



Securing Your Web Applications

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Insecure Apps & APIs are a Problem

Your business depends on web applications

Any app or API can be a foothold into your organization

Developers are not incentivized for security

Cloud-based apps are easy for developers to deploy

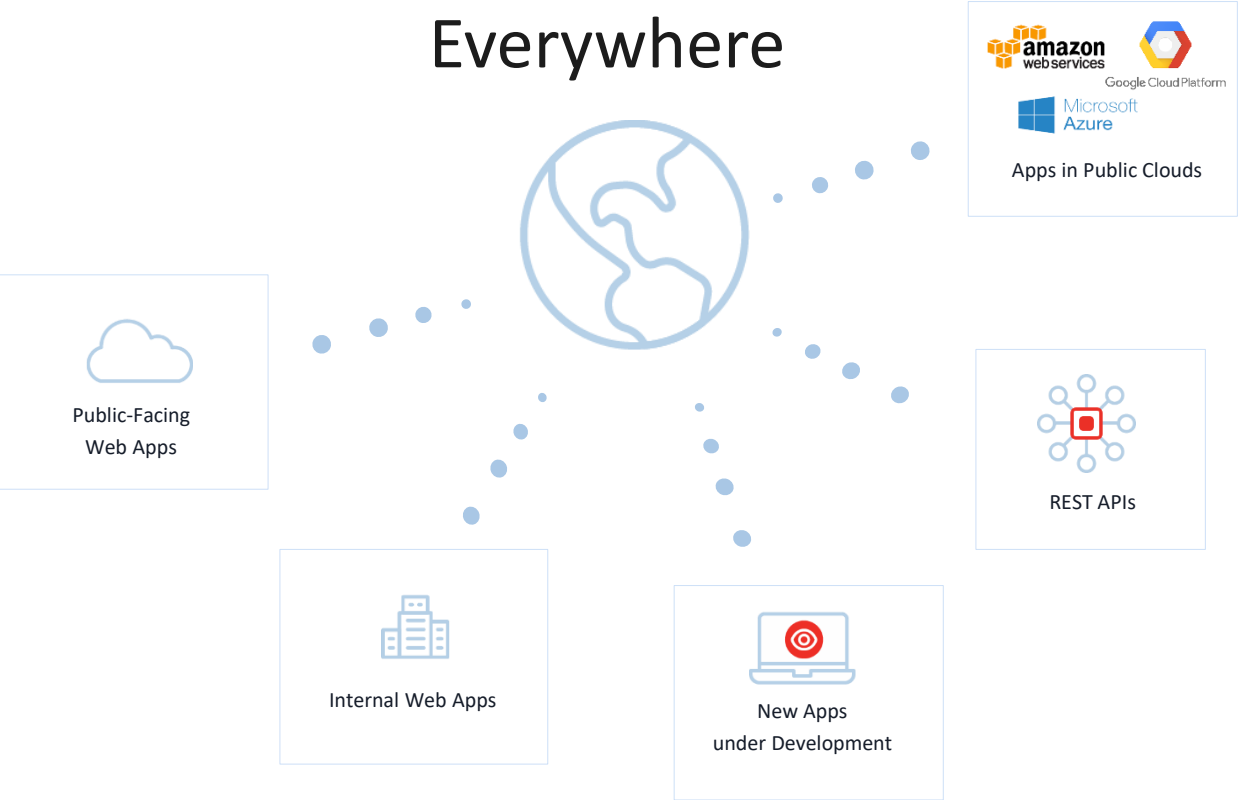
Web Applications are Being Targeted

- Most common data breach pattern *
- Top hacking vector *

Panera Bread	2018
Facebook (API)	2018
Google+ (API)	2018
MyFitnessPal (API?)	2017
Equifax	2017
Yahoo	2016
Ashley Madison	2015
OPM	2015

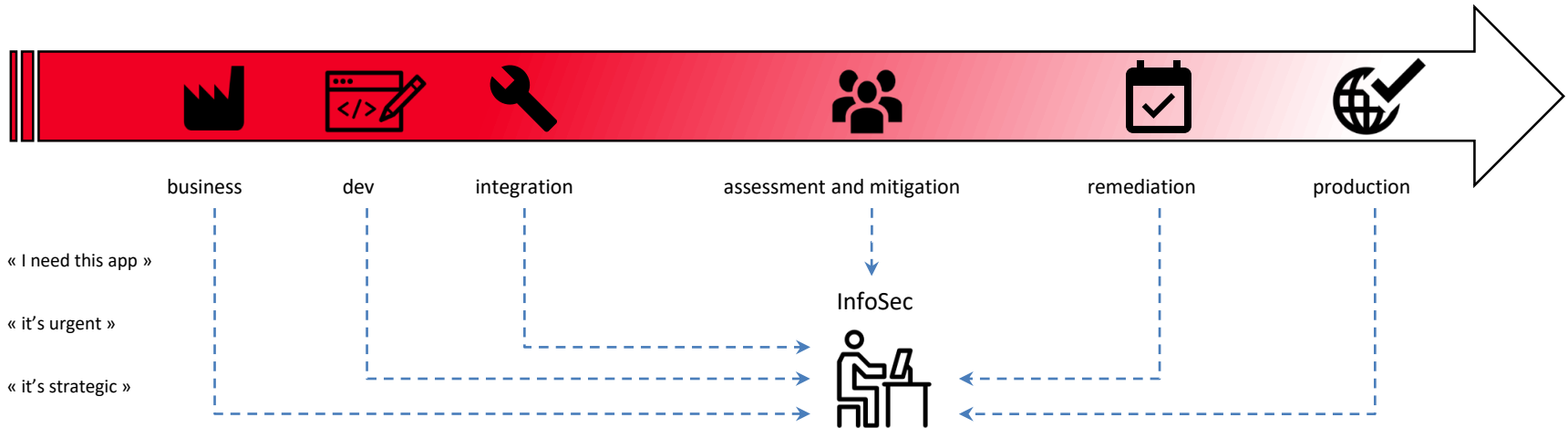
* Source: 2018 Verizon DBIR

Apps & APIs are Everywhere



Web Application Security is Complex

Increasing amount of technologies, frameworks, vulnerabilities, security tools and eventually teams involved, make appsec a complex topic in the Organization.



Qualys WAS

A leading dynamic application security testing (DAST) tool

Delivered via the Qualys Cloud Platform

Identifies app-layer vulnerabilities

OWASP Top 10

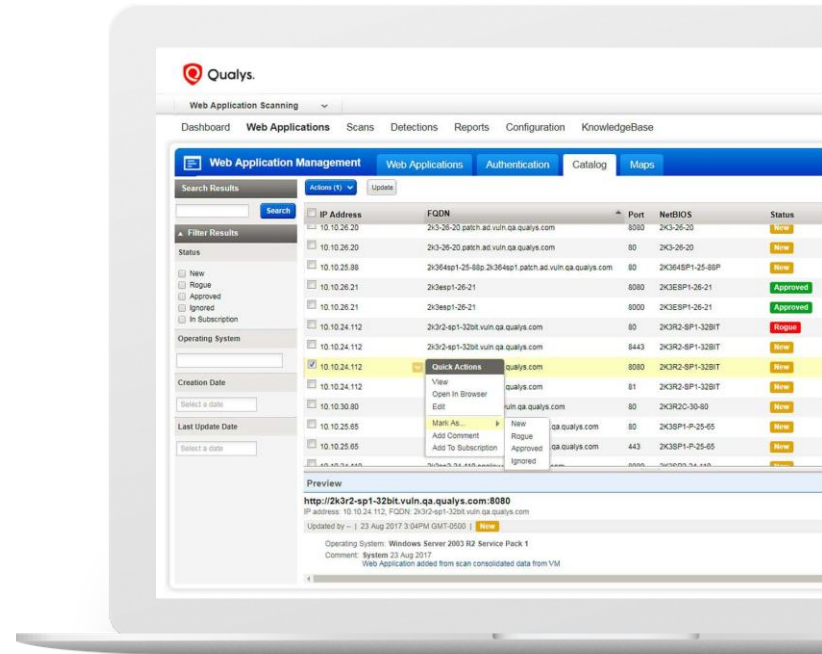
CWEs

Web-related CVEs

Includes automated crawling

Supports Selenium scripts

Malware monitoring as a bonus



Built for the Enterprise



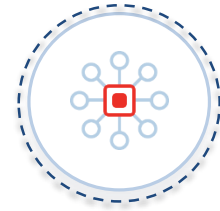
Web App Discovery
Unlimited scans & users
RBAC
Tagging



Scheduled scans
Ad-hoc, targeted scans
Multi-site scans
Retest vulnerability
Scan for malware



Massive scalability
Detection history
Scheduled reports
Customizable reports
Swagger support



Robust API
CI/CD integration
Unique integration
w/Qualys WAF
Bi-directional integration
with Bugcrowd

Qualys Foundations



UNIFIED Application Security Platform

Detect vulnerabilities AND deploy instant Virtual Patches with Web Application Scanning (WAS)

Use WAS trusted scans to challenge the WAF security policy with real detections

Empowered by the Qualys Suite (VM, AV, CA, and more)



POWERFUL Dynamic Scanning

Scales to thousands of webapps

Highly accurate detections

Adapts to changing webapp technology landscape



INTELLIGENT DAG based Inspection

Out-of-the-box Security Policies for WordPress, Joomla!, Drupal, OWA, and more

Developed by Qualys Security Researchers



FLEXIBLE Deployment and Management

Compatible with major Virtualization Technologies and Cloud Vendors

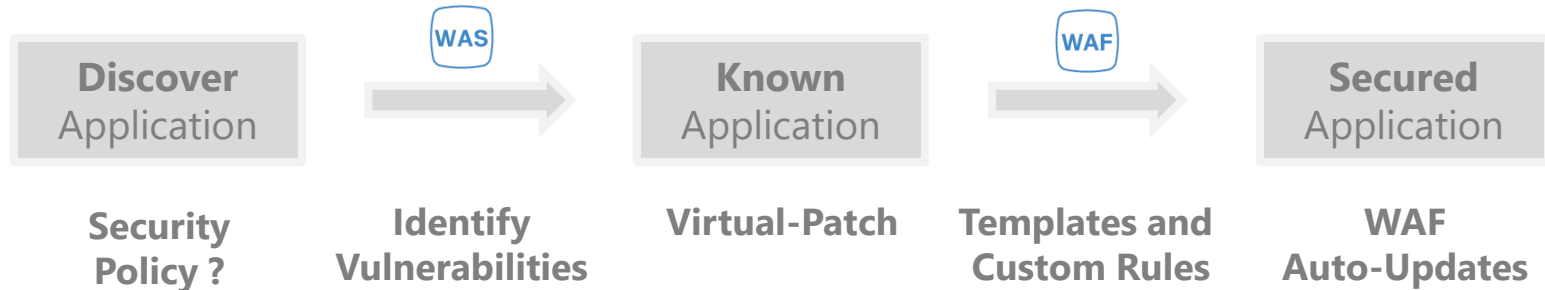
Powerful API

End-to-end management and actionable security data in Qualys Cloud Apps

Easy to integrate in DevOps and continuous testing workflows

Qualys' approach

The scanner and the firewall can communicate through the Qualys Cloud Platform, making “one-click” virtual patches possible directly from within the scanning module





What's New in Qualys WAS

Integration Complete!



Detection Management

Detection List | Burp | Bugcrowd

Search Results

Actions (1)

401 - 550 of 550

Filter Results

Tags

Last Scan Date

Select a date

Finding

Finding Type

- Qualys
- Burp
- Bugcrowd

Confirmed Vulnerability Level

1 2 3 4 5

Potential Vulnerability Level

1 2 3 4 5

Sensitive Content Level

Status	QID	Name	Group	Last Detected	Age	Patch	Severity
New	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://funkytown.vuln.qa.qualys.com:80/cassium/xss/0/6/xss.php...	XSS	15 Jun 2017	111		■■■■■
New	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://funkytown.vuln.qa.qualys.com:80/cassium/xss/0/6/0/...	XSS	15 Jun 2017	111		■■■■■
New	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://funkytown.vuln.qa.qualys.com:80/cassium/xss/0/5/xss.php...	XSS	15 Jun 2017	111		■■■■■
<input checked="" type="checkbox"/> New	-	SQLi	-	21 Apr 2017	166		■■■■■
New	-	test xss	-	21 Apr 2017	166		■■■■■
New	-	test duplicates	-	21 Apr 2017	166		■■■■■

Preview

■■■■■ SQLi

Web Application: bugcrowd test app, Status: **New**

Reference Number: b7f8bf2ef811b3a5f1928d7971187211c8f307f4499ce35ce3c1ee39c98e833e
 State: CLOSED
 Sub State: RESOLVED
 Bug URL: template.com/test/?
 Priority: 1

First Detected	Last Detected	Times Detected
21 Apr 2017	21 Apr 2017	1



What's New in Qualys WAF

Integration with WAS

Virtual Patch : one-click mitigation tool for CISO teams
ran from within WAS console to address confirmed threats

Web Application Scanning

Dashboard Web Applications

Detection Management

Search Results

150173

Filter Results

Confirmed Vulnerability Level

Potential Vulnerability Level

Sensitive Content Level

Information Gathered Level

Install Virtual Patch

You are about to install a virtual patch

We'll automatically add a virtual patch rule to your WAF to block exploitation of the selected vulnerability on your web application. You can easily remove the virtual patch (and rule) at any time either here or from the WAF management interface.

Patch Details

When request.header.content-type MATCH "^.*%.*%.*multipart/form-data\$"

1 request_path MATCH ^[a-zA-Z0-9\\|_\\%]...

2 request_header content-type MATCH ^.*%.*%.*multipart...

3 request_header Content-Type DETECT 150173

4 request_query-string parameter p MATCH ^.*admin.*\$

Integration with WAS

ScanTrust : challenge your WAF protection

assess both the application and the policy that protects it

The screenshot displays the 'Detection Management' interface for a ScanTrust scan. The main table lists detected vulnerabilities with columns for Status, QID, Name, Group, Last Detected, Age, Patch, and Severity. A 'Quick Actions' menu is open for the selected item.

Status	QID	Name	Group	Last Detected	Age	Patch	Severity
Protected	150012	Blind SQL Injection http://waf-demo.qualys.com/bodgeit/login.jsp	SQL	21 Sep 2017	20		High
Protected	150012	Blind SQL Injection http://waf-demo.qualys.com/bodgeit/login.jsp	SQL	21 Sep 2017	20		High
Protected	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://waf-demo.qualys.com/bodgeit/search.jsp	XSS	21 Sep 2017	20		High
Protected	150013	Browser-Specific Cross-Site Scripting Vulnerabilities http://waf-demo.qualys.com/bodgeit/search.jsp	XSS	21 Sep 2017	20		High
Fixed	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://waf-demo.qualys.com/search.jsp	XSS	27 Oct 2016	512	⚙️	High
<input checked="" type="checkbox"/> New	150001	Reflected Cross-Site Scripting (XSS) Vulnerabilities http://waf-demo.qualys.com/search.jsp	XSS		716		High

Quick Actions: View, Ignore, Activate, **Install Patch**, Remove Patch, Edit Severity, Restore Standard Severity, External References

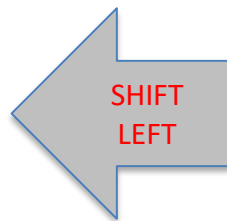
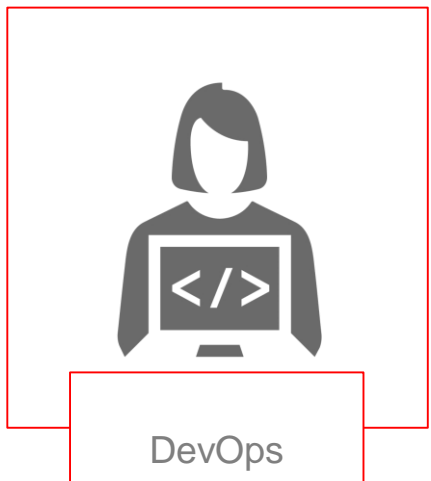


Container security

DevSecOps

Qualys Container Security Overview

Securing containers – New addition (DevOps)



Info sec – Vulnerability Mgmt.
Team Lead

What does DevOps want?

Can I identify the vulnerabilities in
CI/CD process?

REST APIs for the integration into my
build tool?

Qualys Container Security

Total visibility and continuous security for containers



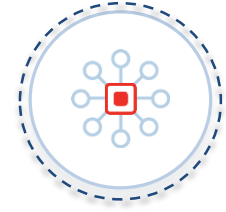
Discovery & Inventory



Vulnerability
Management



Runtime Tracking
& Events



REST API
Integrations



Vulnerability Management: Secure the complete container pipeline

PRE-DEPLOYMENT PHASE

POST-DEPLOYMENT PHASE



BUILD

Block vulnerable images from entering repositories. Get actionable data to developers to fix in the build pipe line. Use Qualys Vulnerability Analysis Jenkins plug-in or REST APIs



REGISTRY*

Secure images pushed to Registry. Scan on-demand or automated to analyze any images in Registries



RUNTIME

Scan running container for vulnerabilities and anomalous behaviors, identify the rogue containers



HOST

Identify vulnerabilities and compliance posture of the docker hosts using Qualys Cloud Agents or scans via virtual scanner appliance

* Support coming Aug 2018

Qualys Container Native Sensor

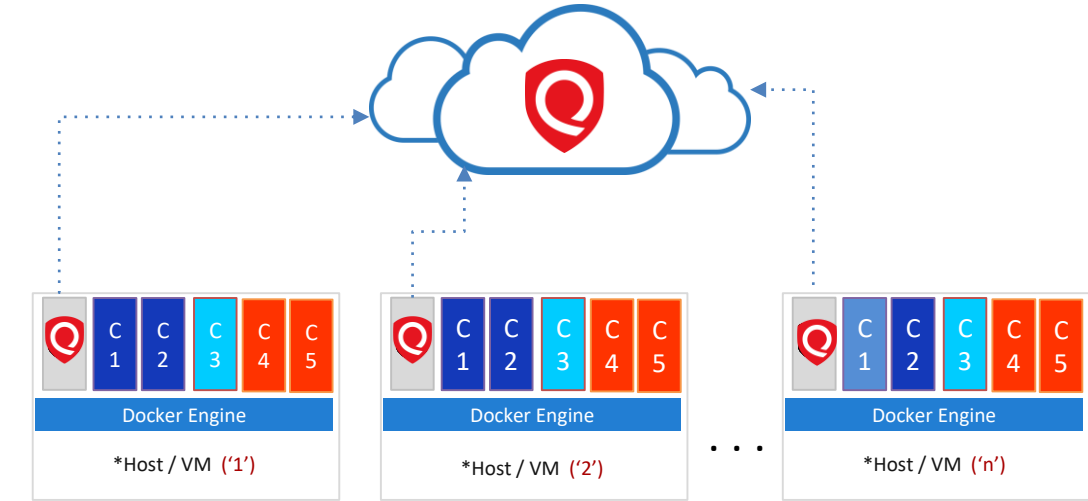
Download as docker Image, deploy as a container on every Docker hosts

Deployable into Kubernetes, AWS ECS, Docker Swarm, Mesos,..

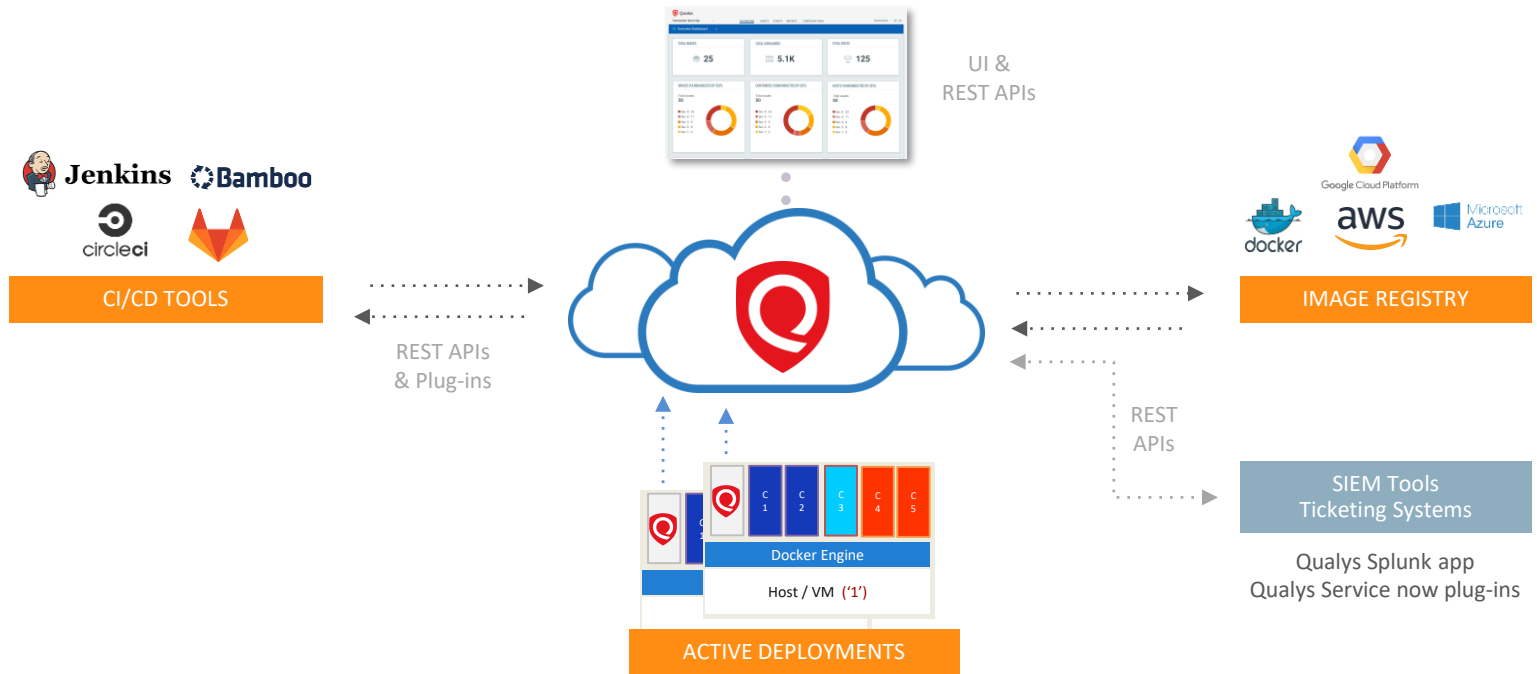
Runs as non-privileged container

Qualys Container communicates to Qualys on port 443 via Egress only

Supports Proxy configuration



Qualys Container Security Functional Overview



Qualys Container Security

Key Uses



Visibility into your container projects

Identify Hosts with Containers. Inventory of images, containers. Search images with vulnerabilities, labels, tags, packages,.. Build custom widgets.



Secure the CI/CD pipeline

Integrate images, vulnerability scans into the build. FAIL builds, not allowing unsecure images to enter the stream



Identify threats and impact across environments

Find out if older image versions are still active. Know all the containers with a specific exposed port or from a vulnerable image



Detect Container Runtime Drifting

Find containers whose runtime got changed of software packages or vulnerabilities.



Thank You

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