

DOUG Training Day - 2025

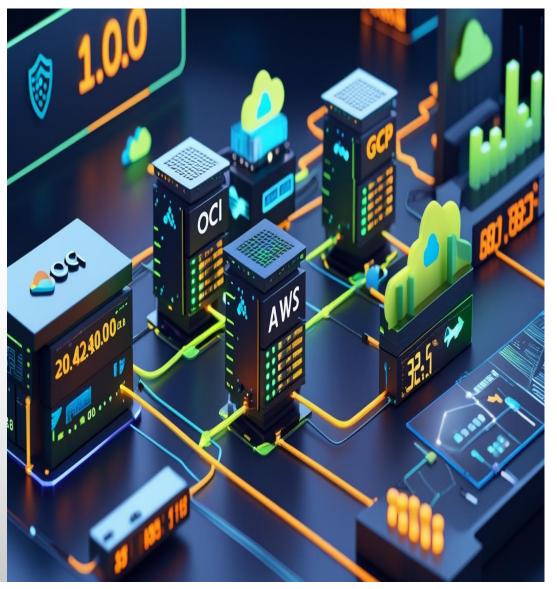
Multi-Cloud Governance

ACHIEVING CONTROL WITHOUT LOSING
AGILITY

Presented By:
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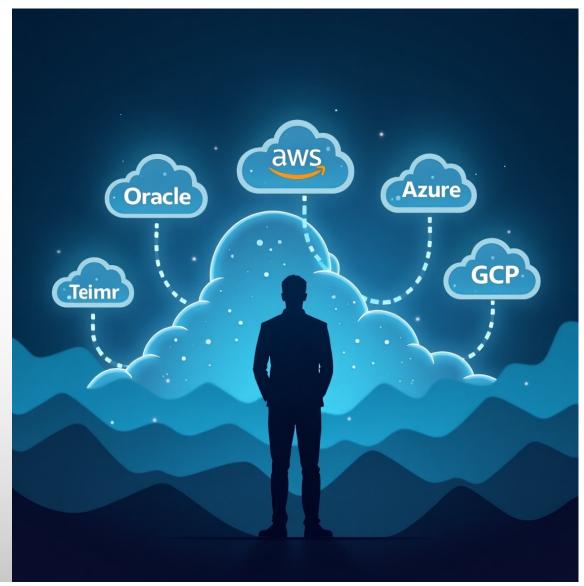
- Oracle ACE Associate
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Why Multicloud Governance Matters?

- Many enterprises are now moving towards using two or more clouds providers
- Drivers:
 - Cost optimization
 - Avoiding vendor lock-in
 - Regulatory compliance
 - Service specialization etc.
- Multicloud ≠ chaos but without governance, it can be!





The Multicloud

Landscape –

How Gaps Arise?





How do we solve it?

- CSCC
- Consistency in Security, Compliance, and Cost Management across different cloud platforms by implementing a single set of policies, procedures, and controls. Aka Multicloud governance



- Distributed model
- Business units operate independently
- Fast but inconsistent, risks sprawl
- Centralized model
- One platform team controls all clouds
- Strong governance, but can bottleneck
- Federated model (target)
- Centrally defined guardrails
- Decentralized execution & innovation

Governance Architecture Overview

- THREE-LAYER ARCHITECTURE:
- ENTERPRISE LAYER:
 - POLICIES, STANDARDS, REGULATORY REQUIREMENTS
- SHARED SERVICES LAYER:
 - IDENTITY FEDERATION
 - LOGGING & MONITORING
 - FINOPS DASHBOARDS
 - AUTOMATION & IAC
- CLOUD EXECUTION LAYER:
 - NATIVE GUARDRAILS (CLOUD GUARD, CONFIG, AZURE POLICY)
 - LANDING ZONES, COMPARTMENTS, ACCOUNTS, SUBSCRIPTIONS
- THIS CREATES CONSISTENT CONTROL ACROSS ALL CLOUDS.



Pillars of Cloud Governance

•Use centralized IdP (Azure AD, Okta, Oracle IDCS, Google IdP). • Enforce least privilege via federation across clouds. Cost & Financial Governance • Establish tagging and chargeback standards. •Use FinOps principles — budgets, alerts, right-sizing. Security & Compliance Governance •CIS benchmarks, NIST, ISO27001. • Automate compliance checks (Oracle Cloud Guard, AWS Config, Azure Policy). Resource & Policy Governance • Define naming conventions and lifecycle management. •Use IaC (Terraform) with policy-as-code enforcement (OPA, Sentinel). Data Governance • Data classification, residency, encryption, and sovereignty controls. • Data catalogs and lineage across platforms. • Centralized monitoring (OCI Observability, Azure Monitor, CloudWatch, Stackdriver). $\bullet\,\mathsf{SRE}$ model for unified incident management.



Designing a
Multicloud
Governance Model

DEFINE ENTERPRISE GOVERNANCE OBJECTIVES

CREATE A CLOUD COE

ADOPT A POLICY AS CODE APPROACH

IMPLEMENT AUTOMATION
GUARDRAILS

INTEGRATE GOVERNANCE INTO CI/CD PIPELINES



Organizational Alignment & CCoE

- Cloud Center of Excellence (CCoE) responsibilities
- Define governance frameworks & standards
- Provide reusable templates, iac modules & patterns
- Approve cloud landing zones
- Drive alignment between security, finops & devops
- Manage training & cloud competency development



Policy-as-Code & Automated Guardrails

- •Governance defined as code → versioned, testable, enforceable
- •Tools: OPA, Terraform Sentinel, Azure Policy, OCI Cloud Guard
- •Enforce:
- Mandatory tags
- Encryption at rest
- Network restrictions
- •Resource naming conventions
- Prevent non-compliant deployments



Governance Maturity Model

Level	Name	Characteristics	Typical State	Key Focus to Advance
1. Ad Hoc	Cloud Chaos	No central policy; each team deploys freely; minimal visibility or cost tracking.	Individual business units using multiple clouds independently.	Establish visibility — implement centralized inventory and tagging.
2. Reactive	Isolated Controls	Some policies exist but are inconsistent across providers; compliance is manual.	Security or cost overruns trigger audits or reviews.	Standardize identity and cost tagging; document baseline governance framework.
3. Defined	Structured Governance	Centralized CCoE defines policies; IAM federation and cost policies established; governance manual exists.	Enterprise has repeatable patterns and partial automation.	Automate enforcement using policy-as-code and CI/CD integration.
4. Automated	Integrated Guardrails	Automated guardrails and continuous compliance across clouds; unified identity, FinOps, and SecOps integration.	Governance as code in production; dashboards for compliance posture.	Expand to predictive governance using Al/ML-based insights.
5. Optimized	Self-Governing Cloud Ecosystem	Continuous feedback loops, Al-driven compliance, cross-cloud orchestration, and automated remediation.	Governance is proactive and self-tuning.	Continuous improvement and benchmarking against industry standards (CIS, NIST).



OCI Cloudguard in Multicloud Governance



Cloud Guard provides continuous Security Posture Management (CSPM) for OCI workloads



Integrates detection + remediation with automated guardrails



Works alongside AWS Config, Azure Policy, and GCP Organization Policies



Central role in a multicloud governance architecture:



Detect misconfigurations



Respond with automated actions



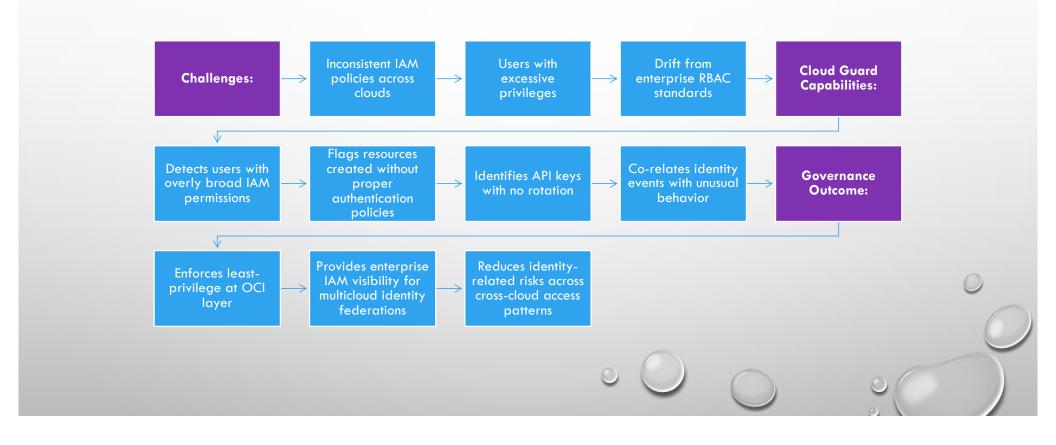
Provide unified reporting for cross-cloud risk posture



Supports governance across shared services, networking, identity, storage, and database layers



OCI Cloudguard Sample Use Case





BEST PRACTICES & KEY TAKEAWAYS

- •Governance must be built in, not bolted on.
- •Use policy-as-code and automation to scale control.
- •Standardize identity and tagging across all clouds.
- •FinOps and SecOps must collaborate.
- •Establish a Cloud Center of Excellence (CCoE) to own governance.



Multicloud Governance Checklist (Template)

Governance Domain	Key Activity	Status
Identity & Access	☐ Centralized IdP across clouds (IDCS, Azure AD, Okta)	
	☐ Role-based access model (least privilege enforced)	
	☐ MFA and conditional access policies	
Financial (FinOps)	☐ Standardized tagging schema across all clouds	
	☐ Budget thresholds and alerts configured	
	☐ Chargeback/showback model implemented	
Security & Compliance	☐ CIS/NIST baseline mapped to each provider	
	☐ Continuous compliance scanning enabled (Cloud Guard / AWS Config / Azure Policy)	
	☐ Automated remediation for policy violations	
Resource & Policy Governance	☐ Terraform or IaC templates standardized	
	☐ Policy-as-code implemented (Sentinel / OPA)	
	☐ Naming convention and lifecycle rules enforced	
Data Governance	☐ Data classification and residency mapping complete	
	☐ Encryption policies enforced via centralized KMS	
Operations & Monitoring	☐ Centralized observability (logs, metrics, alerts)	
	☐ Unified incident response process across clouds	
Organizational	☐ Cloud Center of Excellence (CCoE) established	
	☐ Governance KPIs and reporting cadence defined	



Thank You!!

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