



Vector system progress

The SX-6 systems are fully installed and operational, and have now entered acceptance testing. They are expected to become available for general CSIRO use by the end of March.

The SX-5 systems will continue until about May and will then be decommissioned. HPSC would like users to migrate during April as an early shutdown of the SX-5s will shorten the period during which we bear the cost of running two large scale computer centres.

Data store

All the pieces pictured last month are now assembled and operational, together with a small SGI Altix front end. The “data” was successfully moved on the weekend of the 23rd of February and the system went live the following Monday.



Some problems were encountered but these related to other changes introduced at the same time.

All new HPSC systems will use Nexus authentication so that the old special HPCCC accounts will only continue until the close of the SX-5s.

Unfortunately this means that many of the scripts users have developed over the years need to be updated. While the new Altix goes by the same name as the old Datastore front end (Cherax) it does have a different IP

number – we discovered that many routers and firewalls needed to be updated to allow access to the system.

At present access is slightly slower than previously as all data is retrieved from tape, however we expect significant reductions in retrieval times as the 4 Tbytes of disk cache fills with frequently used data over the next few weeks.



Clusters

As the HPSC intends to acquire a large cluster for general use, we are sponsoring a ‘cluster’ workshop on 30th March in Melbourne. Some divisions now have several years relevant experience in operating clusters, and the aim of the workshop is to bring together that wisdom to share best practice in acquiring, using, supporting, sharing and continuously upgrading clusters.

The workshop is intended to benefit existing cluster owners and those, like the HPSC, that intend to buy and operate a cluster for science computing. All interested staff are welcome, and HPSC will support the travel costs of one person associated with each existing cluster or division with an interest in cluster facilities. Contact Erika for arrangements.

MSC Software Licence Scheme

One of the strategic shifts occurring in software is a move away from bespoke programming to a greater use of packages. This is true in general and increasingly true in scientific computing. Consequently, HPSC is negotiating with MSC software (<http://www.mscsoftware.com/>) for a CSIRO wide commercial licence so that MSC applications are available to all CSIRO staff.

The arrangement proposes a volume (ie user cap) limit implemented through a licence server. Essentially HPSC buys a set of licence tokens, and users need to be granted the number of tokens required to execute specific software. Different packages need more or less tokens, and parallel use of an application requires more tokens. The unknowns are the level of interest in the variety of MSC applications and the number of tokens that therefore should be purchased.

The MSC applications can run on any CSIRO system so that short term use is possible. As very significant savings are available, to express your interest, contact Len in the next few weeks.

DeskTOP – New Staff

The development of a downloadable tool to support single sign on seamless access to HPSC facilities continues with King Chiu joining our implementation team. King brings much needed strength in security and authentication.

In addition, Gareth is now the HPSC DeskTOP project leader and would welcome input from those interested in its development, and in particular we are looking for willing beta testers.

HPSC Seminar

Guy Robinson, formerly of the Arctic Region Supercomputing Center will be visiting HPSC on Tuesday 9th March, and will give a seminar at 2:30 pm hosted at the Victorian Partnership of Advanced Computing, 110 Victoria Street Carlton South, Vic.

His topic will be an outline of the current state of the art in high performance computing and a look at some of the future needs if computers are to be productive part of the research process. The following questions will be a starting point for discussion.

- Can a cluster be as productive as a classical supercomputer: what are the real differences?
- Is supercomputing all flops, aren't there other things to do with computers?
- What will the future supercomputing applications be, and what skills will users need?

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