

*and more!*  
^

# Continuous delivery of Java applications using Oracle Cloud Platform Services

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Principal Sales Consultant | Oracle Cloud Platform

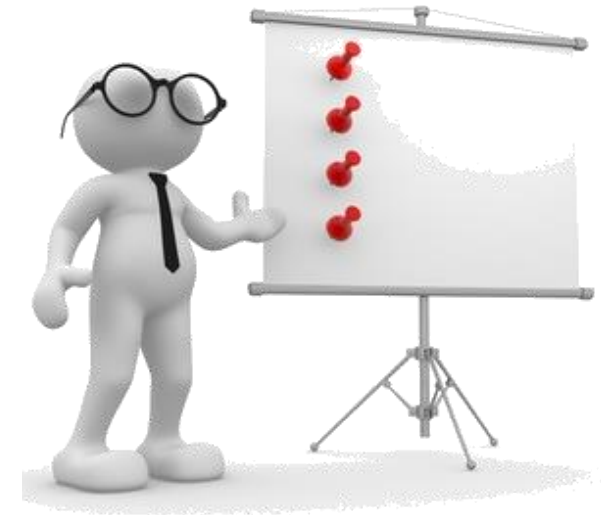
October, 2016

# Safe Harbor Statement

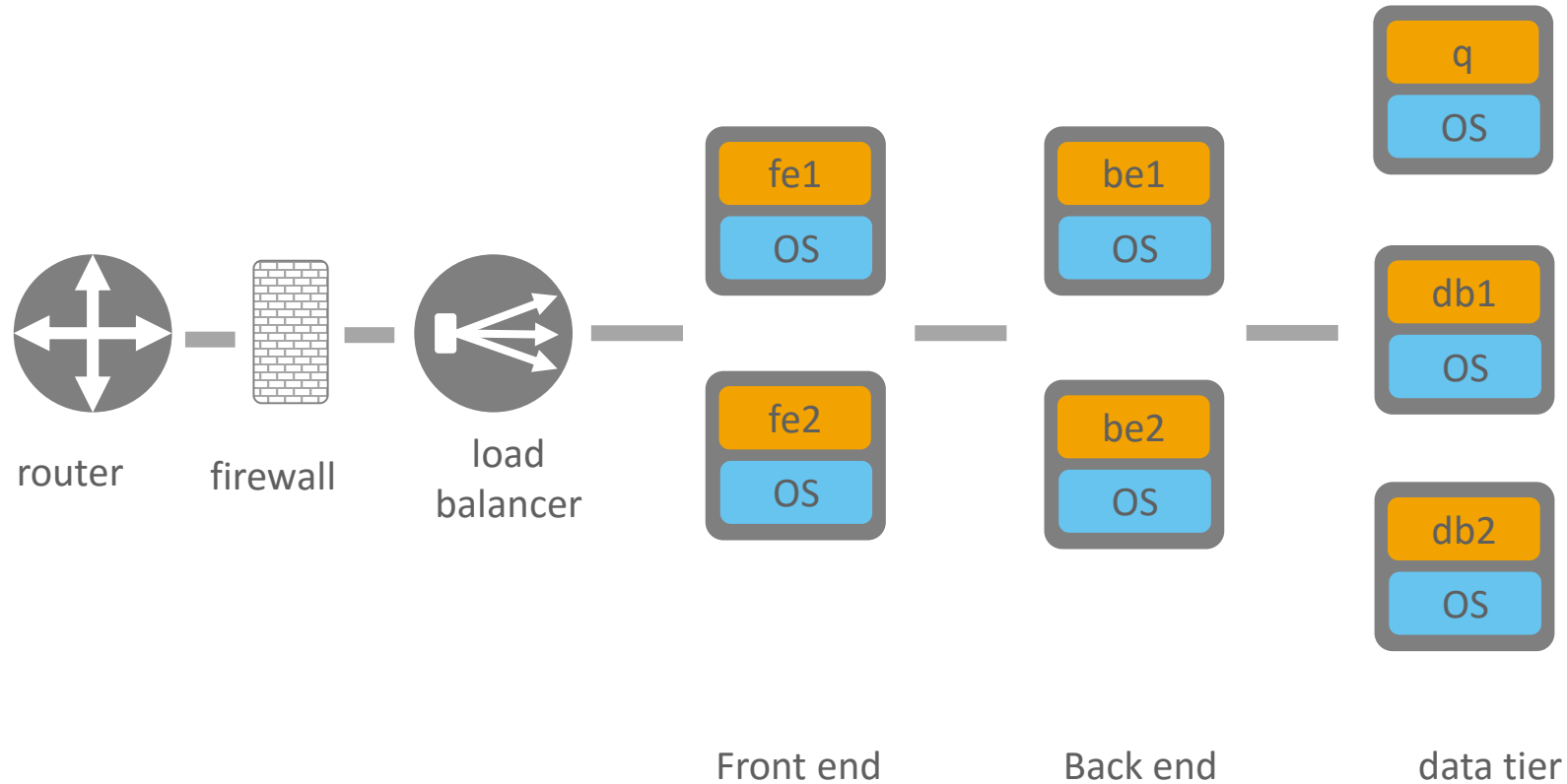
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

# Agenda

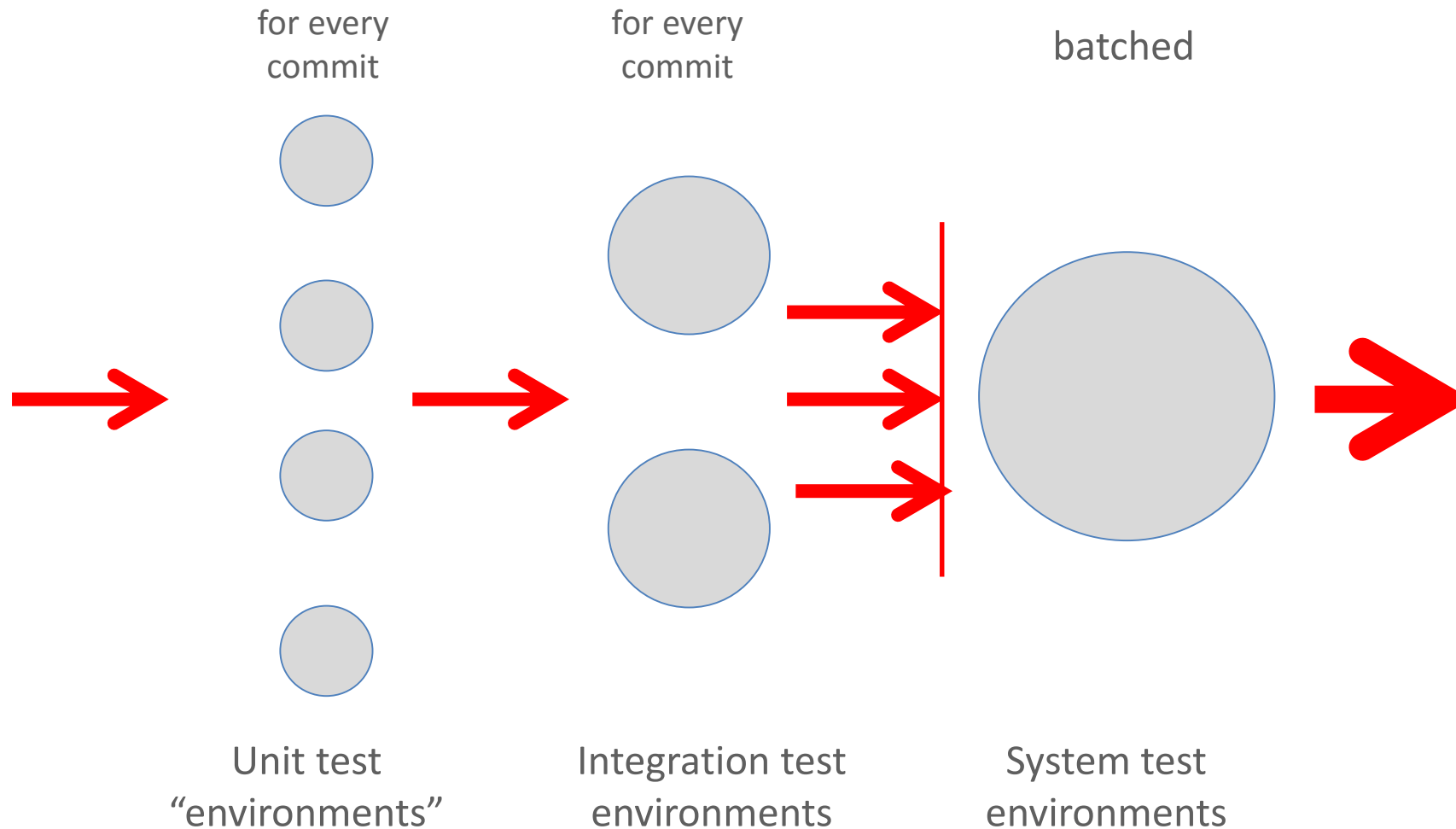
- How customers manage their application environments?
- How can Oracle PaaS for Application Development help?
- Demo – Application Container Cloud Service and integration with Developer Cloud Service
- Beyond Application Container



# A simple application

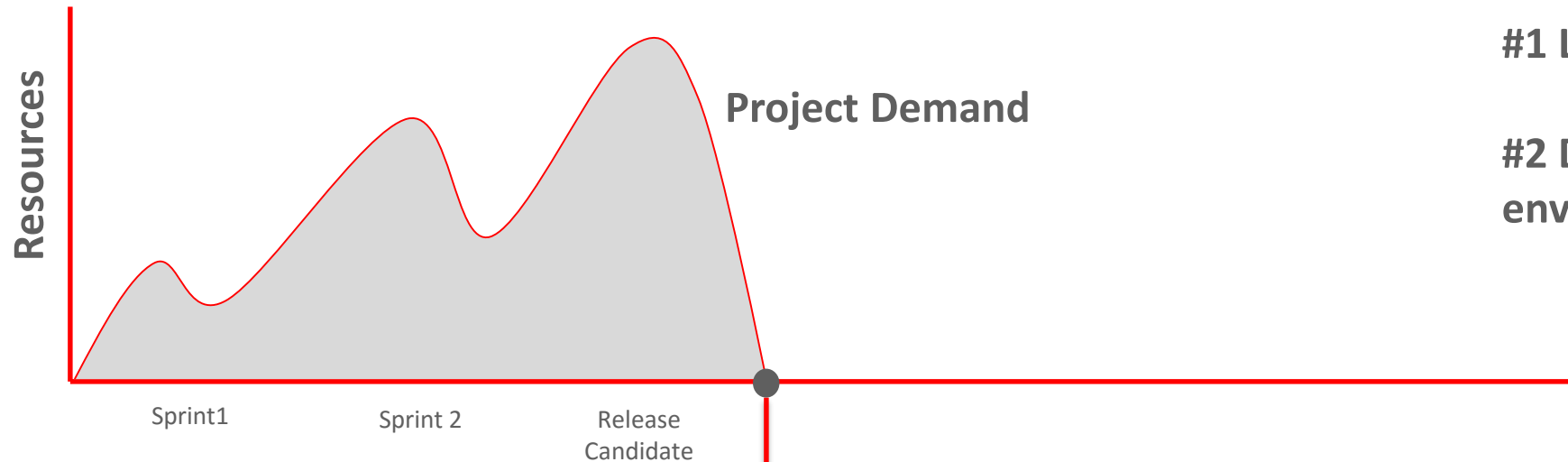


# A simple development process



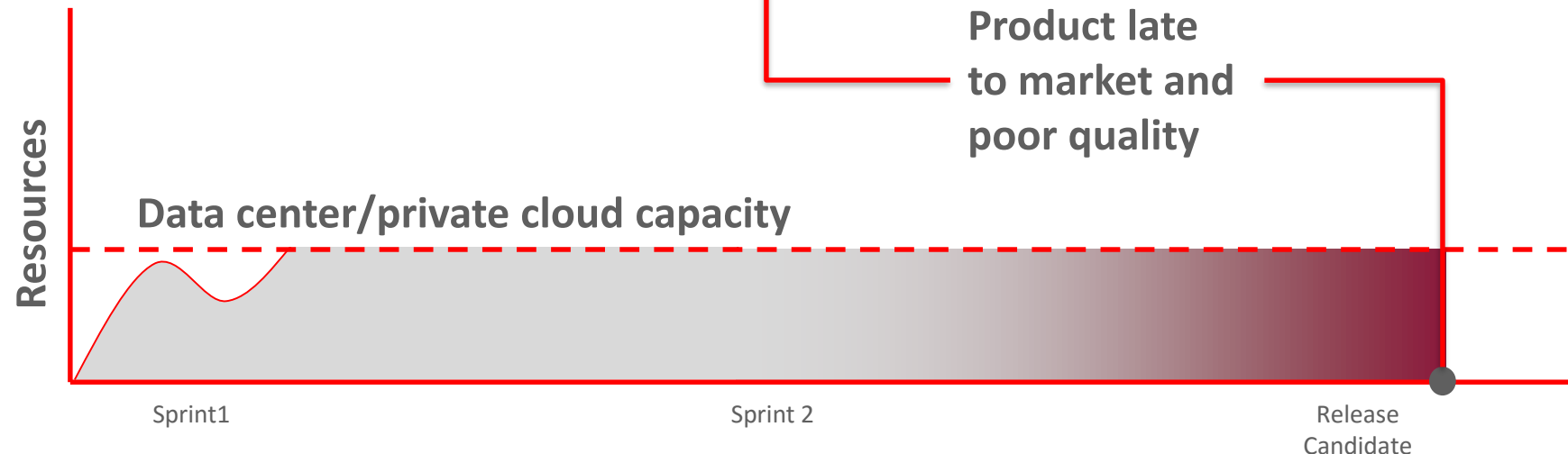
How much capacity do you need to **optimally** develop and test your application?

# On-premise dev & test issues has impact on Time To Market



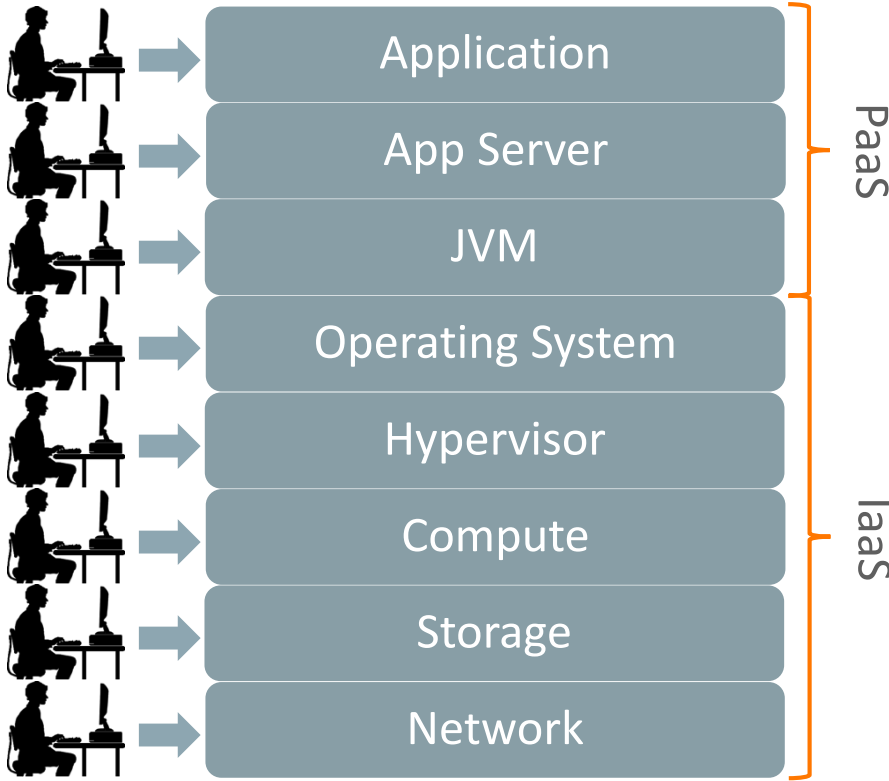
#1 Lack of internal capacity

#2 Difficult to replicate/provision environments quickly

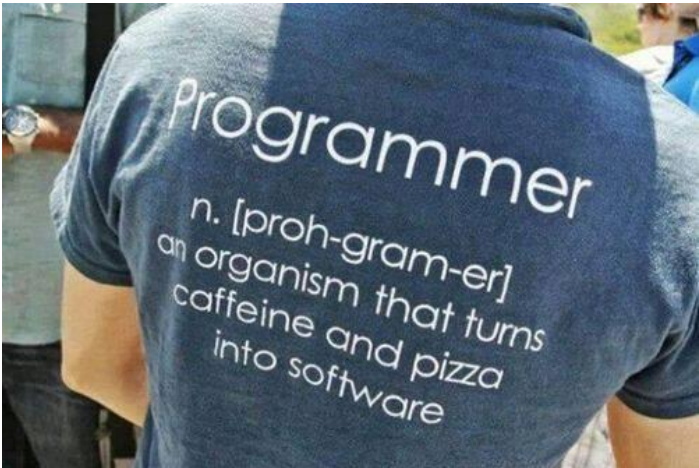


# PaaS / IaaS Now Allows Resources to be Easily Provisioned

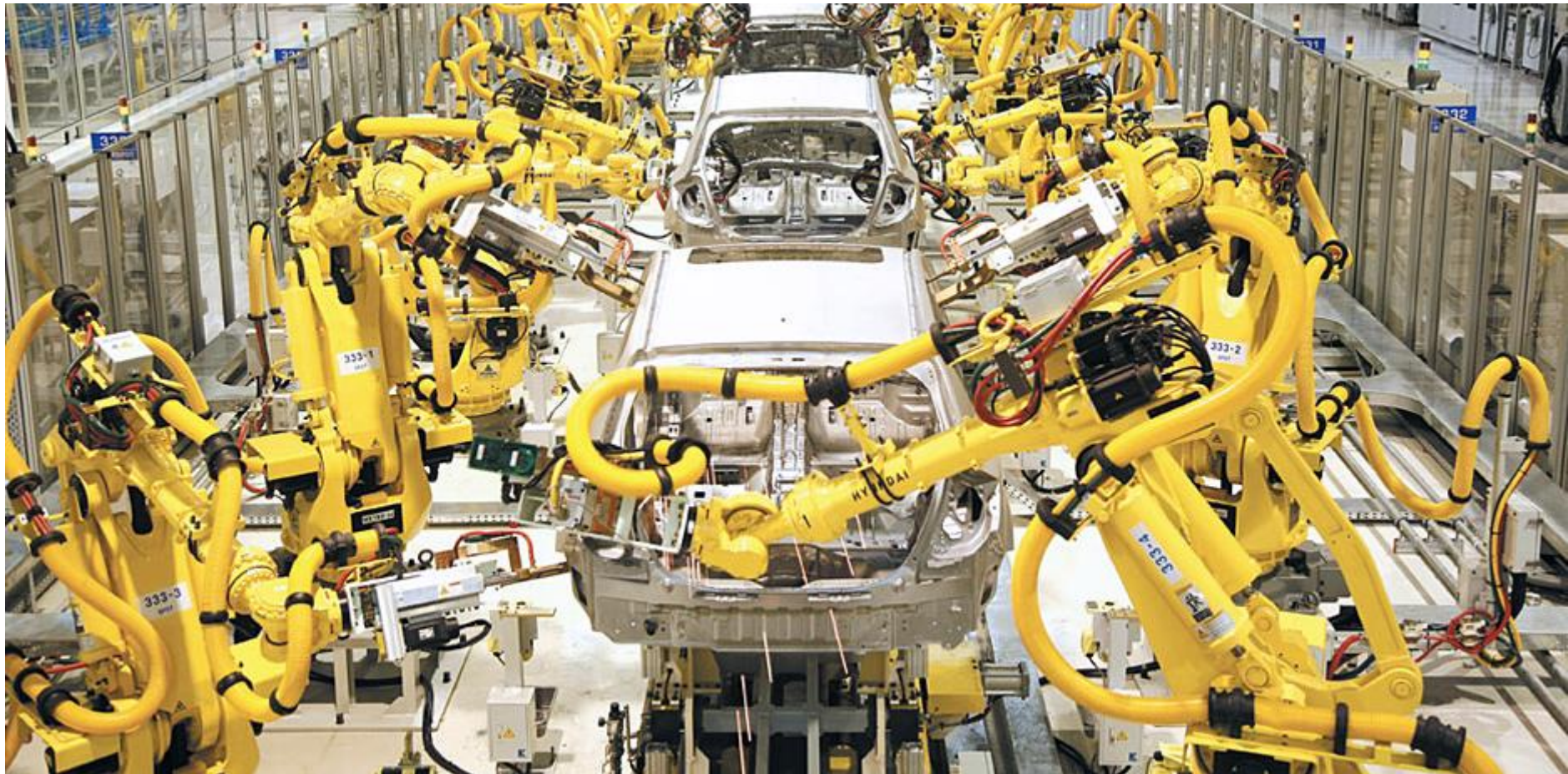
Past: Ops manually provisioned each layer



Today: Developers can provision entire stacks of hardware + software through REST API



# Automation – key enabler





# Oracle **Application Development & Deployment Benefits**

Instant **setup**

Complete **automation**

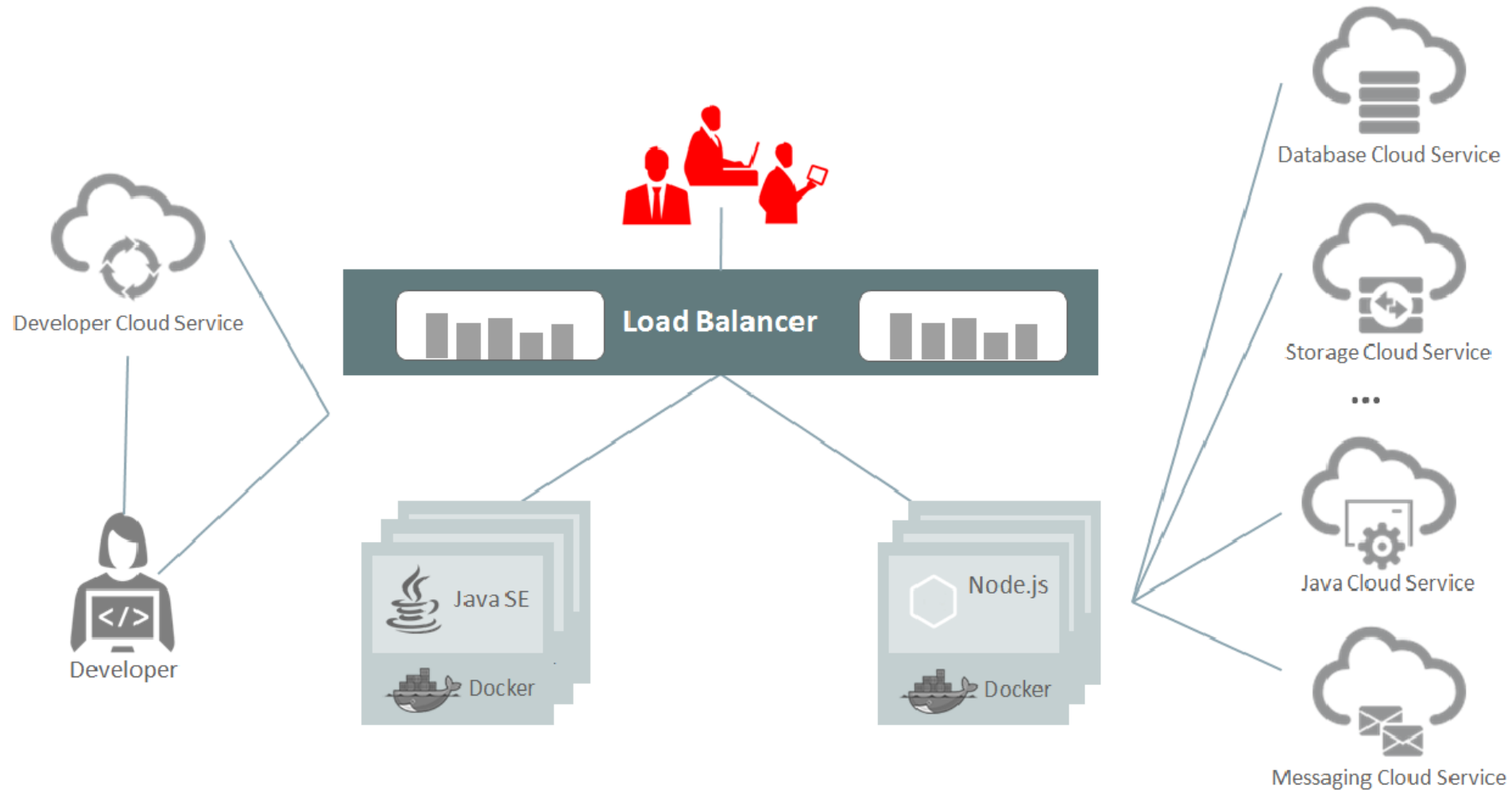
Multiple Programming **Languages**

Continuous **Delivery**

Any workload **with IaaS**

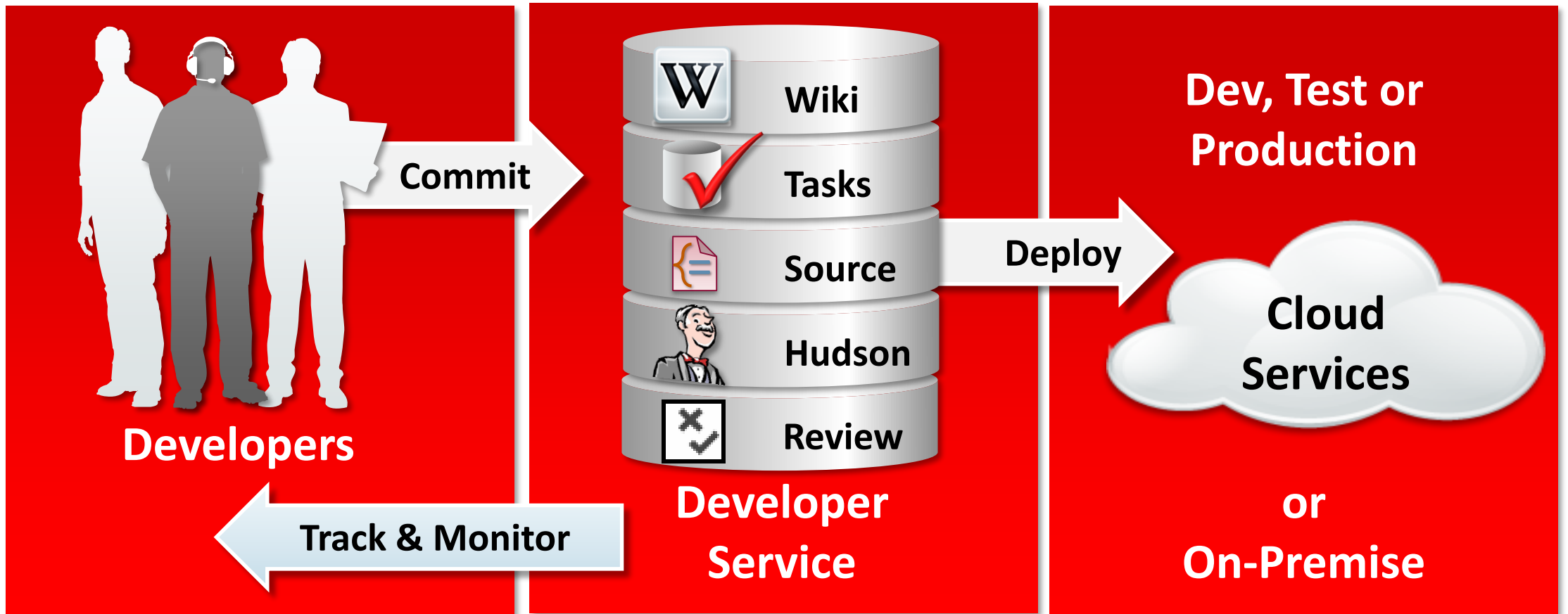
# Oracle Application Container Cloud Service

A modern platform for lightweight application development

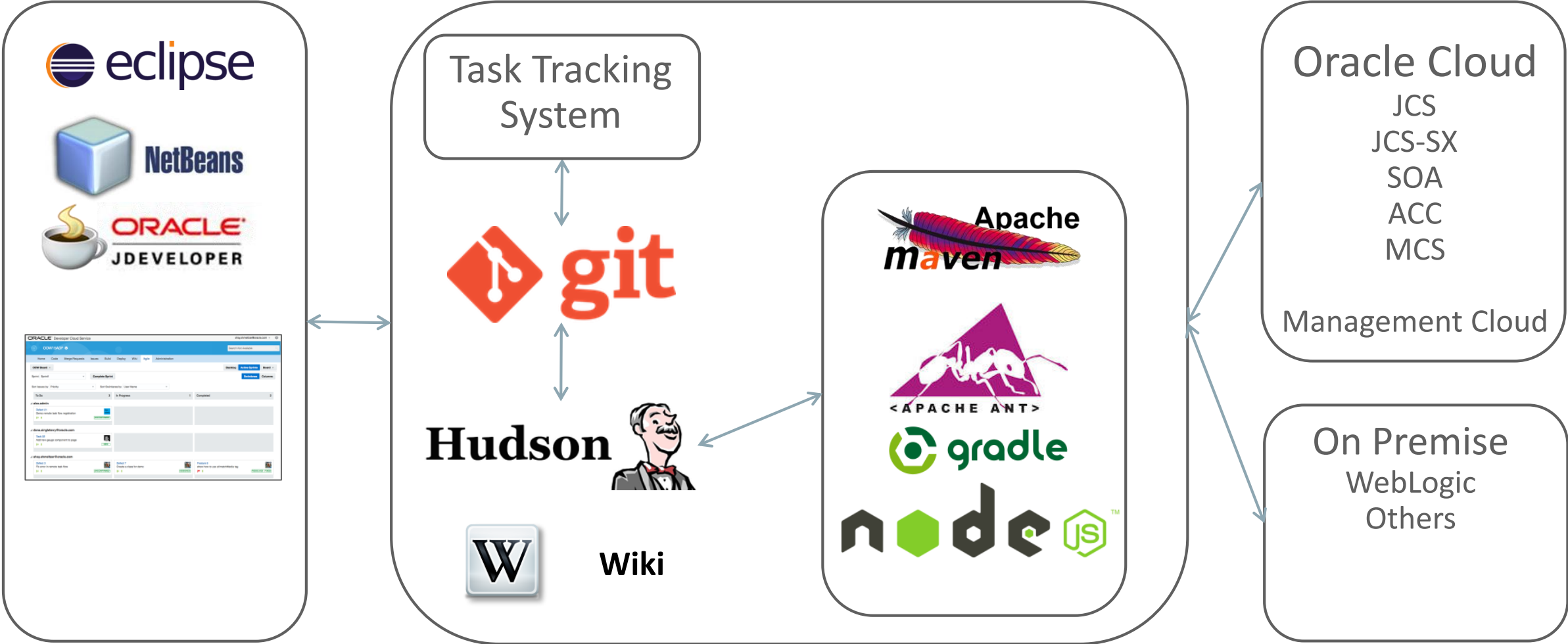


# Oracle Developer Cloud Service

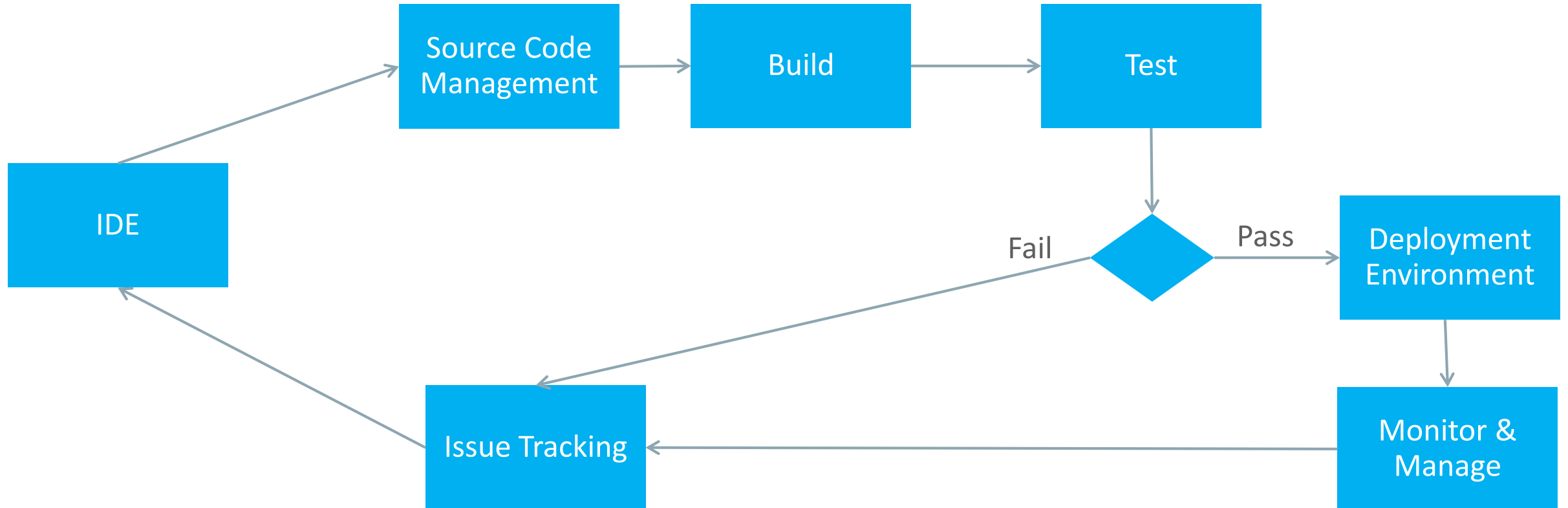
Bringing It All Together



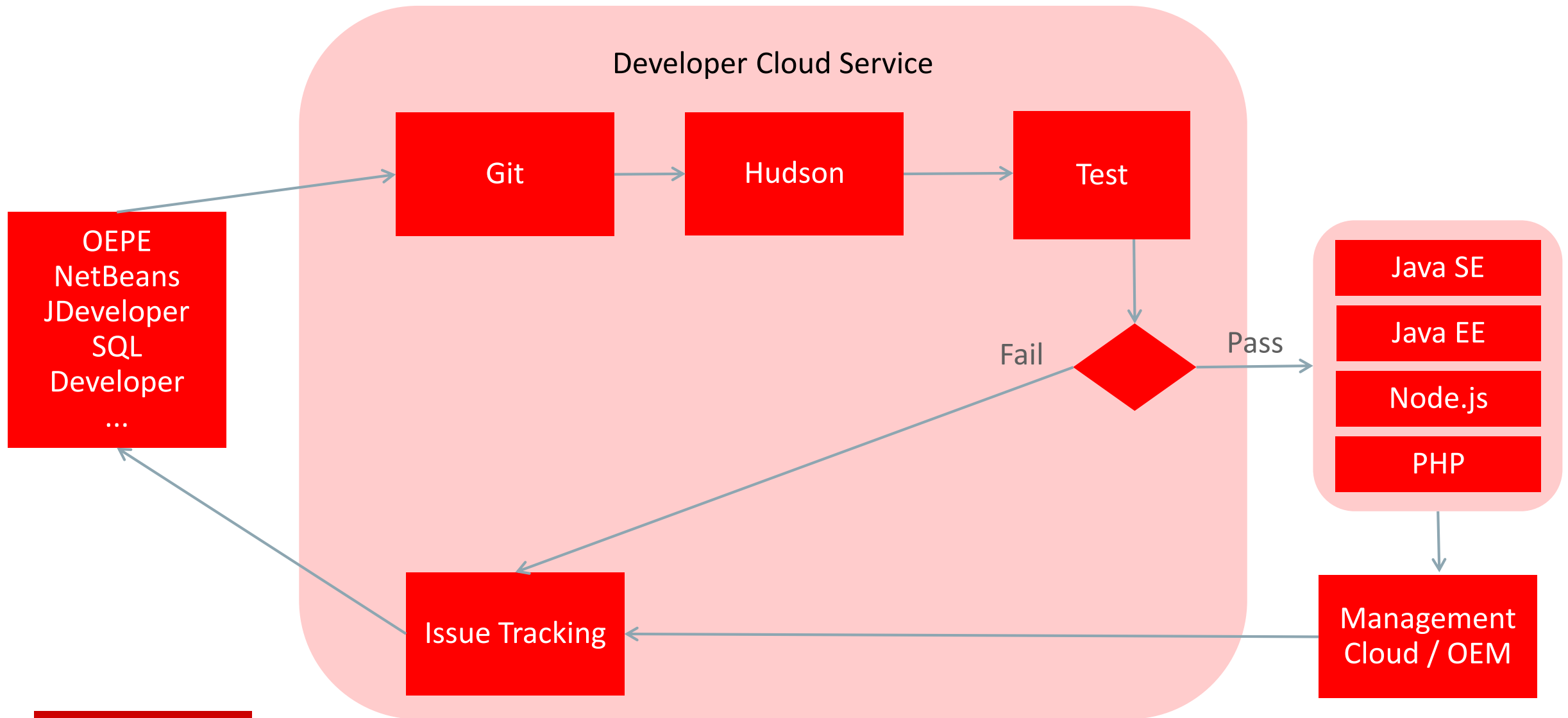
# Oracle Developer Cloud Service



# Continuous Integration/Delivery Pipeline



# Continuous Integration/Delivery Pipeline





Demo

Package Explorer

- employees-app [corporatedirectory.git-8a74 master]
  - src/main/java
    - com.example.employees
      - Employee.java
      - EmployeeList.java
      - EmployeeService.java
      - EmployeeServlet.java
      - Main.java
  - src/main/webapp
    - css
    - fonts
    - js
    - jsp
      - list-employees.jsp
      - new-employee.jsp
    - META-INF
      - context.xml
    - WEB-INF
      - web.xml
    - index.jsp
  - Maven Dependencies
  - JRE System Library [JavaSE-1.8]
  - src
    - assembly
      - distribution.xml
    - main
    - target
    - tomcat.8080
    - make.sh
    - manifest.json
    - pom.xml

list-employees.jsp

# Oracle Employee Directory

Type the Name or Last Name of the employee

Message: \${message}

#	Name	Last name	Birth date	Role	Department	E-mail
\${employee.id}	\${employee.name}	\${employee.lastName}	\${employee.birthDate}	\${employee.role}	\${employee.department}	\${emp

No people found matching your search criteria

Design Preview

Task List

Find [input] | All | Activate...

- Mine [gse00000636 [corporatedirectory]]
- Open [gse00000636 [corporatedirectory]]
  - 1: change title to Oracle

Connect Mylyn

Connect to your task and ALM tools or create a local task.

Outline

```

<> jsp:directive.taglib prefix=c
<> html
  <> head
    <> body
      <> div class=container
        <> h2
          <!-- #comment
            <!-- form id=searchEmployeeForm
              <!-- #comment
                <> c:if test=${not empty message}
                  <!-- form id=employeeForm
                    <!-- form action=jsp/new-employee.jsp
    
```

Oracle Cloud

- gse00000636
  - dbmb\_DBAAAS
  - dbmb\_DBBCS
  - developer41604
    - AlphaProductCatalog
    - corporatedirectory
      - Code
      - Issues
        - Mine
        - Open
          - 1: change title to Oracle
        - Recent
        - Related

Problems @ Javadoc Declaration Console

```

<terminated> C:\Oracle\jdk8\bin\javaw.exe (19. 5. 2016 19:40:25)
[INFO] Installing D:\Work\Development\acc\eclipse\corporatedirectory.git-8a74\corporatedirectory\target\corporatedirectory.war to C:\Users\MKRATKY\.m2\repository\com\example\employees\corporatedirector
[INFO] Installing D:\Work\Development\acc\eclipse\corporatedirectory.git-8a74\corporatedirectory\pom.xml to C:\Users\MKRATKY\.m2\repository\com\example\employees\corporatedirectory\1.0-SNAPSHOT\corpora
[INFO] Installing D:\Work\Development\acc\eclipse\corporatedirectory.git-8a74\corporatedirectory\target\corporatedirectory-1.0-SNAPSHOT-jar-with-dependencies.jar to C:\Users\MKRATKY\.m2\repository\com\
[INFO] Installing D:\Work\Development\acc\eclipse\corporatedirectory.git-8a74\corporatedirectory\target\corporatedirectory-dist.zip to C:\Users\MKRATKY\.m2\repository\com\example\employees\corporatedir
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 14.692 s
[INFO] Finished at: 2016-05-19T19:40:42+02:00
[INFO] Final Memory: 18M/311M
[INFO] -----
    
```





**Description**  
No description available

**Permalinks**  
Last | Successful | Failed | Completed | Unsuccessful | Stable

**Notifications** On Off CC Me

**Build History** New Build 67%

**Console** **Changes** **Git Logs** **Audit**

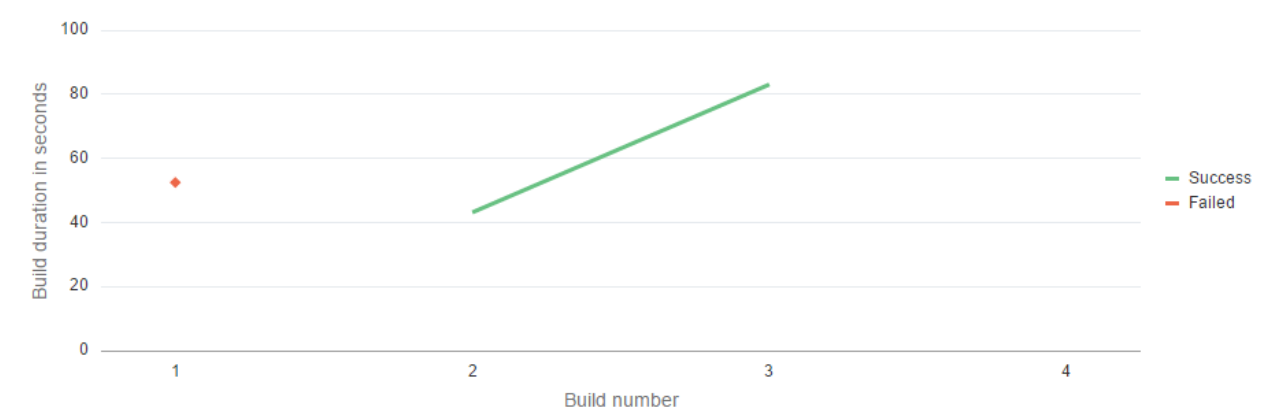
Status	Build	Time	Duration	Console
	#4	Just now	N/A	
	#3	Wednesday at 8:49 PM +0200	1 min 23 s	
	#2	Wednesday at 8:35 PM +0200	43 s 105 ms	
	#1	Wednesday at 8:33 PM +0200	52 s 438 ms	

**Artifacts of Last Successful Build**

corporatedirectory-dist.zip

(all files in zip)

**Build Trend**



**Test Result Trend**

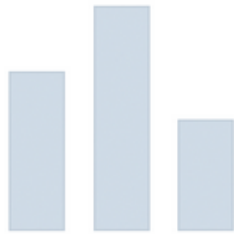




As of Apr 12, 2016 8:23:45 AM UTC ↻

## Applications

Create Application



You currently don't have any application created.

Use Create Application button to create your first application. [Learn More...](#)

### Need help creating an application?

- [Watch a video](#)
- [Step through a tutorial](#)

#### Application creation and deletion history

Range  Show only failed attempts

No attempts to create or delete application.



## Deployments

### corporatedirectory

Deploy to ACCS [gse00000636](#)

Configuration [corporatedirectory](#)

Job / Build [Sample\\_Maven\\_Build / Latest Successful Build](#)

Artifact [corporatedirectory/target/corporatedirectory-dist.zip](#)



Last deployment succeeded -- Just now.

### corporatedirectory: History

- Deployment Succeeded**  
[Sample\\_Maven\\_Build / 4 / corporatedirectory/target/corporatedirectory-dist.zip](#)  
 Logs [dcs\\_undeploy](#), [dcs\\_deploy](#)  
 Just now
- Deployment Succeeded**  
[Sample\\_Maven\\_Build / 3 / corporatedirectory/target/corporatedirectory-dist.zip](#)  
 Logs [dcs\\_undeploy](#), [dcs\\_deploy](#)  
 Wednesday at 8:50 PM +0200
- Update Succeeded**  
[Sample\\_Maven\\_Build / 2 / corporatedirectory/target/corporatedirectory-dist.zip](#)  
 Wednesday at 8:49 PM +0200 by Cloud Admin User
- Deployment Succeeded**  
[Sample\\_Maven\\_Build / 2 / corporatedirectory/target/corporatedirectory-dist.zip](#)  
 Logs [dcs\\_deploy](#)  
 Wednesday at 8:40 PM +0200 by Cloud Admin User
- Create Succeeded**  
[Sample\\_Maven\\_Build / 2 / corporatedirectory/target/corporatedirectory-dist.zip](#)  
 Wednesday at 8:39 PM +0200 by Cloud Admin User



Application Container Cloud

Applications

As of Apr 12, 2016 8:25:03 AM UTC

### Applications

Search by application name

Create Application



corporatedirectory

Creating Application...

Version: 1.2.3

Java SE: 1.8.0\_71-b15

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

Memory: 1GB

Instances: 1

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

▶ Application creation and deletion history




Application Container Cloud

Applications

As of May 19, 2016 5:32:11 PM UTC

### Applications

Create Application

	<b>corporatedirectory</b> Deploying Release... Version: 1.2.3 Java SE: 1.8.0_71-b15 URL: <a href="https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com">https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com</a>	<b>Last Deployed On:</b> May 19, 2016 5:31:23 PM UTC <b>Created On:</b> Apr 12, 2016 9:33:34 AM UTC	<b>Memory:</b> 1GB <b>Instances:</b> 1
---	--	--	---


Application creation and deletion history





Application Container Cloud



Applications

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

## Applications

Search by application name

[Create Application](#)

	<b>corporatedirectory</b> Version: 1.2.3 Java SE: 1.8.0_71-b15 URL: <a href="https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com">https://corporatedirectory-gse00000636.apaas.em2.oraclecloud.com</a>	Created On: Apr 12, 2016 8:24:17 AM UTC	Memory: 1GB Instances: 1	
---	--	---	-----------------------------	---

▶ Application creation and deletion history

## JavaCro16 Employee Directory

 Search

#	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



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

**Overview**

2  
Instances

**Deployments**

0  
Service Bindings

0  
User-defined Variables

**Administration**

0  
Updates Available

**Logs & Recordings**

0  
Logs

0  
Recordings

**Resources**

Instances <sup>?</sup>    Memory (GB) <sup>?</sup>

2    1

▶ **Instances**

▶ **Activity**

**Additional Information**

Last Deployed On:	Apr 6, 2016 6:54:54 PM UTC
Current Version:	1.2.3
Runtime:	Java SE 8u71
Runtime Version:	1.8.0_71-b15
Created On:	Apr 6, 2016 6:54:54 PM UTC
Subscription Type:	MONTHLY
Identity Domain:	gse00000636





As of Apr 7, 2016 9:20:44 AM UTC

**Overview**  
2  
Instances

**Deployments**  
1  
Service Bindings  
0  
User-defined Variables

**Administration**  
0  
Updates Available

**Logs & Recordings**  
2  
Logs  
0  
Recordings

**Deployments**

Upload New

Current Version: 2.0      Source: USER  
Last Deployed On: Apr 7, 2016 9:16:19 AM UTC      Archive Size: 5.71 MB  
Archive Name: deploy4695900902125332731.zip

**Launch Command**

java -jar corporatedirectory-1.0-SNAPSHOT-jar-with-dependencies.jar

**Service Bindings**

Type	Name	Username	Actions
Database Cloud Service	DEMODB	alphaoffice	

Add Service Binding

**Environment Variables** Show All Variables

Name	Value	Actions
No User-defined variables available.		

Add Environment Variable


Deployment History




... and Beyond

# Mobile Cloud Service

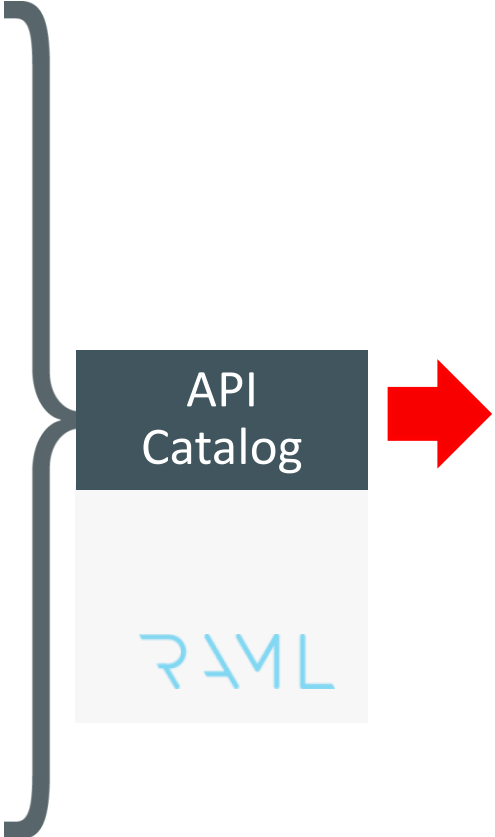

**Bespoke Apps**



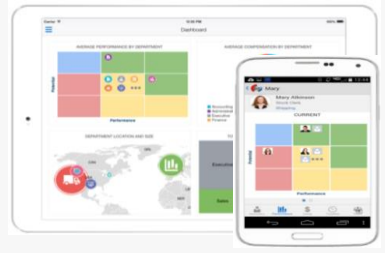
**Packaged Apps**



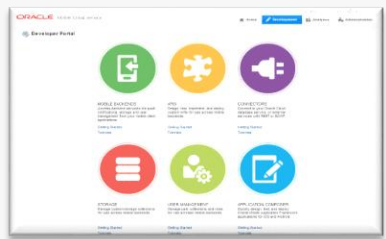
**Cloud Apps**




**Develop**



**Deploy**



**Monitor & Optimize**



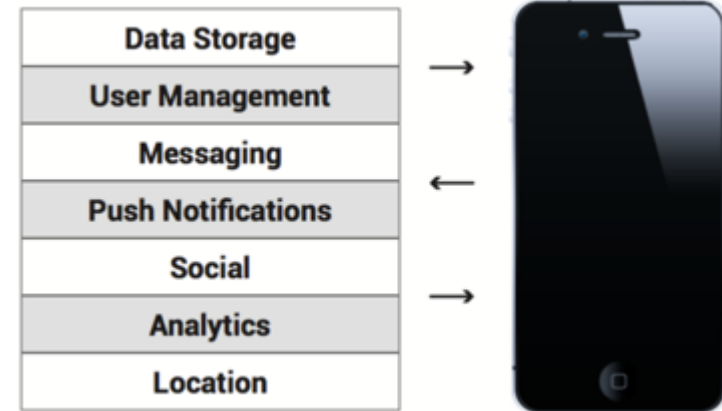
# API Platform Cloud Service and Mobile

- API Platform CS

- API Platform is for the owners of the underlying backend IT systems to expose APIs for many use cases (not mobile specific but mobile included)
- Specific application and audience: IT, Architects, Business for monetization
- Multiple uses across scenarios
- Multiple deployment models: API Platform CS will also live in the customers' own DMZ and also available on Amazon (gateway in Amazon, management is in our cloud)
- Future: monetization

- MCS

- Specific application and audience: Mobile App Developers
- Example of mBaaS:



# Management Cloud Services

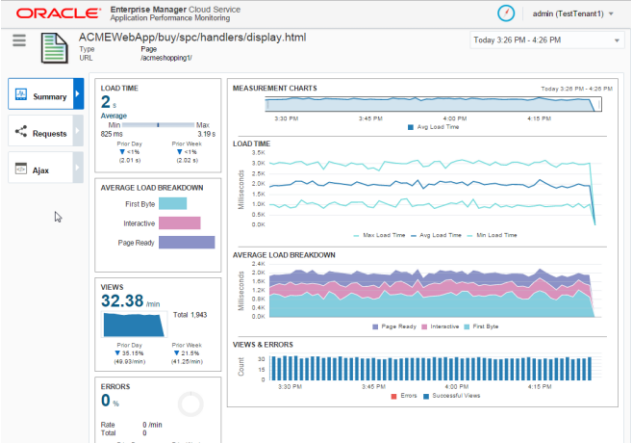
On-Premise

**ORACLE**<sup>®</sup>

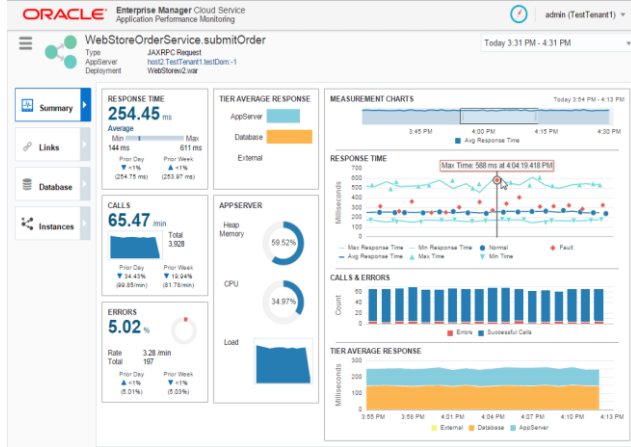
CLOUD

amazon web services™

Windows Azure



Performance Monitoring



I/T Analytics



Log Analytics

Common Management Platform



# What if you use Open Source?



# Cloud Marketplace and Compute Cloud (IaaS)

The screenshot displays the Oracle Cloud Marketplace interface. The browser address bar shows the URL: [https://cloud.oracle.com/marketplace/faces/productHomePage?\\_adf.ctrl-state=1bpejgp81i\\_4](https://cloud.oracle.com/marketplace/faces/productHomePage?_adf.ctrl-state=1bpejgp81i_4). The page features a grid of 15 software product cards, each with an icon, title, version information, and a 'Free' status. The products are arranged in five rows and three columns.

Product Name	Version	Status
Node.js on OL 6.7	5.8.0-0 on OL 6.7	Free
GitLab on OL 6.7	8.5.7-0 on OL 6.7	Free
Codiad on OL 6.7	2.7.2-0 on OL 6.7	Free
Mautic on OL 6.7	1.3.1-0 on OL 6.7	Free
Artifactory on Ubuntu 14.04	4.7.1-0 on Ubuntu 14.04	Free
Fat Free CRM on Ubuntu 14.04	0.13.6-7 on Ubuntu 14.04	Free
RabbitMQ on Ubuntu 14.04	3.6.1-0 on Ubuntu 14.04	Free
Mahara on OL 6.7	15.10.2-0 on OL 6.7	Free
MEAN on Ubuntu 14.04	3.2.4-1 on Ubuntu 14.04	Free
OroCRM on Ubuntu 14.04	1.9.1-0 on Ubuntu 14.04	Free
ownCloud on Ubuntu 14.04	9.0.0-0 on Ubuntu 14.04	Free
MyBB on OL 6.7	1.8.7-0 on OL 6.7	Free
MEAN on OL 6.7	3.2.4-0 on OL 6.7	Free
Mahara on Ubuntu 14.04	15.10.2-0 on Ubuntu 14.04	Free
Weblate on OL 6.7	2.5-0 on OL 6.7	Free



## MongoDB on OL 6.7

★★★★★ (0)

Compute Cloud

| Virtual Machines

High-performance open source NoSQL database written in C++

Pricing

Free ▾

Device Type

Browser

Demo ▶

Get App &gt;

For questions or more information,  
contact the provider.

OVERVIEW

RATINGS  
(0)

PROVIDER

## Oracle Cloud Marketplace Terms of Use



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Cancel

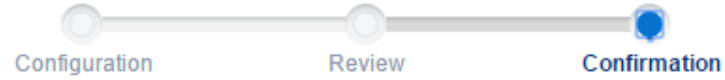
Next





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

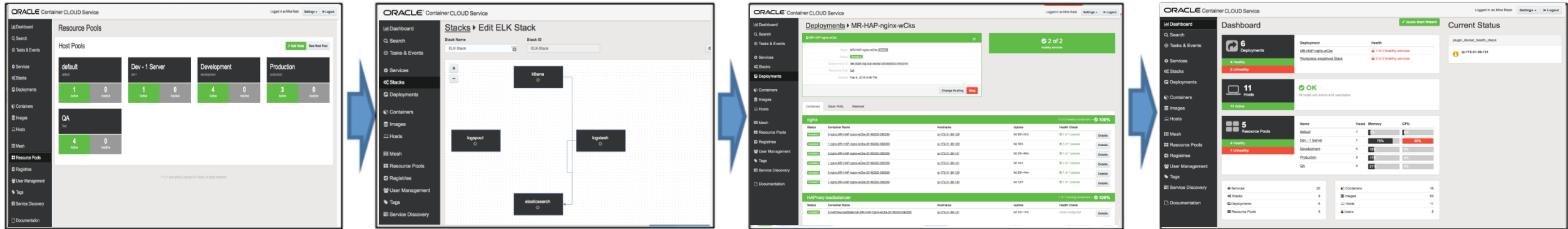
Compute Cloud



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](#)

# Container Cloud Service



## Configuration Management

- Create Instances as Needed
- Define Resource Pools
- Add Private Registries

## Application Deployment

- Edit Create New Services
- Compose Application Stacks
- Deploy Stacks with 1 Click

## Container Orchestration

- Automated Deployment
- Multi-Host, Easy Scale Out
- Built in Service Discovery

## Operations Management

- Integrated Health Checks
- Unified Dashboard
- Monitoring and Auditing

# Transformational Technologies – Where YOU Want Them

## On-Premises

Traditional Infrastructure



- Customer Data Center
- Purchased
- Customer Managed

## Cloud@Customer

Cloud Machines



- Customer Data Center
- Subscription
- Oracle Managed

## Public Cloud

IaaS, SaaS, PaaS



- Oracle Cloud
- Subscription
- Oracle Managed

Q&A



## For More Information



[cloud.oracle.com/acc](https://cloud.oracle.com/acc)  
[cloud.oracle.com/java](https://cloud.oracle.com/java)  
[cloud.oracle.com/developer\\_service](https://cloud.oracle.com/developer_service)

# Integrated Cloud

## Applications & Platform Services