# " TERRACOTTA

Spend Less. Scale More. Simplify.



### **High Performance Caching At Every Scale**

Terracotta offers a full range of caching products to increase application performance by up to 10X and reduce database load by 30%-90%. Each product uses the industry standard Ehcache Java caching API to grow seamlessly as your application scales.

#### Increased Database Performance.

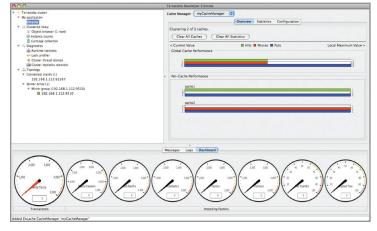
Take as much as 90% of the load off your database while ensuring low-latency access to coherent cached data in your application.

#### Performance at Scale.

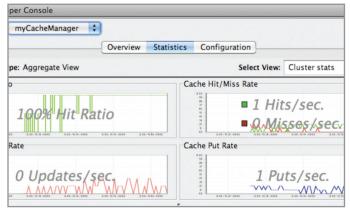
Add application servers as needed without overloading your database or requiring complex custom clustering and replication schemes. Use Terracotta Server Array striping to add more throughput as you add application servers

#### Performance with Correctness.

All changes made to cache entries are guaranteed up-to-date in every instance of the cache so there is no cache drift across application servers. Deltas-only change management built into Terracotta ensures cache correctness coupled with high performance. Terracotta's JVM-level clustering provides coordinated access to cache data to avoid write conflicts and guarantee a stable and consistent view of the cache.



See an overview of cache performance in real time, and watch how the caches offload the database.



See key cache statistics like hit ratio, hit/miss rates, hits on the database, cache puts, detailed efficiency of cache regions.

# Visual Tuning, Configuration Management, and Production Monitoring.

Terracotta brings datacenter-wide cache performance monitoring and configuration management to Ehcache with a visual statistics and control dashboard.

#### Reliability.

Cache entries are persistent to disk, so the state of the cache is reliable. Get the reliability of a database with the performance of an in-memory cache, even if the cached data isn't backed by a database.

#### Configurable Eviction.

Using the cache's built-in eviction policy, you can set time-to-live (TTL) and time-to-idle (TTI) on your cache entries to avoid stale cache data and clean out unused entries.

#### Reliable Write-Behind.

Guarantee updates to cache entries in the database as well as in all instances of the cache using Terracotta's reliable write-behind queue. Even out database write load to avoid load spikes while ensuring write operations occur, even in the event of server failure or restarts.

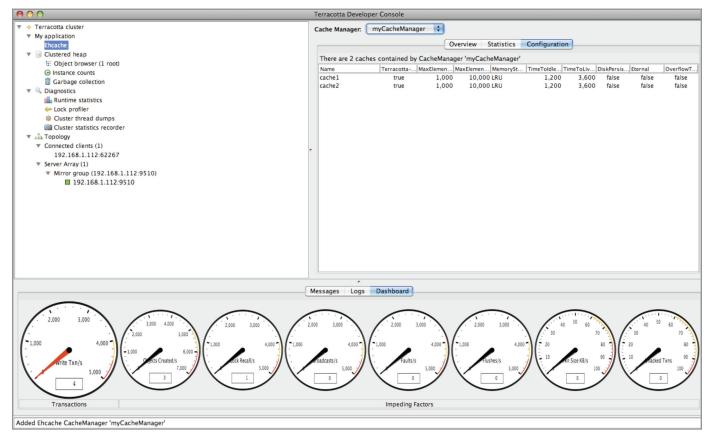
#### **Automatic Partitioning.**

Terracotta's built-in memory management ensures that the hottest cache entries are in-memory where they are used the most. Terracotta Server Array striping (available in Terracotta FX) automatically partitions cache data across multiple Terracotta servers for highly concurrent read and write access at large cache sizes.



#### The Ehcache You Know.

Change a few lines of configuration, start the Terracotta server, and get all the benefits of a coherent distributed cache in your existing Ehcache applications.



Dynamically adjust key cache parameters, such as time-to-live (TTL) and time-to-idle (TTI), manage the size of the cache, and cache persistence to disk.

## **Terracotta for Caching Product Line**

#### Ehcache DX.

High performance Ehcache stand-alone and peer-to-peer replicated cache with enterprise support, monitoring, management, and visualization.

#### Ehcache EX.

The same industry standard high performance Ehcache running on the award-winning Terracotta Server Array for high throughput, scalable distributed cache applications with guaranteed data coherence, along with high availability, enterprise support, monitoring, management, and visualization.

#### Ehcache FX.

Distributed cache infrastructure software for massive scale; industry standard Ehcache API and high throughput Terracotta Server Array with added data striping feature to partition cache data for extreme scale; includes enterprise support, monitoring, management, and visualization

Learn more: http://www.terracotta.org/distributedcache

