



MAKING THE WORLD SAFER – ONE APP AT A TIME

# Security at a Crossroads

## Our New Journey in the Cloud

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QLYS Investors & Analysts Day – Four Seasons San Francisco, March 6<sup>th</sup> 2019

# Safe Harbor

This presentation includes forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally relate to future events or our future financial or operating performance. Forward-looking statements in this presentation include, but are not limited to, the following list:

- our business and financial performance and expectations for future periods, including the rate of growth of our business and market share gains;
- our ability to sell additional solutions to our customer base and the strength of demand for those solutions;
- our plans regarding the development of our technology and its expected timing;
- our expectations regarding the capabilities of our platform and solutions;
- the anticipated needs of our customers;
- our strategy, the scalability of our strategy, our ability to execute our strategy and our expectations regarding our market position;
- the expansion of our platform and our delivery of new solutions;
- the expansion of our partnerships and the related benefits of those partnerships; and
- our ability to effectively manage our costs

Our expectations and beliefs regarding these matters may not materialize, and actual results in future periods are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These risks include those set forth in our filings with the Securities and Exchange Commission, including our latest Form 10-Q and 10-K. The forward-looking statements in this presentation are based on information available to us as of today, and we disclaim any obligation to update any forward-looking statements, except as required by law.

We also remind you that this presentation will include a discussion of GAAP and non-GAAP financial measures. The non-GAAP financial measures are not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP. The GAAP financial measures, and a reconciliation of the non-GAAP financial measures discussed in this presentation to the most directly comparable GAAP financial measures are included in the appendix of this presentation.

# Going Back to our Origins – 1999

## Our Original Mission and Vision

Apply nascent Internet Technologies to automate Vulnerability Assessment making it accurate, continuous and scalable.



11,000+ customers in 160 countries

# Where are we now?

## Today's Mission and Vision

Unifying IT, Security and Compliance in a single pane of glass with 2 second visibility across on-premise, endpoints, cloud(s), containers, web apps, API, mobile and OT/IoT environments

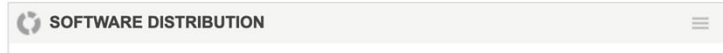
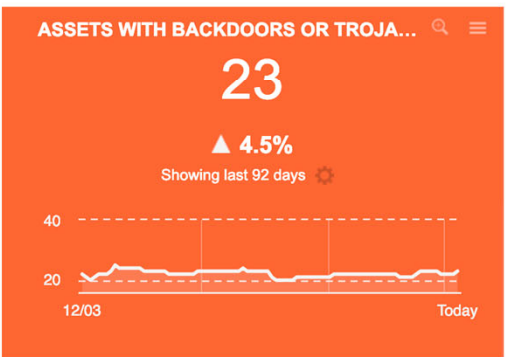
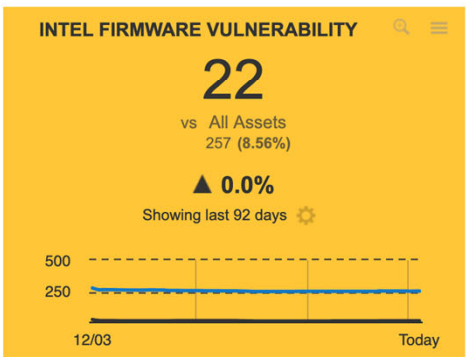
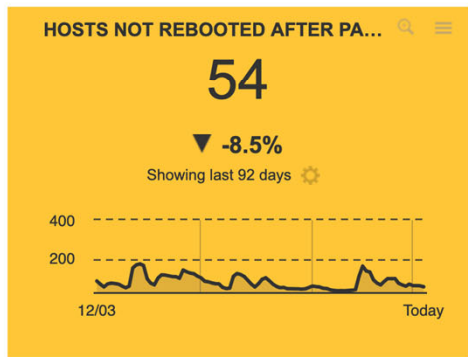
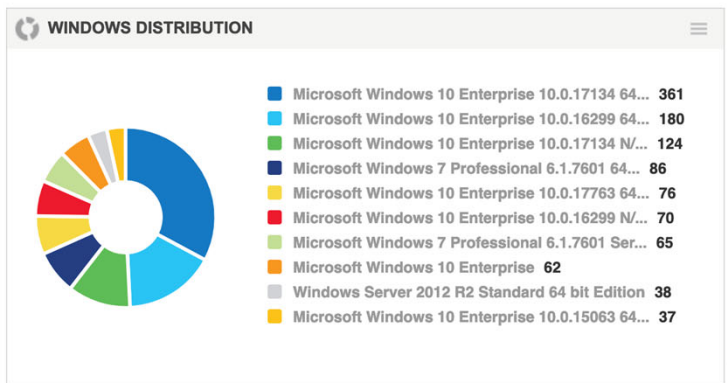
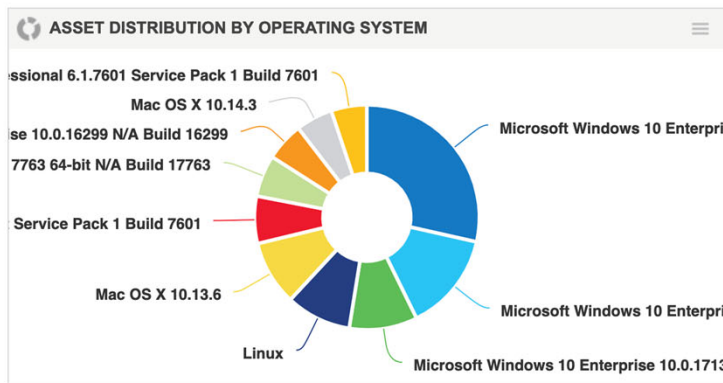




### Asset Overview

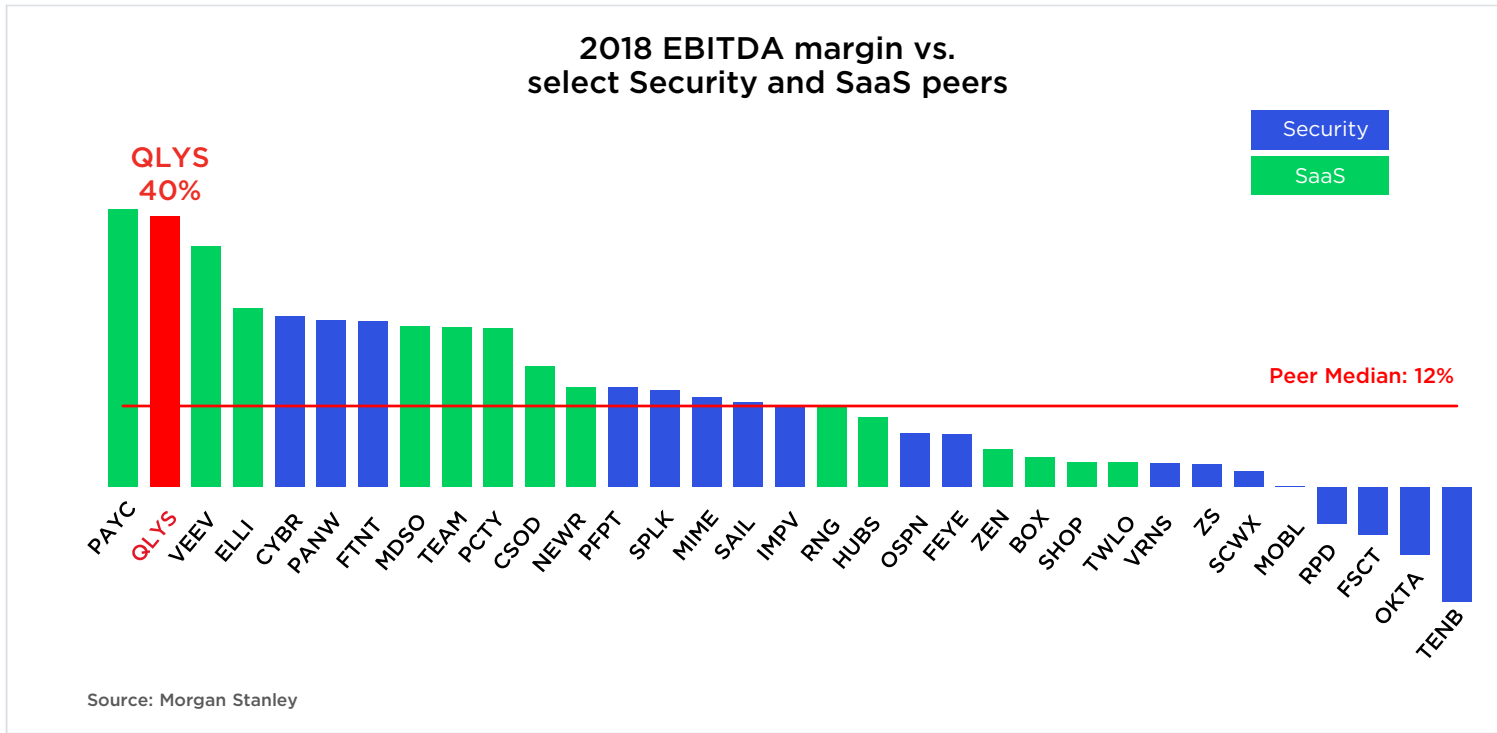
Actions Add Widget

Filter by Asset Tags



SEV 5: FOUND > 30 DAYS AGO

# QLYS a Company Built to Last



# Go to Market

The Platform is the Distribution Channel

The screenshot shows the InformationWeek website interface. On the left and right sides, there are blue vertical overlays with the text: "Know what's on your network at all times." and "Try Qualy's Global IT Asset Inventory!". The website content includes a navigation bar with categories like IT Leadership, DevOps, Security, Cloud, Data Management, and Infrastructure. A main section titled "TOP STORIES" features articles such as "Prepping the Enterprise for the AI Apocalypse" and "Don't Collect Biometric Data Without Providing Notice". A Qualy's logo is visible at the bottom left of the overlay.

The screenshot shows the DarkReading website interface. On the left and right sides, there are blue vertical overlays with the text: "Better than Nessus & free." and "See for yourself" with a red arrow pointing to a Qualy's logo. The website content includes a navigation bar with categories like ANALYTICS, ATTACKS, APPSEC, CLOUD, ENDPOINT, IOT, MOBILE, OPERATIONS, PERIMETER, RISK, THREAT INTELLIGENCE, and TOOLS/THREATS. A main section titled "TOP STORIES" features articles such as "Security Spills: 9 Problems Causing the ..." and "High Stress Levels Impacting CISOs Physically, Mentally". A Qualy's logo is visible at the bottom left of the overlay.



# The Inconvenient Truth we all must Acknowledge

## Data Breaches continue to be on the rise

Despite massive investments in security and an explosion of solutions all claiming they will make us more secure

The digital transformation has created an explosion of new technology and opportunities.

It has left chaos and many gaping security holes in its wake.

Today's plethora of current IT, security and compliance tools create more problems than they solve – delivering diminishing returns.

# We must Adopt a new Mindset to Cybersecurity

## **Building Security in - Stop Bolting it on**

Continuously Assess, Detect and Respond to attacks

In our hyper connected new world where everything connects with everything, we simply cannot secure what we do not know.

We need to know what connects to our networks and changes that are occurring.

Current Incident Response solutions crucially lack context and automation.

# Mindset Change

Embracing the Digital Transformation

## Holistic Transformation of Business to Digital

Cloud, Containers, IaaS, PaaS, OT, IIoT, IoT, Mobility, Web apps, APIs, Mobile Apps

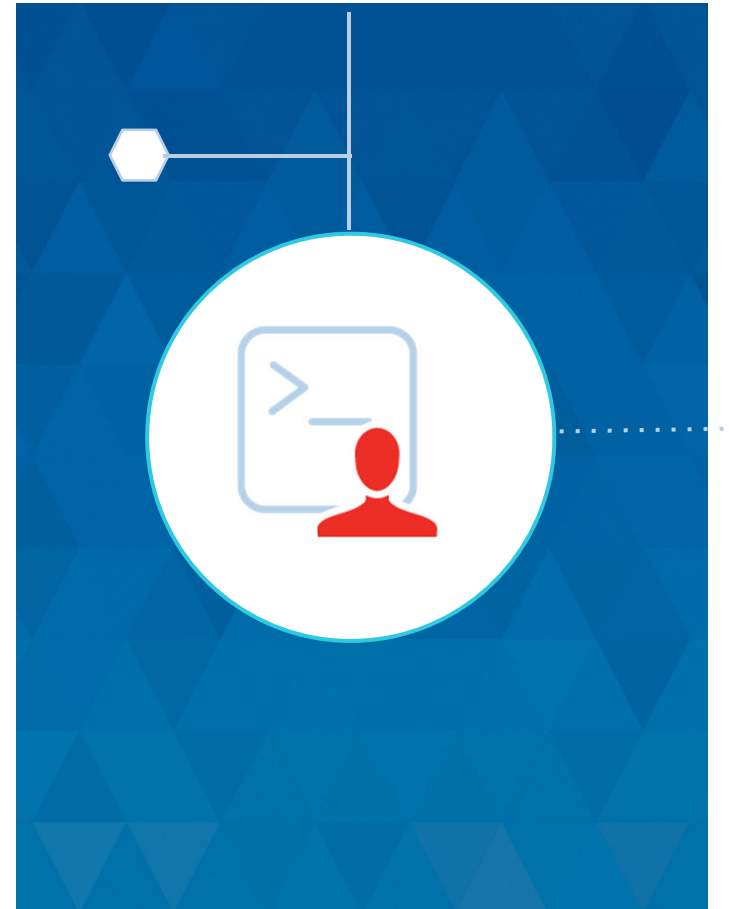


# DevOps and Security the new Frontier

**This is real and highly  
contagious**

Developers decide how  
infrastructure runs in production

Speeds up significantly how fast  
code goes to production



# Moving Toward the Future of Security

## Transparent Orchestration

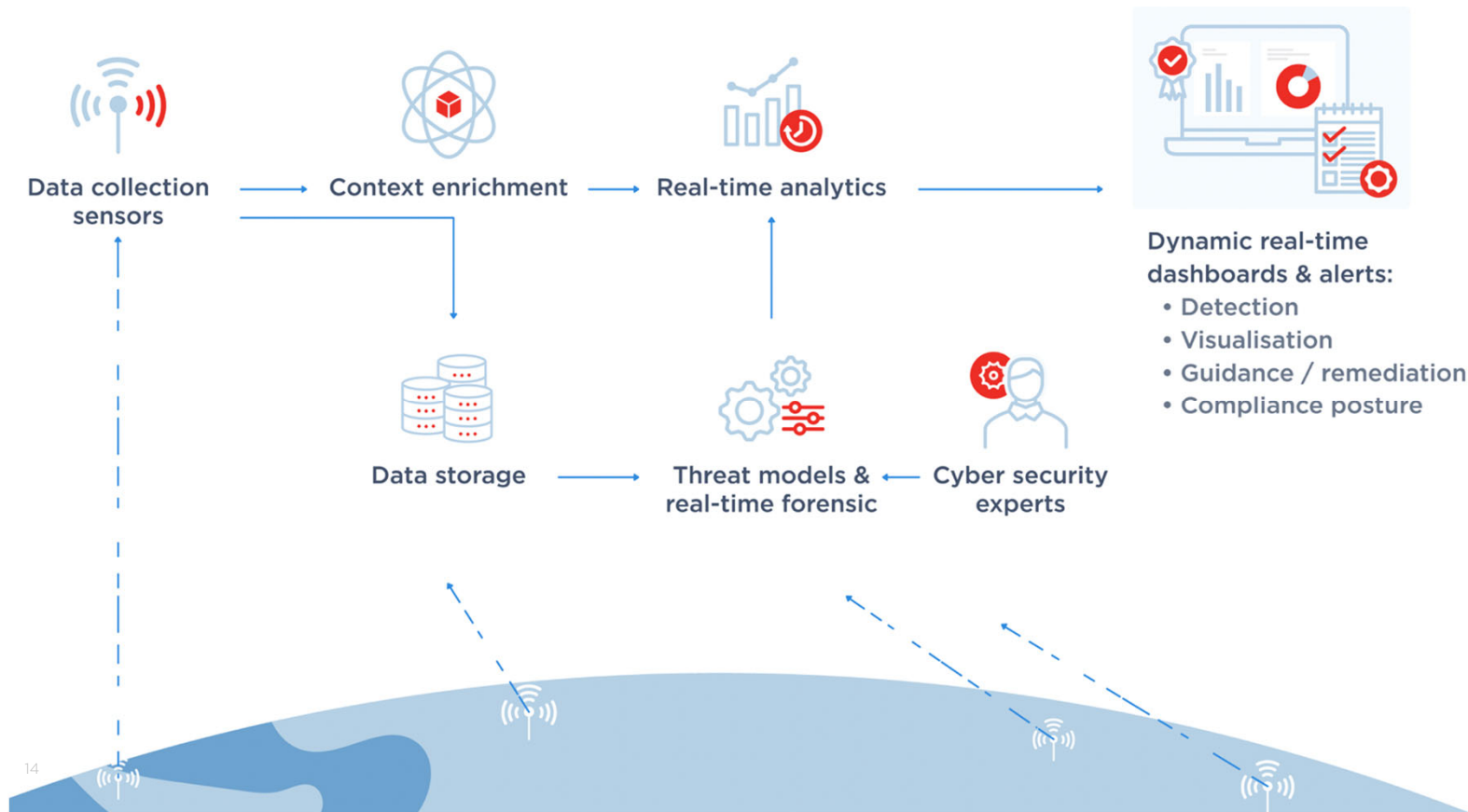
Built-in Automation is the only real solution - Starts in DevOps

## Our continuing mission

Building-in Security into DevOps  
Building-in Secure Access Control  
Building the next generation of  
Security Analytics platform



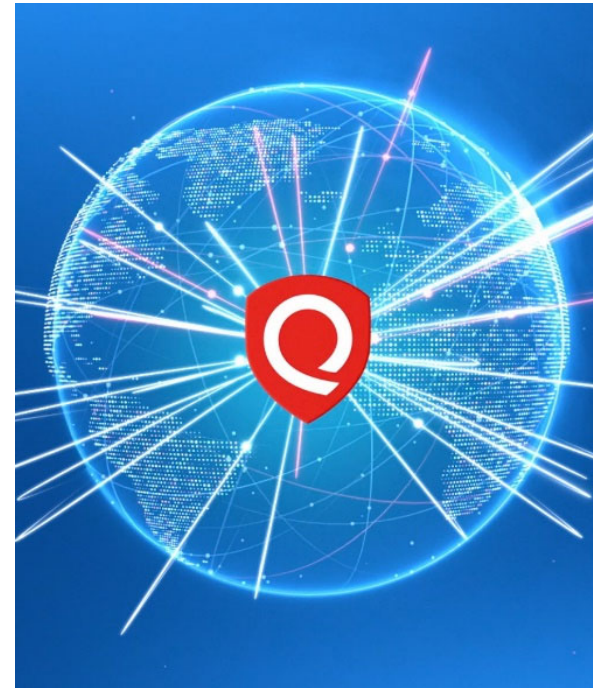
# Next-Gen Analytics Platform (Blue Print)



# Summary

**Bringing a Unique Value Proposition to our Customers and Investors**

Global IT Asset Inventory  
Stack Consolidation  
Building Security into their Digital Transformation  
A Company Highly Profitable and Built to Last





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# Thank You

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# Security at a Crossroads

Regaining our lost visibility

Sumedh Thakar, Chief Product Officer

QLYS Investors & Analysts Day – Four Seasons San Francisco, March 6<sup>th</sup> 2019

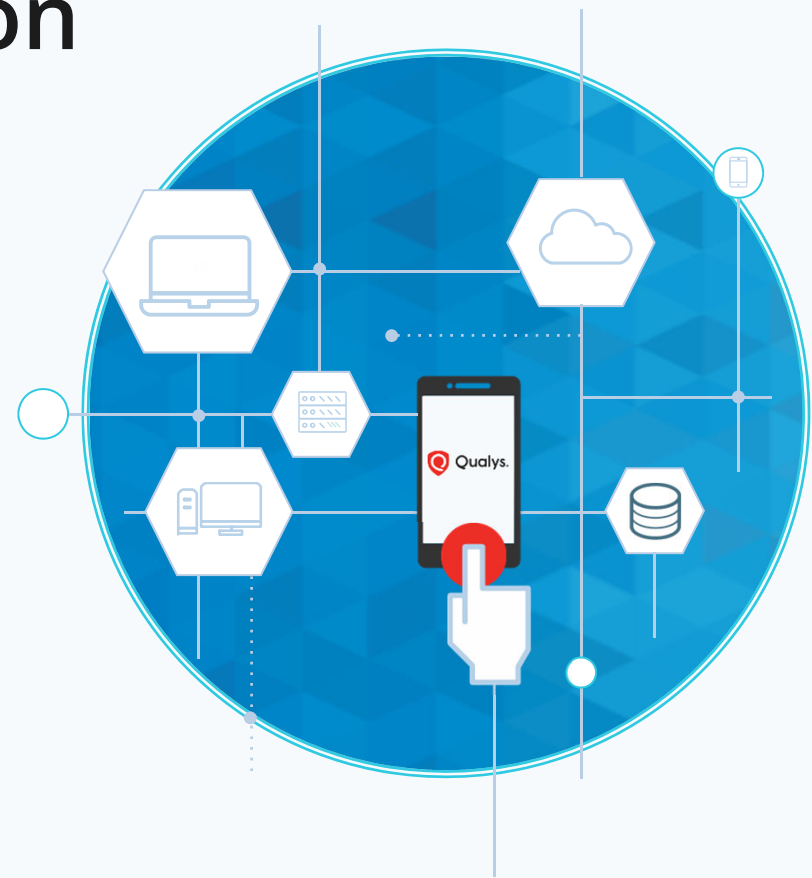
# IT Transformation

## Infrastructure & Applications

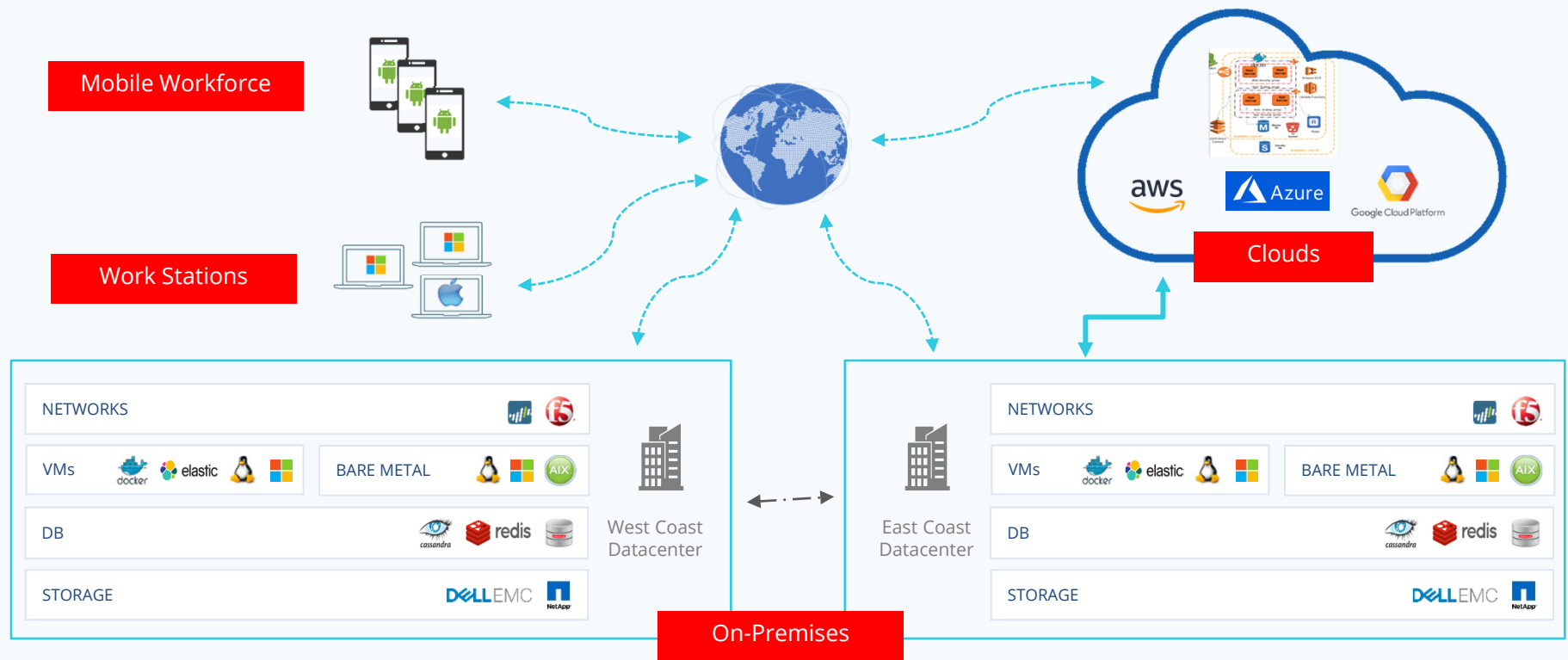
# Digital Transformation

Holistic Transformation of  
Business to Digital

Cloud, Containers, IaaS, PaaS, OT,  
IIoT, IoT, Mobility, Web apps, APIs,  
Mobile Apps



# Hybrid Cloud Overview Architecture



# Containers

Real game-changer

Hypervisor disappearing, bare metal is back

Kubernetes Infrastructure-as-code



# Containers – no servers?

Container-as-a-Service AWS Fargate

AWS Lambda Function-as-a-Service,  
serverless!

Kubefed?

“Priceline” for Containers?



# DevOps

This is real and highly contagious

Developer decides how infrastructure runs in production

Significantly speeds up how fast code goes to production



# On-Prem

Shrinking Datacenter Footprint

Increasing OT & IIoT

Corp IT - more distributed & mobile

More IoT!





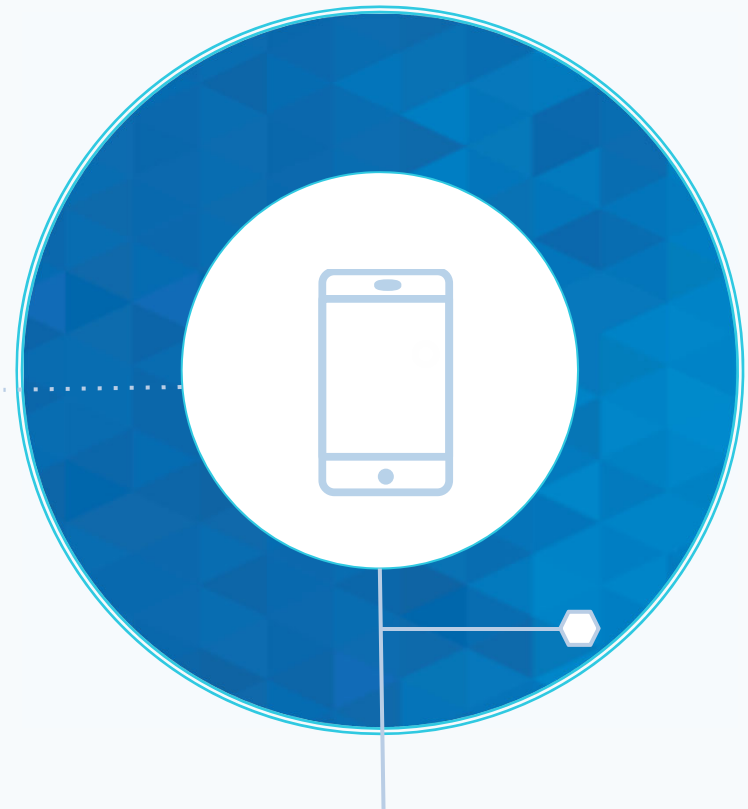
# Enterprise Mobility != BYoD

Enterprise owned handheld devices

Indispensable to modern business

Running apps handling sensitive  
business & consumer data

Mobile!



# Web Apps & APIs

Web Apps for the humans

APIs for the non-humans

Wide window into all customer data



# SaaS

More aaS everywhere

No infrastructure to manage

No applications to code or manage



# SaaS



# Security

# Security Transformation

Transparent Orchestration

Built-in automation the only real solution



# Starts in DevOps

DevSecOps

Strict CI/CD pipeline controls

CI: Eliminate majority issues before prod

CD: Embed security artifacts in Image



# Agile SecOps

SecOps focus on monitoring & response

Drastically reduce security solutions deployed after the fact

New generation of Security Analytics platforms – Data Lake





Qualys

# Qualys Platform Approach

Embracing our own Digital Transformation

Massive expansion of backend for visibility – 2+ Trillion security data points indexed

Comprehensive coverage of sensors – scanners, agents, cloud connectors, container sensors, passive sniffers and mobile agents



# Cloud Platform Environment

## Security at scale on hybrid clouds

19+ apps providing comprehensive suite of security & compliance solutions

12,000+ customers and active users

7 shared cloud platforms across North America, Europe & Asia

70+ private clouds platforms deployed globally... on-prem, AWS, Azure, GCP

16+ PB storage and 16,000 cores



# Cloud Platform Highlights

2+ trillion security events annually

3+ billion scans annually

2.5+ billion messages daily across Kafka clusters

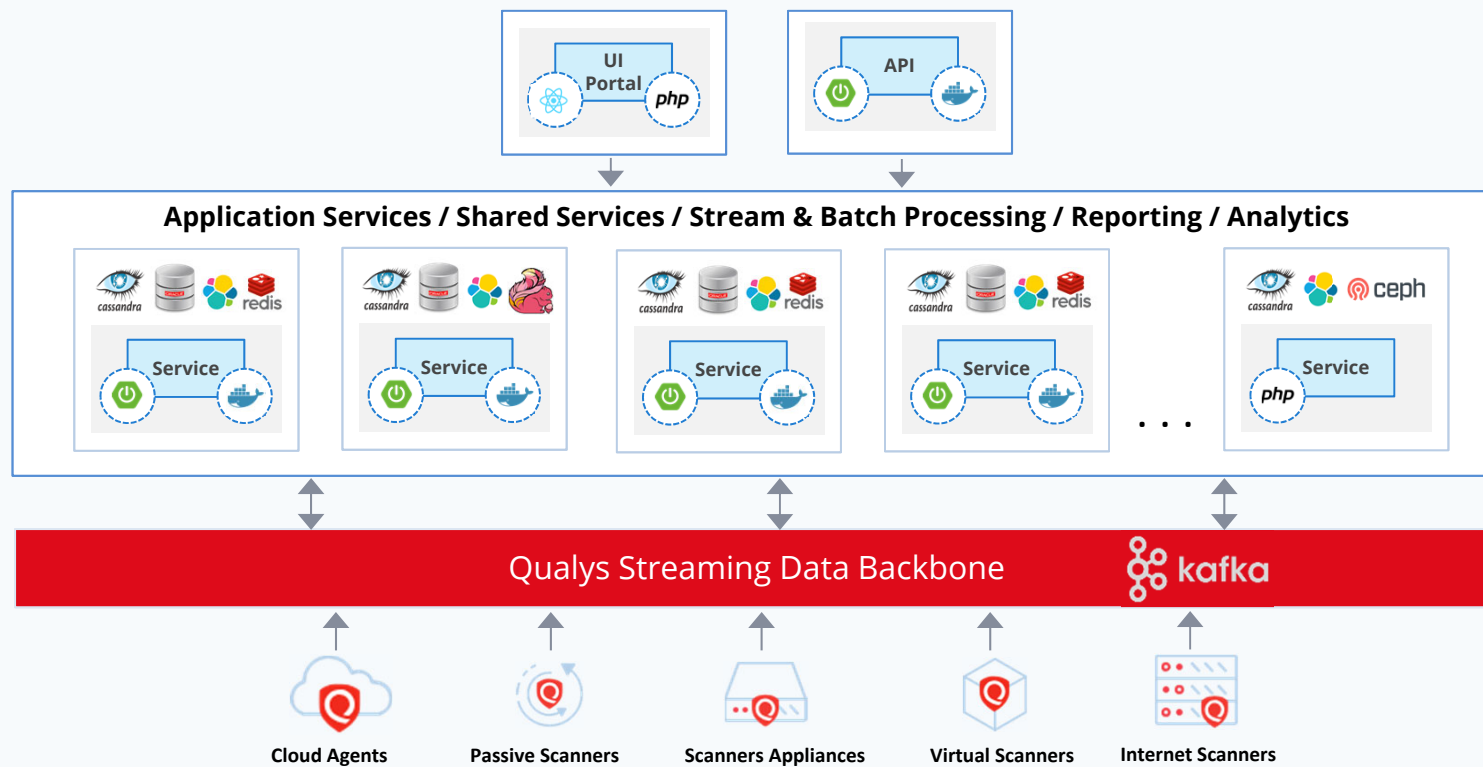
2+ trillion data points indexed in our Elasticsearch clusters

Unprecedented 2-second visibility



# Qualys Cloud Platform

## Sensors, Data Platform, Microservices, DevOps



# Qualys Sensor Platform

## Scalable, self-updating & centrally managed



### Physical

Legacy data centers  
Corporate infrastructure  
Continuous security and compliance scanning



### Virtual

Private cloud infrastructure  
Virtualized Infrastructure  
Continuous security and compliance scanning



### Cloud/Container

Commercial IaaS & PaaS clouds  
Pre-certified in market place  
Fully automated with API orchestration  
Continuous security and compliance scanning



### Cloud Agents

Light weight, multi-platform  
On premise, elastic cloud & endpoints  
Real-time data collection  
Continuous evaluation on platform for security and compliance



### Passive

Passively sniff on network  
Real-time device discovery & identification  
Identification of APT network traffic  
Extract malware files from network for analysis



### API

Integration with Threat Intel feeds  
CMDB Integration  
Log connectors

# Physical & Virtual scanners

Large scale active scanning across on-prem & cloud  
50,000 + Appliances globally deployed

Network Asset mapping, discovery & inventory

Vulnerability Assessment

Configuration Assessment

Web Application Vulnerability Assessment

Digital Certificate discovery, inventory & Assessment



# Cloud Agents

Large scale continuous assessment on-prem, multi-cloud & laptops  
16+ Million Agents

Hardware & Software Asset Inventory  
Vulnerability Assessment  
Configuration Assessment  
File Integrity Monitoring  
Threat Hunting (Malware IOC detection)  
Patch Management (GA March 2019)





# Cloud Agents - Mobility

H1 2019 beta

Extend Agents to Enterprise Mobile Devices

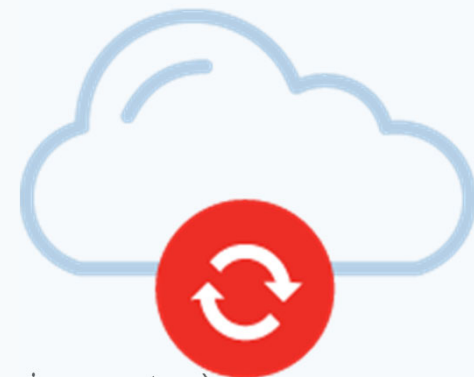
Android, IOS and Windows Mobile

Device & Application Inventory

Vulnerability & Configuration Assessment

Security Policy enforcement (pin, password, geo-fencing, etc.)

App white/black listing & Kiosk mode

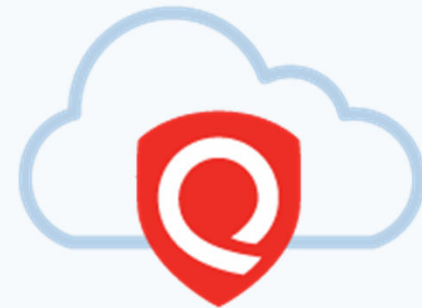


# Cloud Connectors

Continuous assessment of Multi-Cloud data centers  
AWS, Azure & GCP (more coming 2019)

IaaS & PaaS discovery & inventory  
Cloud Config & Threat assessment

Remediation of cloud threats like S3 buckets (H2 2019)  
SaaS security & compliance (H2 2019)



# Container Sensors

Continuous assessment of Docker Containers  
Vulnerability & Configuration assessment

DevOps : CI/CD build pipeline integration  
Jenkins, Bamboo, Kubernetes etc.

DevSecOps: Runtime container monitoring

Container instrumentation runtime protection (H2 2019)



# Passive Network Sensor

Continuous Network Traffic Analysis

Tap port mirroring

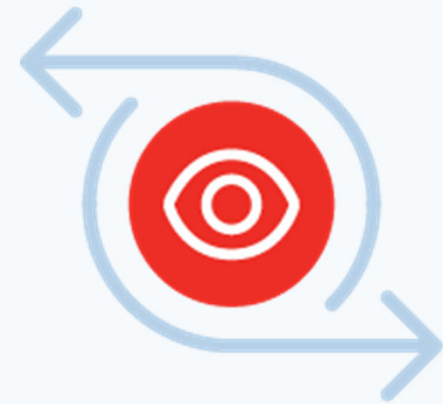
Complete visibility of ALL devices on network

Device Identification : Fingerprinting & ML

Discovery of OT, IOT & IIoT and web applications

Threat monitoring for malicious traffic

Secure Access Control : Enforce policy based controls (H2 2019)



# Qualys Platform Approach

19 solutions on single platform .. and counting – reduce agent/vendor fatigue

DevOps-friendly capabilities

Solutions for CI/CD

Extending solutions into remediation & response



# Qualys Platform Approach

Rapid expansion of R&D org

Building dedicated Data Lake & Data Science team

Key technology acquisitions & investments



# Acquisitions & Investments

Nevis	Passive Scanning & Secure Access Control
Netwatcher	Event Correlation Platform
1Mobility	Enterprise Mobility
Layered Insight	Built-in Runtime Container Security
42Crunch Investment	API Security
Adya	SaaS Security & Compliance
Frog 1	

# Qualys Cloud Apps

## ASSET MANAGEMENT



### Asset Inventory

Maintain full, instant visibility of all your global IT assets



### CMDB Sync

Synchronize asset information from Qualys into ServiceNow CMDB



### Cloud Inventory

Inventory of all your cloud assets across AWS, Azure, GCP and others



### Certificate Inventory

Inventory of TLS/SSL digital certificates on a global scale

## IT SECURITY



### Vulnerability Management

Continuously detect and protect against attacks, anytime, anywhere



### Threat Protection

Pinpoint your most critical threats and prioritize patching



### Continuous Monitoring

Alerts you in real time about network irregularities



### Indication of Compromise

Continuously monitor endpoints to detect suspicious activity



### Container Security

Discover, track, and continuously protect containers



### Certificate Assessment

Assess all your digital certificates for TLS/SSL vulnerabilities

## COMPLIANCE MONITORING



### Policy Compliance

Assess security configurations of IT systems throughout your network



### PCI Compliance

Automate, simplify and attain PCI compliance quickly



### File Integrity Monitoring

Log and track file changes across global IT systems



### Security Configuration Assessment

Automate configuration assessment of global IT assets



### Cloud Security Assessment

Get full visibility and control across all public cloud instances



### Security Assessment Questionnaire

Minimize the risk of doing business with vendors and other third parties

## WEB APPLICATION SECURITY



### Web Application Scanning

Secure web applications with end-to-end protection

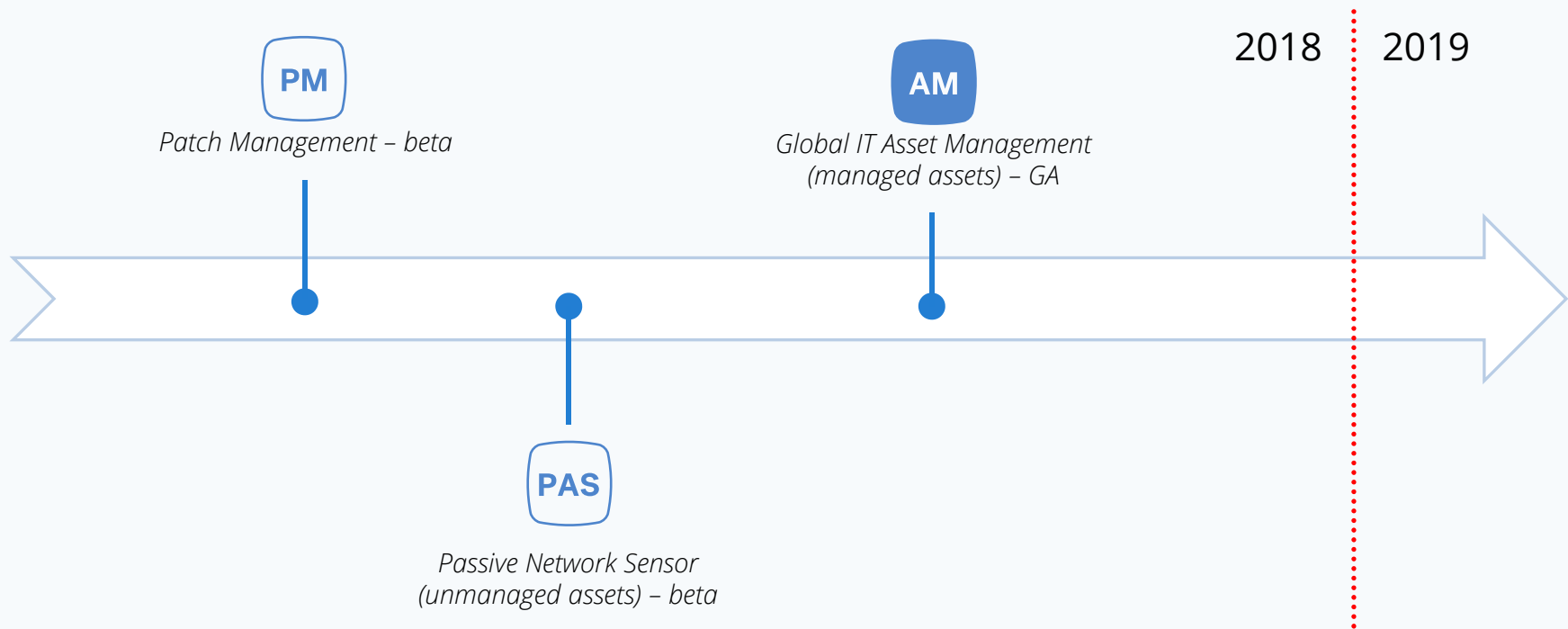


### Web Application Firewall

Block attacks and virtually patch web application vulnerabilities



# Q4 2018 releases



# 2019 – Even more apps to come!

Patch Management - GA

Secure Enterprise Mobility

Secure Access Control

API Security

Software Composition Analysis

Breach and Attack Simulation

Security Data Lake & Correlation Platform

Run-Time Container Security

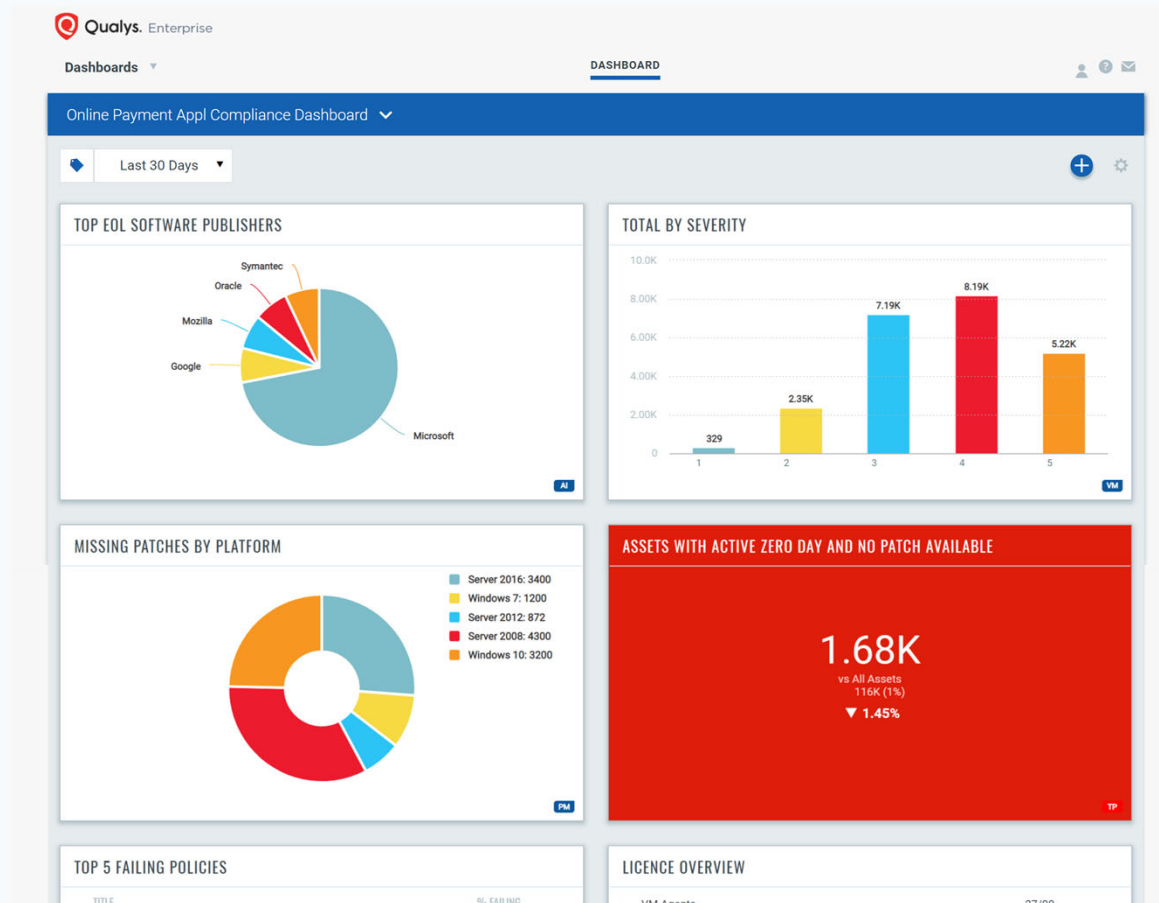
Certificate Management

Cloud Security

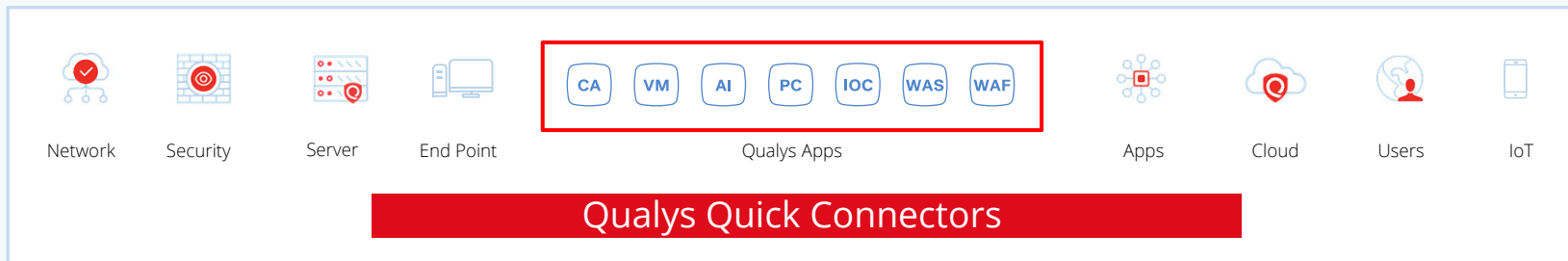


DEMO

# Unified Dashboards



# Advanced Correlation & Analytics





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# Thank You

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# Qualys' Business Model For the Digital Age

Melissa Fisher, CFO

QLYS Investors & Analysts Day – Four Seasons San Francisco, March 6<sup>th</sup> 2019

# Qualys Business Model

Leveraging Cloud Based Delivery

**The Platform is the  
distribution channel**

Key Elements of a disruptive  
model delivering high profitability





# Qualys Cloud Platform Scalability



## GLOBAL IT ASSET MANAGEMENT

- AI** Asset Inventory
- SYN** CMDB Sync
- CRI** Certificate Inventory

## COMPLIANCE

- PC** Policy Compliance
- SCA** Security Configuration Assessment
- PCI** PCI Compliance
- FIM** File Integrity Monitoring
- SAQ** Security Assessment Questionnaire
- OCA** Out-of-Band Configuration Assessment

## IT SECURITY

- VM** Vulnerability Management
- TP** Threat Protection
- CM** Continuous Monitoring
- IOC** Indication of Compromise
- CRA** Certificate Assessment

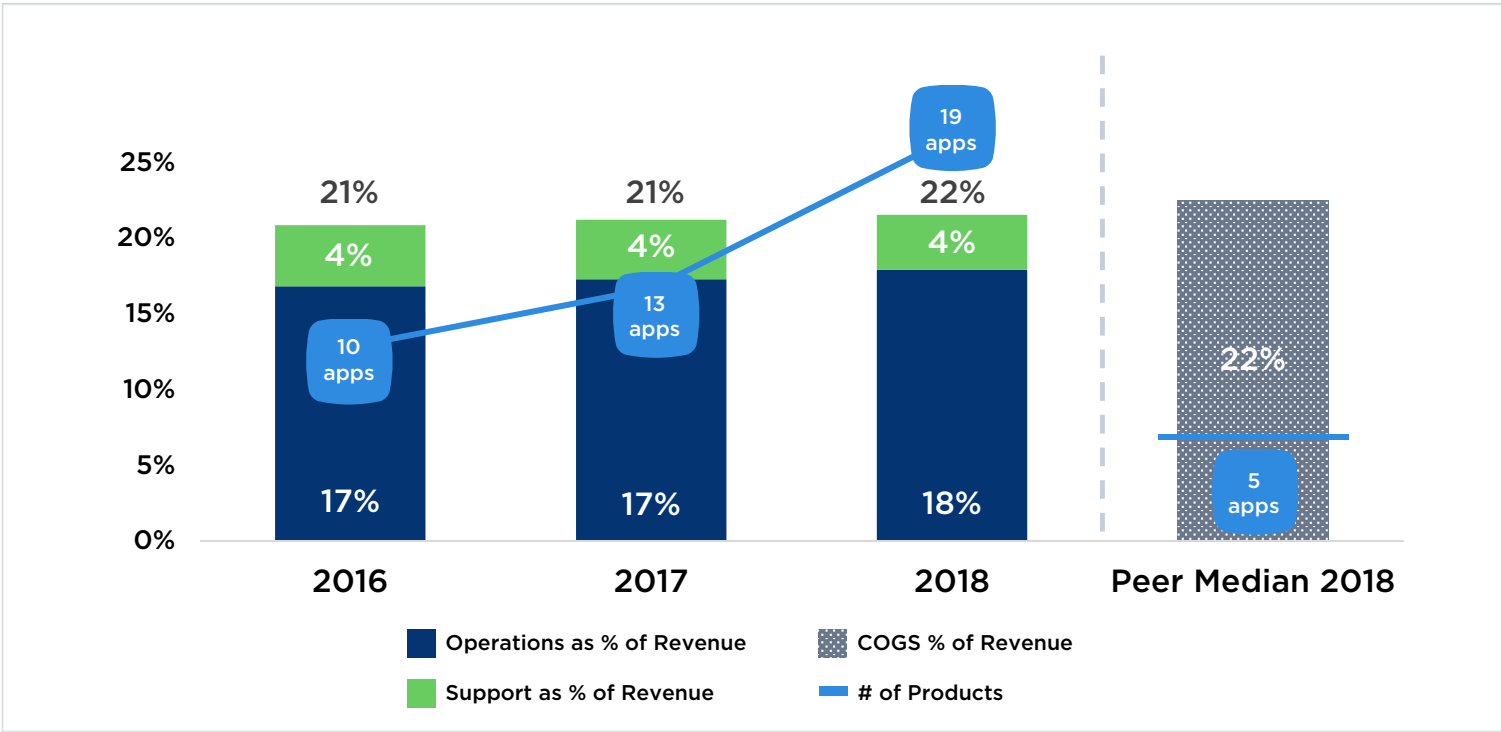
## CLOUD/CONTAINER SECURITY

- CI** Cloud Inventory
- CSA** Cloud Security Assessment
- CS** Container Security

## WEB APP SECURITY

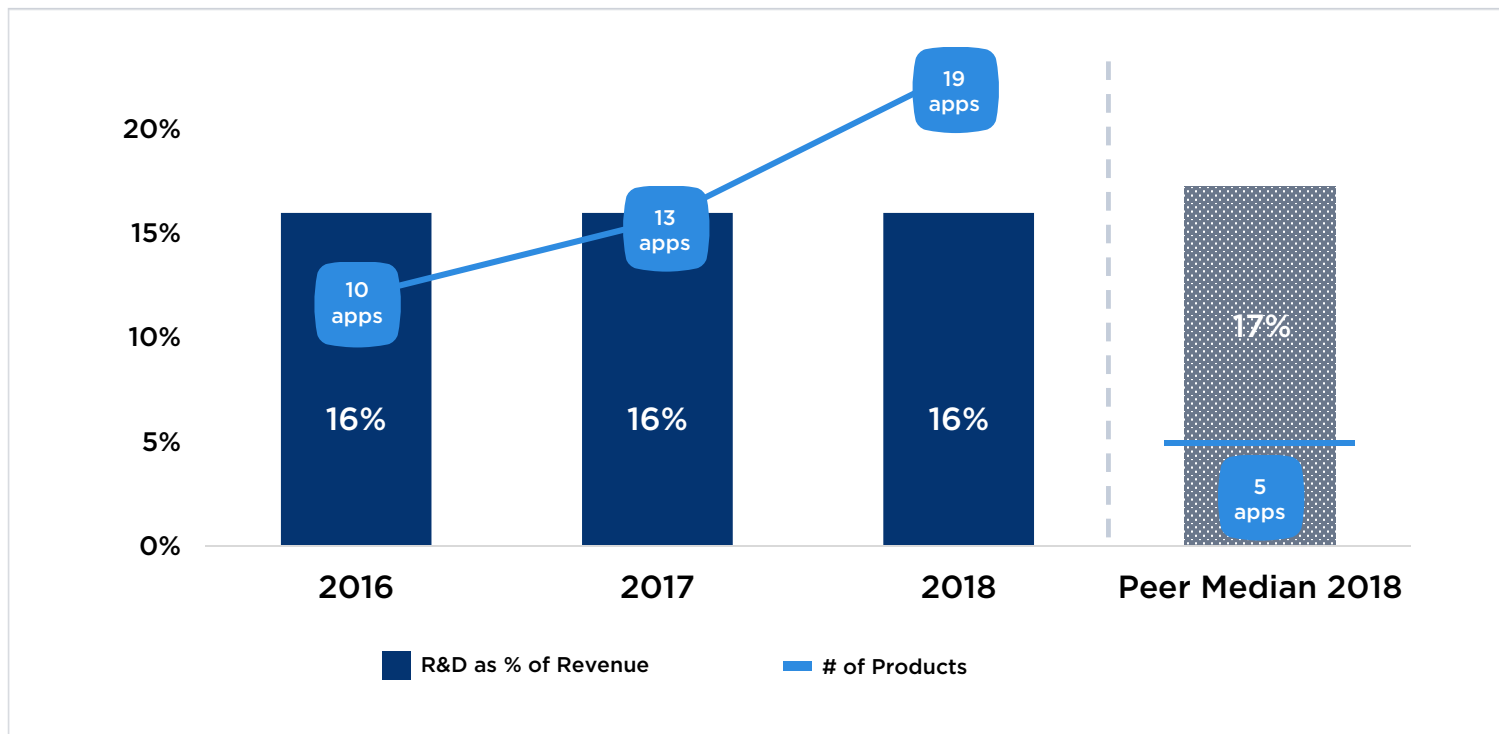
- WAS** Web App Scanning
- WAF** Web App Firewall

# Maintaining Low Cost of Revenue while Launching New Products

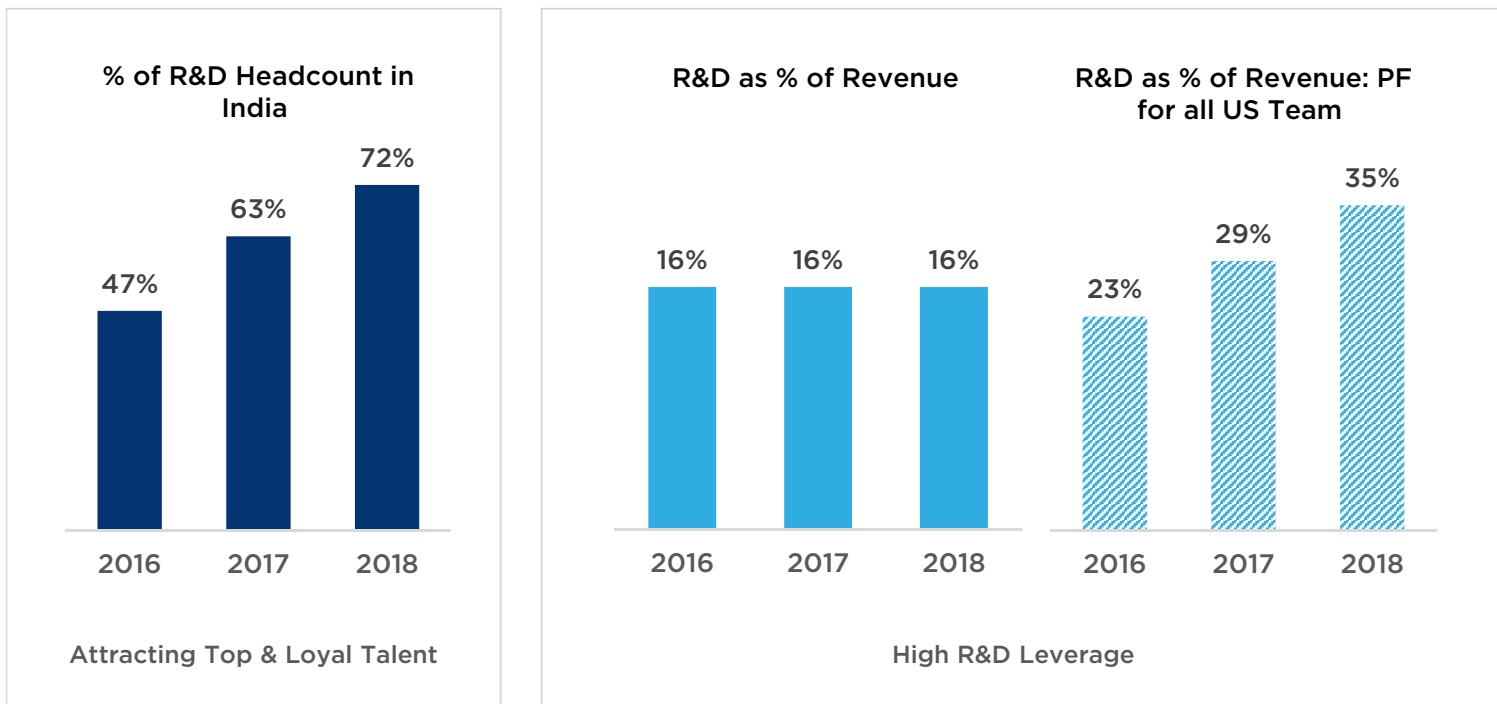


Source: Morgan Stanley excluding OneSpan

# Maintaining R&D Efficiency while Increasing Product Deployment



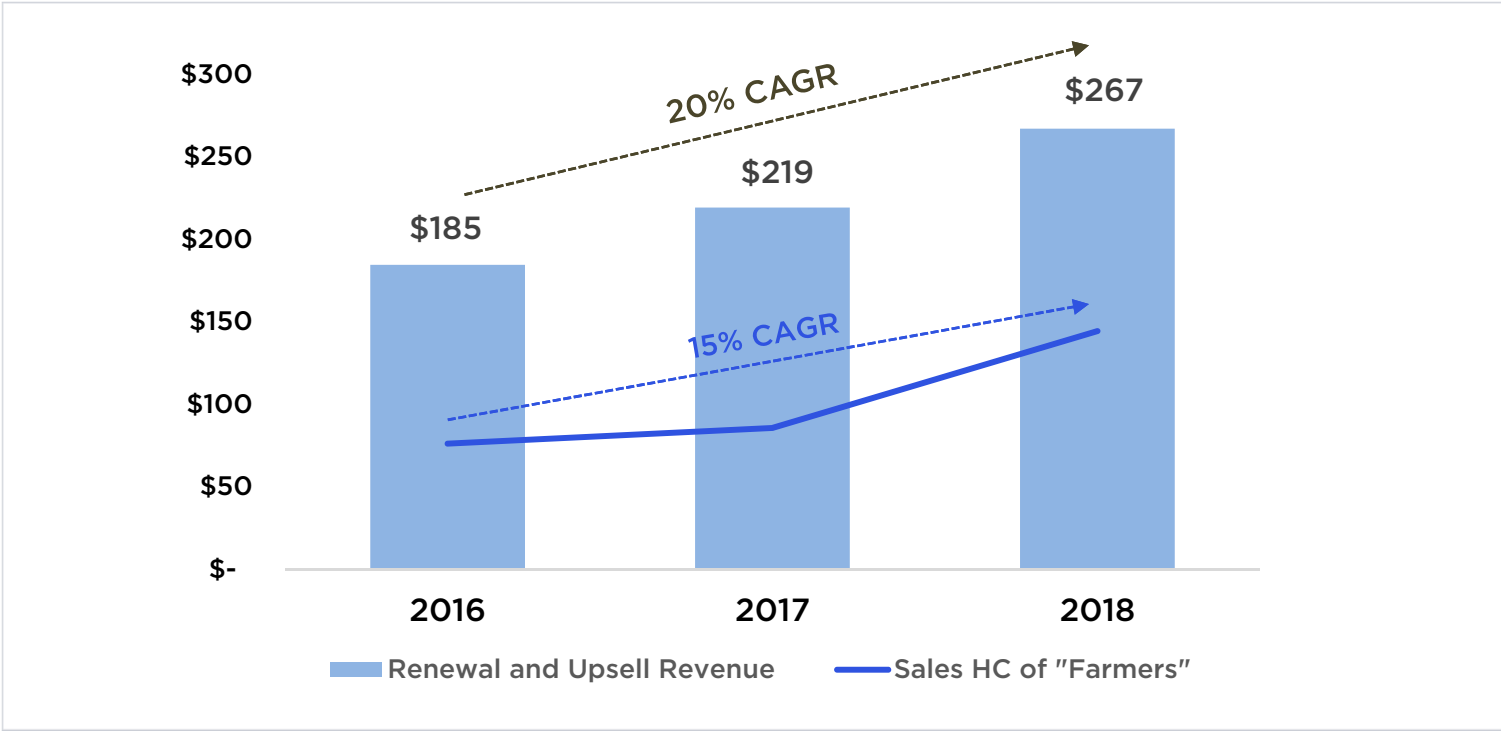
# Attracting Top R&D Talent while Leveraging a Low Cost Geography



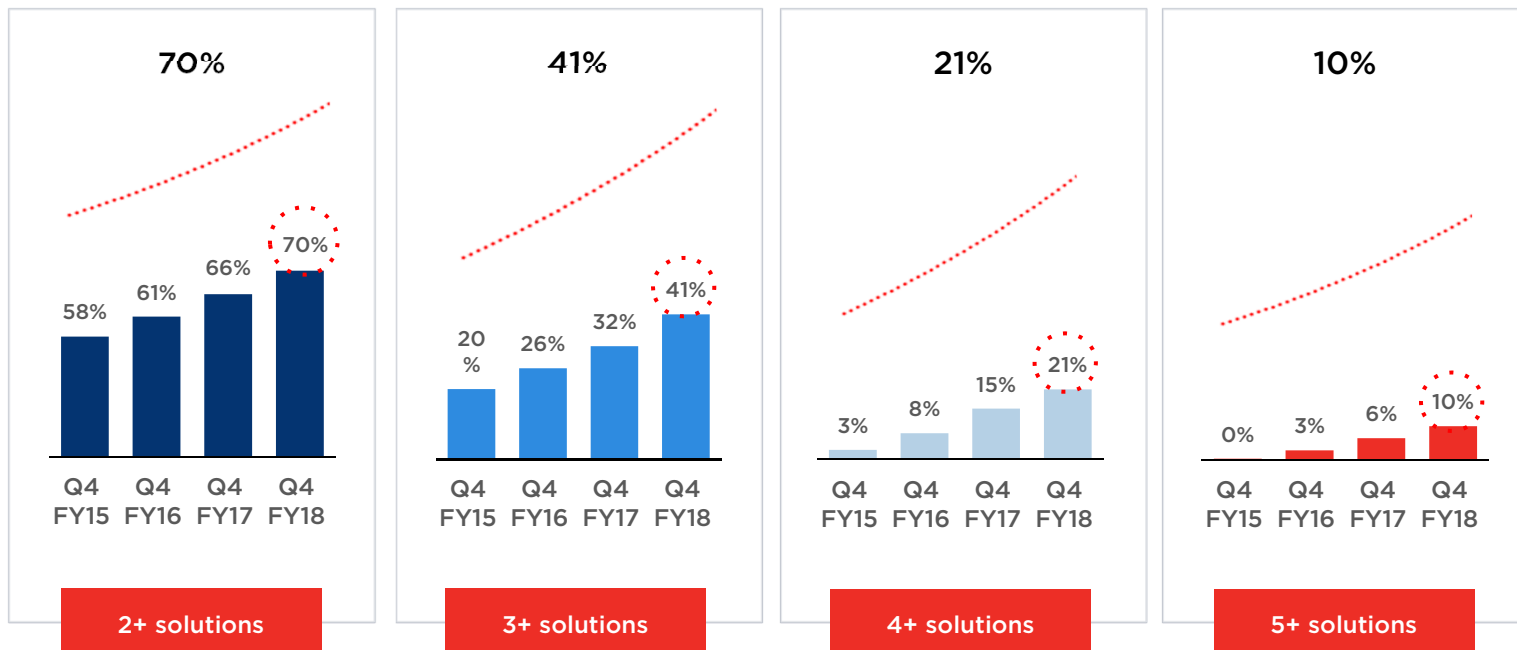
Note: 'PF for all US Team' represents the estimated cost as % of revenue if India R&D headcount were employed in US

# Built-In Sales Productivity as “Farmers” Support Customer Growth

(\$ in millions)



# ... through Multi-Product Adoption

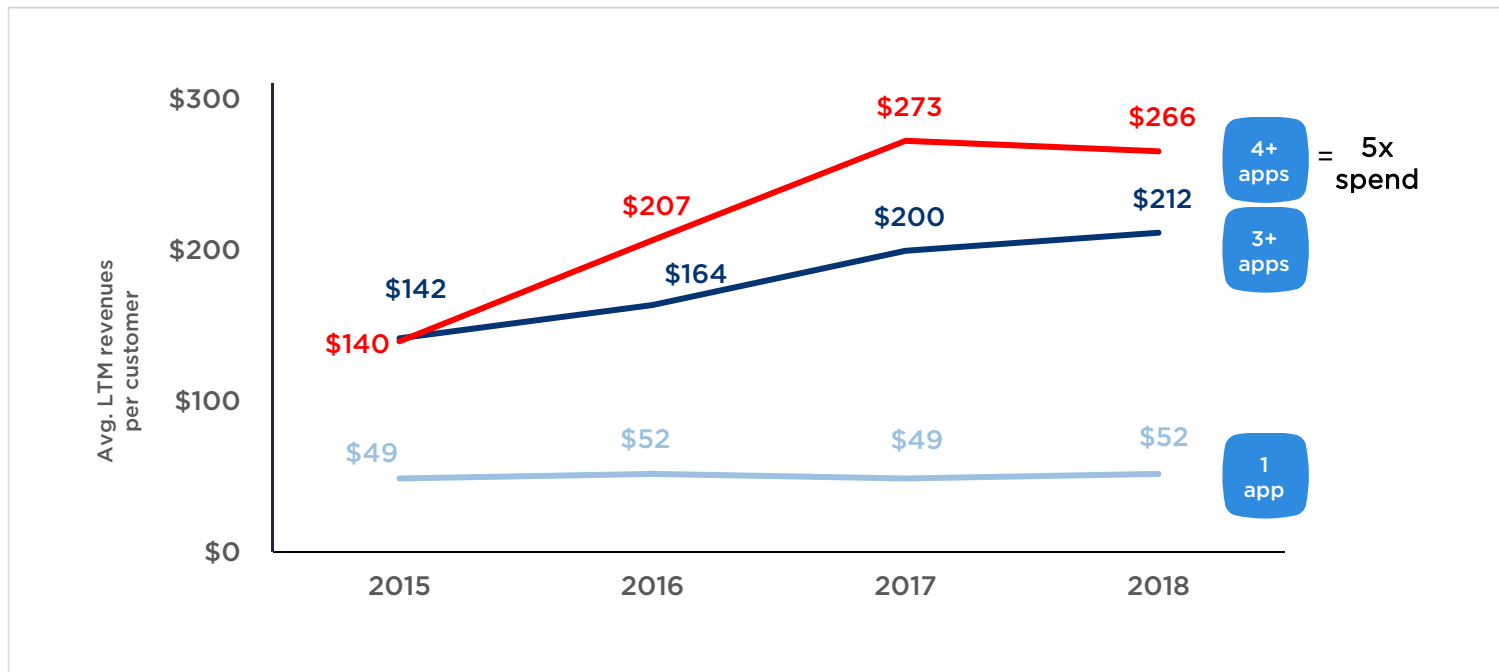


% of Enterprise customers with select number of solutions

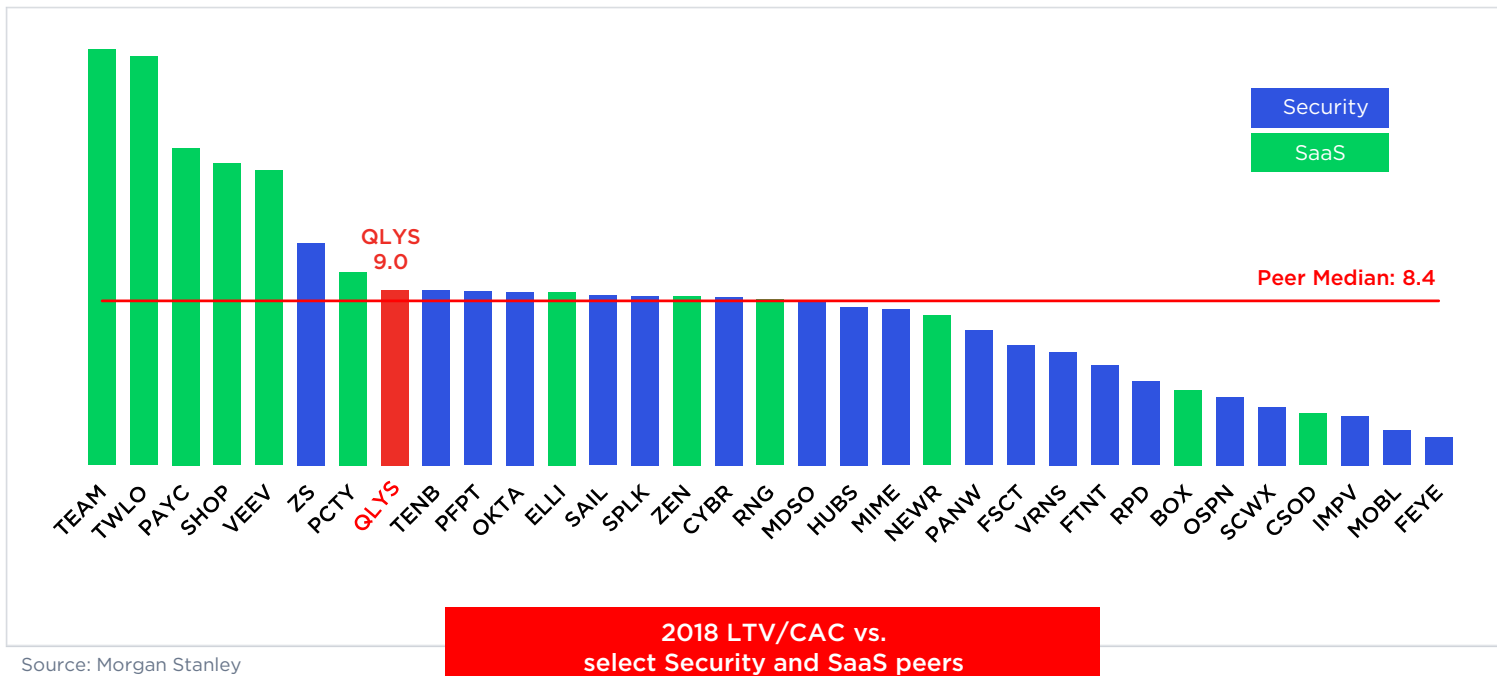
# ...Generating Higher ARPU

Enterprise customers with 4+ solutions spend over 5x that of 1-solution customers

(\$ in thousands)



# Qualys Cloud Platform Enables Top Tier LTV/CAC

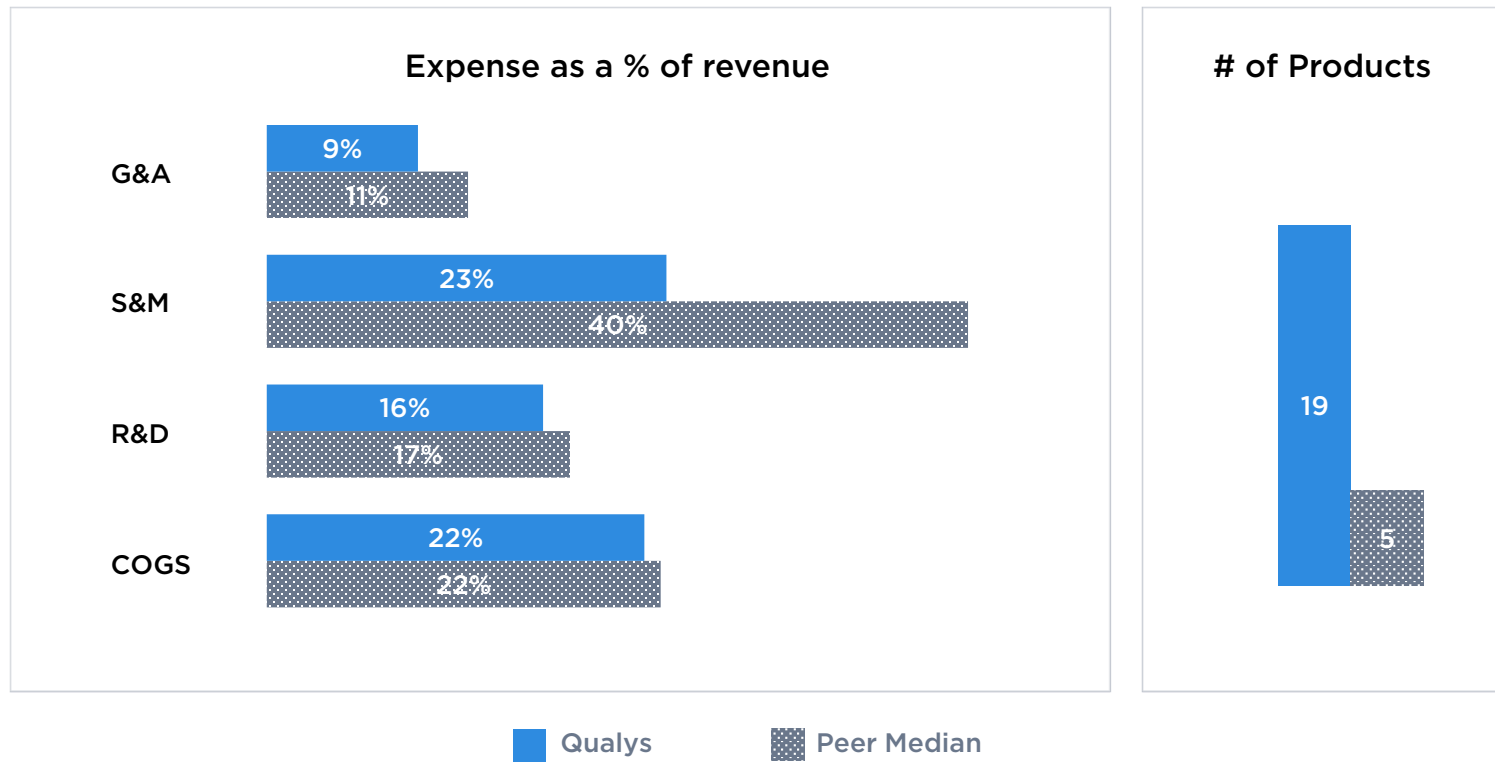


Source: Morgan Stanley

Note: Calculated using Barclay's Research methodology using GAAP financials:  
CAC = 80% of PY S&M; LTV = Net New Revenue multiplied by Gross Margin divided by Churn Rate (assumption 8%)

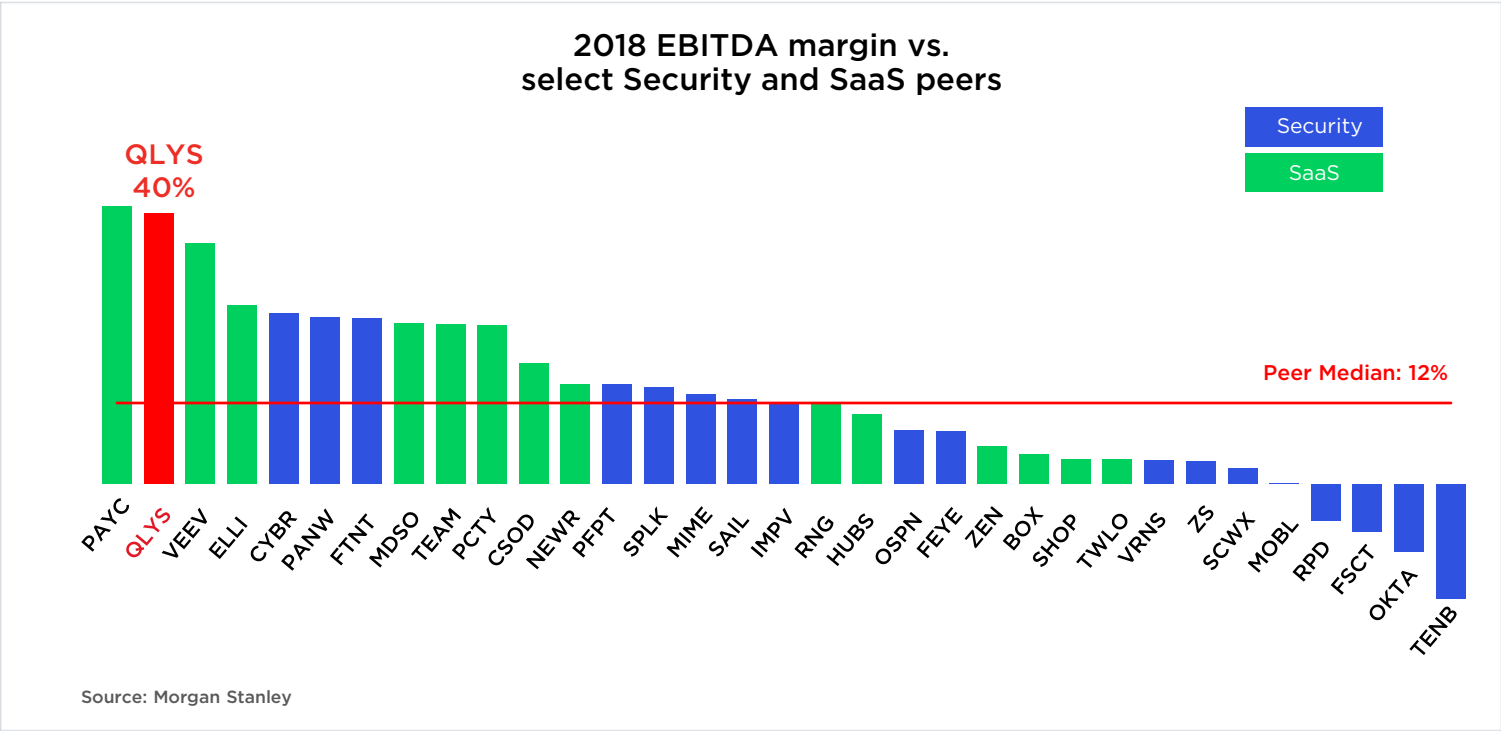


# Delivering a Best-In-Class Operating Model



Note: 2018 Expenses as % of revenue (Non-GAAP); Source: Morgan Stanley excluding OneSpan

# Resulting in Industry-leading Margins



# Summary

## Bringing a Unique Value Proposition to our Customers and Investors

Global IT Asset Inventory  
Stack Consolidation  
Building Security into their Digital Transformation  
A Company Highly Profitable and Built to Last





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# Q&A

# Appendix

# Reconciliation of Adjusted EBITDA

(\$ in millions)

	2016	2017	2018
Net income	\$19.2	\$40.4	\$57.3
Depreciation and amortization of property and equipment	16.6	19.8	25.1
Amortization of intangible assets	0.4	0.8	3.8
Interest expense	0.0	0.0	0.2
Provision for (benefit from) income taxes	11.2	(1.1)	(1.8)
Stock based compensation	20.1	27.0	30.1
Other (income) expenses, net	(0.3)	(2.1)	(5.3)
Acquisition-related expense	-	0.1	3.0
One-time tax related expense	0.7	-	-
<b>Adjusted EBITDA</b>	<b>\$68.0</b>	<b>\$84.9</b>	<b>\$112.4</b>

# Reconciliation of Non-GAAP Expenses

(\$ in millions, except per diluted share metric)

	2016	2017	2018
GAAP Cost of revenues	\$43.1	\$51.6	\$66.2
Less: Stock-based compensation	(1.9)	(2.2)	(2.5)
Less: Intangible asset amortization	-	(0.5)	(3.6)
Non-GAAP Cost of revenues	<b>\$41.3</b>	<b>\$49.0</b>	<b>\$60.1</b>
GAAP Research and development	\$36.6	\$42.8	\$53.3
Less: Stock-based compensation	(5.7)	(5.9)	(8.0)
Less: Cash acquisition-related expense (1)	-	(0.0)	(1.2)
Less: Intangible asset amortization	-	(0.3)	(0.1)
Non-GAAP Research and development	<b>\$30.9</b>	<b>\$36.6</b>	<b>\$44.0</b>
GAAP Sales and marketing	\$59.0	\$63.9	\$70.0
Less: Stock-based compensation	(4.9)	(4.8)	(4.7)
Less: Cash acquisition-related expense (1)	-	(0.1)	(1.8)
Non-GAAP Sales and marketing	<b>\$54.1</b>	<b>\$59.0</b>	<b>\$63.6</b>
GAAP General and administrative	\$29.1	\$35.3	\$39.0
Less: Stock-based compensation	(7.7)	(14.1)	(15.0)
Less: One-time tax related expense	(0.7)	-	-
Non-GAAP General and administrative	<b>\$20.7</b>	<b>\$21.2</b>	<b>\$24.1</b>

(1) Relates to compensation expense from the acquisition of NetWatcher and Layered Insight.