TA 15-21: Oracle Database Subscription Licenses

ATTENTION:	**Current and Future CalCloud Customers**
ACTION REQUESTED:	**Information Only**
DUE DATE:	**None**

Overview:

The California Department of Technology (CDT) has executed an agreement with Oracle that allows state departments and agencies the ability to utilize Oracle Database on CalCloud Infrastructure as a Service (IaaS). This new service is available directly through CDT, in either a managed or unmanaged CalCloud IaaS environment. By leveraging CDT's Oracle agreement, CDT customers have access to the enterprise-grade CalCloud infrastructure platform running Oracle Enterprise Edition Database 12C along with eight of the most popular options. These exciting new services are available immediately.

Oracle Database on CalCloud IaaS is provided as a subscription offering through which customer departments and agencies will no longer need to manage new license inventories and support contracts on their own. CDT will provide a consistent and convenient monthly subscription price for the use of the software. Available only in CalCloud IaaS, the new service offering will allow customers to simplify their administrative overhead, while realizing exceptional value and performance through CalCloud.

Benefits of Oracle Database on CalCloud IaaS include:
- Customers utilizing Oracle Database on CalCloud IaaS shift from license ownership to a subscription pay-as-you go model. CalCloud and Oracle database monthly charges end after the server is decommissioned.
- Corresponding reduction in annual Oracle maintenance fees, which represent approximately 20% of the total product licensing cost on a yearly basis.
- Immediate upgrade opportunity. Customers can quickly test applications using the most current Oracle Database version (12c).
- Rapid provisioning of new servers in CalCloud IaaS.

New Rates and Services:

The Oracle software will be available in the CalCloud IaaS environment at Gold Camp and for CalCloud Infrastructure Disaster Recovery (DR) services in Vacaville. The monthly subscription allows customers access to all of the following products:

Oracle Database Enterprise Edition	Real Application Cluster	Partitioning
Database Lifecycle Management Pack	Cloud Management Pack	Tuning Pack
Advanced Security Option	Diagnostics Pack	Multitenant

For a description of each product please review the material at the end of this Tech Alert.

Rates are based on the available CalCloud IaaS VM sizes and whether the server has Disaster Recovery. The rates below are for Oracle products only and do not include a CalCloud server or database support services.

CalCloud VM Size	CCUs	DB Instance No DR Server	DB Instance with DR Server
Small	2	$946	$1,892
Medium	4	$1,892	$3,784
Large	8	$3,784	$7,568
Extra-Large	16	$7,568	$15,136

Rates include 6.20% Pass-through Admin fee

This new service would be beneficial to customers currently using Oracle in CDT Managed Services, in Tenant Managed Services, and those who are hosting Oracle services on their own premises. Additionally, this service should be considered for new database applications.

For assistance defining the cost benefits for migrating to Oracle Database on CalCloud IaaS please contact your Account Lead.

Due Date:

None. This Tech Alert is for informational purposes only.

Contact:

If you have questions or need further clarification, please contact your CDT Account Lead by using the Account Lead Lookup or call the Customer Delivery Division at (916) 431-5476.

Product Description

Oracle Database Enterprise Edition – Version 12*c:*

Oracle Database Enterprise Edition

Oracle Database 12c Enterprise Edition provides efficient, reliable and secure data management for mission-critical transactional applications, query-intensive big data warehouses, and mixed workloads*.*

Enterprise Edition Options Included for Oracle Database 12*c*:

Real Application Clusters

Oracle Real Application Clusters (Oracle RAC) harnesses the processing power of multiple, interconnected servers on a cluster. It enables access to a single database from multiple servers on a cluster, insulating both applications and database users from server failures, while providing performance that scales out on-demand at low cost. Oracle RAC is a vital component for delivering agile database services on the Cloud. Oracle Database 12*c* along with Automated Storage Management (ASM) and Oracle Clusterware, further helps virtualize storage, database servers, and all the other aspects related to deploying and managing database services in a Cloud environment.

Partitioning

Oracle Partitioning enhances the data management environment for OLTP, data marts, and data warehouse applications by adding significant manageability, availability, and performance capabilities to large underlying database tables and indexes. It permits large tables to be broken into individually managed smaller pieces, while retaining a single application-level view of the data. A comprehensive variety of partitioning methods are supported including, the ability to allow very large tables (and their associated indexes) to be partitioned into smaller, more manageable units, providing a "divide and conquer" approach to very large database management. Partitioning also improves performance, as the optimizer will prune queries to only use the relevant partitions of a table or index in a lookup. Oracle Partitioning can also manage the lifecycle of information, eliminating the need to continually buy high-end storage confining data growth to a scalable, low-end storage solution.

Multitenant

Oracle Multitenant introduces a new architecture in Oracle Database 12c that delivers the highest level of database consolidation, without changes to existing applications. Oracle Multitenant addresses historical DBA pain points: provisioning, patching, and consolidation. This new architecture makes it easy to create a container database and simply plug-in multiple databases working seamlessly with existing Oracle Database functionality as Real Application Clusters and Active Data Guard. In addition, Oracle Multitenant helps reduce IT costs and provide the ability to manage many databases as one, while retaining the isolation of separate databases, without requiring any changes to applications or access rights.

Advanced Security

Oracle Advanced Security helps customers protect sensitive information and comply with various privacy and compliance regulations including breach notification laws and the Payment Card Industry Data Security Standard (PCI-DSS) by enabling encryption inside the database that is transparent to applications and enabling redaction of sensitive data before it leaves the database. Transparent Data Encryption provides encryption of data stored in the database, exported from the database using DataPump, or disk-based backups using Oracle RMAN. Data Redaction is with the release of Oracle Database 12*c* and provides the ability to redact sensitive information such as credit card data and social security numbers displayed by queries and applications.

Enterprise Management Options Included for Oracle Database 12*c:*

Tuning Pack

The Oracle Tuning Pack provides database administrators with expert performance management for the Oracle environment, including SQL tuning and storage optimizations. It includes the following features:

- » SQL Access Advisor
- » SQL Tuning Advisor
- » SQL Tuning Sets
- » Reorganize objects

Diagnostics Pack

The Oracle Diagnostic Pack provides automatic performance diagnostic and advanced system monitoring functionality. The Diagnostic Pack includes the following features: Automatic Workload Repository; Automatic Database Diagnostic Monitor (ADDM); Performance monitoring (database and host); Event notifications: notification methods, rules, and schedules; and Event history and metric history (database and host).

Database Lifecycle Management Pack

The Database Lifecycle Management Pack is a comprehensive solution that helps database, system and application administrators automate the processes required to manage the Oracle Database Lifecycle. It eliminates manual and time consuming tasks related to discovery, initial provisioning, patching, configuration management, ongoing change management and Disaster protection automation. In addition the Database Lifecycle Management pack provides compliance frameworks for reporting and management of industry and regulatory compliance standards.

Cloud Management Pack for Oracle Database

The Oracle Cloud Management Pack for Oracle Database helps to set up a Database Cloud and operate Database as a Service models. Some of the features provided by this pack include:

» Self-service database provisioning on physical infrastructure
» Support for both single instance and Real Application Clusters configurations
» Policy-driven resource management, such as scale out and scale back of compute power
» Metering and chargeback based on fixed cost and utilization metrics
» Programmatic access to the Self-Service Portal