Improving VALET - part 2

This is my second post on the VALET repository deposit tool. Again, if you're not a repository aficionado you can probably move on[1].

Still here?

One of the issues we confronted with VALET was to rewrite in Java or not to rewrite in Java? VALET is written in Perl and quite nicely written in my opinion, apart from the HTML forms which are a big mess of non-valid HTML. There's nothing wrong with that as such, but it does have a couple of downsides relative to Java:

1. VALET requires a web server to be installed. VITAL used to ship with Apache but it no longer does, so to run VALET you can end up having to compile and install Apache, and obtain some other dependencies. If it were a Java application then you could just drop it in to the same servlet container as you use for VITAL and Fedora.

2. We have heard from some of the, um, younger techies in the ARROW community that Perl is a complete mystery. Others report difficulties in hiring Perl programmers, whereas everyone does Java at uni these days.

On the other hand, there are some reasons not to want to do a port:

1. Some of the ARROW contingent have been using Perl since 1934 and can at least tolerate it. I'd count myself in that group. Fortran anyone?

2. Hacking a Java program is not as simple as using a text editor to change a Perl file, because you need to compile (and worry about stuff like CLASSPATH, ugh).

3. A port will create a huge fork.

All these points count for something, but Prashant from University of South Australia has pointed out that using JSP (to which I'm allergic, like PHP and ASP) gives a much easier entry point for 'casual' developers and even if it does fork VALET is actually a fairly small application so the investment is not huge and the gain for sites where they want to just consume the software should be worth it.

In the end the group here at the VALET camp decided that there was enough interest in a Java version that they were going to go for it. Nobody would own up to being a Java expert but four or five confessed to having written production Java code.

They're creating an application as I write this. While they do that Harry, Duncan and David are integrating all the changes that ARROW sites made to VALET and submitted to the Google group. So the Java team will have a moving target as they re-implement the Perl

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1 If you don't want to read about repositories, I recommend Bike Snob NYC. Which prominent fast but not fast enough Australian cyclist was he talking about last week?

> Firstly, there was Saunier Duval's impressive one-two finish, proving once again that there is no "I" in "team." (Though there is a "moi" in "chamois.") Secondly, ___ ____ (whose collarbones are only intact after yesterday's crash because they have both been replaced by titanium) proved he is in fact a great stage racer by taking the Maillot Jaune by one second. (Anybody can blast his way up a mountainside in a distateful display of power, but it takes a certain dignified restraint to sidle up behind people and pilfer seconds the way ___ does, like an uninvited party guest nabbing cocktail weiners.)

> http://bikesnobnyc.blogspot.com/2008/07/rest-day-roundup-stealing-seconds-and.html

code.

The Perl version won't be going away – but it looks like at least some sites will move straight over to the Java version once it's done.

So what are the Java team (Tim, Guy, Prashant and Cyrus) doing?

They're starting a VALET compatible clone. The idea is that you should be able to take an existing VALET workflow and data entry forms and with minimal effort, port it to run in the new application. Best case would be no work at all required; the new application will be a drop-in replacement for VALET. We'll see if that can be achieved.

The new app rejoices in the working title of *Squire*, which is not an acronym; it shows that the developers know how to use a thesaurus. Or is it named for the fish? I reckon they should call it Alfred or Pennyworth[2]. Either way, it's better than the original working title of *Black Hole*. which would be like calling your deposit interface Roach Motel. Although at least if you had a repository deposit called Black Hole you could claim very high rates of compression for data. Just don't mention decompression.

The new JAVA platform will make it easier to do some of the other changes that the community are asking for (we're discussion this on the ARROW Google group for those of you in the inner-circle), in some cases because there are more repository-oriented libraries for Java than for Perl but also just because as a community we have more competent Java programmers than Perl programmers these days.

Here are some enhancements that we will probably do at USQ at some stage – there are lots of other requirements too which we are not going to forget these are just the ones that I can speak for at this stage:

1. A SWORD deposit so the application can push content to repositories other than Fedora. We're going to look at deposit of complex objects over SWORD in the TheOREM-ICE project very soon so this will be a quick add-on.

2. The inevitable ICE interface so that if you submit a styled word processing document to Squire if will generate good quality HTML and PDF renditions automatically. We're working with Ian Barnes at ANU and talking to the PKP people about how we might be able to do a better job of inferring document structure than the standard, breathtakingly abysmal   Save as HTML   feature in word processors. Another step in my campaign to stamp out PDF-only Web 0.5 repositories, at least in Queensland.

3. Automatic embedding of metadata and license in the PDF file in XMP format, based on some work which is apparently going on in collaboration between QUT and an Australian Government agency.

4. A lightweight complete open source repository package with Squire for deposit plus Sun Of Fedora as a portal. Not a lot of features, or complexity, just the basics.

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2   Bron Chandler points out that there is some potential for recursive naming in the tradition of GNU and HURD. Alfred Pennyworth is sometime know as Batman's batman. What would VALET's nemesis be called? Do valets have nemeses? Do nemeses have valets?