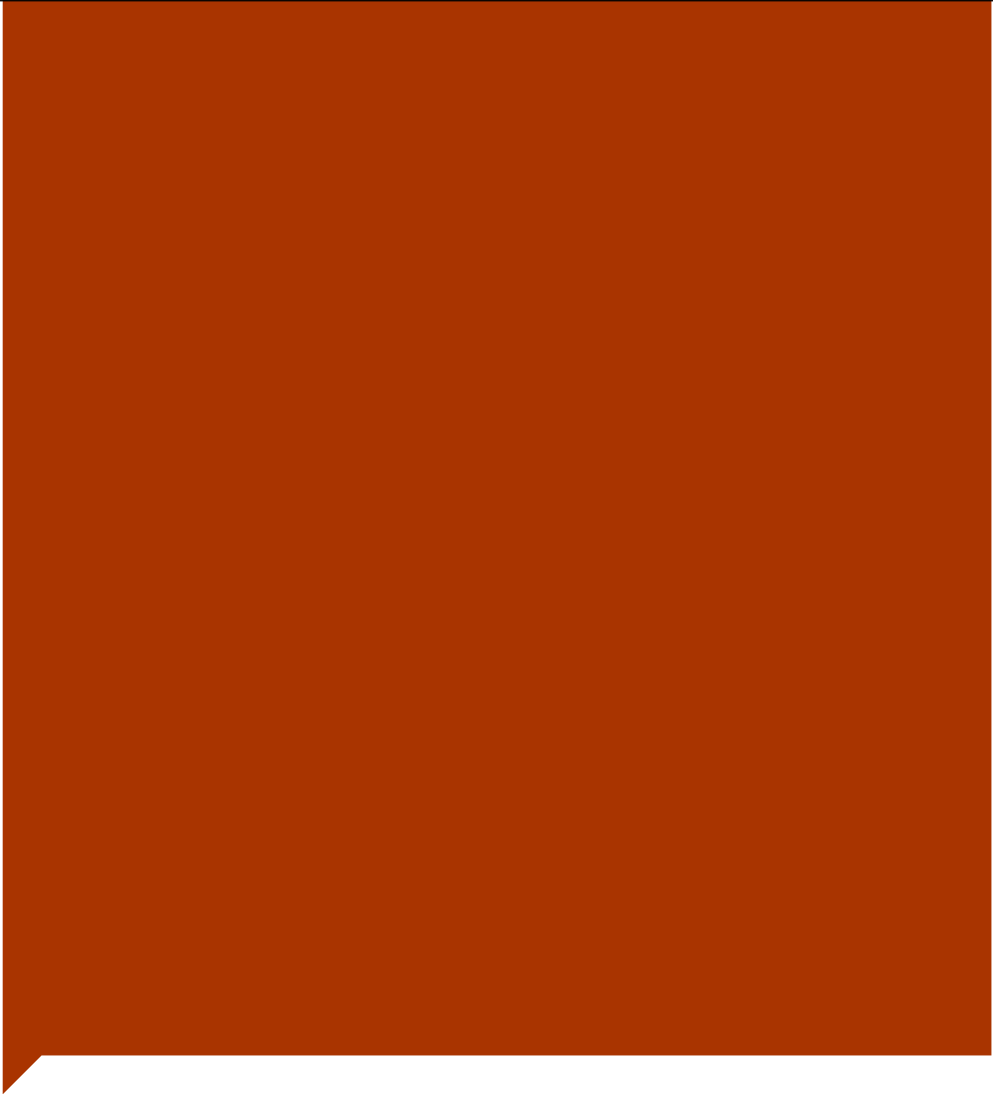


Improving Application Performance with 3 Simple Functions

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Our Story



It's never fast enough.

Google

Google Search

I'm Feeling Lucky





1 Second



10 Seconds

.5 / 7

Caching is but one
of 1000 solutions.



Caching is easy.
Eviction is the challenge.

Query caching

Page caching

Fragment caching

ORM caching



CF

Refer to the CF Docs



Object Caching



cachePut()
cacheGet()
cacheRemove()
[isNull()]

Core Functions



Example (Basics)

Create the name of the item in the cache

cacheGet(name of the item in the cache)

isNull(results of getting the item in the cache)?

Yes:

Do the hard work

cachePut(results of the hard work)

No:

Use the cached version

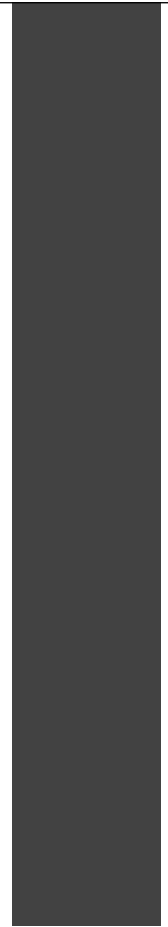
Example (Basics)

```
<cffunction name="getCourse" returntype="course">
  <cfargument name="courseID" type="numeric" required="yes" />
  <cfset var courseNameInCache = "courseID" & arguments.courseID />
  <cfset var cachedCourseInfo = cacheGet(courseNameInCache) />
  <cfset var course = 0 />
  <cfif isNull(cachedCourseInfo)>
    <cfset course = variables.courseService.getCourse
(arguments.courseID) />
    <cfset cachePut(courseNameInCache, course, CreateTimeSpan
(0,0,5,0)) />
  <cfelse>
    <cfset course = cachedCourseInfo />
  </cfif>
  <cfreturn course />
</cffunction>
```

Pick good cache IDs

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cacheGetAllIds()



EHCACHE Console

a product from  TERRACOTTA

- ers
- Statistics
- Configuration
- Contents**
- Charts
- API

or cache manager

Contents

nt: 0.9 Memory count: 0.9

Contents

a match in string keys...

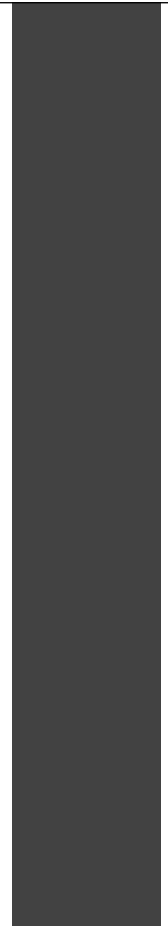
	Key ▲
.:82:61807:CacheManager@6854be84	LIVETALKPAGEINF
.:82:61807:CacheManager@6854be84	MASTERCALENDAF
.:82:61807:CacheManager@6854be84	MC4COURSEDAOR
.:82:61807:CacheManager@6854be84	MC4GETCOURSEIN
.:82:61807:CacheManager@6854be84	MC4GETENROLLMI
.:82:61807:CacheManager@6854be84	MC4GETSTAFFINV
.:82:61807:CacheManager@6854be84	MC4OFFERINGDAC
.:82:61807:CacheManager@6854be84	ROSTERUTILSGETI
.:82:61807:CacheManager@6854be84	_CF_DUMPCORE.M

Details

Key: MC4COURSEDAOREAD200
me: coldfusion.runtime.TemplateProxy
ted: 2011/08/30 09:58:01
ted: 2011/08/30 09:58:01
ted:

Ehcache Monitor

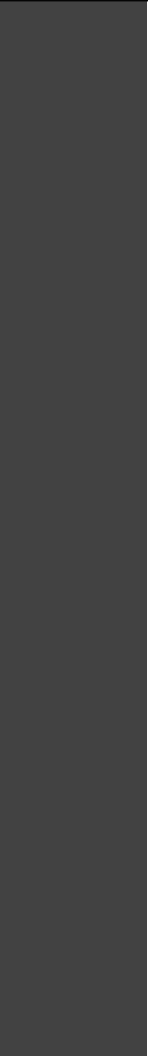
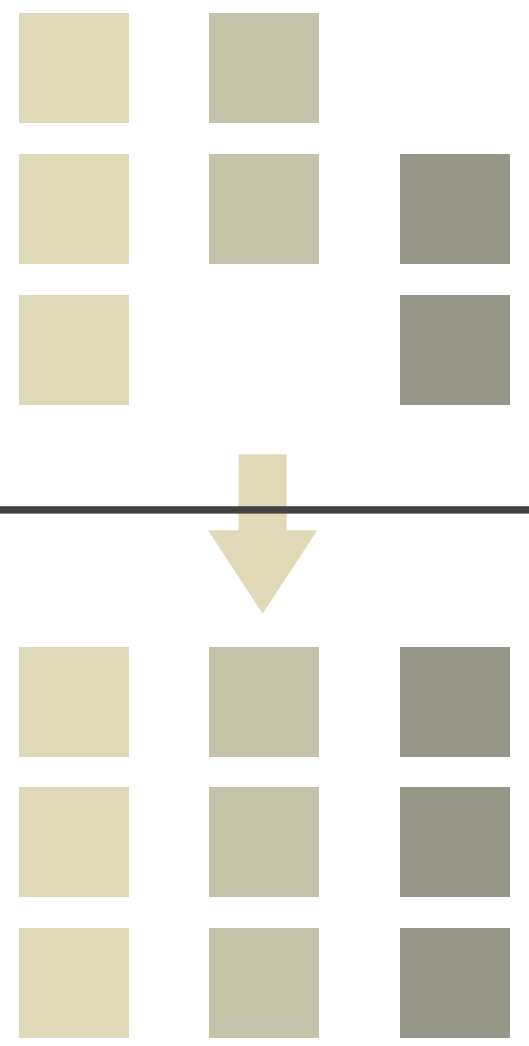
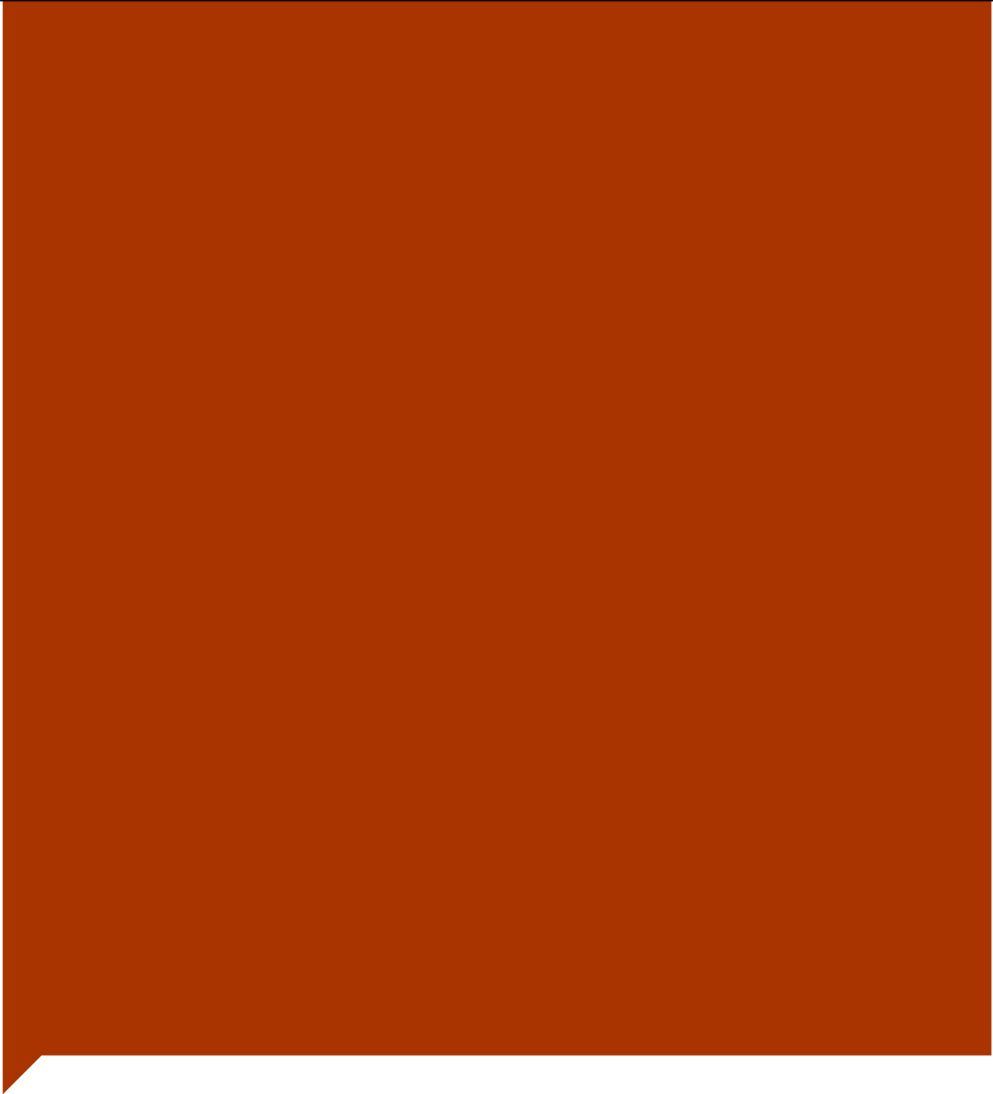
By default,
Ehcache shares
the same JVM
as CF.



Example



Customer Session Objects



Consistency

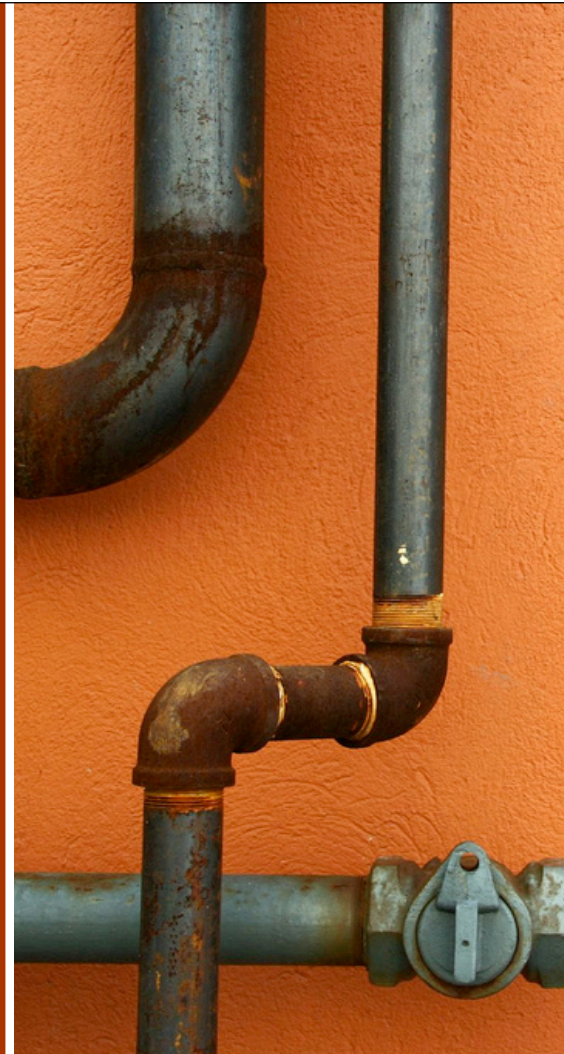


Example



Heavy Composition

Example



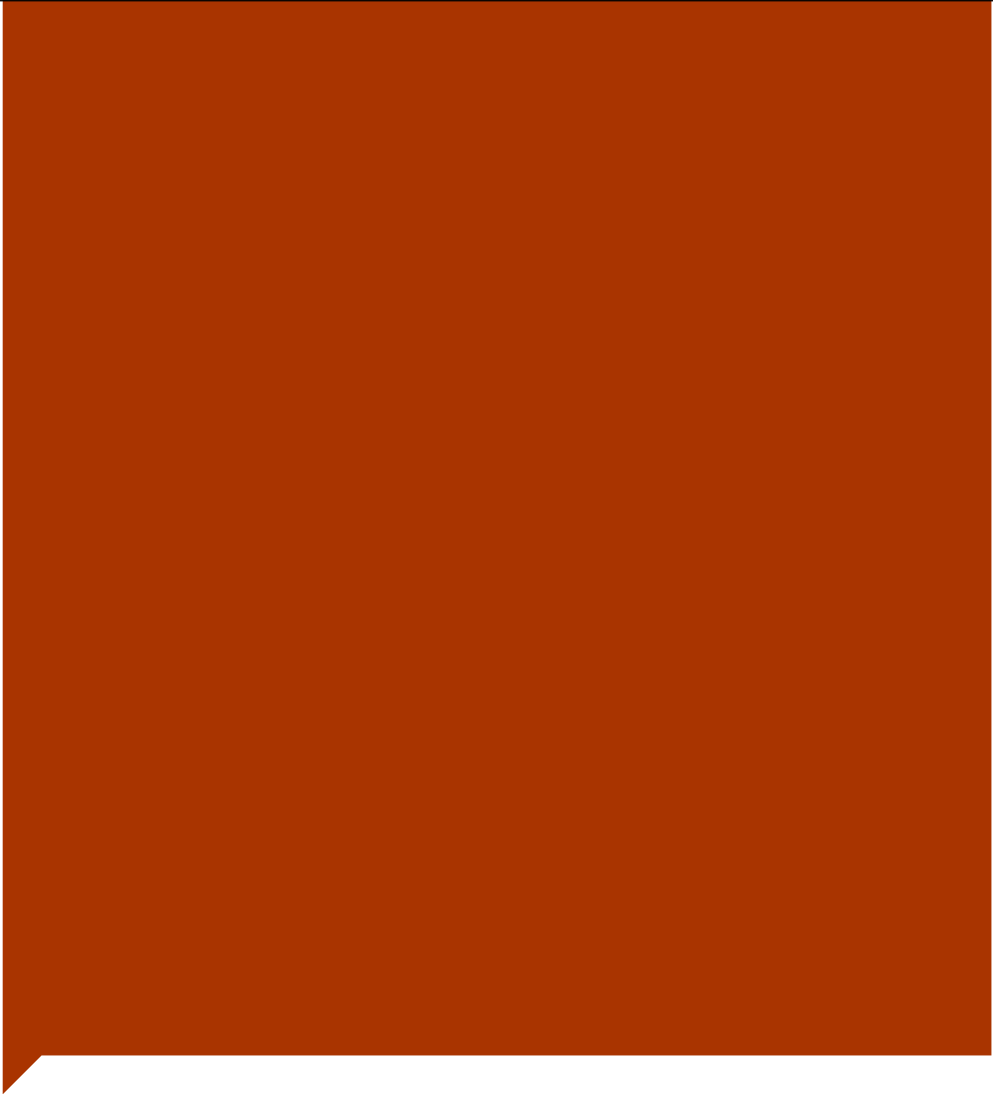
External Data

Example

Match: CHN vs GER
Duration: 45min
Table: 1
Player: TAN Chee Khaiang (SIN) vs ALAMRI HASSAN (QAT)

Game Statistics	MA Lin (CHN)				
	Game 1	Game 2	Game 3	Game 4	Game 5
Points won	11	11	9	11	6
Service %	18%	0%	33%	18%	0%
Third Ball %	2	2	2	2	2

Reports















































One More Problem

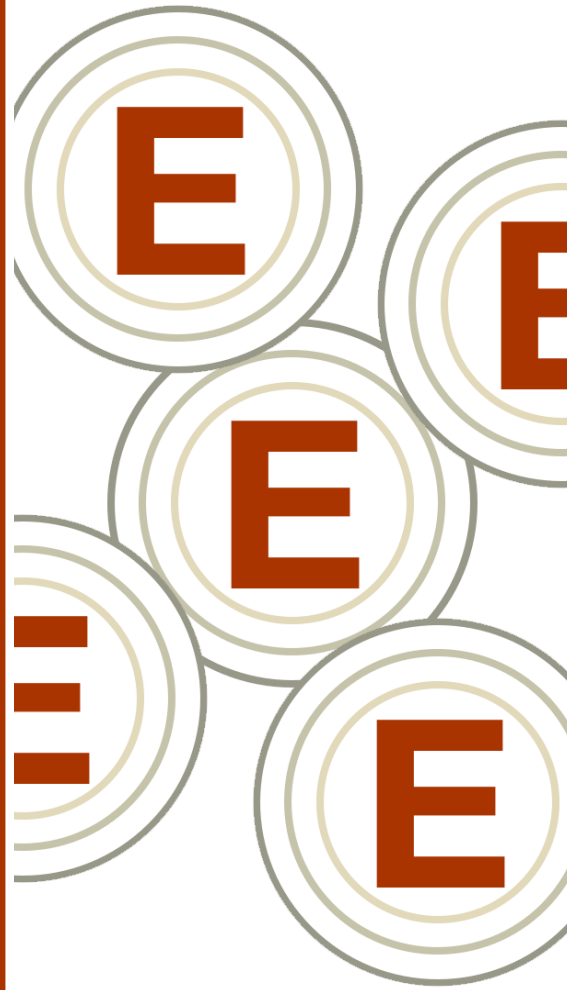


Schedule New Task

Scheduled Tasks

Actions	Task Name
   	AMM: Notify Faculty of Acces
   	Daily Course Email
   	Empty Forum Trash
   	Get HopkinsID For Students
   	Syllabus Builder Daily Email
   	Update Student Names Per IS
Actions	Task Name
   	Clean FuseTalk Subscriptions
Actions	Task Name
   	Breeze Server Heartbeat
   	Clean Up Schedule ZIP Files
   	clear WhosEditing
   	Delete Unrelated Lectures Su

Scheduled Tasks



Ehcache Autodiscovery

Configuring Ehcache autodiscovery

[CF root]/lib/ehcache.xml, add:

```
<cacheManagerPeerListenerFactory  
class="org.terracotta.ehcachedx.monitor.probe.ProbePeerListenerFactory"  
properties="monitorAddress=[IP address of server], monitorPort=9889,  
memoryMeasurement=true" />
```

Just before <defaultCache>. Restart CF.



And One More Problem

Simple admin tool
to clear caches.

Clear Cache Elements

Select a cache: Enrollment: Self-enrollment offerings query

Select a course offering:

Methods in Quantitative Risk Assessment (891) -- Starts 8/25/11

Clear Cache

Caching in CF9 is easy.
Eviction requires planning.

Rob Brooks-Bilson's Blog

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<http://rob.brooks-bilson.com/>

Thank you!

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www.iterateme.com