

ORACLE

Cloud Security

Preparing for the New Normal



Brenda Banning

VP Industry, Value and Architecture

Customer Strategy JAPAC

March 29, 2023

Thank you to our partners

Deloitte.

AMD

vmware[®]

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.

Enterprise Security Today



Humans are part of the problem



33% Of organisations worldwide
have experienced a
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4M Global positions that cannot be filled due to the cybersecurity talent shortage



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82% Of data breaches involved the “human element”



Top Enterprise Security Concerns



Ransomware



Security Complexity



Human Error



Supply Chain Vulnerabilities



Cybersecurity Talent Shortage



Hybrid Work Environment



Geopolitical Risks



Fraud



Dispersed SaaS Services



Compliance Requirements



What if we...

Made security
prescriptive + **integrated**
into the platform

Offer **best of breed**
security + **choice** by
bringing partner
ecosystem together

Convert security to **trust**,
and make it a **business**
driver

Simplify your ability to
assure with easy to use
auditing & reporting



Oracle's approach to security and privacy on the cloud



Simple & Effortless

Oracle offers simple & prescriptive services

Oracle's approach to security and privacy on the cloud



Simple & Effortless

Oracle offers simple & prescriptive services



Deeply Integrated

Oracle provides an integrated experience across IaaS, SaaS & multiple clouds

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Complete Control

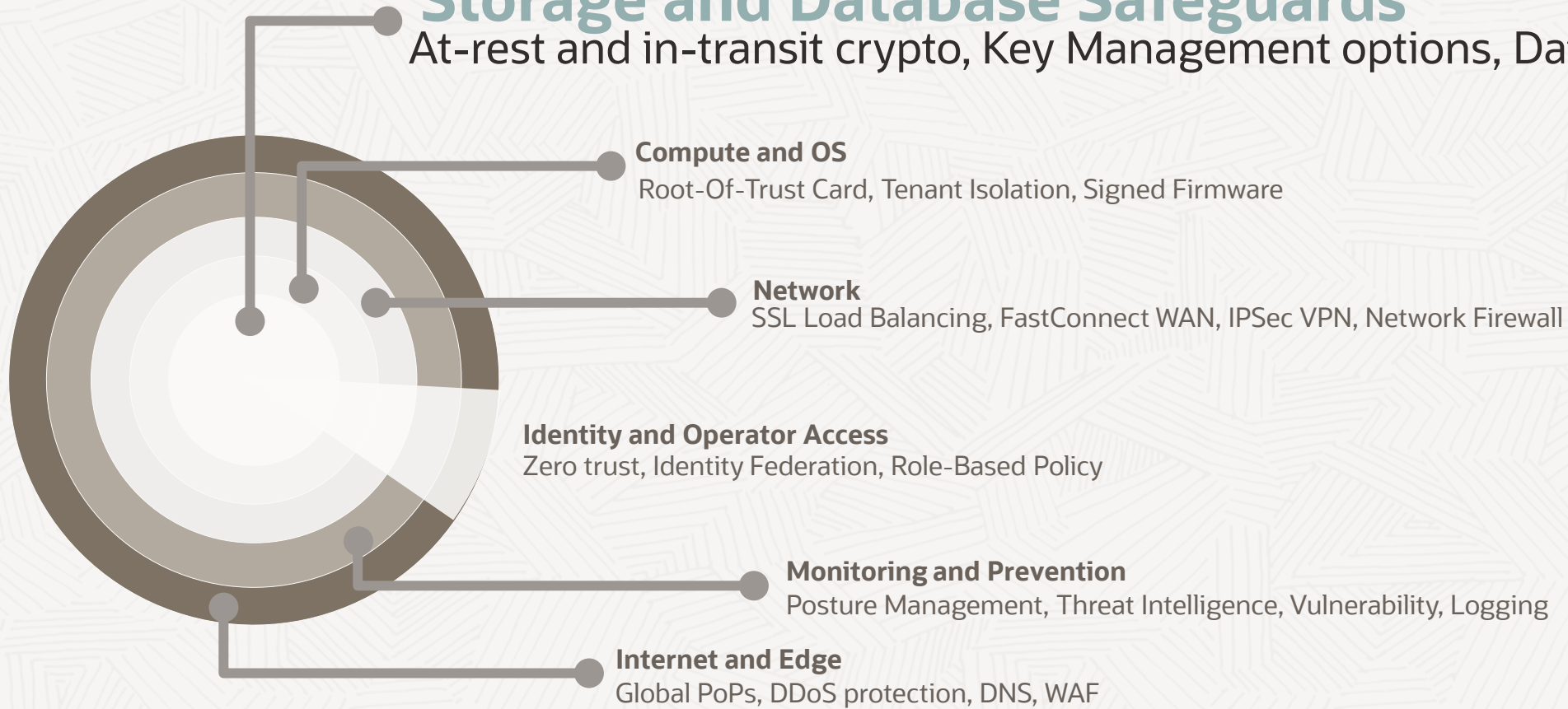
Oracle offers security controls regardless of where your applications and data reside

Simple and Effortless



Storage and Database Safeguards

At-rest and in-transit crypto, Key Management options, Data masking



GENERAL AVAILABILITY

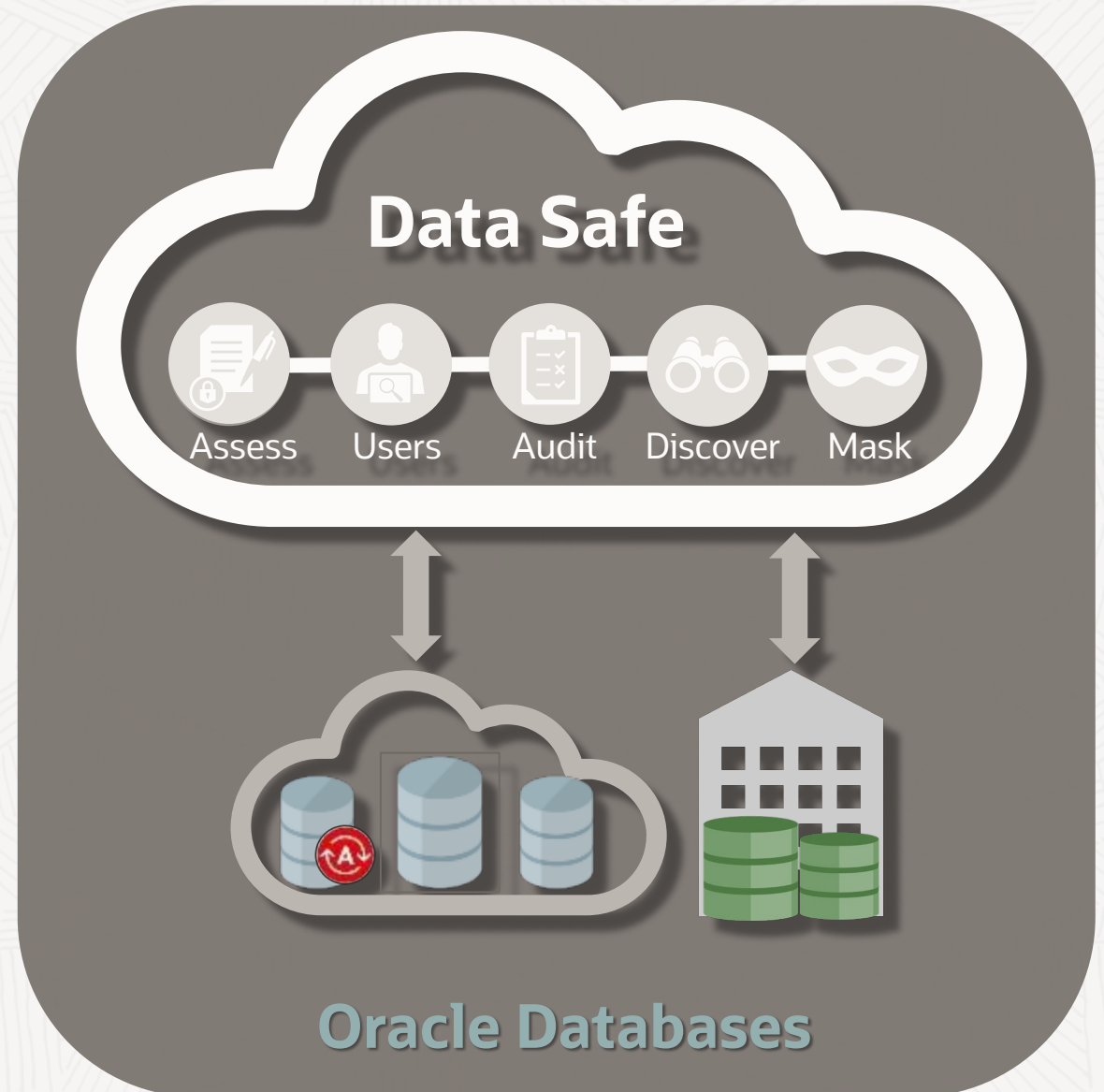
Oracle Data Safe

Unified oracle database security control centre

- Discover sensitive data and mask
- Prevent unauthorised access to data
- Monitors for threats based user activity
- Risk dashboard: configuration, data, users

Benefits

- No special expertise needed: click-and-secure
- Saves time and mitigates security risks
- Defense-in-depth security for all customers



GENERAL AVAILABILITY

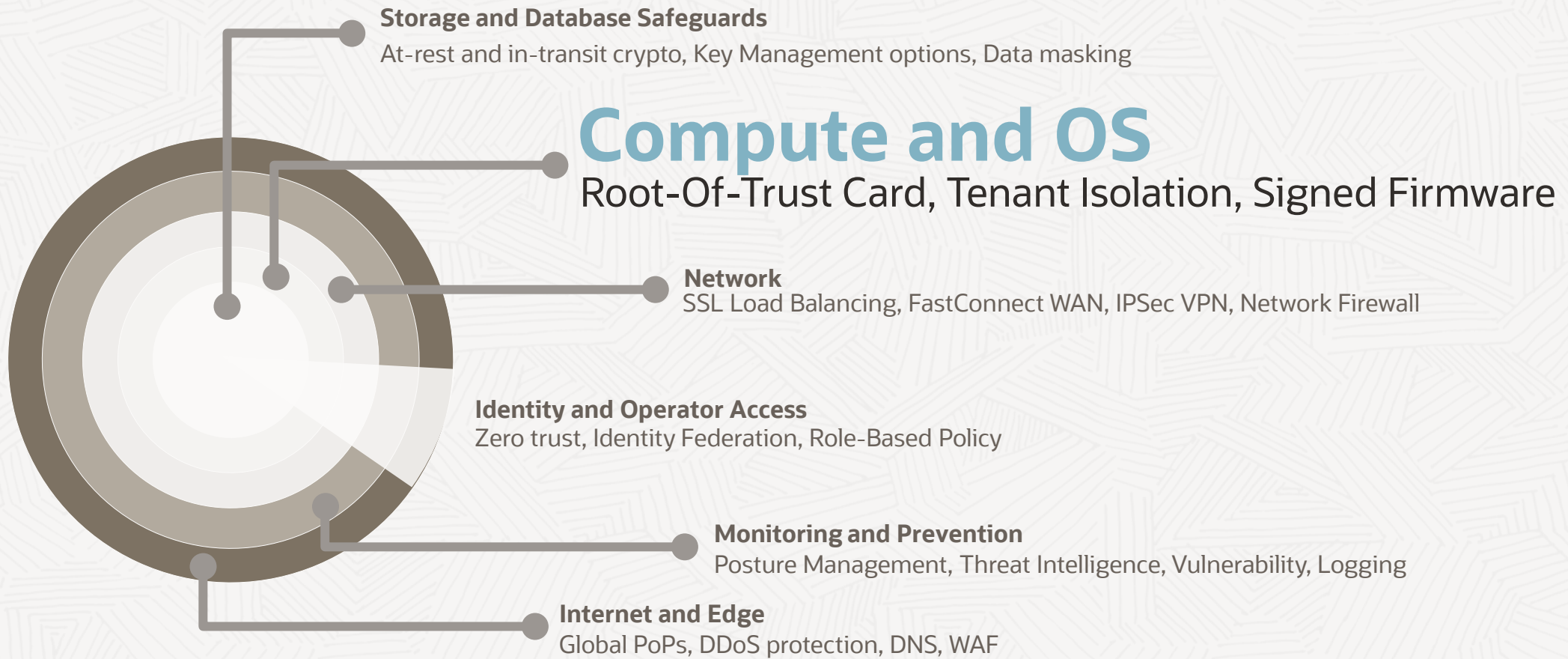
Oracle MySQL HeatWave security capabilities

Data Masking, SQL firewall, asymmetric encryption support

- Masking
- Instance Based SQL Firewall
- Immediate Security Patches (CPUs)
- Asymmetric Encryption
- Strictly Admin Privileges
- Multifactor Authentication (upto 3FA)

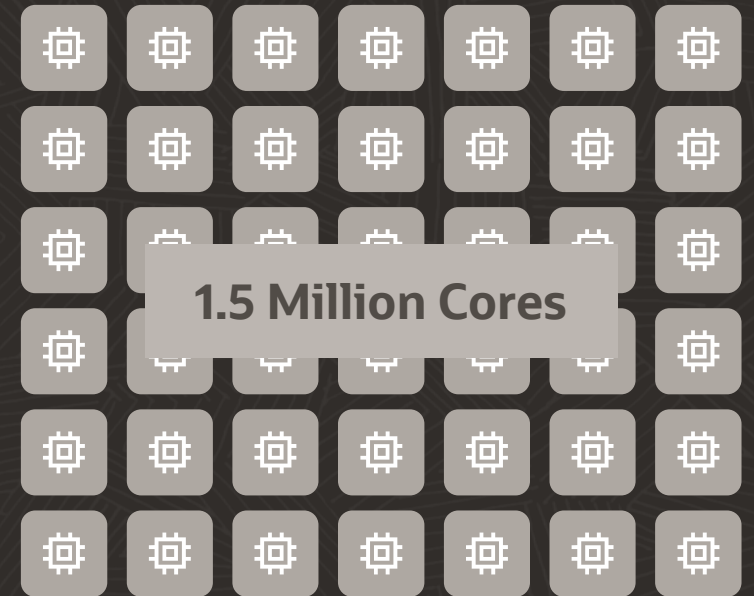


Oracle MySQL
HeatWave



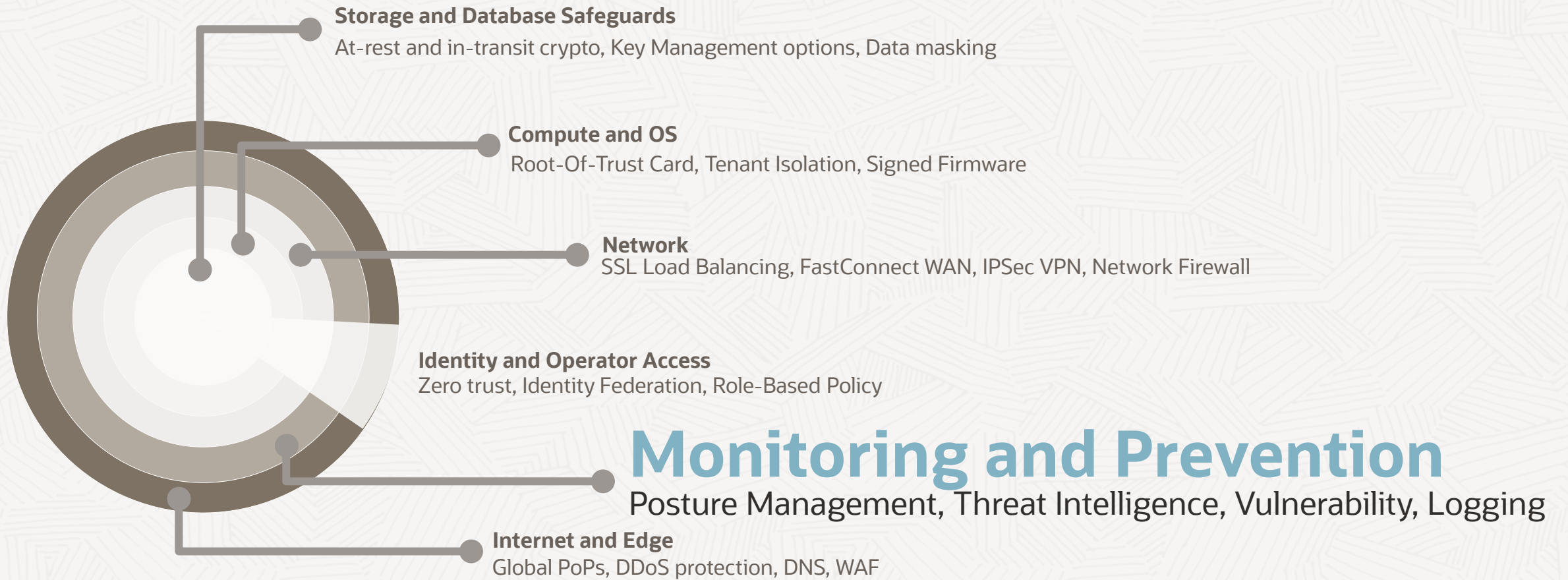
GENERAL AVAILABILITY

Oracle Autonomous Linux protects Oracle Cloud



150M patches applied in OCI in **4 hours** for Spectre/Meltdown Bugs—**No Downtime**

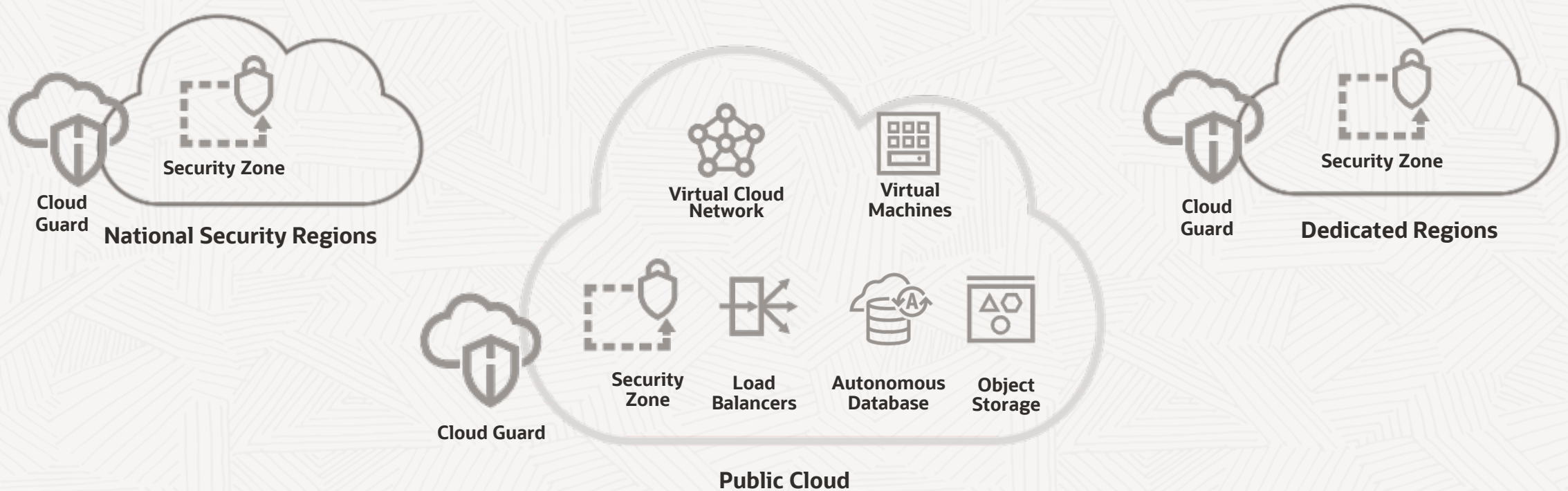




GENERAL AVAILABILITY

Oracle Security Zones and Oracle Cloud Guard

Simple and effortless proactive and reactive security posture management



Oracle Cloud Guard

Continuously monitor your cloud environment
Automatic problem identification
Optional automatic remediation

Security Zones

Extremely secure location
Security is always enforced
Designed for highly secure workloads

The Inventory Problem



Visibility to meet a changing threat landscape



Visibility for rapidly changing and complex microservices

ROADMAP – 2023

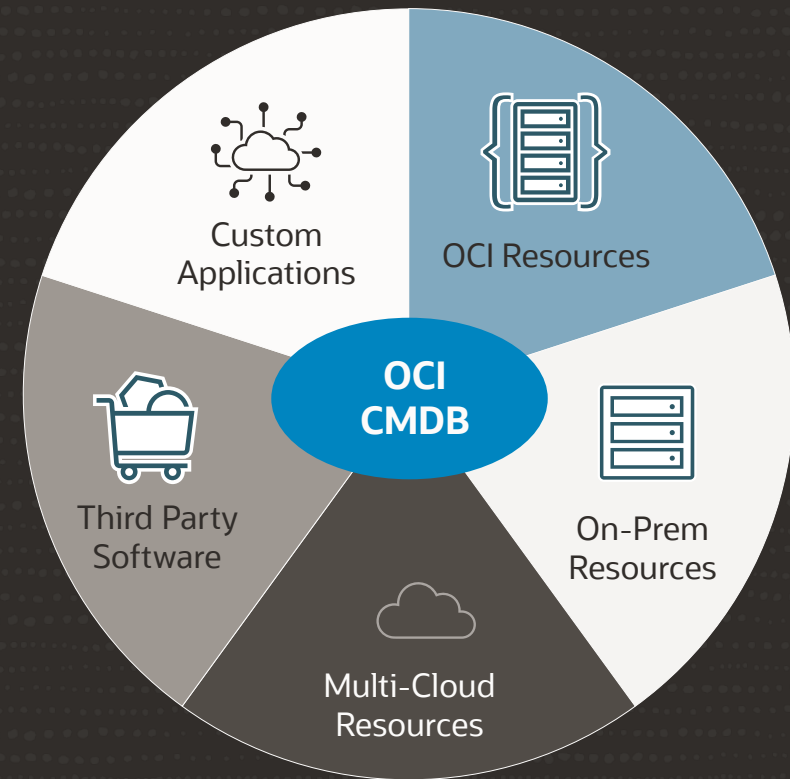
Configuration Management Database (CMDB)

Deeper visibility into your Inventory

Trusted record for all your resource and software configurations

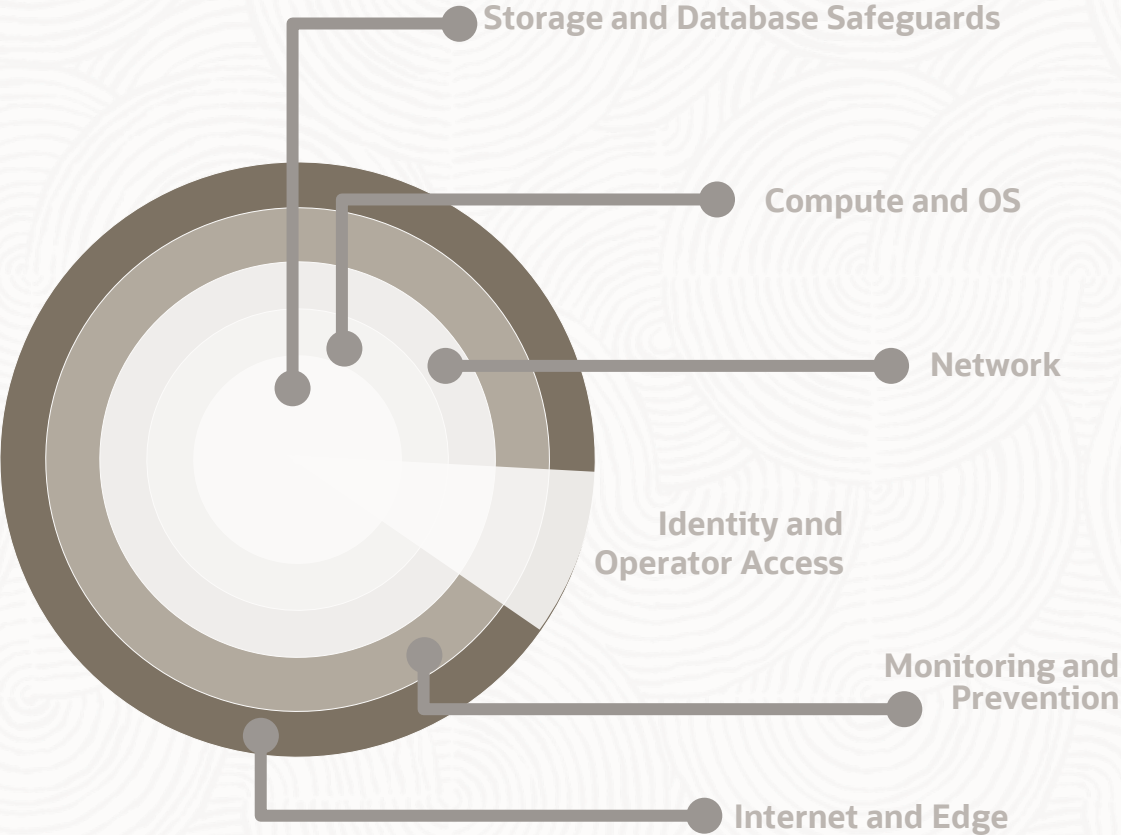
Identify impacted resources quickly

Visualise and take action



Oracle Security defence in depth

A complete solution at every layer

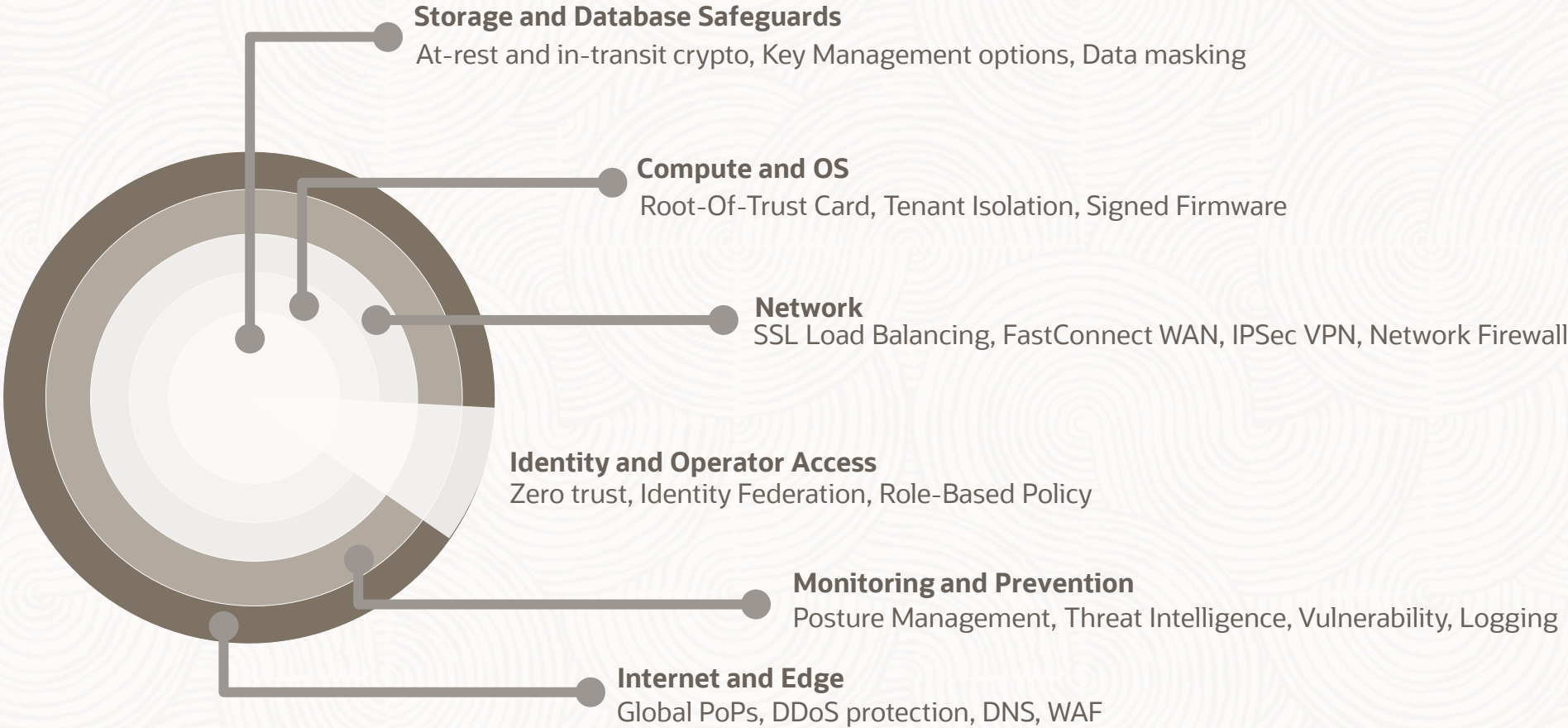


Data Safe	Vault	Key Management	Secrets Management	Certificates			
Oracle Linux	Bare Metal Compute	Hardware Root of Trust	Signed Firmware	Harden Disk Images			
Virtual Cloud Network	Security Lists	Network Firewall	Bastion	Dynamic Routing Gateway	FastConnect	VPN	
Identity	IAM	Policies	Federation				
Cloud Guard	Security Zones	Threat Intelligence	Threat Detector	Logging	Fusion Apps Detector	Vulnerability Scanning	Auditing
DDoS Protection	WAF						



Oracle Security defence in depth

A complete solution with security built-in at every layer





“

Cloud Guard was the first thing we did when we got our tenancy, it is a great security monitoring tool and we also use compartments, policies, and Logging Analytics to maintain visibility and control. Together with logs from OCI IAM identity domains, we're able to access all of our logs in a single location and customize the dashboards we need for complete visibility. The fact that this detailed view is all streamlined is a big win for customers. ”

Lance Braswell, Cloud Architect, Cisco Systems, Inc.



Deeply Integrated



Oracle Cloud: Infrastructure + Applications

Oracle Identity

Oracle Applications

Industry Applications

ISV Applications



Developer Services



Containers and Functions



Application Integration



Analytics and BI



Machine Learning and AI



Data Lakehouse



Compute



Storage



Networking



Oracle Databases



Open Source Databases



Operating Systems, Native VMWare

Security | Observability and Management | Compliance | Messaging | Governance

Global Cloud Datacentre Infrastructure

Commercial and Government Public Cloud Regions | Hybrid Cloud: Cloud@Customer, Dedicated Regions, Roving Edge



A distributed cloud, available in more ways and places

Multicloud

Our products work with your other providers

Hybrid cloud

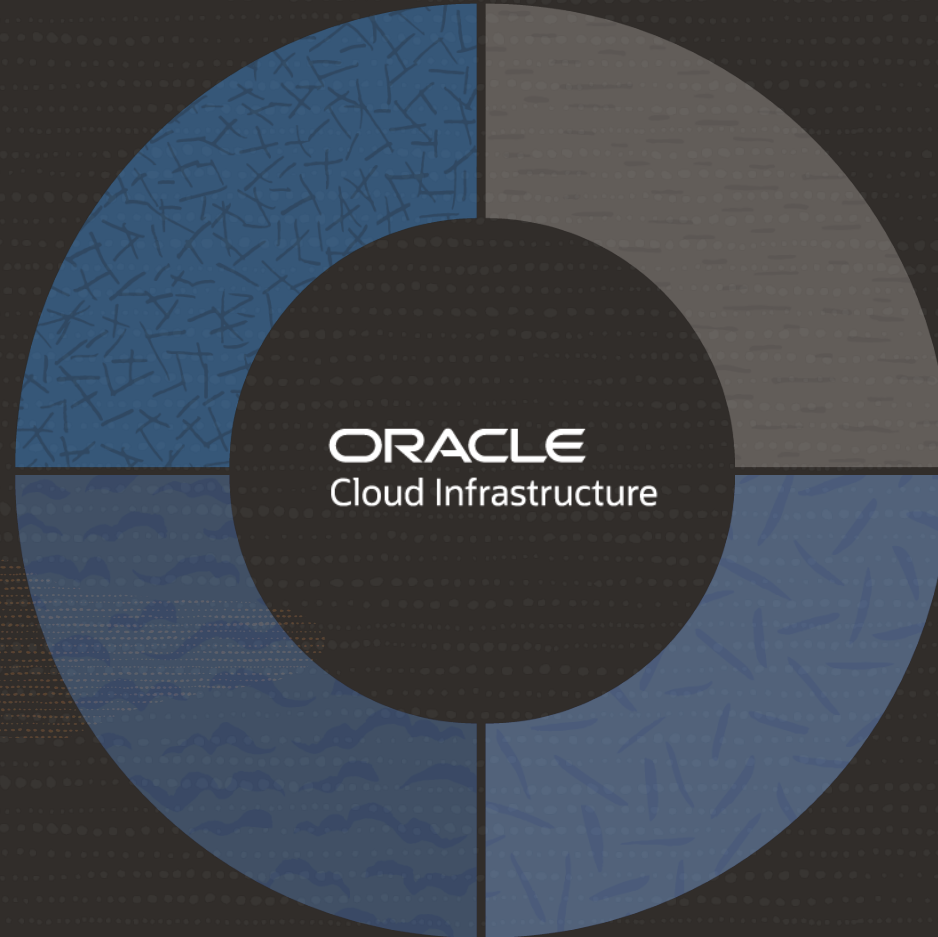
We bring cloud services to you

Public cloud

Access OCI cloud services from 40+ global regions

Dedicated cloud

A cloud just for you



Security for distributed cloud

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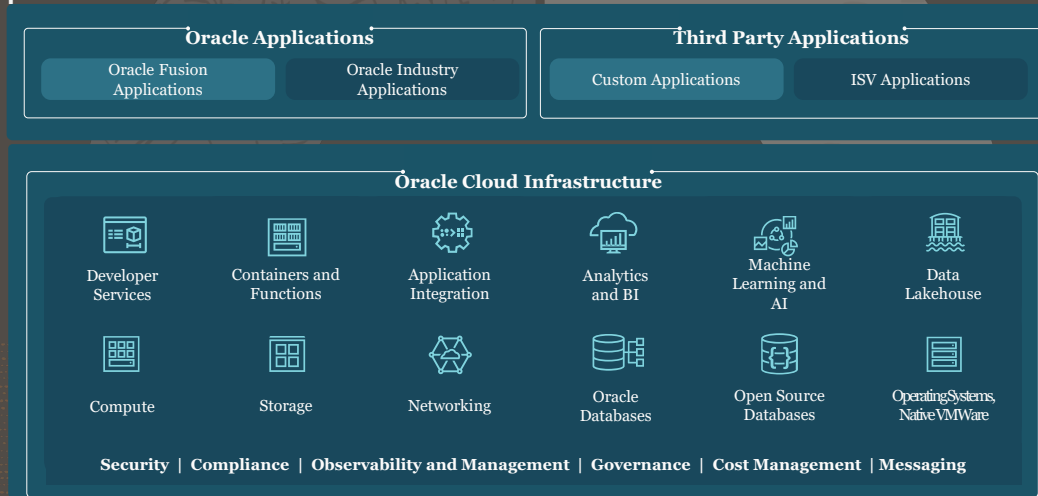
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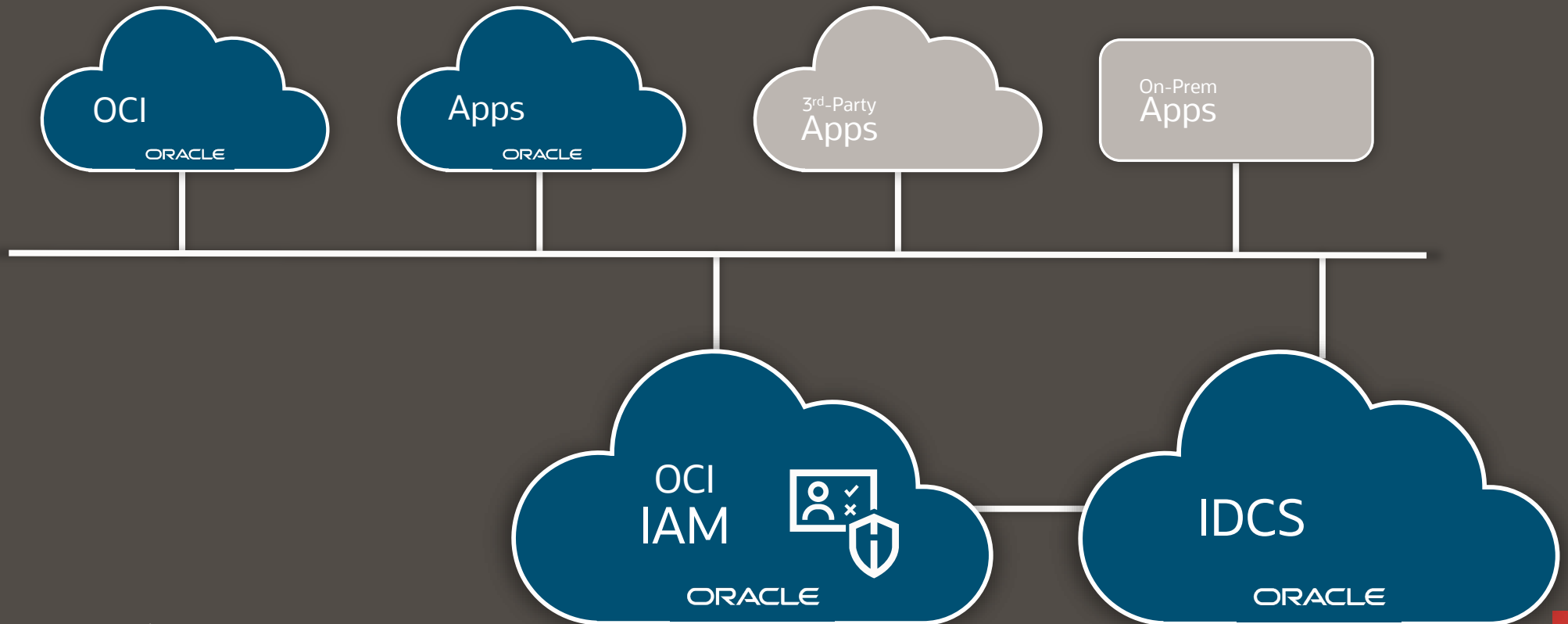


GENERAL AVAILABILITY

OCI IAM Identity Domains

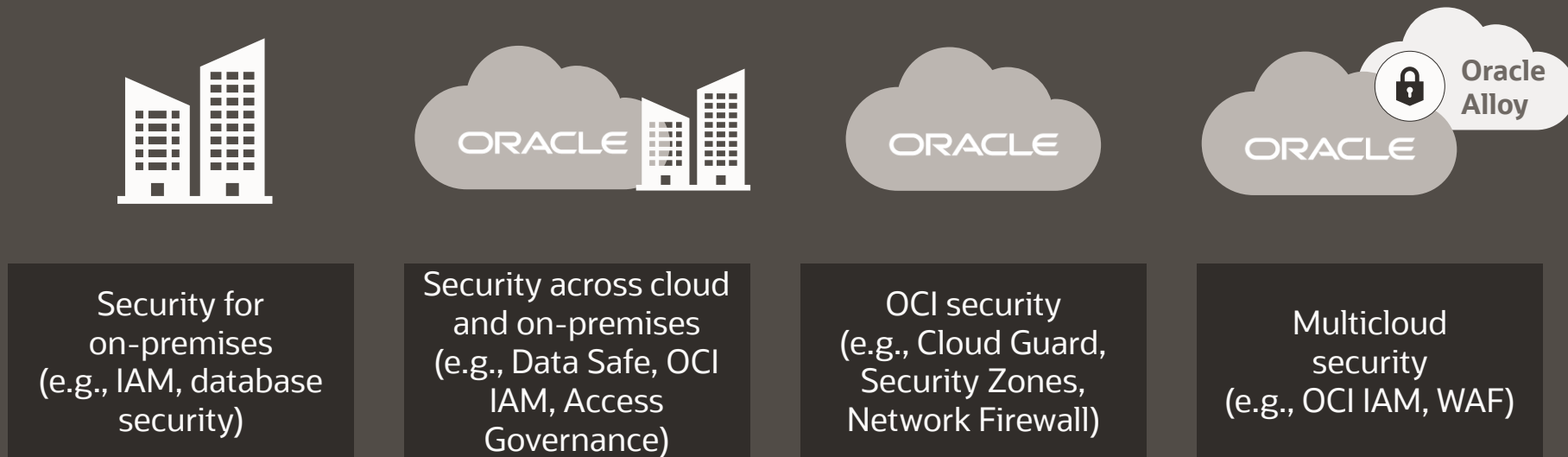
Benefits of Oracle IDCS and OCI IAM services now merged together

OCI IAM will provide a single, unified IDaaS for Oracle and non-Oracle apps across hybrid cloud environments with robust MFA options, Adaptive Access, and Lifecycle Management

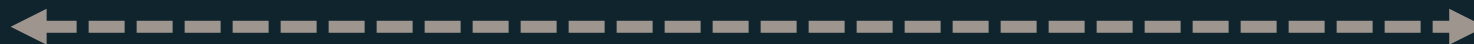


Security solutions enabling your Hybrid Cloud journey

Flexibility to meet you where you are today



On-premises

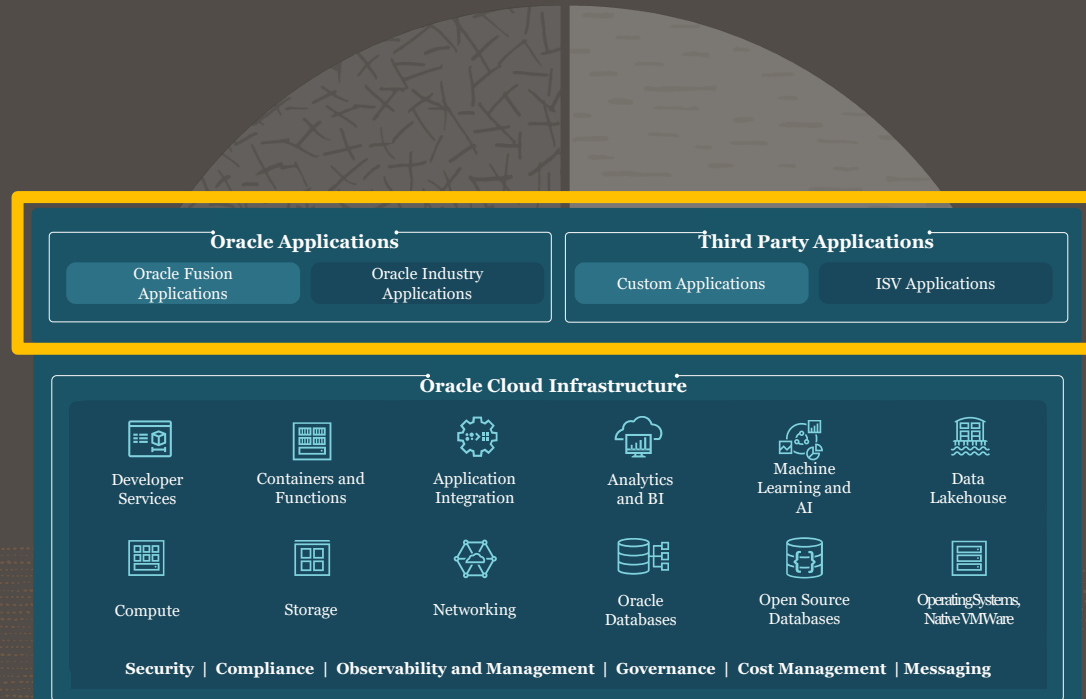


Cloud

New *integrated* security capabilities for SaaS

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Hybrid cloud

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A cloud just for you



LIMITED AVAILABILITY - NOW

Oracle Cloud Guard Fusion Applications Detector

Security posture management for your infrastructure and Oracle HCM and Oracle ERP

- Security for critical business apps
- Detections for sensitive PII
- Pre-configured & customised recipes



Cloud Guard Fusion
Applications Detector

AUTO ENABLED FOR ALL FUSION APPLICATIONS

OCI Web Application Firewall for Fusion Applications

- Security and safeguards for Fusion Apps
- Monitor and detect malicious attacks
- 24x7, Oracle Managed end to end



OCI WAF for Fusion
Applications

New *partner-integrated* security capabilities

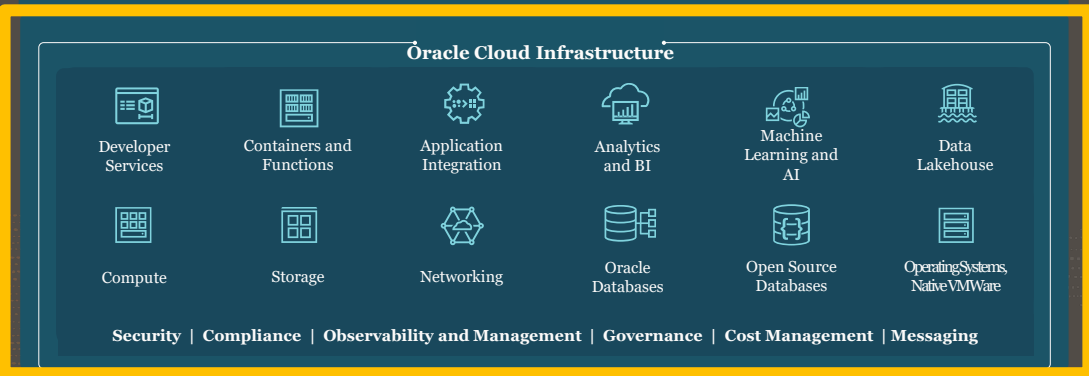
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GENERAL AVAILABILITY

Partner-integrated security services

Cloud-native firewall, powered by Palo Alto Networks' next-generation firewall (NGFW)

- URL filtering, intrusion prevention, & TLS inspection
- No additional security infrastructure
- Addresses regulatory requirements



Next-generation
firewall (NGFW)

LIMITED AVAILABILITY - NOW

Qualys scanning with OCI Vulnerability Scanning

- Integrated with OCI VSS
- Quickly identify vulnerabilities from Qualys agents and address them in OCI Vulnerability Scanning
- Fully managed, eliminating the work of patching agents



Qualys®



OCI Vulnerability Scanning Service

Distributed Clouds

Customer and industry perspective

“We have a primary cloud, but...”

“We’re having trouble meeting service levels in the public cloud”

“Our data can’t leave our premises”

“We still have significant on-prem assets”

70% of organisations have adopted multicloud or hybrid cloud strategies.

– IDC

Requirements to support distributed clouds

- ✓ Cross-cloud authentication, authorisation, and token exchanges
- ✓ Integrated logging and telemetry
- ✓ Interoperable key and secrets management systems
- ✓ Integrated security monitoring
- ✓ Cross-cloud SDK, CLI, and UI compatibility

Customer Testimonial: Thomson Reuters

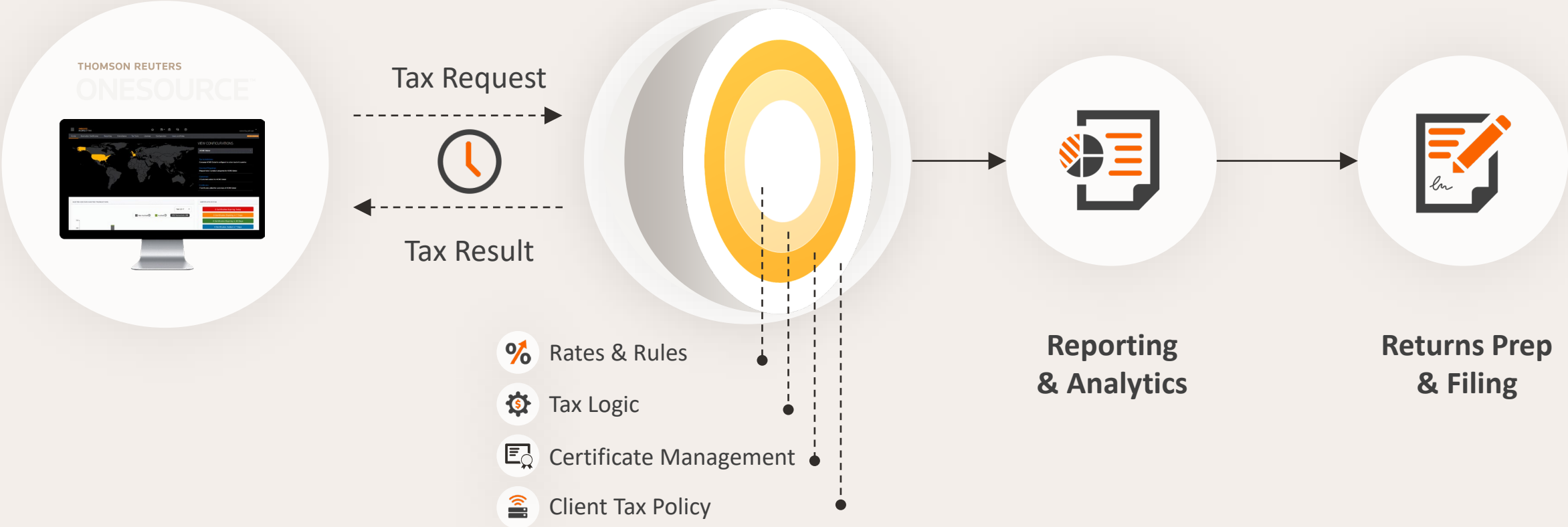


CHIEF PRODUCT OFFICER,
CORPORATES GLOBAL API &
CLOUD LEADER



GLOBAL TAX AND TRADE CHALLENGES,
SOLVED BY
ONE POWERFUL CLOUD PLATFORM

Indirect Tax End-To-End Global Automation



Metrics that matter!

2,000
Transactions
Per Second

+3 Billion

Automated Global Validations
of Tax Results

+5 Billion

Cloud Transactions

+2.8 Million

Tax Rate &
Product Taxability
Changes

22 Milliseconds

Calculation Response Times

ISO 27001

Certified

10M

Transactions/Hour

Determination Anywhere
Edge Computing

Auto
Provisioning
&
Scaling

+460,000

Product and Service
Codes



Complete Control



Violations lead to Significant Fines ...

The New York Times

Facebook's WhatsApp is fined for breaking the E.U.'s data privacy law

Facebook's WhatsApp, which has its European headquarters in Ireland, where many tech giants have their European headquarters, have been criticized for

> \$1B in
GDPR Fines

Addressing data security and privacy on the cloud



Physical Infrastructure

Addressing data security and privacy on the cloud



Security Software

Addressing data security and privacy on the cloud



Physical Infrastructure

+



Security Software

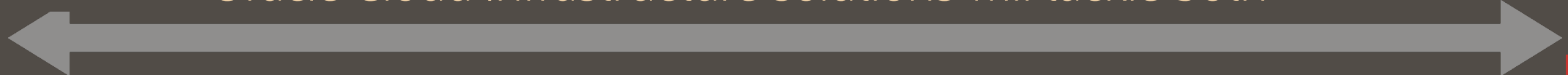
Addressing data security and privacy on the cloud



Physical Infrastructure

Security Software

Oracle Cloud Infrastructure solutions will tackle both



Infrastructure Options to Help navigate Data Privacy

Control



OCI Public Cloud

- All OCI capabilities
- Oracle maintains the infra
- Secure data with OCI native security capabilities as well as third-party solutions

OCI Sovereign Cloud

- All OCI capabilities
- Operations and support restricted to EU residents and specific EU legal entities

Dedicated Region

- All OCI capabilities
- House in your data-center
- Meet data localization and residency requirements

Oracle Alloy

- All OCI Capabilities
- Designed to meet strict assurance and data sovereignty requirements



“

This level of protection will appeal particularly to the many European government and healthcare organizations that use Oracle database technology to manage sensitive data”

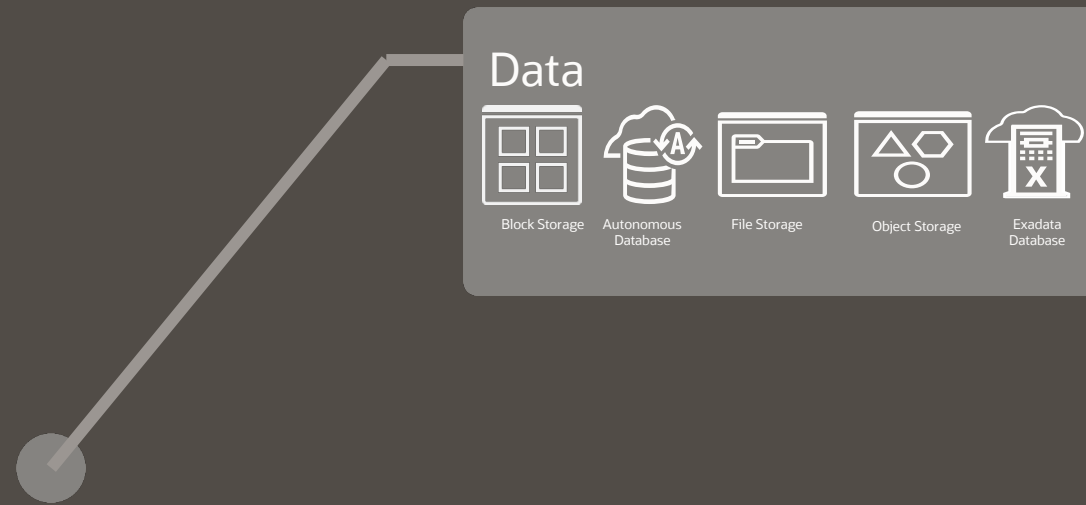
“A critical element of the Oracle sovereign cloud announcement is the approach to data sovereignty compliance. ”

IDC Link, Oracle Plants Big Sovereignty Flag in EU with Launch of Oracle Sovereign Cloud, doc #1cEUR149505922, July 2022



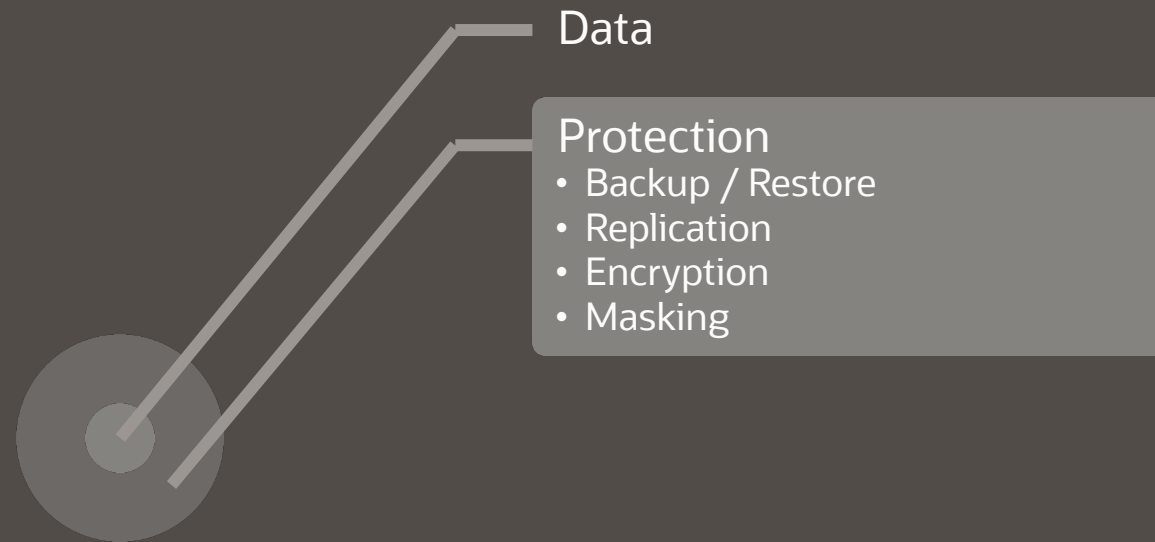
Addressing data security and privacy on the cloud

The role of software



Addressing data security and privacy on the cloud

The role of software



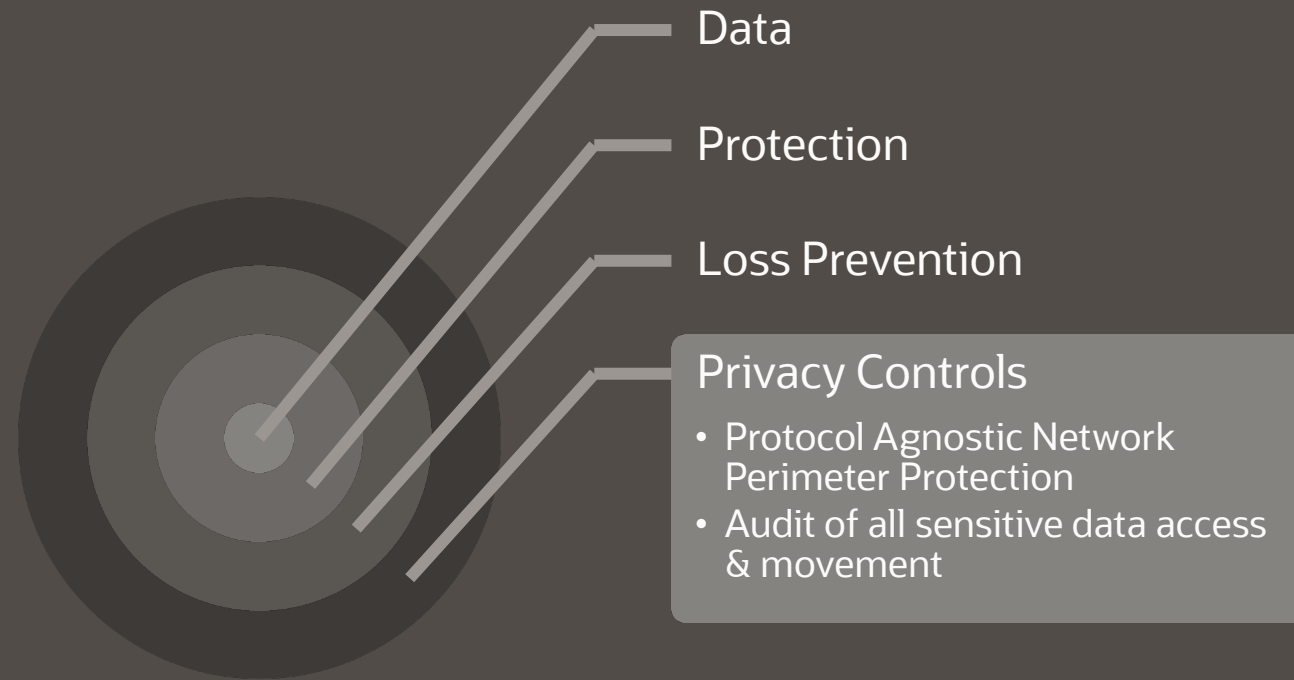
Addressing data security and privacy on the cloud

The role of software



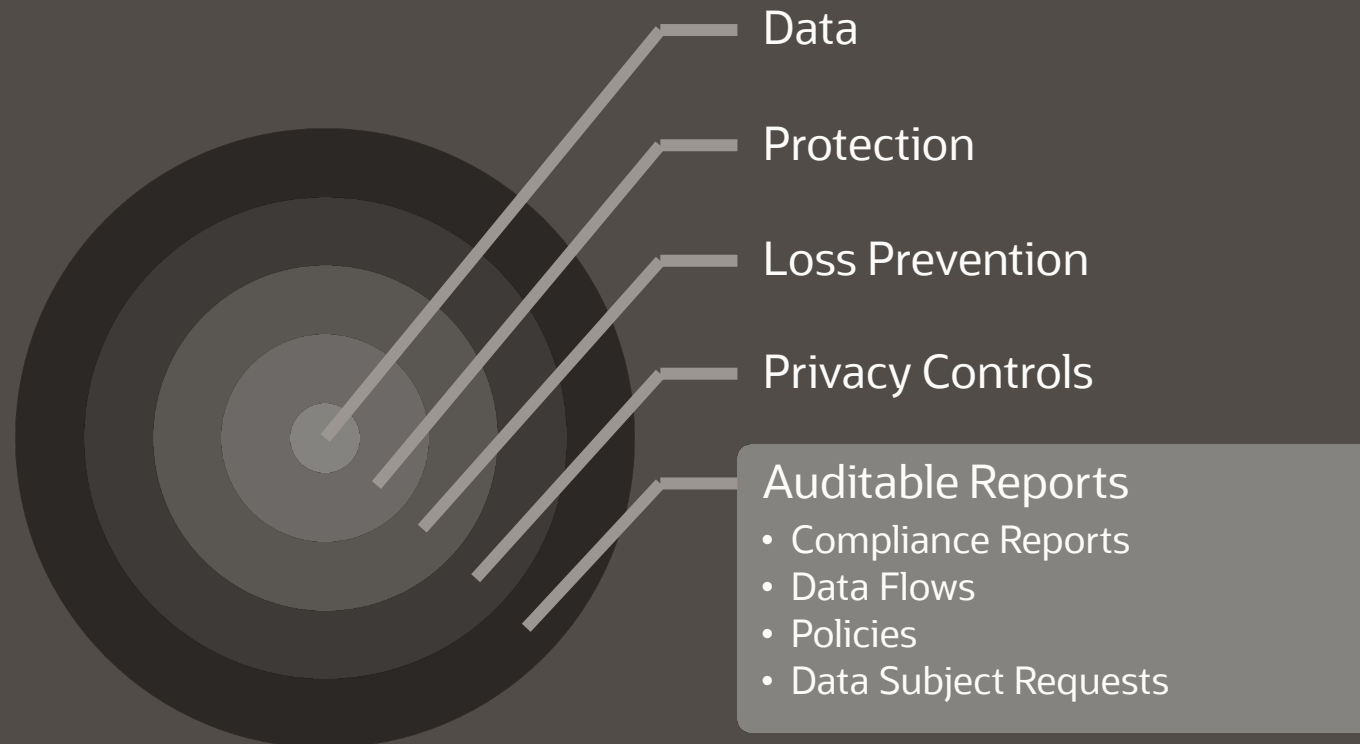
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The role of software



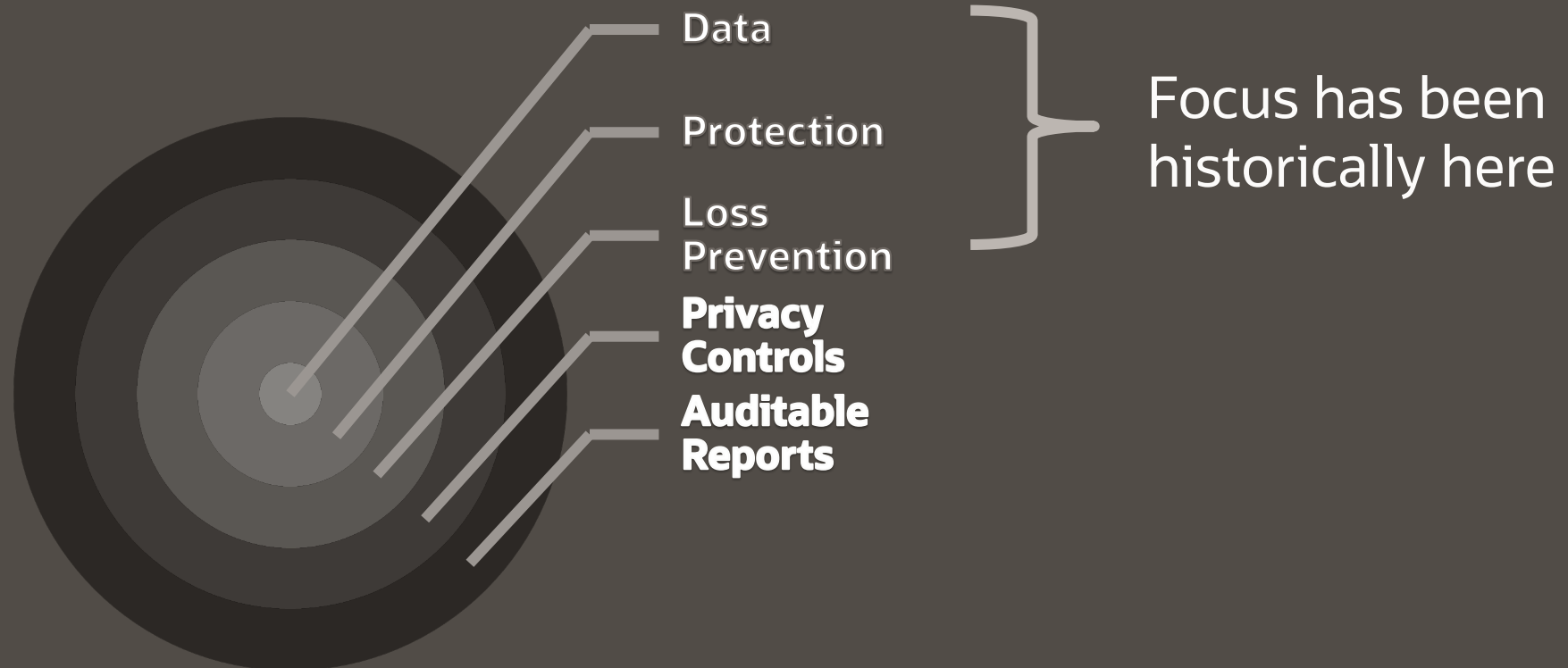
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The role of software



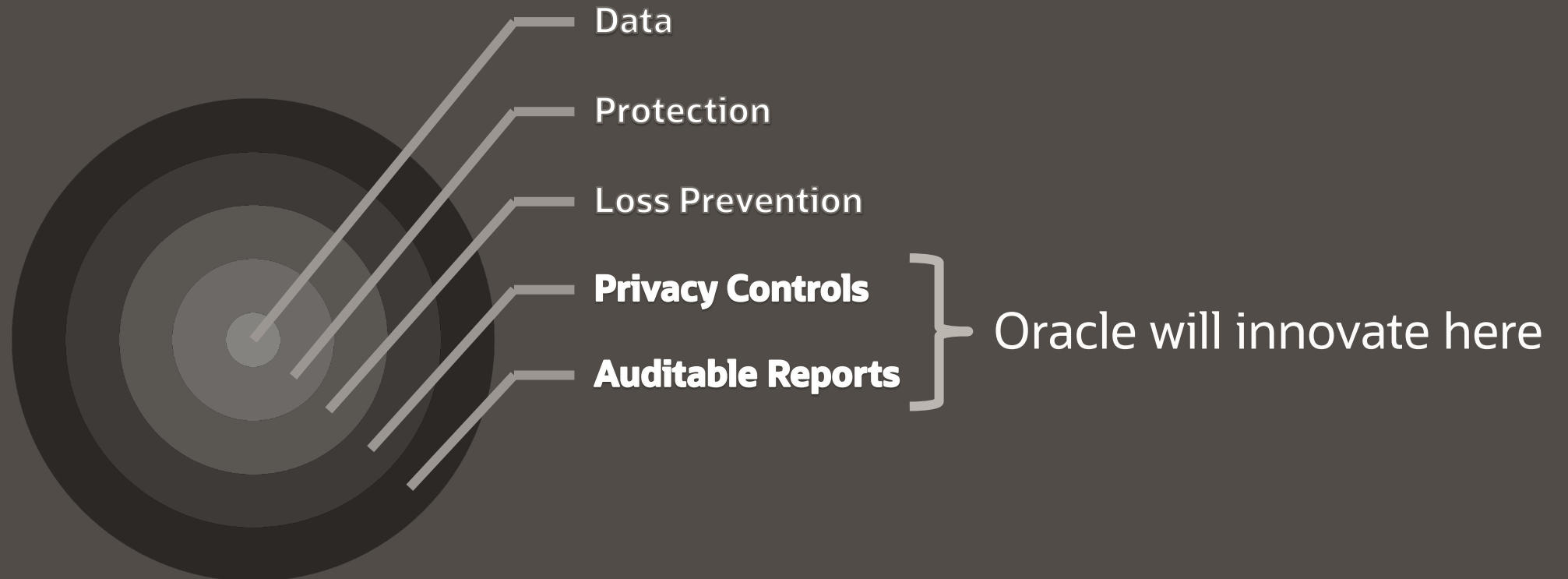
Addressing data security and privacy on the cloud

The role of software



Addressing data security and privacy on the cloud

The role of software



Options to Help you navigate Data Sovereignty Requirements

Control



Coming Soon



Coming Soon

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**Simple &
Effortless**



**Deeply
Integrated**

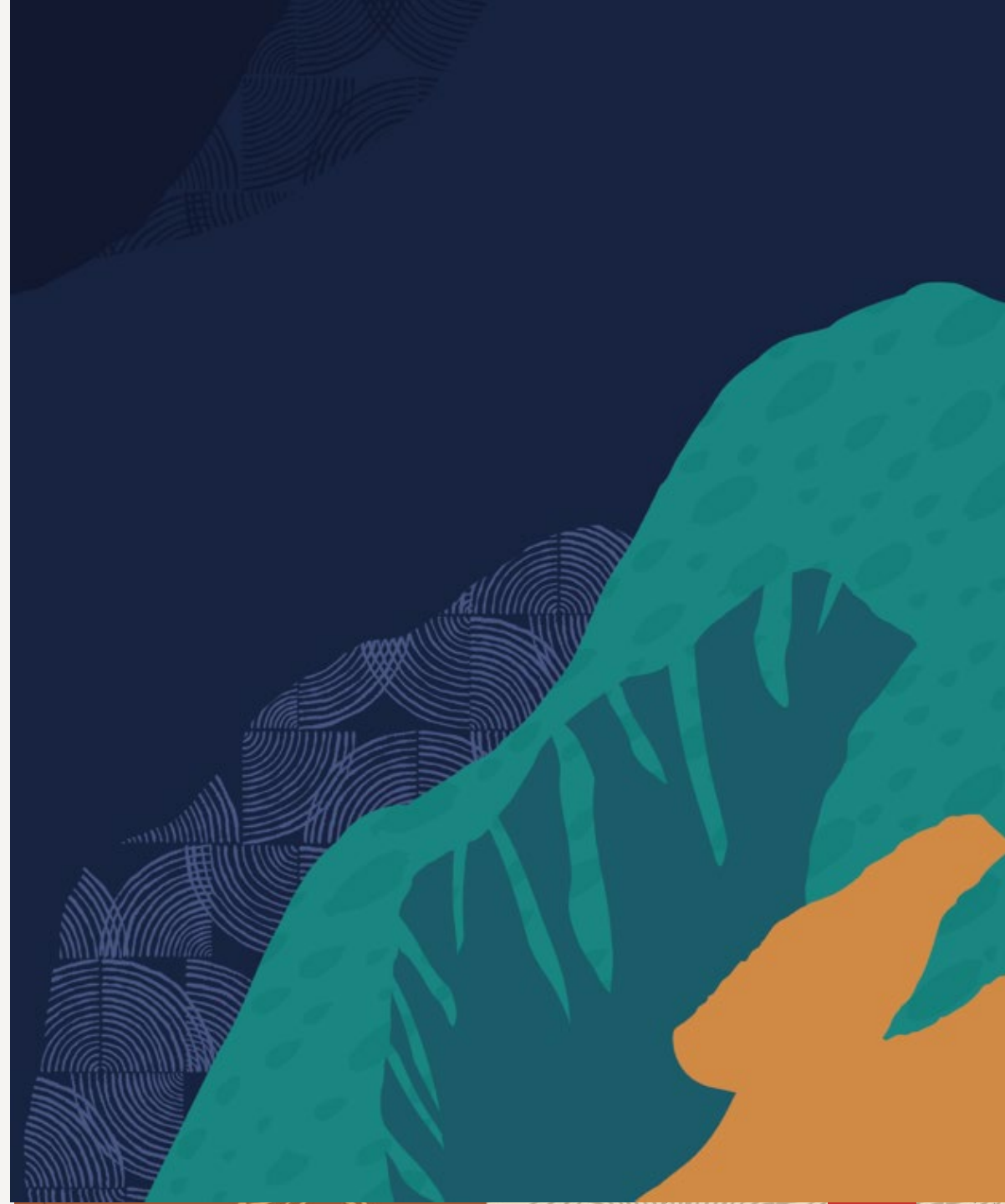


**Complete
Control**

Enterprise security tomorrow Build with Oracle



Thank you



The image features the Oracle logo in a bold, red, sans-serif font, centered horizontally. The background is a stylized, layered landscape of rolling hills in various shades of light gray and white. In the lower right quadrant, there are several concentric circles drawn with a dotted line pattern. The overall aesthetic is clean and modern.

ORACLE