

Heat

- Create a VM as namenode/jobtracker one, then instantiate it
- Document what is needed for:
 - JobTracker
 - Each worker node
 - What is required to go from base ubuntu image
 - Upload to Glance
 - Executed these commands
 - Launched the instance in this way
 - What is the actual configurations for setting up what job to run, ip addresses, specific instantiation configurations
- Built OpenStack images with Java and Hadoop installed
- Can we do all this with Heat and Heat Templates?
 - Heat is just a JSON template, yeah?
 - Yes
 - You can setup your own parameters and mapping variables
 - Is this the right answer?
 - Someone needs to do this work and find if it's right or not.
- python-heatclient?
 - <https://github.com/openstack/python-heatclient>
 - See what commands this gives you on the command line interface
 - <https://github.com/openstack/heat/blob/master/docs/GettingStarted.rst>
 - https://wiki.openstack.org/wiki/Heat/GettingStartedUsingMasterOnUbuntu#Run_the_debian_wordpress_example
- How do you invoke a template?
 - <https://wiki.openstack.org/wiki/Heat/GettingStartedUsingDevstack>
- What other options do we have?
 - Create some kind of GUI that calls the Heat API?
 - Can we integrate this into Horizon in some way?
 - Horizon does not have support for Heat.
 - Horizon is pretty easily extendable.
 - Add a new panel for this.
 - Thermal, project was supposed to be in StackForge but can't find it there.
 - Focus on getting Heat running from command line, then if we have time we can create some kind of user interface.
- How data is added to Hadoop
 - User of Hadoop is required to format the data in the correct way for processing
 - Then data is passed into head node to be distributed into HDFS
 - Need the script to ask for a URL to data
 - What does a user need to type to kick off a program?

Development Setup

- No more VM, put controller and network node on one physical box
- Use Quantum
 - Use OpenVSwitch
 - VLAN tunnels
 - Don't use GRE tunnels
- More memory in compute nodes?

Scripted AWS

- Not quite the fine level of detail. Interested in commands that are needed.

For next week

- OpenStack Development with Quantum
 - Get switch and another NIC by COB Friday
- Heat working on command line
 - Document how to use heat.
 - How to create base images for Hadoop
 - Document how to take EC2 script to use it in Heat.
- Document what it's like to start Hadoop in OpenStack
 - Should be good enough to login to OpenStack and then follow them to get Hadoop to working on an instance.
 - Include a small job and how to run it.
 - Michael will test.