



Leadership of HPSC within IM&T

Dr Rhys Francis has been appointed Executive Manager eScience within IM&T (formerly CSIRO IT). The HPSC group has become a part of IM&T from July 1st under Rhys' leadership. The HPSC will however maintain its separate identity and budget. Rhys' appointment goes to 2009, covering a crucial period for the development of High Performance Computing within CSIRO (see the item below on the important decisions ahead).

However in a parallel development, Rhys has accepted a temporary DEST appointment to facilitate the computing infrastructure component ("Platforms for collaboration") of the government's planned massive NCRIS investment. While Rhys is on secondment, Dr Robert Bell will take on additional responsibilities, as well as continuing his experienced and successful operational management of CSIRO's supercomputing capability within the HPCCC joint facility.

Being a part of IM&T's eScience team will make it easier for us at HPSC to give our users, throughout Australia, support that is integrated with local clusters and other IM&T facilities.

Commercial engineering and scientific software now for free use

For the last two years, CSIRO HPSC has provided users with access to a suite of commercial software, but has required a user contribution of \$5000 per annum for this. For the financial year 2006-7, CSIRO HPSC is dropping this charge for casual use of the software, but users and groups who make frequent or sustained use of the software will still have to contribute.

The software covered by this scheme includes:

MSC Master Key Software	
Nastran	Patran
AFEA	Mark
Mentat	Adams
Dytran	Superform 2D
Explore	GS-Mesher
SDM	Easy5

Other Software
NAG Fortran Library
Mathematica
S-Plus
Gaussian W & 2003
Ensign
Matlab
Intel Fortran and C (linux) and Visual Fortran (windows)

Some of the software can run only on the machines at the HPSC - the vector NEC SX-6, shared-memory SGI Altix, and the IBM Xeon cluster systems. For some of the software, the HPSC runs

a licence server, and users can download the software and run it on their local machines.

For further information see the contact information below.

HPSC platforms cover the full range

HPSC offerings now include high performance systems that will run nearly any code generated by and for the worldwide scientific community:

- The NEC SX series remains the front line for Fortran codes that have combined requirements for speed, size and memory bandwidth.
- Our 128 processor IA64-based SGI Altix with 244Gbyte of shared memory is a standard Linux platform, and has direct access to the HPSC's massive CSIRO datastore.
- The expanding PC cluster provides high performance for traditional Linux PC architecture codes.

We also provide access to the APAC grid. If we don't meet your computational needs, please join the planning process discussed in the following section.

Planning for the HPSC

The current HPCCC agreement terminates in March 2008, along with NEC's supply and support contract (if not extended).

Because of the long lead-time in major equipment purchases, the HPCCC has commenced planning for 2008 and beyond, and needs to have a business plan completed in the near future.

HPSC needs an indication from users and business units about their requirements for High Performance Computing and storage from 2008 onwards.

The Bureau of Meteorology and CSIRO have already been asked for input through the HPCCC Steering Committee representatives. The Bureau has initiated internal reviews of requirements. CSIRO users are also asked to provide an indication of their likely requirements, to help in the decision-making process for the HPCCC and future equipment.

Research group leaders are encouraged to make your needs known, giving plans for new modelling, increased model resolution, performance requirements, etc. Some indication of the type of equipment best suited to requirements, along with storage demands would also be helpful. In particular, it would be useful to document any desires for new classes of equipment or new services.

New Staff

John Giovannis and Daniel Smith have joined our system support team, which now includes support for a cluster on a nearby CSIRO site. HPSC has renewed ability to provide applications support with the appointment of Aaron McDonough, replacing Len Makin who has retired. Teresa Curcio has joined to give us part time administrative support. Erika Stojanovic has left us, but is still in CSIRO.

New Brochure

The HPCCC joint facility has a new brochure: <http://www.hpccc.gov.au/about/hpccc-lo.pdf>. Or ask for a printed copy from teresa.curcio@csiro.au.

Contact points

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