

Deployment of Virtual Cluster on a Commercial Cloud Platform for Molecular Docking and Elasticity of the Clusters

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Overview

- Objective: upload a virtual machine that runs a protein-ligand interaction simulating program (Dock6) onto FutureGrid
- Purpose: having Dock6 onto the commercial cloud will allow tasks to be performed cheaply and efficiently
- 3 areas will be investigated:
 - Elasticity of the clusters (Katy)
 - Fault tolerance of the system (Derek)
 - Use of several virtual clusters on various commercial clouds to form a single system (Anthony)

Week 2 Progress

- Successfully installed Hadoop onto Prime Test
- Got access to Kevin & Karen (Prime 2013)'s virtual machine, which contains all the right parameters and environment necessary for Dock6 to produce consistent results
- Submitted the FutureGrid project proposal
- FutureGrid project proposal was approved
- Successfully installed Hadoop onto the front end 1 of Barco (Prime 2013's VM)- still working on running Hadoop tutorials to see if it was correctly installed
- Started to read literature on the relationship between parsing files and the Input format of Hadoop files
- Checked if Dock6 was running correctly on Barco

Coming up: Next Week's Goals

- Successful run of Hadoop tutorials on the front end 1 of Barco
- Additional, more thorough reading on relationship between parsing files and Hadoop files
- First attempt to write a file splitting tool in some program language (will most likely have to be Java language)

Exploring the Culture

- On Saturday:
 - Took the subway to Kyoto
 - Explored Arashiyama area
 - Tenryuji Temple
 - Bamboo Path
 - Nonomiya Shrine
 - Monkey Park
 - Explored Gion area (one of the last Geisha districts in Japan)
 - All-you-can eat Japanese BBQ
 - Green tea parfaits at a teahouse
- On Sunday:
 - Took the subway to Nabari city, Mie prefecture
 - Hiked to Akame 48 Waterfalls



Exploring the Culture

PRIME 2014



Exploring the Culture

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