Commercial Cloud Research Activity

Research Computing & Data (RCD) Community Meeting

August 9, 2022

Meeting Basics

- Google Doc notes page in chat

- Meeting will be recorded

- Use the Zoom chat for questions, ideas, and suggestions

- Or, Raise Hand
  (Reactions > Raise Hand)

- Live Transcript (auto-generated closed captions) is available

- Meeting content (recording, notes, discussion, slides, chat log) will posted on meeting page

Agenda

- Meeting Basics

- Welcome to the UCSD RCD Community!

- Commercial Cloud Landscape at UCSD
  Cyd Burrows-Schilling, UCSD Research IT

- Examples from Campus
  - Ricky Mok, CAIDA

- Community Discussion

WELCOME TO THE UCSD RCD COMMUNITY!

It's about us!

Research Computing and Data (RCD), also known as Cyberinfrastructure (CI), refers to foundational research support areas. This community includes researchers and their collaboration partners, those RCD professionals who include data scientists, systems engineers, software developers, research librarians, data wranglers, research facilitators, and more.

Meetings

Our bi-monthly meetings are a chance to come together to discuss issues important to the UCSD research community, learn about resources, software, tools, and services relevant to our work.

https://ucsd-rcd.github.io/meetings/

Mailing List

Our mailing list is a way to stay updated on the UCSD RCD Community, ask questions, and contribute your knowledge. We'd also love to hear your ideas for this community.

Google Groups ucsd-rcd
https://groups.google.com/a/ucsd.edu/g/ucsd-rcd-l

Website & GitHub Repos

Our website and GitHub repos are places to share resources, experiences, and examples in a way that's widely accessible.

https://ucsd-rcd.github.io/
https://github.com/ucsd-rcd
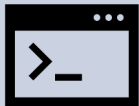
The Cloud: Some Whys & Why Nots

Rick Wagner, UCSD Research IT

Potential motivations for the cloud

research-it@ucsd.edu

- Doing research on the cloud services—literally measuring aspects of the cloud providers

- Reduce systems (hardware) management effort

- Build with cloud-managed (databases, storage, network) without managing them yourself

- Testing & development

  - Allocate small, independent, VMs

- Inexpensive cold storage (e.g., AWS Glacier)

- Separate project infrastructure from campus systems

  - Allow collaborators to share management

  - Host data, web sites, web services

  - Implement specific security requirements

Potential motivations for NOT the cloud

- Existing hardware investment

- Cost

  - Some things may be cheaper (small VMs)

  - Some things may be more expensive (large downloads)

- Team skills & knowledge

  - Not just the systems & software

  - Also understanding costs

- Still requires management

- Some risk of "out of sight, out of mind"

  - "Who left that EC2 instance running?"

EXAMPLES FROM CAMPUS

Ricky Mok
CAIDA