

Cloud Security Risk Assessment

Solution brief

Most businesses today operate in a cloud-only or cloud hybrid environment, helping employees and customers get timely access to the data, information and applications that they need.

The shift into a distributed model, however, brings its own security risks and vulnerabilities for bad actors to exploit. How confident are you that your existing security program is up to addressing cloud properties?

Supporting all major cloud platforms, the Cloud Security Risk Assessment program provides an objective review of an organization's external and internal cloud security posture as related to the most common threat patterns. It offers:

- The ability to review external and internal security controls against a broad set of cyber threats
- Risk scores and reports, with information tailored to technical, management and executive users
- Quarterly assessment activities that include maturity-based scoring
- Customized and prioritized recommendations to help strengthen your security posture
- Benchmarking of your controls against your industry and peers

Risk scoring

Risk scores are based on two objective frameworks. First, the likelihood of an attack type as determined by the VERIS Framework (Vocabulary for Event Recording and Incident Sharing). We integrate the likelihood of an attack with the severity and likelihood of a given vulnerability along with the potential impact of exploitation to determine a risk value. We then include threat pattern analysis from the Data Breach Investigations Report (DBIR) and all of the assessment data to determine risk scores. Scoring allows an organization to establish a baseline and then objectively judge their progress through quarterly and annual evaluations.

Our methodology provides you a clear understanding of your security controls maturity, the gaps that could be exploited and a prioritized set of recommendations to reduce the risk of compromise.

Core and full packages

The Cloud Security Risk Assessment program offers ten different components delivered on a weekly, quarterly or annual basis. Four components are provided with the Core package while the other six components can be customized as part of the Full package. New and current Cyber Risk Monitoring and Cyber Risk Program customers that select a Cloud Security Risk Assessment package will automatically receive all ten components.

Assessments are conducted with the full knowledge and cooperation of the client, and should offer little to no disruption of normal business operations.

	Assessment performed	Frequency
Core	Cloud Threat Intelligence/Posture Report	Weekly
	Cloud Asset Inventory Changes Report	Weekly
	Cloud Configuration Review	Quarterly
	Cloud Policy, Process & Procedure Assessment	Annually
Full	Cloud External Vulnerability Assessment	Quarterly
	Cloud Internal Vulnerability Assessment	Quarterly
	Cloud Firewall Assessment	Quarterly
	Cloud Endpoint System Assessment	Quarterly
	Cloud Web Application Scan	Quarterly
	Executive Summary Risk Report	Quarterly

Cloud Security Risk Assessment program components

Core assessments

Cloud Threat Intelligence/Posture and Asset Inventory Changes Report

Clients receive an automated weekly email reporting:

- Cloud inventory changes
- New public storage
- Cloud keys leaked this week
- Alerts of attacks targeting cloud providers
- Mentions of client's cloud URLs on the dark web
- Identification of any new critical vulnerabilities

Cloud Configuration Review Assessment

We conduct a quarterly assessment of:

- Identity and Access Management (accounts, passwords, 2FA, etc.)
- Logging (what and how events are logged)
- Monitoring (what and how events are monitored - alarms for root account usage, policy changes, etc.)
- Networking (basic check of network protections such as IP to ssh or rdp, Virtual Private Clouds (VPCs) in multiple availability zones, avoiding Elastic Computing 2 (EC2) instances on public subnet, etc.)
- Data protection (SSL setup, encryption in transit, encryption at rest, etc.)
- Business continuity (S3 versioning, RDS backup policy etc.)

Cloud Policy Process & Procedure Review

This annual assessment helps you ascertain how your organization has implemented the necessary governance to effectively manage your cloud infrastructure security. The review includes:

- Executive action – a prioritized set of recommendations to reduce the risk of a cyber security incident
- Policy review – results of policy assessment
- Process and Procedure review – residual risk based on critical controls
- Actionable items

Also includes a deep dive stepping through the cloud management console with a knowledgeable client resource to perform:

- Active roles review
- Full Identity Access Management review
- Cost management
- Disaster preparedness
- Cloud Access Security Broker configurations
- Personal Identifiable Information discovery

Full package assessments

Cloud External Vulnerability Assessment

This quarterly, cloud-based vulnerability scan helps assess weaknesses, patch and configuration management issues, including EOL software. We will scan specific customer hostnames to discover active devices, identify operating systems, find open network ports and determine which services are running within those ports, and uncover vulnerabilities. Results are prioritized for clients based on the Verizon DBIR, risk intelligence and severity.

Cloud Internal Vulnerability Assessment

A quarterly vulnerability scan focused on devices behind the perimeter – assessing the true configuration of the systems and their weakness. We scan specific customer devices with a non-intrusive agent, identify operating systems, and uncover vulnerabilities. Results are categorized as Exploited vulnerabilities, High Severity vulnerabilities, Moderate Severity vulnerabilities and End-of-life Software.

Cloud Web Application Scan

A quarterly external assessment of your critical web applications mapping to Open Web Application Security Project (OWASP) Top 10 and beyond. We scan specific scoped IP addresses, a range of scoped IP addresses, and/or specific URLs to discover web application vulnerabilities and associated weaknesses. Results are categorized as Severity 5 / 4 / 3 Vulnerabilities, as well as a list of Active Web Applications that are internet-facing.

Cloud Firewall Assessment

A quarterly evaluation of the effectiveness and security of an organization's access control lists (ACL) in the cloud. We analyze client-provided configurations remotely for the presence of strong firewall configurations and/or necessary boundary protections that can detect, prevent, and correct the flow of data transfer across networks. Results are categorized as Critical / High / Moderate Severity.

Cloud Endpoint System Assessment

A quarterly scan of endpoint systems for configuration management and policy compliance issues. We scan and analyze specific endpoints with a non-intrusive agent, assessing the security baseline for the presence of improper anti-virus, screen saver passwords, default configurations, industry best practice build standards, and secure configurations. Results are categorized as Urgent / Critical / Serious Severity checks.

Executive Summary Risk Report

Summarizes your overall security posture and gives you the business insight necessary to effectively communicate risk to the C-Suite, Board and internal stakeholders.

Why Verizon

As an award-winning leader in cybersecurity, we keep up with the rapidly changing nature of cyber threats by processing billions of security events each year, analyzing evolving threats at our global security operations centers, performing forensic investigations for companies around the world, and sharing our knowledge through industry-recognized content like the annual Data Breach Investigations Report.

We differ from other security service providers because our substantial risk and incident experience lets us understand the real-world threats you face and the potential vulnerabilities in each system. And, our years of practical experience in developing and implementing security programs across all industries lets you know that our priority is your long-term success.

Learn more.

For more information on Verizon's Cloud Security Risk Assessment, contact your account representative.

For the 2024 Data Breach Investigations Report, go to: enterprise.verizon.com/resources/reports/dbir

