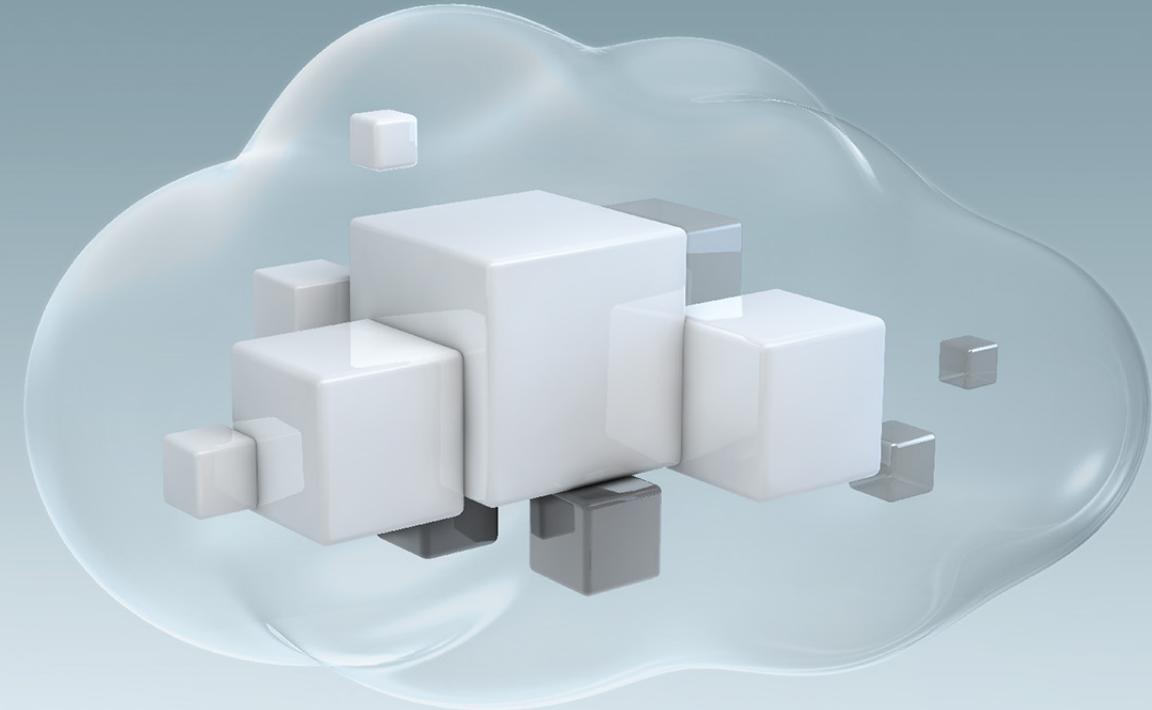


Oracle Public Cloud Platform as a Service

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April 6, 2015



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.

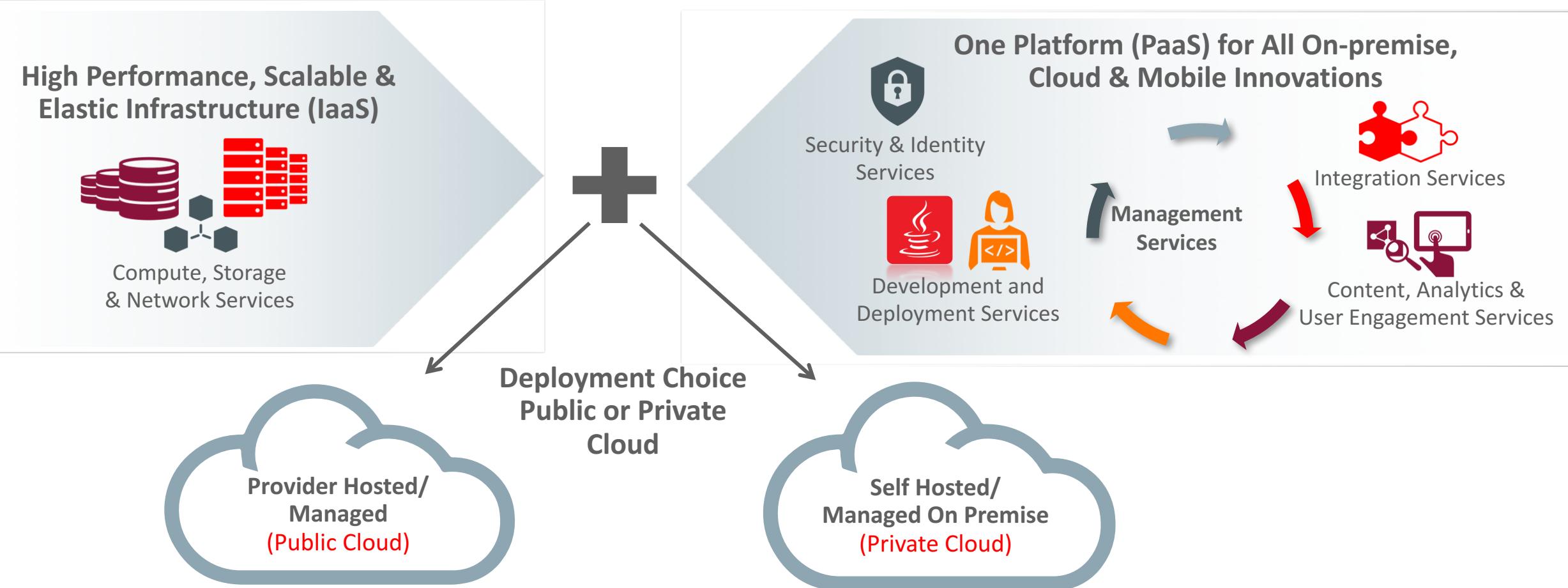
Agenda



- **Oracle Cloud Strategy**
- **Compute Cloud Service**
- **Java Cloud Service**
- **Developer Cloud Service**
- **Database Cloud Service**
- **Storage Cloud Service**

Solution: Oracle's Cloud Platform

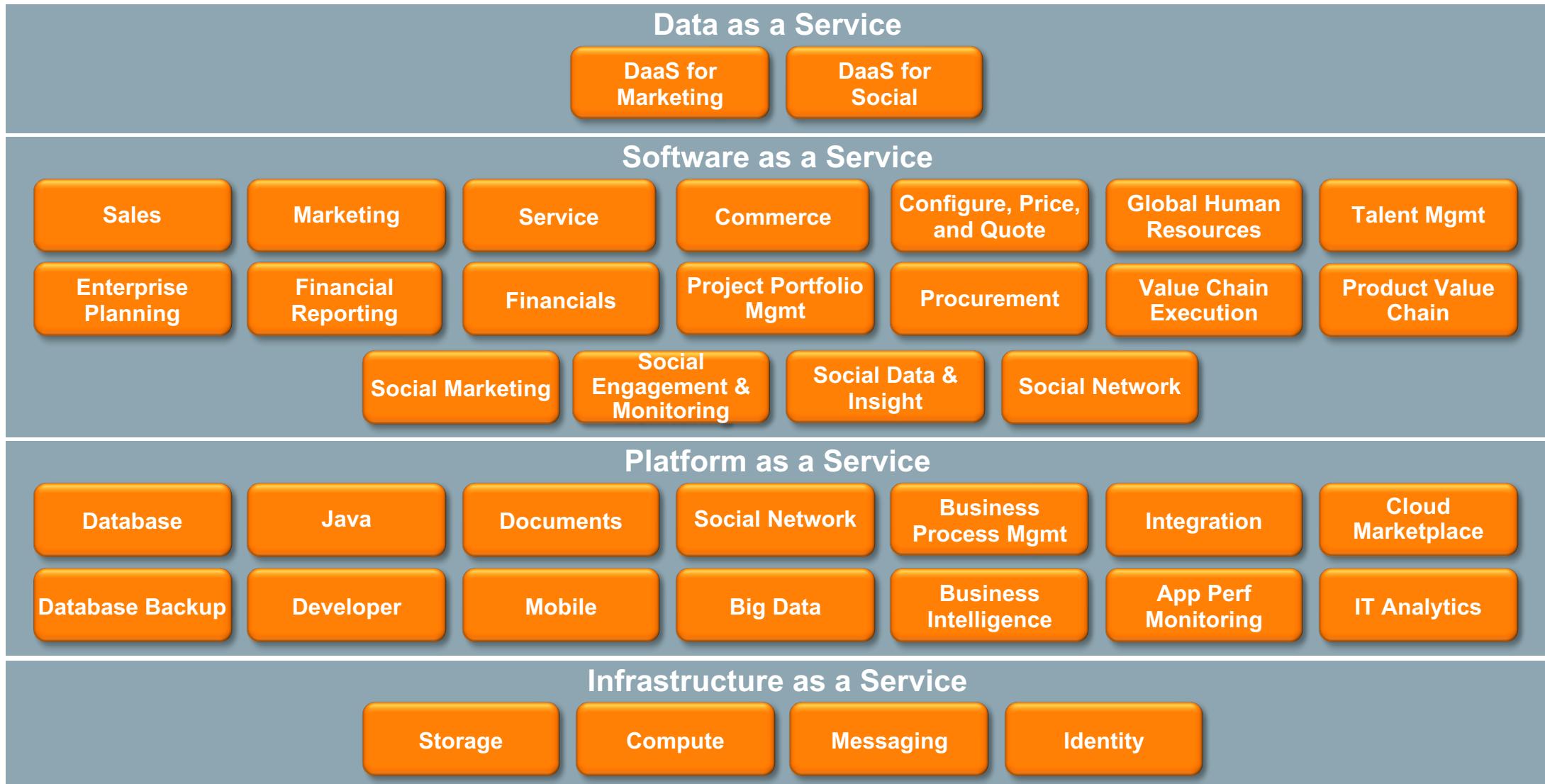
A single platform for public and private cloud



Oracle Cloud: Key Differentiators

- **Unique:** Only public cloud offering with all 3 layers of the cloud computing stack – SaaS, PaaS and IaaS – enables consolidation
- **More Value:** Only public cloud provider who provides more than just VMs for Oracle software
 - “One button” fully installed platform + infrastructure and ready to use
- **Optimized:** Standard Configurations Based Upon Oracle Best Practices
- **Managed:** Benefit From an Environment Managed by Oracle Experts
 - Routine administration operations such as backup, restore, patching etc.

Oracle Cloud: Complete Suite of Integrated Services

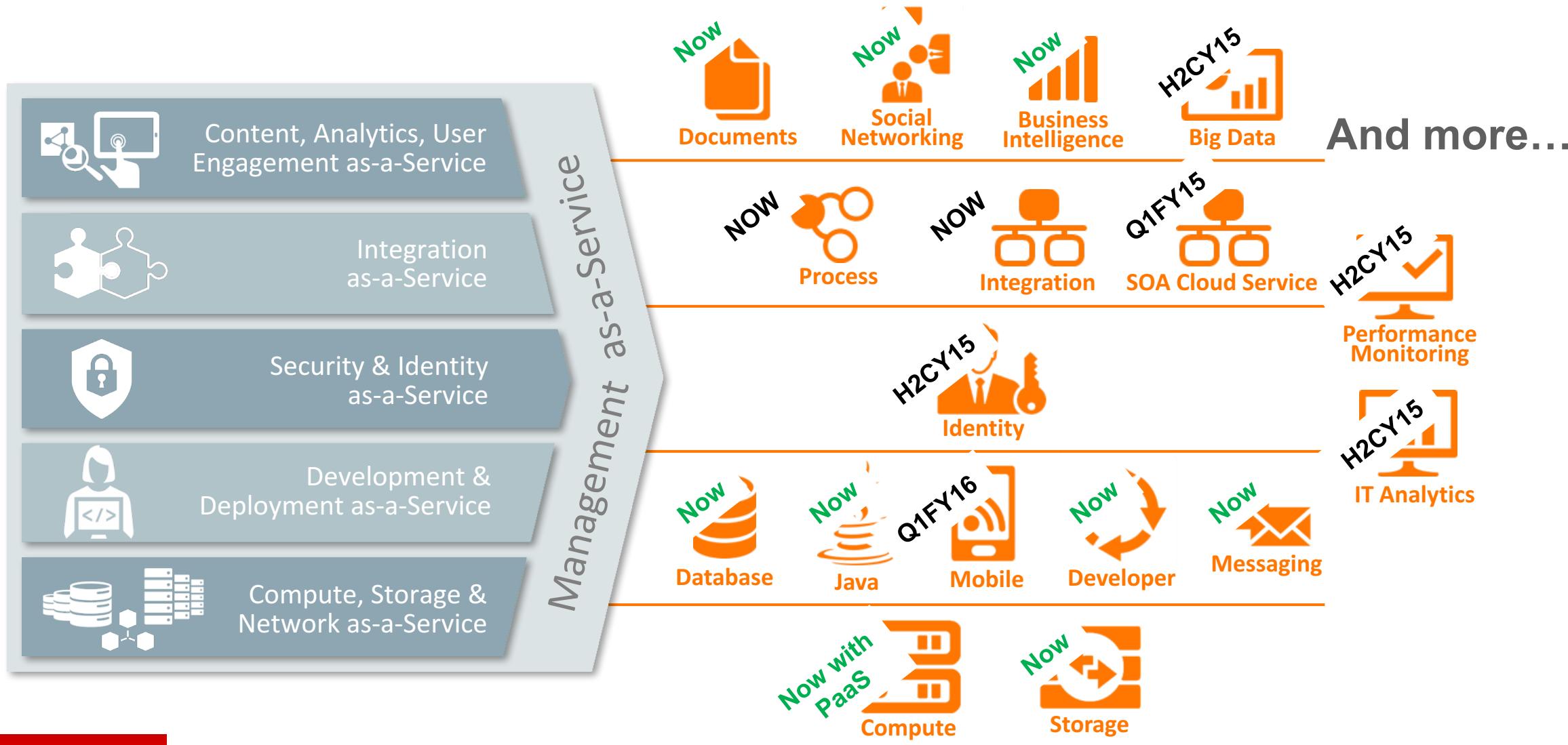


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Complete Portfolio Of Cloud Architected Services

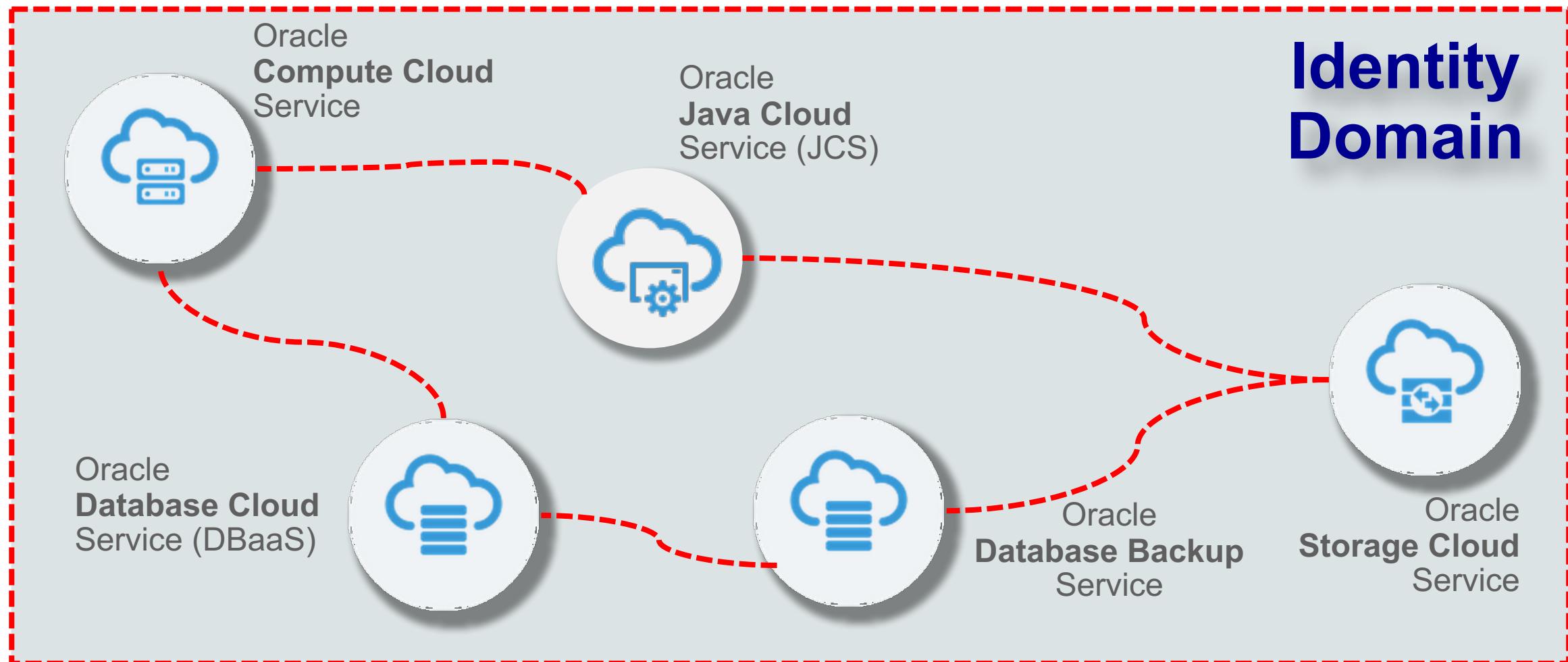


Identity Domains

Who can do what

- Collection of users and services for an Account
- Manages who can access and manage services
- Multiple services per Identity Domain
 - Oracle Compute Cloud Service, Oracle Database Service, Oracle Storage Service, Oracle Java Cloud Service, etc.
- Initially granted to the creating account
 - Watch your email closely
- Role and user based access

How it fits together...



Oracle Compute Cloud Service

Instances, Networks and Block-Storage Allocation

- Enterprise Grade Infrastructure-as-a-Service (IaaS)
 - Virtual Machines - Monitoring
- Easy to Manage
 - Manage Running Instances
 - Static IP Addresses
 - Persistent Storage (block) for VMs
- Network Management
 - Access Rules
 - Network Groups
- User and Role Management



Where did I leave my keys?

Private / Public Keys and SSH

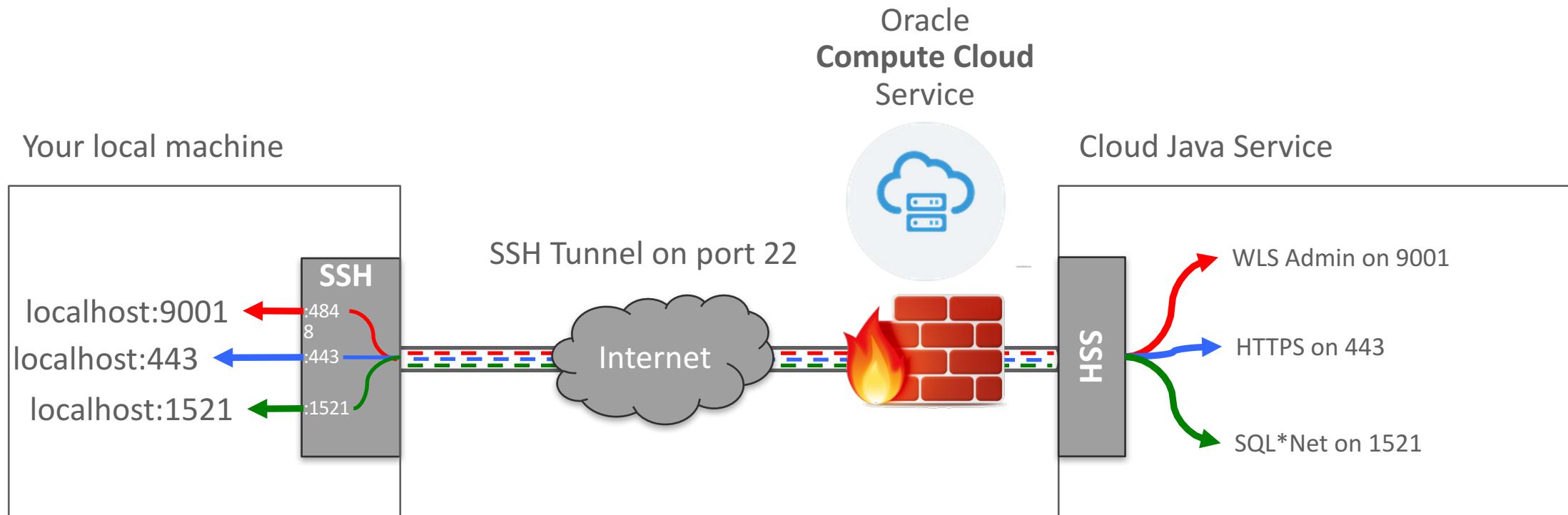
- PKI keys are **mandatory** for instance creation and access
- Instance public keys cannot be changed later
- Keys generated locally – not an Oracle Cloud function
- Never lose the private key!!
- Keys are easy to create on all platforms
- Keys create SSH sessions and tunnels for secure access to services
- Oracle Cloud – *secure by default*

● ● ● cloud-demo — oracle@AlphaDBCS01:/u01/app/oracle/product/glassfish3/glassfish — bash — 82x25

```
MCGMacBookPro:cloud-demo markgreynolds$ ssh-keygen -b 2048 -t rsa -f prodkey
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in prodkey.
Your public key has been saved in prodkey.pub.
The key fingerprint is:
81:19:74:88:08:35:d7:5d:ef:19:ab:be:ee:82:2d:5a markgreynolds@MCGMacBookPro.local
The key's randomart image is:
+--[ RSA 2048]----+
| .oo...+oo... |
| .o. o=. . |
| o . o |
| . . + |
| S + |
| . |
| Eo . |
| .o o. |
| ... +=. |
+-----+
MCGMacBookPro:cloud-demo markgreynolds$ ls -l prodkey*
-rw----- 1 markgreynolds staff 1679 Feb  9 07:14 prodkey
-rw-r--r-- 1 markgreynolds staff   415 Feb  9 07:14 prodkey.pub
MCGMacBookPro:cloud-demo markgreynolds$
```

Secure Tunnels

How to get there from here



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Introducing Java Cloud Service

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
- Optionally enable Oracle Coherence for caching and data grid functions and Oracle Traffic Director for load balancing
- Pre-configured for Database and Developer Cloud Services for complete cloud application management



Java Cloud Service: Three Options



Full-featured Service

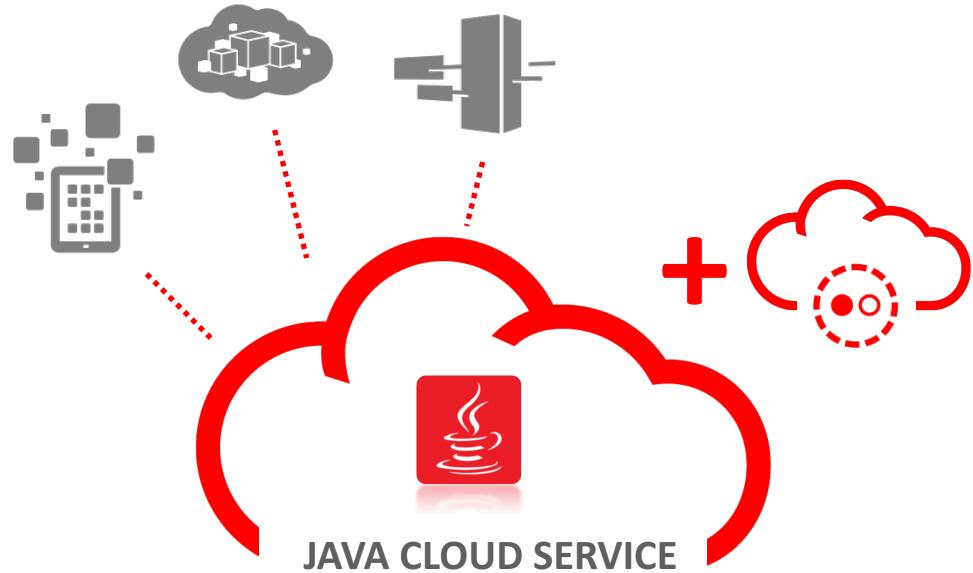


- Easy to enrich Oracle SaaS apps
- Tailored-made WebLogic Server for rapid extension deployment
- Ready marketplace with pre-built extensions, automated deployment



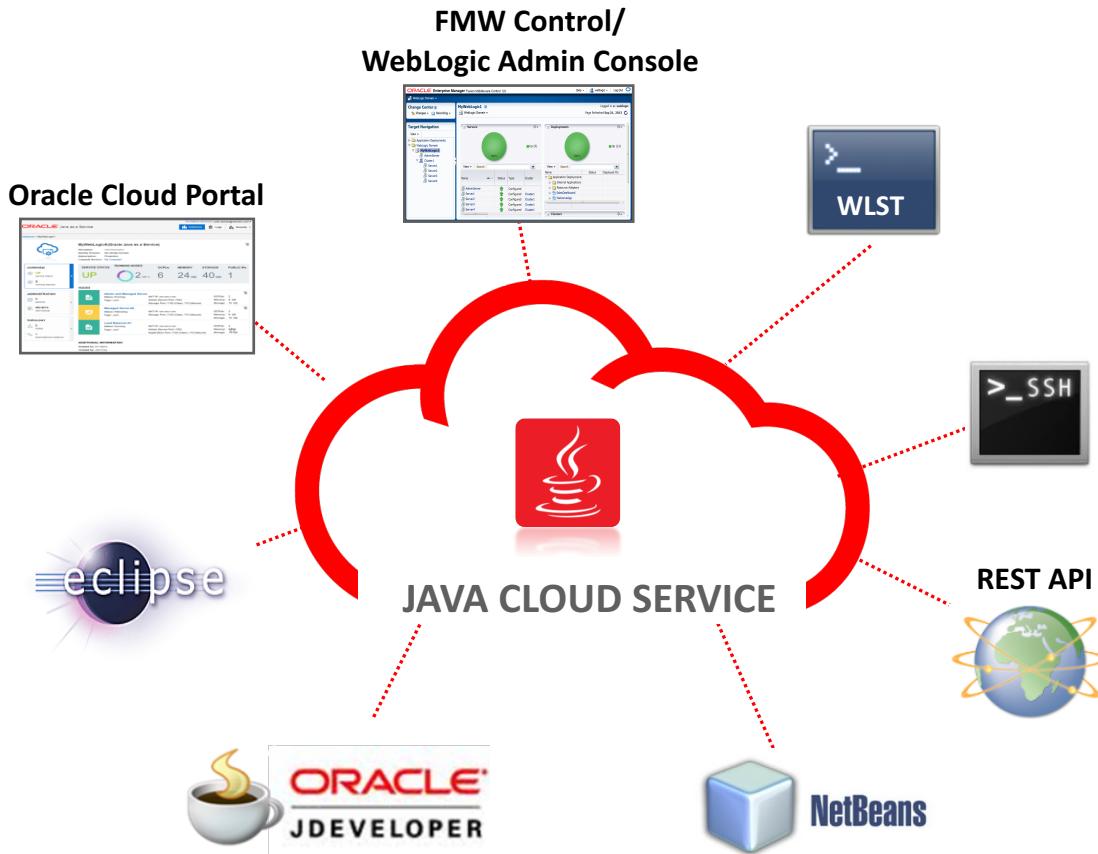
- Simple, hosted WebLogic instance
- Oracle controlled, updated

Oracle Coherence Option: Data Caching & Scaling



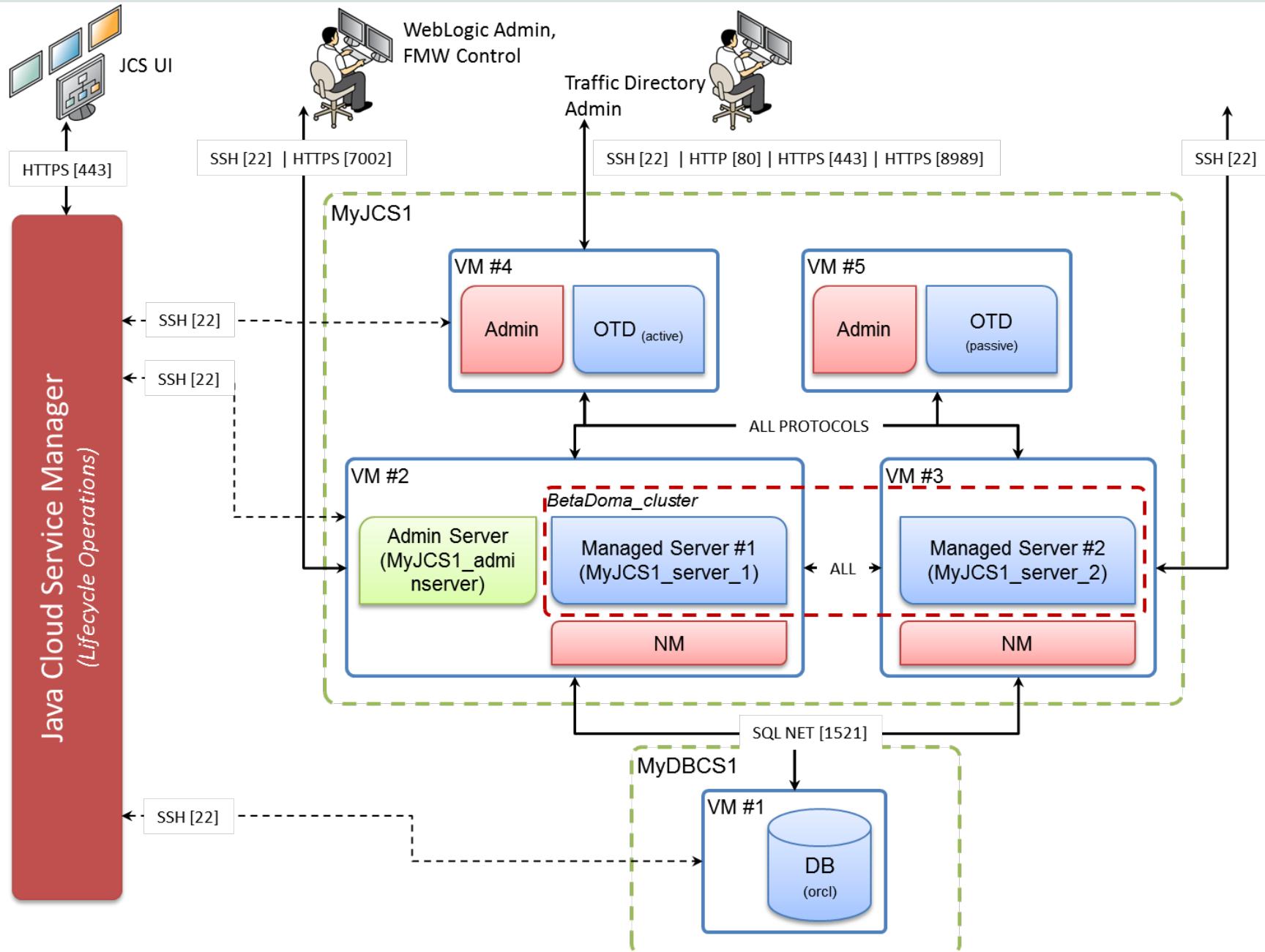
- Scaling applications' caching/data grid capacity in-memory to support growth
- Offload and protect shared cloud services and databases
- Delivery of data to cloud apps in real time
- Transparency and high-availability in the cloud's data grid tier

How You Interact with Java Cloud Service



- New Cloud Portal
- Familiar, but improved WebLogic Admin Console
- Fusion Middleware Control
- Traffic Director Admin Console
- Public REST APIs
- Command Line Interface
- SSH to VM
- Standard IDEs

Provisioning Topology



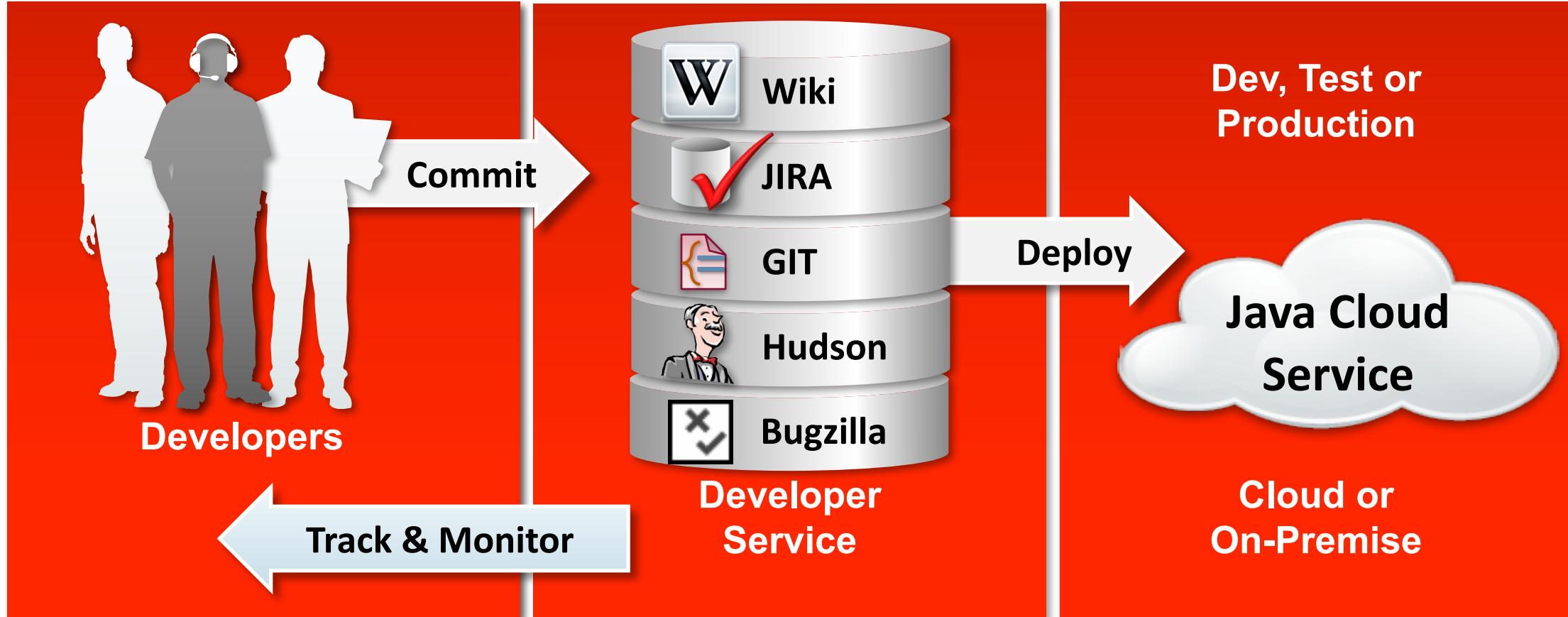
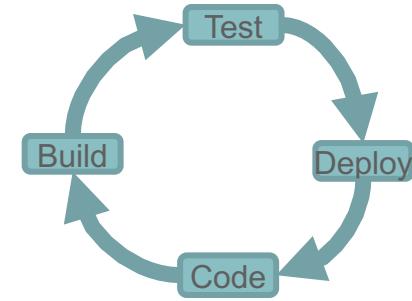
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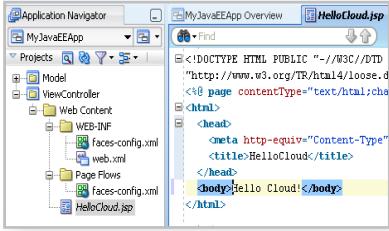
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Oracle Developer Cloud Service

Continuous Integration: Code, Build, Test & Deploy



Oracle Developer Cloud Service - Interfaces



JDeveloper,
NetBeans
and Eclipse



Web
Dashboard



REST
Interface



SSH to GIT



Mylyn



Partners

Developer Cloud Service

Oracle Developer Cloud Service

Simplify Development

- Automated Provisioned Env
- Preconfigured & Integrated
- Automated Builds & Deployments
- Web based administration

Collaborate & Manage

- Integrated team source repository
- Continuous integration with breakage notifications
- Task/Defect tracking with activity stream and notifications

Deploy Automatically

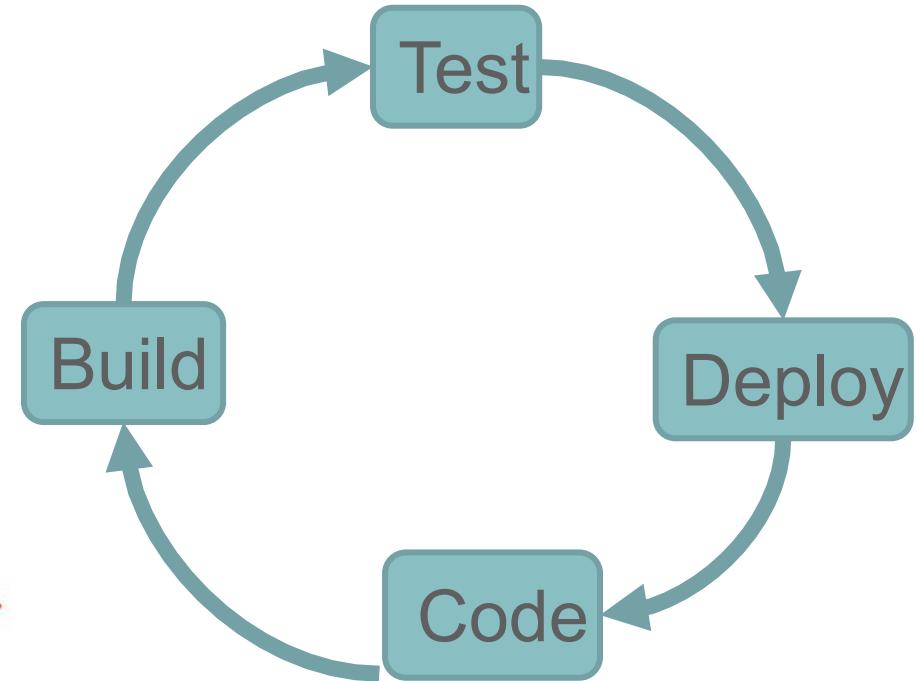
- Deploy into Oracle Java Cloud Service automatically
- Workflow ensures build & test

Integrated With IDEs

- JDeveloper
- Eclipse
- NetBeans

Continuous Integration: Code, Build, Test & Deploy

- Software development process
 - Keep your work in a repository
 - Integrate your work frequently
 - Each integration is automatically built
 - Test integrated with build & Deploy



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Oracle Database Cloud Service (DBaaS)



- **Full capabilities** of the Oracle Database, including SQL and PL/SQL support
- **Dedicated virtual machine** with preconfigured database instance or dedicated schema
- Flexible management options from self managed to fully managed by Oracle
- Rapid provisioning and easy to use **cloud tooling** for simpler management

Oracle Database Service Flavors

Database Version

Oracle Database 11g Release 2

Oracle Database 12c Release 1

Database Flavor

- Standard Edition One (11g Only)
- Enterprise Edition
 - All Database Components
- Enterprise Edition – High Performance
 - Plus all Enterprise Mgmt Packs
 - Excludes Active Data Guard, In-Memory and RAC
- Enterprise Edition – Extreme Performance
 - Everything except RAC

General Purpose Virtual Machine

- OC3 - 1 OCPU, 7.5 GB RAM
- OC4 - 2 OCPU, 15 GB RAM
- OC5 - 4 OCPU, 30 GB RAM
- OC6 - 8 OCPU, 60 GB RAM
- OC7 - 16 OCPU, 120 GB RAM

High Memory Virtual Machine

- OC1M - 1 OCPU, 15 GB RAM
- OC2M - 2 OCPU, 30 GB RAM
- OC3M - 4 OCPU, 60 GB RAM
- OC4M - 8 OCPU, 120 GB RAM
- OC5M - 16 OCPU, 240 GB RAM

Oracle Database Backup Service

Oracle backup to the cloud

- Secure, scalable, on-demand **Oracle** backup to the cloud
 - Automatically includes Oracle Storage Service
 - Pay-as-you-go
 - Elastic self-provisioning
- Uses standard RMAN commands
- Requires the Oracle Databases Backup Module
- Automatically installed and configured in DBCS instances w/Storage
 - 14 days total with 7 days on block storage
 - Encrypted at the source
- Focuses on on-premise to the Cloud

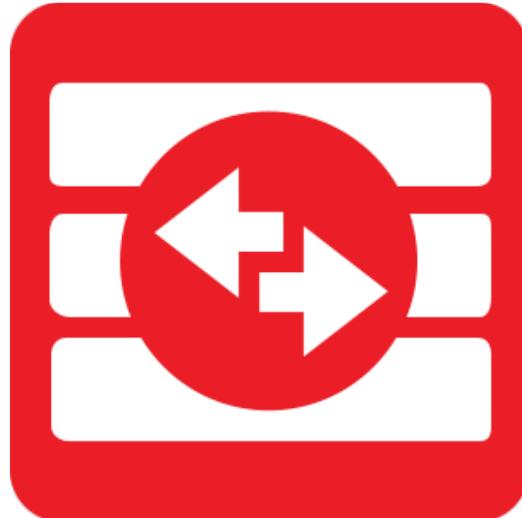


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IaaS : Storage Cloud Service



- Store & Manage Digital Content
- Simple GET & PUT of Objects
- Java & REST API (OpenStack Swift)
- Access using Cloud and On-Premise Clients
- Secure & Granular Access Control
- Performance, Scalability, High Availability
- Backup & Archive for Files, DBMS in Oracle Cloud

Oracle Storage Cloud



- Store unlimited **pieces** of data – not a disk drive
- Replicated with error detection and healing
- Store, retrieve, and manage data with RESTful or Java API
- Access control to restrict data availability to specific users
- Track and monitor key storage metrics
- **Storage location for Oracle Backup Services (DBaaS, JCS)**

ORACLE®