

[Cloud Computing Hands-On and Hack-a-Thorn Workshop](#) [1]

Submitted by cyang3 on Tue, 2016-03-29 18:01 Tuesday, March 29, 2016 - 18:00

Event: [2016 ESIP Summer Meeting](#) [2]

Session Type: [Workshop](#) [3]

Room Location: [Coolidge](#) [4]

Expertise Level: [Beginner](#) [5]

Collaboration Area: [Cloud Computing](#) [6]

[Earth Science Collaboratory](#) [7]

[Information Technology and Interoperability](#) [8]

[Products and Services](#) [9]

Abstract/Agenda:

We will design a short hands-on workshop to introduce how to use cloud computing based on private or public cloud of end users' choices. Participants are also encouraged to bring a light weight problem to be running on the cloud in a hack-a-thorn fashion. The workshop is organized by CC, P&S, IT&I, and supported by the NSF Spatiotemporal Innovation Center with it's hybrid cloud service and Amazon. This session could accomodate 25 participants with a first come first serve mechanism. Bringing your own laptop is required and please bring your application (ideas) to be put on the cloud. Please indicate your participants by signing up at sched

<https://2016esipsummermeeting.sched.org/event/6uHO/cloud-computing-hands...> [10].

1. Brief Intro to Cloud Computing (5-10 minutes)
2. Hands-on Overview (5-10 minutes)
3. Hands-on & Hack-a-Thorn (70-80 minutes)

Notes:

Cloud computing workshop

This workshop gave a brief introduction of the NSF Spatiotmeporal Hybrid Cloud Platform (<http://dasher.cloud.gmu.edu/sthcp/> [11]).

1. Hybrid Cloud platforms: Private Cloud(Eucalyptus, OpenStack); Public cloud(AWS); DC2: hybrid cloud management systems;
2. Hardware: 6 columns (504 nodes in total, 84 nodes per column) , infinity band(about 10 Gbits/s)
3. Softwares on cloud: data managements(Rasdaman, HBase, PostGIS), data analytics softwares;
4. DC2 demo: cloud resource monitoring; Link accounts to projects; manage instance, images, ip, firewall; monitor funding usage for different projects; funding alert;
5. Demo Video(<http://dasher.cloud.gmu.edu/sthcp/document.php> [12])::
 - End users demo: Operate the instance(launch instance; access the instance); set the configuration on vm; publish the service;
 - Project manager: set funding alter, deactivate project, manage existed users, and so on;
 - Privileged users: submit golden images and share it with others if anything on the VM is good; manage vms: key pair, start ,create vm; access s3, create storage, snapshot, allocate ips;

There were about 15 participants. They learned how to create their own cloud account and launch the virtual machines. To deploy a web service on the virtual machines was given as an example.

Attachments/Presentations:  [ESIP_CloudComputing_Poster.pdf](#) [13]

Cloud Computing Hands-On and Hack-a-Thorn Workshop

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[hands-on](#) [23]

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