Abstract

Science particularly that based on large instruments increasingly involves distributed, global collaborations enabled by the internet and using very large scale data collections, high performance computing resources, tele-science (remote access and control of instrumentation) and collaborative visualisation. For the Australian Synchrotron the Virtual Beam Line will be a model for this sort of distributed access.

The VBL is broken into 5 sections Presentation Areas Online Induction System. The online induction system allows remote users to be inducted via the web. The features of this system include video or slide presentations, a user history of exams undertaken, exams with multiple choice questions, including the capacity for multiple correct answers, picture and/or text questions and answers, automated exam marking, exam timing and user notification of exam results.

Languages used:

- php
- mySQL
- JavaScript
- HTML
- LDAP

Current Version 1.01
eVBL

The eVBL or educational Virtual Beam Line has been developed as a support and development tool for the VBL proper as well as delivering a useful environment for the education and outreach of synchrotron science to educators.

In its support and development role the eVBL will deliver a rich client interface screen encompassing basic functions such as motor control, sample/overview video capture, sample analysis, training documentation, client interaction and support requirements. It will also demonstrate that VBL technology is viable.
About the speaker

Chris is the Virtual Beam Line Development Engineer for VeRSI.

His duties include delivery of new communication services which allows researches to remotely interact collaboratively with the Australian Synchrotron, This project will be outcome based on the needs of the research, and the needs of the Synchrotron, resulting in a productised environment.

Formally Chris was the Advanced Communication Services Coordinator at GrangeNet located in Canberra in which he encouraging local and international collaborative research in advanced networking and delivering training and training resources in advanced networking.

Chris was responsible for IPv6 and multicast service deployments on GrangeNet and also the Distributed Data Centre Mass Storage (DDCMS) Prototype Project and the eduroam AU and eduroam APAN Project.

Chris is actively participating in the IPv6, VoIP and AccessGrid communities and has strong relationships with APAN, Internet2 and TERENA.