Hazelcast In-memory Computing Platform

Hazelcast 3.5 Architecture

- **Web Sessions**
  - Java
  - C++
  - .NET
- **Portable Serialization / Pluggable Serialization**
- **Memcached**
- **REST**
- **Client Network Protocol**

- **Hibernate 2nd Level Cache**
  - `javax.cache.*`
  - `java.util.concurrent.*`
- **Executor Service**
- **Lock/Sem.**
- **Atoms**
- **Topic**
- **User Defined**

- **Continuous Query**
  - SQL Query
  - Predicate
- **Entry Processor**
- **MultiMap**
- **Map / Reduce**
- **Aggregation**

- **Low-level Services API**

- **Node Engine**
  - (Threads, Instances, Eventing, Wait/Notify, Invocation)

- **Partition Management**
  - (Master Partition, Data Affinity, Replicas, Migrations, Partition Groups)

- **Cluster Management**
  - (Multicast, IP List, AWS/OpenStack)

- **Networking**
  - (IPv4, IPv6)

- **On-heap Storage**
- **High-density Memory Store**

- **Security**
  - (Connection, Encryption, Authorization)
  - (Topology Aware Partition Management, WAN Replication)

**Hazelcast Open Source**

**Hazelcast Enterprise**
Why Use Hazelcast?

### Caching
- Elastic scalability
- Super speeds
- High availability
- Fault tolerance
- Cloud readiness

### In-Memory Data Grid
- Automatic data recovery
- Object-oriented and non-relational
- Elastic and scalable
- Transparent database integration
- Browser-based cluster management

### Web Session Clustering
- High performance
- No application alteration
- Easy scale-out
- Fast session access
- Off load to existing cluster
World-Class Customers

HIGH-TECH
- WSO2
- Swiss Re
- Constant Contact
- MuleSoft
- mindjet
- Oracle
- Ericsson
- Cisco
- TEOCO
- Vorwerk
- American Express
- Commerzbank
- Morgan Stanley
- Ellie Mae
- Capital One
- HSBC

GAMING & ENTERTAINMENT
- High 5
- Playtech
- TriPlay
- Nielsen
- OLG
- Ticketmaster
- Target
- The Limited

TELECOMMUNICATIONS
- AT&T
- Harris
- Verizon
- Wallenius Wilhelmsen

BANKING & FINANCIAL SERVICES
- New York Life
- USAA
- Morgan Stanley
- HSBC

INSURANCE
- Swiss Life
- USAA

CONSUMER & ECOMMERCE
- Target
- The Limited

LOGISTICS
- Morgan Stanley
- HSBC
Deployment Architecture

**Embedded Hazelcast**

Great for early stages of rapid application development and iteration

**Client-Server Mode**

Necessary for scale up or scale out deployments – decouples upgrading of clients and cluster for long term TCO
Hazelcast Enterprise
Multimillion Dollar Enterprise License Business Built on Hazelcast Open Core

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Vibrant Open Source Community

Google Groups

Hazelcast

Questions

Tags

Users

Badges

Unanswered

357 questions tagged hazelcast

Lines of Code

2009 2010 2011 2012 2013 2014

Code  Comments  Blanks
Global Distribution of Phone Home Data
Tierra del Fuego – Iceland – Novosibirsk
As of 25 March 2015

8,000+ Organizations Using Hazelcast

98M Server Starts 4 per Second