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# Managing Configuration Compliance in and across the Clouds

CON9750

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## Session : CON9750

### **Title :** Managing Configuration Compliance in and Across the Clouds

**Description :** Did you think that “hybrid cloud” meant that the phone call from the security officer is going to disappear? You’re mistaken. “Hybrid cloud” implies increased scrutiny from security and compliance officers—more than ever before. Whether the instances are hosted on Oracle Cloud or on premises, Oracle Enterprise Manager offers a single pane of glass for service-level agreements (SLAs) and compliance management, providing an aggregated view for administrators, CIOs, and compliance officers. It ships with thousands of rules that can be mapped to PCI, STIG, or other compliance frameworks. This session recaps those powerful capabilities and drills down into their applicability to hybrid clouds.

## Safe Harbor Statement

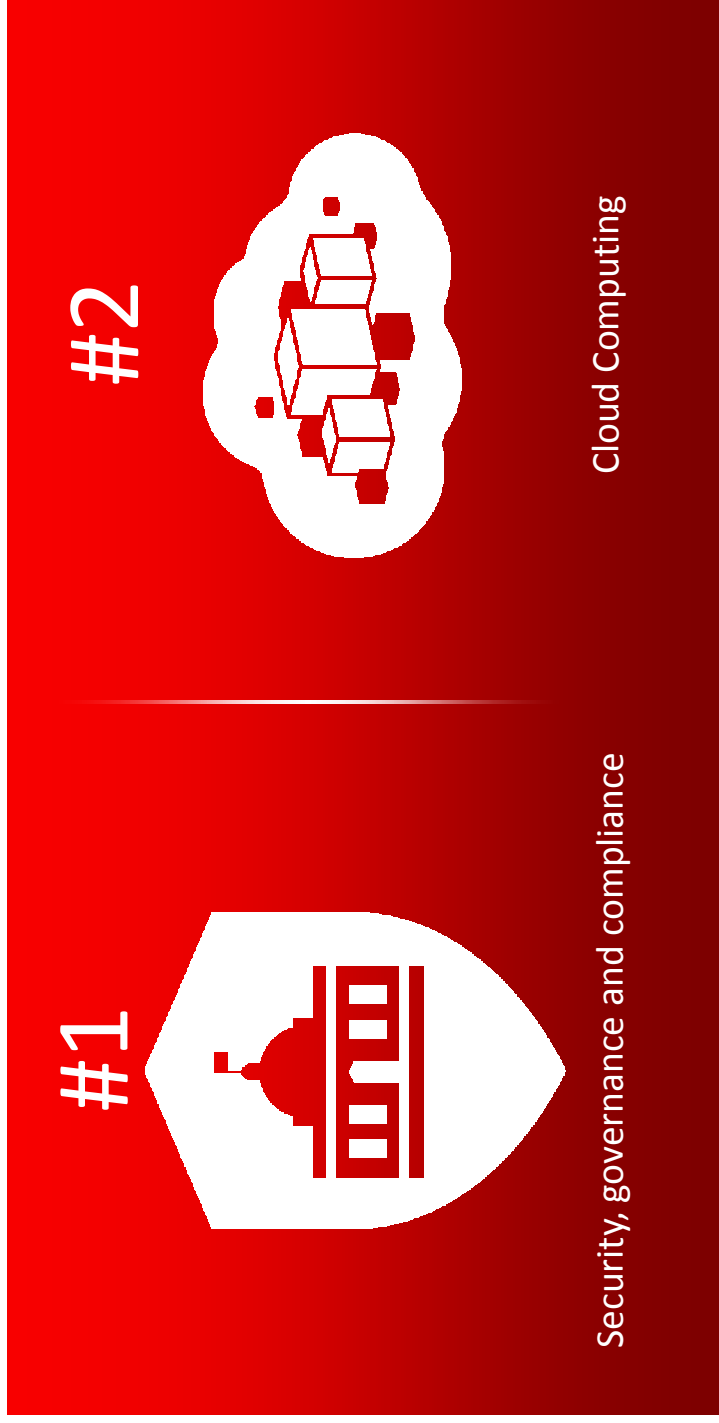
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development,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

# Program Agenda

- 1 Trends impacting Database Administration
- 2 Compliance Framework
- 3 Customer Use Case Study : Paypal ( Patching Compliance)
- 4 Drift Management and Patch Standard Demo
- 5 Conclusion

# Competing Priorities at Odds

## Trends Impacting Database Administration



# Oracle Enterprise Manager – Compliance Across Clouds

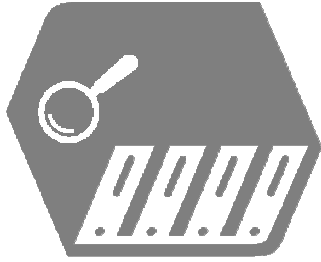
- Manage configuration compliance across private and public cloud via single pane of glass
- Simple, Secure Deployment
- Leverage existing IT investment

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ENTERPRISE MANAGER **13<sup>c</sup>**



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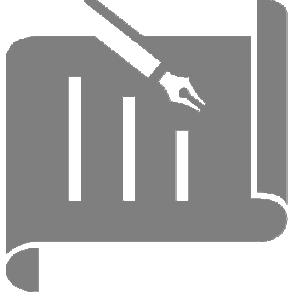
# Enterprise Manager Compliance Framework



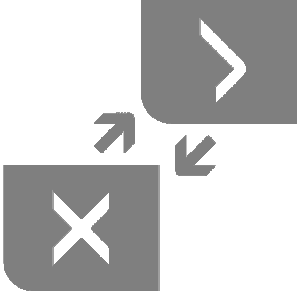
Continuous Drift and  
Configuration Auditing



Cloud Scale



Ready to use  
Standards

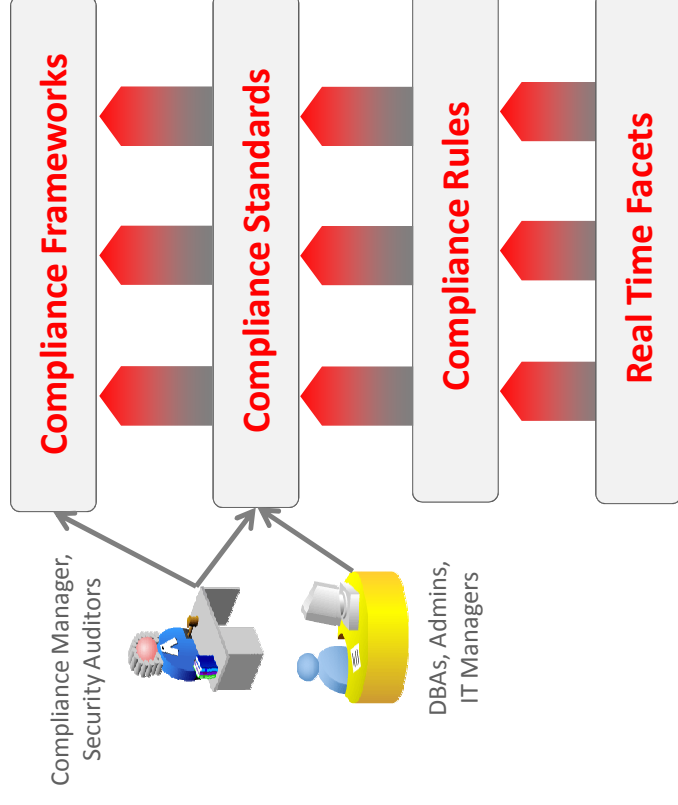


Automated  
Remediation




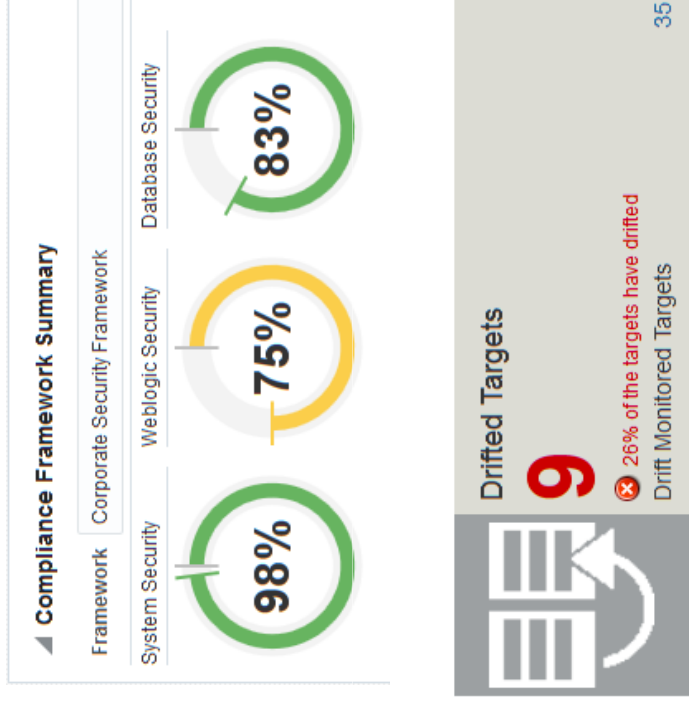
# Compliance Framework – Quick Recap

- Compliance Framework
  - Group Compliance Standards different Target Types
- Compliance Standard
  - Group of Compliance Rules
  - Specific to Single Target Type
- Compliance Rule
  - Discreet Check or Test
  - Specific to Target Type
- Real Time Facet
  - Group of related entities
  - Files, Processes or Users

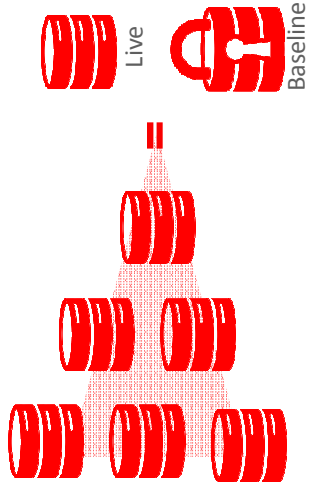


# Continuous Drift and Configuration Auditing

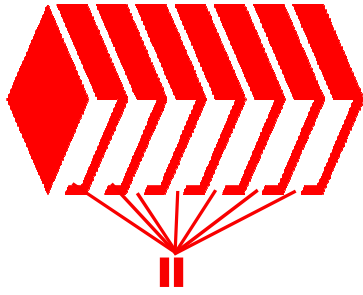
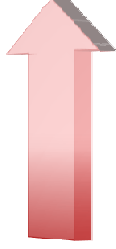
- Configuration Audit
  - Validate conformance to standards or benchmarks using discrete logic
  - Best for Industry and internal standards (STIG,CIS)
- Continuous Drift 
  - Validate conformance to standards using Reference configuration
  - Best for critical and rapidly changing configuration settings



# Drift and Consistency Management



- Drift Management – INTER Target
  - Large scale and dynamic INTER target configuration difference tracking
  - Source can be live or saved baseline



- Consistency Management – INTRA Target
  - Auto comparison of member targets
  - System targets only ( Exadata, Cluster DB, etc )



Oracle Engineered System

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# Configuration & Compliance Management

## Key Features

### Setup and Maintenance

- Comparison Templates – Ignore expected differences
- Group Association 
  - Current and future members
  - Supported – Admin, Dynamic, Static
- Test Mode 
  - Test Definition before mass deploy
  - Option for new group members can be tested before results added

### Operational

- Summary Dashboards 
  - Compliance and Drift
- Side by Side Results 
  - Compare CIs across New Targets in single view
- Incident Management Integration
  - Standard ruleset notification methodology
- Corrective Actions – Manual/Auto

# Drift and Consistency Management

## Key Customer Use Cases

### Drift

- **DB Initialization Parameters**
  - Saved DB Reference to 1200+ DBs
  - Compare 50 DB Initialization Parameters Only
- **Application Patches**
  - Live Fusion App Instance Ref to 1000+
  - Compare ONLY Patches
- **Host Configuration**
  - Live Linux Host Reference to 500+ Hosts
  - Compare Extended configuration collections

### Consistency

- **RAC DB Instances**
  - Consistency of instances WITHIN 500+ Cluster DBs
- **Data Guard Standbys**
  - Consistency of Primary DB with it's DG Standby Databases
  - 100s of DB systems
- **Exadata Storage Cells**
  - Consistency of Storage Cells within Exadata

# Enterprise Manager Compliance Framework

## Cloud Scale

- Use same standards within and across cloud targets
- Efficient re-evaluation on change reduces network and host resource consumption.
- Dynamic group integration enables layered standard auditing
- Efficient Agent-Side rules control repository growth at scale



# Ready to Use Compliance Content

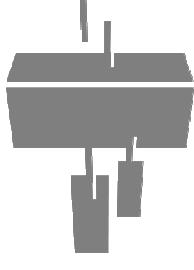
- 100s of Oracle Best Practice and Industry Standards
- 1000s of checks in Compliance Library
- Manual Rules for non-automatable checks
  - “Ensure Backup policy in place and documented”
- BI Publisher Reports
- Customizable to meet Internal best practices
  1. Leverage Oracle provided rules matching your own
  2. Tailor Oracle provided rules with known exceptions
  3. Build custom rules to exactly match requirement



NEW



NEW



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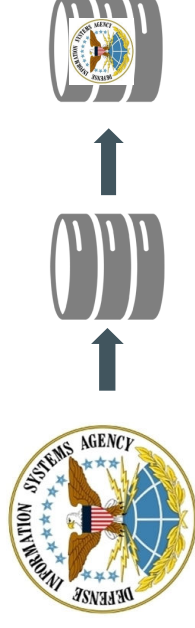
# Automated Remediation

- Proactively enforce configuration standard
- Initiate remediation Manually or Automatically
- Supports Oracle provided and custom standards
- Reuse corrective actions for multiple checks using context parameters



## Key Use Case & Example

- Automatically “harden” any database, middleware or host to Oracle Best practice, STIG or internal standard
- Example –
  - Rule : Well Known Accounts
  - Corrective Action – Lock and Expire User





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# Enterprise Manager 13c Drift Demo and Patch Standard

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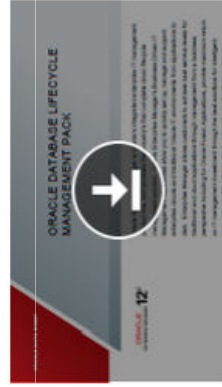
# Enterprise Manager – Single Compliance Solution for Cloud For Automated Security Compliance Auditing

- ✓ Highly automated
- ✓ Continuous auditing
- ✓ Proactively alert on findings and issues
- ✓ Automated remediation or guidance
- ✓ Robust and flexible reporting

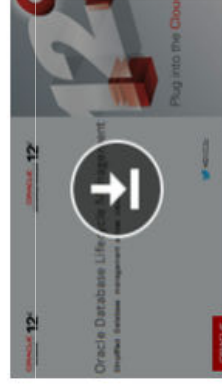
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Enterprise Manager is the industry's first complete database lifecycle management solution offering powerful capabilities to aid consolidation, enforce standardization and deploy automation.



Data Sheet: Database Lifecycle Management Pack



Presentation : Simplified Database Management Across Clouds

# Learn More

On Oracle Technology Network  
Enterprise Manager-Lifecycle Management Page



Learn more about Configuration and Compliance Management by exploring demonstrations, videos, presentations and more!

## Demonstrations and Videos

- Introduction to Configuration Management.
- Introduction to Compliance Management.
- Using Configuration Search
- Managing Configuration Drift with System Compare
- Using the STIG Compliance Standard
- Using Agent-Side Compliance Rules
- Real-Time Monitoring and Rule-Based Compliance Overview

## Presentations

- Compliance Management Overview
- Custom Compliance on Default Data
- Custom Compliance using Command Configuration Extension
- Custom Compliance using SQL Configuration Extension

# Enterprise Manager Labs

**Location:** Hotel Nikko—Carmel (3rd Floor) – unless noted

	Day	Time
Oracle Systems and Virtualization Management with Oracle Enterprise Manager [HOL10466]	Monday	11:00 AM
Consolidate and Standardize Database Resources with Lifecycle and Private Cloud Management [HOL10468]	Monday Wednesday	2:00 PM 4:15 PM
Hybrid Cloud Management: Complete Management of On-Premises and Public Services [HOL10465]	Tuesday Wednesday	10:15 AM 11:45 AM
Practical Overview of the Latest Features of Oracle Enterprise Manager for MySQL [HOL4522] * *Location: Hotel Nikko—Peninsula (25th Floor)	Tuesday	10:15 AM
Maximizing Oracle Database 12c Performance with Oracle Enterprise Manager [HOL10442]	Tuesday Tuesday	11:45 AM 5:30 PM
Managing Oracle Fusion Middleware with the New Oracle Enterprise Manager [HOL10453]	Wednesday Thursday	10:15 AM 12:30 PM
Consolidate and Standardize Database Resources with Lifecycle and Private Cloud Management [HOL10468]	Monday Wednesday	2:00 PM 4:15 PM

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