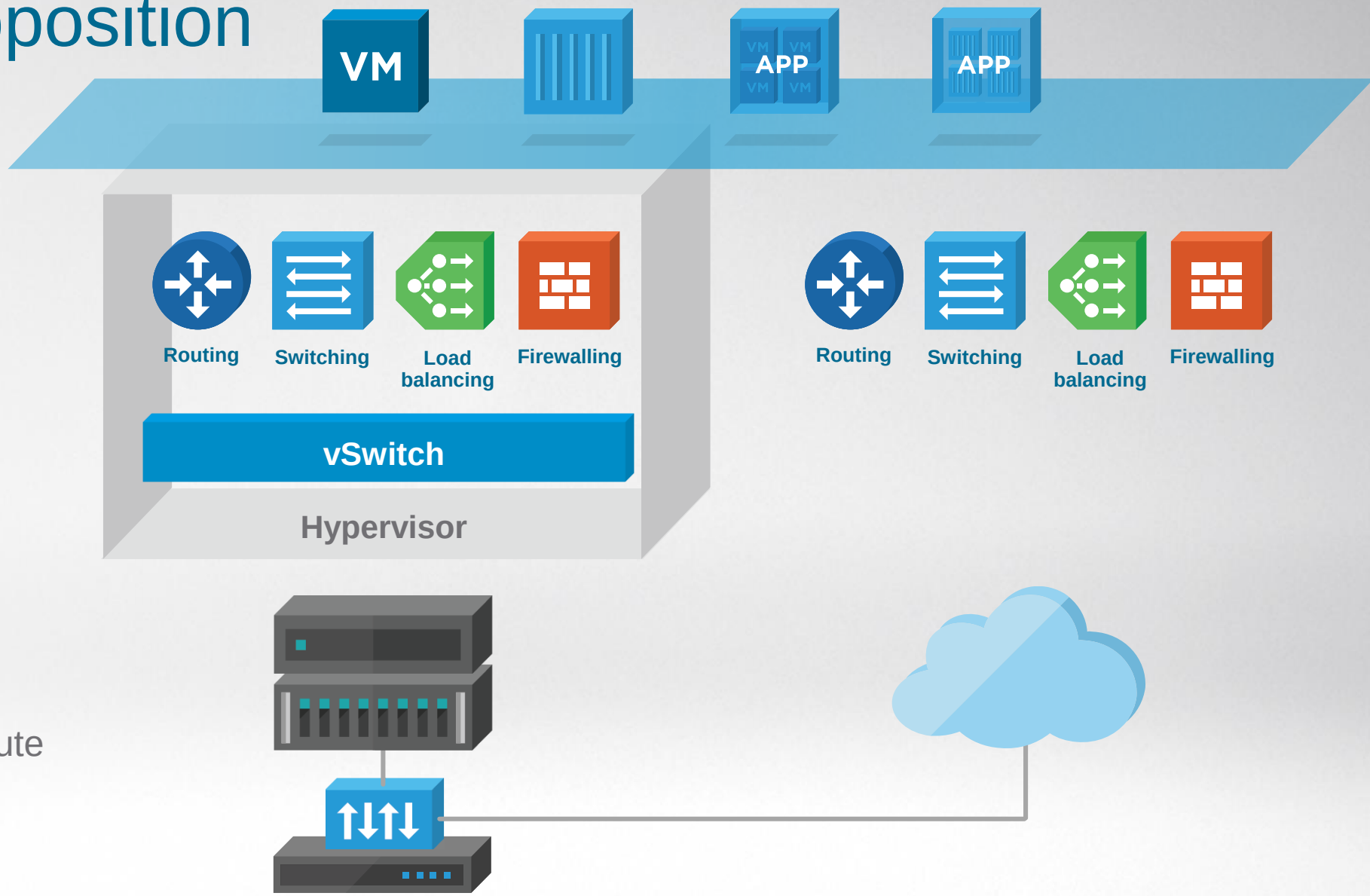
NSX value proposition

- Virtual networks
- “Network platform”
- Virtualization layer
- Network, storage, compute



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Security with NSX

Micro-segmentation

Secure end user

DMZ Anywhere

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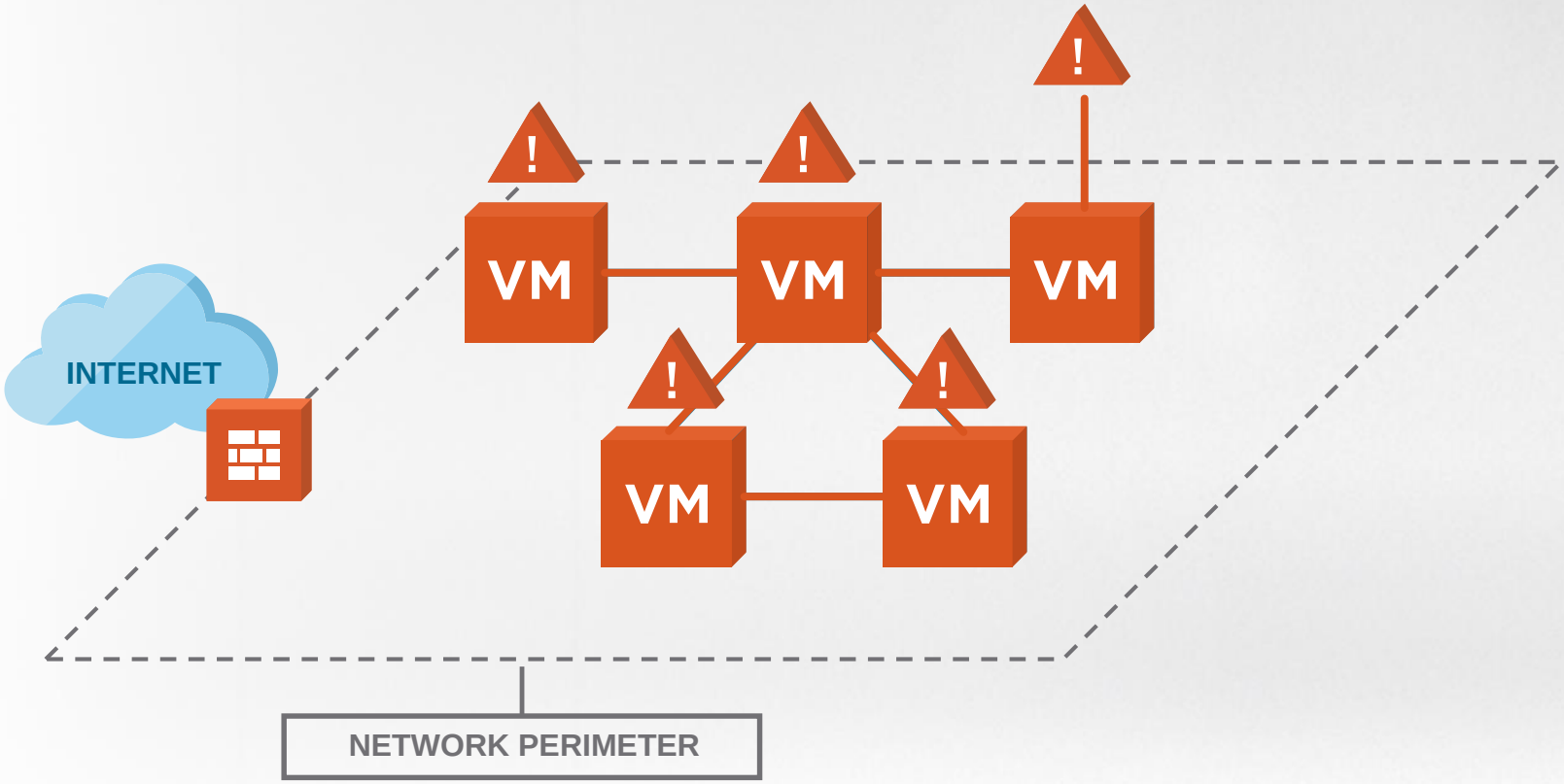
Our security realities

When threats breach the perimeter, it's hard to stop lateral spread



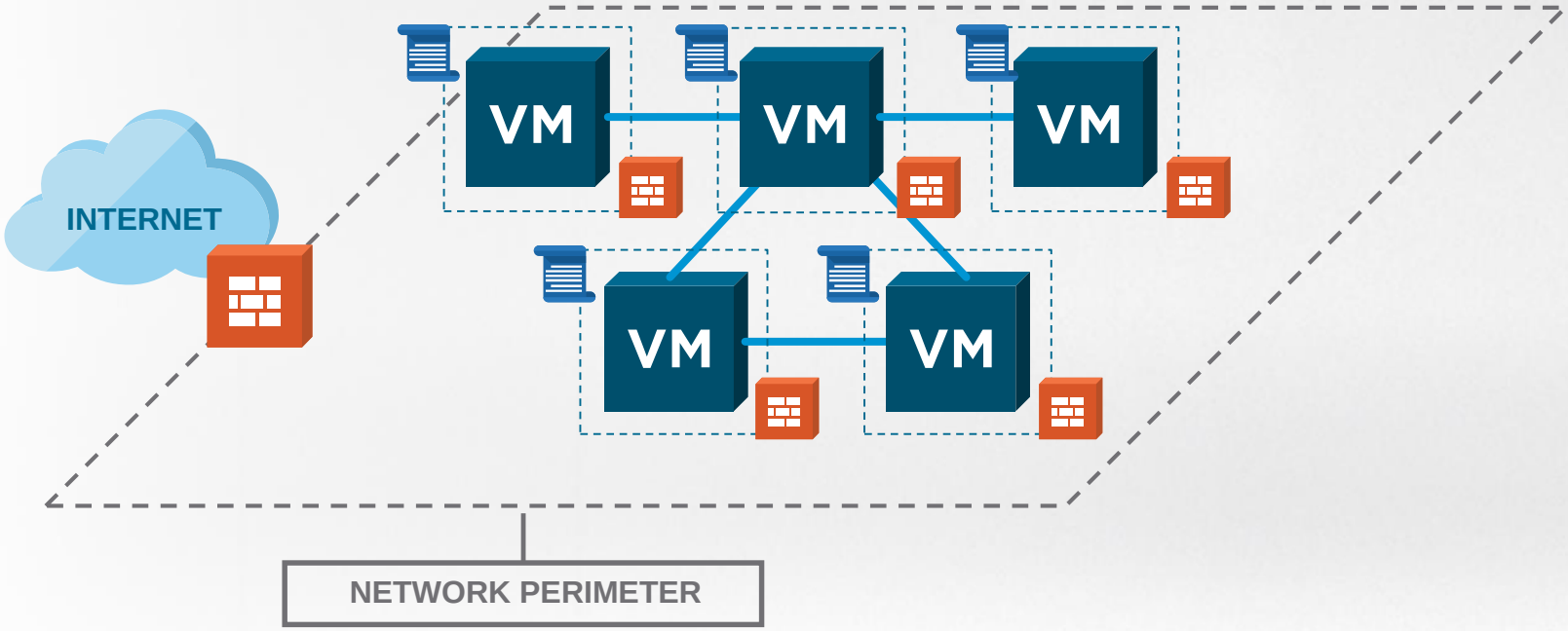
Low priority systems are often targeted first.

Attackers can move freely around the data center.

Attackers then gather and exfiltrate the valuable data.

What if you could…

Enforce security at the most granular level of the data center?



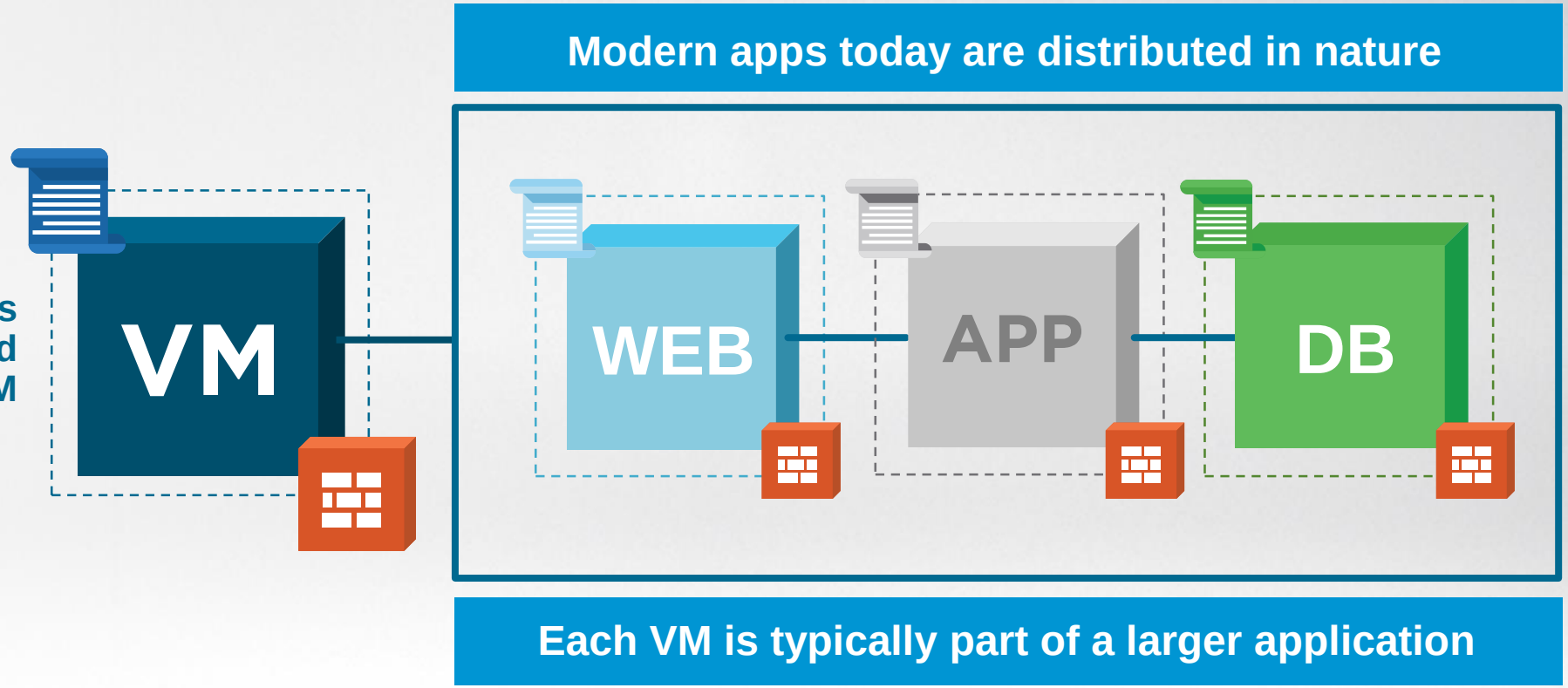
Every VM can have:

- Individual security policies
- Individual firewalls

What if you could…

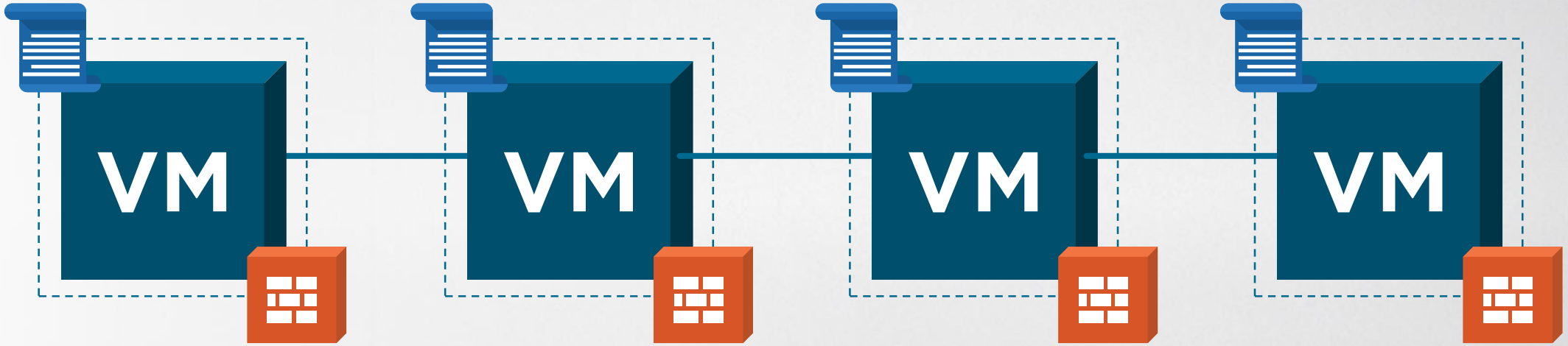
Maintain that level of consistent security across an entire application

Security needs to reach beyond an individual VM



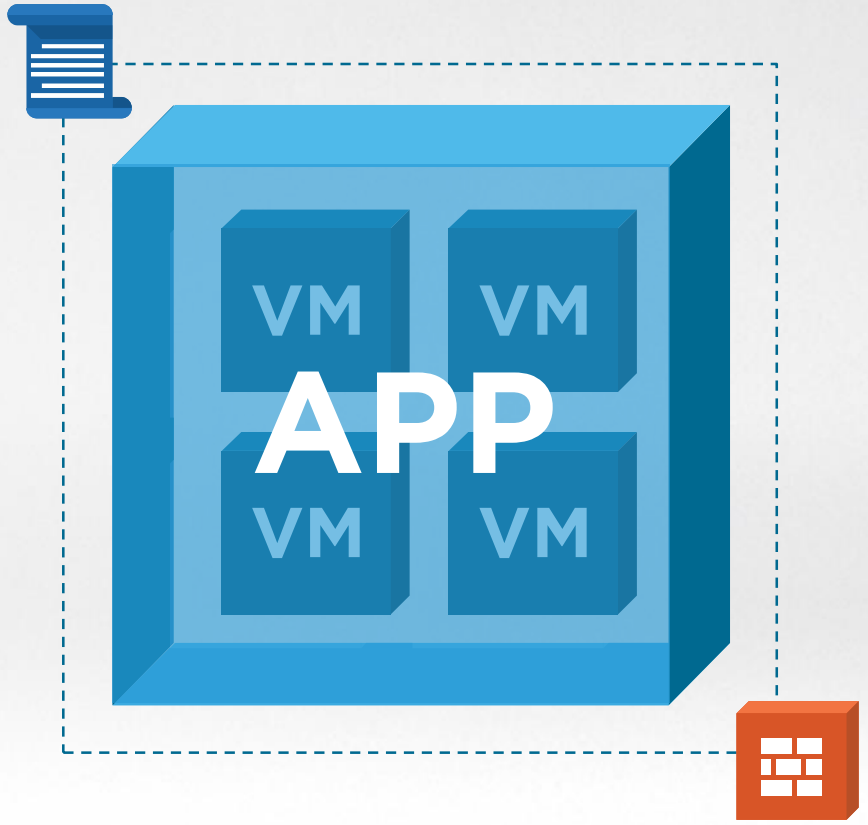
What if you could…

Maintain that level of consistent security across an entire application



What if you could…

Maintain that level of consistent security across an entire application

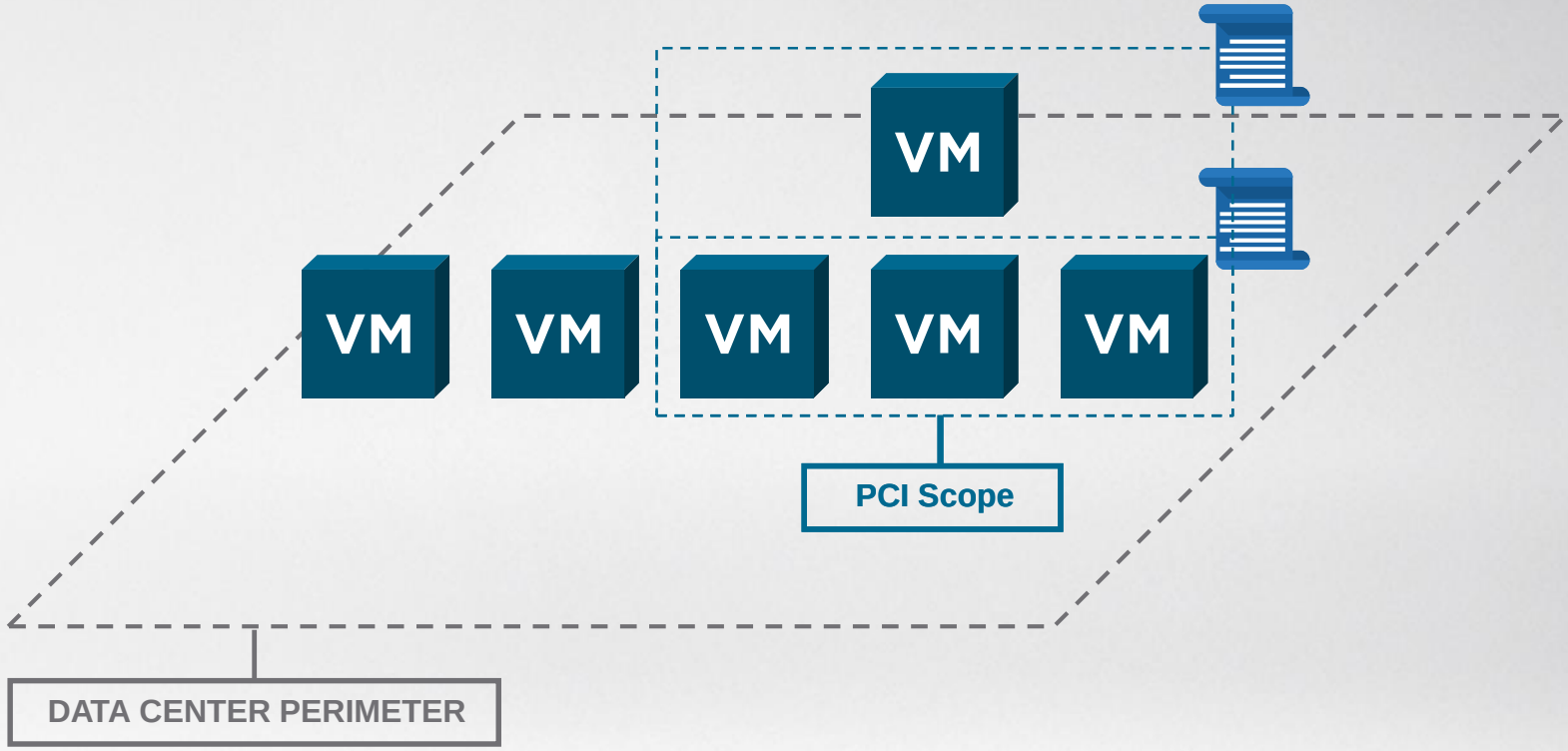


Better security, simplified policy

Define a policy using workload characteristics, not IPs and ports

An NSX security policy can be based on things like:

- Operating system
- Machine name
- Services
- Application tier
- Regulatory requirements
- Security posture



Creating and managing policies becomes a whole lot easier

Stop threats in their tracks

“With the increasing number of IoT devices, the more segmented our network is, the better off we are…That way, threats can’t move laterally within the data center.”

Christopher Frenz
Director of Infrastructure
Interfaith Medical Center

Micro-segmentation

Interfaith Medical Center

Security with NSX

Micro-segmentation

Secure end user

DMZ Anywhere

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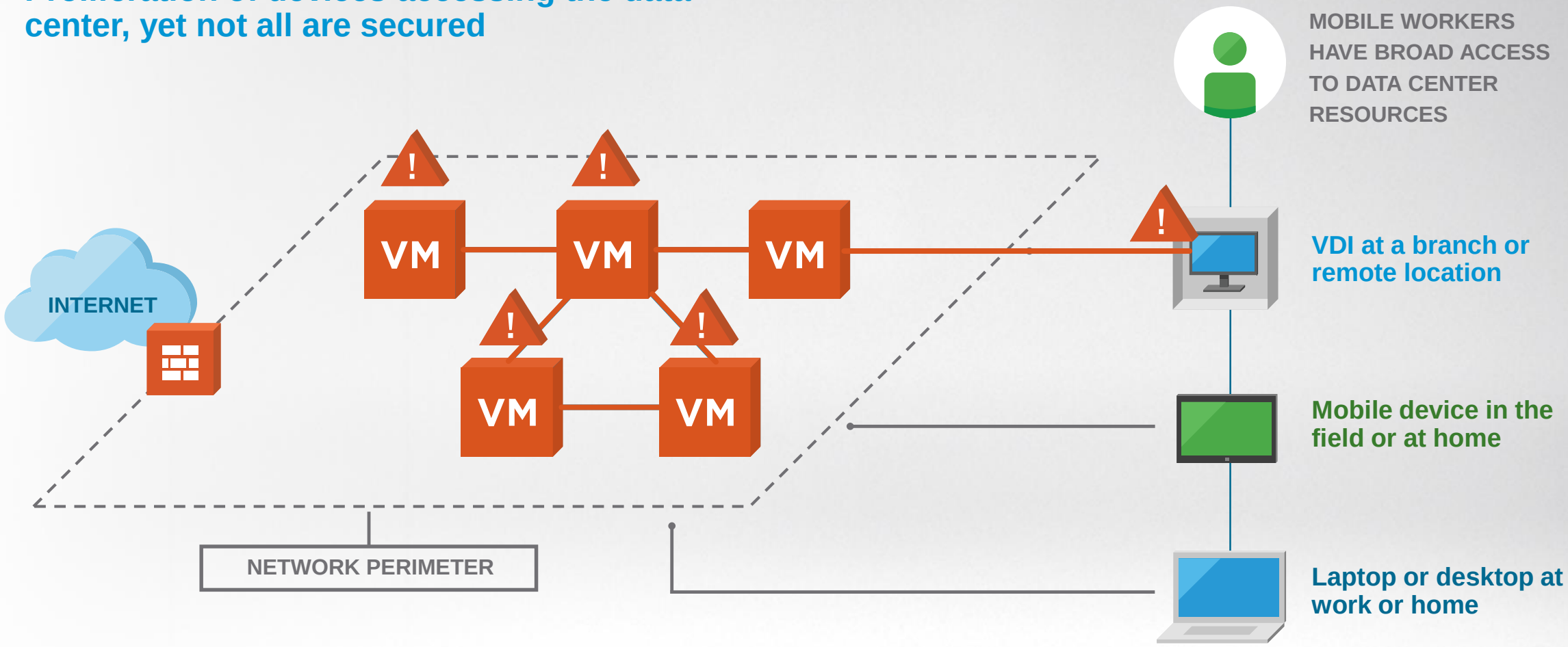
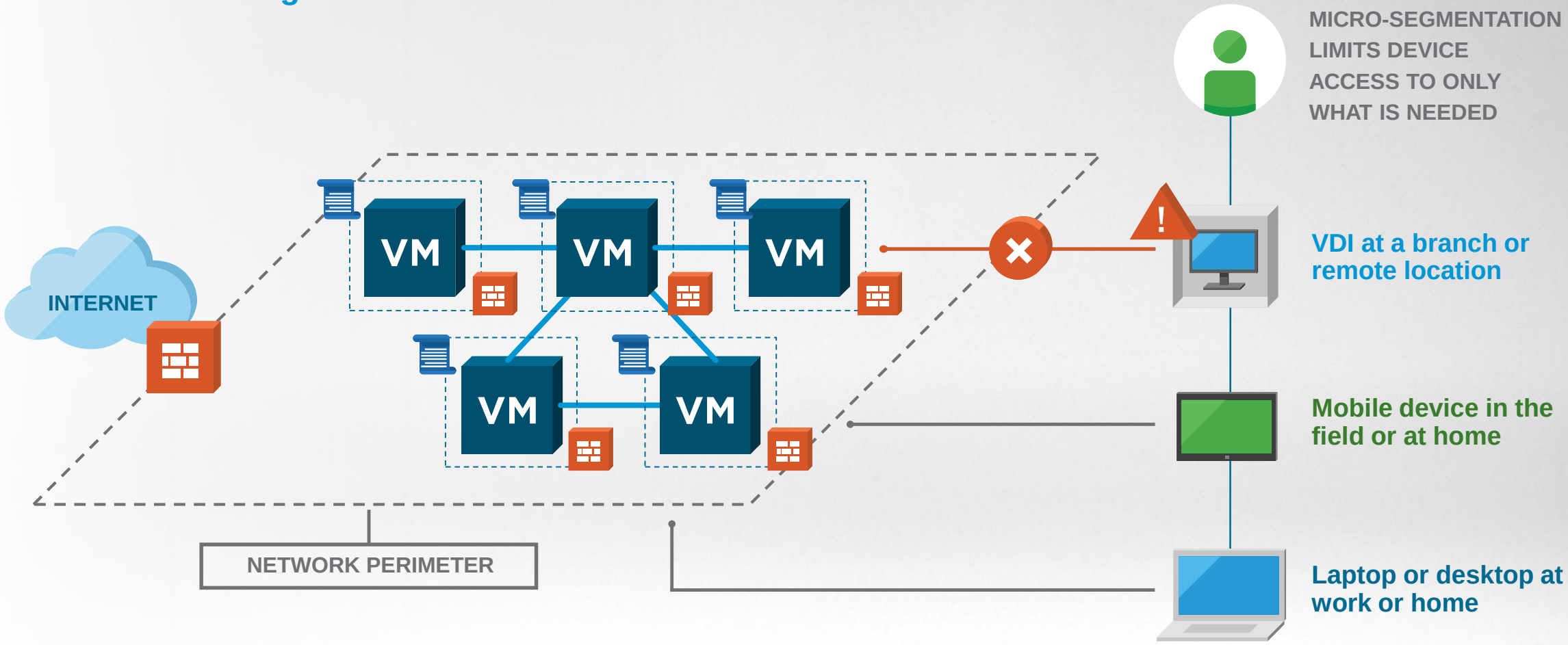
Our security realities

Proliferation of devices accessing the data center, yet not all are secured



What if you could…

Extend micro-segmentation out to secure the end user device



Security from data center to device

“We have Airwatch, which provides our mobile device management. We have NSX, which controls access in our network and to our network. And we also have Horizon, which provides a platform for our employees to get onto their desktops from anywhere they are. They all work well together.”

Terry Chatman
Information Systems
Vallejo Sanitation Flood Control District

Secure end user

Security with NSX

Micro-segmentation

Secure end user

DMZ Anywhere

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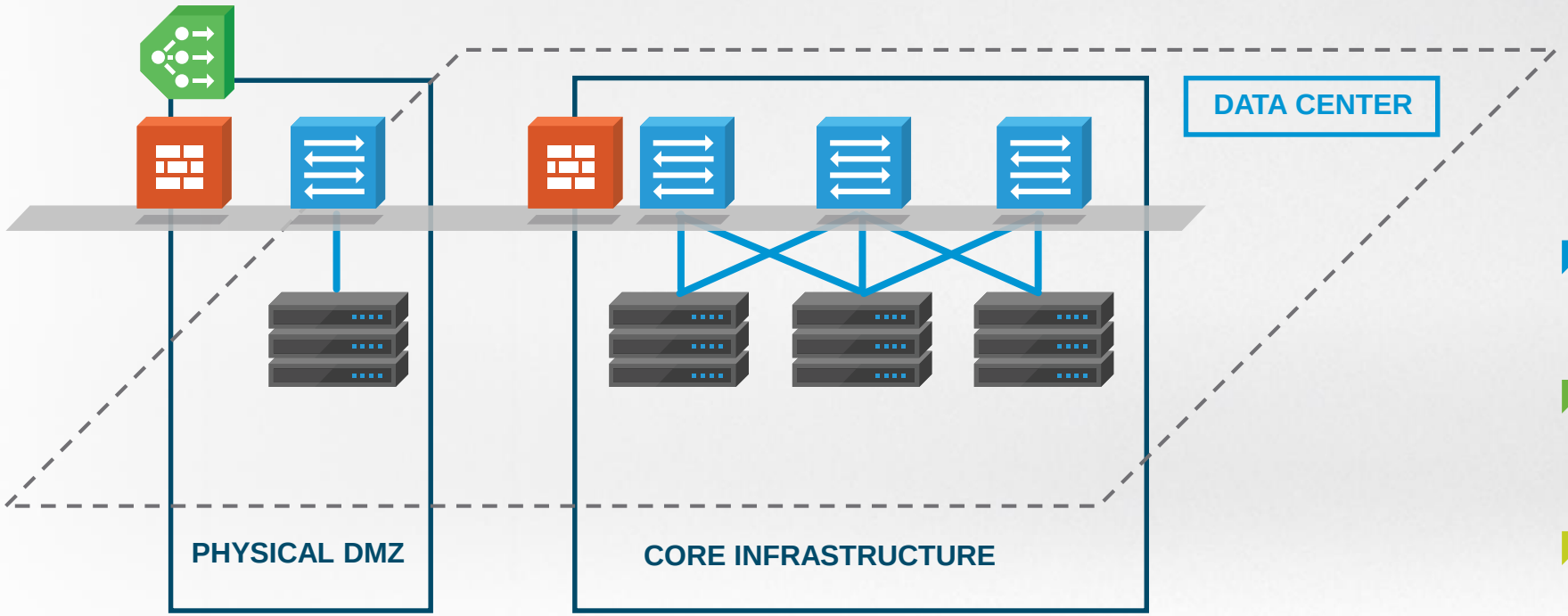
Our security realities

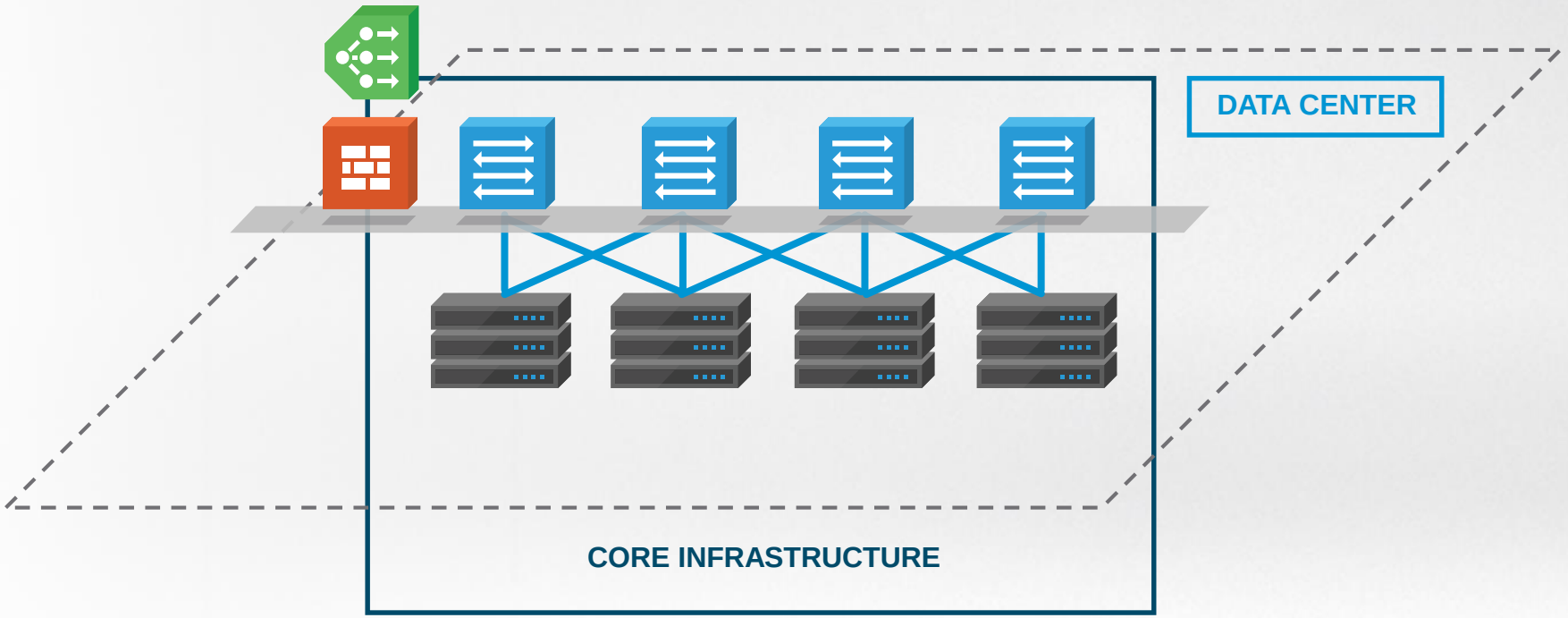
Isolating physical infrastructure for security is effective, but inefficient



- Manual processes
- Inefficient use of pooled resources
- High CapEx investment

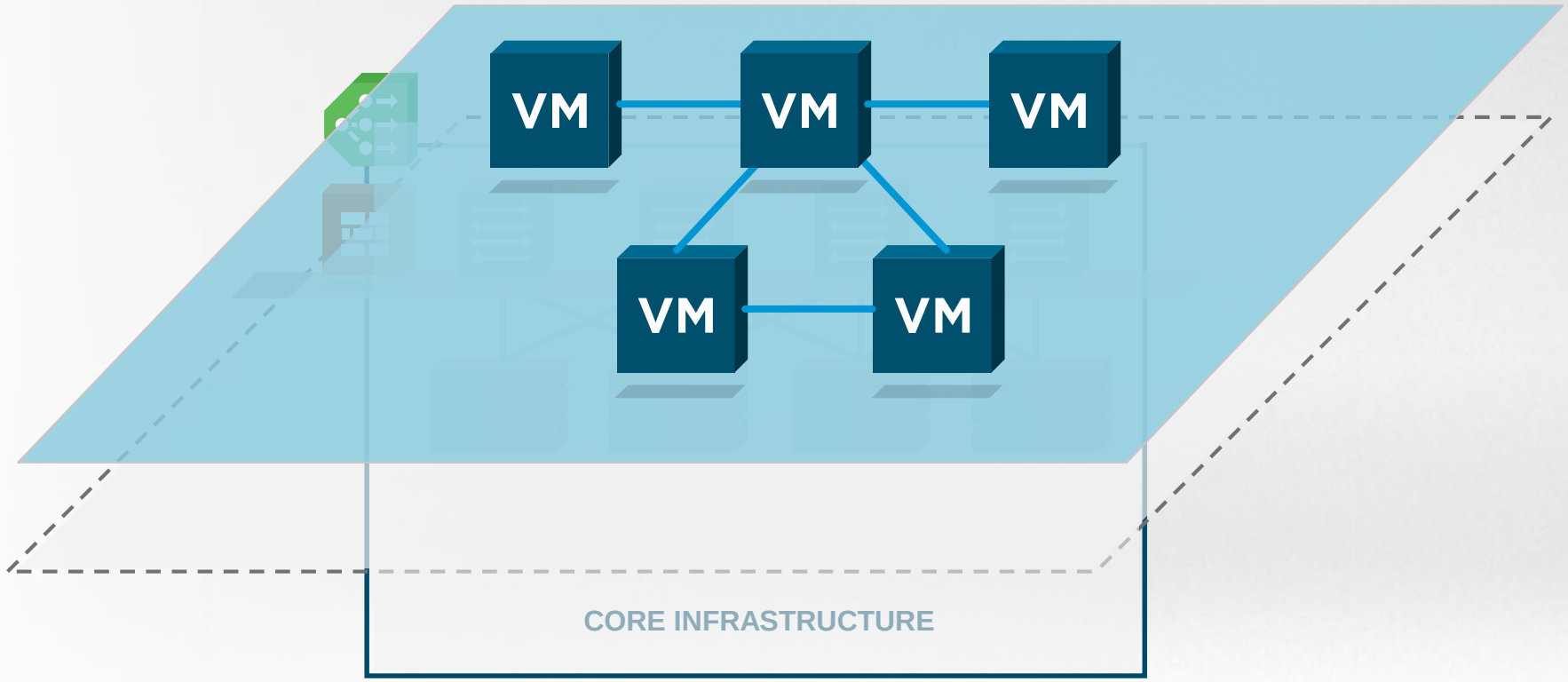
What if you could…

Pool your physical infrastructure resources…



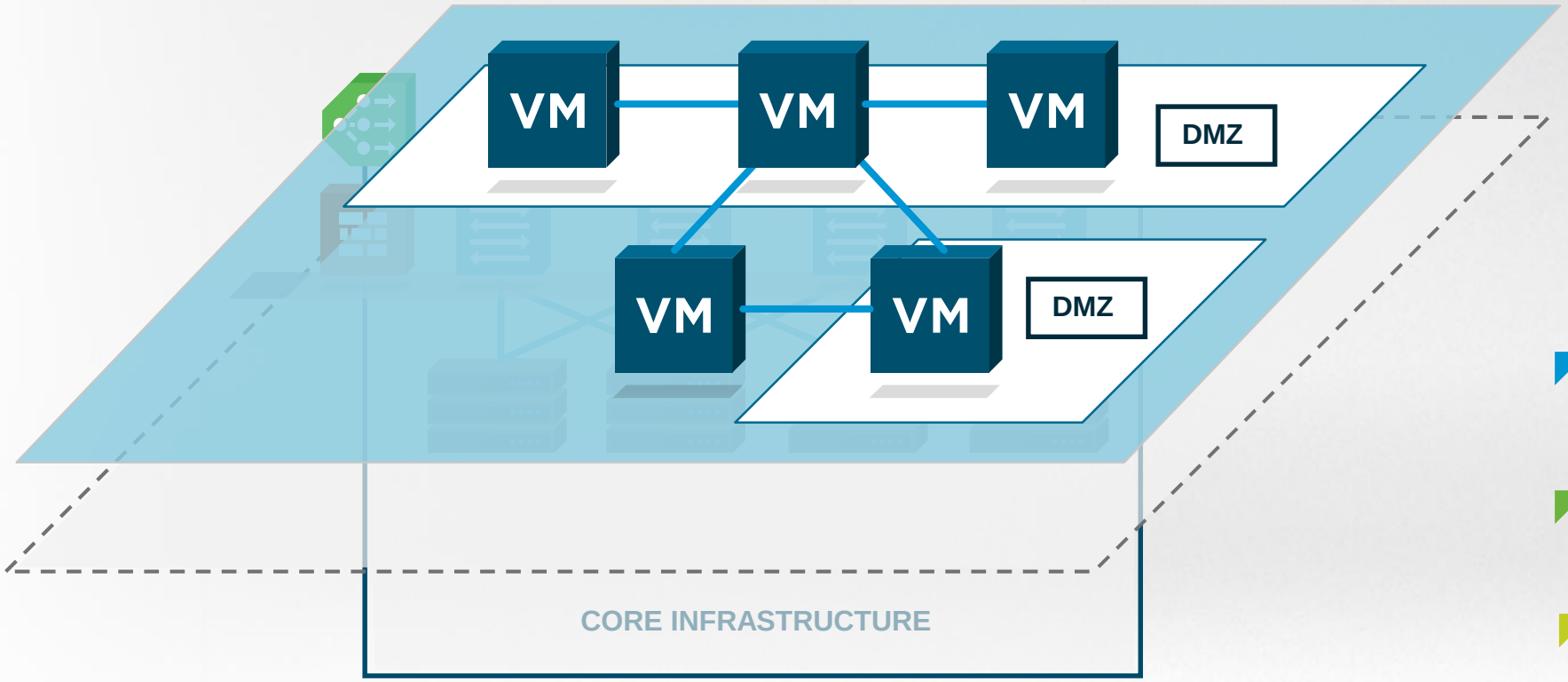
What if you could…

So that you could provide isolation at the hypervisor layer



What if you could…

Enabling you to create DMZs anywhere, regardless of their location



- Scalable and flexible
- Increase asset utilization
- Simplify management

Security at Any Size, Anywhere

“NSX allows us to secure our dedicated science networks for our researchers. Anywhere there is connectivity, I can set up a DMZ.”

Brian Pietrewicz
Deputy CIO & Director of Computing Platforms
University of New Mexico

DMZ anywhere

THE UNIVERSITY of NEW MEXICO

Driving value with our NSX partner ecosystem

Orchestration & Management

Pivotal Cloud Foundry, docker, kubernetes, openstack, vRealize Automation, VIO, vRealize Orchestrator, vCloud Director, MIRANTIS, CSC, ANSIBLE, CHEF, redhat, SUSE, puppet labs, VMWARE {code}

Networking & Security Services

paloalto NETWORKS, Check Point SOFTWARE TECHNOLOGIES LTD., FORTINET, Symantec, CISCO, eset, f5, McAfee, TREND MICRO, KASPERSKY lab, AVI Networks, Bitdefender, JUNIPER NETWORKS, VECTRA

Network Infrastructure

DELL EMC, cumulus, ARISTA, Hewlett Packard Enterprise, JUNIPER NETWORKS, BROCADE, HUAWEI

Compute Infrastructure

vmware, amazon web services, KVM, IBM Bluemix™

Platforms

vmware, vSAN Ready Node, VXRAIL, VXRACK, FUJITSU, IBM, HITACHI Hitachi Data Systems

Operations & Visibility

Gigamon, algosec, tufin, REDSEAL, Infoblox, NETSCOUT, SKYBOX SECURITY, ForeScout, FIREMON, riverbed, HYTRUST Cloud Under Control, ca technologies

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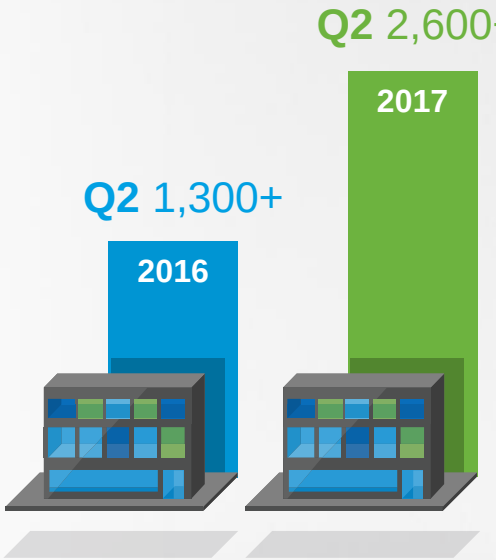
NSX customer momentum is growing exponentially



Customers

2,600+ customers across all industries and organizational sizes — representing **100% year-over-year growth**

Deployments

Over two new deployments of NSX per day. Number of deployments increased **3x year-over-year**

Certifications

8,800+ Certified NSX professionals

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Customer are using NSX…

SERVICE PROVIDER

To stay one step ahead of hackers

HEALTHCARE

To keep hospitals running smoothly

FINANCE

To process millions of transactions globally

TECHNOLOGY

To keep pace with the explosion of data

PUBLIC SECTOR

To protect governments and militaries

TELECOM

To keep millions of people connected

EDUCATION

To deliver apps to thousands of students

RETAIL

To process $ billions of retail transactions

TRAVEL AND TRANSPORT

To keep planes in the air

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Where to get started

Engage and Learn

Join VMUG for exclusive access to NSX
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Find NSX Resources
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Training and Certification
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Thank you

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