



# Oracle Application Container Cloud Service Overview

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# Objectives

After completing this lesson, you should be able to:

- Get an overview of Oracle Application Container Cloud
- Understand the unique features of Oracle Application Container Cloud
- Understand how to build, zip, and deploy applications to the cloud



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# Oracle Application Container Cloud Service



An open highly available  
Docker container-based  
elastic polyglot cloud  
application platform

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# Oracle Application Container Cloud



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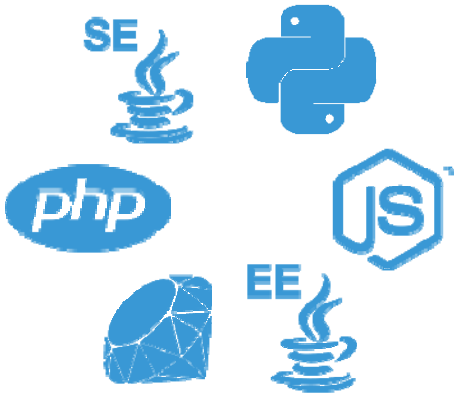
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Simple and easy to use deployment platform for Java SE & Node applications

Open platform—use any application frameworks and libraries

Runs applications in Docker containers for reliability and scalability

# Polyglot Platform



Deploy applications to a selection of popular language runtimes supported

- Latest release supports Java SE, Java EE Web Apps, Node.js, and PHP

Leverage unique Oracle Java SE features

- Immediate access to platform upgrades, security, platform optimizations
- Continued commercial support for Java SE versions no longer receiving public updates

Node access to Oracle DB with open source database driver

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Runtime releases regularly updated to the latest

## Open Platform



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Use any of the thousands of open source or commercial Java or Node frameworks—no restrictions.

# Container-based Application Platform as a Service



Applications run on Oracle Linux in Docker containers

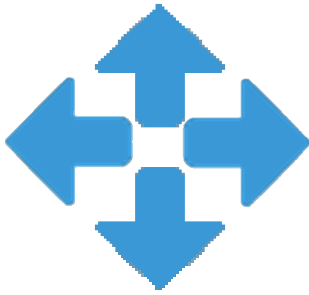
Stateless Applications

- Ephemeral disk
- Permanent storage through database or storage service

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# Elastic Scaling



## Resources

Instances ?	Memory (GB)
<input type="text" value="2"/>	<input type="text" value="1"/>

On demand elastic scaling either through the service console or using the service REST API

Scale out / in

- Add / remove application instances to handle workloads

Scale up / down

- Add / remove RAM to accommodate application memory requirements

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## Profiling



Java application can use Java Flight Recorder to monitor application and JVM behavior and analyze in Mission Control

Use Application Performance Monitoring Cloud Service for advanced use cases

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# Manageable



New Java and Node releases published in the service console  
One-click upgrade to the latest releases—applications are simply restarted to upgrade to new runtime

## Updates ⓘ

Current Version: Java SE 8u71

### Available Updates



Runtime: Java SE 8u91

[Release Notes](#)

Release Date: Jul 4, 2015 12:00:00 AM UTC

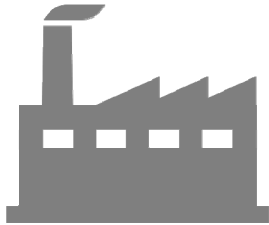
[Update](#)

Description: This update contains new features as well as fix for critical issues. Refer to the 'Release Notes' for more details

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# Build



# Zip



# Deploy!



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## Build

- Use your favourite or corporate standard build system to produce binaries and deployable resources.

## Zip

- Zip up all binaries, scripts, html files, images, etc. that make up your application. The structure of the zip is entirely up to the user—we have no opinion on structure.

## Deploy

- Deploy the application archive (zip) to the platform and tell us how to start the application. This could be “java -jar”, “java -classpath ... <main>”, “node myapp.js”, or “sh bootmyapp.sh”.

## Deploy—Application Archive (Zip)

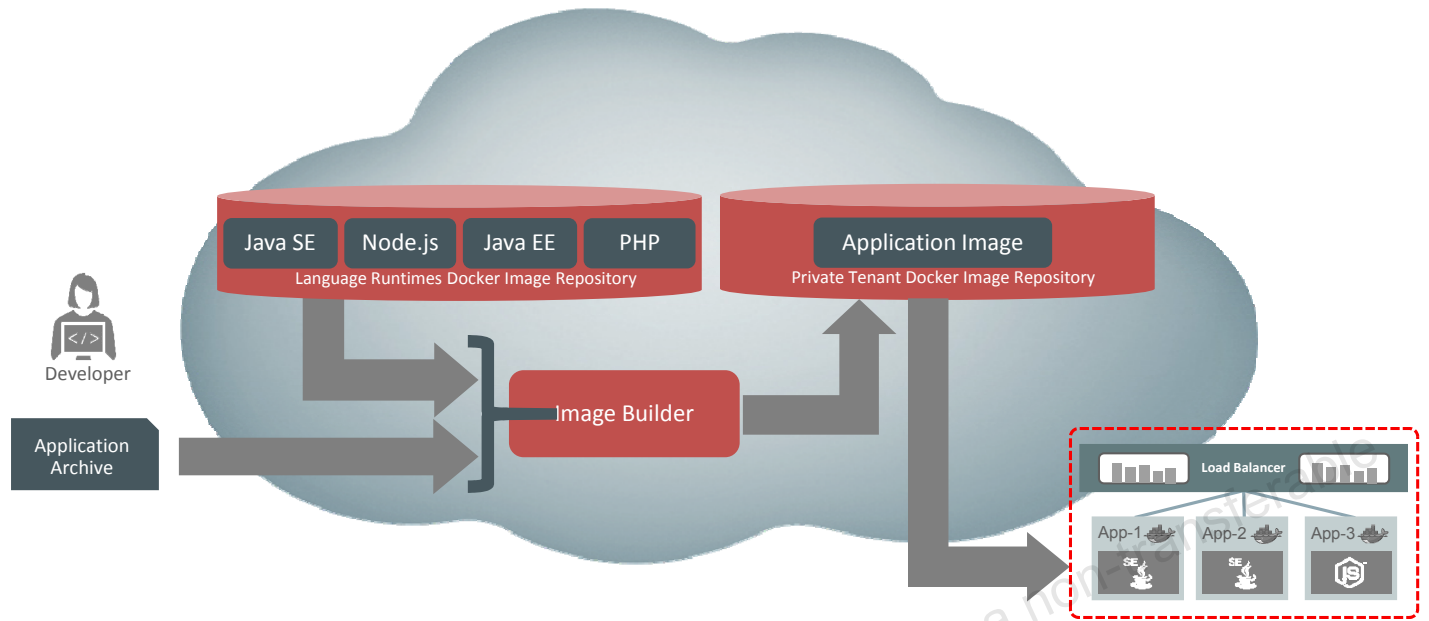
- All application binaries
- All required libraries
- Binaries of any container/embedded container
- Images files
- HTML files

**Everything you'd need to run your application on a virgin machine**

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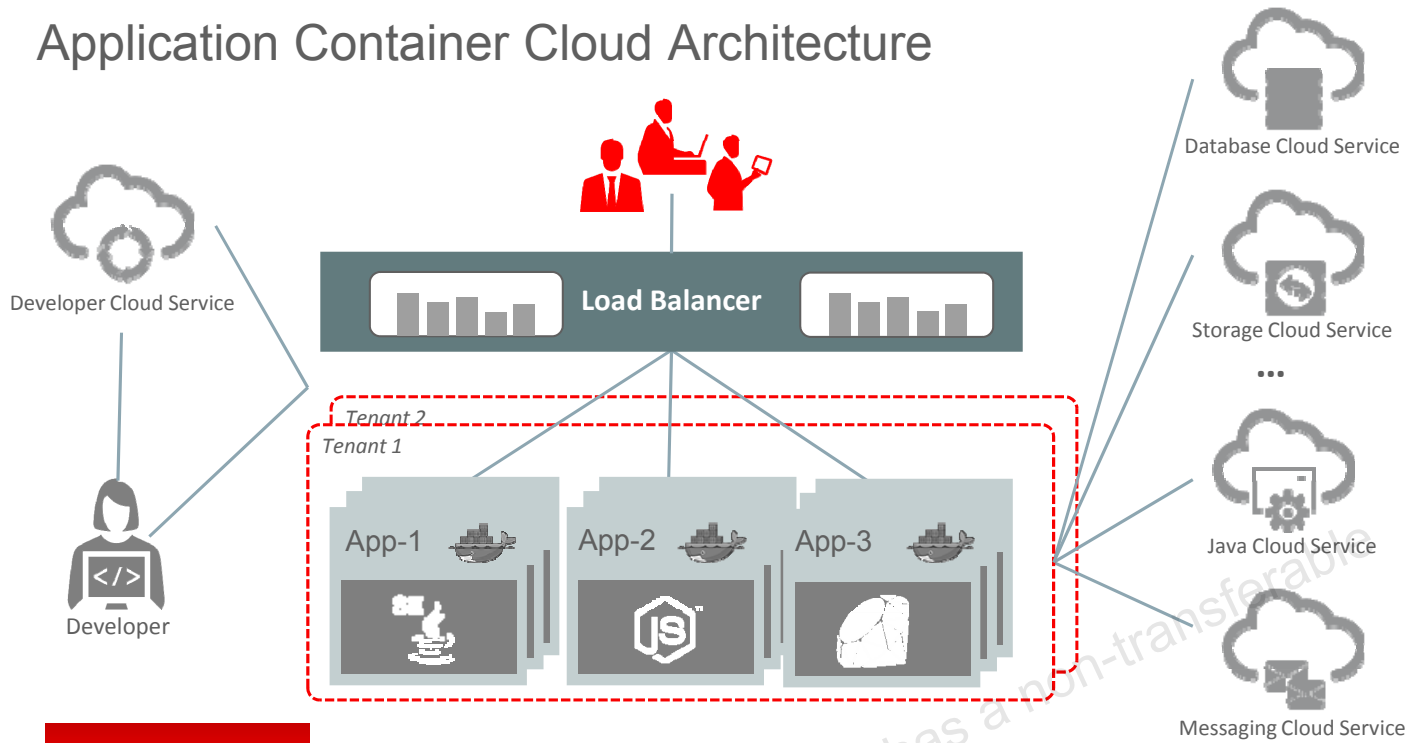
# Application Deployment



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# Application Container Cloud Architecture



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- Tenant Isolation
- Polyglot
- Integrated
- Developer Friendly

# Load Balancer



Fully automated—no user management required

Scale out or in and application instances are automatically registered/unregistered

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Vanity URL support (upcoming) will allow installation of certificates

# Oracle Developer Cloud Service



**Source Control  
Management**



**Issue Tracking**



**Hudson Continuous  
Integration**



**Wiki Collaboration**

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Complete, Integrated Development Platform—as a Service

Application Lifecycle Management

Team Management

Entitlement with all Application Container Cloud services



# Developer Cloud Service – Easy Adoption/Integration

## Pre-integrated development technologies in the cloud

### Standards Based

- Git, Maven, Hudson, Ant, Grunt, Gulp, etc.

### Built-in IDE Integration

- Eclipse, NetBeans, JDeveloper

### Flexible Source Location

- Hosted Git or GitHub

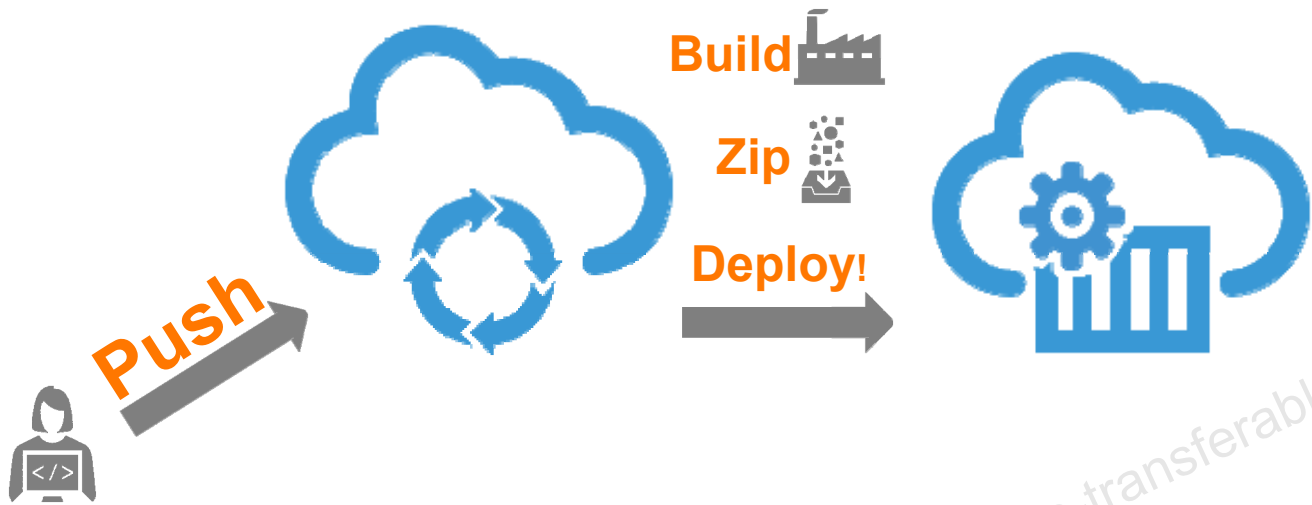
### Choice of Deployment Target

- Oracle Cloud or on-premise



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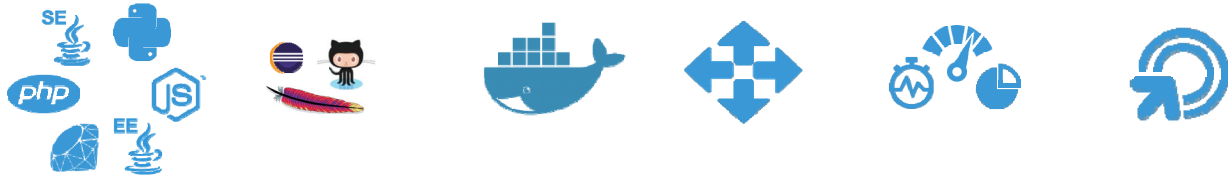


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Rather than build on-premise, use DevCS to perform continuous build, test, and deployment.

# Application Container Cloud Service Advantages



- Integrated **enterprise** ecosystem and services from IaaS to PaaS and SaaS
- Java SE Advanced – completely **unique** and unavailable on any other cloud platform
- Developer Cloud Service – **included** and *integrated*

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# Summary

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