

and more!

Continuous delivery of Java applications using Oracle Cloud Platform Services

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May, 2016





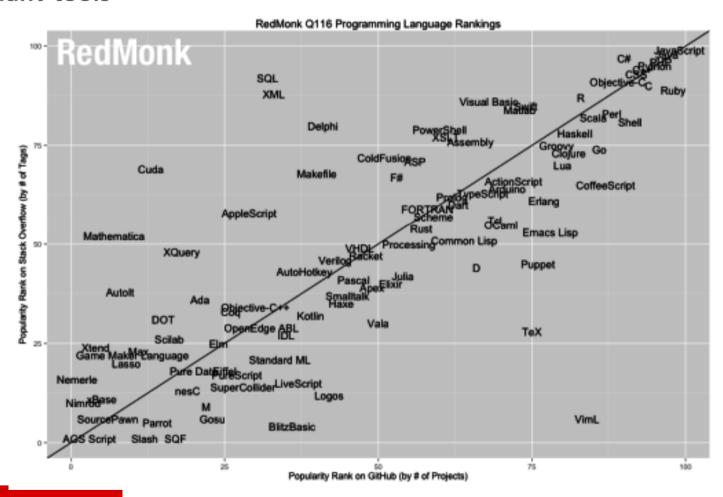
# Safe Harbor Statement

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# **Polyglot Programming**

## Many tools





2 Java

3 PHP

4 Python

5 C#

5 C++

5 Ruby

8 CSS

9 C

10 Objective-C

11 Shell

12 Perl

13 R

14 Scala

15 Go

15 Haskell

17 Swift

18 Matlab

19 Clojure

19 Groovy

19 Visual Basic



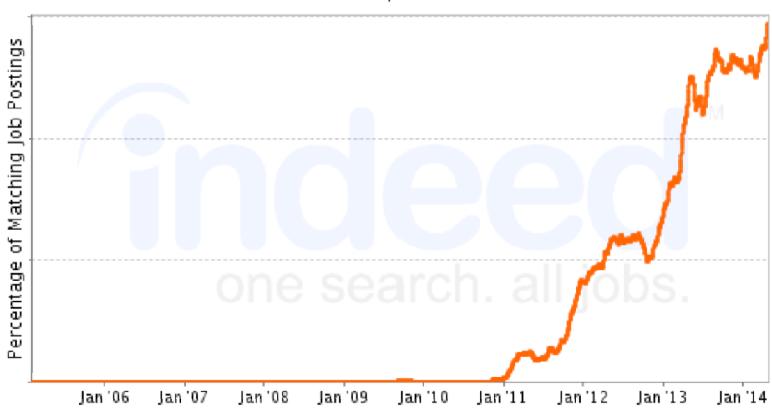
JavaCro IE



# **Demand for DevOps Skills**

## Job Trends from Indeed.com

— devops







# Microservices Cattle vs Pets



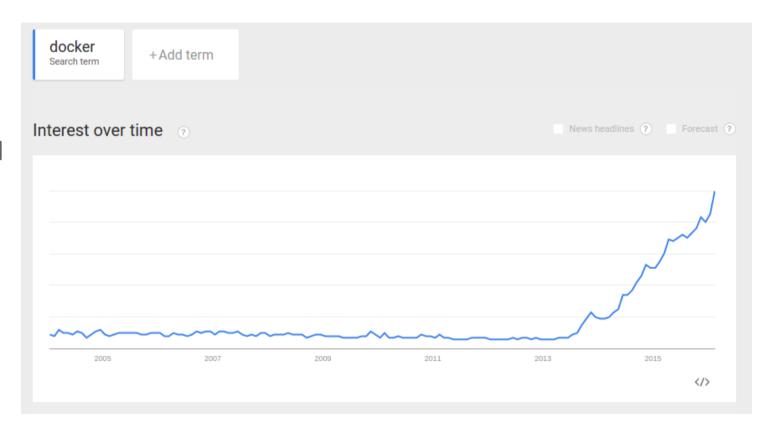






# **Fast Growing Interest**

- Community
  - General buzz
  - 700+ contributors
  - Red Hat, IBM, Pivotal
  - Microsoft, Google
  - Oracle
- Agile customers
  - Fast adoption
- Useful for DevOps
  - Easy provisioning







# **Open Source is the new Normal**





# Oracle Application Development & Deployment Benefits

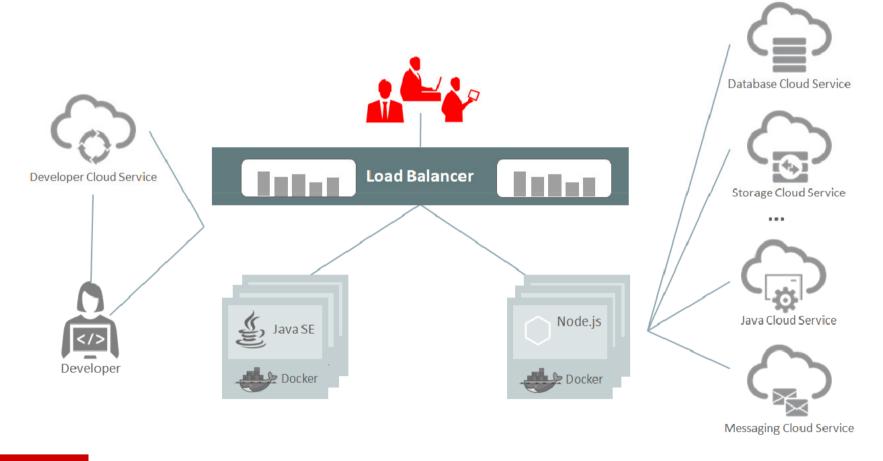
Instant setup
Complete automation
Multiple Programming Languages
Continuous Delivery
Any workload with laaS





# **Oracle Application Container Cloud Service**

A modern platform for lightweight application development







# Using Application Container Cloud Service For Microservices

Java SE Other Cloud Cloud Your Own **Developer Cloud Service** Service Service Container Configuration **Caching Cloud Service for State** Service Discovery **API Load Balancer Messaging Cloud Service** Container Placement **Docker Containers Database Cloud Service NoSQL Cloud Service Application Container Cloud Service** Oracle Management Cloud - Management/Logging/Alerting **Oracle Cloud** 





# Using WebLogic + Java EE For Microservices

A proven, enterprise-grade platform for application development

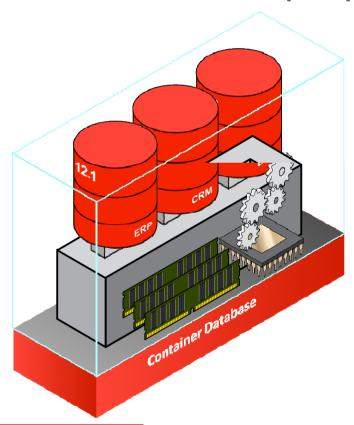
WebLogic Partition **Cloud Service** Coherence Data Grid WebLogic Multi-tenant WebLogic Multi-tenant For State, Configuration, Service Discovery **Oracle Traffic Director Messaging Cloud Service Oracle Linux** Developer **Oracle VM NoSQL Cloud Service Database Cloud Service** Oracle Java Cloud Service Oracle Management Cloud - Management/Logging/Alerting **Oracle Cloud** 





# Pluggable Databases

One Container Database per application, one Container Database per microservice



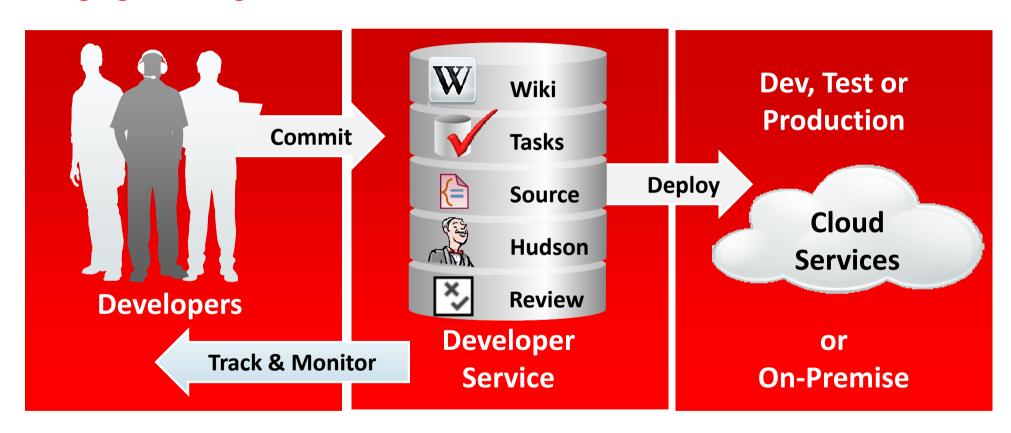
- Container Database
  - Multi-tenant database that includes zero, one or many pluggable databases
  - Upgrades, etc are performed against container
- Pluggable Database
  - A full database to the client except that behind the scenes it doesn't have its own controlfiles, redo logs, undo, etc
  - Just a collection of datafiles and tempfiles to handle its own objects, including its own data dictionary
  - Can easily move Pluggable Databases from one container to another





# Oracle Developer Cloud Service

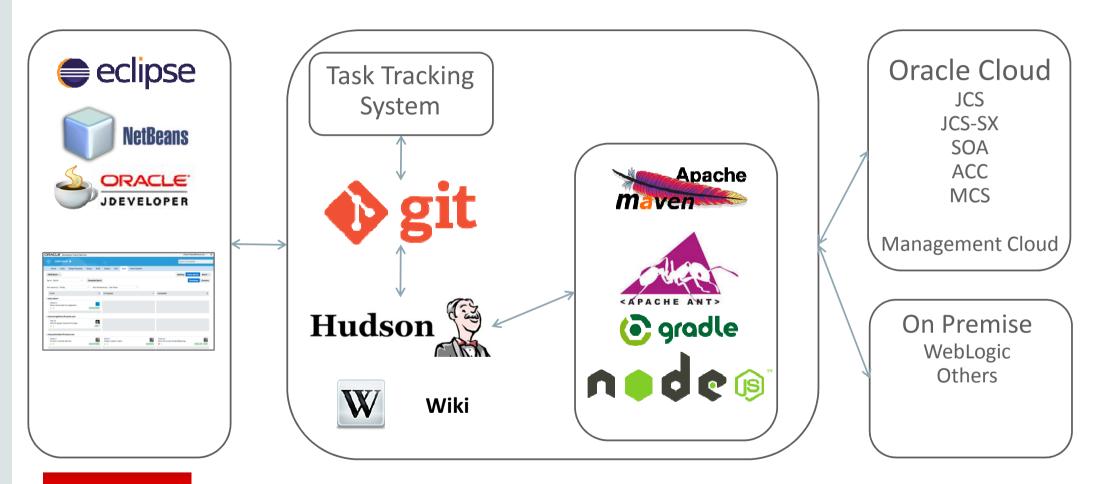
Bringing It All Together

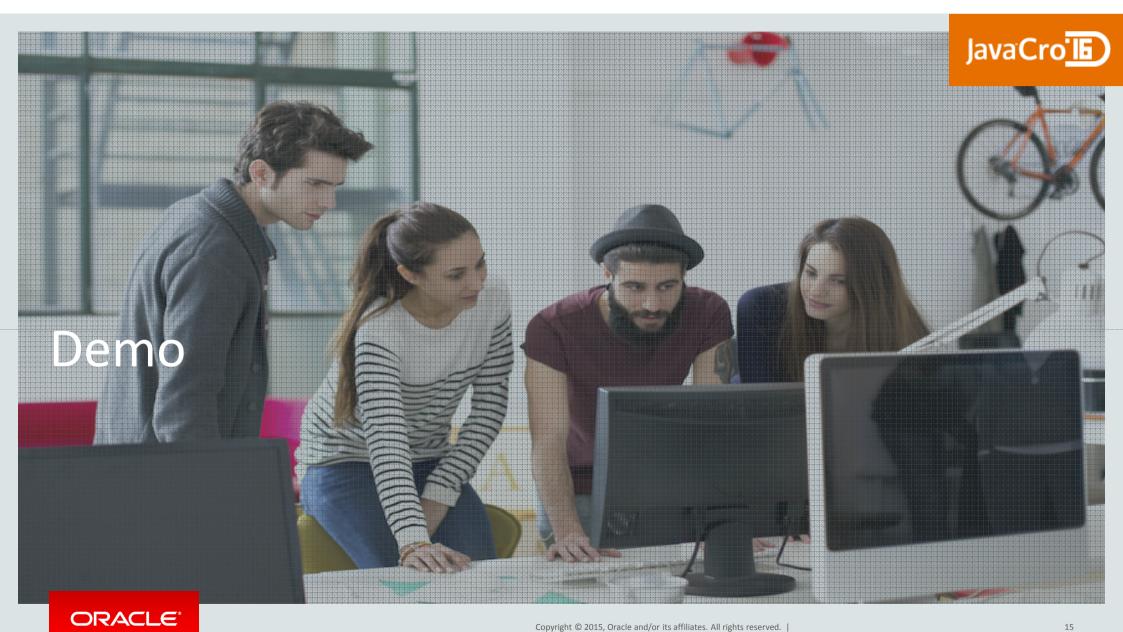


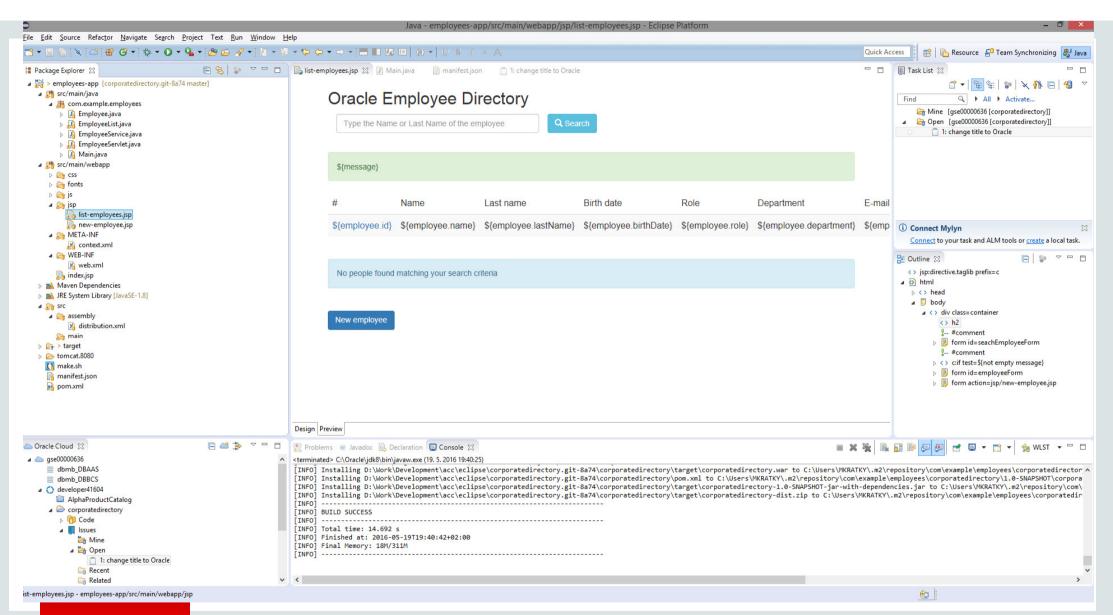


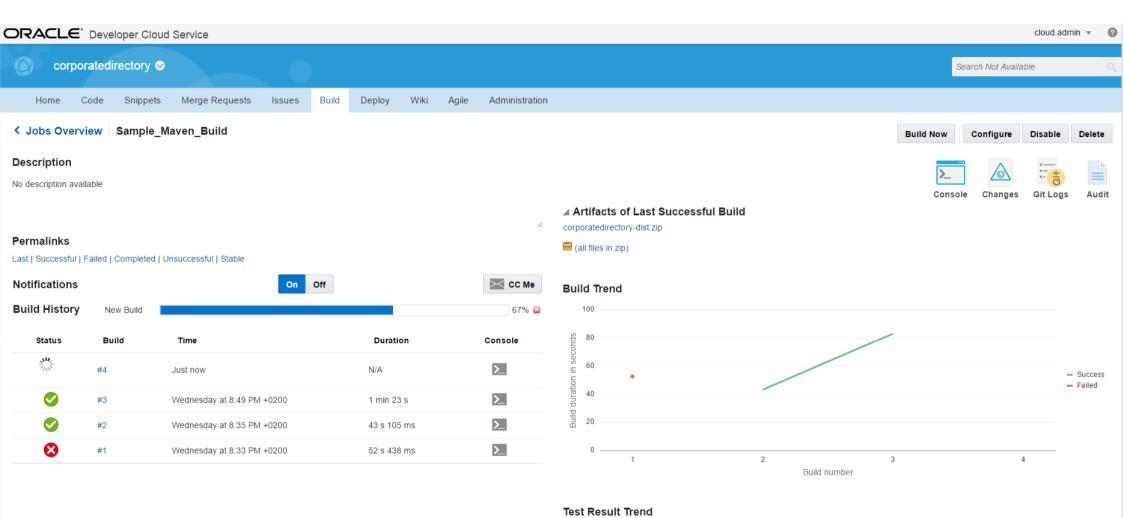


# Oracle Developer Cloud Service

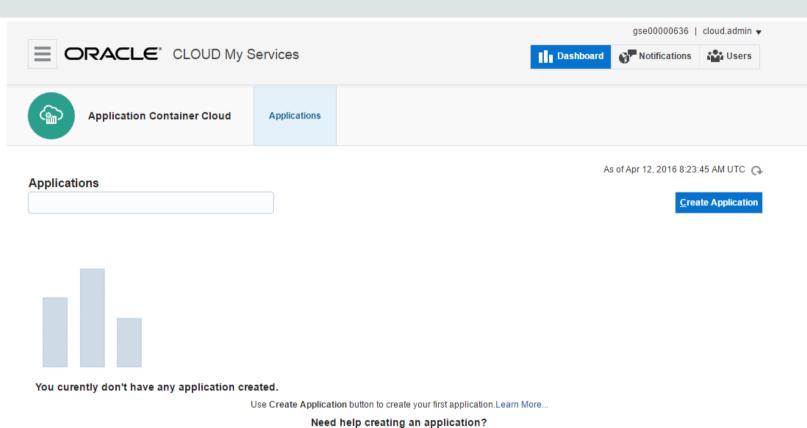












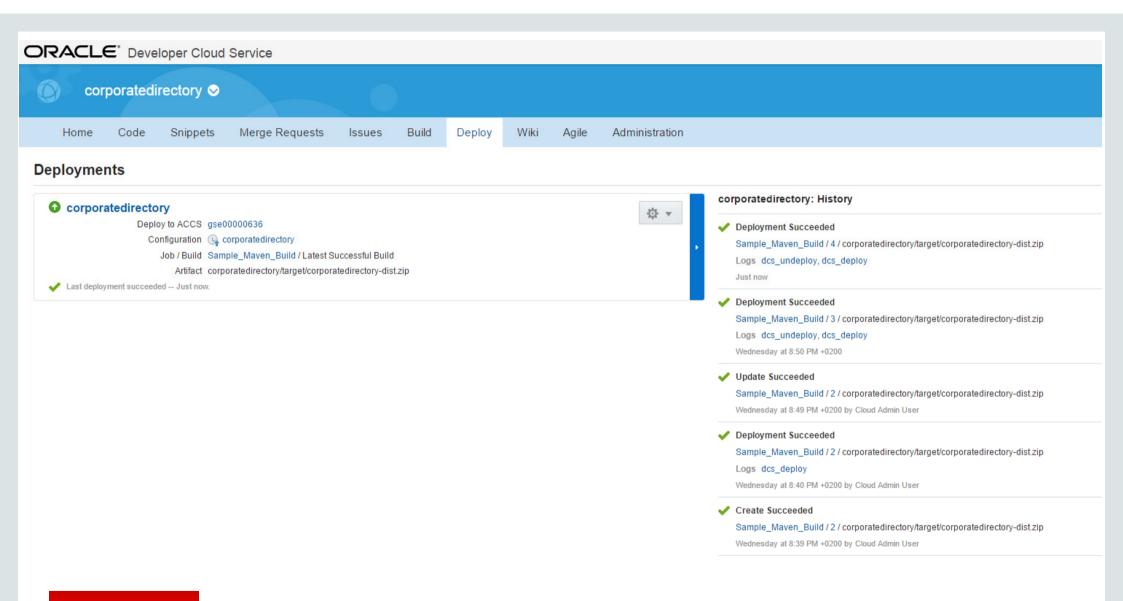
- Watch a video

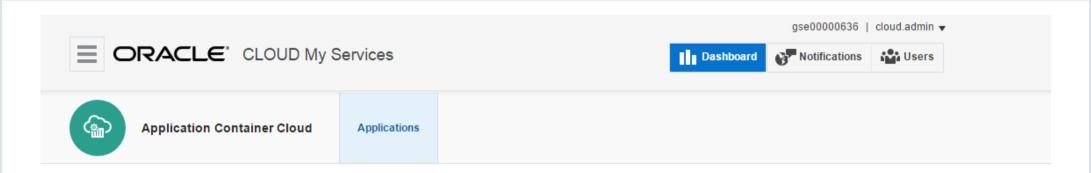
- Step through a tutorial



No attempts to create or delete application.







### **Applications**

Search by application name

**Create Application** 

As of Apr 12, 2016 8:25:03 AM UTC 🔼

#### corporatedirectory



Creating Application...

Version: 1.2.3

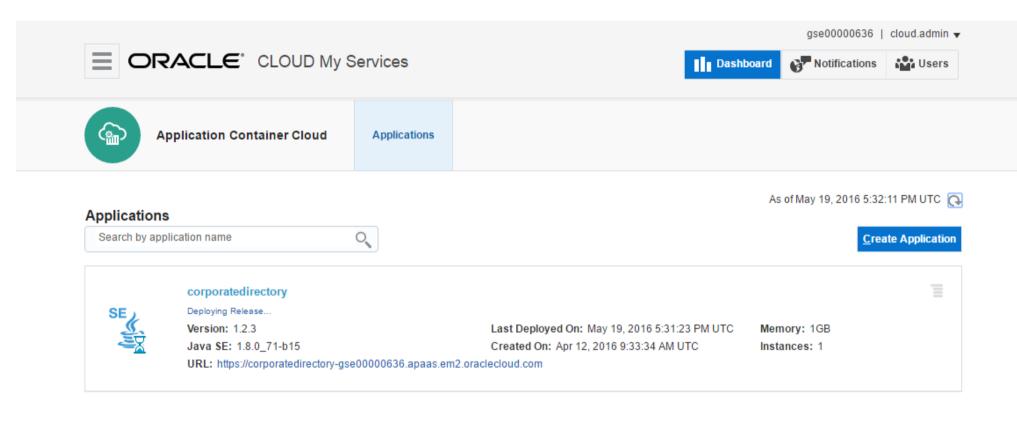
Java SE: 1.8.0\_71-b15

URL: https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com

Memory: 1GB Submitted On: Apr 12, 2016 8:24:17 AM UTC Instances: 1

▶ Application creation and deletion history





▶ Application creation and deletion history

















### **Application Container Cloud**

Applications

### **Applications**

Search by application name

**Create Application** 

 $\equiv$ 

As of Apr 12, 2016 8:26:00 AM UTC (



#### corporatedirectory

Version: 1.2.3

Java SE: 1.8.0\_71-b15

URL: https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com

Memory: 1GB

Instances: 1

Application creation and deletion history



Created On: Apr 12, 2016 8:24:17 AM UTC

# JavaCro16 Employee Directory

Type the Name or Last Name of the employee

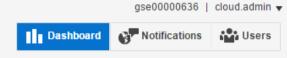


#	Name	Last name	Birth date	Role	Department	E-mail	
101	John	Smith	12-12-1980	Manager	Sales	john.smith@abc.com	
102	Laura	Adams	02-11-1979	Manager	IT	laura.adams@abc.com	
103	Peter	Williams	22-10-1966	Coordinator	HR	peter.williams@abc.com	
104	Joana	Sanders	11-11-1976	Manager	Marketing	joana.sanders@abc.com	
105	John	Drake	18-08-1988	Coordinator	Finance	john.drake@abc.com	
106	Samuel	Williams	22-03-1985	Coordinator	Finance	samuel.williams@abc.com	

New employee





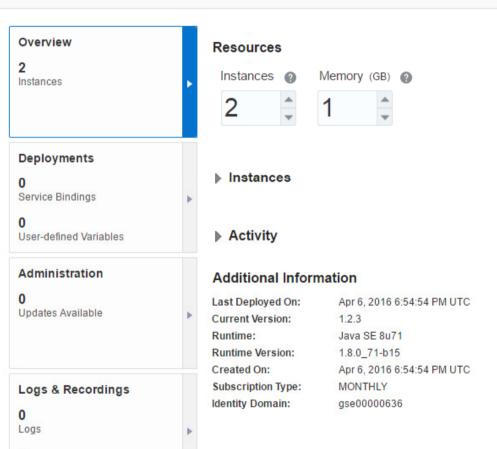




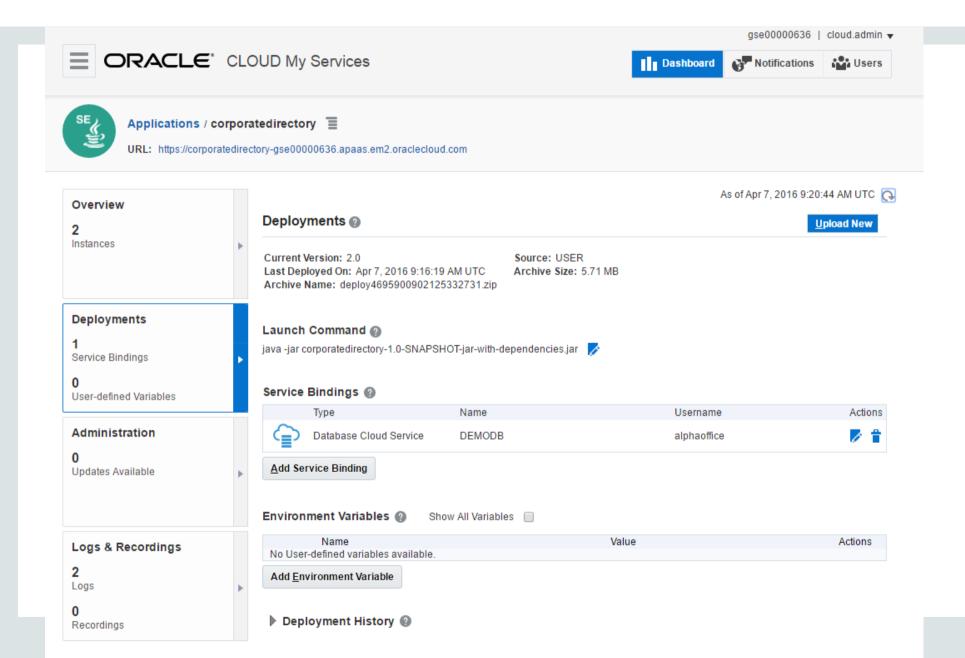
Recordings

### Applications / corporatedirectory

URL: https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com



As of Apr 7, 2016 9:14:05 AM UTC Q





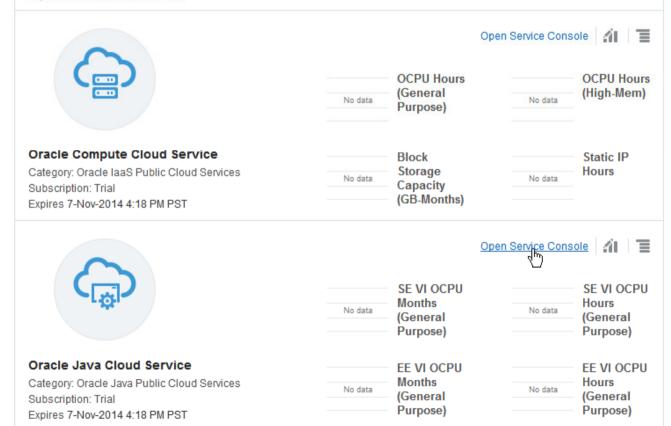


#### **Oracle Storage Cloud Service**

Category: Oracle laaS Public Cloud Services

Subscription: Trial

Expires 7-Nov-2014 4:18 PM PST



jtrain\_user01 ▼



### **Oracle Java Cloud Service**

Identity Domain: Z16JCS7112619924

As of 21-Oct-2014 12:54:21 AM UTC Refresh

#### INSTANCES

Search by instance name

Create Instance

No service instances found.

Failed attempts to create or delete an instance in the last 7 days















#### **Subscription Type**

Select the service level and billing frequency for your Oracle Java Cloud Service instance.

#### Service Level

#### Oracle Java Cloud Service - Virtual Image

Oracle WebLogic Server installed on an Oracle Cloud virtual machine.
 No additional cloud tooling available.

#### Oracle Java Cloud Service

Oracle WebLogic Server installed on an Oracle Cloud virtual machine.
 All additional cloud tooling available.

### Billing Frequency

Hourly

Pay for the number of hours used.

Monthly

Pay one price for the entire month irrespective of the number of hours used.



#### **Provision New Oracle Java Cloud Service**



Cancel



Next 🔪

#### Software Release

Select the software release to be installed on your service.

#### Oracle WebLogic Server 11g (11.1.1.7)

WebLogic Server 10.3.6.0, Fusion Middleware 11.1.1.7
 Installed on Oracle Linux 6.6

### Oracle WebLogic Server 12c (12.1.3.0)

WebLogic Server and Fusion Middleware 12.1.3.0
 Installed on Oracle Linux 6.6

### Oracle WebLogic Server 12c (12.2.1.0)

WebLogic Server and Fusion Middleware 12.2.1.0
 Installed on Oracle Linux 6.6





#### **Provision New Oracle Java Cloud Service**







#### **Software Edition**

Select the edition of your selected software release to be installed on your service.

#### Standard Edition (Details)

Oracle WebLogic Server 12c (12.2.1.0)
 Installed on Oracle Linux 6.6

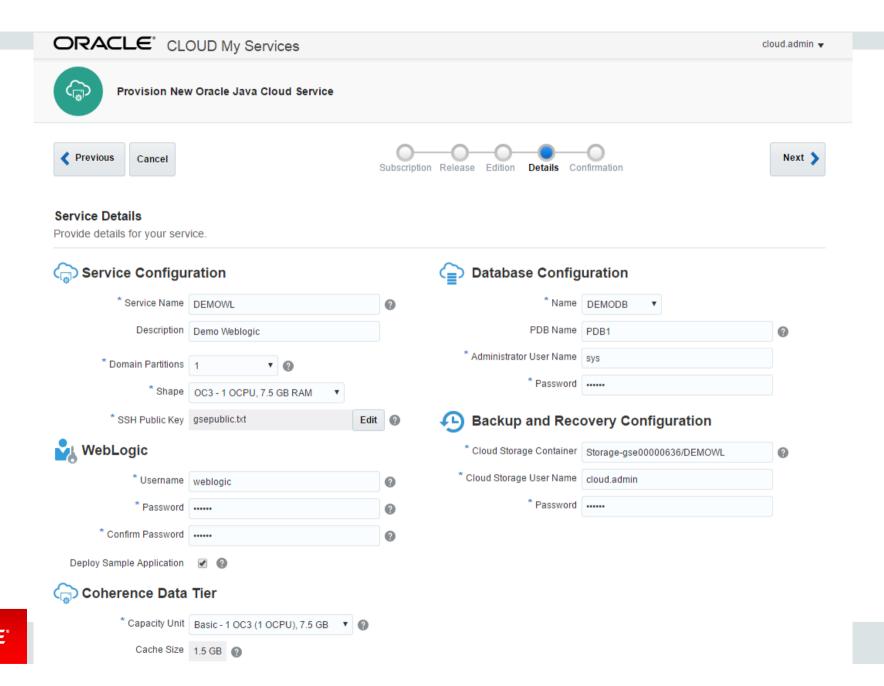
#### Enterprise Edition (Details)

Oracle WebLogic Server 12c (12.2.1.0)
 Installed on Oracle Linux 6.6

### Enterprise Edition with Coherence (Details)

Oracle WebLogic Server 12c (12.2.1.0)
 Installed on Oracle Linux 6.6







#### **Provision New Oracle Java Cloud Service**



Cancel



Create 🔪

#### Confirmation

Confirm your selections and create your service.



### **Subscription Details**

Service Level: Oracle Java Cloud Service

Billing Frequency: Monthly

Release: Oracle WebLogic Server 12c (12.2.1.0)
Edition: Enterprise Edition with Coherence



#### **Service Details**

Service Name: DEMOWL
Description: Demo Weblogic

Cluster Size: 1
Domain Partitions: 1

Shape: OC3 - 1 OCPU, 7.5 GB RAM

Key: gsepublic.txt

WebLogic Administrator: weblogic Deploy Sample Application: Yes



### **Coherence Details**

Capacity Unit: Basic

Shape: OC3 - 1 OCPU, 7.5 GB RAM

Virtual Machine Count: 1 Managed Servers per VM: 1 Cache Size: 1.5 GB

JVM Heap Size: 4.5 GB



### **Database Details**

Database: DEMODB PDB Name: PDB1

Administrator User Name: sys

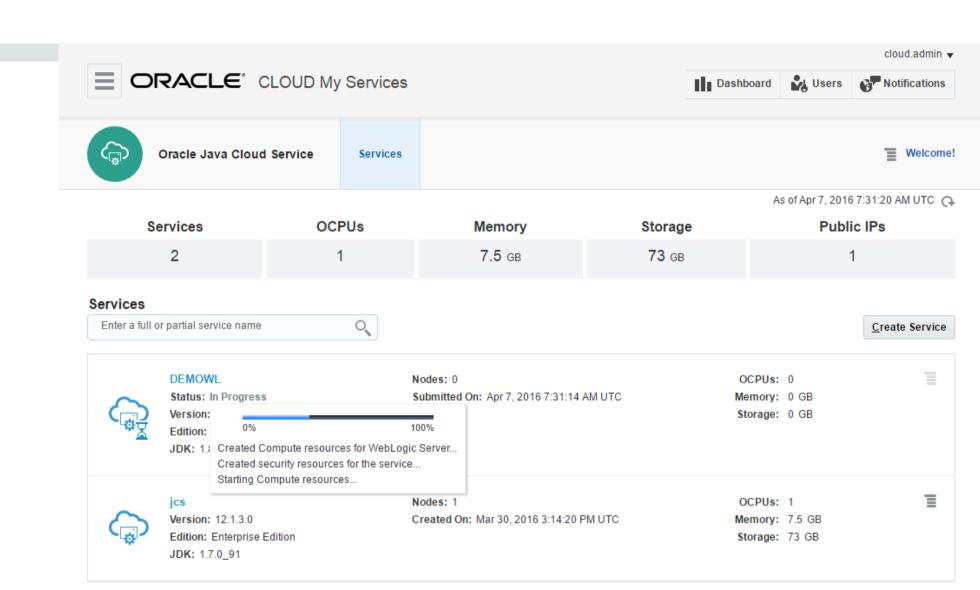


### **Backup and Recovery Details**

Cloud Storage Container: Storage-gse00000636/DEMOWL

Cloud Storage User Name: cloud.admin





▶ Service create and delete history





#### ▶ Oracle Java Cloud Service / DEMOWL

As of Apr 7, 2016 9:22:29 AM UTC Q Public IPs

#### Overview

#### N/A

Average response time

2

Nodes

# **Virtual Machines**

**OCPUs** 

Click the icon to retrieve monitoring information.





Administration Server Domain: DEMOWL\_domain

Memory

15 GB

Managed Server: DEMOWL\_d\_server\_1

Public IP: 140.86.1.115



OCPUs: 1 Memory: 7.5 GB

Storage: 73 GB



Coherence Data Tier: Cache Capacity: 1.5 GB

Capacity Unit: Basic (1.5 GB)

Storage

116.58 GB

Nodes: 1

OCPUs: 1

Memory: 7.5 GB Storage: 43.58 GB

#### Administration

Patches available

#### N/A

Last successful backup

#### **Associated Services**



Nodes

Topology

#### not configured

Load balancer status

Database Service Name: DEMODB

Connect Descriptor: DEMODB:1521/PDB1.gse00000636.oraclecloud.internal

Version: 12.1.0.2 PDB Name: PDB1

### Activity

#### Additional Information (show more)

Identity Domain: gse00000636

WebLogic Server Version: 12.2.1.0.160119 - Domain Partition Enabled

Edition: Suite

Description: Demo Weblogic



## ORACLE' Java Cloud Service

itrain user01 ▼ Instances **Users** Consoles





### MyJCS1 (Oracle Java Cloud Service)

WebLogic Server Version: 12.1.2.0

Description: Auto Generated Service, Session Name: Bulk Request JCS U1-5

#### **OVERVIEW**

average response time: n/a

3 nodes

#### ADMINISTRATION

patches available

20-Oct-2014 3:10 PM UTC

last backup

#### **TOPOLOGY**

nodes

load balancer enabled



PATCHING

LOAD BALANCER

Incremental backup daily at 3:10 PM UTC (Full backup every Thu at 3:10 PM

Last Successful Backup 20-Oct-2014 3:10 PM UTC

Configure Backups

Contains: ==

Contains: ===

Contains: ===

Notes:

Notes:

Notes:

As of 21-Oct-2014 1:03:17 AM UTC Refresh

Back Up Now

 $\equiv$ 

### **Available Backups**



20-Oct-2014 3:10 PM UTC

Type: Incremental, scheduled Available Until: 19-Nov-2014 3:10 PM UTC

Location: Disk

#### 19-Oct-2014 3:10 PM UTC

Type: Incremental, scheduled Available Until: 18-Nov-2014 3:10 PM UTC

Location: Disk



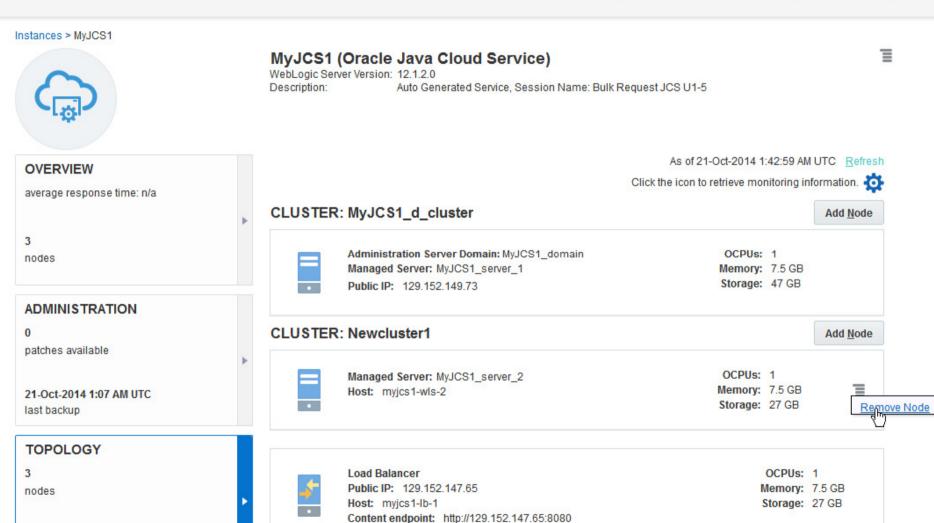
#### 18-Oct-2014 3:10 PM UTC

Type: Incremental, scheduled Available Until: 17-Nov-2014 3:10 PM UTC

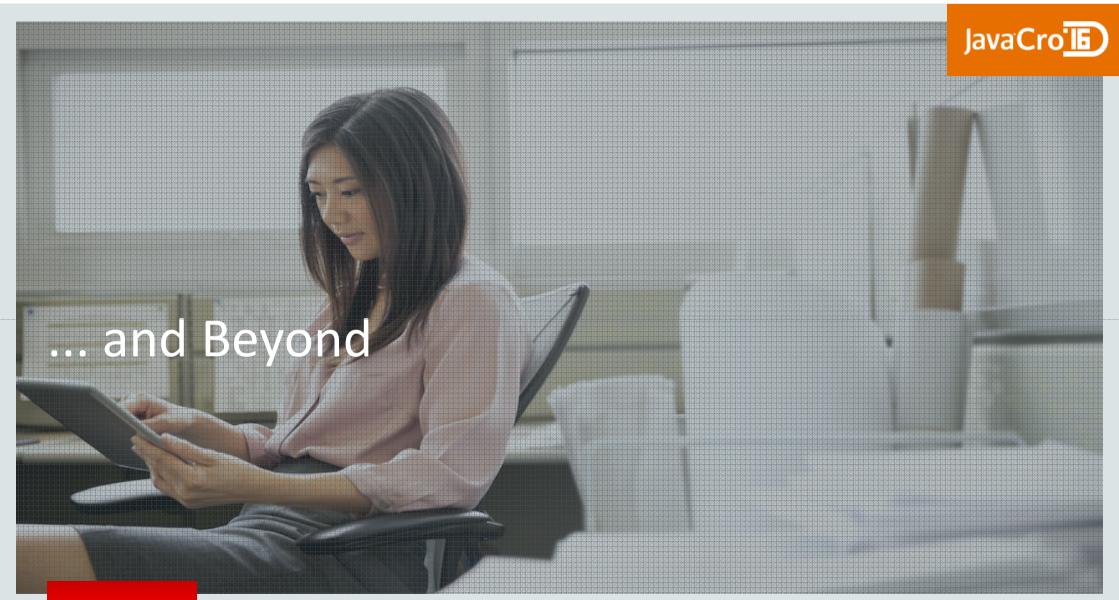
Location: Disk

## ORACLE Java Cloud Service



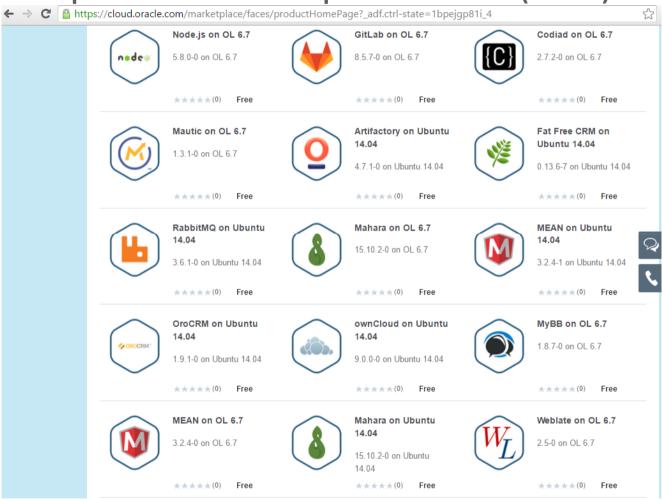


load balancer enabled

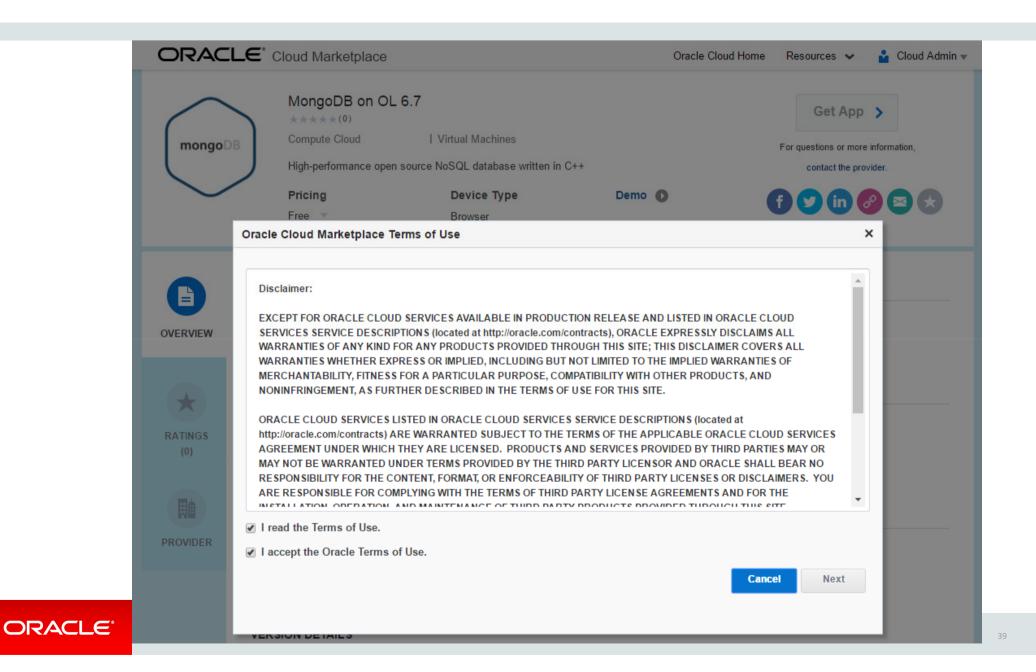


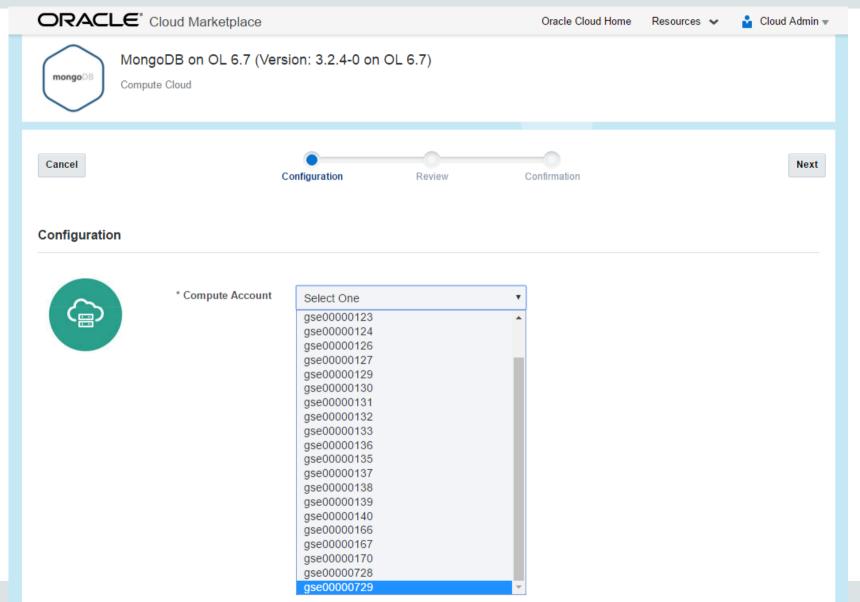


# Cloud Marketplace and Compute Cloud (IaaS)









### Tomcat on OEL 6.7 (Version: Version 7.0.65-0 on OEL 6.7)

Compute Cloud



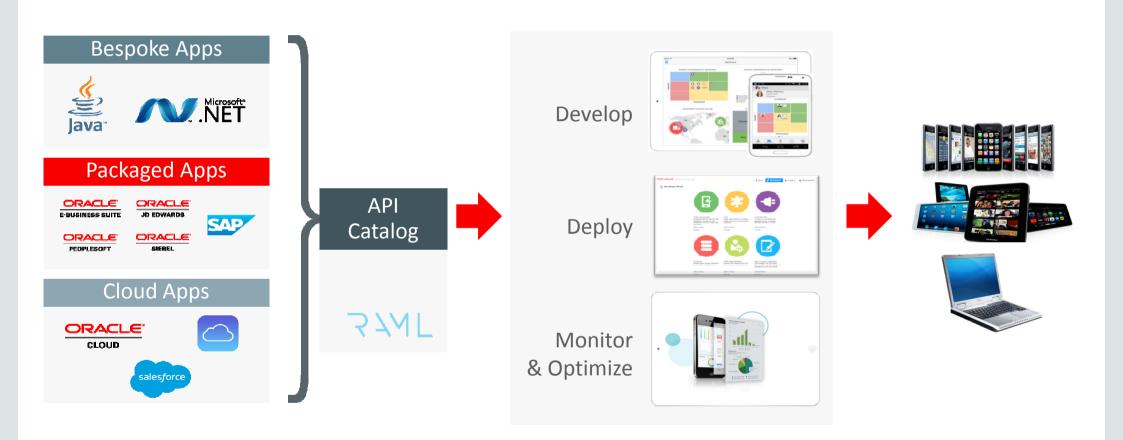
The Tomcat on OEL 6.7 app for creating virtual machine (VM) instances is now available in your Compute account.

To create a VM instance, start the Compute Console.

Start Compute Console



# **Mobile Cloud Service**







# **Management Cloud Services**









Performance Monitoring

I/T Analytics

Log Analytics

**Common Management Platform** 



Windows Azure



# If You Can't Use Oracle Public Cloud Oracle Cloud Machine



- **Same** Software
- <u>Same</u> Experience
- <u>Same</u> Pricing Options





- 2-10x greater scalability, performance
- Full vertical integration from one vendor
- Lowest business risk





# For More Information











cloud.oracle.com/java





# Integrated Cloud

Applications & Platform Services

