

Dear Mentors and Tuscany Community,

This email is the mid-term update for GSoC project "Integrate Google services in SCA compositions (Apache Tuscany)" from Haibo Zhao.

This is Haibo Zhao, and I have been working on the GSoC project "Integrate Google services in SCA compositions (Apache Tuscany)" mentored by Luciano Resende. In this report, I will first give a very brief overview of the project we have been working on, and then summarize our progress so far. A little bit more details about the project related activities will be presented in Section 3, and finally the to-do list in the second half stage.

Section 1: Project Overview

Compared with Atom and RSS, GData provides a general model to fetch feeds from resources, query information of interest in the feeds while supporting optimistic concurrency and authentication. However, current Tuscany does not support GData binding. This project focuses on adding GData binding to Apache Tuscany to allow users to integrate SCA compositions with Google services, and in a wider range, any web accessible applications and services with GData interface.

The project includes two major components: GData ServiceBinding support and GData ReferenceBinding support.

Section 2: Progress Summarization

2.1 GData ServiceBinding support	[Progress: 4/6 = 0.667=66.7%]
doGet, doPost, doDelete, doPut	<Completed>
processAuthorizationHeader and authenticate	<Todo>

2.2 GData ReferenceBinding support	[Progress: 5/8 = 0.625=62.5%]
get/getFeed, getEntry, post, delete, Put	<Completed>
Query	<dummy implementation>
PostMedia and PutMedia	<Todo>

2.3 Tests	[Progress: around 10%-20%]
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Test case "GdataBinding_LocalhostServlet_Test" are used to test both ServiceBinding and ReferenceBinding. I am going to write more test cases to test ReferenceBinding using Google services when the authorization issue is cleared.

Section 3: More about My Approach to the Project

- 3.1 Read Tuscany documents (User Guide and Developer Guide)
- 3.2 Download and import Tuscany source code into Eclipse
- 3.3 Read GData documents and get familiar with GData APIs
- 3.4 Read two existing example bindings of Atom and Echo in Tuscany source
- 3.5 Start coding based on the binding implementation of Atom
- 3.6 Implement Gdata operation: get/getFeed, getEntry, Delete
- 3.6 Implement Gdata operation: Put, Post
- 4.7 Write a Junit test case to test implemented GData operations

Section 4: To-Do in the Second Half Term

- 4.1 Finish the implementation of GData ServiceBinding and ReferenceBinding support
- 4.2 Add more Junit test cases to test available Google services

Section 5: Resources

- 5.1 Project Wiki: <http://cwiki.apache.org/confluence/display/TUSCANYWIKI/Integrate+Google+services+in+SCA+compositions%28Apache+Tuscany%29>
- 5.2 Project Blog: <http://gdatabindingtuscany.blogspot.com>
- 5.3 Project Proposal: <http://denali.cs.uga.edu/gsoc/gsocProposal.pdf>

I would like to thank Tuscany community for the help, especially my mentor Luciano.
Thanks to all of you for your support and attention.