Oracle Orchestration Cloud Service

Oracle Orchestration Cloud Service is a software-as-a-service solution that lets you schedule and track workflows that execute scripts on hosts or invoke web service endpoints all from a single location. It’s ideal for administrators looking to schedule recurring maintenance tasks across their on-premises and cloud infrastructure as well as developers looking to integrate a scheduler into their applications. For IT Managers looking to start or migrate an existing DevOps project to the cloud, Oracle Orchestration Cloud Service provides simple REST APIs that can be easily integrated with existing tools and scripts to provision new environments and applications.

**KEY BUSINESS BENEFITS**
- Single solution for on-premises and cloud
- Centralized operations
- Reduced complexity
- Lower investment
- Predict and plan future capacity
- Gain insight through custom analysis

**KEY FEATURES**
- Topology-aware workflow execution
- Dashboards
- Workflow log retention and analytics with Log Analytics integration
- Automated anomaly detection and alerting
- Both on-premises(agent) and cloud(REST) endpoint support
- Immediate and recurring execution
- Hyper cloud scale

**Schedule, Track and Report on Tasks at Hyper Cloud Scale**

Whether you need to run your task now or on a recurring basis, Oracle Orchestration Cloud Service will reliably initiate your workflow on one or thousands of entities or endpoints on time. Workflows can execute scripts on hosts having an Oracle Management Cloud agent or invoke web service endpoints over HTTP or HTTPS. For endpoints requiring authentication, Oracle Orchestration supports basic, Oracle Public Cloud, Amazon Web Service and Microsoft Azure authentication providing flexibility and cloud heterogeneity.

Users can track the status and progress of their workflows using either the REST API or the pre-built dashboards. Alerts can be sent upon successful completion or failure of the workflow via email or any notification channel supported by the Oracle Management Cloud platform.

Oracle Orchestration can also automatically detect and alert on anomalies in workflow execution time and failure rate enabling users to take proactive steps to triage and remediate issues as they are occurring.

**Topology-Aware Workflow Execution**

Modern applications are complex, elastic and typically have a dynamic topology. This can make it difficult for administrators to automate tasks that need to run across all members of an application topology. For example, say an administrator wants to update an OS package on hosts supporting a particular application. Typically this would require the administrator to figure out the current list of members each time they wish to perform this operation. With Oracle Orchestration, workflows initiated against an application...
Oracle Orchestration 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 troubleshooting and providing the ability to run IT like a business.

Workflow Log Retention and Log Analytics Integration

Workflow executions produce logs and these logs provide valuable information for understanding failures and forecasting execution times. Oracle Orchestration automatically retains workflow logs and generated output for 7 days. For additional retention and analysis, logs can optionally be sent directly to Oracle Log Analytics where they are automatically parsed and efficiently stored. Users can view Oracle Orchestration workflow logs alongside other log sources to understand and correlate outside factors causing changes in execution time, failures, etc.

Figure 1. View of Oracle Orchestration Execution logs (REST response) in Log Analytics.

Dashboards

Dashboards provide operational insight for both IT and Business. Stakeholders can get visibility into the status and results of their workflows 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 the workflows including failed steps, errors, and execution time. The big data platform common to all Oracle Management Cloud services enables aggregation of widgets from across services to get a 360-degree view of end-user experience, events, critical errors, business metrics, and resource/capacity availability across all your applications and services.
Figure 2. Workflow Submission Dashboard showing submissions over time based on Execution status.