theSkyNet Launched

After the official launch on September 13th, this community science initiative to help discover the hidden Universe is now underway. The launch attracted worldwide media attention and thousands of people have joined in the project.

TheSkyNet allows members of the public to contribute their spare computing power to process radio astronomy data. Curtin IT Services and the DMU collaborated in the development of this project, which is sponsored by the WA Department of Commerce and developed by the International Centre for Radio Astronomy (ICRAR), in conjunction with UK-based computing company, eMedia Track.

CITS provides backend infrastructure for theSkyNet and contributes more than 2000 University lab computers to the effort. You can put your home or office computer to work by registering at http://theskynet.org.

DNA sequencing trial in cloud-based Azure

CITS Systems engineers Dr Amandeep Sidhu and Brendon Wade, have almost completed a six-month trial of the Microsoft Windows HPC platform, combined with Microsoft Azure Cloud, to speed DNA and RNA sequencing. The trial is helping CITS determine the viability of Windows HPC Server 2008 and Azure Cloud (HPC+Azure) as a service to complement the facilities already available and coming online at iVEC and its Pawsey Centre.

“A focus has been transmitting data between the compute nodes in Singapore, internal HPC nodes at Curtin and the genome sequencing machine at Royal Perth Hospital,” Dr Sidhu explained.

The hybrid HPC and Azure solution assists researchers to reduce time and costs typically associated with bioinformatics, by reducing complex analysis times to less than a week in the cloud environment. A complex human genome sequence - which initially took millions of dollars and 13 years to complete - could now be analysed in less than a week using cloud-based processing power.

If adopted as a service, HPC+Azure could be used by Curtin researchers to achieve quick turnaround times for complex computational tasks involved in disease-susceptibility prediction, targeted treatments and conservation of extinct species. The trial is expanding to explore applications for modelling, simulation and computation for engineering, science, mathematics and digital design.
FAST SEARCH:  
A BETTER CURTIN SEARCH ENGINE

Curtin’s current search solution is provided by Google, however it offers limited opportunity for customisation which is why some people may experience difficulty finding specific types of content. Earlier this year, Microsoft’s Fast Search product was chosen as a robust, customisable solution to replace Curtin’s current Google search model. It will provide Curtin with a greater level of flexibility and website users will benefit from quick, accurate and relevant search results.

Implementation of Fast Search in a User Acceptance Testing (UAT) environment is about to be commissioned. The DMU and other selected Curtin users will be invited to assess performance of Fast Search. CITS will include their feedback into the Phase One Production environment of March 2012. Phase Two of the project, expected to be completed by July 2012, will see the full integration of Fast Search at Curtin and real improvements to searches relating to staff, buildings, facilities and courses.

iLecture:  
IMPROVING RELIABILITY

CITS and the Centre for eLearning are working towards upgrading the iLecture system during 2012 to bring a whole new back-end, many new features and improved reliability to Curtin Lecture users. Any lecture in the 45 main lecture venues at Bentley will be automatically webcast so remote students can watch and participate live as each lecture occurs. Staff will be able to edit their own iLecture recordings on the web. The student experience will be significantly improved with new rich media players on desktop and mobile devices that provide features such as thumbnail navigation of recordings, time-based bookmarking and discussion of recordings for a deeper blended learning experience.

OrgPlus:  
Visual Organisational Structure

In conjunction with Curtin Human Resources staff, CITS is implementing the OrgPlus system to provide an intuitive visual display of Curtin’s organisational structure and reporting hierarchy. OrgPlus has the capacity to extract data from Curtin’s HR system and display a dynamic graphical Organisational Chart. Drill down capabilities offer the capacity to quickly access data from the chart, providing a convenient way to view detailed information. By providing this visual representation of the organisation’s composition, staff can better understand the organisational structure, and will be able to more easily plan for change.

The first implementation was completed in late 2008 and since then Curtin Human Resources staff have been using it internally. The new version has been configured to allow specialised views for managers, administrators and Human Resources employees. These users will be able to download information from these charts relevant to their area using PDF’s, Excel spreadsheets and Powerpoint presentations. HR are currently configuring and testing the software prior to its release to general staff in 2012.

ICT Procurement Portal Launch

CITS recently launched the new ICT Procurement Portal, a joint project between the Agile and Procurement teams. The Procurement Portal enables Curtin staff to lodge a requisition for ICT equipment and view the status of their request online.

The Procurement Portal is intended to standardise, stream-line and provide transparency throughout the ICT procurement process – it is a workflow system that creates, tracks and audits purchase orders for ICT equipment.

The procurement portal application is one of the many successes of the Rapid Application Development (RAD) team, an initiative set up by CITS at the end of 2010. The RAD team employs Agile development methods, which sees a renewed focus on flexibility and working closely with the client. Procurement manager Elissa McNair and her team were co-located with the Agile team for a large part of the development process which allowed them to have direct control over the application features, resulting in a perfectly tailored solution.

Please visit the procurement portal ictpurchase@curtin.edu.au or contact the Procurement team ictpurchase@curtin.edu.au for all your office needs.

Contact CITS
Ask IT, login to Oasis for IT FAQ’s
Call the Service Desk on 9266 9000
Log a service call at cits.curtin.edu.au/servicedesk/servicedesk.cfm
Suggestions and complaints: we want your feedback cits-feedback@curtin.edu.au