Mind-Alliance Channels Performance Test Report

Date: June 8, 2012

SVN Revision: 4112

Hardware and Software details:

Environment	Parameter	Value
Channels	Hardware	Processor: Intel C2D@2.66Ghz Memory: 8194MiB Motherboard: DG31G Hard Disk: 250 GB
	Software	OS – Ubuntu Server 10.10
Load Machine Details	Hardware	Processor: Intel Core i3 CPU@3.02Ghz Memory: 4096MB RAM Motherboard: INSPIRON N5110 Hard Disk: 500 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, adds the segments to the plan, adds the organization to the plan, assigns task to the member, logged out from the channels.	30
2	Planner B: - Planner logged in to the channels, 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.	30
3	Planner C: - Planner logged in to channels, adds the organization, removes the organization, adds the events to the plan, logged out from the channels.	30

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	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 77.7%.
- Observed that for some requests Std. deviation was above 2 sec (Refer SummaryReportFor90threads.ods file)

Test area	Actual Result	Expected Result	Comments
New Segment	90	90	Created 90 new segments
Update Segment	90	90	Segments updated
New Organization	60	60	Created 60 new org
New Phase	30	30	Phase added
New Task	90	90	Created 90 new task
New Goals	30	30	Goals were created
New Events	30	30	Events were added

Please refer following files for more statistics.

Sr. No.	File Name	Comments
1	SummaryReportFor90threads.ods	Contains information about response time, stddev and throughput etc.
2	ResultStatusFor90Threads.ods	Status of each request with respect to thread (user).
3	Channels.log	Channels log
4	PerformanceCounterReportFor90Threads.ods	CPU, Memory and IO etc. performance counter.