

**ORACLE WHITEPAPER  
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# ORACLE CONFIGURATION AND COMPLIANCE CLOUD SERVICE

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# Oracle Configuration and Compliance Cloud Service



Oracle Configuration and Compliance Cloud Service is a software-as-a-service solution that enables the IT and Business Compliance function to assess and score industry standard benchmarks, REST-based cloud resources and your own custom rules. With the Oracle Configuration and Compliance Cloud Service you can score, assign and remediate compliance violations both on premise and in the cloud.

### KEY BUSINESS FEATURES

- Evaluate standards based compliance benchmarks
- Assess multiple on-premise, cloud or hybrid cloud datacenter infrastructures
- Execute and score internal compliance standards mapping custom scripts to violation observations
- Take action on prioritized violation work lists decorated with run-book remediation instructions
- Manage Compliance Scores as Business Driven Service Levels

### Enterprise Compliance Visibility: On Premise & In The Cloud

Organizations require comprehensive, timely, accurate and actionable compliance data across all environments ranging from production, to development and test. These requirements have never been more important in today's highly virtualized environments where a systems lifecycle may last anywhere from hours to years. Furthermore, the rapid adoption of hybrid cloud-based services has created additional attack vectors, challenging IT's ability to provide both timely and comprehensive enterprise compliance attestation. Oracle Configuration and Compliance Cloud Service uniquely addresses these challenges by:

1. Executing compliance standards rapidly at scale
2. Assessing REST-based Cloud resource configurations
3. Allowing for the extension of a compliance assessment by executing and scoring custom scripts

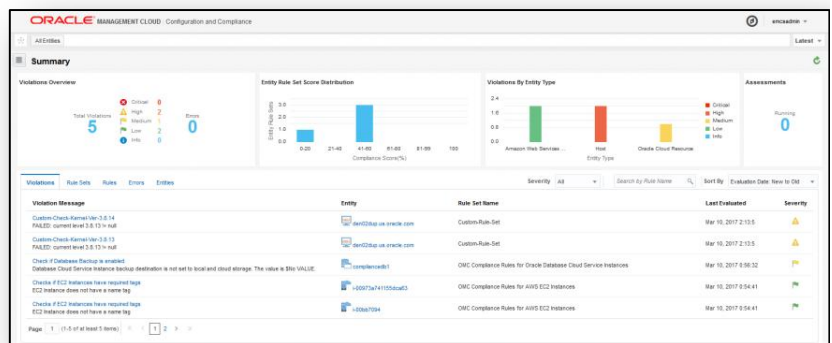


Figure 1. Comprehensive Enterprise Compliance visibility



#### KEY FEATURES

- Application and Cloud Aware
- Execute out-of-the box Cloud Resource ( REST-based) compliance rules
- Dynamic runtime Cloud asset discovery eliminates manual target reconciliation for reoccurring evaluations
- Violation Alerting and Ticketing

## Heterogeneous Cloud Support

While virtualized on-premise and hybrid cloud environments have increased asset utilization, at the same time these technologies have created a unique set of IT compliance attestation challenges. Newly provisioned infrastructure software stacks pose an un-known compliance risk until they are assessed. Highly virtualized environments compound this problem when an assets' lifespan leads them to be created and destroyed without evaluation. Un-assessed assets result in incomplete and inaccurate enterprise wide-compliance scores and risk assessments, ultimately leading to a false sense of security. Infrastructure-As-A-Service Hybrid cloud environments further complicate this problem by creating new attack vectors into on-premise networks. The Oracle Configuration and Compliance Cloud Service addresses these challenges by allowing for the:

1. Performance of REST-based Cloud Resource assessments, for example: validating best-practice network configuration and restriction
2. Dynamic assessment of cloud-based assets at runtime, so no manual reconciliation needs to take place
3. Allowing for the rapid assessment of transient virtualized environments
4. Aggregation of compliance scores across the entire enterprise from multiple datacenters: on-premise, cloud and network-disconnected stand-alone environments.

Oracle Configuration and Compliance Cloud Service facilitates an unprecedented level of visibility addressing today's rapidly evolving compliance challenges. Multi-datacenter, on-premise, hybrid-cloud environments have all benefited from the Oracle Configuration and Compliance Cloud Service, as it's highly distributed, comprehensive, and timely assessments provide more accurate and actionable representation of risk and compliance. The Oracle Configuration and Compliance Cloud Service currently provides out-of-the-box rules for Oracle Cloud and Amazon Web Services (AWS).

## Standards Based, Open and Extensible

Compliance benchmarks standards such as Secure Technical Implementation Guides (STIG) can provide the foundation for compliance standards such as the Federal Information Security Management Act (FISMA). The open and extensible nature of Oracle Configuration and Compliance Cloud Service allows extending recognized benchmarks, facilitating the last mile of requirements necessary to adhere to industry compliance standards.

The Oracle Configuration and Compliance Cloud Service allows for:

- The execution of custom scripts or process where return codes can be mapped to a pass or fail rule-violation observations
- The decoration of a custom script with severity, violation context and run-book remediation instructions
- The uploading , aggregation and scoring of industry standard results

### ORACLE MANAGEMENT CLOUD

- Oracle Configuration and Compliance Cloud Service is part of Oracle Management Cloud
- Oracle Management Cloud (OMC) is a suite of next-generation, integrated monitoring, management and analytics solutions delivered as a service on Oracle Cloud. It is designed for today's heterogeneous environments across on-premises, Oracle Cloud and third-party cloud services. OMC is built on a horizontally scalable big data platform with high throughput data processing for providing real-time analysis and deep insights across technical and business events.
- Data in OMC is automatically analyzed using machine learning and is correlated across all OMC services, thereby eliminating multiple information silos across end-user and infrastructure data, enabling faster trouble-shooting and providing the ability to run IT like a business.
- OMC eliminates the human effort associated with traditional management toolsets while achieving better performance. Autonomously monitor, detect, triage and proactively resolve issues across hybrid cloud environments, including heterogeneous technology on-premises, in Oracle Cloud and in third-party clouds.

### TOP THREE CAPABILITIES

- Comprehensive, intelligent management platform
- Zero-effort operational insights
- Automated preventative and corrective actions

Exit Codes Mapping :		Standard Output Mapping :	
Success/Pass	100, nonemptyOutput, emptyOutput	Pass	*SUCCESSFUL*
Violation	102, 1	Violation	*FAILED.*
Error	101, nonzeroExitCode	Error	*ERROR.*

Optional Rule Metadata	
Entity Subtype	Script Parameters
Entity Version	Reference URL
Description	Rationale
Remedy	<input checked="" type="checkbox"/>

Figure 2 Custom Rule run-book remediation instructions and metadata

## Application Awareness

Applications are at the core of businesses today. Whether in customer facing revenue function or taking cost out of self-service end-user operations, applications provide a critical revenue conduit through the organization. Delivering timely application compliance assessments requires performing the evaluation on a single compute system or over a multi-tier cluster. Typically a heterogeneous collection of operating systems, application servers, and databases must be evaluated in within a narrow time-window in order for the compliance score to be comprehensive, repeatable and comparable over time. The Oracle Configuration and Compliance Cloud Service allows you to define this varied technology stack, associate it with the relevant benchmarks, custom rules, cloud resource evaluations and schedule the resulting Assessment Template for on-demand or reoccurring evaluation. For example, an application running on an open-source stack may be running Tomcat for the web-tier, MySQL the data-tier on Red Hat or Centos Linux. Alternatively, Weblogic, Oracle Database 12c and SPARK Solaris may be powering a packaged or custom application. Any combination of targets in the above two use-cases can be combined into a single Assessment Template and evaluated for compliance. This reoccurring evaluation provides the basis for score comparisons over time, giving you the ability to determine if your compliance posture is improving or deteriorating subsequently violating a service level agreement. Oracle Configuration and Compliance Cloud Service's application awareness dramatically simplifies the process for providing compliance score insight for your most valuable multi-tiered corporate applications containing for example: sales, financial, human resources or customer data.

## Comprehensive, Timely and Actionable Compliance Results

Oracle Configuration and Compliance Cloud Service is a cloud-first SaaS solution designed for rapid compliance evaluation on-premise, in the cloud, or hybrid enterprise topologies with highly virtualized environments. The Oracle Configuration and Compliance Cloud service automates the assessment, scoring and reporting of your compliance posture so that, upon a service level regression, you can shift focus to automating and executing remediation at scale. Compliance officers benefit from rapid enterprise-wide assessment snapshots providing compliance score trending data. IT administrators benefit from prioritized compliance violation work lists, providing a roadmap for the most effective use of time remediating the most severe violations impacting the compliance score. As a consequence, the Oracle Configuration and Compliance Cloud Service provides the most comprehensive, timely and actionable compliance results for all organizational stakeholders.

## An Integrated Part of Oracle's Integrated Identity SOC Solution

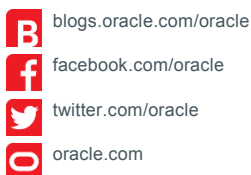
Oracle Management Cloud is a key part of Oracle's Identity Security Operations Center (SOC) solution, which provides a complete suite of identity and context-aware security intelligence and automation. The integrated Identity SOC technologies include Security Incident and Event Management (SIEM), User & Entity Behavior Analytics (UEBA), Configuration & Compliance Management, Identity Management (IDM), and Cloud Access Security Broker (CASB) -- all delivered as cloud services built on the power, reliability and security of the Oracle Cloud.



### CONTACT US

For more information about Oracle Configuration and Compliance Cloud Service, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.

### CONNECT WITH US



### Integrated Cloud Applications & Platform Services

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Das Karlsruher Systemhaus HUNKLER wurde 1988 erster offizieller Partner von Oracle in Deutschland. Ein Team von rund 20 Mitarbeitern unterstützt Kunden aus Industrie, öffentlicher Verwaltung, Gesundheits- und Finanzwesen mit Beratung, Lösungsentwicklung und Managed Services.

Im Fokus von HUNKLER stehen leistungsfähige, wirtschaftliche Infrastrukturen für Oracle-datenbanken mit den Schwerpunkten Hochverfügbarkeit, Ausfallsicherheit und Zero Downtime Migration. Die integrierten Komplettlösungen der Produktfamilie Oracle Engineered Systems sowie der Datenbank-/Anwendungsbetrieb in der Oracle Cloud sind weitere Themenfelder, die das Unternehmen umfassend abdeckt.

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