Mind-Alliance Channels Performance Test Report

Date: October 21, 2011

Hardware and Software details:

Environment	Parameter	Value
Channels	Hardware	Processor: Intel C2D@2.66Ghz
		Memory: DDR2- 4GB
		Motherboard: DG31G
		Hard Disk: 250 GB
	Software	OS – Ubuntu Server 10.10
Load Machine	Hardware	Processor: Intel Core i3 CPU@3.07Ghz
Details		Memory: DDR3- 3GB
		Motherboard: DH55TC
		Hard Disk: 250 GB
	Software	OS – Windows 7 Professional

Test Overview:

Test was conducted using JMeter for following scenarios with load details.

Sr. No	Scenario	Load (Thread)	
1	Planner A: - Planner logged in to the channels,	20	
	adds the segments to the plan, adds the		
	organization to the plan, assigns task to the		
	member, logged out from the channels.		
2	Planner B: - Planner logged in to the channels,	20	
	Adds the segments to the plan, adds the goals		
	to the segments, and adds the task, logged out		
	from the channels.		
3	Planner C: - Planner logged in to channels,	20	
	adds the organization, removes the		
	organization, adds the events to the plan,		
	logged out from the channels.		

Note: As all the scenarios are running simultaneously hence whenever lock is release from the channel other user can perform its task.

E.g.:

Suppose all 16 scenarios are executing using 10 threads (users) per scenario.

Hence if Planner A of scenario 1 is updating the details of the plan then all other planners which are logged in to the channels will not access the plan till Planner A completes its task. It may happened that Planner A of scenario 1 release the lock when Planner 5 of scenario 2 is start executing, so it will add events for Planner 5 but for Planner 1,2,3 and 4 it will not add

the events because of lock. So it is depending upon the Planner when it releases the lock and which one grabs it based on requests.

Similarly sometimes Scenario 3 grabs the lock and so on...

Load Details:

Total No of Threads (Users): 60

JVM size (Heap):

Parameter	Ubuntu server	Load machine	
		(Increased for Jmeter)	
Min	4096m	4096m	
Max	4096m	4096m	

Result and Analysis:

Summary:

Refer attached files with this report for summary of tests conducted.

Observation:

- During test CPU utilization was between 60-70%.
- Observed that for some requests Std. deviation was above 2 sec (Refer SummaryReportFor60threads.ods file)

Test area	Actual Result	Expected Result	Comments
New Segment	60	60	Created 60 new
			segments
Update Segment	60	60	Created 60 new
			segments
New Organization	40	40	Created 40 new org
New Task	40	40	Created 40 new task
New Goals	20	20	Created 20 new goals
New Events	20	20	Created 20 new events

Please refer following files for more statistics.

Sr. No.	File Name	Comments
1	SummaryReportFor60threads.ods	Contains information about response time,
		stddev and throughput etc.
2	ResultStatusFor60Threads.ods	Status of each request with respect to
		thread (user).
3	Channels.log	Channels log
4	PerformanceCounterReportFor60Threads.ods	CPU, Memory and IO etc. performance
		counter.