Oracle Cloud Services

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Agenda

- Cloud Services Background
- Java Cloud Service with Demos
- Developer Service
- Key Architectural Concepts
- Wrap up
Oracle Cloud
Unmatched Breadth, Depth and Choice

Platform Services
Application Services
Social Services
Common Infrastructure Services

Build new or seamlessly extend existing investments with Cloud
Oracle Cloud Services for Developers

Key Features

- Built on industry standards – SQL, Java, HTML5, Web
- Transparently run in the cloud – zero application code changes
- Self-service control for users – develop, deploy, manage
- Complete data isolation – in the database, on disk
- Service-Oriented Architecture – on-premise and cloud integration
Transform Development Experience with Oracle Cloud
Complete, Standards-Based, Enterprise-Grade

Database Services
Java Services
Developer Services
Mobile Services
Messaging Services
Storage Services

Identity Services
Notification Services
Caching Services
Collaboration Services
Analytics Services
Application Store

Enterprise Grade Hardware, Software, and Management Infrastructure
Oracle Cloud Data Centers

Global Reach

- Global coverage for security & performance
- Gen 4 Data Centers
- Compliance Certifications
- Multi-data center regional coverage
- 24X7 Active Monitoring and Support

*Coming Soon
Agenda

✓ Cloud Services Background
- Java Cloud Service with Demos
  - Overview
  - Browser Administration/Self Service Demo
  - Development Environment
  - Eclipse Environment Demo
- Developer Service
- Key Architectural Concepts
- Wrap up
Oracle Java Cloud Service

Summary

EASY TO USE: INSTANT ACCESS, SELF-SERVICE

JAVA SERVER INFRASTRUCTURE

CHOICE: JDEVELOPER, ECLIPSE, NETBEANS

SECURE: APPLICATION AND DATA ISOLATION
Oracle Java Cloud Service

Offerings

<table>
<thead>
<tr>
<th>Java S1</th>
<th>Java S2</th>
<th>Java S4</th>
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<td>$249/1M</td>
<td>$1,499/1M</td>
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- **Java S1**
  - 1 Managed Oracle WebLogic Server
  - 1.5 GB RAM Heap Size, adequate File Storage, 5 GB Data Transfer
  - Unlimited Users and Applications

- **Java S2**
  - Also includes a trial of the Oracle Database Cloud Service with:
    - 1 Schema
      - Oracle Database 11g Release 2
    - 1 GB
      - Oracle Database Storage
    - 6 GB
      - Data Transfer

- **Java S4**
  - 4 Oracle WebLogic Servers
    - 6 GB RAM for Java Heap
  - 20 GB File Storage
  - 500 GB Data Transfer

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1. Oracle WebLogic Server Managed Server instances to which the applications are deployed.
2. RAM allocated to the Java heap for all of the service’s Managed Servers combined to run the Oracle WebLogic Server Managed Servers and the objects consumed by your application code.
3. File system space available to your service instance for the storage of your application deployment archive files as well as the servers log files.
4. Maximum allowed bytes of data in and out of your service within a billing month. Database import and export are provided for free and do not deduct from this allocation.
Oracle Java Cloud Service
Instant, Self-Service Provisioning

Go to cloud.oracle.com
Click on “Try It”
Provide details, submit trial request
Check email
Activate service
Manage service & applications

Subscribe
Activate
Use

- Provision
- Associate
- Notify

- Instantiate
- Operations hook-up
Oracle Java Cloud Service

Key Components

- My Services
  - Buy Services
  - Monitor Service
  - View Notifications

- Identity Console
  - Manager Users & Roles

- Service (Instance) Console (Java, DB)
  - Manage applications

- My Accounts
  - Buy Services

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END USERS
- Desktop
- Mobile
- Tablet

DEVELOPERS
- IDE
- CLI
- API

OPERATIONS
- GUI
- Enterprise Manager
- 3rd Party Tools

APPLICATION SERVICES
- Fusion CRM
- Fusion HCM
- Social Network

SERVICE INTEGRATION & LINKAGES
- JAVA SERVICE
  - Java EE
- DATABASE SERVICE
  - SQL
  - APEX

RUNTIME INFRASTRUCTURE
- Highly Available
- Scalable
- Secure
- Managed
Oracle Java Cloud Service

Account Management

My Account

- View services across datacenters
- Check service uptime
- Upsize
- Add account administrators
- Accessible to Account Administrators
Oracle Java Cloud Service
Service Management

My Services

- View all services in one datacenter
- Check service status
- Check Oracle notifications
- Lock service for maintenance
- Accessible to Service Administrators (Owners)
Java Service Control

- Deploy, un-deploy, re-deploy, start, stop applications
- View availability
- View CPU, memory usage
- View response time and load
- View, download logs
- Accessible to Service Administrators (Owners)
Oracle Java Cloud Service
Application Standards Support

Java EE & Web Apps
- EJBs (Local Only)
- JSF
- JSP
- Web Services (JAX-WS)
- REST Service (JAX-RS)

Database Interaction
- Java Persistence API (JPA)
- JDBC to Database Service

Oracle ADF Apps
- ADF Faces
- ADF Business Components
- ADF Web Service Data Control
Oracle Java Cloud Service
IDE Integration

- Popular IDE support
- Plugins provided to make IDEs Oracle Cloud-ready
- Requires Oracle Java Cloud Service SDK
- Deploy directly to cloud
- View logs
- View metrics
Oracle Java Cloud Service
Extending Oracle Cloud Applications – Service-based Integration

Customers, Partners, Suppliers, etc.

Oracle Cloud PaaS

Oracle Cloud Apps

SOAP, REST

WEB

REST, SOAP

java
Oracle Java Cloud Service

Extending Oracle Cloud Applications – UI-based Integration

Customers, Partners, Suppliers, etc.

Oracle Cloud

Oracle Cloud Apps

SOAP, REST

WEB

Oracle Cloud PaaS

Java

WEB, REST

WEB, REST
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  - Developer Service
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Oracle Developer Cloud Service

Choice | Open | Secure | Easy to use

Source Control Management
Create hosted Git repositories to manage project source files
Use Maven repositories to manage libraries
Integrate existing repositories in GitHub

Issue Tracking
Provision a cloud-based issue tracking system for each project
Track development tasks and file defects and suggest enhancements
Associate code transactions with issues

Hudson Continuous Integration
Automate and integrate scalable build and testing environments
Receive immediate feedback
Deploy to Oracle Java Cloud Service and local environments

Wiki Collaboration
Have documentation services for each project
Define and collaborate on project requirements
Choose the wiki markup to fit your project
Developer Cloud Service

Interfaces

JDeveloper, NetBeans and Eclipse

SSH to GIT

REST Interface

Developer Cloud Dashboard

Mylyn

Partners

Developer Cloud Service
Oracle Developer Cloud Service

Features

- Project based, multi-tenant
  - Integrated lifecycle and team management

- Integrated Wiki server
  - Supports major markup languages. Nothing new to learn

- Integrated Task/Defect Service
  - Automatically publishes to activity stream.

- IDE Integration
  - JDeveloper, Eclipse and NetBeans
  - Mylyn support

- Flexible Source repository
  - Integrated Git server or GitHub.
  - No need to migrate code to use service.
  - Mix-and-match or import.

- Maven integration

- Continuous Integration
  - Automatically build and test as you go
  - Expands as load increases
  - Developers are notified instantly if they break the build

- Deployment Service
  - Ensure quality before deployment
  - Regulate and control deployments
  - Deploy to dev, test or production
Agenda

✓ Cloud Services Background
✓ Java Cloud Service
✓ Demo
✓ Developer Service
  ▪ Key Architectural Concepts
  ▪ Wrap up
Oracle Java Cloud Services
Built using Cloud Application Foundation

ORACLE Cloud

Traffic Director/Web Tier
- WebLogic Server
- Coherence
- Tuxedo

Virtual Assembly Builder

Cloud Application Foundation

Exalogic Elastic Cloud

User Engagement
- Business Process Management
- Content Management
- Business Intelligence
- Service Integration
- Data Integration

Identity Management

Development Tools

Cloud Application Foundation

Enterprise Management
Oracle Java Cloud Service

Introduction – Key Strength

- Industry’s #1 application server on the best engineered system
- Secure, highly available infrastructure
- Enterprise-grade, Open, Standard-based
- Database service & IDE integration
- Java EE apps, Web Apps, Web Services, REST services
- Fully managed and supported by ORACLE
Oracle Java Cloud Service
Secure, Isolated, High Availability Architecture

Java Cloud Service Instance
Customer Dedicated WebLogic Domain

Exalogic Compute Node A
OVM Instance 1
App 1
App N
Managed Server 1
Customer dedicated Cluster with HA
Exalogic ZFS Storage
Binary Volume
Config Volume
Customer Volume

Exalogic Compute Node B
OVM Instance 1
App 1
App N
Managed Server 2

Exadata (Oracle DB Schema – RAC Node)
Database Cloud Service Instance
Oracle Java Cloud Service

Service Interactions

- Database Service
  - Through JDBC, JPA, ADF BC, or other JDBC abstractions

- Fusion Application Service
  - Through WS-Security protected SOAP Service
Oracle Java Cloud Service

Identity Domain – Introduction

Provides identity isolation between tenants in the cloud

Contains users, roles and mapping

Enables single-sign on across service within the same domain
Oracle Java Cloud Service
Identity Domain – Association

Identity Domain Sharing

- Sharing done by associating multiple services to the same Identity Domain
- Association done at Paid service activation time or Trial service subscription time
- Only services within the same Account & Datacenter can share Identity Domain

NO SSO between Java Services

SSO between Java Services sharing identity domain
Oracle Java Cloud Services
Summary – Key Areas of Differentiation

Flexible Deployment
On-premise or in the cloud

Programming Model
Standard Java EE

Database and Persistence
Full Oracle Database & User defined schema

Fusion Applications Integration
Integrated connectivity services

Identity Management
Comprehensive & integrated

Service Console
Common & integrated

Developer Service
JDeveloper, Eclipse, NetBeans