**ITC303 – Team Orange E4 Iteration Plan**

# **1. Iteration 3 summary and comments**

**Summary**  
Major efforts resolving critical risk identified with contact use case. Risk was resolved.

**Demonstrated functionality includes:**

**Comments Shaun**

Bulk time spent on contributing to solving critical error in contact add. Successfully implemented OpenFire Install on Local Machine and demonstrated same behaviour as remote machine.

**Comments Tim**

-Fixed a new bug in the code which would add a contact twice.  
-Explored the contact add error we were having, and it ended up being resolved, for more information see [ContactProblemFindings](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/ContactProblemFindings.docx).  
-Improved the way a ChatSession is created.  
-Created, executed, and recorded results for 4 test script documents: [CreateAccount](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/TestScripts1-CreateAccount.docx), [Login](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/TestScripts2-Login.docx), [Contacts](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/TestScripts3-Contacts.docx), [Chat](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/TestScripts4-Chat.docx).  
-Improved all iteration plans.

**Comments Murray**

This iteration was spent testing our server and localhost using other clients: Gajim, Pidgin and PSI. The first two of these are multi-platform, PSI appears to be linux only. Through this testing, I could not replicate the problems we have been experiencing using the combination of our client and OpenFire. XMPP clients are able to host contacts on multiple servers. I did not observe any performance degradation between the localhost clients and the teamorange.space / AWS clients. Shaun was able to replicate the problems using a localhost Openfire server.

The main takeaway from all of this is that the problems can be narrowed to one of the following scenarios:

1. We are using the Babbler library as intended, but there are bugs with the library
2. We are using the Babbler library as intended, but there are bugs when it is used with OpenFire (not yet tested against another type of server)
3. We are not using Babbler as intended. If we modify the implementation it may work

One of the strengths of XMPP is its standards based. There should not be problems with using different products together as “on the wire” the protocol is XMPP. Personally I don’t think we can rule out (3) yet. More testing is needed.

# **2. High Level Objectives/Milestones**

|  |  |  |
| --- | --- | --- |
| **ID** | **Objectives** | **Date** |
| - | Iteration start | 22/05/2017 |
| 1 | Update docs for LCAM | 04/06/2017 |
| 2 | Ensure wiki is fully linked and setup for LCAM and PMAS | 04/06/2017 |
| 3 | Develop test scripts for all scenarios through all implemented use cases and functionality, covering all functionality and critical architecture. | 04/06/2017 |
| 4 | Perform test scripts, take screen shots, document outcome. | 04/06/2017 |
| 5 | Diagnose problems encountered implementing functionality in E3 - is this a server issue? | 04/06/2017 |
| 6 | Fix 2 person messaging so that it will automatically create the same session between two contacts every time, with the thread “{userOneJid}AND{userTwoJid}” where userOneJid is the user's jid that comes first alphabetically. | 04/06/2017 |
| 7 |  | 04/06/2017 |
| - | Iteration End | 04/06/2017 |
| 8 | Review Iteration | 04/06/2017 |

# **3. Work Item assignments**

The following Work Items will be undertaken in this iteration to complete the above listed Milestones:

**GREEN**  = Complete  
**YELLOW**  = Mostly complete, some complications  
**RED**  = Aborted

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Work Items** | **Measure** | **Outcome** | **Assigned** | **Completion Date** | **Hours worked** |
| **Shaun** | | | | | | |
| 5.5 | Install Server on local machine to determine if problem still exists. | Server installed on local machine, test script run. | * Researched OpenFire server install on OpenSUSE OS. * Implemented OpenFire Install on local machine, configured Apache services, successfully implemented Services. | Shaun | 26/05/17 | 8 |
| 5.6 | Performed required tests for local OpenFire Instance.. | Run test script on Local Machine. | * Run test scripts to demonstrate contact issues, resulting in same behaviour. Reported results to group. | Shaun | 26/05/17 | 2 |
|  |  |  |  |  |  |  |
| **Murray** | | | | | | |
| 5.1 | Test server functions using other XMPP clients | Attempt to replicate the errors/issues found using our client | Established [Prosody server on AWS](http://52.65.135.53:5280/admin/). | Murray | 27/05/17 | 3 |
| 5.2 | Attempt (if possible) to try other Babbler implementations | Are there problems with our implementation? | Not attempted | Murray | - | - |
| 5.3 | Try our app with localhost environment | Test for problems due to latency performance | Added Prosody localhost on Linux, tested with Gajim, Pidgin and PSI XMPP web clients. Added teamorange accounts and local accounts. No obvious degradation in performance observed. Documented in [localhost client testing.pdf](https://github.com/csuproject/instantmessenger/blob/bbf12d8547e0a9f3bdebc8c83073362cfbb71169/docs/Elaboration/localhost%20client%20testing.pdf) | Murray | 29/05/17 | 7 |
| 5.4 | Try our app with an alternative server, same host | Isolate | Not attempted. The localhost testing appeared to confirm that some clients are able to connect to our server satisfactorily at the moment. More testing/potential changes to the app are required | Murray | - | - |
| 5.4 | Attempt upgrade/performance upgrade of the server | Mitigate possible latency/performance issues which might be contributing, plus bug fixes | Not attempted. Exchanging contact details between local and teamorange users did not show significant difference in performance. | Murray | - | - |
| **Tim** | | | | | | |
| 1.1 | Update Iteration plans. | Iteration plans have been improved. | Added color coding, improved summaries, sectioned work items by the person they are assigned to. | Tim |  | 2 |
| 1.2 | Update full use case descriptions | Complete. See [here](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/RequirementModel.docx) |  | Tim |  | 1 |
| 1.3 | Create component diagram | Complete. See [here](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/highLevelStructureDiagram.pdf) |  | Tim |  | 2 |
| 1.4 | Take screen shots | Complete See [here](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/ScreenShots.docx) |  | Tim |  | 0.5 |
| 1.5 | Create executable jar | Complete See [here](https://github.com/csuproject/instantmessenger/tree/master/ExecutableJar) |  | Tim |  | 2 |
| 1.6 | Create Elaboration Phase Project Assessment | Created and filled out some of it. See here |  | Tim |  | 1 |
| 5.5 | Explore the issue we are having with retaining added contacts. | The issue is either solved, or more information has been gathered about it so that a decision of how to move on can be made. | Another issue arose which i solved first, then this issue stopped happening. For more information see [ContactProblemFindings](https://github.com/csuproject/instantmessenger/blob/master/docs/Elaboration/ContactProblemFindings.docx) | Tim |  | 4 |
| 6.1 | Improve the way ChatSessions are created. | The way chat sessions are created could be problematic when one or both of the users close the application. This should be fixed. | Now there is no special message request to create a chat session, one user simply sends a message to another, and upon receiving this message, if there isn't already a chat session for them, then one is created (only if that user is in their contacts). | Tim |  | 4 |
| 3.1 | Create Test Scripts | Test script documents exist, with clear steps to follow in order to complete each test script. |  | Tim |  | 4 |
| 3.2 | Perform Test Scripts, and record results. | Test scripts have been performed, and the results are recorded in the test script documents. |  | Tim |  | 1 |
| **Multiple People** | | | | | | |
|  |  |  |  |  |  |  |