MuseProposal

PROJECT PROPOSAL

Muse - A Web Services subproject to provide a robust implementation of the OASIS Web Services Distributed Management (WSDM) Management using Web Services (MuWS) specification.

RATIONALE

Muse will provide a robust, open-source implementation of the WSDM MuWS specification. The implementation will be based on Axis/Java. The WSDM MuWS specification enables management of IT resources using Web services.

The rationale for Hewlett-Packard to contribute to this open-source effort is to help further the adoption of the WSDM specifications, and related WS-* specifications, which HP sponsors/authors.

SCOPE OF SUBPROJECTS

Currently, the scope of this project is to include Axis based support for the OASIS Web Services Distributed Management Management Using Web Services specification.

MuWS is dependent on the following WS-* specifications:

- 1. WS-Addressing (already supported by the WS-FX subproject)
- 2. WS-Resource Framework
    - 2.1 WS-ResourceProperties
    - 2.2 WS-ResourceLifetime
    - 2.3 WS-BaseFaults
    - 2.4 WS-ServiceGroups
- 3. WS-Notifications
    - 3.1 WS-BaseNotifications
    - 3.2 WS-Topics

This proposal is to build a subproject called Muse to encompass the WSDM MuWS specification under the Web Services project. The initial Muse code base contains an embedded implementation of the required WS-* specifications. However, the goal is to also begin work on each WS-* specification required by MuWS as subprojects of WS-FX. Once these efforts are stabilized Muse will be refactored to these implementations. Separate project proposals have been submitted for these WS-* efforts (see Apollo and Hermes project proposals).

FEATURES

- Code generation from WSDM MuWS-compliant WSDL.
- Runtime support for Web service implementations of WSDM MuWS specfication.
- Discovery and Advertising of WSDM MuWS-compliant Web services.

PRACTICAL APPLICATIONS

- Web Services Distributed Management, Management of Web Services (MoWS)
- Distributed Management Task Force's WS-CIM specification (CIM over SOAP).
- Anything you want to expose to Management clients via Web services.

INITIAL SOURCE

HP will donate the initial source code for this project. This source code represents a fully functioning implementation for the WSDM MuWS .5 specification. The source code will include Maven scripts that can produce a binary and source distribution. The source code was initially written with donation to Apache in mind so most typical Apache programming practices were adopted. As part of the evaluation of this project for acceptance by Apache HP will make available the source and binary distributions.

RESOURCES TO BE CREATED

- SVN Repository
- JIRA Project
- Mailing Lists
- Official Build Systems

CRITERIA

The product developers have examined the guidelines that govern Apache subprojects and it has been determined that they can and will be adhered to during the lifetime of the propsed projects. Hewlett-Packard has committed to releasing the code related to the proposed project under the Apache License umbrella.

While the proposed project does not enjoy an active community, they certainly have a high potential for doing so. Examining the authors of the WSDM specifications that this proposal plans to support shows that such a potential exists. In addition, the specifications may also garner support not only from the organizations represented by the authors but also from those organizations following OASIS recommendations and specifications (note that OASIS is the organization hosting the WSDM specification work). This proposal should also be able to tap into the already existing community for the Web Services subprojects.

HP is committed to building a strong community around the proposed project. As part of the initial population of the initial incubation projects, the committers will supply example code, build and run ANT scripts as well as "trailmap" tutorials. This documentation should help bring new members up to speed as to the current functionality of the code and how it is organized and maintained.

The bulk of the libraries used by the initial incubator code heavily rely on Apache libraries (log4j, XmlBeans, Axis, et. al.) as well as another open source library (wsdl4j). A core piece of the implementation requires usage of one of the current WS-FX subprojects (WS-Addressing). Therefore, this proposal aligns nicely with existing Apache Web Services sub-projects.

AVOIDING THE WARNING SIGNS

This proposal is not the result of an orphaned or abandoned HP-internal project. On the contrary, the proposed project will help assist HP in furthering its current long-term goals of promoting technology needed to support its vision of the Adaptive Enterprise.

All of the current committers have experience working with open source projects and communities; we have a committer on another open source project and others have activily participated in other open source initiatives.

Unfortunately, the current list of committers in this proposal are homogenous in the sense they all work for Hewlett-Packard. However, it should be noted that other companies/individuals will be recruited to help develop the projects once incubation has begun; particularly those currently involved in the development of the OASIS WSDM specifications. Because the basis of the proposed projects lie within the scope of OASIS specifications, it can be assumed that those companies/individuals working on those specifications would also be interested in developing implementations for those specifications. Hewlett-Packard is merely taking the lead in beginning the incubation process. HP welcomes any and all willing participants into the proposed projects.

COMMITTERS

- Alan Cabrera (Geronimo and Directory Committer)
- Sal Campana (HP)
- Steve Loughran (HP) - Member of WS PMC and Axis Committer
- John Mazzitelli (HP)
- Bill Reichardt (HP)
- Ian Springer (HP)

PROPOSED APACHE SPONSOR

Web Services Project

CHAMPION

Davanum Srinivas (dims@yahoo.com)