Mind-Alliance Channels Performance Test Report

Date: April 13, 2012

SVN Revision: 3900

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 | Hardware | Processor: Intel Core i3 CPU@3.07Ghz | |
| Details | | Memory: 4096MB RAM | |
| | | Motherboard: INSPPIRON 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, | 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 84.1%.
- 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 | Segments were updated |
| New Organization | 40 | 40 | Created 40 new org |
| New Phase | 20 | 20 | Phase added |
| New Task | 40 | 40 | Created 40 new task |
| New Goals | 20 | 20 | Goals were created |
| New Events | 20 | 20 | Events were added |

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. |