Capstone Meeting Notes: 2/18/2015

**What are some of the metrics we are going to be recording?**

Build times, how long it takes to run, failure or success. Jenkins has concept of unstable. Junit plugin reads a generic X unit format. Python jobs that run a unit test called nose test. Output nose test.xml Jenkins can scan it and treat it like a junit output. Success / failures more important.

**Are Jenkins servers properly named?**

They have fully qualified domain names. Actual Jenkins jobs are uniquely named. 2% of them might have collisions.

**How do we get test data out of Jenkins and into Carbon? What do we use for test data? Can we get a copy of a running Jenkins server?**

I have 5 projects you can use for this one:

<http://jenkins.chilblain.net/>

JMerells is the one you’re probably going to be interested in. What I would do is you should be able to pull data from each build. If you go to:

<http://jenkins.chilblain.net/job/JMerells/43/>

that is a single job result. Rest API would be much nicer. Test results has a coverage report. If you have a rest API you could probably pull data from it as new builds come in. Get information from XML parse.

**Are different plugins required for different Jenkins server?**

We don’t have any selenium jobs. You could pull data directly from the community stuff. That would be a lot more data and a lot more reliable. You can use the rest API and the 404 error if it’s not there.

I’ll see if I can get the plugin installed and I’ll let you know from there.

Here is a project:

https://github.com/openstack-dev/bashate

You can build that one, there are no build steps you just want to run tests. There is 3 main steps to setting up a Jenkins build. First you need a trigger, I would suggest a daily build. Then you want to tell it where to get the code. You can use a git plugin. Then you need unit tests. You need to make sure you have tox on the Jenkins server. Tox will take care of building a virtual environment. This should allow you to test the plugin locally.

**What is Tox and what is it outputting?**

The output is a return code for Jenkins. It does not do any XML or Xunit output. IT builds a virtual environment on your machine so you can download python packages. You will get a success or failure in your Jenkins based on your unit tests. You will get info like how long it took to run and the status of the build.

**This is an example of the data you can get back from Jenkins rest API:**

<https://jenkins.openstack.org/api/json?depth=2&pretty=true>

commands:

tox –recreate –e py27

S tox –e py27

You just want the Git plugin.

You could create your own server and start building open source projects on your server. Tox is self-contained and doesn’t have many dependencies. The majority of our stuff is running Tox for testing. You can get it from your linux package distribution, it’s called python-tox. You can get it directly from pip. You have to install Tox from pip or easy install.

**How long should we keep data in graphite?**

I think a year would be plenty. 6 months would be plenty as well.

**Carbon push or pull?**

If plugins don’t work you would have to write an intermediary task that would pull data and feed it into carbon.