

# Collaboration Management

Software Collaboration  
Management mit Trac

FrOSCon 24./25. Juni 2006

# Agenda

- Was ist Software Collaboration Management?
- Softwareentwicklung in der Praxis.
- Voraussetzungen und Installation
- Einrichtung eines Projektes
- Handhabung

# Was ist SCM?

- Software Collaboration Management bedeutet, dass unterschiedliche Personen und Werkzeuge zusammenarbeiten.

# Softwareentwicklung in der Praxis?

- Bug- / Issue-Tracker
  - Oft wird Excel o.ä. als Bug Tracker genutzt.
  - Das heißt, es wird gemeinsam in einer Excel Tabelle gearbeitet.

# Verbesserungen

- Bug/Issue Tracker
  - Verwendung von vorhandenen Tools z.B. Mantis, Bugzilla, JIRA etc.

# Softwareentwicklung in der Praxis?

- Dokumentation
  - Benutzerhandbücher, Fach- und DV-Konzepte etc.
    - MS-Word oder OpenOffice
    - HTML, XML etc.

# Verbesserungen

- Dokumentation
  - Einsatz eines Wiki Systems zur Dokumentation
    - z.B. MediaWiki, etc.

# Verbesserungen

- Dokumentation
  - Ein Anwender ist in der Regel nicht mit der Dokumentation in Form eines Wikis zu frieden.



# Softwareentwicklung in der Praxis?

- Versionskontrolle
  - Oft wird noch mit Benennung der Dateien, in Form einer Datumsangabe gearbeitet

# Verbesserungen

- Versionskontrolle
  - Hier wäre der Einsatz von unterschiedlichsten Tools möglich bzw. Anzuraten: z.B. CVS, Subversion, ClearCase etc.

# Verbesserung?

Versionskontrolle

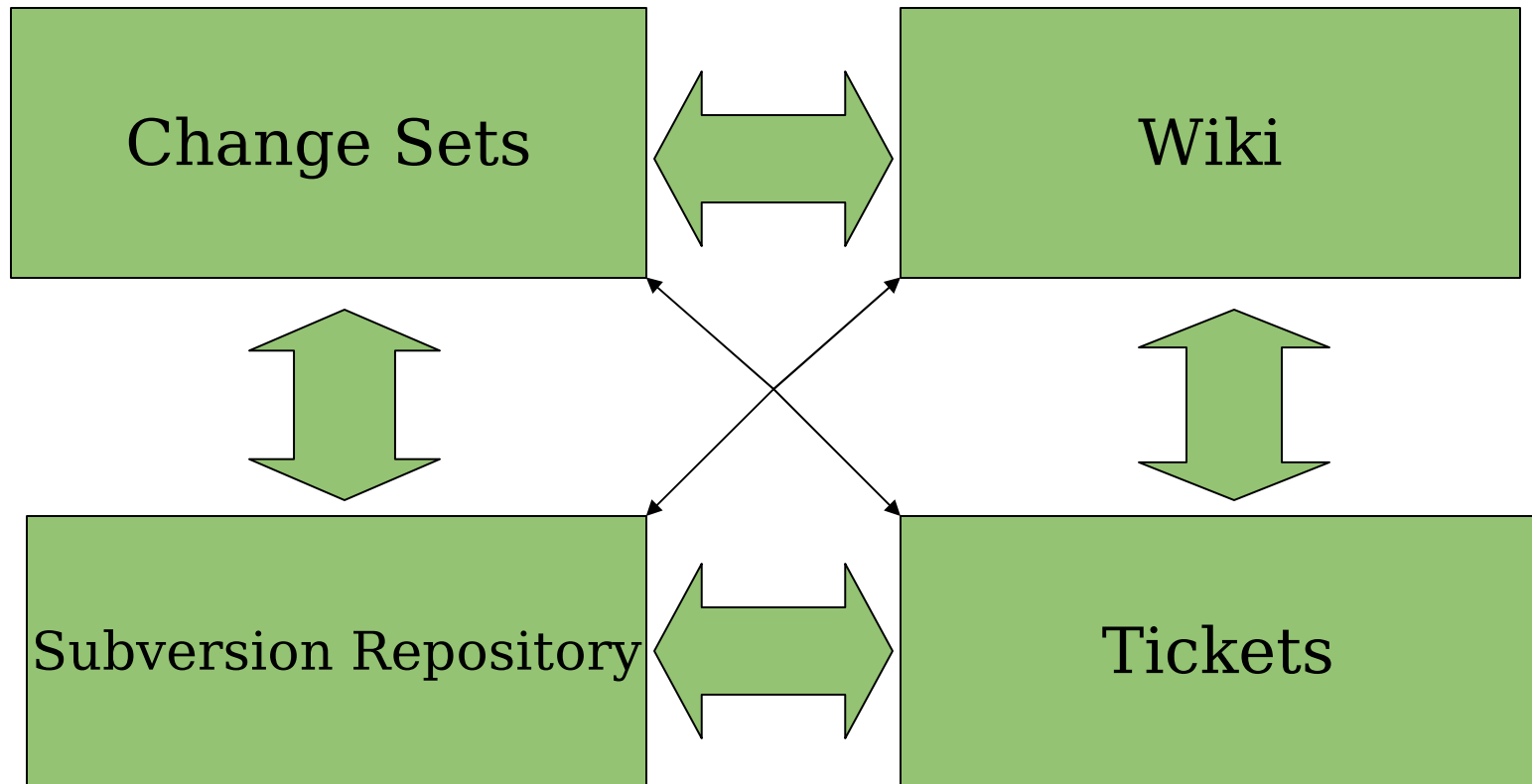
Wiki

Bug/Issue Tracker

# Was bietet Trac?

- Bug/Issue/Request Tracking Tool
- Wiki
- Roadmap/Milestone
- Subversion Integration
- Berechtigungssystem

# Verbesserungen



# Voraussetzungen Installation

- Python
- Subversion
- ClearSilver
- PySQLite for Python
- mod\_python für Apache
- Trac

# Voraussetzungen Installation

- Python mind. 2.3
  - Auf Windows derzeit keine Unterstützung für Python 2.4, da keine Subversion bindings vorhanden sind.

# Voraussetzungen

## Installation

- Subversion mind. 1.1.4 besser 1.2.3
  - Mit Python Bindings übersetzt.  
`./configure --with-swig=python`



# Voraussetzungen Installation

- ClearSilver mind. 0.9.3

```
./configure --with-  
python=/usr/bin/python
```

# Voraussetzungen Installation

- PySQLite for Python mind. 2.X für SQLite 3.X
  - pysqlite-2.0.8.tar.gz

# Voraussetzungen Installation

- `mod_python`
  - Mind. 3.1.3

# Voraussetzungen Installation

- Trac
  - Mind. 0.9.5 (0.9.4 ist auch noch Ok)
  - Ältere Releases sollten nicht mehr genutzt werden.

# Installation

- Es sollten zuerst die Komponenten installiert werden:
  - Python, Subversion, ClearSilver, PySQLite, mod\_python
  - Trac

# Einrichtung Projekt

- Einrichtung eines Projektes:
  - Einrichtung Subversion  
Repository
  - Trac Einrichtung
  - Apache Einrichtung (Optional)

# Einrichtung Projekt

- Einrichtung eines Projektes:

```
svnadmin create repos/ProjectName
```

```
trac-admin
```

```
envPath/ProjectName
```

```
initenv
```

# Einrichtung Projekt

- ***repos/ProjectName***
  - **ProjectName** ist das Verzeichnis, in den ein Subversion Repository für das Projekt angelegt wird.
  - z.B. repos = /usr/local/tracrepos



# Einrichtung Projekt

- **env/ProjectName**
  - ProjectName ist das Verzeichnis, in dem die Trac-Konfiguration für das Projekt angelegt wird.
  - z.B. env = /usr/local/tracenv

# Einrichtung Projekt

- *Einrichtung unter Apache*
  - Entweder in Form von CGI oder per mod\_python.
  - mod\_python ist schneller!

# Einrichtung Projekt

- *VHOST Apache Konfiguration*

```
DocumentRoot      env/ProjectName
```

```
<Location />
```

```
    SetHandler mod_python
```

```
    PythonHandler trac.web.modpython_frontend
```

```
    PythonOption TracEnv      env/ProjectName
```

```
    PythonOption TracUriRoot /
```

```
    PythonPath "sys.path + ['/usr/local/svnlib/svn-python']"
```

```
</Location>
```

# Einrichtung Projekt

- *Login*

```
<Location /login>
```

```
AuthType Basic
```

```
AuthName "JSVK Server"
```

```
AuthUserFile /usr/local/jsvk.pass
```

```
Require valid-user
```

```
PythonPath "sys.path + ['/usr/local/svnlib/svn-python']"
```

```
</Location>
```

# Startseite / Wiki

 Search

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## Welcome to Trac 0.9.4

Trac is a **minimalistic** approach to **web-based** management of **software projects**. Its goal is to simplify effective tracking and handling of software issues, enhancements and overall progress.

All aspects of Trac have been designed with the single goal to **help developers write great software** while **staying out of the way** and imposing as little as possible on a team's established process and culture.

As all Wiki pages, this page is editable, this means that you can modify the contents of this page simply by using your web-browser. Simply click on the "Edit this page" link at the bottom of the page. [WikiFormatting](#) will give you a detailed description of available Wiki formatting commands.

"[trac-admin yourenvdir initenv](#)" created a new Trac environment, containing a default set of wiki pages and some sample data. This newly created environment also contains [documentation](#) to help you get started with your project.

You can use [trac-admin](#) to configure [Trac](#) to better fit your project, especially in regard to *components*, *versions* and *milestones*.

[TracGuide](#) is a good place to start.

Enjoy!  
The Trac Team

## Starting Points

- ◆ [TracGuide](#) -- Built-in Documentation
- ◆ [The Trac project](#) -- Trac Open Source Project
- ◆ [Trac FAQ](#) -- Frequently Asked Questions
- ◆ [TracSupport](#) -- Trac Support

For a complete list of local wiki pages, see [TitleIndex](#).

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# Wiki Formatierungen

- Formatierungen
  - bold, italic, bold italic, underline, monospace, strike-through, superscript, subscript.
- Überschriften in drei Ebenen, Paragraphen

# Wiki Formatierungen

- Listen
  - geordnete und ungeordnete Listen.
- Definitionslisten
- Vorformatierter Text
- Blockquotes, Tabellen
- Links

# Berechtigungssystem

- Es ist möglich für verschiedene Nutzer unterschiedliche Rechte zu vergeben.
- Anzeige:  
`trac-admin ProjectName permission list`



# Berechtigungssystem

- Anlegen von Seiten im Wiki

```
trac-admin ProjectName permission add  
  userName WIKI_CREATE
```

- Übersicht über die Möglichkeiten

```
trac-admin ProjectName help
```

# Berechtigungssystem

- Anlegen von Rollen in Trac

```
trac-admin ProjectName permission add Role WIKI_ADMIN
```

```
trac-admin ProjectName permission add Role REPORT_ADMIN
```

```
trac-admin ProjectName permission add ADMIN TRAC_ADMIN
```

```
trac-admin ProjectName permission add bob Role
```

```
trac-admin ProjectName permission add john Role
```

```
trac-admin ProjectName permission add manager ADMIN
```

# Berechtigung Wiki

logged in as manager | [Logout](#) | [Settings](#) | [Help/Guide](#) | [About Trac](#)

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# Besonderheiten im Wiki

- Verknüpfungen in alle Bereiche (Trac-Links)
  - Milestones
  - Attachments
  - Dateien / Verzeichnissen / Change-Sets im Repository

# Wiki: Milestone

 Search

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## 26. March 2006 [antSVK 0.0.10 \(Gamma\) Release](#)

- ◆ [List of fixed Bugs](#)

## 21. Dec 2005 [antSVK 0.0.9 \(Gamma\) Release](#)

- ◆ Started testsuite. Currently not working.
- ◆ Fixed build file.
- ◆ added bz2 format for distribution
- ◆ Fixed [ChangeLog](#)
- ◆ Changed creation of the manifest file.
- ◆ svk copy command
  - enhanced doc
  - fixed options of command.
- ◆ svk mkdir, svk move added.
- ◆ Enhanced example.xml file.

## 09. Dec 2005 [antSVK 0.0.8 \(Gamma\) Release](#)

- ◆ svk list, svk log added
- ◆ improved example.xml file.
- ◆ enhanced overview.

## 06. Dec 2005 antSVK 0.0.7 (Gamma) Release

- ◆ Fixed Bug in Build file for the usage of the `${build.dir}` instead of `${dist.jar.classes.dir}` so no test would run.
- ◆ svk mirror, svk status command
- ◆ svk copy added
- ◆ Improved documentations

# Wiki: Milestone

 Search

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Wiki | Timeline | **Roadmap** | Browse Source | View Tickets | Search

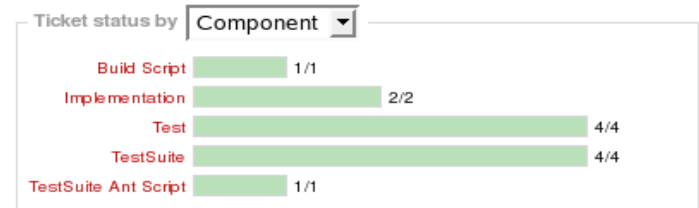
## Milestone Release 0.0.10

Completed 3 months ago (03/26/06 18:17:55)



Closed tickets: **12** Active tickets: **0**

- First complete working testsuite shell script This will do local checkins and local mirroring of repositories to test the commands in the Ant script.
- Fixed Bugs.



Note: See [TracRoadmap](#) for help on using the roadmap.



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# Roadmap

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## Roadmap

### Milestone: **Release 0.0.11**

*No date set*



Closed tickets: **3**   Active tickets: **6**

Show already completed milestones

### Milestone: **Release 0.0.12**

*No date set*

Note: See [TracRoadmap](#) for help on using the roadmap.

Download in other formats:



# Tickets

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[Available Reports](#) | [Custom Query](#)

## Custom Query (6 matches)

Filters

Status  new  assigned  reopened  closed

Milestone

Add filter

Group results by   descending  Show full description under each result

Ticket	Summary	Status	Owner	Type	Priority ▲	Component
7	svk delete	new	kama	task	major	Test
8	svk depotmap	new	kama	task	major	Test
9	svk describe	new	kama	task	major	Test
10	svk diff	new	kama	task	major	Test
11	svk import	new	kama	task	major	Test
32	Running on Win32 / Unix etc.	new	kama	task	major	Test

Note: See [TracQuery](#) for help on using queries.



# Ticket Changes

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## Ticket #29 (defect)

**Running on Win32** Opened 3 months ago  
Last modified 3 months ago

Status: **closed** (*fixed*)

---

Reported by:	Aban Browaeys	Assigned to:	kama
Priority:	major	Milestone:	Release 0.0.11
Component:	Implementation	Version:	0.0.11
Keywords:	Cc:		

---

- ◆ The problem ist that on Win32 the exec task needs (**svn.bat** or **svn.cmd**) to work.
- ◆ It has to checked the OS and make a decision to run.
- ◆ Searching for a more elegant way to do.

## Change History

03/29/06 18:48:45: Modified by kama

---

- **status** changed from *new* to *closed*.
- **resolution** set to *fixed*.

...

# Subversion Browser

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	Wiki	Timeline	Roadmap	<b>Browse Source</b>	View Tickets	Search
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[Revision Log](#)

root / **antsvk**

View revision:

Name ▲	Size	Rev	Age	Last Change
../				
<a href="#">branches</a>		3	7 months	anonymous: - Repos layout
<a href="#">tags</a>		3	7 months	anonymous: - Repos layout
<a href="#">trunk</a>		149	4 months	anonymous: r1351@wanderer: kama   2006-02-15 18:04:25 +0100 - Update TeX Doku ...

Note: See [TracBrowser](#) for help on using the browser.

# Change Sets I

 Search

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[Wiki](#) | [Time line](#) | [Roadmap](#) | **[Browse Source](#)** | [View Tickets](#) | [Search](#)

[← Previous Changeset](#) | [Next Changeset →](#)

## Changeset 41

**Timestamp:** 12/10/05 14:28:54

**Author:** anonymous

**Message:**

r969@wanderer: kama | 2005-12-06 11:03:07 +0100  
- [ChangeLog](#) updated  
- [TODO](#) updated  
- Build file enhanced (svk copy)  
- enhanced doc  
- Changed coding of all Java files to unix  
- added example build file

**Files:** [antsvk/trunk \(previous\)](#)  
[antsvk/trunk/ChangeLog \(1 diff\)](#)  
[antsvk/trunk/TODO \(3 diffs\)](#)  
[antsvk/trunk/build.xml \(3 diffs\)](#)  
[antsvk/trunk/example.xml](#)  
[antsvk/trunk/overview.html \(2 diffs\)](#)  
[antsvk/trunk/src/com/soebes/antsvk/cli/SVKCommand.java \(1 diff\)](#)  
[antsvk/trunk/src/com/soebes/antsvk/cli/command/CheckoutCommand.java \(1 diff\)](#)  
[antsvk/trunk/src/com/soebes/antsvk/cli/command/CopyCommand.java](#)

View differences    
Show  lines around each change  
Ignore:  
 Blank lines  
 Case changes  
 White space changes

# Change Sets II

- antsvk/trunk/overview.ntml (2 diffs)
- antsvk/trunk/src/com/soebes/antsvk/cli/SVKCommand.java (1 diff)
- antsvk/trunk/src/com/soebes/antsvk/cli/command/CheckoutCommand.java (1 diff)
- antsvk/trunk/src/com/soebes/antsvk/cli/command/CopyCommand.java

Unmodified  Added  Removed  Modified  Copied  Moved

antsvk/trunk/ChangeLog		
r40	r41	
5	5	so no test would run.
6	6	* svk mirror, svk status command
	7	* svk copy added
7	8	* Improved documentations
	9	* Added Example build file (example.xml)
8	10	
9	11	05. Dec 2005 antSVK 0.0.6 (Gamma) Release

antsvk/trunk/TODO		
r38	r41	
7	7	- JavaDOC
8	8	- Add better testing
	9	- Copy Example.xml to dist area
	10	using replacements for major.minor and patchlevel information.
9	11	- Enhance functions
10	12	
11	13	X done (not much testing done.)
12		Y full release features
	14	R full release features
13	15	- started but not ready for use.
14	16	
...	...	
20	22	cmerge - Merge specific changes
21	23	X commit - Commit changes to depot

# Timeline

 Search

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Wiki | **Timeline** | Roadmap | Browse Source | View Tickets | Search

## Timeline

06/10/06:

- 11:36 [CamelCase](#) edited by trac
- 11:36 [RecentChanges](#) edited by trac
- 11:36 [SandBox](#) edited by trac
- 11:36 [TitleIndex](#) edited by trac
- 11:36 [TracAccessibility](#) edited by trac
- 11:36 [TracAdmin](#) edited by trac
- 11:36 [TracBackup](#) edited by trac
- 11:36 [TracBrowser](#) edited by trac
- 11:36 [TracCgi](#) edited by trac
- 11:36 [TracChangeset](#) edited by trac
- 11:36 [TracEnvironment](#) edited by trac
- 11:36 [TracFastCgi](#) edited by trac
- 11:36 [TracGuide](#) edited by trac
- 11:36 [TracImport](#) edited by trac
- 11:36 [TracIni](#) edited by trac
- 11:36 [TracInstall](#) edited by trac
- 11:36 [TracInterfaceCustomization](#) edited by trac
- 11:36 [TracLinks](#) edited by trac
- 11:36 [TracLogging](#) edited by trac
- 11:36 [TracModPython](#) edited by trac
- 11:36 [TracNotification](#) edited by trac
- 11:36 [TracPermissions](#) edited by trac
- 11:36 [TracPlugins](#) edited by trac

View changes from 06/23/06 and 30 days back.

- Milestones
- Ticket changes
- Repository checkins
- Wiki changes

Update

# Vorteile von Trac

- Integration aller Komponenten
  - Wiki, Roadmap, Ticket-System, Subversion Repository
- Einfache Nutzung

# Nachteile von Trac

- Die Installation ist nicht immer ganz einfach wg. der Anzahl der Komponenten.
- Keine vollständige RPC/SOAP Schnittstelle. Derzeit eine eingeschränkte Schnittstelle.

# Nachteile von Trac

- Die Einrichtung eines Projektes ist derzeit nur auf Kommandozeile möglich.
- Fehlende Nutzerverwaltung
  - User/Passwort derzeit nur per Apache möglich.



# Online Quellen I

- Homepage von Trac
  - <http://projects.edgewall.com/trac/>
- Trac Hacks Seite
  - <http://trac-hacks.org/>
- Handbuch zu Subversion
  - <http://svnbook.red-bean.com>
- Andere Clients / Bibliotheken etc.
  - <http://subversion.tigris.org/links.html>

# Online Quellen II

- Homepage von Subversion
  - <http://subversion.tigris.org>
- Andere Clients / Bibliotheken etc.
  - <http://subversion.tigris.org/links.html>
- Client für Linux
  - <http://www.twobarleycorns.net/tkcv.html>

# Online Quellen III

- Verteiltes Versionsmanagement
  - <http://svk.elixus.org>
- Subversion Forum
  - <http://www.svnforum.org>
- Forum über Software Konfigurations Management
  - <http://www.openbc.com/net/skm>

# Literatur I

- Programmieren unter Linux 2/2006  
„Einführung von Subversion in eine Arbeitsgruppe“ ([www.proglinux.org/de](http://www.proglinux.org/de))
- Software Developers Journal 3/2006  
„Umstieg von CVS auf Subversion“ ([www.sdjournal.org](http://www.sdjournal.org))

# Literatur II

- „SKM und Projektmanagement“ ([www.proglinux.org/de](http://www.proglinux.org/de))
- „Verteiltes Versionsmanagement mit SVK“ (FrOsCon 2006)

# Noch Fragen?

- Fragen?
  - [froscon@soebes.de](mailto:froscon@soebes.de)
- Vielen Dank für Ihre Aufmerksamkeit.