Social Media API for Java

JCP EC F2F Meeting

Werner Keil
Antoine Sabot-Durand

Redwood City, California
10 / 01 / 12
Our Goal

A JAVA API FOR ACCESS TO SOCIAL NETWORKS
Proliferation of Social Media
Apache Shindig

• Open source implementation of OpenSocial & Gadgets specification
• An Apache Software project
• Available in Java & PHP
• http://shindig.apache.org

It’s Goal:
“Shindig's goal was to allow new sites to start hosting social apps in under an hour's worth of work"
OpenSocial Container

• Become an OpenSocial Container
  o Get Shindig (PHP or Java) or the Google implementation
    ▪ http://shindig.apache.org
  o Look at examples & documentation
    ▪ http://code.google.com/p/opensocial-resources/wiki/SampleApps

• The “official” OpenSocial implementation has shifted – from Shindig to Google Code
What Is a Gadget?

Simple gadgets for getting a Grid proxy credential and running remote commands. Both run on my own Web server.
Portable Contacts

- REST API for Person and Contacts
  - Open source implementation
- Compatible with OpenSocial
  - [http://portablecontacts.net](http://portablecontacts.net)
SocialSite – Sun’s approach to Social

Sun Microsystems

- Socialsite: Shindig + gadget based UI written in Java
- Open Source https://socialsite.dev.java.net/

Facebook’s Query Language

• All of the Facebook API is basically a set of wrappers around their SQL like FQL query language. So you can, if you prefer, make custom methods out of FQL query strings.

```javascript
var myQuery='SELECT name FROM user WHERE uid='+api.get_session().uid;
api.fql_query(myQuery, getFQLResponse);
```

def getFQLResponse():
    pass

getFQLResponse() is a developer-written callback function

If it’s SQL like, could we use something like JPA around it?
Seam Social – a bootstrap for the API

- A full CDI API to interact with Social Networks
- Developed by Antoine Sabot-Durand (one of the proposed co-Spec Leads)
- Independent of CDI implementation
- A helper for:
  - Consuming REST services
  - Consuming OAuth 1 and 2 services
  - Identification via OAuth
  - JSON binding of Social Services API
- Ready to adopt JSR 351, 353 and JSR 339
- Will move to Apache Delta Spike initiative during 2012
Java Social – a kind of JCA for Social
DaliCore – History

- Open-source “CMS” with community features
- 2008: integration with Shindig, provides OpenSocial Implementation (JavaScript code from Shindig, Java code in DaliCMS)
- Developed as Glassfish incubator project
More than a CMS → DaliCore

Adds functionality common to users, content and permissions on top of Java EE 6.

Focus on Users and Permissions.

In about every project that uses DaliCore, users should be able to login with existing credentials (Facebook, Twitter, Google Connect, ...)

Dali modules extend DaliCore
DaliCore – Connect

public abstract class ExternalNetwork

    public abstract Response connect(String callback);
    public abstract ExternalToken callback(String requestToken, String verifier);
    public abstract OnlineAccount createOnlineAccount(ExternalToken accessToken) throws DaliCoreException;

- ExternalNetwork class is extended by
  - FacebookExternalNetwork
  - TwitterExternalNetwork
  - GoogleExternalNetwork
The User concept in DaliCore can have 0 or more instances of “OnlineAccount”

In projects created with DaliCore, the administrator/configurator decides what social networks are supported.

Users can access all functionality using their social network credentials.
Twitter4J – History

- Twitter4J is an unofficial Java library for the Twitter API. With Twitter4J, you can easily integrate your Java application with Twitter.
- Its author, Yusuke Yamamoto now officially working at Twitter. Designated to represent Twitter in Social JSR EG.
Let’s talk

Q & A