

ORACLE

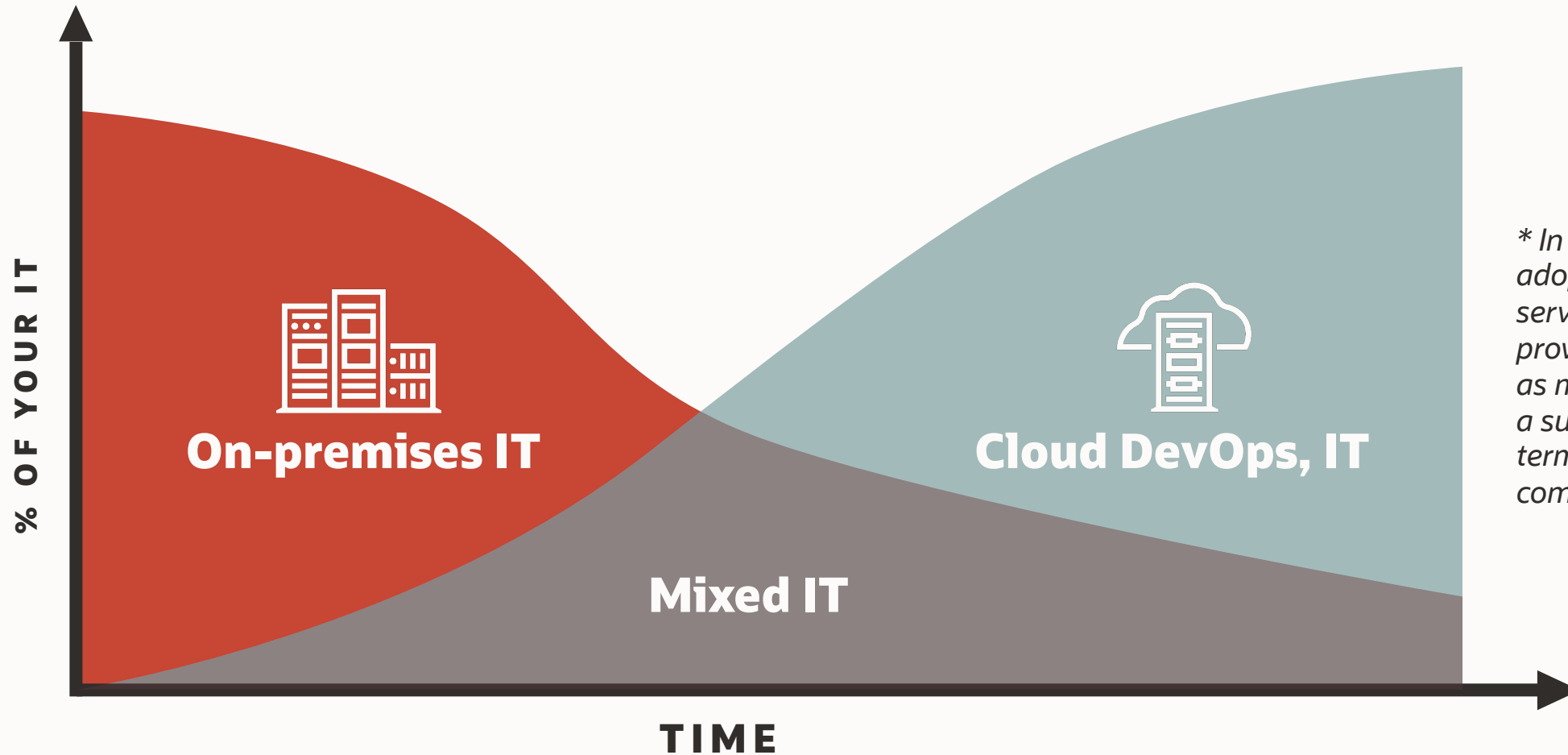


# Observability and Management

*Optimize hybrid multicloud visibility and rapid performance insights for any technology, deployed anywhere.*

# Most enterprises have mixed environments

On-premises, hybrid, multicloud



*\* In fact, most enterprise adopters of public cloud services use multiple providers. This is known as multicloud computing, a subset of the broader term hybrid cloud computing.*

\* source public post by Gartner <https://www.gartner.com/smarterwithgartner/why-organizations-choose-a-multicloud-strategy>



# Observability & Management Challenges



Support for different stacks



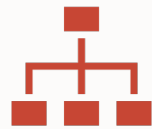
Too many tools, different for cloud and on-premises



Too much data



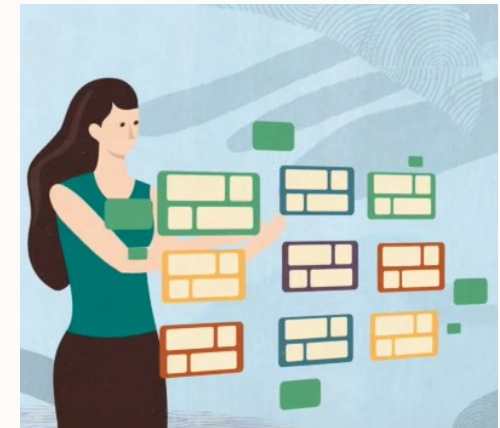
Building monitoring, integration, automation is difficult



Analysis is manual, fragmented, specialized



Lack of insight



**Trying to bring everything together is hard, time consuming and costly**

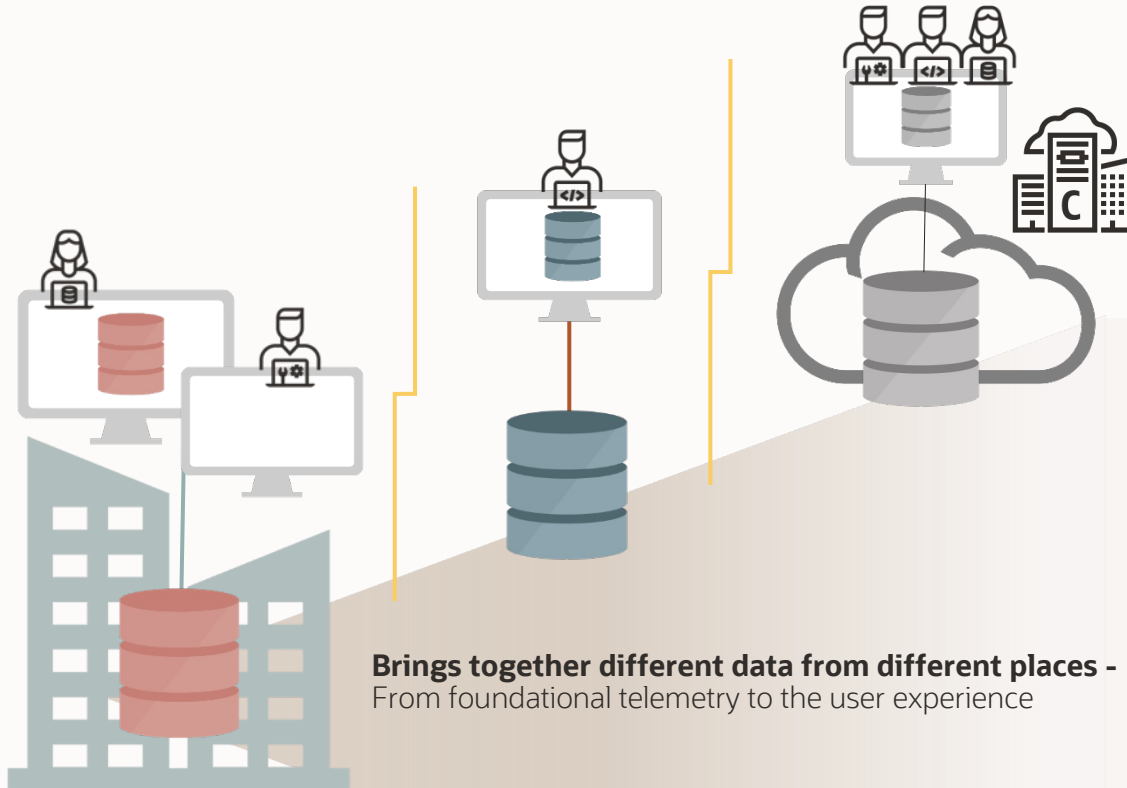


# Oracle Observability & Management Platform

Microsoft Azure



ORACLE



**Brings together different data from different places -**  
From foundational telemetry to the user experience

**Cloud-native platform** brings together all telemetry – traces, metrics, logs – for analysis, visualization, and advisement

**Hybrid and multicloud support** – across on-premises, Oracle Cloud and multicloud

**Extensible** – based on open standards supporting 3<sup>rd</sup>-party technology collection

**Comprehensive stack visibility** across the enterprise – individual component, across complex application topologies, down into SQL

**ML algorithms and models** eliminate noise, detect problems, identify the root cause and help ensure availability and performance



# O&M Platform Overview

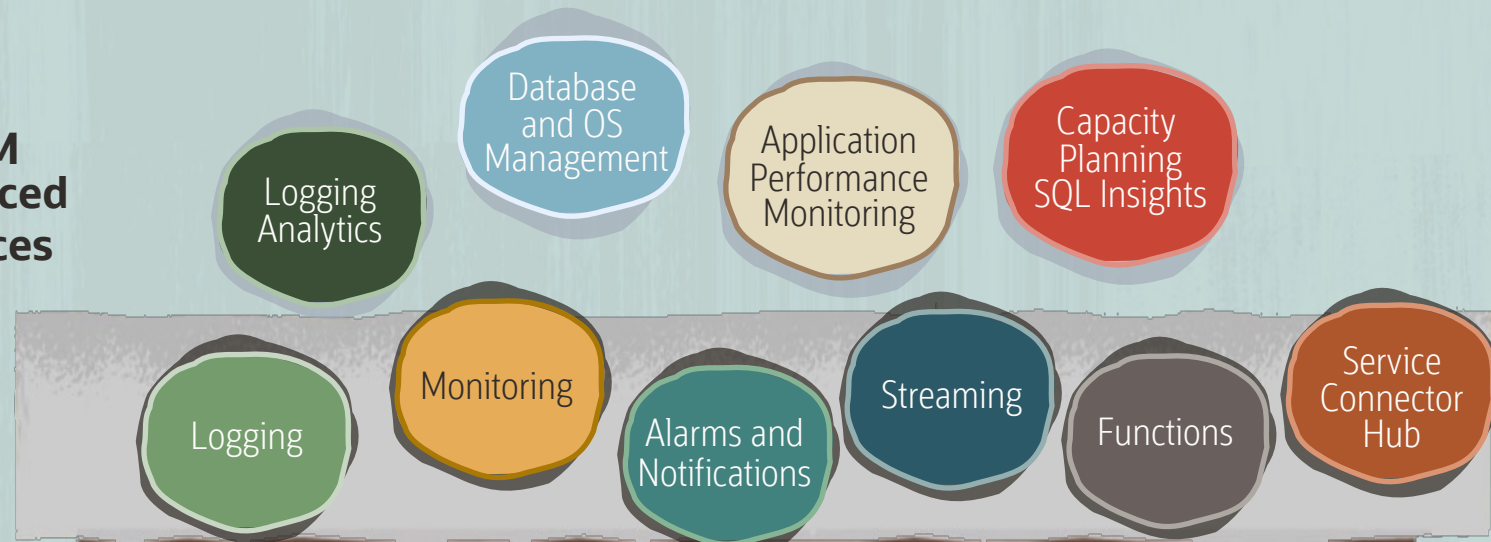
Complete choice of solutions to observe and manage your stack together



**O&M  
Advanced  
Services**

**O&M  
Foundational  
Services**

**Oracle Cloud  
Infrastructure**



Integrated foundational and advanced services  
that work together to accomplish more faster



Compute



Storage



Network



Security

# Monitoring Key Capabilities

## Out-of-the-box metrics

- Measure resource utilization with fine grained out-of-the-box metrics for all OCI resources
- Real-time aggregation engine for flexible querying around time intervals most relevant for you

## Custom metrics

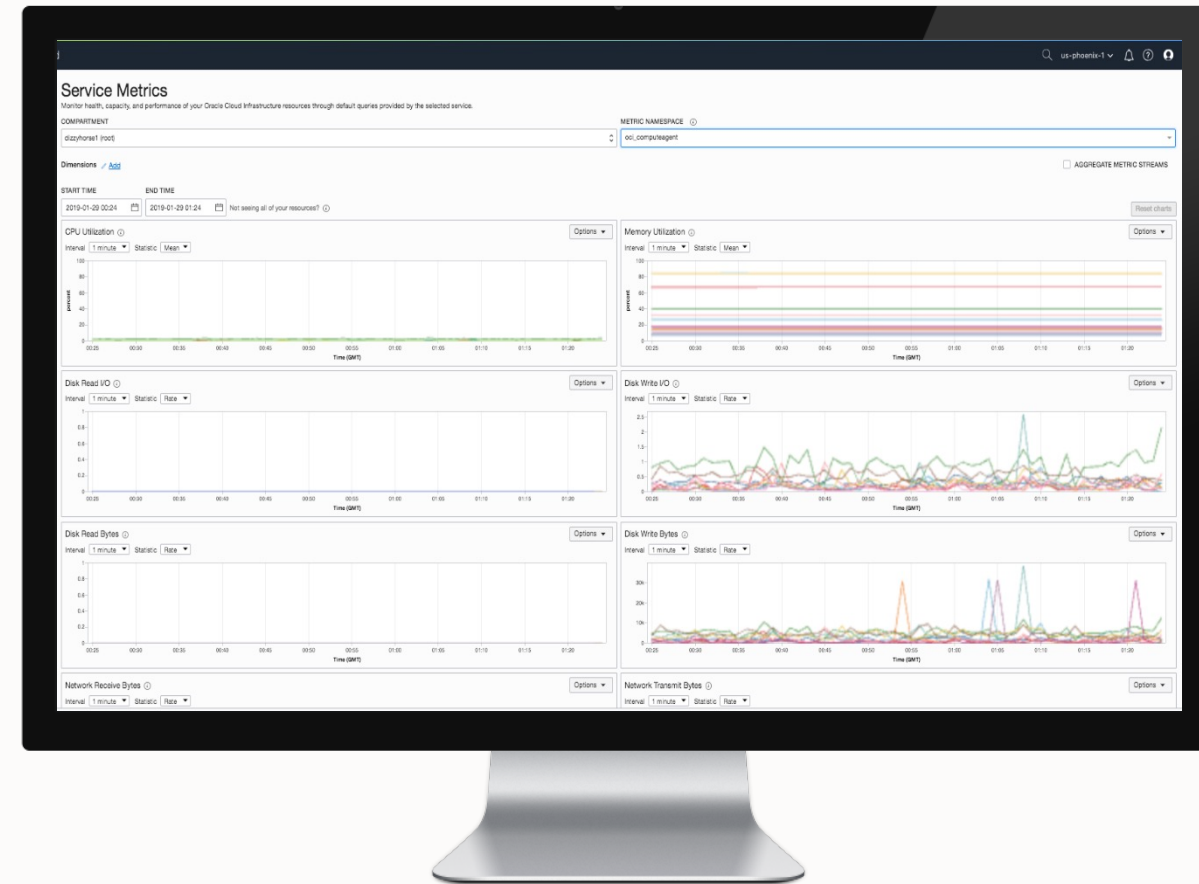
- Define new metrics which integrate seamlessly into your dashboards and alarm rules

## Alarming

- Set up alarms to act when metrics cross preferred thresholds
- Receive notifications via SMS, PagerDuty, Email and Slack. Trigger Functions and Webhooks for auto-remediation

## Customizable Dashboards

- Create your own visualizations with metrics and logs



# Logging Key Capabilities

## Centralized log management

- Simple, one-click experience to turn on logging across OCI resources e.g., VCNs, Object Storage, Load Balancers, etc.
- Secure management for all log types: audit, service, apps

## Search & analyze logs

- Search and correlate logs from all sources in one clean layer cake view with intuitive log search language
- Create visualizations with logs & metrics (LA: Sept 2021)

## Take rules-based-actions

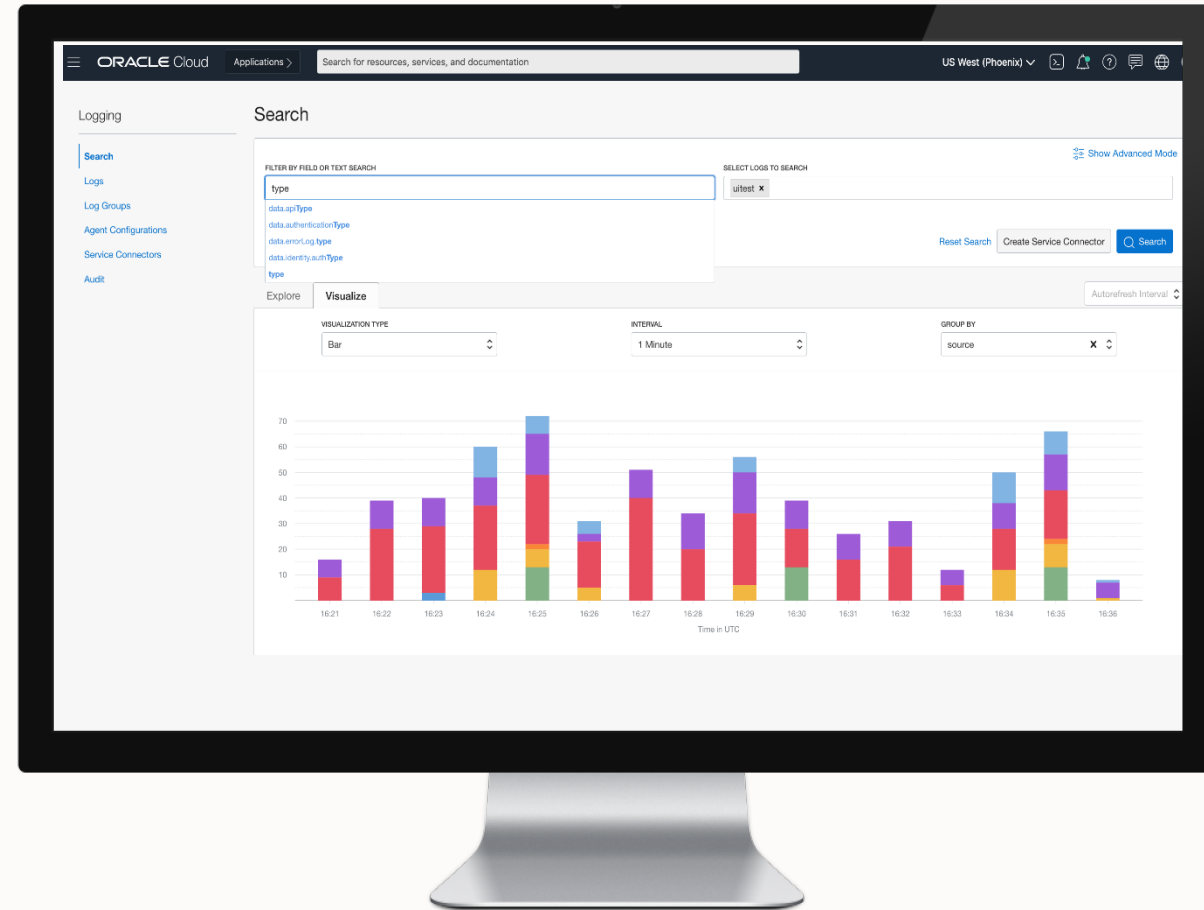
- Define rules to act on logs via integration with Service Connector Hub

## Agents for custom logs

- Deploy Agent for collecting logs from on-premises and multicloud resources

## Built on open standards

- Leverages Fluentd for ingesting logs. Compliant with CNCF cloudevents 1.0



# Service Connector Hub Key Capabilities

## Move data between OCI services

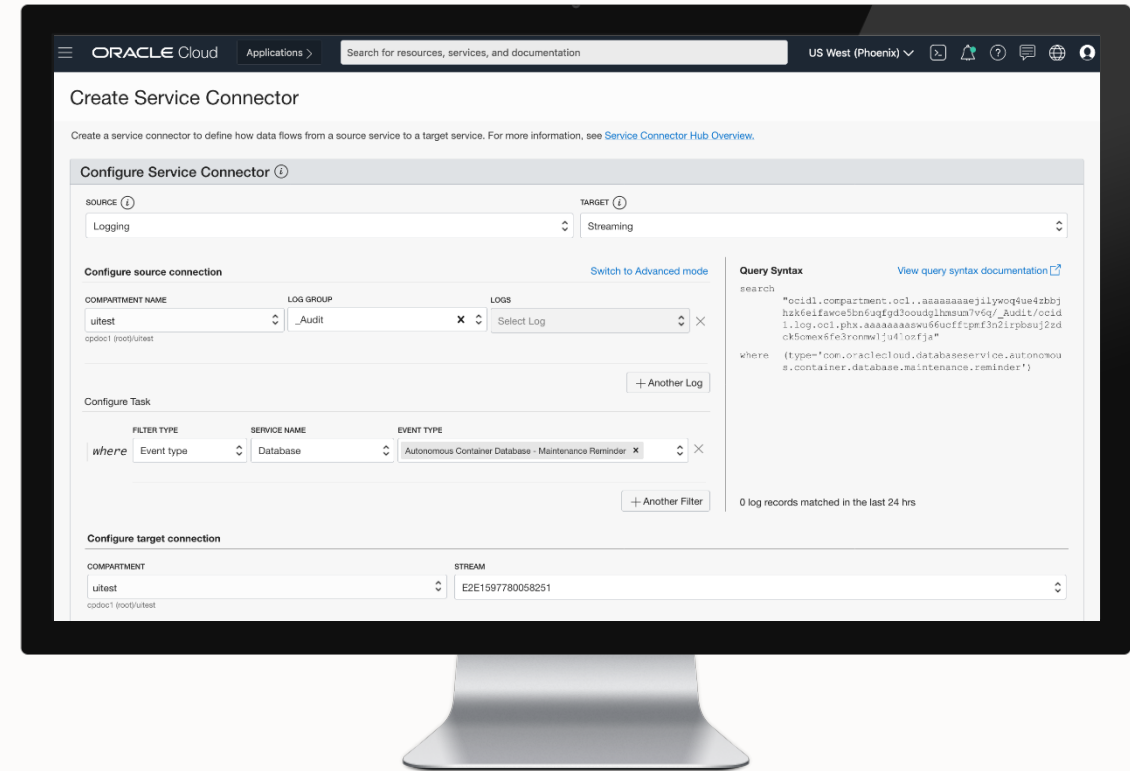
- Fully managed service that moves data between source and destination OCI services
- Supports moving logs and streams data to supported destinations
- Centralized experience to view, secure and manage all data movement

## Take actions

- One click data archival to Object Storage
- Easily emit log metrics to OCI Monitoring
- Automated remediation and alerting for using Oracle Functions & Notifications
- Facilitates deeper data analysis by ingesting data into Logging Analytics

## Move data to 3rd Party services

- Moves data to Kafka compatible OCI Streaming service from where Kafka compatible 3rd Party Observability tools can consume data







# Oracle Cloud Observability and Management Advanced Services



# Advanced services overview

APM, Logging Analytics, Database Management and Operations Insights

## Application Performance Monitoring

Monitors real-user activity and interaction with applications, provides deep visibility into the end-user experience



## Logging Analytics

Integrated log analytics solution for proactive, repeatable, and rapid problem resolution



## Database Management

Unified console for monitoring, performance diagnostics, tuning, lifecycle management and administration



## Operations Insights

Data lake of operational telemetry for ML-based analytics; capacity planning, forecasting and systemic trend identification on curated usage and performance data



# Application Performance Monitoring

## Track every step of every transaction

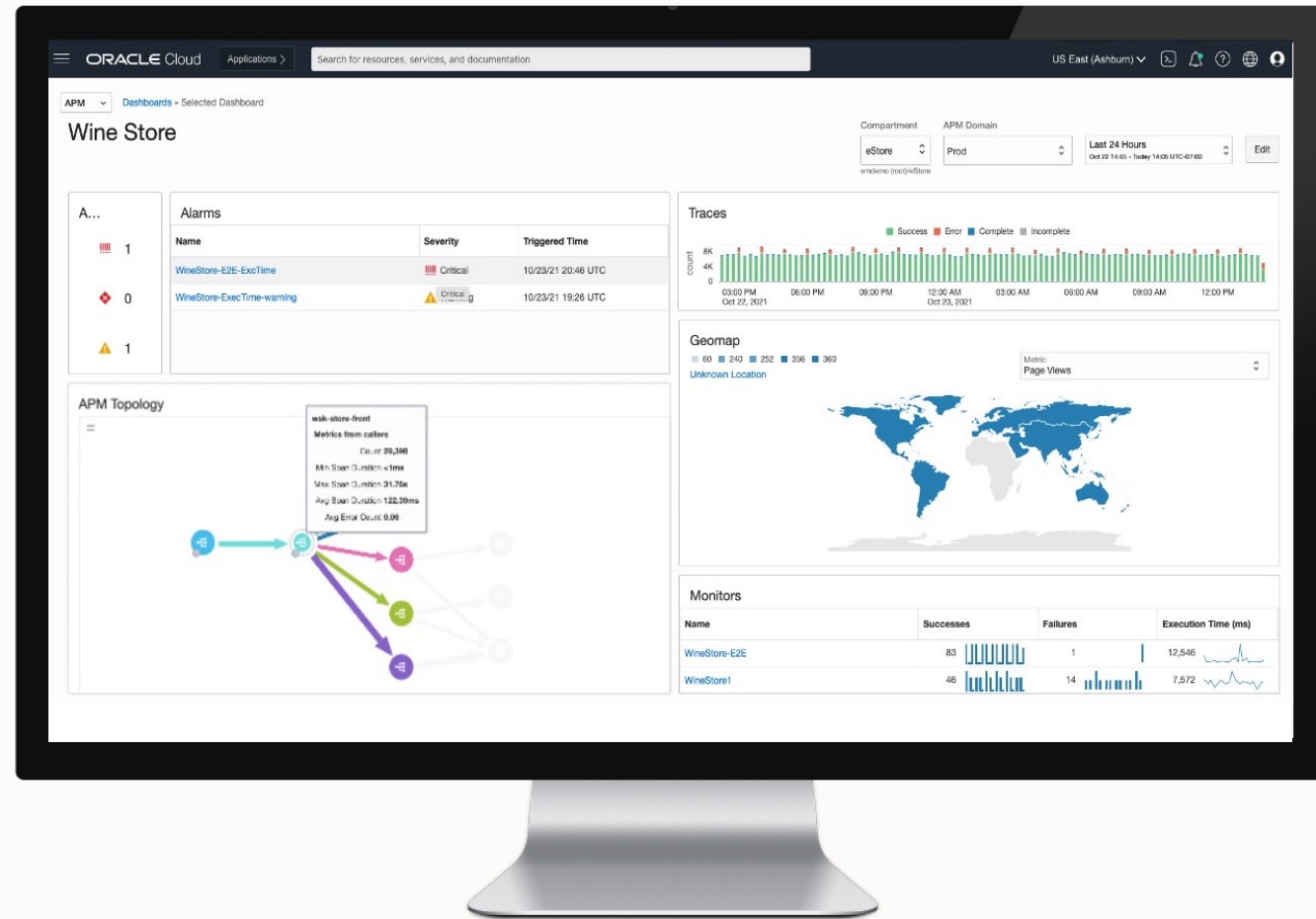
- Distributed tracing for fine-grained problem diagnostics
- Compatible with OpenTracing and OpenTelemetry

## Understand experience of every user

- Measure end-user performance from browser to app with in-context drill-downs
- Proactively monitor performance
- Synthetic monitoring to run pre-defined monitors from global and private vantage points

## Customizable Dashboards

- Create your own visualizations including data from other Observability and Management Services



# Logging Analytics service

Provides collection, indexing, enrichment, aggregation, exploration, search, analysis, correlation, visualization and monitoring of all log data from applications and system infrastructure.

## Clustering: ML-powered pattern recognition

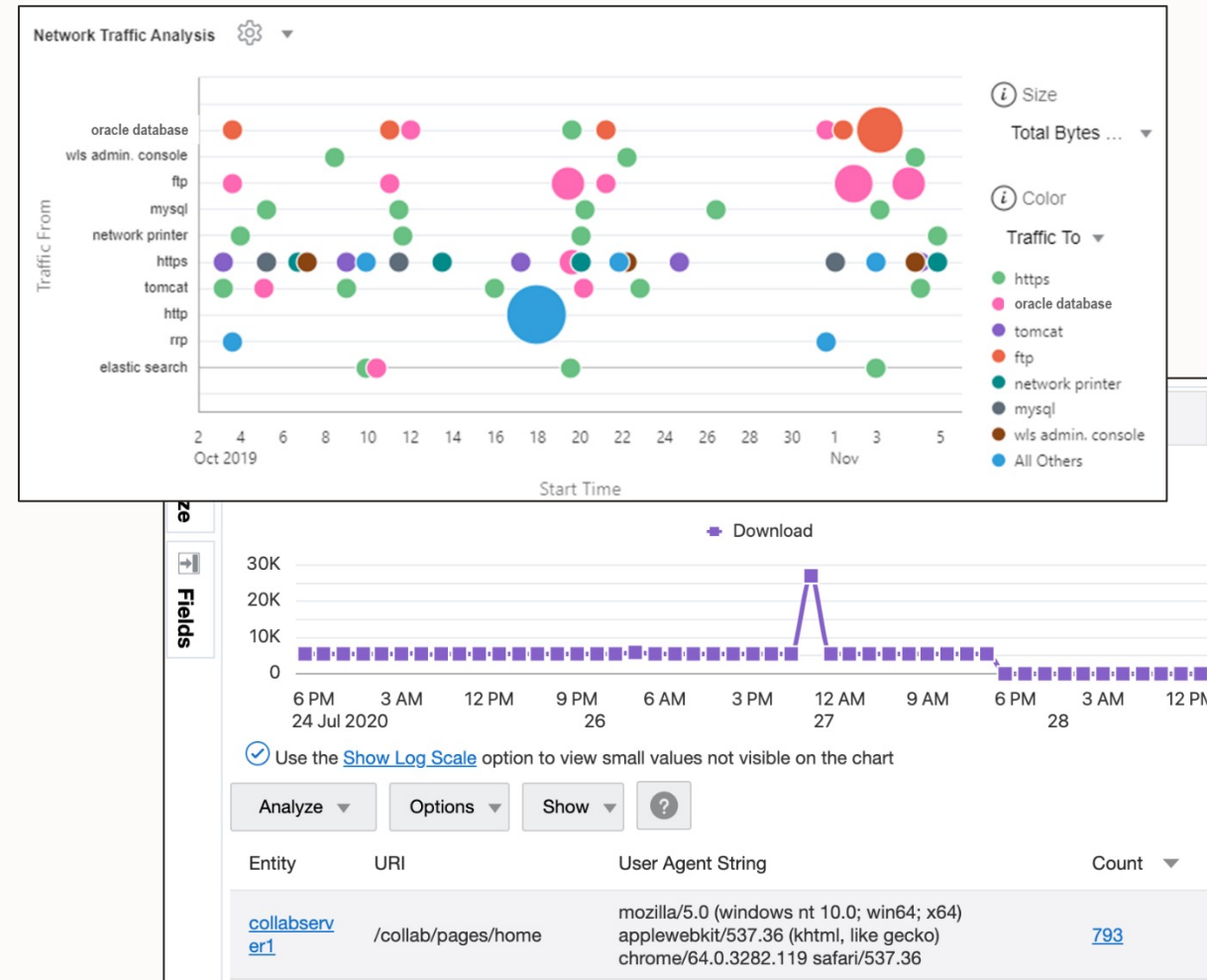
- Automatically identify outliers and anomalies
- Show trend of clustered group; correlate clustered events that show similar trends; compare clustered patterns
- Identify differences in cluster patterns to compare events with “normal” baseline

## Link: ML-powered relationship analysis

- Link events from millions of log records across sources that share common attribute(s)
- Compute statistics on linked events, analyze for anomalies
- Analysis of linked events using statistical aggregates, clustering, anomaly detection, sequence analysis

## Data Organization

- Organize and quickly find right data based on entities, compartments, labels etc.



# Database Management

## Fleet monitoring and management

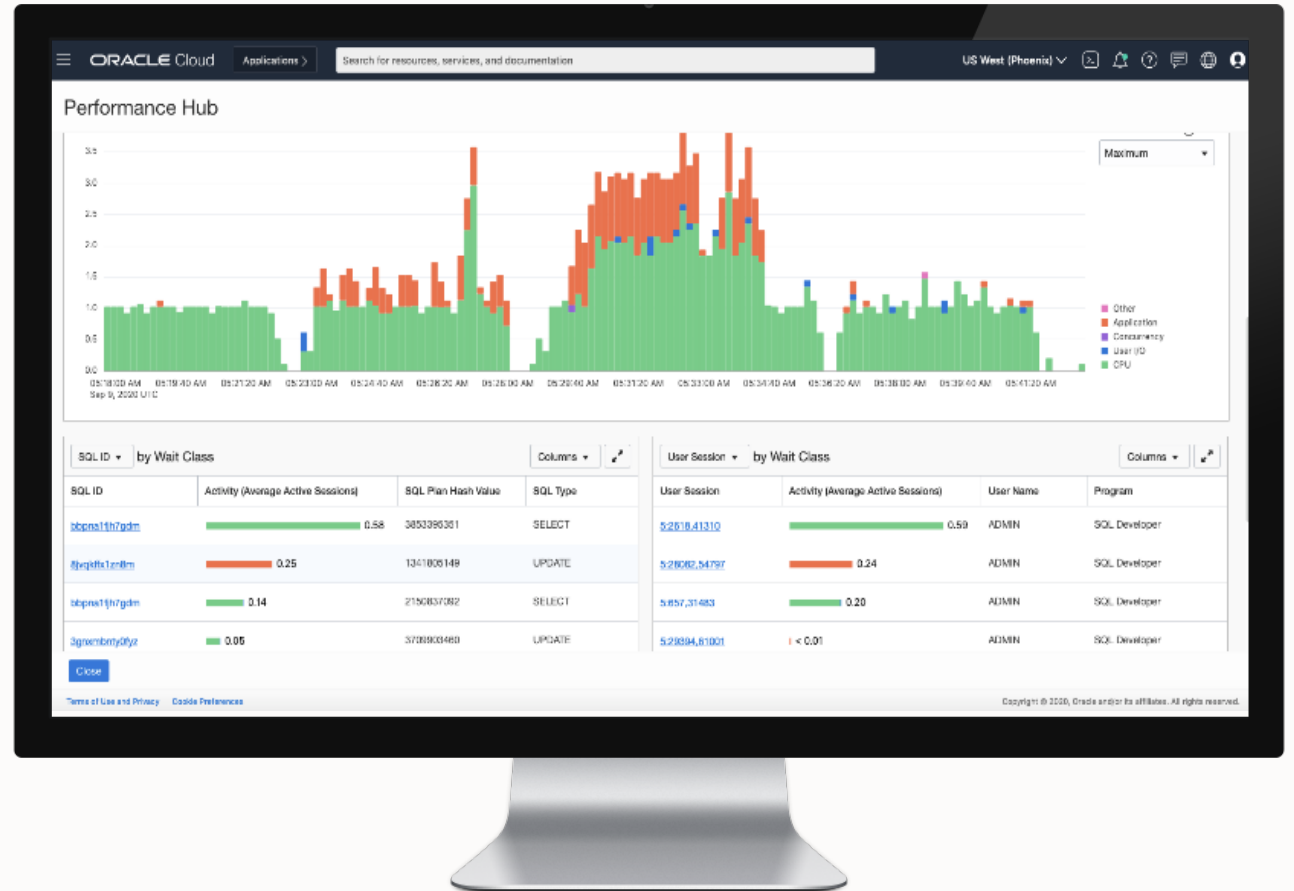
- Unified view monitoring and managing Oracle Database fleet across on-premises and cloud
- Performance Hub – performance at a glance

## Integrated view of database activity for easy performance diagnostics

- Features include ASH Analytics, SQL / session details, blocking sessions
- Real-time SQL monitoring

## Advanced execution plan analysis for monitoring and optimization

- Database administration
- Simplified space, configuration, users and backup management



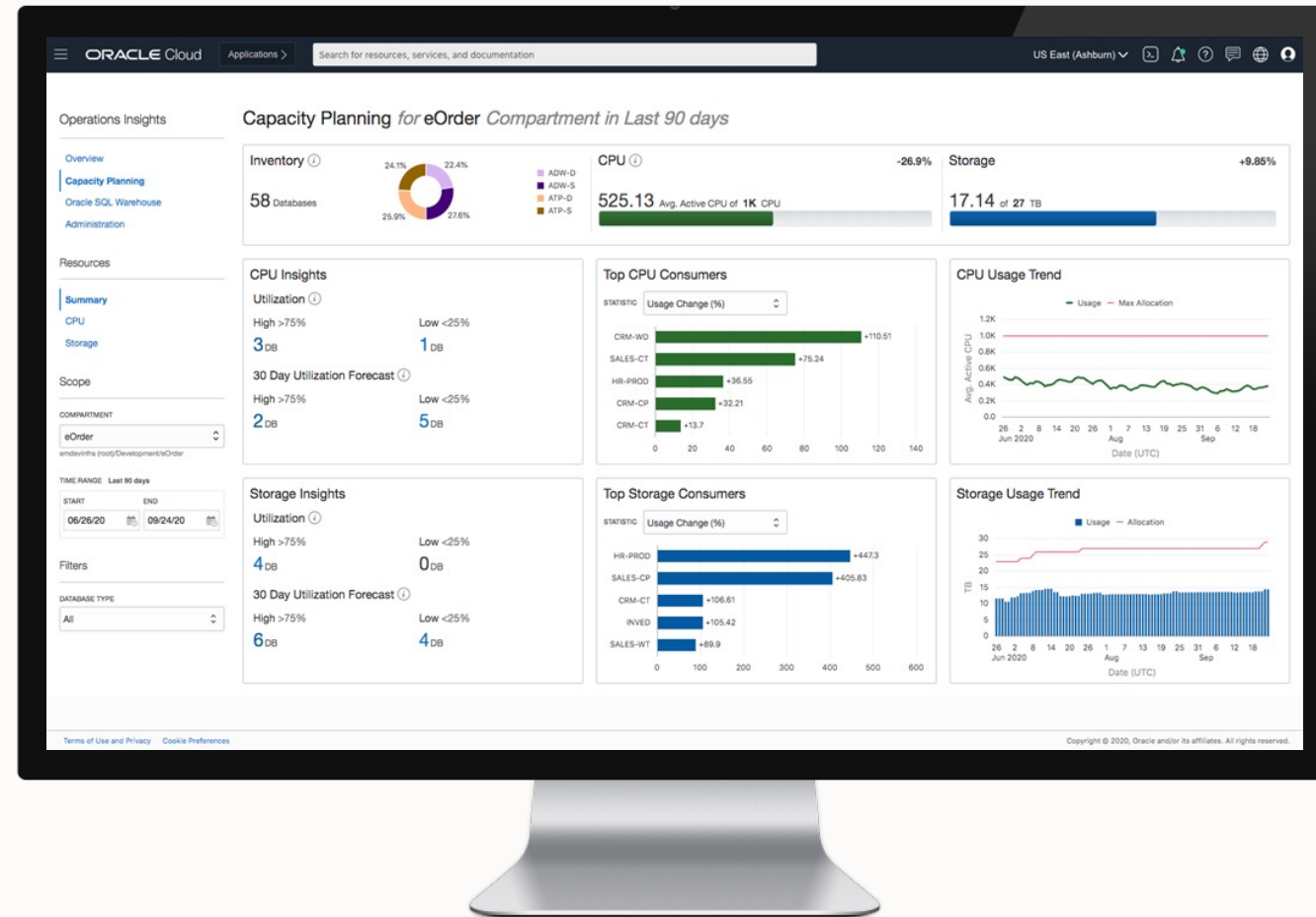
# Operations Insights

## Capacity planning

- Analyze and forecast database resource usage based on long-term historical data
- Optimize cost of operations by identifying over- and under-utilized servers

## SQL warehouse

- Long term SQL store for performance and trend analysis of Oracle Databases
- Proactively identify and mitigate SQL issues
- Find common patterns in SQL behavior across databases and applications



# Why customers are choosing Oracle Observability and Management

- 1 Natively built within Oracle Cloud Infrastructure
- 2 All the services DevOps need to monitor cloud native applications
- 3 Built to support open standards like Open Tracing and Open Telemetry
- 4 Out of the box support for OCI developer and database services
- 5 Native support for very large/high volume application
- 6 Superior price-performance