Mind-Alliance Channels Performance Test Report

Date: September 16, 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- 4Gb
		Motherboard: DH55TC
		Hard Disk: 8GB Gb
	Software	OS – Windows Server 3008 R2 Enterprise x64

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,	30
	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,	30
	Adds the segments to the plan, adds the goals	
	to the segments, and adds the task, remove	
	segment from the plan, logged out from the	
	channels.	
3	Planner C: - Planner logged in to channels,	30
	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): 90

JVM size (Heap):

Parameter	Ubuntu server	Loadmachine
		(Increased for Jmeter)
Min	3072m	3072m
Max	3072m	3072m

Result and Analysis:

Summary:

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

Observation:

- During test CPU utilization was between 40-45%.
- Observed that for some requests Std. deviation was above 2 sec (Refer Test01_SummaryReport90Threads.ods file).
- It is observed that during execution Jmeter completed few request and it is waiting for GET request from Channels after some interval we stop execution as threads count is not decrementing (not completed). To verify we login to the Channels but we are unable to login.

Please refer following files for more statistics.

Sr. No.	File Name	Comments
1	SummaryReport90Threads.ods	Contains information about response time, stddev
		and throughput etc.
2	ResultStatus90Threads.ods	Status of each request with respect to thread (user).
3	Channels.log	Channels log
4	PerformanceCounter90Threads.ods	CPU, Memory and IO etc. performance counter.

It is observed that with increase in threads no. (User load) operations (request) were not completed.