

Research Cloud Computing Recommendations

SRCPAC

December 3, 2014

Mandate and Membership

SRCPAC convened this committee in Sept 2014 to investigate the role that cloud computing should play in our research computing strategy.

The committee membership consisted of the following:

- Greg Bryan, Professor (Astronomy), Chair
- Alan Crosswell, Chief Technologist (CUIT)
- Roxana Geambasu, Assistant Professor (Computer Science)
- Rob Lane, Manager, Research Computing Services (CUIT)
- Chris Marianetti, Associate Professor (APAM)
- Bob Mawhinney, Professor (Physics)
- Allen Zweben, Senior Associate Dean for Research & Academic Affairs (Social Work)

Questions discussed

- What cloud resources are available?
- Which kinds of research computing projects would be more cost effective to run on the cloud than on Yeti?
- What are the technical/financial/sociological impediments for researchers to use the cloud?
- What practical steps should the University take to remove or reduce these difficulties?

Recommendations: Overall

1. Cloud computing viable alternative
 - particularly for those with serial applications
 - cost-effective (\$ and space)
 - should not reduce support for Yeti (yet)

Recommendations: Financial

2. University Purchasing agreement
 - Amazon EC2 (to start)
3. Research and publish overall granting policies
 - e.g. can I ask NSF to pay for research cloud services?
4. Address overhead charge issue
 - Hardware (no ICR) vs. computing services (ICR)

Recommendations: Pilot Project

5. Create research cloud pilot with three parts:
 - a. Identify group of researchers interested in using cloud resources and willing to participate in the pilot, as well as a few researchers who have already made of such resources.
 - b. Purchase a modest amount of cloud resources.
 - c. Develop/identify appropriate technical resources and documentation.