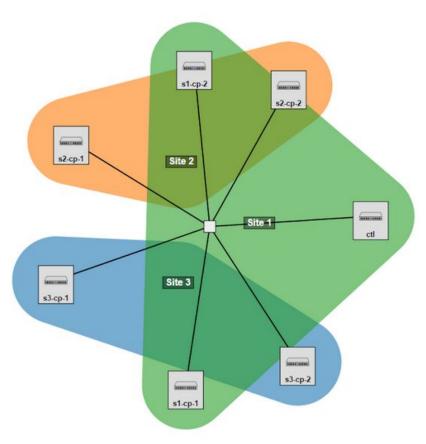
# **JetStream**

## Group 14

Nicole Michaud, Parth Patel, Corey Redmon, Stuart Jackson

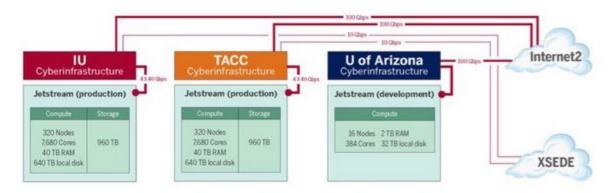
# **Topology Diagram:**



We have 3 sites, each with 2 nodes. We also have 1 ctl node. The control processes of OpenStack are run on the ctl node.

## **Topology Explanation:**

# Jetstream System Overview



The original Jetstream architecture has 3 sites so we created 3 sites in our topology as well. Each site has a certain number of nodes as well as a ctl node.

### **Script:**

To create our script, we started with the OpenStack default profile. We found that script here: <a href="https://www.cloudlab.us/show-profile.php?uuid=f4a12de2-7fe9-11e4-afea-001143e453fe">https://www.cloudlab.us/show-profile.php?uuid=f4a12de2-7fe9-11e4-afea-001143e453fe</a>. We extended the OpenStack script to incorporate 3 sites to fit JetStream's architecture. Our script works just as OpenStack does allowing an OpenStack instance with multiple nodes. A user can choose a different number of nodes for each of the 3 sites. Through the script, users are able to manage computation, storage, and networking resources to create a cloud that is comparable to JetStream.

### Validation:

To validate our instantiation of JetStream, we ran Project 4's code through the script. Since none of our group members had a fully functioning Project 4, we used a working portion of the code to prove that our script worked.

### **Instructions:**

When the CloudLab experiment is created, in step 2 parameterize the option "extra VM image URLs" should contain the url:

https://drive.google.com/open?id=0BzlaJrNssbADLTV3elJvcHUxN00 Link to the cloud lab profile:

https://www.cloudlab.us/p/3b4b2973-1b9d-11e7-ac8d-90e2ba22fee4