MONASH University
e-Research Centre

GROUP OF EIGHT

The Faculty of IT and the Monash e-Research Centre are proud to present the following seminar - part of the High Definition interactive video links of MURPA Seminar Series 2009

User-defined Clusters - Introduction to the Rocks Cluster

Presented by Phil Papadopoulos

Program Director, UC Computing Systems, University of California San Diego

(Biography: https://messagelab.monash.edu.au/MURPA/PhilPapadopoulos)

" The "Cloud" and computing in the "Cloud" have become a hot topic in the media and this will impact how HPC users access and define resources. While many groups focus solely on how to more easily get your virtual machine started on a cloud resource, few are addressing the practicalities of building clusters within and in concert with cloud resources. In this talk, we will describe some of the basic mechanisms of Rocks 5.1 that enable the building of physical, completely virtual and mixed clusters for achieving what we term as "cluster extension." Cluster extension is where a physical cluster (temporarily) expands its footprint by using virtual machines (VMs) from a cloud resource. The extended cluster treats the remote VMs as just another "brand" of hardware to be integrated and therefore automatically controls the complete software stack including user definitions, file mounts, queuing system configuration, and applications. We'll describe a practical use of cluster extension for a CAMERA Metagenomics at UCSD resource where a large number of sequence alignment (BLAST) calculations are occasionally needed for data set preparation. See http://www.rocksclusters.org for all software described in this talk."

Date: 30 April
Time: 10am-11am
Location: Seminar Room 135, Building 26, Clayton campus

MURPA Seminar Series 2009

MURPA supports a unique summer mode placement in a leading research group overseas. It not only provides a research experience at the undergraduate level, but does that in an international context. Students are placed for a period of eight weeks, allowing them to integrate into the research groups as team members.

MURPA also involves an advanced seminar scheme, in which students can attend seminars given by world leading experts before they leave. The seminar scheme is novel, because it uses a cutting edge High Definition interactive video link to the University of California, making it feasible to attract some of the world's best researchers "virtually" to Monash. These seminars also allow students to "meet" potential UCSD mentors and get some information about potential projects.

https://messagelab.monash.edu.au/MURPA/MURPA2009

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