

ORACLE

Cloud Security

Safeguarding data and applications

Krithiga Gopalan, CISSP

Director

Enterprise Security & Information Management Lead

Oracle Asia Pacific

March 16th, 2023

Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation



Oracle Security makes a difference to all our customers and partners!

Uber + ORACLE

“Oracle provides an ideal combination of price, performance, flexibility, and security.”

Dara Khosrowshahi
CEO, Uber



[Read More](#)

Oracle Security makes a difference in every industry



“Migrating our data center workloads to **OCI was one of the best business decisions** we’ve ever made. With superior performance, scalability, and **security**, OCI and Oracle Support have been instrumental in helping us meet the growing demands of our customers”.

Sriram Manoharan

Founder and Chairman, CONTUS Tech

CONTUS Tech **cuts costs by 40%** with OCI. They tapped a variety of Oracle Cloud security services to automatically ensure the **highest levels of data and network security and integrity**.

[Read More](#)



“OCI with **Autonomous Database** enables us to achieve our vision and accelerate the diffusion of technology across healthcare to improve the quality of life for everyone.”

Bijjam Parthasarathi Reddy

Founder and CEO, iHub Technologies

OCI with Autonomous Database provides **security that ensures performance** and **simplifies HIPAA compliance**. **Data Safe’s** data masking capability was a **key factor** for iHub to choose Oracle.

[Read More](#)



Wipro uses OCI to enhance its flagship airline products’ reliability, scalability, and **security**. With OCI, Wipro **met the strict security and compliance requirements** of its customers, internal security teams, and the industry.

Wipro **boosts agility, security and lowers costs with OCI**. For example, when a large security issue impacted one of its airline clients, Wipro’s applications remained **resilient** without being affected.

[Read More](#)



State of the security market – Top enterprise security concerns

33%

of organizations worldwide have experienced a ransomware attack or breach

4M

global positions that cannot be filled due to the cybersecurity talent shortage

82%

of data breaches involved the “human element”



Security Complexity



Supply Chain Vulnerabilities



Hybrid Work Environment



Fraud



Compliance Requirements



Geopolitical Risks



Disparate SaaS



Sources: IDC 2021 Ransomware Study: Where You Are Matters, (ISC)² Cybersecurity Workforce Study 2021, and Verizon Data Breach Investigations Report 2022



Oracle Security helps address top security concerns



Guard

against ransomware, attacks, and breaches



Simplify

security across on-premises and cloud



Deliver

managed security to meet compliance requirements





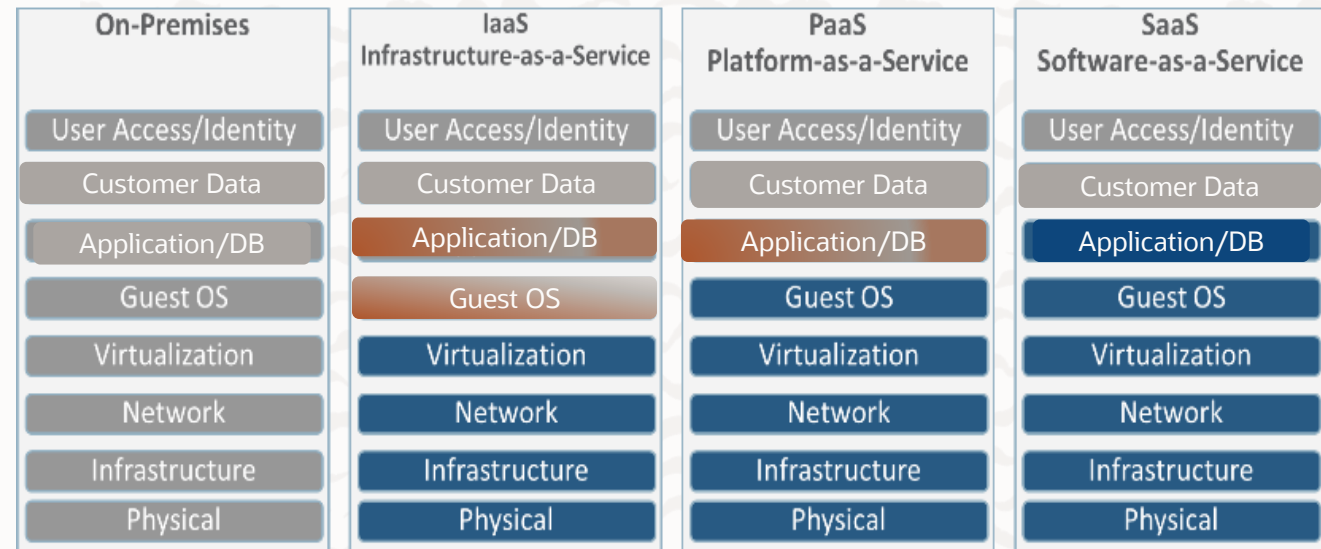
Guard against ransomware, attacks, and breaches



Shared Security Responsibility Model in Cloud

57%

of data breaches are attributed to poor patch management.



Source: Oracle and KPMG Cloud Threat Report (2019)

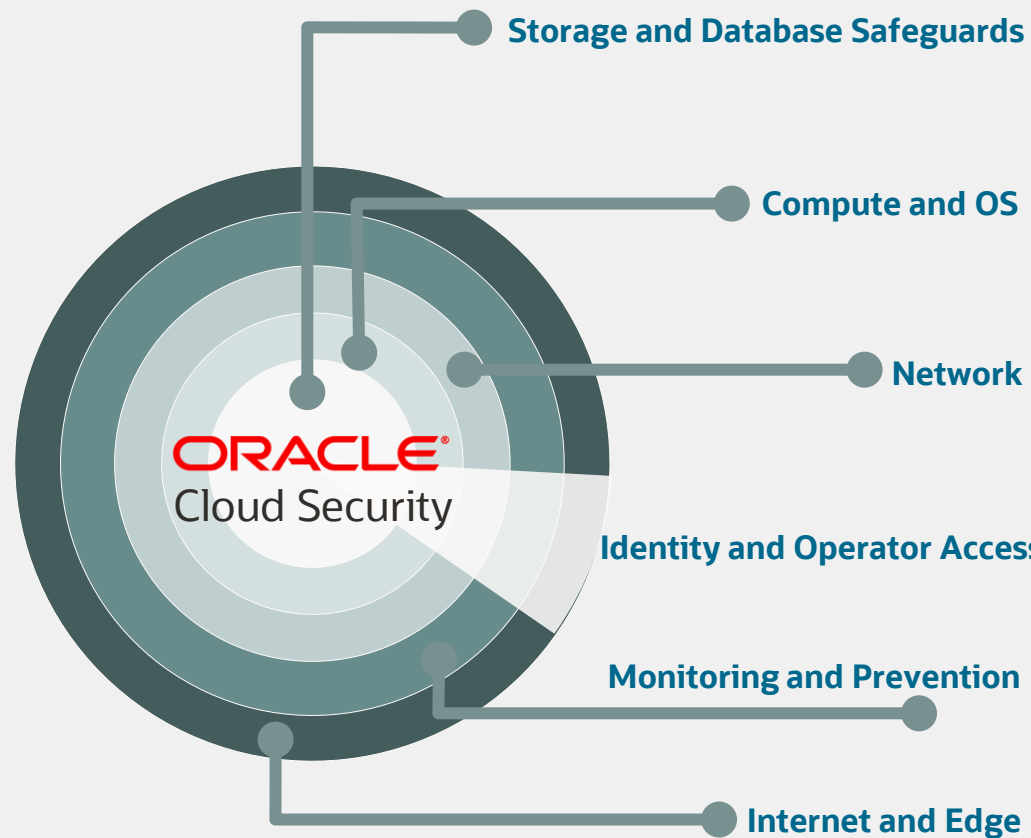
- Service Provider Responsibility
- Service Consumer Responsibility
- Automated by Oracle services

Source: Ponemon Institute, Cost and Consequences of Gaps in Vulnerability Response





Oracle offers a full stack of cybersecurity capabilities



| | | | | | | | |
|-----------------------|------------------------------------|---------------------|------------------------|-------------------------|---------------------------------|-------------------------|----------------|
| Vault | Key Management | Secrets Management | Certificates | Data Safe | Autonomous Database | | |
| Signed Firmware | Hardware Root of Trust | Harden Disk Images | Bare Metal Compute | OS Management | Isolated Network Virtualization | Oracle Autonomous Linux | |
| Virtual Cloud Network | Security Lists | Network Firewall | Bastion | Dynamic Routing Gateway | FastConnect | VPN | NAT Gateway |
| Access Governance | OCI Identity and Access Management | Policies | Federation | | | | |
| Cloud Guard | Threat Intelligence | Threat Detector | Vulnerability Scanning | Logging | Auditing | Fusion Apps Detector | Security Zones |
| DDoS Protection | WAF | WAF for Fusion Apps | | | | | |

Oracle Cloud Security differentiators





Oracle database security helps guard against attacks

Built-in capabilities and cloud-native services

Attack



Configuration drift



Lateral movement and data access



Data theft



Compromised backups from ransomware



Attack spread



Identity and Access Management (IAM)

Seamless identity integration with OCI IAM helps decrease the risk of attacks with multi-factor authentication and role-based access control



Data Safe / DB SAT

Continuously assess your configuration and users with Data Safe and database security assessment tool



Audit Vault Database Firewall (AVDF)

Detect suspicious activity with Audit Vault and Database Firewall (AVDF)



Advanced Security and Key Vault

Encrypt the data and protect encryption keys with Advanced Security and Key Vault



Zero Data Loss services

Recover up to the last valid transaction with immutable backups ZDLRA (Zero Data Loss Recovery Appliance) and ZFS



Isolated network virtualization

Separates virtualization layer from the network layer to protect customer instances

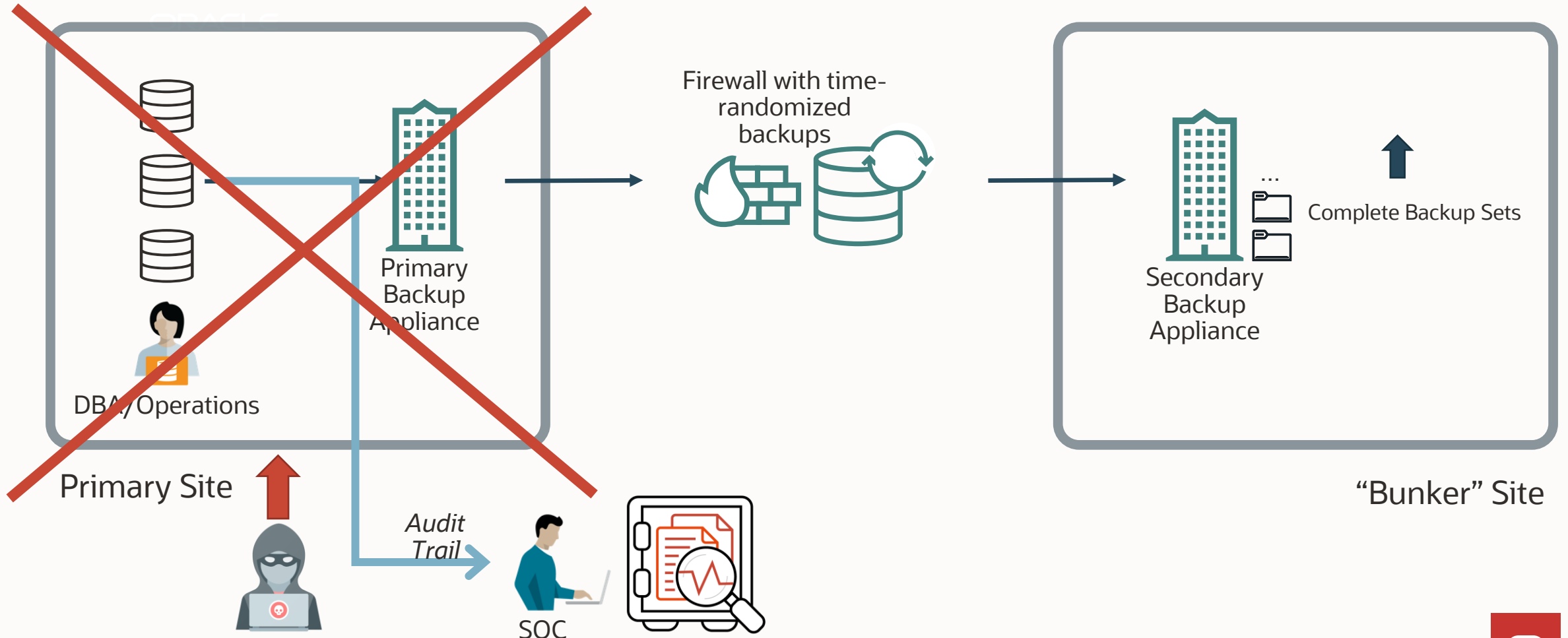




Oracle helps you strengthen your cyber-resilience

Recover completely from the last known trusted state for business continuity

Primary Site Down

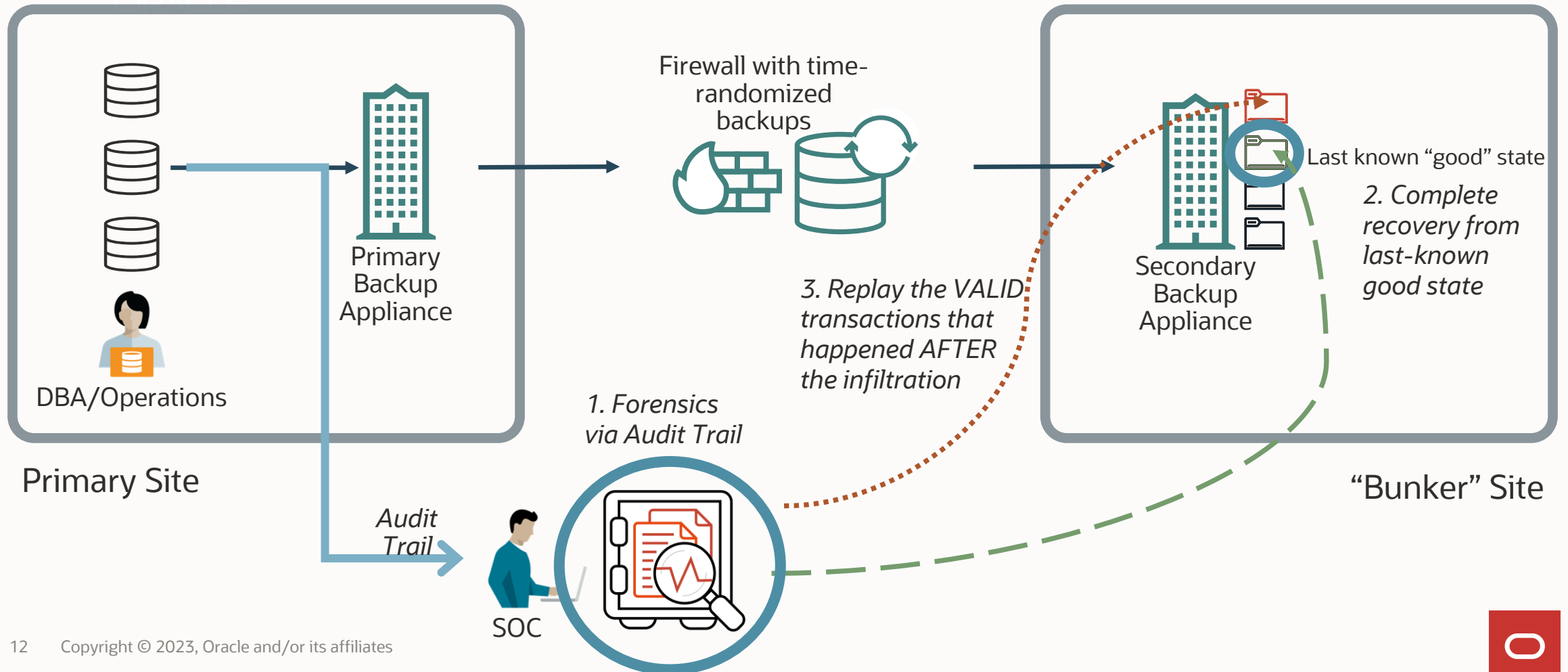




Oracle helps you strengthen your cyber-resilience

Recover completely from the last known trusted state for business continuity

Flashback your enterprise to a point in time that you know is safe

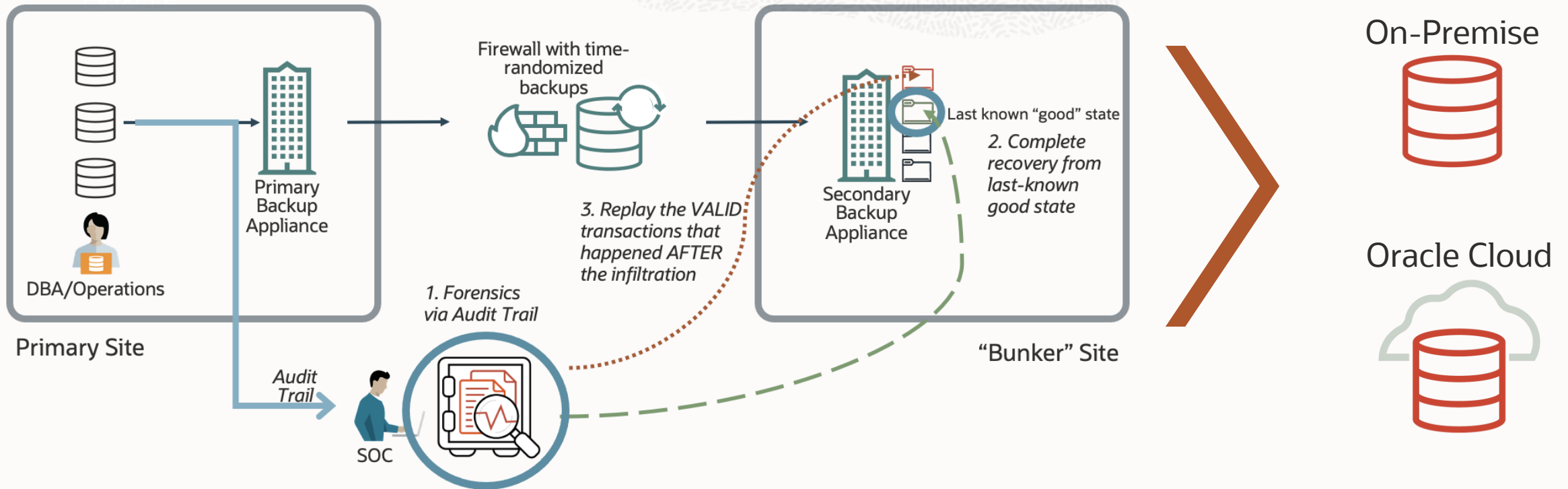




Oracle helps you strengthen your cyber-resilience

Recover completely from the last known trusted state for business continuity

Flashback your enterprise to a point in time that you know is safe





Simplify security across on-premises and cloud

It's complex to ensure security “*within and between*” different environments



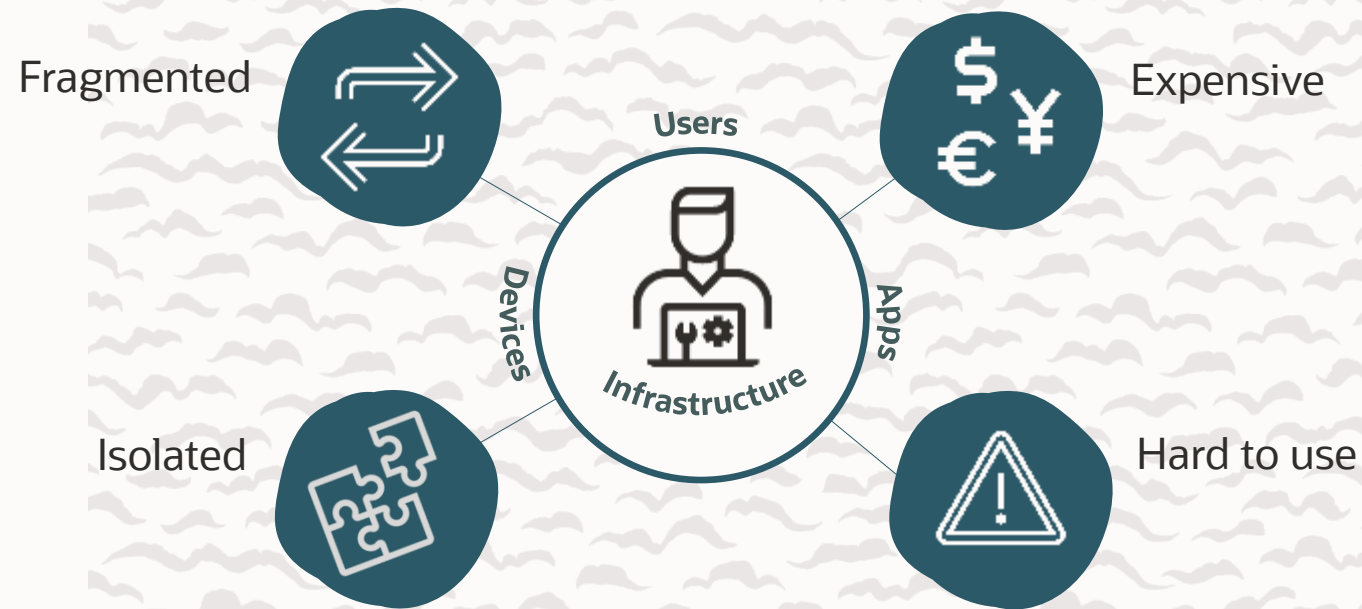
“Our on-premises and cloud deployments have different security settings that do not talk to each other”

“There are very limited cloud-native security services for our cloud deployments, and we use more than one cloud”

“What about private cloud, hybrid cloud, and public cloud? We have all of them. We need security among all of them”



Challenges with complex cloud security tools



82%

of breaches involved the human element.

Source: [Verizon's 2022 Data Breaches Investigations Report](#)



Oracle provides consistent security

Across all cloud service delivery models, addressing the reality



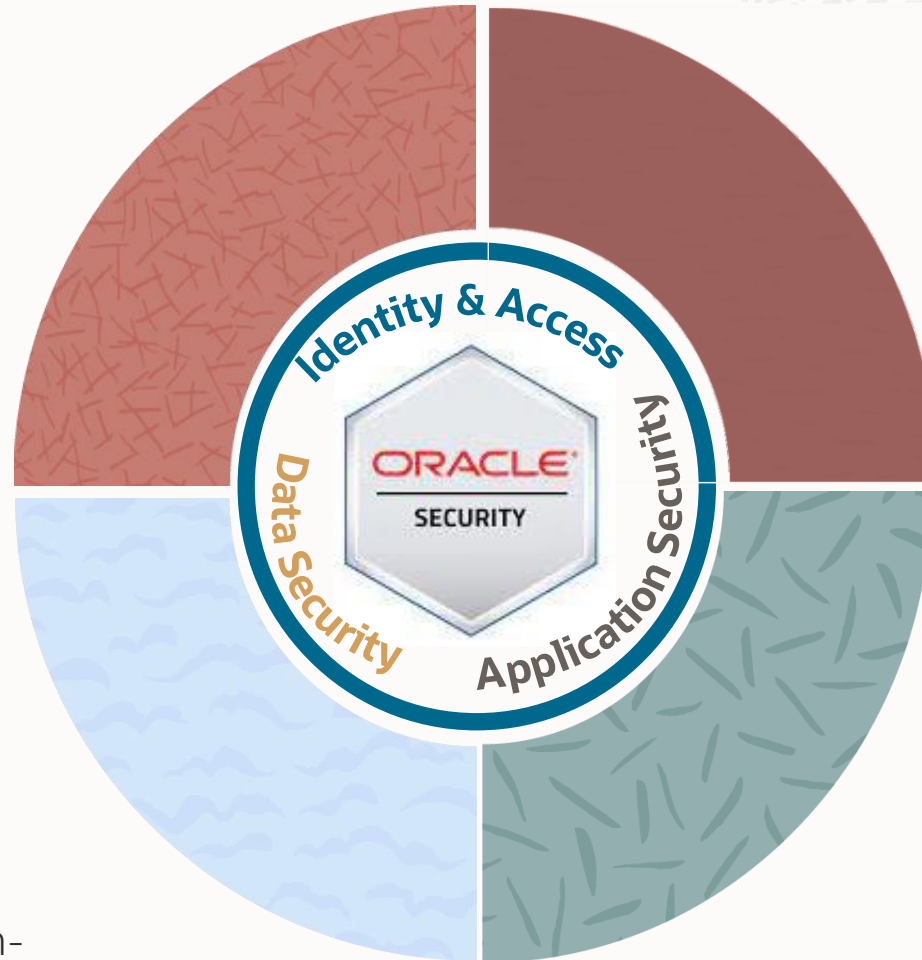
Oracle Public cloud

Access OCI cloud services from 41+ global regions



Hybrid cloud

Security across cloud and on-premises



Oracle Dedicated cloud

Single tenant Oracle Cloud, running in your data center for data residency & data localisation



Other Clouds

- Our products work with your other providers
- 12 Azure interconnect regions



Oracle provides consistent security

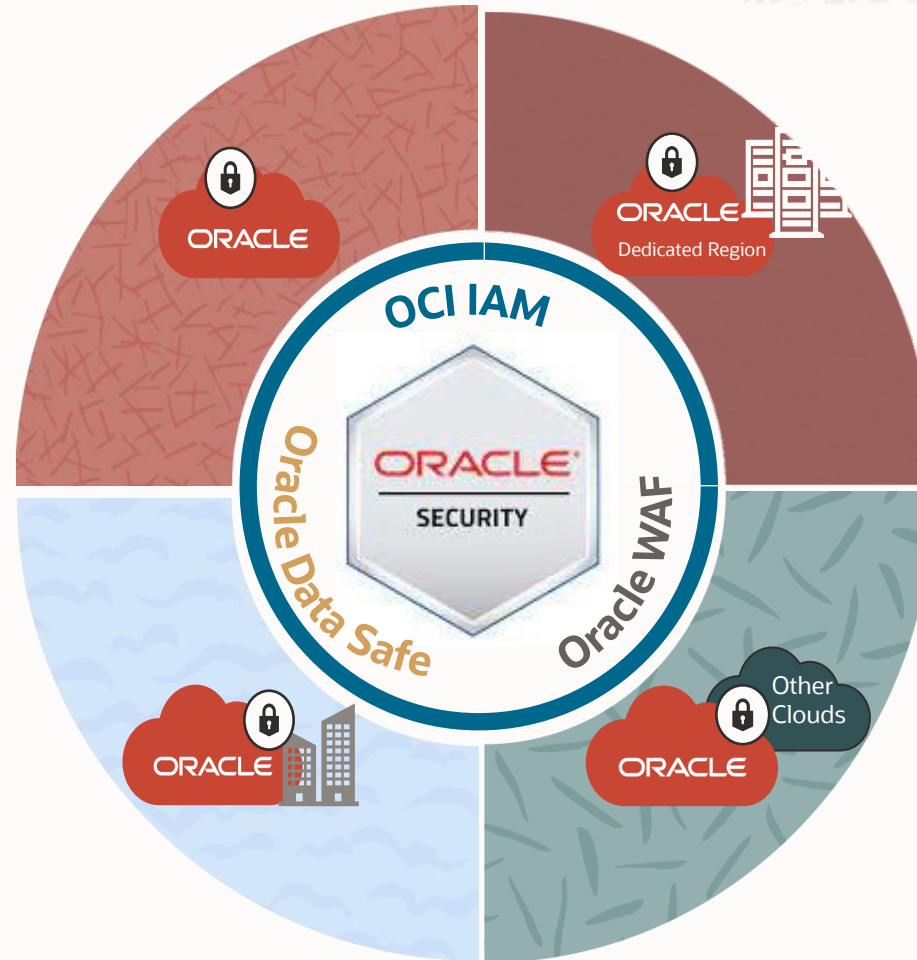
Across all cloud service delivery models, addressing the reality



Secure environments with OCI native security capabilities as well as third-party solutions

Protect Oracle Databases everywhere with **Oracle Data Safe**

Protect on-premises & cloud applications with **OCI Web Application Firewall**



Identical security on **OCI & Dedicated Region**

Centralize visibility and control of access across multicloud and on-premises deployments with **OCI IAM & Access Governance**



Oracle removes the commercial barriers to security

By providing core security at Zero Cost



“You should always push your security features as low in the stack as possible without having to pay extra”

– Larry Ellison

- ✓ **Core Security** for **EVERY customer** at **ZERO COST**
- ✓ No more Security vs Affordability trade-offs



Simple, Prescriptive & Integrated Security Services

Enterprise class IAM

FREE



OCI IAM for tenancy administration

*FREE



OCI IAM Identity Domains



Access Governance

Data Protection

FREE



Encryption

*FREE



Vault

*FREE



Data Safe

FREE



Certificates

Posture Management

FREE



Cloud Guard (including Threat Detector)

FREE



Security Zones

FREE



Vulnerability Scanning

FREE



Security Advisor

FREE



Threat Intelligence

OS & Workloads Protection

FREE



Dedicated Host

FREE



Bastions

FREE



OS Management

FREE



Shielded Instances

FREE



Confidential Computing

Network Protection

FREE



DDoS Protection

FREE



WAF

FREE



Security Lists & Groups



Network Firewall

FREE Core Security

*FREE Supplementary Security – Free for many use cases





Deliver managed security to meet compliance requirements

Regulatory compliance is evolving faster than ever



“On-going changes to compliance and regulatory requirements, such as U.S. Federal strategy to move to a Zero Trust Architecture by 2024, are very complex”

“We need to quickly adhere to security requirements to ensure we remain compliant at all times”

“Meeting local data protection laws, including sovereignty requirements, for managing sensitive data”

OCI Compliance

Oracle capabilities help address core compliance needs at all levels

Your compliance obligations

Security Services



...and many more



RBI Guidelines [India]

Advisory

Advisory: Oracle Cloud Infrastructure and the Reserve Bank of India 2011 Guidelines on Information Security, Electronic Banking, Technology Risk Management, and Cyber Frauds



IRDAI /5/142/2017 [India]

Advisory

Advisory: Oracle Cloud Infrastructure and the Insurance Regulatory and Development Authority of India (IRDAI) (Outsourcing of Activities by Indian Insurers) Regulations, 2017



OCI & GDPR

Advisory

Advisory: Oracle Cloud Infrastructure and the General Data Protection Regulation (GDPR)



ZERO-TRUST SECURITY with OCI

Whitepaper

Approaching Zero Trust Security with Oracle Cloud Infrastructure



ISO, PCI, SOC compliant deployment solutions

Oracle's compliance obligations

OCI manages 70+ compliance programs across regions and industries

REGIONAL



GOVERNMENT



INDUSTRY



GLOBAL



Oracle Security helps address top security concerns



Guard

against ransomware, attacks, and breaches



Simplify

security across on-premises and cloud



Deliver

managed security to meet compliance requirements

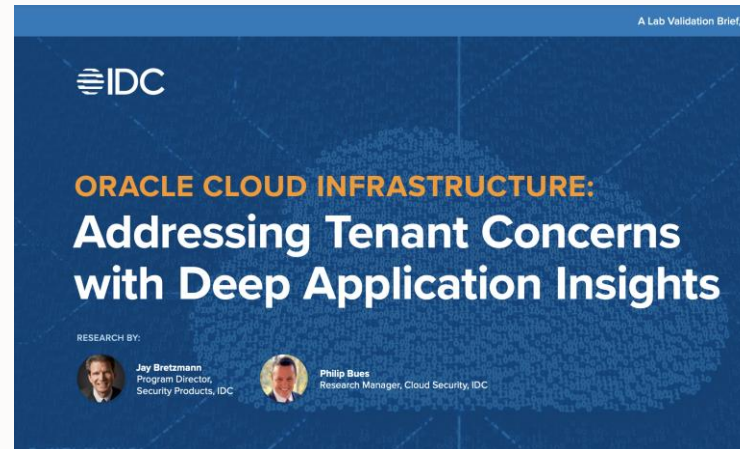


Analysts & Media on Oracle Cloud

Oracle recognized as a Visionary

In 2022 Gartner® Magic Quadrant™ for Cloud Infrastructure and Platform Services

[Read More](#)



[Read More](#)

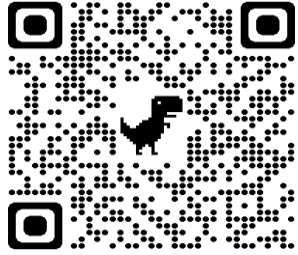
Forbes

“Oracle Cloud Made All The Right Moves In 2022. Oracle Cloud is very credible. The facts speak for themselves as OCI lands many big-name customers. One must assume those customers spent due diligence looking at the competition before picking Oracle. That speaks volumes and shows OCI displayed the ability to **deliver more business value** than the alternatives.”

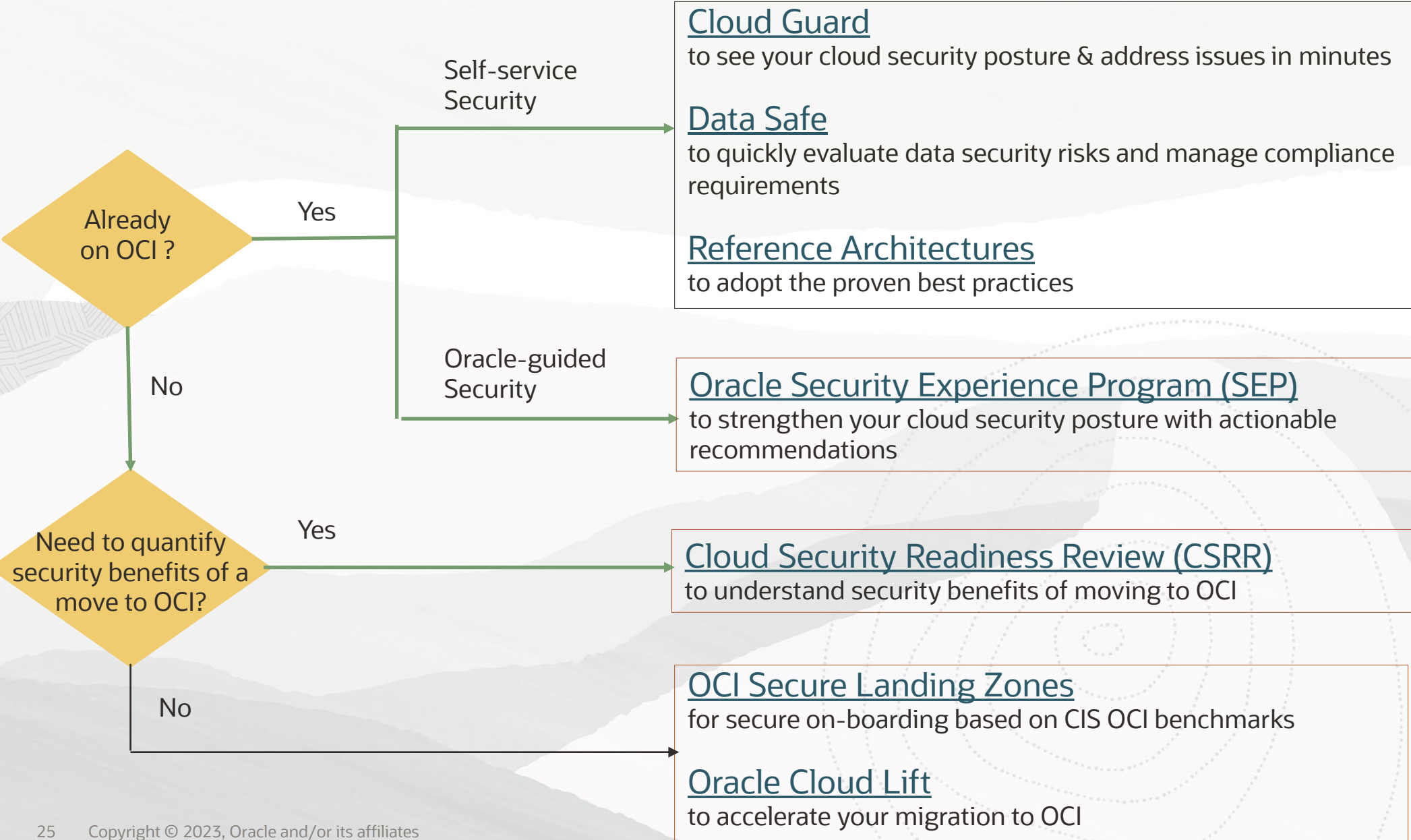
[Read More](#)



Path to outcome based on proven real-world experiences



Visit Oracle Security

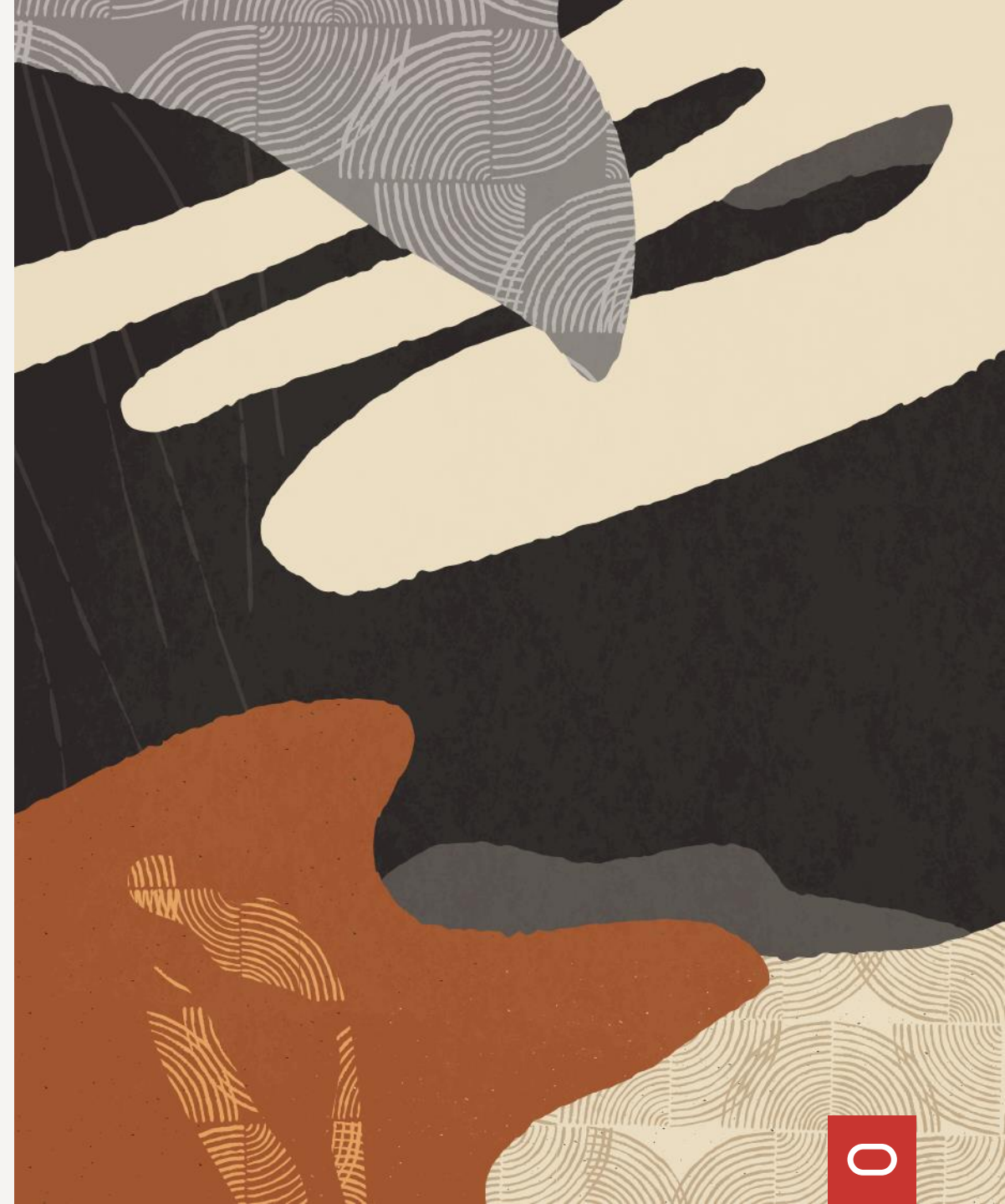


Thank you



Krithiga Gopalan

oracle.com/security/cloud-security/



The background features a stylized landscape with layered, wavy mountain ranges in shades of light green and grey. In the lower right, there are several concentric circles formed by dotted lines, resembling a target or a ripple effect. The Oracle logo is centered in the middle of the image.

ORACLE