

Application Deployment with Oracle Cloud Services

**Lift and Shift Applications from On-Premises** to Oracle Cloud

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## PaaS is Growing Rapidly Because...

IT Development, Operations And Line of Business Want



- Latest Technology
- Instant Access
- Better Code
- Frequent Releases
- Build Once Deploy Anywhere



# IT Operations Performance & Costs

- Faster Response
- Higher QoS
- Lower Risk
- Lower Costs
- Do More with Less



Line of Business Innovation & Speed

- New Markets
- New Products
- Richer Insights
- Ubiquitous Access
- Ease of Use

#### **Cloud Drivers**

**Agility** 

Cost

Risk

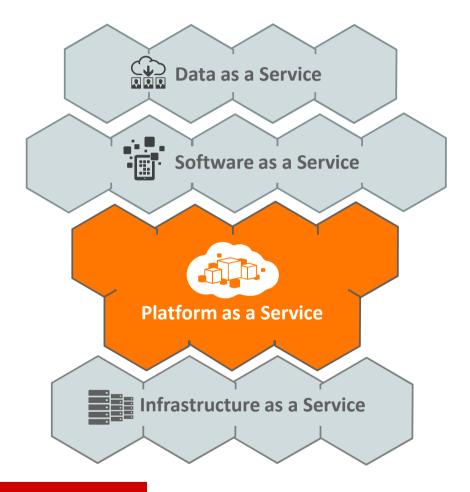
4+ months

to deploy new business applications

Average server utilization 10 ~20%

Unplanned downtime costs \$10k ~ \$20k per minute

# **Oracle Cloud Platform Strategy**

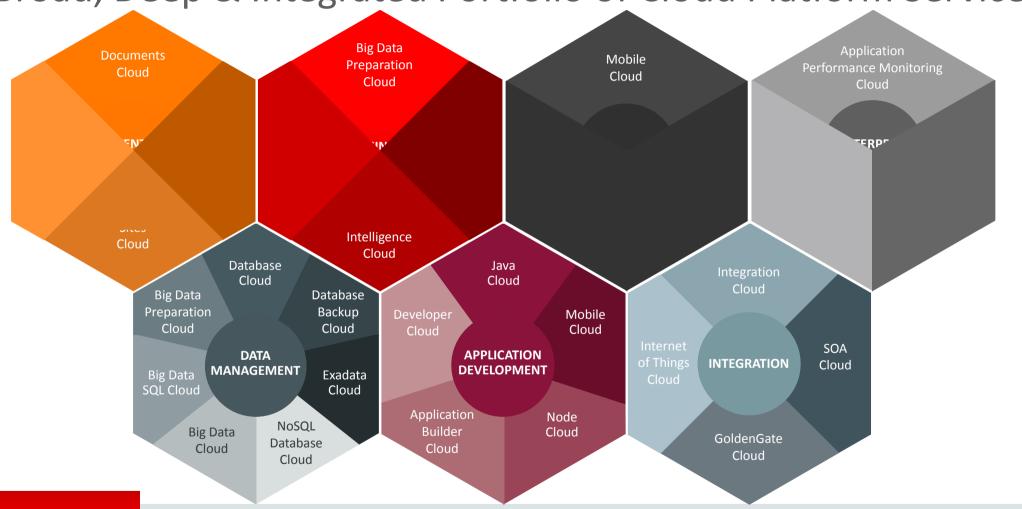


Bring Oracle's leading
Database and Middleware
Technology Software to customers
and partners anywhere in the
World through the Internet





#### Broad, Deep & Integrated Portfolio of Cloud Platform Services



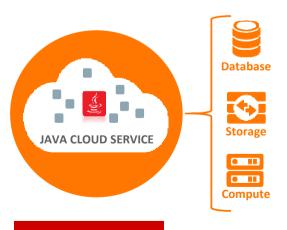


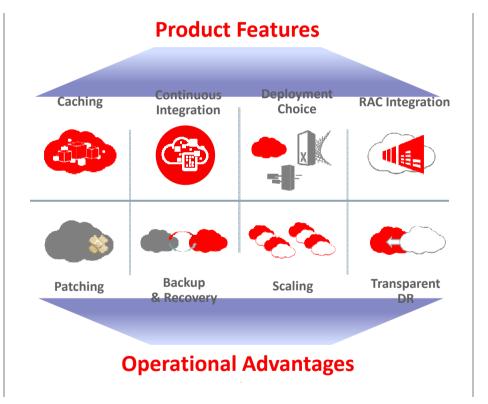
# Bird's-eye View of Java Cloud Service (Launched In FY15)

#### Your platform for running business applications in the cloud

#### What is JCS?

- Robust PaaS for Java, built on Oracle's JaaS solution
- Includes advanced cloud tooling that covers the complete lifecycle of your application





#### **Benefits**

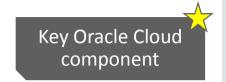












#### Java Cloud Service Basics

#### Your platform for running business applications in the cloud

- Self-service application platform with advanced cloud tools
- Save time and cost with simplified provisioning
- Reduce down time: automated patching, backup, recovery
- Increase data and processing capacity on demand to scale for new business needs
- Enable Oracle Coherence for caching & data grid functions
- Pre-configured for Database and Developer Cloud Services for complete cloud application management





## Java Cloud Service is Transforming Java Application Delivery

#### Old Model - WebLogic

Buy Perpetual/Term Licenses

Download, Install, Configure WebLogic

**Configure Database Connections** 

Install, Configure Load Balancer

Install, Configure Coherence Cache

Manual Ops – Provision, Patch, Backup, Scale

Administrator-driven Model

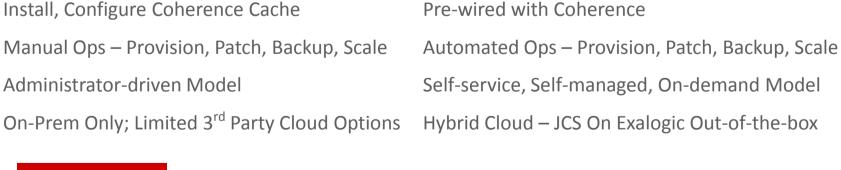
#### Cloud Model – Java Cloud Service

Buy Cloud Credits, Pay As You Use

Consume Cloud Services As You Need

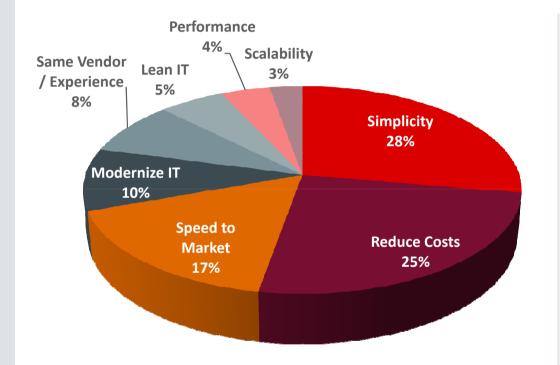
Pre-wired with Database Cloud

Pre-wired with Load Balancer





## Why Customers Choose Java Cloud Service ...

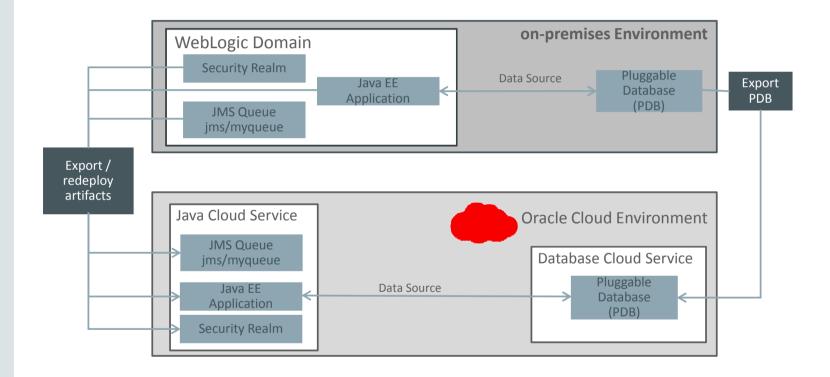


#### **Top 4 Reasons For Choosing JCS:**

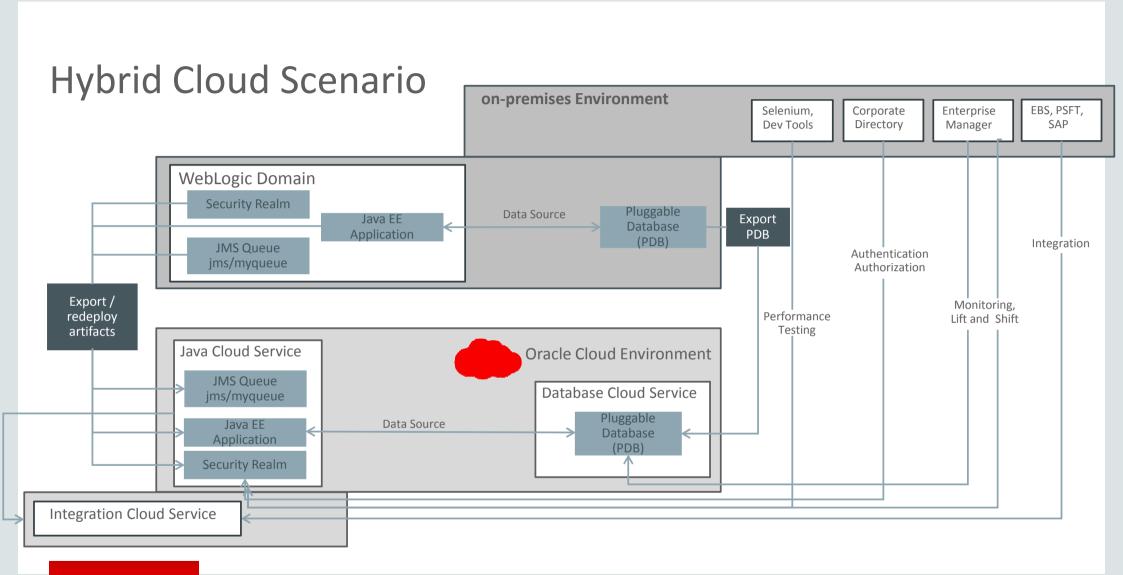
- Simplicity
  - Easy to deploy, configure, implement
- Reduce Costs
  - Reduce CapEx, dev/test environment costs, free up resources
- Speed
  - Faster time-to-value, rapid provisioning
- Modernize IT
  - Hybrid Cloud strategy for app dev



#### Lift and Shift to Oracle Cloud





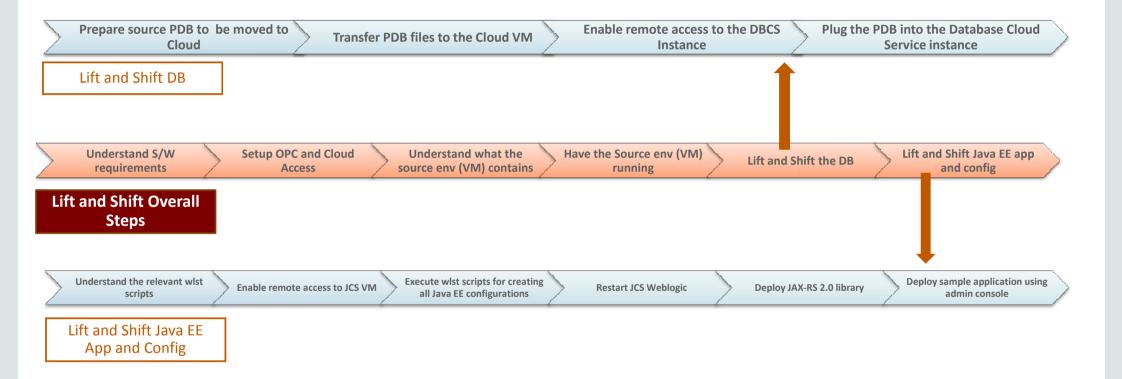


#### Lift and Shift Tutorial Overview

- Basic Version of the tutorial
  - On-premises environment (WLS 12c) captured in a VM
  - Lift and Shift PDB from on-premises to Database Cloud Service
  - Use wist based deployment of on-premises WLS JavaEE app, to Java Cloud Service
- Extended version
  - On-premises Active Directory integration, Identity Federation based approach



#### Lift and Shift – Basic Tutorial





Understand S/W requirements

Setup OPC and Cloud Access

Understand what the source env (VM)
contains

Have the Source env (VM) running

Lift and Shift the DB

Deploying OE Application using Admin Console

Lift and Shift JavaEE app and config

Enable External T3 Channel for WLST Scripts

Create JDBC Data Source on JCS Weblogic using WLST Create JMS Resources on JCS Weblogic using WLST Create Security Realm on JCS Weblogic using WLST Deploying JAXRS 2.0 Shared Library

Deploy OE Application using Admin console





/home/oracle/workspace/oraclecloud

#### Servers

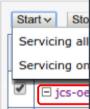
demojcs\_\_adminserver

#### Clusters

demojcs\_cluster
All servers in the cluster

Part of the cluster demojcs server 1

#### Module



to Weblogic domain admin the "Deployments" section ck and Edit" the console

eployments" and "Install" ired library

plesnapshot1.0.war), available 1.

s for the

ent, choose the admin server cluster for corresponding JCS





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# Lift and Shift Tutorial — Extended Version on-premises AD Integration, Identity Federation Based approach

**Understand Pre-requisites** 

Install OUD in JCS VM

Establish synchronization between OUD and AD

**Setup OUD Authenticator** 

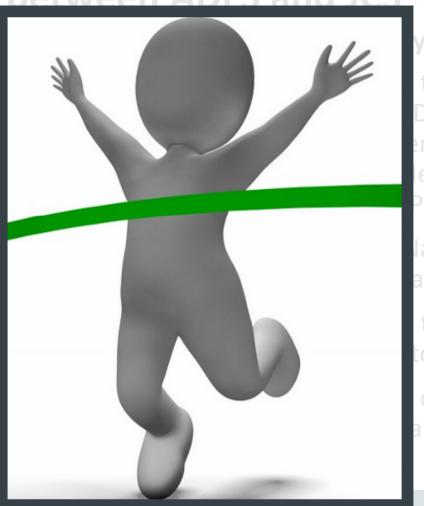
Setup Federation between ADFS and JCS



Setup federation between ADFS and JO
Adding Identity Provider

**Understand Pre-requisites** 





to security realm, click
DAsserter", in
ement" tab, click "New" and
lew Web Single Sign-On
Provider Partner"

lame, select copied ADFS a, click OK

to app URL, it should to ADFS login

can sign in using AD



# Additional Scenarios important from Lift and Shift Perspective

- Integration of Lifted/Shifted applications scenarios with
  - On-Premises and Cloud Apps integration
  - On-Premises IT tools/software usage
- Scenarios important from Identity and Access Management (IAM) perspective
- Alternate methods and variations for executing Lift and Shift

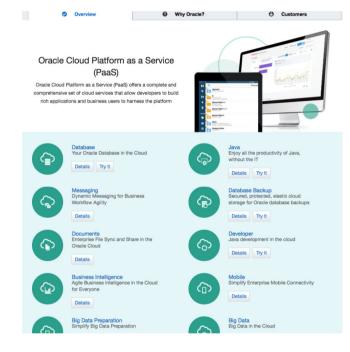


#### Summary

- Because of strong business drivers, enterprises are majorly adopting Cloud
- Oracle Cloud makes it easy for customers to Lift and Shift databases and JavaEE applications from on-premises to Oracle Cloud
- For Databases:
  - Pluggable databases can be unplugged from on-premises and plugged to cloud
  - Other techniques like usage of database dump, RMAN and transportable tablespaces are also available
- For JavaEE applications:
  - Applications and relevant configurations (datasources, JMS, security realms), as deployed in On-Premises Weblogic, can be deployed using wlst scripts executed
    against JCS
- EM CC Hyrbid cloud solution offers a comprehensive solution for Lifting and Shifting Databases and JavaEE Applications from On-premises to Cloud
- With Lifted/Shifted applications to Oracle Cloud, customers can continue to:
  - integrate with On-premises directory like AD, using Identity Federation based approach.
  - integrate with On-premises business applications like EBS and Oracle SaaS, like Sales Cloud, using ICS
  - leverage their On-Premises IT investments like EM CC, Selenium, JMeter to work with Lifted/Shifted apps, similar to how these technologies interact with On-Premises applications.



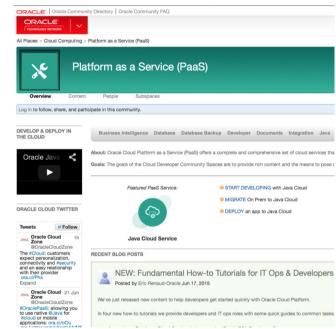
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# Hardware and Software Engineered to Work Together



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