

# Open (Source) Collaboration Using Software Forges

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## Open Source Software

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- Definition of open source software
  - Software that is provided under an approved OSI license
- General properties of open source software
  - Software that is available in source code form
  - Software that you can modify and redistribute
- Further important (not always present) properties
  - The project has gathered a thriving community
  - Feedback and ideas about the software are public and abundant
  - Projects are egalitarian, meritocratic, and self-organizing

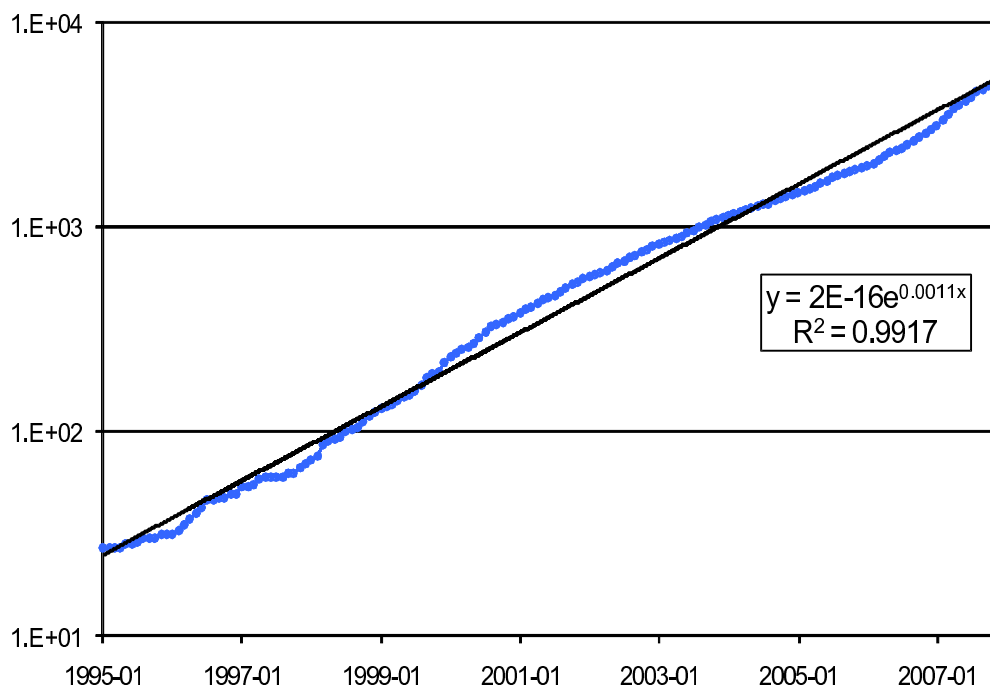
## Significance of Open Source Software

- Traditional (“closed source”) and total packaged software revenues
  - Worldwide revenue of \$381bn 2006 for Software 500 [2]
  - Estimated worldwide revenue of \$235bn in 2006 [3]
- IDC’s Open Source Software Business 2007-2011 Forecast [1]
  - Worldwide revenue from open source software \$1.8bn in 2006
  - Revenue to reach \$5.8bn in 2011, a CAGR of 26%
- Relationship of open source with total source
  - Open source revenues at 0.8% of packaged software revenues
  - At a 5X discount, open source comes in at 3.7% of total usage
  - At a 1 to 10 conversion ratio, open source comes in at 35%

[1] IDC. Worldwide Open Source Software Business Models 2007–2011 Forecast: A Preliminary View  
[2] Software Magazine. The 2006 Software 500. <http://www.softwaremag.com/L.cfm?Doc=1085-10/2007>  
[3] Software & Information Industry Association. Packaged Software Industry Revenue and Growth, 2006

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## Growth of Open Source Projects



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## Open Source vs. Agile Methods vs. Lifecycle

	does not cope well with changes	cope well with changes
does not scale well	N/A	Agile Methods
scales well	Traditional Lifecycle	Open Source

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## Agile Methods vs. Open Source

### Agile Methods

- Co-location
  - Stand-up meetings
  - Short communication paths
- Self-documenting code
  - Self-explanatory code
  - Refactor rather than comment
- Continuous integration
  - Small commits
  - Frequent commits

### Open Source

- Distributed development
  - Lengthy email discussions
  - Across all time-zones
- Stringent code documentation
  - ~20% comment density
  - Comment-only commits
- Has not changed practices
  - Commit size constant
  - Commit frequency constant

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## Corporations vs. Communities

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### Corporate Setting

- Fixed number of resources
- Limited perspectives
- From defined and limited pool
- Top-down assigned
- Following corporate process
- ...

### Community Setting

- Open-ended number of people
- Any possible perspective
- From any possible creed
- Self-selecting and organizing
- Determining their own process
- ...

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## Learning from Open Source

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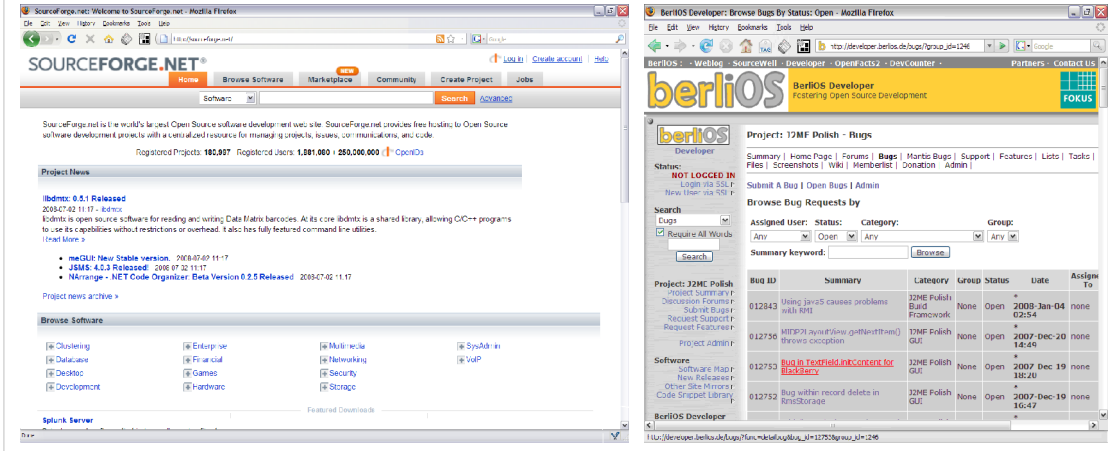
- Frugal and resource-efficient
- High quality contributions
- Engaged contributors
- User base evangelizes
- Breadth of perspectives
- Fast and short feedback cycles
- Well-documented and archived
- Fully distributed from the get-go
- Civilized discourse (mostly)
- ...

**One primary reason... volunteers!**

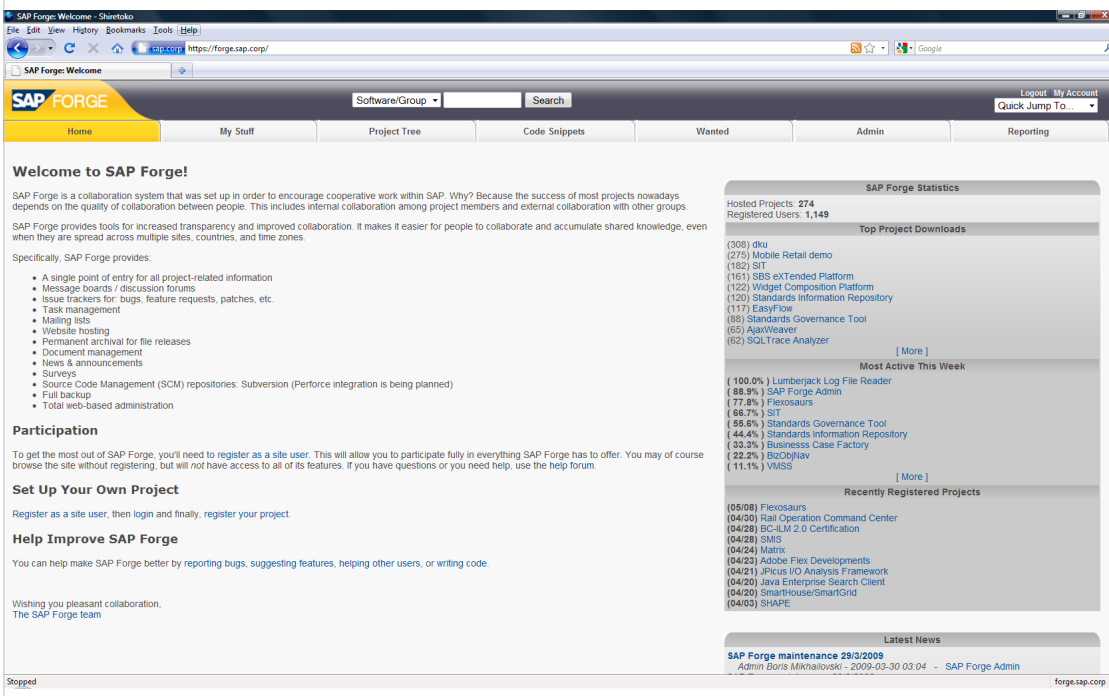
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# What is a Software Forge?

- A software forge is an
  - extensible web-based software tools platform that
  - integrates best-of-breed tools for collaborative software development
- Best known example is SourceForge.net but there are many more



# SAP Forge Front Page



SAP Forge: Personal Page For: i811381 - Mozilla Firefox  
 https://forge.sap.corp/my/

**SAP FORGE** Software/Group  Search Logout My Account Quick Jump To...

Home **My Stuff** Project Tree Code Snippets Wanted

[My Personal Page](#) | [Diary & Notes](#) | [Account Maintenance](#) | [Register Project](#)

Your personal page contains lists of bugs and tasks that you are assigned, plus a list of groups that you are a member of.

**My Assigned Items**

You have no open tracker items assigned to you.

**My Submitted Items**

**My ABAP Connect - Bugs**

1174	BO issue with new BAPI
1173	Failure in RFC for Linux

**TRI Code Front - Bugs**

1178	URL serialization problem with UTF-8
1177	Ruby/Java bridge issue in Java 5
1176	Serialization issue with deep copies
1175	Deep copy of AST fails on BO

**Monitored Forums**

**SAP Forge Admin**

- discussion
- help

**Monitored FileModules**

You are not monitoring any files.

**My Tasks**

**My ABAP Connect - Next Release**

489	Add persistent queue implementation
-----	-------------------------------------

**My ABAP Connect - To Do**

488	Revise Linux/BAPI binding
-----	---------------------------

**TRI Code Front - To Do**

490	Revamp AST implementation
491	Fix DOM serialization
492	Add XSLT handler; fix extension points

**Quick Survey**

Survey not found.

**My Bookmarks**

You currently do not have any bookmarks saved.

**My Projects**

- My ABAP Connect
- TRI Code Front
- Zrtab Compression Library

Done forge.sap.corp

SAP Forge: TRI Code Front: Project Info - Mozilla Firefox  
 https://forge.sap.corp/projects/tricodefront/

**SAP FORGE** Search the entire project  Search Advanced search Logout My Account Quick Jump To...

Home My Stuff Project Tree Code Snippets Wanted **TRI Code Front**

Summary Admin Forums Tracker Lists Tasks Docs Surveys News Source Releases

The TRI Code Front is *tricodefront* project identifier. This should be similar to the *tricodefront* project.

This project has not yet categorized itself in the Trove Software Map.

Registered: 2008-06-28 00:49  
 Activity Percentile: 0%  
[View project activity statistics.](#)  
[View list of RSS feeds available for this project](#)

**Developer Info**

Project Admins:  
 Dirk Riehle  
 Developers:  
 Omar Alonso  
 Philipp Hofmann

[\[View Members\]](#)  
[\[Request to join\]](#)

**Latest File Releases**

Package	Version	Date	Notes / Monitor	Download
tricodefront	trif 0.8	September 30, 2008		Download

[\[View All Project Files\]](#)

**Public Areas**

- [Project Home Page](#)
- [Tracker](#)
- Bugs ( 4 open /4 total )  
Bug Tracking System
- Support ( 0 open /0 total )

**Latest News**

**TRI Code Front v0.8 released!**  
 Dirk Riehle - 2008-09-30 05:50  
 (0 Comment) [\[Read More/Comment\]](#)

**TRI Code Front v0.7 released!**  
 Dirk Riehle - 2008-05-20 05:50  
 (0 Comment) [\[Read More/Comment\]](#)

[\[News archive\]](#)

Done forge.sap.corp

## Firm-Internal Software Forges

	Start Date	# of developers	# of projects	at age [mths]
IBM	January 2000	~800 (~4% of population)	45	18
HP	June 2000	1500 (~7.5% of population)	24	18
SAP	September 2006	706 (~7.1% of population)	179	18
Microsoft	June 2007	794 (~2.8% of population)	406	10

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## Benefits of Internal Software Forges [4]

### Economic Reasons

- Everything in one place
- All the tools all the time
- Cuts down on administration
- Projects at the click of a button

**Like CASE tools, only better**

### Open Source Reasons

- Finding volunteers
- Motivated contributors
- Better quality
- Broader expertise
- Broad support and buy-in
- Better research transfer

[4] Dirk Riehle et al. "Open Collaboration Using Software Forges." IEEE Software, April 2009. Page 52-58.

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## The Three Steps of Volunteer Acquisition

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- Finding a project
  - A project needs to be findable
  - A volunteer needs to find a matching project easily
- Contributing to a project
  - A project must be understandable, easy to read up on
  - A first contribution should be only a click of a button away
- Staying with a project
  - Projects need to welcome and engage volunteers
  - Projects need to provide career, benefits

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## Step 1: Finding a Project

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- Finding a project through search
  - Project needs to be openly accessible
  - Project needs to be indexable
  - Project needs to be known to search engine
- Marketing and social networking
  - Project members need to advertise project
  - Submit it to search engines, portals, sites
- Stumbling upon a project
  - Forge features a project (top 10, etc.)

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# Many Companies Operate in Silos

The screenshot shows the SAP Scripting Languages website in a Mozilla Firefox browser. The address bar contains the URL `http://vmw2064:8080/`, which is highlighted with a red box. The website content includes the SAP logo, the slogan "THE BEST-RUN BUSINESSES RUN SAP", and navigation links for "SAP Scripting Languages", "SAP Scripting Tool Information", and "Scripting Demos". Several overlapping browser windows are visible, showing different parts of the website, including a "Bugzilla Main Page" and a "SAP Scripting Tools - SVN Admins" page. The "SAP Scripting Tools - SVN Admins" page contains information about the Subversion Server, Nightly Backups, and Repository Restoration after a threaddown. A red number "17" is located in the bottom right corner of the screenshot.

# Searching for Projects

The screenshot shows the SAP Forge website in a Mozilla Firefox browser. The address bar contains the URL `https://forge.sap.corp/`. The website features a navigation menu with "Home", "My Stuff", and "Code Snippets". A search bar is located in the top right corner, with a dropdown menu showing "Software/Group", "People", and "Skill". The search bar contains the text "netweaver" and a "Search" button. The main content area includes a "Welcome to SAP Forge!" message and a list of features provided by SAP Forge, such as a single point of entry for project-related information, message boards, issue trackers, task management, mailing lists, website hosting, permanent archival for file releases, document management, news & announcements, surveys, source code management (SCM) repositories, full backup, and total web-based administration. The word "Participation" is visible at the bottom left of the page.

## And Finding Projects

The screenshot shows a web browser window displaying the SAP Forge search interface. The search results are for the term 'netweaver'. The results are listed in a table with columns for Group Name and description.

Group Name	Description
SNAP	SNAP is a Software Test Automation platform for Functional and Regression GUI tests, done by the NetWeaver Automation Framework Development team in SAP Labs Israel.
PIANO for VC	PIANO for VC is a new Netweaver project. It is an extension for Visual Composer, enabling the creation of user interfaces for SAP NetWeaver.
ES Proxy Generator for ActionScript	Objective is to ship the proxy generator for ActionScript with the SAP NetWeaver Developer Tools, so that developers can seamlessly consume Enterprise Services.
Task Notifications	How about being notified when new tasks have been created by others or about the usage of RSS or ATOM feeds. <a href="https://wiki.pal.sap.com:8443/x/np0C">https://wiki.pal.sap.com:8443/x/np0C</a>
Porta - IDE Server Integration	You are still in love with your favorite NetBeans, IntelliJ IDEA or JBuilder and you dream of having them integrated with SAP NetWeaver?
Sysmon4	SYSMON 4 - SAP Netweaver Administrator Workplace Monitoring - Administration - Administration - Administration
NWDI	NetWeaver Development Infrastructure (NWDI), provides a comprehensive development environment for SAP NetWeaver.
VC Usability Forum	A part of the SAP NetWeaver Visual Composer Usability task-force. use this project to discuss usability issues.
New NetWeaver Tech for Business Suite	This project is about tracking the development and delivery of latest NetWeaver Technology for Business Suite.
NetWeaver AS Java Troubleshooting Guide	The Troubleshooting Guide Project provides problem solving guides for NetWeaver Administrator.
SQLTrace Analyzer	Analyzes NetWeaver SQLTrace xmls. Aggregates data by user, thread and stacktrace.
Job Bean Code Generator	Eclipse plug-in to generate Java source code for job beans that implement archiving and monitoring of the NetWeaver Administrator.

## Step 2: Contributing to a Project

- It must be easy to read-up on a project
  - Use of forums, mailing-lists, and wikis
  - Always prepared to help passersby to help themselves
  - Follows consistent practice of email over phone
- It must be easy to make that first simple contribution
  - Projects want contributions hence no artificial hurdles
  - As easy as the click of a reply-button in a forum
- The project team must respond properly
  - Any first contribution is a good contribution
  - Need to invest and hand-hold in the beginning

# Project Front Page (1 of 2)

The Retail demo application for Mobile phones

This project has not yet categorized itself in the [Trove Software Map](#).

Registered: 2006-11-22 06:02  
Activity Percentile: 0%  
[View project activity statistics](#)  
[View list of RSS feeds available for this project](#)

**Developer info**

Project Admins:  
Huaigu Wu  
Developers:  
Anna Tkachenko  
David Gullinaine  
Erica Miras  
Faraaz Hasani  
Francis St-Aniant  
Gilbert Bain  
Hans-Heinrich Siemens  
Hugo Ares  
Huynh Van Du Tran  
Ian Mayor  
Isidoro Reyes  
Jean-Francois Desjeans Gauthier  
Johannes Gilbert  
Jorn Keller  
Josh Borts  
louenas hamdi  
Maxime Chartrand-Dumas  
Michael Faber  
Mohammad Kanso  
Nina Seghatolesami  
Sebastian Stadtröcher  
Sebastian Rullange  
Serhan Dogtas  
Stamatis Karkouskos  
Sven Wollanger  
Torben Schlichling  
Victor Kaufman  
Yi Zheng

[\[View Members\]](#)  
[\[Request to join\]](#)

Package	Version	Date	Notes / Monitor	Download
fkom	J2ME Client 0.7 - stable	January 25, 2007		<a href="#">Download</a>
MobileWeaver	MobileWeaver_LWA_release 2.0 Alpha	April 18, 2008		<a href="#">Download</a>

Transferring data from forgesap.corp...

# Project Front Page (2 of 2)

**Public Areas**

- [Project Home Page](#)
- [Tracker](#)
  - Bugs ( 54 open /68 total )  
Bug Tracking System
  - Support ( 0 open /0 total )  
Tech Support Tracking System
  - Patches ( 0 open /0 total )  
Patch Tracking System
  - Feature Requests ( 11 open /11 total )  
Feature Request Tracking System
- [Public Forums \( 78 messages in 2 forums \)](#)
- [DocManager: Project Documentation](#)
- [Mailing Lists \( 2 public mailing lists \)](#)
- [Task Manager](#)
  - Retail Demo
  - MobileWeaver
  - Next Release
- [surveys \( 2 surveys \)](#)
- [SCM Repository \(SVN: 0 updates, 0 adds\)](#)

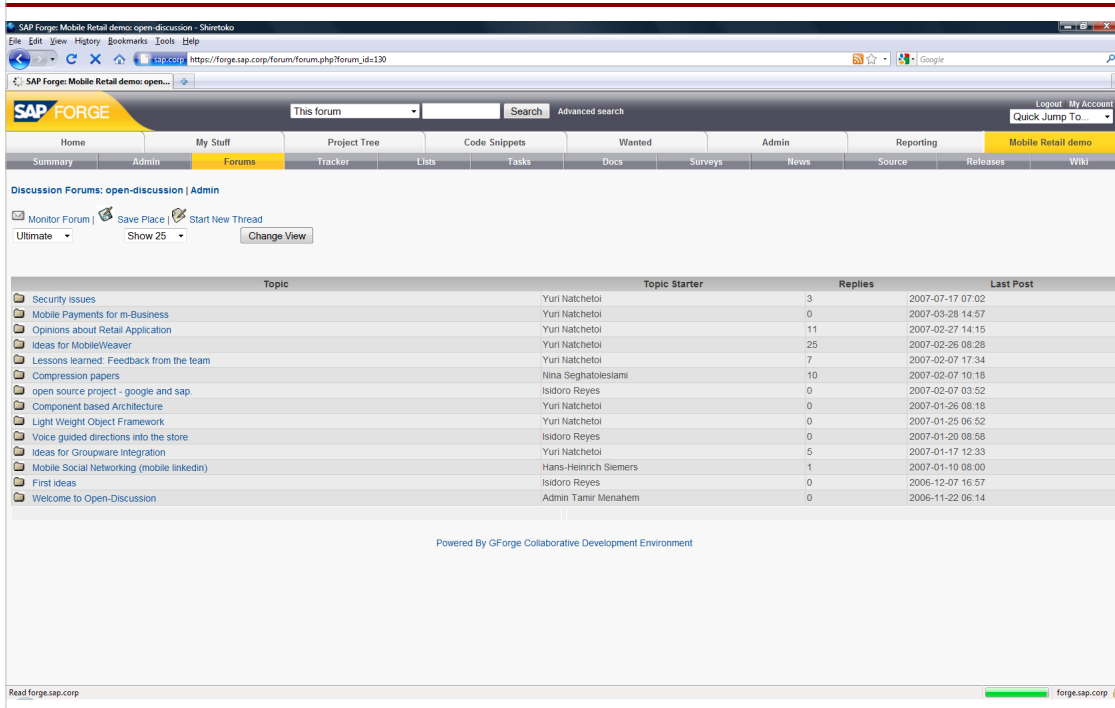
**Latest News**

- [scrum meeting 2007-03-06](#)  
Yuri Natcheto - 2007-03-06 08:04  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-28](#)  
Yuri Natcheto - 2007-02-28 10:59  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-27](#)  
Yuri Natcheto - 2007-02-27 15:37  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-26](#)  
Yuri Natcheto - 2007-02-26 10:41  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-16](#)  
Yuri Natcheto - 2007-02-16 06:58  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-15](#)  
Yuri Natcheto - 2007-02-16 06:58  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-13](#)  
Yuri Natcheto - 2007-02-13 12:23  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-12](#)  
Yuri Natcheto - 2007-02-12 07:58  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-07](#)  
Huaigu Wu - 2007-02-08 07:45  
(0 Comment) [\[Read More/Comment\]](#)
- [scrum meeting 2007-02-06](#)  
Yuri Natcheto - 2007-02-06 11:26  
(0 Comment) [\[Read More/Comment\]](#)

[\[News archive\]](#)  
[\[Submit News\]](#)

Transferring data from forgesap.corp...

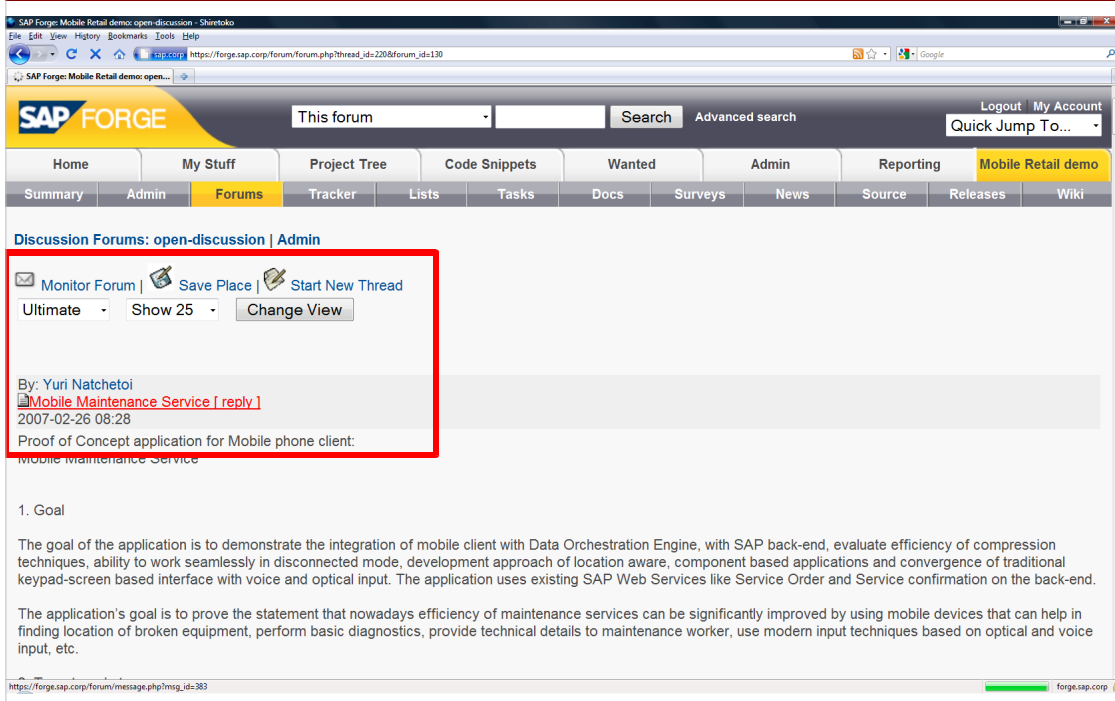
# Public Discussions, Public Documentation



The screenshot shows the SAP Forge forum interface. At the top, there is a navigation bar with 'SAP FORGE' logo and a search bar. Below the navigation bar, there are tabs for 'Home', 'My Stuff', 'Project Tree', 'Code Snippets', 'Wanted', 'Admin', 'Reporting', and 'Mobile Retail demo'. The 'Mobile Retail demo' tab is selected. Underneath, there are sub-tabs for 'Summary', 'Admin', 'Forums', 'Tracker', 'Lists', 'Tasks', 'Docs', 'Surveys', 'News', 'Source', 'Releases', and 'Wiki'. The 'Forums' tab is active, displaying a list of discussion topics. The list includes columns for 'Topic', 'Topic Starter', 'Replies', and 'Last Post'. The topics listed are: Security issues, Mobile Payments for m-Business, Opinions about Retail Application, Ideas for MobileWeaver, Lessons learned: Feedback from the team, Compression papers, open source project - google and sap, Component based Architecture, Light Weight Object Framework, Voice guided directions into the store, Ideas for Groupware Integration, Mobile Social Networking (mobile linkedin), First Ideas, and Welcome to Open-Discussion. The 'Welcome to Open-Discussion' topic is highlighted in blue. At the bottom of the forum list, it says 'Powered By GForge Collaborative Development Environment'.

Topic	Topic Starter	Replies	Last Post
Security issues	Yuri Natchetoi	3	2007-07-17 07:02
Mobile Payments for m-Business	Yuri Natchetoi	0	2007-03-28 14:57
Opinions about Retail Application	Yuri Natchetoi	11	2007-02-27 14:15
Ideas for MobileWeaver	Yuri Natchetoi	25	2007-02-26 08:28
Lessons learned: Feedback from the team	Yuri Natchetoi	7	2007-02-07 17:34
Compression papers	Nina Seghatoleslami	10	2007-02-07 10:18
open source project - google and sap	Isidoro Reyes	0	2007-02-07 03:52
Component based Architecture	Yuri Natchetoi	0	2007-01-26 08:18
Light Weight Object Framework	Yuri Natchetoi	0	2007-01-25 06:52
Voice guided directions into the store	Isidoro Reyes	0	2007-01-20 08:58
Ideas for Groupware Integration	Yuri Natchetoi	5	2007-01-17 12:33
Mobile Social Networking (mobile linkedin)	Hans-Helmirch Siemers	1	2007-01-10 08:00
First Ideas	Isidoro Reyes	0	2006-12-07 16:57
Welcome to Open-Discussion	Admin Tamar Menahem	0	2006-11-22 06:14

# Contributions at the Click of a Reply Button



The screenshot shows a detailed view of a forum post on SAP Forge. The navigation bar and tabs are the same as in the previous screenshot. The 'Forums' tab is active, and a specific thread is selected. The post is titled 'Mobile Maintenance Service [ reply ]' and is by 'Yuri Natchetoi', dated '2007-02-26 08:28'. The post content starts with 'Proof of Concept application for Mobile phone client: Mobile maintenance Service'. Below the title, there is a red box highlighting the 'Monitor Forum', 'Save Place', and 'Start New Thread' buttons, along with the 'Ultimate' dropdown, 'Show 25' dropdown, and 'Change View' button. The post content includes a section titled '1. Goal' with the following text: 'The goal of the application is to demonstrate the integration of mobile client with Data Orchestration Engine, with SAP back-end, evaluate efficiency of compression techniques, ability to work seamlessly in disconnected mode, development approach of location aware, component based applications and convergence of traditional keypad-screen based interface with voice and optical input. The application uses existing SAP Web Services like Service Order and Service confirmation on the back-end. The application's goal is to prove the statement that nowadays efficiency of maintenance services can be significantly improved by using mobile devices that can help in finding location of broken equipment, perform basic diagnostics, provide technical details to maintenance worker, use modern input techniques based on optical and voice input, etc.'

# No Artificial Hurdles for the Curious

SAP Forge Mobile Retail demo: Project Filelist - Shiretoko

Search the entire project [ ] Search Advanced search

Home My Stuff Project Tree Code Snippets Wanted Admin Reporting Mobile Retail demo

Summary Admin Forums Tracker Lists Tasks Docs Surveys News Source Releases Wiki

Admin

Below is a list of all files of the project. Before downloading, you may want to read Release Notes and Changelog (accessible by clicking on release version).  
To create a new release click here.

Package	Release & Notes	Filename	Size	D/L	Arch	Date	Type
<b>fkom</b>						2007-01-25 10:58	
<b>J2ME Client 0.7 - stable</b>						2007-01-24 05:49	
shopping.jar			1.45 MB	22	Other		
<b>Middleware v.0.5</b>						2007-01-23 12:08	
middleware.war			1.01 MB	9	Other		
<b>0.6</b>						2007-01-18 05:09	
fkcomclient.jar			1.45 MB	8	Other		
<b>0.5</b>						2007-01-12 11:32	
FkomClient.jar			619 KB	4	Other		
<b>0.4</b>							
FkomClient.jar			601 KB	1	Other		
<b>MobileWeaver</b>						2008-04-18 13:06	
<b>MobileWeaver_LWA_release 2.0 Alpha</b>							
CompShopServer.zip			1.33 MB	3	Other		
CrmMobile_v1.5.zip			9.63 MB	2	Other		
DSD_04_06.doc			1.62 MB	0	Other		
IcmMobile_v1.2.zip			2.43 MB	1	Other		
MobileWeaverJava_2.0_Readme_2008_06_28.ppt			813 KB	4	Other		
mobileweaver-lwa-client.zip			9.4 MB	1	Other		
MobileWeaver_LWA_Communication_Management_SACM.pdf			805 KB	1	Other		
MobileWeaver_LWA_Data_Management_LAOF.pdf			564 KB	1	Other		
MobileWeaver_LWA_Demo_Competitive_Shopper.pdf			331 KB	4	Other		
MobileWeaver_LWA_FloorPlan_Management.pdf			182 KB	1	Other		
mobileweaver-lwa-server.zip			1.9 MB	0	Other		Source.zip
publications.zip			2.23 MB	1	Other		
Recording-06-6-08.zip			888 KB	3	Other		
speech-detection.zip			8 KB	0	Other		

Read forge.sap.corp

# And Again, Easy to Provide Feedback

SAP Forge Mobile Retail demo: Shiretoko

Bugs [ ] Search Advanced search

Home My Stuff Project Tree Code Snippets Wanted Admin Reporting Mobile Retail demo

Summary Admin Forums Tracker Lists Tasks Docs Surveys News Source Releases Wiki

Bugs: Browse | Download... | **Submit New** | Reporting | Monitor | Admin

Assignee: Any State: Open

Build Query Order by: ID Ascending Quick Browse

ID	Summary	Open Date	Priority	Assigned To	Submitted By
152	Demo Application does not work with z800 emulator	* 2006-12-07 06:59	3	Huaigu Wu	Sven Wolfanger
153	Not all product descriptions can be displayed	* 2006-12-07 10:36	4	Huaigu Wu	Yuri Natcheto
156	Dictionary builder for XML Compressor throws exceptions on some letters	* 2006-12-07 10:53	4	Yuri Natcheto	Yuri Natcheto
162	calculateDiscountValue throws Null pointer exception	* 2006-12-14 07:04	3	Sven Wolfanger	Yuri Natcheto
198	Manufacturer: null	* 2007-01-02 12:06	2	Huaigu Wu	Yuri Natcheto
199	Hot keys should work in Help Menu	* 2007-01-02 13:28	1	Huaigu Wu	Yuri Natcheto
204	Label in InputScreen is not displayed completely when scroll up again	* 2007-01-10 14:05	2	Huaigu Wu	Michael Faber
206	Cross-seeling => endless loop	* 2007-01-12 08:02	3	Huaigu Wu	Jörn Keller
207	Direct Navigation to background mode and main menu shall be available	* 2007-01-12 08:03	3	Huaigu Wu	Jörn Keller
208	Wishlist can currently not be saved by mobile application	* 2007-01-12 08:04	3	Yuri Natcheto	Jörn Keller
209	Error using search functionality	* 2007-01-12 08:06	3	Yuri Natcheto	Jörn Keller
210	Product catalog shall not be bound on the client side but available on server side	* 2007-01-12 08:08	3	Yuri Natcheto	Jörn Keller
211	Navigation behaviour not intuitive and not unambiguously	* 2007-01-12 08:10	3	Yuri Natcheto	Jörn Keller
214	Pressing "" to enter the background mode should be mentioned in the help	* 2007-01-15 12:51	1	Huaigu Wu	Yuri Natcheto
215	Cyclic reference in cross-selling	* 2007-01-15 12:52	1	Huaigu Wu	Yuri Natcheto

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## Step 3: Keeping Volunteers

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- Volunteers are valuable investments (see benefits)
- Traditional community building practices apply here
- Make sure that your volunteers are happy
- Reward them (T-Shirts, talk well about them)
- Done right, volunteers will remain with the project

### **New laws of labor economics will help you [5]**

[5] Dirk Riehle. "Open Source Software Developer Careers." Presentation at OSMB 2009, Nuremberg, Germany.

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## Is it Real? SAP Forge Survey

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- Results from latest survey
  - 98% of respondents wanted to see SAP Forge fully integrated
  - 66% of respondents regularly browse SAP Forge for other projects
  - 24% of respondents stated that their project received outside help
  - 12% of respondents stated that they helped other projects
- Found similar results in prior surveys

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## SAP Forge's FKOM Case Study (1 of 2)

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- **Volunteers:** SAP Forge brought the project more than 18 additional contributors. These contributors aren't full-time but they do contribute actively.
- **Motivated contributors:** The volunteers joined the project on their own and hence care deeply about it, leading to contributions of above-average quality.
- **Broad expertise:** The volunteers bring expertise from across the organization. Many of them are working on related projects and are familiar with these applications.
- **Better understanding of requirements:** Volunteers contribute insights into requirements and applications that influence the project's product management.

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## SAP Forge's FKOM Case Study (2 of 2)

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- **Broad support:** Volunteers mean broader support across the organization. The project got such good publicity that further resources became available.
- **Testing help:** Enthusiastic volunteers who bought into the project became excellent software testers, providing quick feedback on problems and bugs.
- **Increased visibility:** Being on SAP Forge and getting volunteers and broad support raised the project's profile and lowered the chances of redundant competing efforts.
- **Formalized display of significance:** The contributions, broader interest, and raised project profile imply additional validation of its significance for the company.

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## Principles of Open Collaboration

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- **Egalitarian:** Whoever shows up is the right people
  - On the Internet: whoever cares
  - Within a corporation: whoever cares
- **Meritocratic:** Contributions are evaluated based on their merits
  - Status and seniority do not grant extra rights
  - Egalitarian and meritocratic view of peers
- **Self-organizing:** Follows its own processes
  - Meta-contributions (processes) are contributions too
  - Contributors ensure context fit but allow for idiosyncratic variation

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## Open (Source) vs. Closed Collaboration

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### Open Collaboration

- Egalitarian
  - Everyone can contribute
  - Accessible on the Internet
  - Inclusive project community
- Meritocratic
  - Contributions are judged by merit
  - Decisions are discussed publicly
  - Can be looked up for reference
- Self-organizing
  - No defined process is imposed
  - Community defines its process

### Closed Collaboration

- Top-down job assignment
  - Need be member
  - Hidden away on server
  - Curiosity faces mistrust
- Status rather than merit
  - Seniority rather than merit
  - Phones and water coolers
  - Lack of docs = job security
- Imposed processes
  - Process imposed on project
  - No adaptation to project needs

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## Conclusions

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- We can learn a great deal from open source processes
- Open collaboration enhances prior forms of collaboration
- Software forges are a great vehicle for internal change
- You don't need to argue open source to get a software forge
- The volunteer acquisition process needs to be designed well
- Don't underestimate corporate inertia, plan for the long game

**Prediction:** The benefits are a leaner and happier organization

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# Thank you! Questions?

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