



Maîtriser les techniques de cache et de datagrid avec Oracle Coherence

Référence : COHERENCE-02-02

Durée : 2 jour(s)

Présentation

Rick Evan's 2 day Clustered Caching with Oracle Coherence course provides both an overview of Oracle Coherence and a deep dive into the more technical aspects of this exciting technology.

Oracle Coherence is a Java, .NET, and C++ enabled clustered caching and data grid technology that delivers high availability, rapid performance and extreme scalability. You will learn the theory of caching and various caching techniques, and you will gain a good understanding of the capabilities of Oracle Coherence.

Upon completion of the course, you will know when and how each of the different caching options and features should be used. You will be able to take full advantage of all of the available functionality within Coherence, and you will know how to use it to achieve exceptional data caching performance for highly demanding data intensive and transactional applications.

The version of Oracle Coherence that we use in the labs on the course is version 3.5.3, which is, at the time of writing, the latest production version.

Objectifs

- Understand the concepts of reliability, availability and scalability.
- Understand the value-add of clustered caching and grid computing
- Understand the differences between the various Oracle Coherence editions.
- Identify when Oracle Coherence is a suitable fit for your needs.
- Get started with Oracle Coherence.
- Access the grid from Java and write sophisticated queries using the Oracle Coherence API
- Understand advanced functionality such as Read-through, Write-through, Refresh-ahead, and Write-behind caching.
- Unleash the full power of grid computing using Oracle Coherence APIs.
- Access your Oracle Coherence cache and grid from Java and .NET clients using Oracle Coherence *Extend.

Répartition: 40% Théorie, 60% Pratique

Public: Manager, Architecte, Chef de projets, Administrateur, Développeur

Pré-requis: Une bonne connaissance de Java est nécessaire.

Programme

Introduction to Oracle Coherence

- Introducing Oracle Coherence: the company, the technology stack, the various editions.
- The Architecture of Oracle Coherence: a Single System Image
- Data Topologies: Local, Replicated, Partitioned, Near Cache, and others.

Working with Oracle Coherence

- Installing Coherence
- Introducing the Coherence API
- Key Cache Features: Querying, Indexing, Aggregating
- Deep Dive into the Oracle Coherence Caching API: Map, NamedCache, Filter, Consuming Events with MapListeners
- Working with the System of Record: the CacheStore API, Read-Through, Write-Through, Write-Behind, Refresh-Ahead usage and configuration
- Key Grid Features: Spreading Processing Across the Nodes In Your Grid
- Deep Dive into the Oracle Coherence Data Grid API: InvocableMap and EntryProcessor
- eXtreme Transaction Processing: Considerations and APIs
- Configuring Oracle Coherence: defining cache schemes and named caches
- Configuring the operational aspects of Oracle Coherence: protocols, ports, security, configuring services, network filters




Tuning Coherence and your Architecture for Performance

- Understanding Garbage Collection; tuning your JVM
- Understanding Java Serialization; Introducing Coherence PIF/POF
- Network Issues: tuning the network
- Testing your Coherence cluster

Other Features of Oracle Coherence

- Caching and Clustering Session Data using Coherence*Web
- .NET Connectivity using Coherence*Extend: the .NET API using C#
- Monitoring and Managing an Oracle Coherence Grid: exposing Coherence using JMX.
- Integration with Open Source Frameworks such as Spring and Hibernate.

OFFERT EN INTER-ENTREPRISE

-  Le petit déjeuner croissants, jus d'orange, café)
-  Le déjeuner
-  Une qualification téléphonique si nécessaire avec l'un de nos consultants

Tel: +33(0)1 45 26 19 15
Fax : +33(0)1 75 43 49 92
Email : training@zenika.com

Auteur du cours



Rick Evans est un expert Java EE et Spring avec une grande expérience dans les secteurs publics et financiers. C'est aussi un expert Coherence et Data Grids.