

## **VBL Outline**

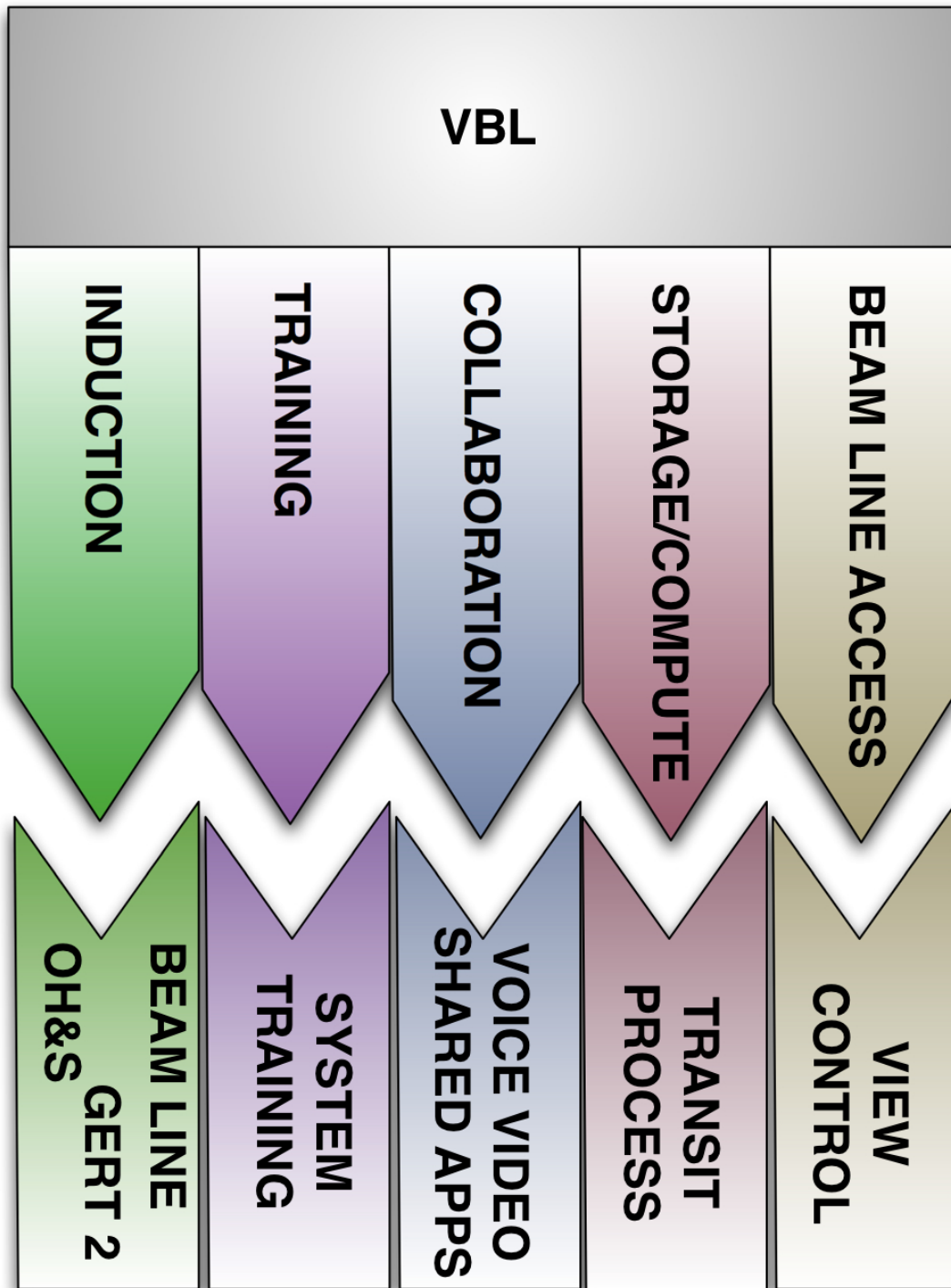
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### Introduction

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 and achievable at the Australian synchrotron.

In its education role the eVBL will deliver an invaluable source of outreach from the Australian Synchrotron and VerSI into secondary and early tertiary education. It provides an introduction to synchrotron science at the Australian Synchrotron and an experimental platform to perform a basic double-slit optical experiment.

Preview of VBL development and planing areas

Beam Line Access	Development
Storage & Compute	Planning
Collaboration	Development
Training	Development