Working with
Apache Tuscany

A Hands-On Workshop

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Get to know Tuscany Project

I have been hearing a lot about this open source project called Apache Tuscany. How can I learn more about it ?

- **Learn about the project**
  - Project overview and subproject pages
  - Go to Tuscany website's dashboard page that links to key resources for your learning.

- **Subscribe to the mailing list and talk to the community**
  - Ask questions. Any questions is welcomed

- **Download distribution**
  - Typically latest release is the best to start with

- **Run getting started tutorial**

- **Run samples, demos**
  - Use samples and demos to better understand how to use the project and learn details about it's features

Project Overview: http:/tuscany.apache.org

Index : Apache Tuscany - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

luckbr1975

http://tuscany.apache.org/

google documents

Start Stumbling...   or   Sign-in

APACHE
TUSCANY

Apache Tuscany > Home > General Info > Index   User List | Dev List | Issue Tracker

General

Home
License
Downloads
Documentation
Found a Bug?

Community

User Feedback
Get Involved
Mailing Lists
Dashboard
Blog
Chinese Portal 中文

Tuscany SCA

SCA Overview
SCA Java
SCA Native
SCA PHP

Tuscany SDO

SDO Overview
SDO Java
SDO C++
SDO PHP

Tuscany DAS

DAS Overview
DAS Java
DAS C++

Overview

Welcome to the Apache Tuscany project! The Tuscany community is working to create a robust and easy to use infrastructure that simplifies the development of service-based application networks and addresses real business problems posed in SOA.

Tuscany is based on specifications defined by the OASIS Open CSA Member Section and the Open SOA Collaboration:

- **Service Component Architecture (SCA)** - An essential characteristic of SOA is the ability to assemble new and existing services to create brand new applications that may consist of different technologies. Service Component Architecture defines a simple, service-based model for construction, assembly and deployment of a network of services (existing and new ones) that are defined in a language-neutral way. Tuscany implements the SCA Version 1.0 specifications. Learn more about SCA

- **Service Data Objects (SDO)** provides a uniform interface for handling different forms of data, including XML documents, that can exist in a network of services and provides the mechanism for tracking changes. Tuscany implements the SDO Version 2.1 specifications. Learn more about SDO

- **Data Access Service (DAS)** provides a simple SDO interface to relational databases. Learn more about DAS

The above mentioned technologies provide a full infrastructure for developing and running SOA based applications. They are not dependent on one another and can be used independently.

Please join us to create a simple, practical, extensible SOA infrastructure to address the problems that large-scale applications and service networks are faced with. We look forward to your participation.

Latest Tuscany Releases

- SCA Java 1.2.1-incubating (June, 2008)
- SDO Java 1.1-1 (July 2008)
- DAS Java 1.0-incubating-beta2 (Oct, 2007)
- SCA Native Incubator-M3 (May, 2007)

Project Ideas

- Integrate Tuscany & Google gadgets
- Implement Data Services
- And much more

News

- **June 08, 2008** - Tuscany Java SCA 1.2.1 released!
- **May 21, 2008** - Apache Tuscany is now an offical ASF project!
  The ASF board has approved graduation from the Apache Incubator to be a fully endorsed ASF top level project.
- **May 11, 2008** - PyCon Italia Due!
  Giorgio Zoppi presents **Python e Service Component Architecture** covering Python in SCA
- **April 27, 2008** - Tuscany Java SCA 1.2 released!
- **April 15, 2008** - Tuscany Java SDO 1.1 released!
- **Feb 05, 2008** - Tuscany Java SCA 1.1 released!
- **Nov 12-13, 2007** - SOAWorld Conference & Expo 2007 West

Find: conti   Next   Previous   Highlight all   Match case
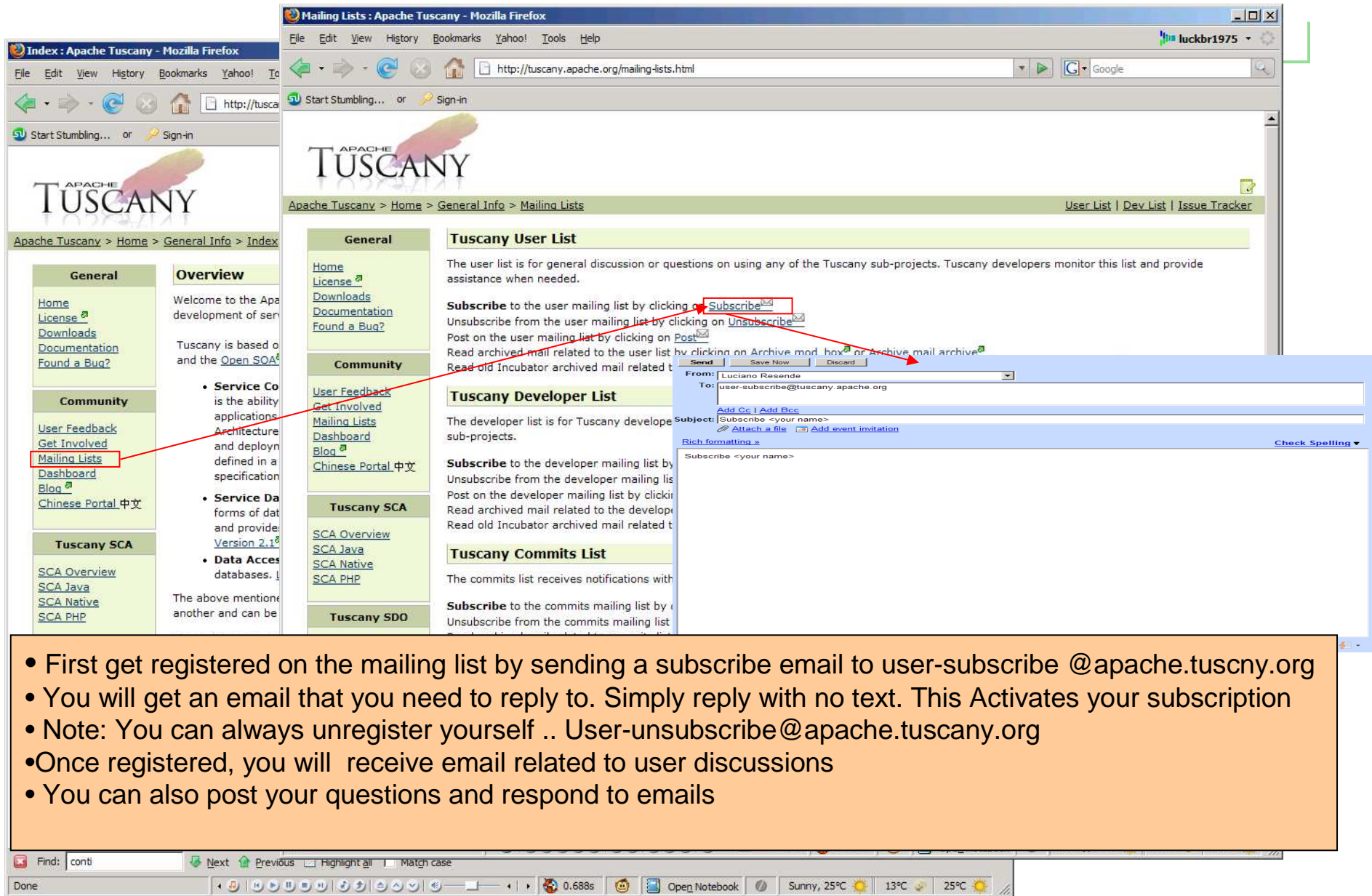
Done   0.688s   Open Notebook   Sunny, 25°C   13°C   25°C

SCA
For service composition & management

SCA's pluggable data Handling extension Allows it to work with Different types, Jaxb, Axiom, SDO.

Dashboard page Links to useful resources

How to ask questions as a user?

- First get registered on the mailing list by sending a subscribe email to user-subscribe @apache.tuscny.org
- You will get an email that you need to reply to. Simply reply with no text. This Activates your subscription
- Note: You can always unregister yourself .. User-unsubscribe@apache.tuscany.org
- Once registered, you will receive email related to user discussions
- You can also post your questions and respond to emails

How to ask questions as a developer?

- First get registered on the mailing list by sending a subscribe email to developer-subscribe @apache.tuscny.org
- You will get an email that you need to reply to. Simply reply with no text. This Activates your subscription
- Note: You can always unregister yourself .. developer-unsubscribe@apache.tuscany.org
- Once registered, you will receive email related to developer discussions
- You can also post your questions and respond to emails

Subscribing and using the mailing lists

- **Different mailing list types**
  - User – Used by users to ask questions or help each other
  - Development – Used by developers to discuss designs, releases, roadmaps. JIRA updates get routed to this mailing list
  - Committs – where code commits are sent to. A good way to see what is progressing in the project
  - Archives – hold a history for user and developer mailing list. Great place to search for finding answers for questions that may have already been asked.

- **You can subscribe, unsubscribe or watch archive of these mailing lists. You cannot respond to emails from archive.**

- **Subscribing to Tuscany user list**
  - <list>-subscribe@<project>.apache.org
  - <e.g.> user-subscribe@tuscany.apache.org
- **Unsubscribing from Tuscany user list**
  - <list>-unsubscribe@<project>.apache.org
  - <e.g.> user-unsubscribe@project.apache.org
- **Browsing Tuscany Mailing Archives**
  - http://www.mail-archive.com/
  - http://apache.markmail.org
  - http://mail-archives.apache.org/mod_mbox/

How to ask questions on the project mailing list

- Feel VERY COMFORTABLE to ask ANY kind of questions to help you understand the project. There is no bad or good questions.

- Remember that the project is a community effort and most people working on the project are volunteers.

- The way you ask questions can play in how you get answers
  - **Use meaningful, specific subject headers**
    - **Not helpful:** HELP!
    - **Better:** Webservice Error when running App

  - **Be precise and informative about your problem**
    - Describe the symptoms of your problem or bug carefully and clearly.
    - Do the best you can to anticipate the questions someone could ask back, and answer them in advance in your request for help.
  - Email volume is not precision – Keep the email concise and to the point
  - **A good source: "how to ask questions the smart way" at** http://www.catb.org/~esr/faqs/smart-questions.html

SCA Java Documentation

How to Contribute?

I think Apache Tuscany is a great project to get involved with. I like the idea and the technology. How can I get involved?

- **welcome to the project!** Apache Tuscany welcomes any kind of participation.

- Check "Get involved" page. It explains some ways to get involved.
  - Find what you are interested in after you learn about the overall project.
    - Check roadmap or JIRAs
  - Some ideas:
    - Provide patch for JIRAs to get experienced
    - Contribute to design, architecture documents as you learn about the project
    - Contribute features that you are interested in
    - Contribute tests, scenarios, …
  - Check development guides. It usually has good hints for how to build, setup your environment, etc.
  - If you need help, ask.

Get Involved Page

Reporting Problems

How do I create a JIRA?

- JIRA system is used to report and track issues and new feature requests.

- If first time user, create a login account: User id and password
  - You define your own user id and password

- If not a first time user, login to create a JIRA or to update a JIRA

- Each area of the project has a component name. For example, component core, component data binding, etc.

New Feature Requests

Do I use JIRA system for feature requests and enhancements? Yes

- JIRAs are used to track new feature enhancements.
  - Typically a discussion on the mailing list leads to a JIRA
  - What helps?
    - Use case scenario for why this is a useful feature
    - Samples/tests if you have any
    - Your code contribution can expedite getting the feature in

Reporting Problems or requesting features: Use JIRA system

Creating a JIRA

- Provide a one liner summary that describes the issue
- Select the area that was affected
- Select the version of the code that you are using
- Provide necessary environment information
- Provide detailed description and any stack traces on the description
- Provide a test case to reproduce if can be done

Finding JIRAs to fix, good starting point

Download the code

asf - Revision 679547: /tuscany - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

https://svn.apache.org/repos/asf/tuscany/

asf - Revision 679547: /tuscany

- ..
- KEYS
- PROPOSAL.txt
- STATUS
- branches/
- contrib/
- cpp/
- interop/
- java/
- maven/
- sandbox/
- site/
- tags/

Powered by Subversion version 1.5.0 (r31699).

• Anyone can read the code
• Anyone can provide a patch
• Only committers can write to the repository
• There are different subprojects under Java (SCA, SDO, DAS, ..)

•Developers Guide with general info on how to check out code and build is on : http://tuscany.apache.org/sca-java-development-guide.html

Exploring open source releases

How do I learn more
about a release?

- Download the release
  - There is a binary and source distribution for each supported platform
- Check important distribution artifacts
  - RELEASE_NOTES
  - CHANGES
- Learn how the code works via samples, tests

Tuscany Binary and Source distribution

Name	Size	Type ▲	Date Modified
demos		File Folder	6/1/2008 7:20 PM
lib		File Folder	6/1/2008 7:20 PM
modules		File Folder	6/1/2008 7:20 PM
samples		File Folder	6/1/2008 7:20 PM
tutorial		File Folder	6/1/2008 7:20 PM
CHANGES	15 KB	File	5/29/2008 12:41 PM
DISCLAIMER	1 KB	File	5/29/2008 10:59 AM
INSTALL	2 KB	File	5/29/2008 12:41 PM
LICENSE	135 KB	File	5/29/2008 10:59 AM
NOTICE	5 KB	File	5/29/2008 10:59 AM
README	1 KB	File	5/29/2008 12:41 PM
RELEASE_NOTES	4 KB	File	5/29/2008 12:41 PM

Java SCA binary distribution
- Demos
- Binary Dependencies
- Tuscany binaries
- Samples
- Tutorial
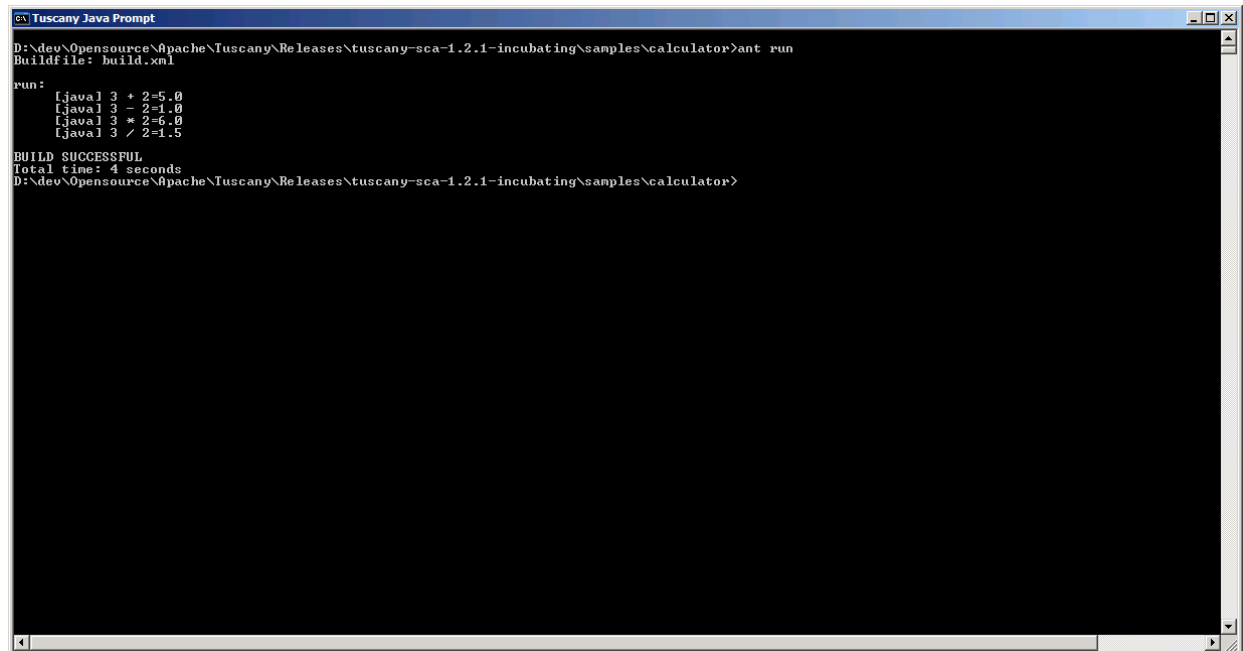
Java SCA source distribution
- Demos
- Distributions
- Integration Tests
- Implementation Modules
- Samples
- Tools
- Tutorial

Name	Size	Type ▲	Date Modified
demos		File Folder	6/1/2008 1:16 PM
distribution		File Folder	6/1/2008 7:18 PM
itest		File Folder	5/29/2008 12:05 PM
modules		File Folder	6/1/2008 11:20 AM
samples		File Folder	5/29/2008 12:05 PM
tools		File Folder	5/29/2008 12:41 PM
tutorial		File Folder	6/1/2008 1:11 PM
BUILDING	2 KB	File	5/29/2008 12:41 PM
CHANGES	15 KB	File	5/29/2008 12:41 PM
DISCLAIMER	1 KB	File	5/29/2008 10:59 AM
LICENSE	21 KB	File	5/29/2008 10:59 AM
NOTICE	2 KB	File	5/29/2008 10:59 AM
README	1 KB	File	5/29/2008 12:41 PM
RELEASE_NOTES	4 KB	File	5/29/2008 12:41 PM
pom.xml	10 KB	XML Document	5/29/2008 11:31 AM

Size: 9.87 MB
Folders: assembly, assembly-java-dsl, assembly-xml, ...
Files: pom.xml

Running a sample from a distribution

- cd tuscany-sca-1.2.1-incubating\samples\calculator

- ant run

    - Buildfile: build.xml

    - run:

    - [java] 3 + 2=5.0

    - [java] 3 - 2=1.0

    - [java] 3 * 2=6.0

    - [java] 3 / 2=1.5

Contributing your fixes – Patch process

I have found this bug, and have a fix for it. How can I give it back to the Tuscany Project ?

- Communicate to the community that there is an issue by creating a new JIRA issue
  - ❑ Bugs
  - ❑ New Features
  - ❑ etc

- Discuss your design approach on the mailing list or in the JIRA.

- Attach the fix to the JIRA

- Please do not put code on the mailing list as a patch.

- More info on http://tuscany.apache.org/issue-tracking.html

Contributing your fixes – Patch process

- Configure your svn properties
  - https://svn.apache.org/repos/asf/tuscany/java/etc/svn-props
- Checkout the code
  - https://svn.apache.org/repos/asf/tuscany/java/sca/
  - Use svn client or TortoiseSVN
- Modify a file(s)
  - Edit modules/pom.xml
  - New files need to be added
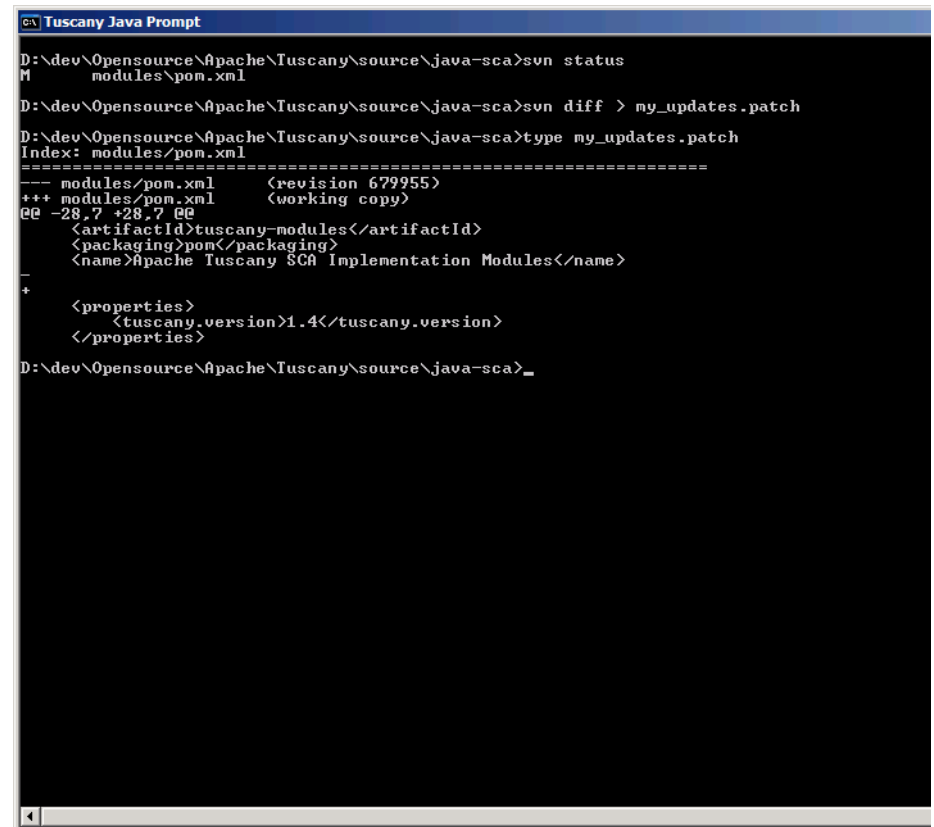   - svn add
- Check modified files
  - svn status
- Generate patch
  - Svn diff > my_updates.patch
- Attach the patch to the related JIRA. If a JIRA does not exist, create one.
  - Make sure you grant Apache License
  - Make sure you mark the flag that says a patch is included
- Someone in the community will pick up the patch, review it and apply it or ask for more information.

```
Tuscany Java Prompt

D:\dev\Opensource\Apache\Tuscany\source\java-sca>svn status
M       modules\pom.xml

D:\dev\Opensource\Apache\Tuscany\source\java-sca>svn diff > my_updates.patch

D:\dev\Opensource\Apache\Tuscany\source\java-sca>type my_updates.patch
Index: modules/pom.xml
===================================================================
--- modules/pom.xml     (revision 679955)
+++ modules/pom.xml     (working copy)
@@ -28,7 +28,7 @@
     <artifactId>tuscany-modules</artifactId>
     <packaging>pom</packaging>
     <name>Apache Tuscany SCA Implementation Modules</name>

+
     <properties>
         <tuscany.version>1.4</tuscany.version>
     </properties>

D:\dev\Opensource\Apache\Tuscany\source\java-sca>_
```

How to get JIRAs into releases

I really need this fix. How do I get it into next Tuscany release?

- Release takes a community effort to happen
  - Everyone is asked for their input and help
- Tuscany community tries to do a release every 6-8 weeks
- Make sure there is a JIRA for the problem or the new feature that clearly states the problem, scenario and tests if available.
- Remember this is a community effort. The fastest way to get fixes in is by providing patches otherwise the work gets prioritized against other requests
- Communicate the urgency of the JIRA for being included in the next release

Summary

- Getting involved in Apache Tuscany is easy. No invitation is required. You are welcome to join at any time.

  - Check Get involved

  - Subscribe to the right mailing list and ask questions, provide your input and contribute
  - Plenty of choices:
    - Report problems via JIRA
    - Provide patches
    - Contribute samples, scenarios
    - Provide feedback on the project is working for you
    - Contribute code
    - Help with the website content, documentation
    - ……..

- Any type of contribution is valuable

Apache Tuscany Project Resources

- Portal : Website & WIKI

    - http://tuscany.apache.org

    - http://cwiki.apache.org/confluence/display/TUSCANYWIKI/Home

- Repository (SVN)

    - https://svn.apache.org/repos/asf/tuscany/java/sca/

- Issues Tracking System (JIRA)

    - http://issues.apache.org/jira/browse/Tuscany

- Mailing List (user, dev, commit)

    - http://tuscany.apache.org/mailing-lists.html

- Downloading Releases

    - http://tuscany.apache.org/sca-java-releases.html

- Documentation

    - http://tuscany.apache.org/java-sca-documentation-menu.html