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# Safe Harbor Statement

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# Coherence and Caching in the Oracle Cloud

**Coherence SIG– London**

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# Coherence Feature of the Java Cloud Service

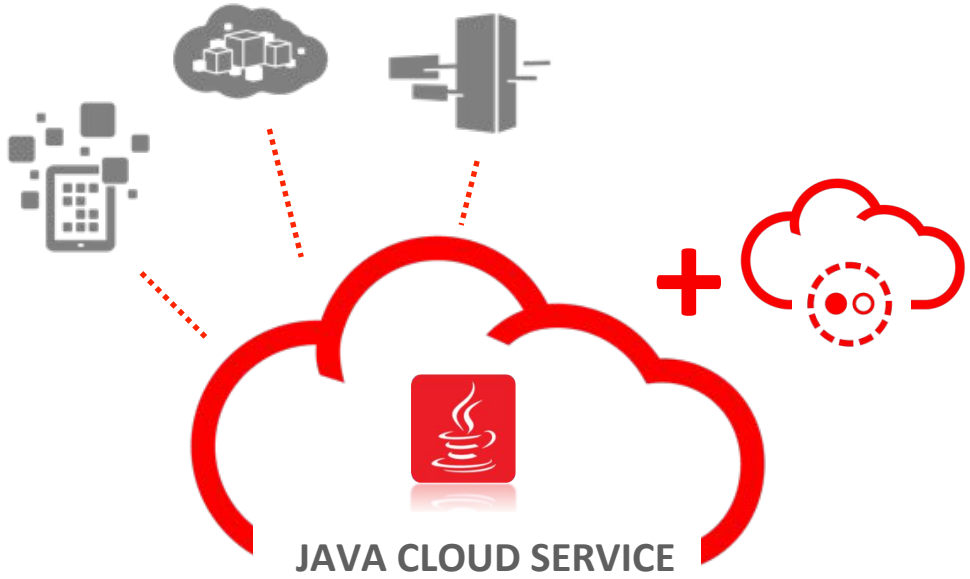
**Released February 2015**

# 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 Option: Oracle Coherence




- Cache frequently-used data to avoid expensive round-trips to underlying data sources (e.g. databases)
- Scale applications' data in-memory to quickly support growth
- Offload and protect shared cloud services and databases
- Deliver real-time data to cloud apps
- Provide transparency and high-availability in the cloud's data grid tier

# Oracle Coherence is Your Cloud Data Grid

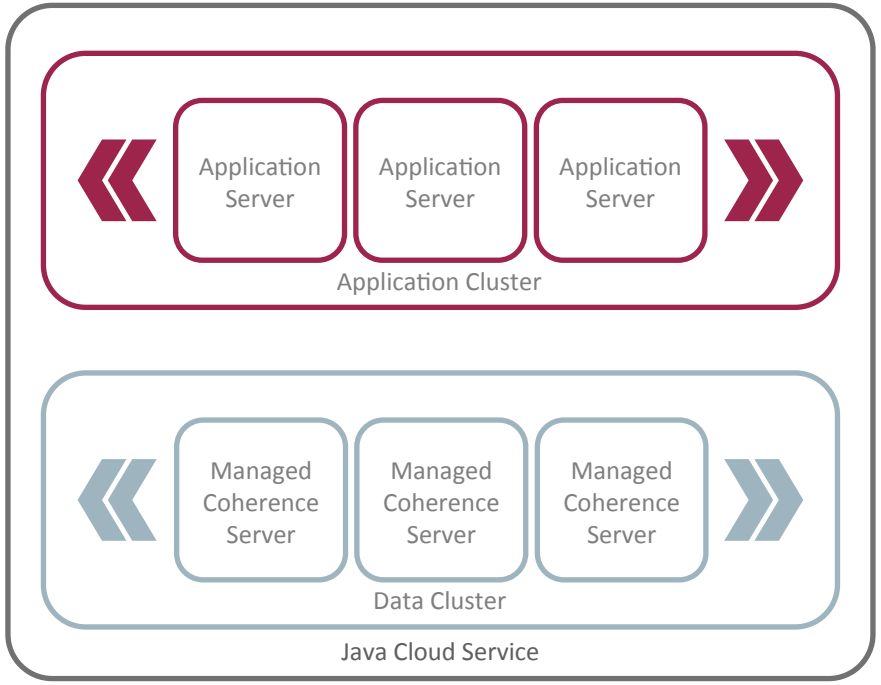
## Scalable, fault-tolerant cloud infrastructure

- Fully integrated into the JCS instance creation workflow
  - Create a new JCS instance with Coherence in four easy steps
- Automated infrastructure patching and rollback
  - Patches are applied in a rolling fashion with no application downtime

# Coherence Option: Infrastructure & Architecture

## Integration with Oracle Cloud and Management Tools

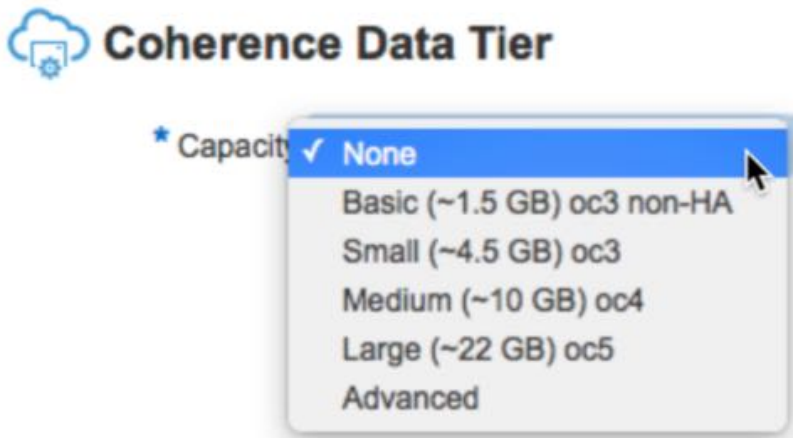
- Built on WebLogic & Coherence 12*c* (12.1.3) Enterprise Edition
- Leverages WebLogic Management Framework
  - Develop, deploy, manage and monitor your applications via Managed Coherence Servers
- One Coherence cluster per domain
- Creates an additional WebLogic cluster of Managed Coherence Servers nodes
- Coherence (TCMP) cluster spans Java Cloud Service and Managed Coherence Servers
- Cache storage automatically disabled in the app cluster



# Coherence Feature: Simplified Provisioning

## Planning for capacity and scale of your cache

- Select the cache capacity your application requires
- Passively selecting a predefined set of resources (known as a “capacity unit”) to support the desired cache capacity
- Scale-out/in cache capacity based on selected capacity unit
- A capacity unit is made up of:
  - a configurable number of Virtual Machines (one in the non-advanced mode)
  - a configurable number of Managed Coherence Servers per Virtual Machine
  - a configurable heap size per Managed Coherence Server

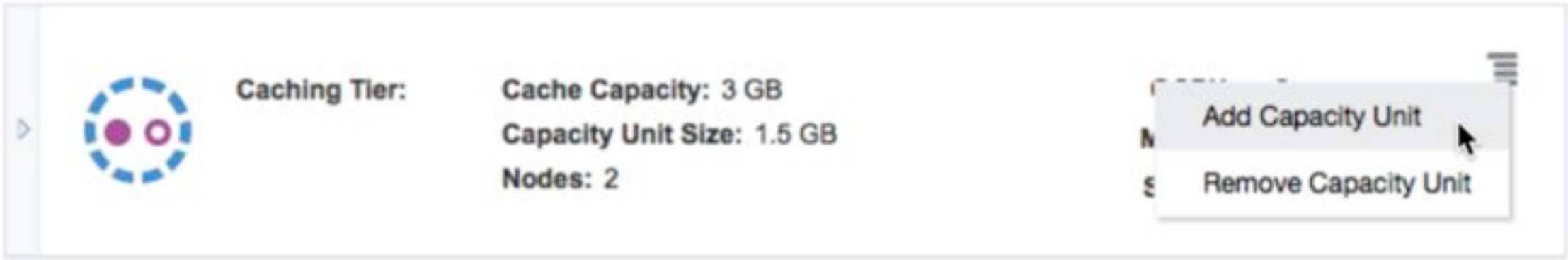


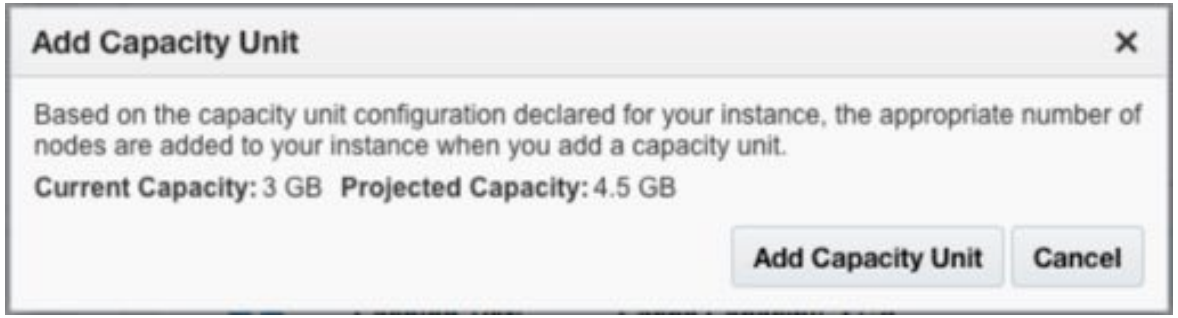
# Coherence Feature: Simplified Provisioning (Advanced)

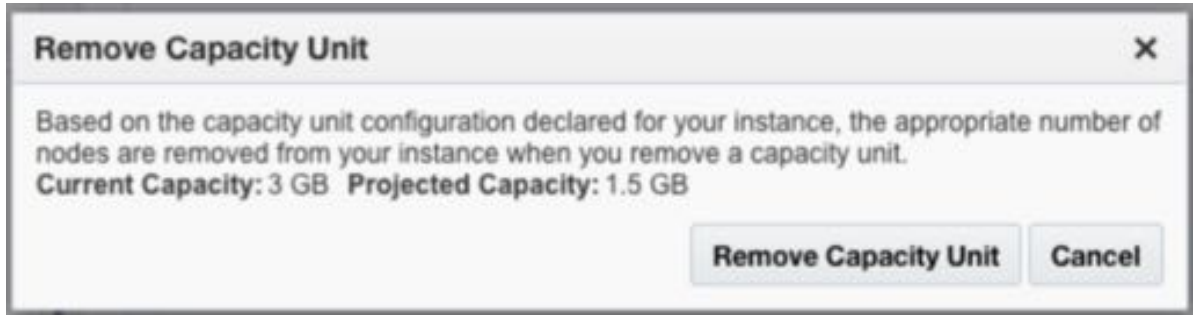
## Planning for capacity and scale for your cache

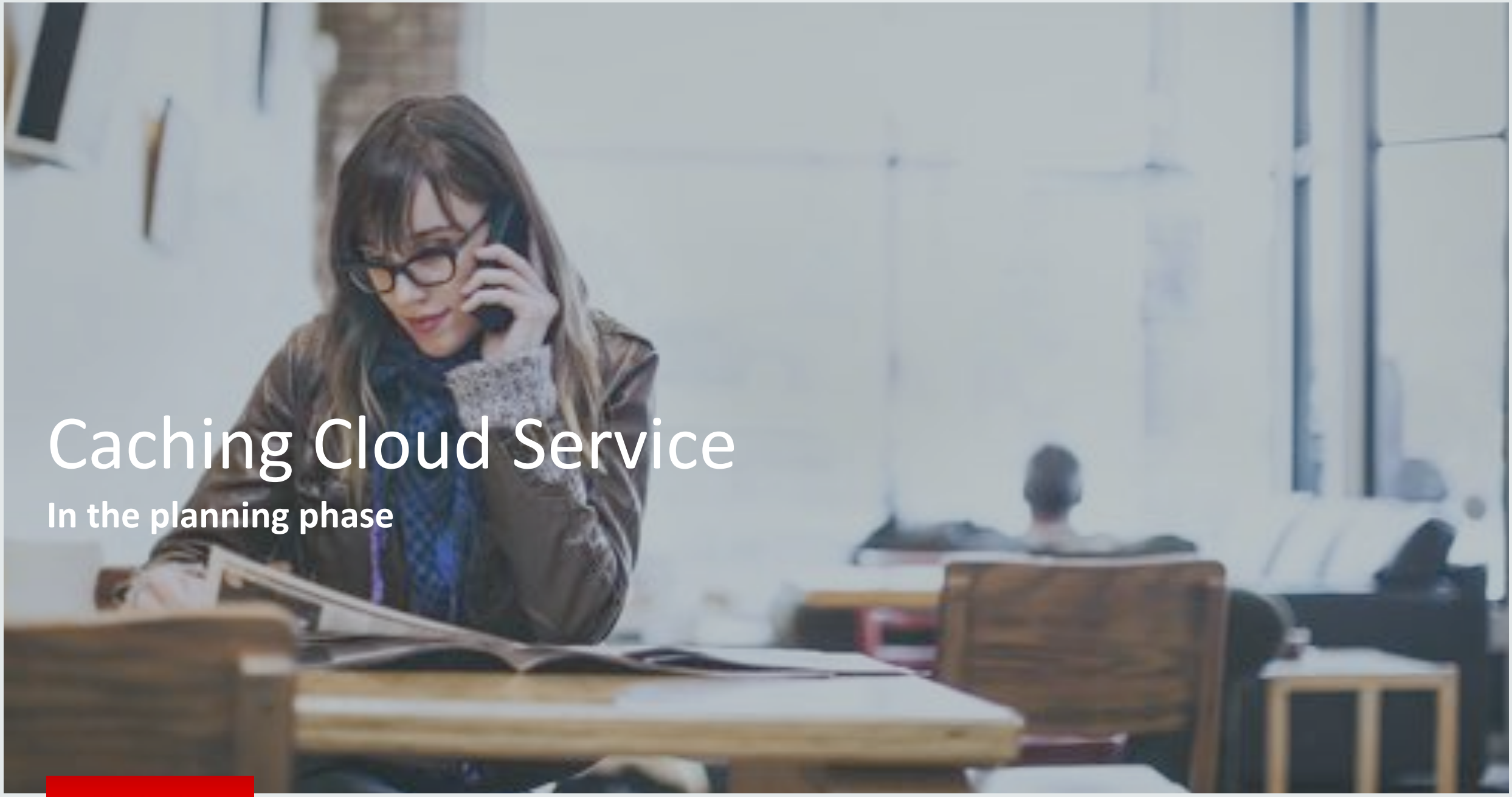
- Advanced users can define custom capacity units
- Selecting the number of Virtual Machines, Managed Coherence Servers & heap size
- Scale-out/in cache capacity based on defined capacity unit

# Coherence Feature: Simplified Scaling





# Caching Cloud Service

## In the planning phase

# Caching Cloud Service

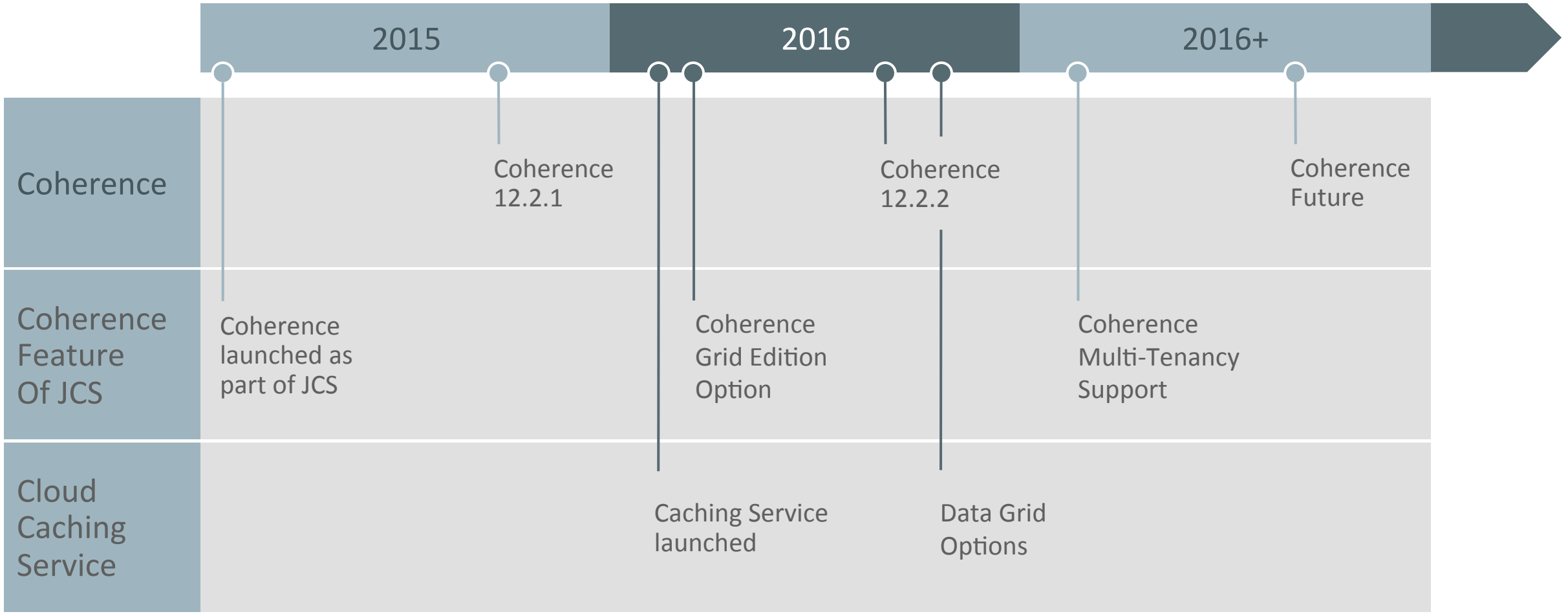
Goals

- Provide a first class caching service
- Provide both “Caching” and “Datagrid” feature sets
- Provide a caching/datagrid tier for use by the Oracle Cloud ecosystem
- Simplify provisioning, scaling patching, deployment & upgrade

# Integrated Roadmap

## Coherence, Coherence on JCS and Caching Cloud Service

# Oracle Coherence and Caching Projected Roadmap



# For More Information


cloud.oracle.com/java

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