

ORACLE WHITEPAPER SEPTEMBER 2018

# ORACLE LOG ANALYTICS CLOUD SERVICE



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# **Oracle Log Analytics Cloud Service**

CRACLE LOG ANALYTICS CLOUD SERVICE

#### KEY BUSINESS BENEFITS

- Detect problems early
- · Troubleshoot problems faster
- Lower investment, easier learning curve
- Work collaboratively
- Build executive Dashboards
- · Make better decisions
- Insight across health and availability of applications

#### **KEY FEATURES**

- Topology-aware log exploration
- Machine learning
- Dashboards
- Light-touch log aggregation
- APM integration
- · Extreme performance and security

Oracle Log Analytics Cloud Service is a software-as-a-service solution that monitors, aggregates, indexes, and analyzes all log data from your applications and infrastructure (running on-premises or in the cloud). It enables users to search, explore, and correlate this data to troubleshoot problems faster and derive operational insight to make better decisions.

# Light-Touch Log Aggregation

Oracle Log Analytics can monitor, aggregate, index, and analyze log data from a wide variety of Oracle and non-Oracle log sources. Simple configuration of data collectors can rapidly enable log data monitoring from ANY log file (including Syslog sources) and securely transport this data to the Oracle Log Analytics service. The data collectors can significantly compress the log data (10:1) and transport the compressed data over a secure communication protocol (HTTPS).

# **Topology-Aware Log Exploration**

Troubleshooting problems in today's distributed applications (that now span enterprise data centers, private clouds, and public clouds) has become increasingly complex. While developers, IT Ops, and DevOps teams rely heavily on application and infrastructure logs for troubleshooting, modern applications are elastic and have a dynamic topology. Oracle Log Analytics understands and uses the current application topology to provide an accurate picture of which platform and infrastructure components make up your application and then it enables you to explore logs relevant to the application at the time the problem occurred. Exploring logs relevant to the application makes the troubleshooting process more accurate as it enables users to focus on the right log data in the context of the problem.



#### ORACLE DATA SHEET

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Figure 1. Topology-aware log exploration



Figure 2. Topology-aware log exploration

# Machine Learning Based Pattern And Anomaly Detection

IT Operations and DevOps organizations are inundated with the volume of log data that needs to be analyzed to troubleshoot problems. This is exacerbated by the fact that modern applications are developed and deployed in an agile manner making it difficult to troubleshoot problems by relying purely on domain knowledge and rules. Oracle Log Analytics relies on machine learning to rapidly identify "Interesting" log entries in your log data. These could include patterns or anomalies that exist in your log data. Working with patterns and anomalies makes log exploration more efficient and can help get to the root cause of the problem faster.

#### ORACLE DATA SHEET

#### ORACLE MANAGEMENT CLOUD

- Oracle Log Analytics 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 thirdparty 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

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Figure 4. Machine Learning based pattern and anomaly detection

## Dashboards

Dashboards provide operational insight for IT and Business. Stakeholders can get visibility into the health and availability of applications and monitor critical events from one central place using out-of-box and custom dashboards. The rich set of predefined widgets, charts and controls enable extraction of critical operational information from logs and are used to build dashboards that expose critical business metrics. When problems occur, users can drill into the Log Visual Analyzer for troubleshooting. The big-data platform common to all Oracle Management Cloud services enables aggregation of widgets from across the services to get a 360-degree view of end-user experience (from APM), events, critical errors, business metrics (from Logs), and resource/capacity availability (from IT Analytics) across all your applications and services.

#### ORACLE DATA SHEET



Figure 5. Analyze, build and share compelling dashboards

# **Oracle Management Cloud Service Integration**

Troubleshooting modern web applications requires looking at a variety of data including end-user experience, transaction performance, workload and resource performance metrics and logs from across all software and hardware components. Users can analyze and correlate this wide variety of data by seamlessly navigating from the APM service and the application issue they are working on into Oracle Log Analytics and explore the logs related to the application server, database, and hosts in the context of the workload. Expanding troubleshooting efforts from the APM view into the application and infrastructure logs in the application context and request flows helps accelerate the problem troubleshooting process. Users can drill-down into log data from APM, IM or Security Monitoring services in troubleshooting use cases to find the possible root cause or understand context around issues



Figure 6. Unified platform. Troubleshoot from APM to LA within the context

### ÜBER HUNKLER

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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