Weekly Report for Week Ending 02/15/2013
IBM - OpenStack

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Status Summary

We had another week of good discussion with IBM and the faculty. We've completed our first design document that outlines the infrastructure of OpenStack within the department. We also decided to pursue implementing Hadoop in the cloud and have a few leads with different API's of OpenStack like Heat. Along with this information we've decided to write another design document specifically for Hadoop and we've already made good progress on it. Jack was also able to deploy a 3-node Hadoop cluster on Amazon EC2 and found that we should be able to further our development based on how Hadoop is running on EC2. John also got a 2 node DevStack instance running and we're already doing testing on it.

Top Highlights

- John got DevStack running on his VM's (one controller node and one compute node) and we're able to do some configuration testing. So far everything appears to be working except quantum.
- Jack deployed a 3-node Hadoop cluster on Amazon EC2 as an exercise to learn more about Hadoop deployment
- We completed and turned in our first design document

Top Lowlights

- We need write another design document for Hadoop, though this isn't really a bad thing. We're just looking forward to moving on to implementation instead of so much documentation.
- We are running into errors setting up Openstack. This is creating large log files, and forcing us to debug our installations.

Accomplishments vs. Plan

- Accomplishment - Completed Design Document
  - Owner: Team
  - Status: Complete. The document we submitted focuses on the OpenStack infrastructure that will be used at NDSU.
- Accomplishment - Having a 2 node cloud running
  - Owner: John
  - Status: John was able to get a two node cloud going on his VM's. It currently is having some problems with quantum, but Cesar is already working on resolving them.
- Plan - Complete Hadoop Design Document
  - Owner: Team
  - Status: In progress, the majority of the document is already complete. We are still adding some requirements and will be reviewing it with IBM over the next few days and in our next meeting.
- Plan - Get Quantum Working on John's Cloud
  - Owner: Cesar and John
  - Status: Cesar is already in progress of trying to get it to work on the controller node.
- Plan - Get development stack in 244 running
  - Owner: Team
  - Status: We still want to get this dedicated hardware functioning. All the machines have Ubuntu 12.04 LTS installed and are ready for DevStack. We're going to be running a virtual controller on a vSphere server and then have 3 compute nodes in 244.
- Plan - Discuss storage solutions with faculty
  - Owner: John, Jack, and Cesar
  - Status: We have a meeting scheduled with Dr. Ludwig, Dr. Denton, and Robert on Monday where we're going to discuss storage options.

Goals for Next Week

- Complete design document
  - Owner: Team
- Complete test Hadoop installs
  - Owner: John and Team
- Continue developing use-cases with faculty
  - Owner: Team
- Get Quantum working and be able to run some VM's on the cloud
  - Owner: Team
- Begin LDAP testing
  - Owner: John

Risks

ID#	Status	Risk	Owner	Probability / Priority	Impact	Trigger	Recommendation / Resolution
R001	Incomplete	Unable to complete design document	Team	100%/Medium	Will set back our progress	Decision with team and mentors during next meeting	We will complete this document by Monday evening for review on Tuesday

Issues

ID#	RID#	Status	Issue	Owner	Due Date	Impact	Recommendation / Resolution
I001		Resolved on 02/05/2013	Need access to more hardware	Team	02/05/2013	Having more hardware will provide us a system that is in a controlled environment.	Contact Robert

Project Success Indicator	02/01	02/08	02/15	02/22	03/01	03/08	03/15	03/22	03/29	04/05	04/12	04/26	05/03
Planned milestone events are being met	OK	OK	OK	OK									
Budget is under control	OK	OK	OK	OK									
Quality control results are within specifications	OK	OK	OK	OK									
Change control process indicated minimal requests for change	OK	OK	OK	OK									
Project resources are being supplied per schedule and skill levels are adequate	OK	OK	OK	OK									
Project team appears to be cohesive and reasonably happy	OK	OK	OK	OK									
Users seem satisfied with progress of the work	OK	OK	OK	OK									
Top management remains visibly supportive of project goals	OK	OK	OK	OK									
Third-party vendors are delivering quality items on schedule	OK	OK	OK	OK									
Risk events are under control and nothing unusual is appearing	OK	OK	OK	OK									
Project training program is progressing according to plan	OK	OK	OK	OK									
Relationships with support groups appear to have no identifiable issues	OK	OK	OK	OK									