

Qualys Compliance Solutions

Automate the Assessment of Technical Controls & Mandate-based Security Requirements

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Compliance Challenges

Continuing Expansion of Industry & Regulatory Mandates

Ensuring Coverage of Technical & Non-Technical Controls

Maintaining Visibility Across Silos

Due Diligence Beyond Regulated Environment



















Necessities to Support Digital Transformation

Complete Visibility across Business Units, Technologies, and Environments

Simplified Processes, So they can focus on improving security rather than running products

Flexibility options for capturing required compliance data

Support for emerging technologies and capabilities



Necessities to Support Digital Transformation

Tight integration across security technologies to support complex mandates and audit requirements

Automation and process integration to support DevSecOps

Comprehensive reporting against regulations, mandates & audit objectives



Qualys Security Compliance Apps







Use Case: ISO Compliance via unified security program

Customer: EU Financial institution

Digital Transformation underway Leveraging ISO for control objectives company wide GDPR IT Security Goals as a function of ISO

Goals

Address **ISO certification readiness** as a bi-product of good cybersecurity practices

Consolidated cybersecurity dashboard based on the ISO objectives

Requires

Security Vendor Consolidation Integrated Solutions Strong Regulatory Content End-End mandate reporting





Start with a Strong Foundation

Security

Asset Management

Technical Vulnerability Management

TP

Restrictions on Changes to software packages

Al CM
PC FIM

PC FIM

Procedural Controls & SAQ

Supplier relationships



Continuously Assess Controls with Qualys Policy Compliance





Define Policies and Controls



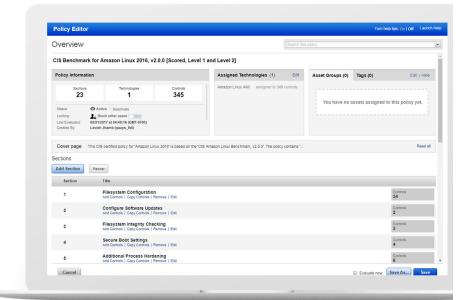
Continuously Assess



Report, Inform & Remediate



Manage Exceptions





Complete Visibility

Assessment for Out-of-band Configurations

Expanded UDC Support

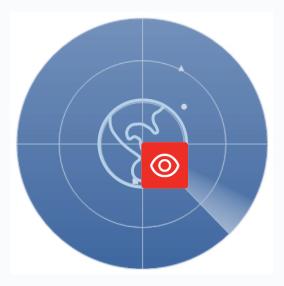
Cloud Agent Support for OS UDC's

Database UDC

Windows File Content

Command UDC

PC Dashboard





Broad Technology & Control Coverage

to support Emerging Technologies & Digital Transformation

Network Devices Applications Operating Systems

Emerging Technologies

Containers Cloud Security

Qualys Platform Security Report Security Gap Assessment







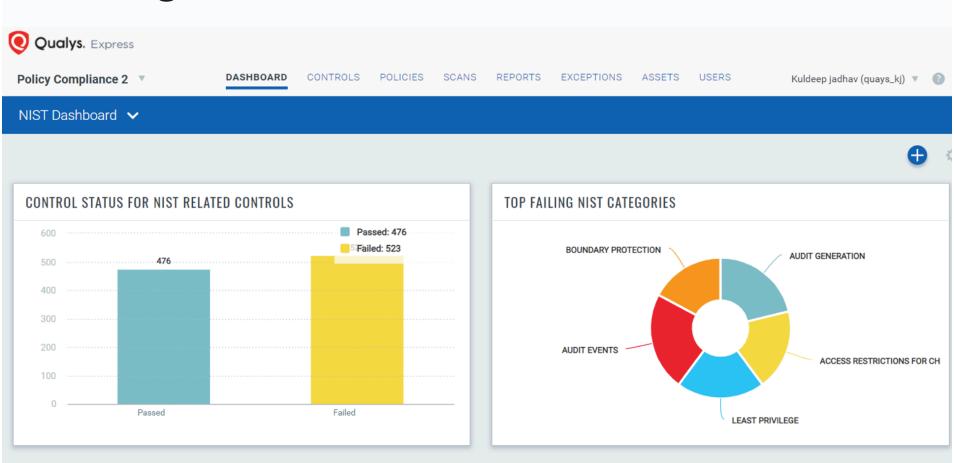








Coming Soon: PC Dashboard & Control Search

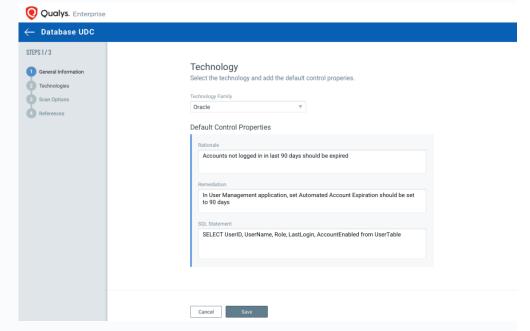


Database UDC

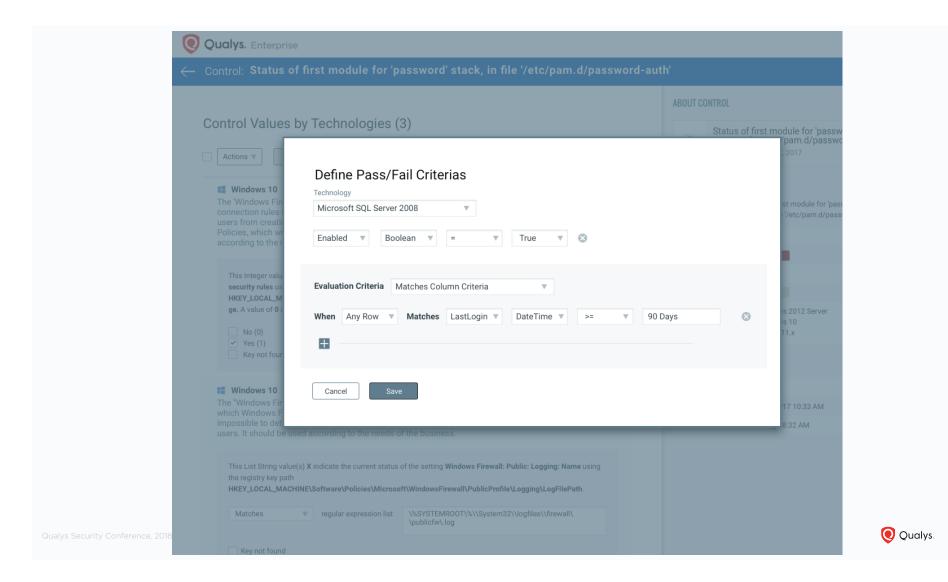
Initial Support: MSSQL, Oracle, MongoDB

Define DB Query (read only), Customizable by DB Version

Set a query to return tabular data to evaluate (which can include evidence)







Simplifying Processes

Expanded Library Content

Instance Discovery & Controls

Migration to New UI - Up First:

PC Dashboard

Policy & Control Library

Reporting

Mandate-based Policy Configurator

Leverage Asset Inventory for Asset Lifecycle Management





Mandate Policy Configurator

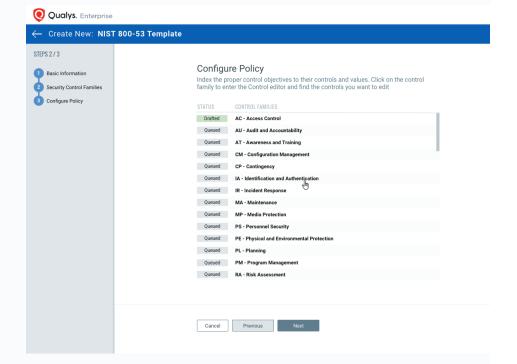
More Granular, Customizable Control Objectives

Custom & Library Mandates

Generate Policies from Mandate

Mandate-specific Reports

Gap Analysis Reports



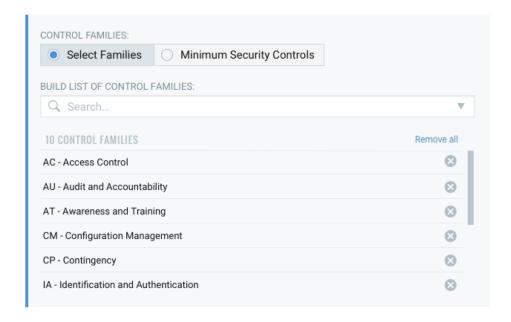




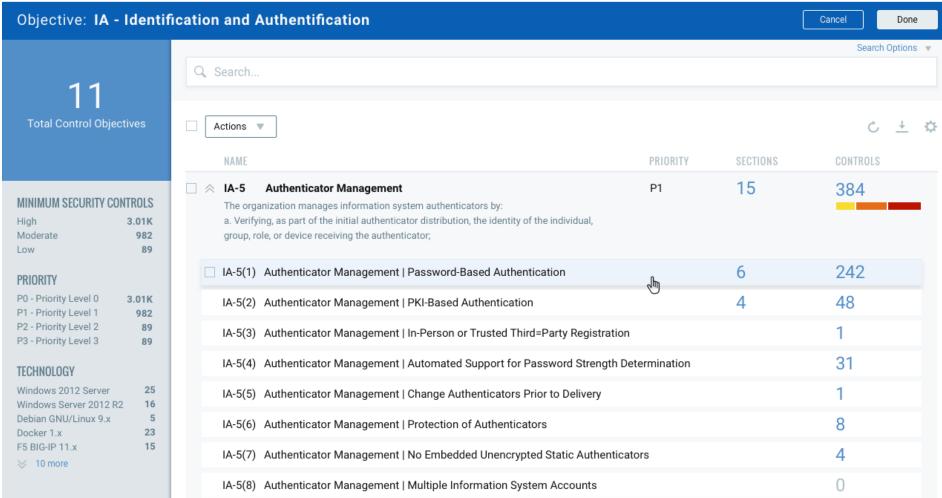


Security Control Families

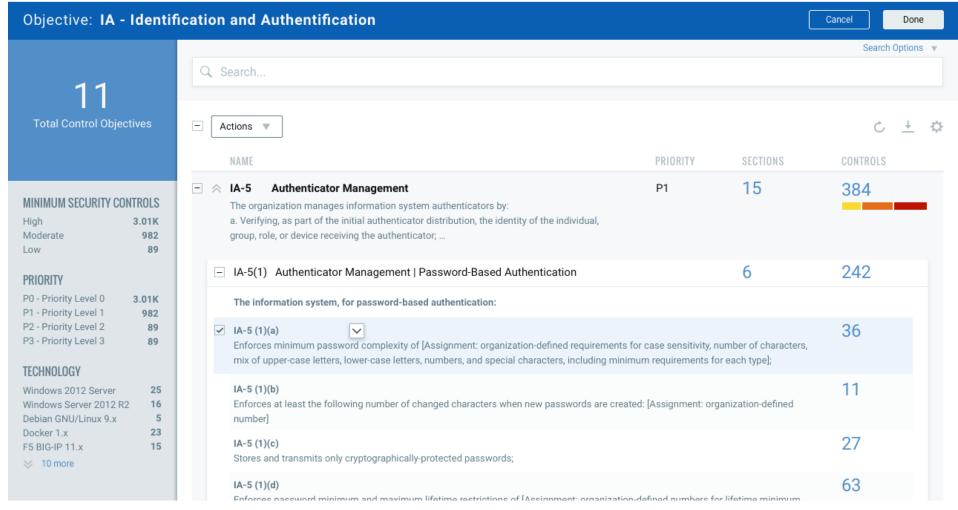
Select all or just the security controls families you want to configure in this template.



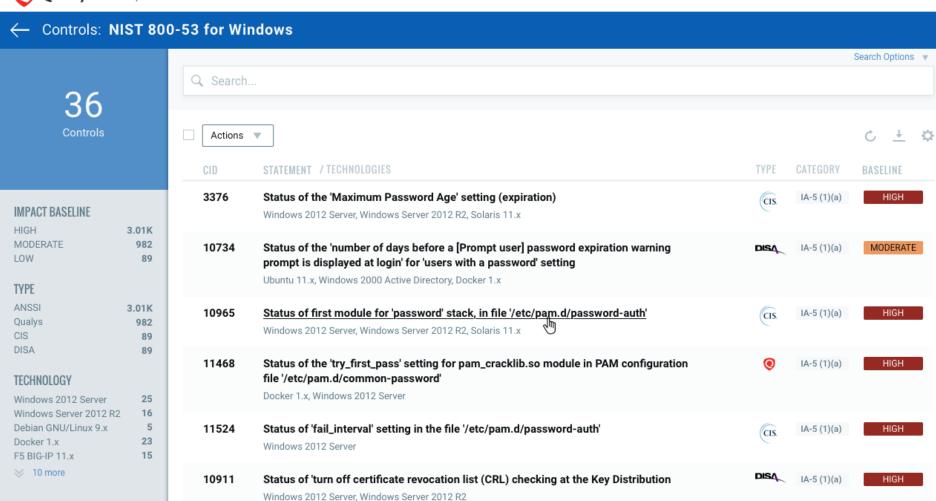














Control: Status of first module for 'password' stack, in file '/etc/pam.d/password-auth'

Control Values by Technologies (3)

Actions ▼ Technology: All	
Windows 10 The 'Windows Firewall: Apply local connection security rules (Domain)' connection rules that govern IPSec connections. As this setting enable users from creating such local connection rules, in addition to the conr Policies, which will increase the exposure of the system to remote attaccording to the needs of the business.	s or restricts local administrative nection security rules in Group
This Integer value X indicates the current status of the setting Windows Firewa security rules using the registry key path HKEY_LOCAL_MACHINE\Software\Policies\Microsoft\WindowsFirewall\Dom ge. A value of 0 indicates the setting is set to No, A value of 1 indicates the set No (0) Yes (1) Key not found	nainProfile\AllowLocalIPsecPolicyMer
Windows 10 The "Windows Firewall: Public: Logging: Name" setting is used to speci	ify the path and name of the file in

which Windows Firewall will write its log information. If events are not recorded it may be difficult or impossible to determine the root cause of system problems or the unauthorized activities of malicious

users. It should be used according to the needs of the business.

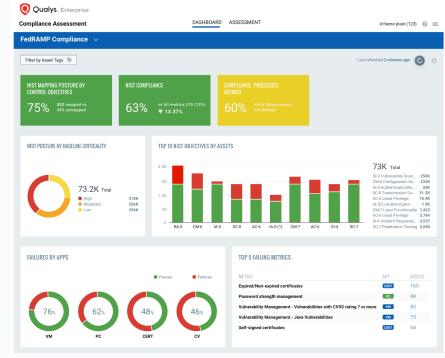
ABOUT CONTROL Status of first module for 'password' stack, in file '/etc/pam.d/password-auth' CIS. Last modified: Apr 12, 2017 Identification Statement: Status of first module for 'password' stack, in file '/etc/pam.d/password-auth' CID: 10965 Baseline: Reference: 17.15.2.1 Active Status: Technologies: Windows 2012 Server Windows 10 Solaris 11.x Activity Last User Login: .\KCtech March 1, 2017 10:33 AM Created on: Last Modified on: 8 Mins ago 8:32 AM

Integration Across the Platform: Unified Compliance Assessment

Out of the box Library of Metrics
SAQ Self-Assessments
Vendor Risk Violations
VM & PC Remediation SLA Failures

Customizable! Map back to Control Objectives & Custom Mandates

Result: Single Pane of Glass for Reporting Metrics & Compliance Violation Tracking across the platform!





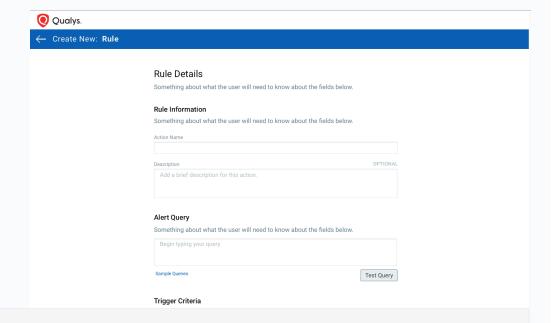
Defining Metrics & Mappings

Leverages new Alerting feature as exposed in apps

Define ANY QQL Query

Action is Log a Compliance Metric

Metrics are then mapped to Control Objectives, which are cross-mapped to regulations



vulnerabilities.vulnerability.severity:"5" and vulnerabilities.vulnerability.patchAvailable:"true" and vulnerabilities.firstFound > now-90d



Security Metric Examples

High Severity Vulnerabilities/ Patching

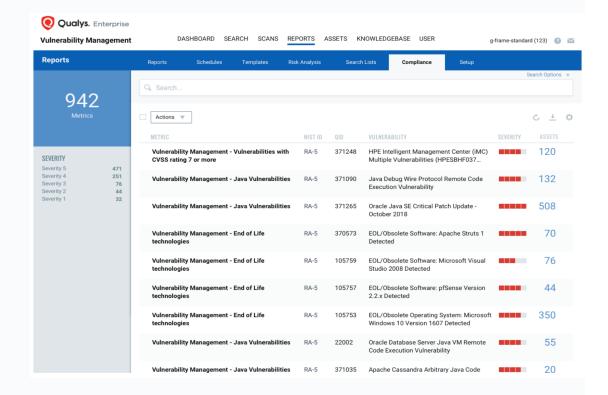
FIM Incident Review Expired

Cloud Security Configuration Issues

Expired or Self-Signed Certificates

Vendor Risk - Failure to Respond

Procedural Control Gap Identified





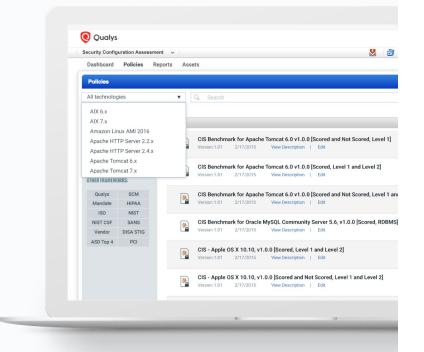
Assess ALL your assets against CIS

With Qualys Security Configuration Assessment

SCA Security Configuration Assessment

Lightweight add-on to VM
Broad platform coverage
Accurate controls & content
Simple assessment workflow
Scan remotely or via agent
Powered by the Qualys Cloud Platform

Support for NIST Reporting coming soon!





Introducing

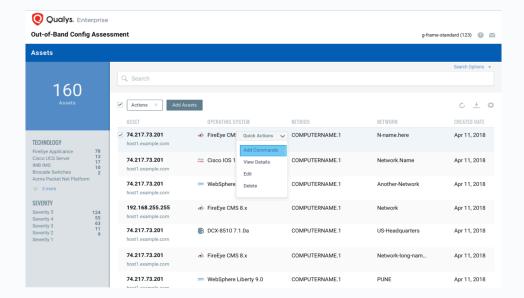
Out-of-Band Configuration Assessment

OCA, add-on to VM/PC

Flexible Data Collection via API/UI

Support for Inventory, Policy Compliance and Vulnerability Assessment

Bulk data, Automated and Customizable





Out of Band Configuration Assessment Large Global Bank

Disconnected/Inaccessible systems to be a part of overall Vulnerability, Risk and Compliance program

Sensitive Systems/Regulated Devices

Legacy Systems
Highly locked down systems
Network Appliances
Air-gapped Networks







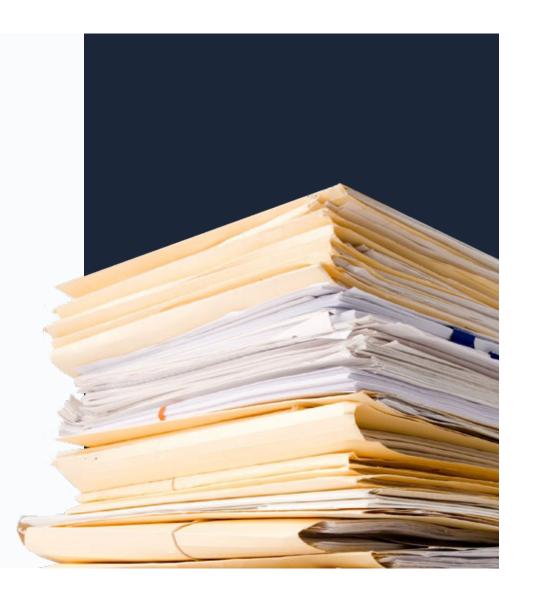


Current Options

Ad-hoc scripts

Procedural controls (manual assessment) Outside audits

Limited software-based solutions



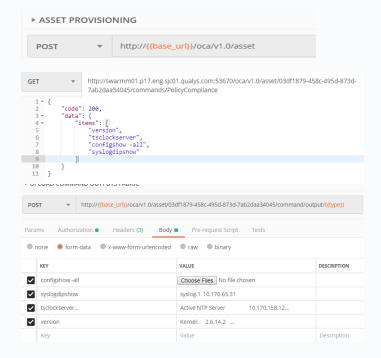
Configuration Upload Workflow

Push the Asset data

Upload Configuration Data

Qualys creates agent-based data snapshot

Report Generation





Technology Support

VO.9 and v1.0 release November - 2018

FireEye Appliances

BigIP F5

Brocade DCX Switch

Acme Packet Net

Imperva Firewall

Cisco Wireless Lan Controller 7

Cisco UCS Server

NetApp OnTap

Juniper IVE

Future Priorities

AS/400

Cisco Meraki

Sonic Firewall

Fortinet Firewalls

Aruba WLC

Dell EMC Data Domain

Oracle Tape Library



Availability & Roadmap

November 2018 V.O.9 release for limited customers API-based Asset and Config Data Upload for PC December 2018 January 2019 Extend Support to VM Support OCA for AS400 compliance 1H 2019 Paggible SDK route

Possible SDK route Expand Platform Coverage CMDB Integration FIM Integration

UI-based Data Upload for PC

Bulk asset data upload (CSV)

Integration with AssetView



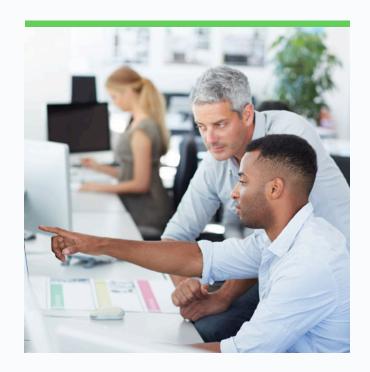
File Integrity Monitoring

Log and track file changes across global IT systems.

Validating Integrity

Why do organizations need File Integrity Monitoring solutions?

Change control enforcement
Compliance & audit requirements
Explicit mandates like PCI
Security best practices
Compromise detection





Qualys File Integrity Monitoring

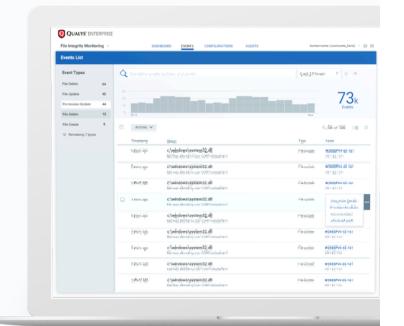


Real-time detection

Built on the Qualys Cloud Agent

Easy to install, configure and manage

No expensive infrastructure to deploy





Use Case:

File Integrity Monitoring for PCI

Customer: Retail

Distributed network environment that benefits from cloud-based model 20k+ Windows systems

Large Linux back end infrastructure on-prem and in the cloud

Goals

Monitor for change control enforcement PCI auditor requirements

Requires

Scalable, cloud-based solution
Hands-off management of distributed agents
VM+PC+FIM at the Point of Sale
Broad Linux platform support



FIM Challenges

Deciding what depth to monitor

Tuning out noise, but not missing important events

Scalability of legacy solutions

Meeting auditor event review requirements



What Are Customers Monitoring?

Critical Operating System Binaries

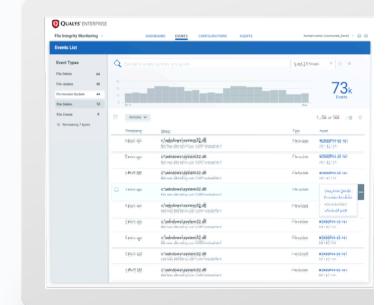
OS and Application Configuration Files

Content, such as Web source

Permissions (such as on Database Stores)

Security Data (Logs, Folder Audit Settings)

User & Authentication Configurations





Focus for 2019

Simplest tuning in the industry!

Secondary Event Filtering and Automated Correlation

API access to data

Rule-based Alerting

Reporting

Expanded data collection & whitelisting features

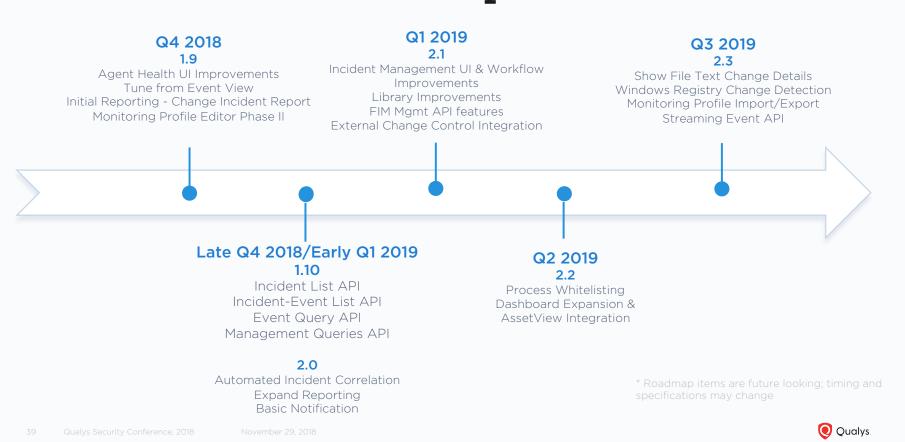
Expanded Platform Support







FIM Feature Roadmap





Security Assessment Questionnaire

Automate the Assessment of Procedural Controls & Vendor Risk

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Assess Procedural Controls with Security Assessment Questionnaire

Cloud-Based Questionnaires

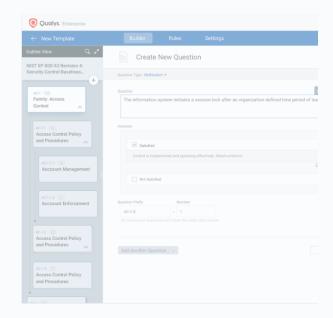
Visually design questionnaires

Assign assessment leveraging embedded workflow

Intuitive response

Track using an operational dashboard

Review answers and evidences





One of the biggest Financial Institutions

Assesses their Internal Procedural and Process controls

Need to comply with number of International and regional mandates/ standards.



Took 2 hours to rebuild Excel based 76 question assessment using web-based UI and Outof-box Rich content

They understand >50% compliance requirements are related to assessing processes and procedures



Dashboards the process deficiencies and risk posed by Internal controls failure

Important that Respondents find it easy and make the collected data actionable



Consolidates the Internal procedural control posture with Technical compliance controls



New-age Vendor Assessment Challenges

Extend the Perimeter to include vendors - security & vulnerability data collection

Vendor Profiling based on the services, Vendor Assessment based on criticality

Vendor control data aggregation with Internal security and compliance data

Automated workflow, operational dashboards

	SOURCE OF ATTACK	FINANCIAL IMPACT	REPUTATIONAL IMPACT	BREACH ORIGIN	
TARGET	Attackers stole credentials from 3 rd Party vendor to breach network	\$200 million in costs (to date)	/	Direct Breach	Third Parties
NOTE:	Attackers breached network via 3 rd Party vendor	Estimated \$2-3 billion in fraud charges	/	30%	
LOWE'S	Breach due to 3 rd Party vendor	Estimated \$3 billion in fraud charges	/	7	0
Google	Google's Australia office hacked via 3 rd Party HVAC vendor	Impact TBD	/	9/	6
Y _A HOO!	Yahoo Mail accounts hacked due to 3 rd Party database breach	Impact TBD	/		
T · ·Mobile	T-Mobile customer PII data stolen from Experian (3rd Party) server	15 million customers' PII stolen	1		



One of the biggest pharmaceutical companies

Assessing their vendor risk through SAQ



Vendors Profiling — Defines Criticality based on Service areas/Cybersecurity domains



Assesses vendors per their risk profile, in a standardized (SIG) manner



Uses out-of-the-box content, including regional mandates



Dashboards the risk posed by the highly critical vendors and ranks them per risk



Easy online workflow for the vendors, receives reminders, alerts and status



Consolidates the vendor control posture with Internal procedural & technical compliance controls



Rich Template Library

Industry

PCI DSS SAQ A, B, C, D
IT for SOX
GLBA
BASEL 3 (IT)
HIPAA
HITRUST
NERC CIP v5
SWIFT

NERC CIP

Popular Standards

ISO 27001-2013 ISMS

NIST CSF

COBIT 5

FedRAMP

COSO

ITIL

CIS TOP 20 Controls

Shared Assessment (SIG)

*- vendor assessment

Regional

GDPR

Abu Dhabi Info Sec Standards ANSSI (France) MAS IBTRM (Singapore) BSP (Philippines) BSI Germany ISM (Australia) UK Data Protection RBI Guidelines (India) California Privacy** Canada Data Protection 2018**

Technical Services

CSA CAIQ v3.0.1 CSA CCM v3.0.1 Vendor Security for Hosting Service Provider AWS ** Procedural controls for cloud, containers**

- Includes premium content Shared Assessments (SIG)
- Use as-is or customize to your need:



SAQ Roadmap

Q3 2018

User/Role/Privilege Management
Question Bank
Create template from
library templates
New campaign Ul
Risk scoring

Q1 2019

Vendor-driven workflows to cater to customers

- Create answer bank,
- Upload customer required templates
 - Match on Keywords
- Metrics, Dashboards on risk posed to my customers

Q4 2018

SAQ Lite – for PCI users Vendor Risk Management workflows

- Vendor Onboarding, Profiling
- Automated assessment based on Vendor profiles/onboarding
- Compare vendors based on risk scores
- Dashboards on total Vendor risk/Trending/ Top 5 risky vendors

^{*} Roadmap items are future looking; timing and specifications may change



In the world where everyone is a vendor of someone SAQ Feature coming up in Q1: Answer bank Technology company wants to understand Risk posed to the customers



Receives 100s of questionnaires from their customers and answers them offline, through spread-sheets



Want to understand What risk they pose to their critical customers



Costly & resource-intensive to respond and gains no visibility into risk intelligence

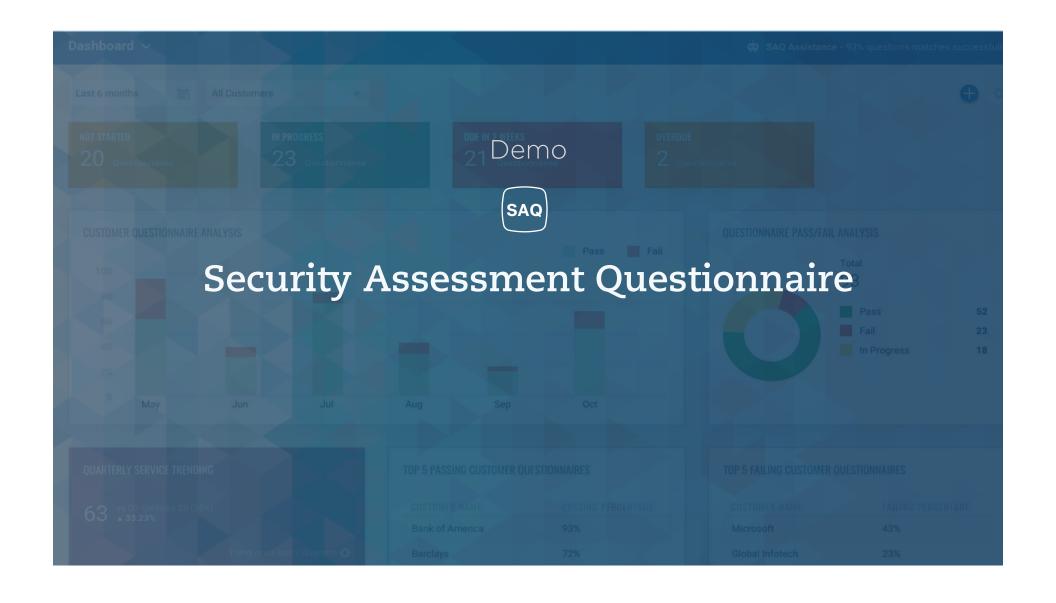


Want to understand the top failing, passing cybersecurity areas/ answers to improve their own internal controls



Wants to drive the vendor-management project to showcase their good security practices and use the data for contract negotiation







Thank You

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