**CS 590: Cloud Systems for Blind and Hearing Impaired**

**Benchmarking of different cloud providers**

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1**.Problem Statement:** There are many promises made by the cloud providers about performance, security etc, but the question of will they deliver on their promise arise? On cloud the consumer usually will not know what exactly he will get from the cloud or there is no quantifiable information out on which he can trust.

2. **What needs to be done to solve this problem**: To solve this problem in my project I take different application scenarios (I/O intense scenario, computing Intense Scenarios etc) and will benchmark the different cloud providers with considerations like different resource allocations, depending on VM locality etc,

3**. What has been done**:

Cloudstone is an academic open source project from the UC Berkeley. It provides a framework for testing realistic performance.

Another interesting project although just a startup is Cloud Harmony, if the  Cloud Harmony succeeds it is likely to be an important resource for customers and the media for evaluating cloud provider performance. Cloud Harmony has a service called Cloud Speed Test, which allows users to benchmark the performance of a web application across multiple cloud providers and services

4. **What can be done**:

By understanding how well a cloud is performing against a set of established metrics we can provide users with true information about the performance of different cloud providers and we can come up with some ideas like which cloud provider is better for which kind of application based on their performance.

5. **What I have done:**

I have begun reviewing research papers to get to know about the different benchmark standards considered by the industry which I can consider for my application.

**References:**

[1] Project Cloudstone is a project which is carried out by UC Berkeley <http://radlab.cs.berkeley.edu/wiki/Projects/Cloudstone>

[2]BitCurrent conducted a comprehensive performance benchmarking study commissioned by Webmetrics and using their testing service entitled [The Performance of Clouds](http://www.bitcurrent.com/new-report-on-cloud-performance/)

<http://www.bitcurrent.com/new-report-on-cloud-performance/>

[3] Research at Carnegie Mellon University

<http://www.cmu.edu/news/blog/2009/Spring/cloud-computing-at-scs.shtml>

[4]Cloud Harmony

<http://cloudharmony.com/>