# **Mind-Alliance Performance Test Report**

Date: July 19, 2012

**SVN Revision: 4244** 

## 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      | About Plan-Details:-Planner A Updates the                                    | 20            |
|        | details of the Plan and if Planner B will                                    |               |
|        | update the same plan then the lock will be                                   |               |
|        | generated for the plan   |               |
| 2      | About Plan-All Events:- Planner A will add                                   | 20            |
|        | event to the Plan and if Planner B will add                                  |               |
|        | event in the same plan then the lock will be                                 |               |
|        | generated for the plan   |               |
| 3      | About Plan-All Organizations:- Planner A                                     | 20            |
|        | will add All Organizations to the Plan and                                   |               |
|        | if Planner B will add All Organizations in                                   |               |
|        | the same plan then the lock will be  |               |
|        | generated for the plan   |               |
| 4      | About Plan Segment-Details:- Planner A                                       | 20            |
|        | Updates the details of the About Plan  |               |
|        | Segment and if Planner B will update the                                     |               |
|        | same Segment then the lock will be   |               |
|        | generated for the plan   | 20            |
| 5      | About Plan Segment-Goal:- Planner A  | 20            |
|        | adds the Goal in the Segment and if Planner B will add goal the same Segment |               |
|        | then the lock will be generated for the plan                                 |               |
|        | dien die fock win de generated for the plan                                  | l             |

| About Plan - Update Task Details: Lock should be generated for user B for updating same task of about plan  Update Flow: Lock should be generated for user B for same updating flow  Phase: Lock should be generated for user B for same updating phase  Agents: Lock should be generated for user B For same updating Agent  Places: Lock should be generated for user B For same updating Places  Transmission Media: Lock should be generated for user B For same updating Places  Transmission Media: Lock should be generated for user B for same updating Transmission Media  Operation of the American Security I sale should be generated as a security of the III and II and |    |   |    |
|--|----|---|----|
| same task of about plan  7   | 6  |   | 20 |
| 7 Update Flow: Lock should be generated for user B for same updating flow  8 Phase: Lock should be generated for user B for same updating phase  9 Agents: Lock should be generated for user B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media   |    | should be generated for user B for updating |    |
| for user B for same updating flow  8 Phase: Lock should be generated for user B for same updating phase  9 Agents: Lock should be generated for user B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media   |    | same task of about plan                     |    |
| 8 Phase: Lock should be generated for user B for same updating phase  9 Agents: Lock should be generated for user B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media  | 7  | Update Flow: Lock should be generated       | 20 |
| B for same updating phase  9 Agents: Lock should be generated for user B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media   |    | for user B for same updating flow           |    |
| 9 Agents: Lock should be generated for user B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media  | 8  | Phase: Lock should be generated for user    | 20 |
| B For same updating Agent  10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media  |    | B for same updating phase                   |    |
| 10 Places: Lock should be generated for user B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media   | 9  | Agents: Lock should be generated for user   | 20 |
| B For same updating Places  11 Transmission Media: Lock should be generated for user B for same updating Transmission Media  Transmission Media  |    | B For same updating Agent                   |    |
| 11 Transmission Media: Lock should be generated for user B for same updating Transmission Media 20   | 10 | Places: Lock should be generated for user   | 20 |
| generated for user B for same updating Transmission Media  |    | B For same updating Places                  |    |
| Transmission Media   | 11 | Transmission Media: Lock should be          | 20 |
|  |    | generated for user B for same updating      |    |
| 12 Organization, Losk should be consented 20   |    | Transmission Media                          |    |
| 12 Organization: Lock should be generated 20   | 12 | Organization: Lock should be generated      | 20 |
| for user B for same updating Organizations   |    | for user B for same updating Organizations  |    |
| Roles: Lock should be generated for user B 20  | 13 | Roles: Lock should be generated for user B  | 20 |
| for same updating Roles  |    | for same updating Roles                     |    |

**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 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): 260

### JVM size (Heap):

| Parameter | Ubuntu server | Load machine<br>(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 95.7%.
- Observed Stack trace for some requests

• Observed that for some requests Std. deviation was above 2 sec (Refer SummaryReportFor260threads.ods file)

| Test area           | Actual Result | <b>Expected Result</b> | Comments            |
|---------------------|---------------|------------------------|---------------------|
| Update Plan         | Not updated   | Updated                | Due to Load some    |
| Add Event           | Not added     | Added                  | components were not |
| Update Media        | Not updated   | Updated                | updated updated     |
| Update Agent        | Updated       | Updated                |                     |
| Update Places       | Updated       | Updated                |                     |
| Update Organization | Updated       | Updated                |                     |
| Add Goal            | Not added     | Added                  |                     |
| Update Role         | Updated       | Updated                |                     |
| Update Task         | Updated       | Updated                |                     |
| Add Flow            | Not added     | Added                  |                     |
| Update Segment      | Updated       | Updated                |                     |
| Update Phase        | Not updated   | Updated                |                     |

Please refer following files for more statistics.

| Sr. No. | File Name                                 | Comments                                  |
|---------|---|---|
| 1       | SummaryReportFor260threads.ods            | Contains information about response time, |
|         |   | stddev and throughput etc.                |
| 2       | ResultStatusFor260Threads.ods             | Status of each request with respect to    |
|         |   | thread (user).                            |
| 3       | Channels.log                              | Channels log                              |
| 3       | PerformanceCounterReportFor260Threads.ods | CPU, Memory and IO etc. performance       |
|         |   | counter.                                  |

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