Project 5 - Team5Babies: KTH-DB Geo Distributed Key Value Store

Week 42 Status Report

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1. Purpose

This week was one of the hectic week for the Team members. The team had to prepare for the midterm project demo, presentation, weekly report, and mid term project plan. The various tasks were divided among the team members. Before the end of week the team have synchronized the work and are ready for the mid-term workshop. This week was mostly all about having the working prototype that demonstrate the communication between the server Nodes on Mininet i.e. sub-optimal working prototype of a distributed database and testing database read/write using YCSB.

2. Description of weekly tasks

Weekly tasks included working demo Preparation for Midterm Workshop and synchronization of different modules. This included having more group meeting during this week, to synchronize the work between the Mininet Team and the YCSB Team. Also apart from the preparation of Weekly report an updated Midterm project Plan was also included in the tasks for this week. This week the interface between the master and slave nodes has also been completed, and the new file system for I/O to the database is written, including the insert and read tests methods.

3. Risks and Challenges

The week tasks were well arranged and assigned and clear directions were given to every Team member. There were few challenges regarding the interface between master and slave node development i.e. To use existing server class and client class for developing interface between the Master and Slave by changing destination address to broadcast IP. But the issue was solved by creating new Classs ClientSniffer(), and MulticastServer Class.

Regarding the file system development for traffic from YCSB, the issue was to first figure out the generated Key & Value and its characteristics, sorting of keys etc. These challenges were solved by development of file system and read/write methods based on lookalike test YCSB generated traffic.

Regarding the synchronization of code from different team members, we faced few challenges to fix some small bugs and imports, but it was successfully fixed.

4. Gantt Chart

Gantt Diagram

5. Team Members Progress Report

Team member ; Anargyros Chatzaras

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	attend course		2	
Tue, 14 Oct	resolving merge issues		4	complete
Wen, 15 Oct	Read/write Operation lifecycle drawings		4	complete
Thu, 16 Oct	fixing bugs/development		10	complete
Fri, 17 Oct				
Total			20	

Team member 2: Tengqingqing GE

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	Attended course		4	
Tue, 14 Oct	file system()		4	complete
Wen, 15 Oct				
Thu, 16 Oct	ReadMethod(), WriteMethod()		12	complete
Fri, 17 Oct				
Total			20	

Team member 3 Ahmed Sadek

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	Attended course		4	
Tue, 14 Oct				
Wen, 15 Oct	midterm project plan		12	complete
Thu, 16 Oct				
Fri, 17 Oct	Update Gantt chart		4	complete
Total			20	

Team member 4: Georgios Savvidis

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	attended course		4	
Tue, 14 Oct				

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Wen, 15 Oct	fixing the file read/write method at mininet level		4	complete
Thu, 16 Oct	merging the mininet part to the YCSB		12	
Fri, 17 Oct				
Total			20	

Team member 5: Jawad Munir

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	attended course		4	
Tue, 14 Oct	ClietSniffer()		8	complete
Wen, 15 Oct				
Thu, 16 Oct	MulticastServer()		10	complete
Fri, 17 Oct	weekly report		4	complete
Total			26	

Team member 6: Mihret Getye

DAY	ACTIVITY	DESCRIPTION	HOURS	RESULTS
Mon, 13 Oct	Attended course		4	
Tue, 14 Oct	file system()		4	complete
Wen, 15 Oct				

Thu, 16 Oct	ReadMethod (), WriteMethod( )		12	complete
Fri, 17 Oct				
Total			20	

6.   Next Week Schedule/Goals

Next week include a meeting on Monday with Technical assistant, attending the midterm workshop on Thursday 23, 2014. Reviewing the other teams work and projects. Next week our project will enter the Master-Slave selection logic. The first task will be to measure latency, and then later task would be create a logic for master selection and then writing the handover() method.