

VRE (Virtual Research Environment) for the Study of Documents and Manuscripts: A VRE Stage 2 Project Meeting

University of Oxford | 11 May 2007

Chris Awre, University of Hull, is preparing minutes of this meeting.

The Technology Challenge

Because this project proposed integration with the University of Reading’s VERA Project (VRE in Archaeology), integration suggests a number of standards. Yet this project offers one of the best opportunities for the VRE 2 projects to demonstrate the value of integration. Standards could be applied to data storage (whether a repository is used or not), search and retrieval, and display. As conceived, the project expects to use a framework as develop tools that have a common interface.

Framework

Three frameworks have been identified by the VRE 2 projects. This include a standards-compliant portal—uPortal is an example, the Sakai portal, and Eclipse. Here the term Eclipse refers to the specification for “plug-ins,” not the Integrated Development Environment.¹ Although conceived as an integrated development environment (IDE) primarily for software development. Eclipse has become a presentation platform for a number of different applications—from Java development to multimedia presentation.

	uPortal	Sakai Portal	Eclipse
Unit	Portlet	Portlet	Plug-in
Basic Interface	JSR 168, WSRP 1.0 ²	JSR 168	Plug-in specification
Inter-tool communications	JSR286, WSRP 2.0	JSR268	Plug-in specification
Language ³	Java	Java	Java
	Server	Server	Client (Server)

¹ “A plug-in is the smallest unit of Eclipse Platform function that can be developed and delivered separately. Usually a small tool is written as a single plug-in, whereas a complex tool has its functionality split across several plug-ins. Except for a small kernel known as the Platform Runtime, all of the Eclipse Platform’s functionality is located in plug-ins.

“Plug-ins are coded in Java. ...Each plug-in has a manifest file declaring its interconnections to other plug-ins. The interconnection model is simple: a plug-in declares any number of named extension points, and any number of extensions to one or more extension points in other plug-ins.”

² uPortal will support WSRP 2.0 soon after the specification is approved and stable.

³ The choice of Java as the only language for application development reduces complexity, but makes the use of Java application in a Microsoft .NET environment more difficult. About 50% of colleges and universities have Microsoft environments.

The use of Eclipse implies installing Eclipse for every user; uPortal and Sakai implies the availability and use of a Web browser, typically Mozilla's Firefox or Microsoft's Internet Explorer,

Oxford elected to use uPortal for this application primarily because it was used by others and because it implemented Shibboleth authentication—important for librarians concerned about privacy.