

#### High Performance Scientific Computing

### **Relocation to 700 Collins Street**

The HPSC team has finally relocated to its new building as part of the complete relocation of the Bureau of Meteorology to Docklands in Melbourne.

The physical situation is quite interesting with our building still incomplete. We are also surrounded by new buildings under construction and/or old wharf facilities and rail yards. Please note new address details below.

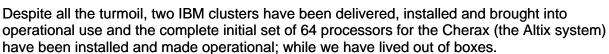
At present, we have some space to accommodate irregular visitors. Public car parking is available at the nearby Telstra Dome and we are immediately adjacent to the Spencer Street railway station.

Note that we can't yet be assured of network access for visitors etc, until after final building corrections are completed.

### Fax and help desk

It has taken us a little while to have our contact numbers re-connected properly. The HPSC and HPCCC fax number 03 9669 8112, and the Help Service phone number 03 9669 8103, are both now functional.

### **IBM Zeon Clusters**



The clusters are constructed from Zeon processors in blade hardware which allows up to 140 processors to be accommodated in a standard rack (28 processors per 5U, if you know racks).

The 40 processor cluster (Nelson) is a dedicated divisionally owned system, managed within the HPSC on behalf of the divisions, for a project with the Navy being undertaken by Marine and Atmospheric Research.

The second 64 processor cluster (Burnet) is a general purpose facility provided by HPSC and available for any research group. Groups interested in gaining access to a significant fraction of the system should contact Rob Bell. We intend to scale up Burnet as demand grows.





# **Dedicated extensions to Burnet and Cherax**

We propose that interested divisions/groups consider the purchase of additional processors to sit within Burnet or Cherax, to be managed by the HPSC, but made available on an exclusive basis to the funding divisions. We believe this arrangement would leverage expertise and infrastructure and reduce overall facilities management overheads while guaranteeing control and providing reliable performance to research programmes.

Apart from the obvious advantages, we would expect further benefits to arise from the fact that the dedicated resources are fully integrated with general purpose shared resources. Significant steps up in peak power will be possible when deadlines arise or where investigations into larger problems are required. Where dedicated resources do become idle for reasonable periods, we would also be able to 'pool' them more easily for temporary general use.

Divisions that have an interest in participating in this approach should contact Rhys Francis.

## The APAC Grid

The Australian Partnership for Advanced computing (APAC) has allocated \$18M over the next 2-3 years to design, construct and operate grid infrastructure connecting most of the Australian research communities' major HPSC facilities.

The APAC Grid program includes application development in Astronomy, Bioinformatics, Chemistry, Earth Systems, Geosciences, and Physical Sciences, and infrastructure development in the areas of Computation, Information and Visualisation. CSIRO is a partner in APAC and several divisions are involved in the APAC Grid program.

The HPSC is pleased to announce that Rhys Francis will manage the APAC Grid program and will perform those duties in conjunction with the role of HSPC Director.

As the manager of the APAC Grid program, Rhys will be responsible for bringing the APAC Grid into reality and marshalling activities and resources to maximise outcomes and benefits for the APAC Partners and the broader Australian research community in the longer term.

Significant synergies are expected to arise from the combined role.

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