

# Strengthening the Cloud Security: Strategies for Comprehensive Risk Management

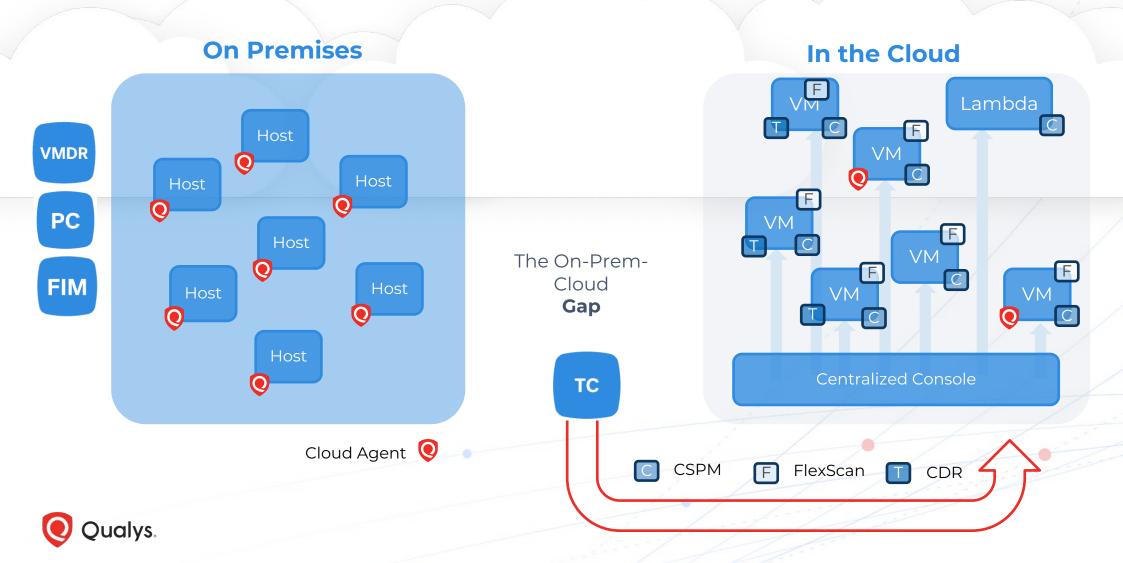


#### **Kunal Modasiya**

Vice President, Product Management Attack Surface Management, Web App & API Security Cloud & Container Security April 24

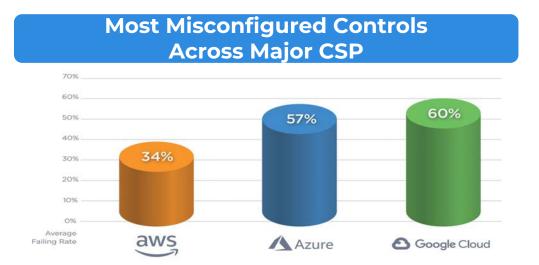
### Security Journey from On-Prem to Multi-Cloud

VM, Compliance, FIM, and More



### **Leading Causes of Cloud Breaches**

**Vulnerabilities, Misconfigurations, and Malware** 



**High Unpatched Rate** 



CIS benchmarks controls across major CSP's are not meet **50% time on average** 

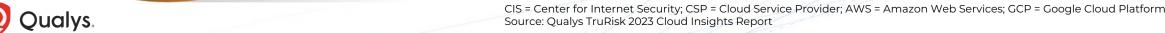


70% of Log4Shell vulnerabilities have still not been fixed, since last 2 years





**Cryptomining malware is a growing threat** 



**Challenge: Siloed View of Risk** 



Hybrid Visibility: How do I get 360 visibility and determine the risk of my resources across on-prem + multi-cloud + SaaS environments?



**Prioritization in the Cloud: How do I prioritize risk** emerging from vulnerability, misconfiguration, permissions, and threats between tools?



Orchestrated Data: How do I unify and orchestrate data feeds from my Cloud with on-prem, IoT, OT, external asset environments?





**Challenge:** Infective and Inefficient Communication of Risk



Reporting: How do I provide risk reporting tasks for Cloud in a way that unifies risk assessment and remediation recommendations holistically?



Mitigation Workflows: How can I better inform Dev, Ops, and DevOps teams about the critical issues to be fixed in the cloud?



Compliance: How can I provide a unified compliance posture report across on-prem, multi-cloud, and SaaS to auditors?





**Eliminate** 

### **Challenge: Remediation Process is Too Long**



**Proactive Security:** How can I **reduce the risk of all risk vectors** - on-prem, multicloud, and SaaS environments?



Reactive Security: How can I more quickly eliminate the risk across all risk vectors - on-prem, multi-cloud, and SaaS environments?



**Automation: How can I automate** the risk mitigation path selection process?





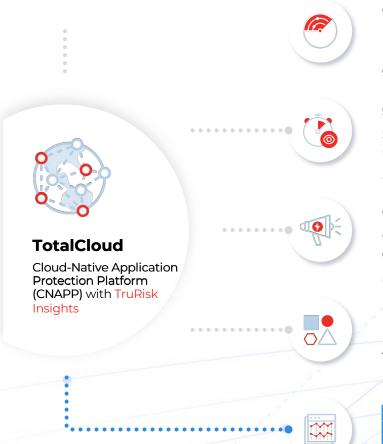


### Measure, Communicate and Eliminate

**Unified Vulnerability, Threat and Posture Management** 

# Start secure and stay secure with a real-time AI CNAPP solution

Unified Vulnerability, Threat and Posture Management from development to runtime



#### **Cloud Security Posture Management (CSPM)**

Inventory of public cloud resources. Detection and remediation of misconfigurations and non-standard deployments, including Infrastructure as Code (IaC) Security

#### **Cloud Workload Protection (CWP)**

Scanning for vulnerabilities in the cloud environment **(VMDR with FlexScan).** 

#### **Cloud Detection and Response (CDR)**

Continuous real-time protection of the multi-cloud environment against active exploitation, malware, and unknown threats.

#### **Kubernetes & Container Security (KCS)**

Discover, track, and continuously secure containers – from build to runtime.

#### SaaS Security Posture Management (SSPM)

Manage security posture and risk across your entire SaaS application stack

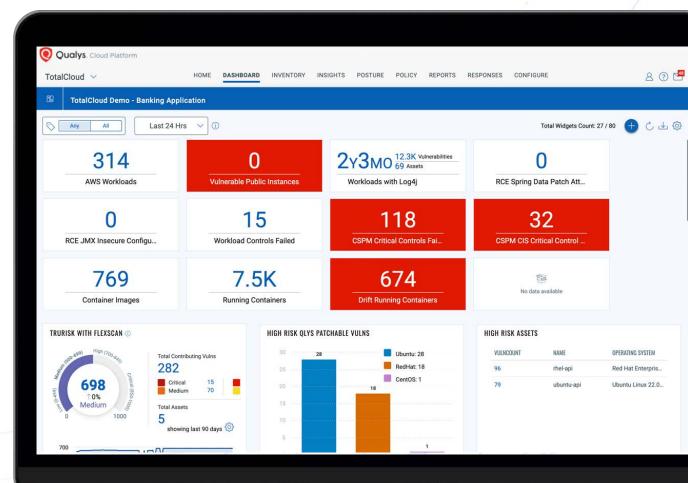


### **Measure Risk Effectively**

**Cloud Security it Hard. Why Make it Harder?** 

Quickly onboard the connectors and see the dashboard in 30 mins!

- Select different features (CWPP, CDR, CS, CSPM, SSPM, SaaSDR) as part of the same subscription
- See the unified cyber risk picture across multi-cloud and on-prem environment





# Measure: Comprehensive Scanning Qualys FlexScan - Fast, Flexible, Ongoing Scanning Results

### **10 MIN**

#### **API Assessment**

CSP-provided APIs collect software inventory for results in 15 min vs. 24 hours



#### 24HRS

#### **Snapshot Assessment**

Efficiently capture workload snapshots and perform vulnerability assessments



#### **Agent Scanning**

Real-time comprehensive vulnerability, configuration and security assessments



#### **Network Scanning**

Quickly and accurately assess for network-related vulnerabilities



### Scalable Scanning

### **Overview of Different Scanning Methods**

Assessment Method	Strengths	Limitations
API-based Use CSP-provided APIs to collect software inventory and perform assessments	<ul> <li>Fastest setup and assessment</li> <li>Ephemeral instances</li> <li>Quick assessment on startup</li> </ul>	• Lack of OSS coverage
Snapshot-based Take snapshot of the workload and perform vulnerability assessment on it	<ul> <li>Fast and easy setup without access to the workload</li> <li>Quick assessment</li> <li>Can scan suspended instances</li> <li>M&amp;A, Cloud migration, large scale deployment</li> </ul>	<ul> <li>Requires deployment of a scanner</li> <li>Does not work for a hybrid environment, only public cloud</li> <li>Periodic scanning, 24 hrs. due to resource limitations</li> </ul>
Agent-based Real-time comprehensive vulnerability, configuration and security assessment	<ul> <li>Long-running workloads</li> <li>Detects vulnerabilities based on runtime-context</li> <li>Workloads on which high accuracy vulnerability coverage is desired</li> </ul>	<ul> <li>Getting access to all workloads to run agents</li> <li>Difficult to deploy agent to ongoing deployments (shutdown workloads to deploy new agent)</li> </ul>
Network-based Assess compute and non- compute	<ul><li>Outside in view of vulnerabilities</li><li>Assessment of non-compute workloads</li><li>Meet compliance requirements</li></ul>	<ul> <li>Need to have authentication details</li> <li>Deployment complexity</li> </ul>

### **Comprehensive Inventory**

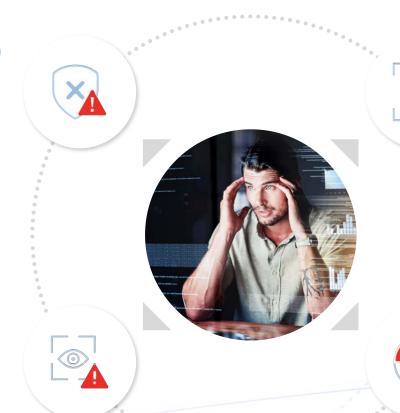
**Users, Resources and SaaS Applications** 





## Data from Many Sources with Independent Priorities

Vulnerability
Assessments (CWP)



Misconfiguration (CSPM)

Runtime Threats (CDR)

**External Attack Surface (EASM)** 



### **Contributing Factors**

With TruRisk™ Insights



### **Risk Multipliers**

Critical vulnerability with a known exploit found on Publicly Exposed VM

Asset with Vulnerability and C2 beaconing to malicious IP

High permission publicly exposed critical vulnerabilities

Endpoints with vulnerabilities, EOL software, and cloud secrets

### TruRisk Insight Report

### Get Yours Now for Multi-Cloud Environment

- Know your Risk of Multi-Cloud Workloads
- 2. Publicly exposed Cloud Application & Technologies
- 3. Identify Risky IAM Roles, Permissions and resource
- 4. Prioritize and Remediate the Risk

#### Call To Action:

Reach out to local TAM team for your TruRisk Insight Report

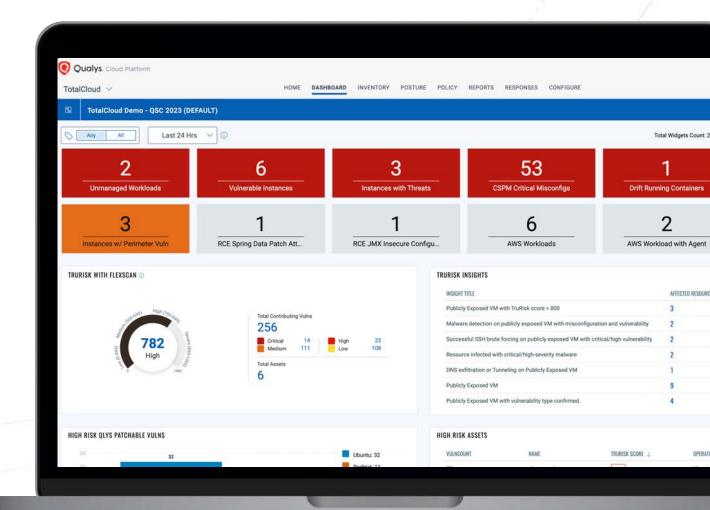




### **Communicate Risk Effectively**

**Cloud Security it Hard. Why Make it Harder?** 

- View persona-based dashboards that aggregate risks from all the public clouds
- Integration with IDEs, Git repositories, CI/CD tools, Container Registries, ITSM tools (ServiceNow, JIRA)
- Generate reports for 30+ industry compliance mandates

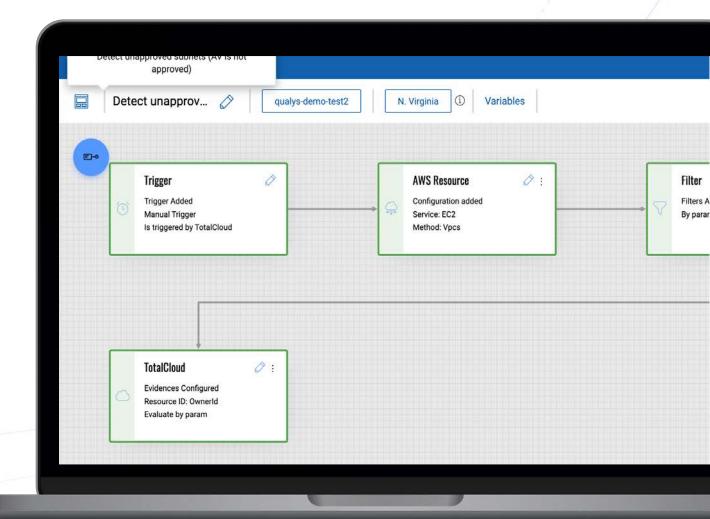




### **Eliminate Risk Faster**

### **Action Vulnerabilities – Wherever they are**

- Use 1-click out-of-box remediations for instant remediations
- Automated remediation with nocode/low-code, workflow to mitigate and remediate risk
- ITSM tool integration for ticket assignment

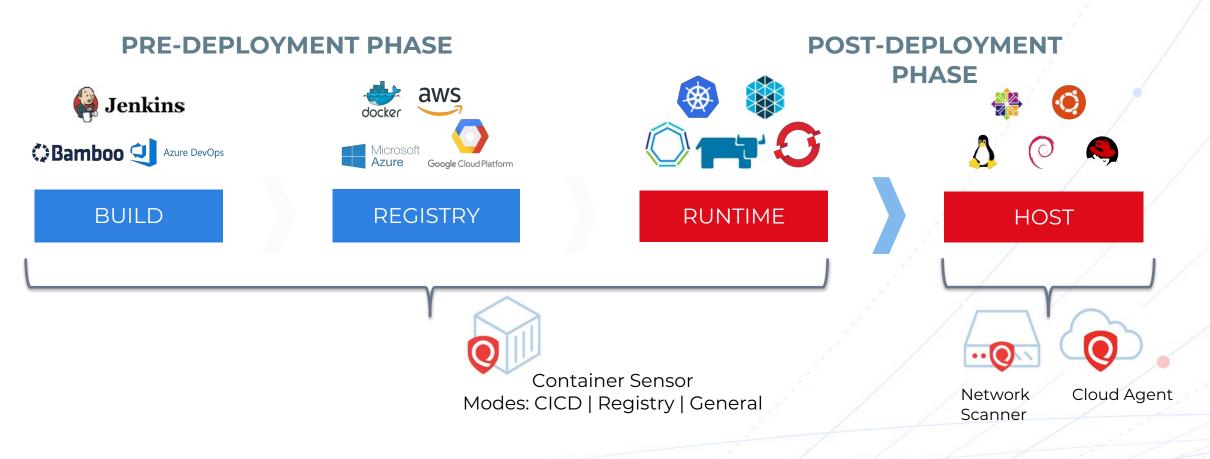




# Container Security



### Measure: Shift-left Security Across the DevOps Pipeline



Support for all cloud service provider build tools, registries, and Kubernetes implementations



# Flexible Subscription Using Qualys Units (QLU)

#### Select what you want to deploy and when with QLUs



Ability to select different features (CWPP, CDR, CS, CSPM, SSPM) as part of the same subscription



No need to re-license to select different features



Qualys Units (QLU) are reallocated to enable preference



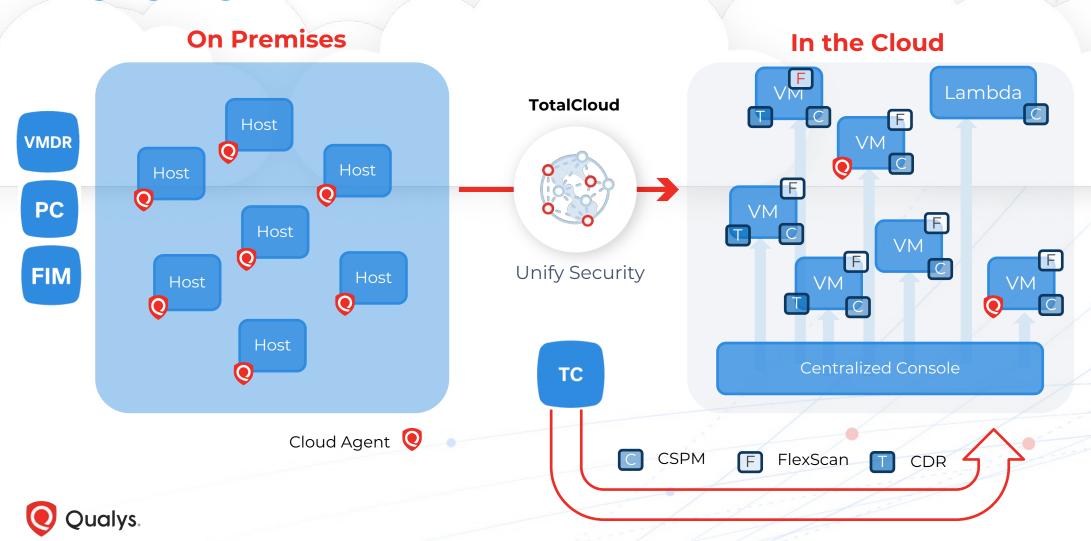
One QLU == One VMDR – Move Unused VMDR licenses to TotalCloud





### **On-Prem & Multi-Cloud**

**Bringing Together On-Prem and Multi-Cloud** 



### Let's Get Started With TotalCloud

### **Use VMDR unused Licenses towards TotalCloud QLU**



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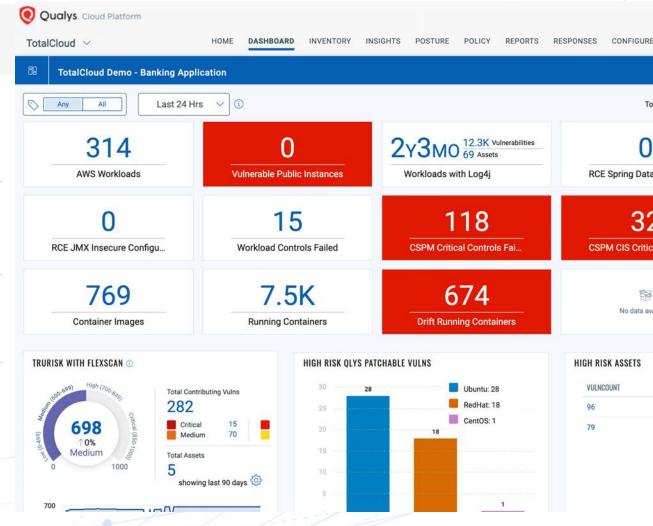
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See the Unified Cyber Risk across multicloud and on-prem environment



Prioritize and Remediation Risk with TruRisk Insights





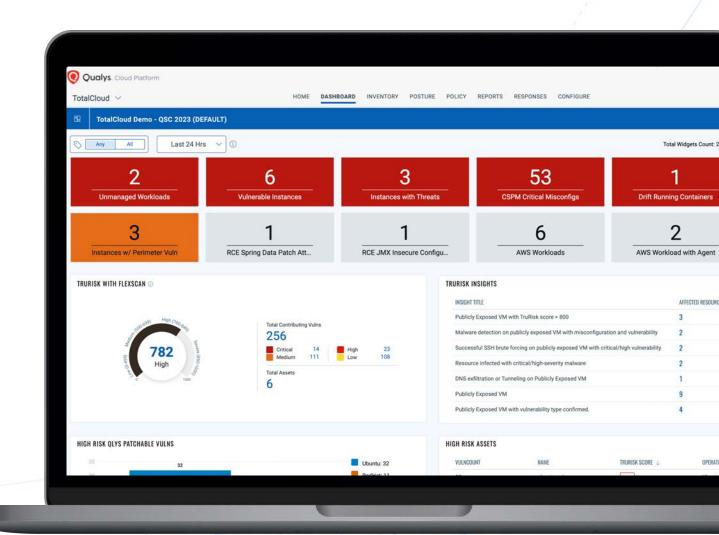
# DEMO





### **Communicate: Risk Effectively**

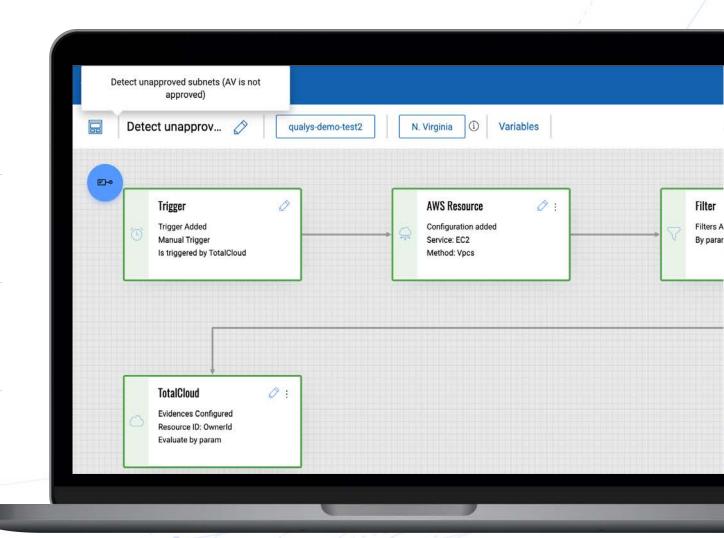
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- Integration with IDEs, Git repositories, CI/CD tools, Container Registries, ITSM tools (ServiceNow, JIRA)
- Generate reports for 30+ industry compliance mandates





### **Eliminate: Risk with Cloud-Native Workflows**

- Use 1-click remediations for instant remediations
- Design with QFlow to complex workflow to mitigate and remediate
- Remediate at the source using Shiftleft workflows
- Eliminate Attack Paths with MITRE ATT&CK Context





### Flexible Subscription **Using Qualys Units**

#### **Select what you with Qualys Units (QLUs)**



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