# **Mind-Alliance 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 | Hardware  | Processor: Intel Core i3 CPU@3.02Ghz |  |
| Details      |           | Memory: 4096 MB 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      | Add Questionnaire: Planner logged in to the      | 20            |
|        | channels, adds questionnaire, activates          |               |
|        | questionnaire and logged out from the            |               |
|        | channels.  |               |
| 2      | Add Questions: - Planner logged in to the        | 20            |
|        | channels, adds questionnaire, add question to    |               |
|        | the questionnaire, activate question and         |               |
|        | questionnaire and logged out from the            |               |
|        | channels.  |               |
| 3      | Add Survey To The Plan: - Planner logged in      | 20            |
|        | to the channels, adds questionnaire to the plan, |               |
|        | Click on survey of about plan, launch the        |               |
|        | survey and logged out from the channels.         |               |
| 4      | Create Survey From Task: - Planner logged in     | 20            |
|        | to the channels, add new task, click on create   |               |
|        | new survey link, click on check box of user      |               |
|        | and click on update or request participation     |               |
|        | button and logged out from the channels.         |               |

| 5 | Submit Task Survey Details:- Planner            | 20 |
|---|---|----|
|   | logged in to the channels, add new task, click  |    |
|   | on create new survey link, click on check box   |    |
|   | of user and click on update or request          |    |
|   | participation button go to home page, clicks on |    |
|   | planning survey link, click on ToDo tab and     |    |
|   | enter details of survey and submit form and     |    |
|   | logged out from the channels.                   |    |
| 6 | Forward Survey:- Planner logged in to the       | 20 |
|   | channels, add new task, click on create new     |    |
|   | survey link, click on check box of user and     |    |
|   | click on update or request participation button |    |
|   | go to home page, clicks on planning survey      |    |
|   | link, click on ToDo tab, click on forward       |    |
|   | button and logged out from the channels.        |    |

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

### **E.g.**:

Suppose all 9 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): 390

## JVM size (Heap):

| Parameter | Ubuntu server | Load machine           |
|-----------|---------------|------------------------|
|           |               | (Increased for JMeter) |
| Min       | 4096m         | 4096m                  |
| Max       | 4096m         | 4096m                  |

#### **Summary:**

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

### **Observation**:

- During test CPU utilization was between 93.1%.
- Observed that few components of data collections were not created.
- Observed stack trace for some requests.

- Observed error like resource not found for some requests.
- Observed that for some requests Std. deviation was above 2 sec (Refer SummaryReportFor390Threads.ods file)

| Test area          | Actual Result | Expected Result | Comments               |
|--------------------|---------------|-----------------|------------------------|
| Add Questionnaire  | 5             | 20              | Created 5 new          |
|                    |               |                 | Questionnaire          |
| Add questions to   | 5             | 20              | Added 5 new questions  |
| questionnaire      |               |                 |                        |
| Add Survey To The  | 5             | 20              | Added 5 survey to the  |
| Plan               |               |                 | plan                   |
| Create Survey From | 10            | 20              | Created 10 survey from |
| Task               |               |                 | task                   |
| Submit Task Survey | 1             | 20              | 1 survey details were  |
| Details            |               |                 | submitted              |
| Forward Survey     | 1             | 20              | 1 survey forwarded     |

Please refer following files for more statistics.

| Sr. | File Name                                 | Comments                               |
|-----|---|--|
| No. |   |  |
| 1   | SummaryReportFor120Threads.ods            | Contains information about response    |
|     |   | time, stddev and throughput etc.       |
| 2   | ResultStatusFor120Threads.ods             | Status of each request with respect to |
|     |   | thread (user).                         |
| 3   | Channels.log                              | Channels log                           |
| 3   | PerformanceCounterReportFor120Threads.ods | CPU, Memory and IO etc.                |
|     |   | performance counter.                   |

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