

OPEN-SOURCE PROJECT TOOLS FOR CORPORATE PROJECTS?

BERTRAND DELACRÉTAZ
CODECONSULT.CH
BDELACRETAZ@APACHE.ORG

ApacheCon
Europe 06

The logo for ApacheCon Europe 06 is located in the bottom right corner. It features the text "ApacheCon" in a white serif font, with "Europe 06" in a smaller white sans-serif font below it. To the left of the text is a stylized feather icon with a red and yellow gradient.

Can the corporate
world learn something
from successful Open
Source projects?

CAN WE SUCCEED?



Efficient communication is (obviously)
the key to successful teamwork...

OPEN SOURCE PROJECTS

timezones

cultures

english?

chaotic

egos

meetings?

no boss

divas

...many are **successful!**

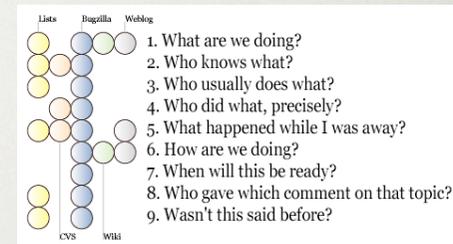
CORPORATE PROJECTS

- structure
 - rules
 - same office, same language
 - meetings!
 - the boss!
 - bullet points
- ...many **fail!**

WHY?

THE QUESTIONS

1. What are we doing?
2. Who knows what?
3. Who usually does what?
4. Who did what, precisely?
5. What happened while I was away?
6. How are we doing?
7. When will this be ready?
8. Who said what on that topic?
9. Wasn't this said before?



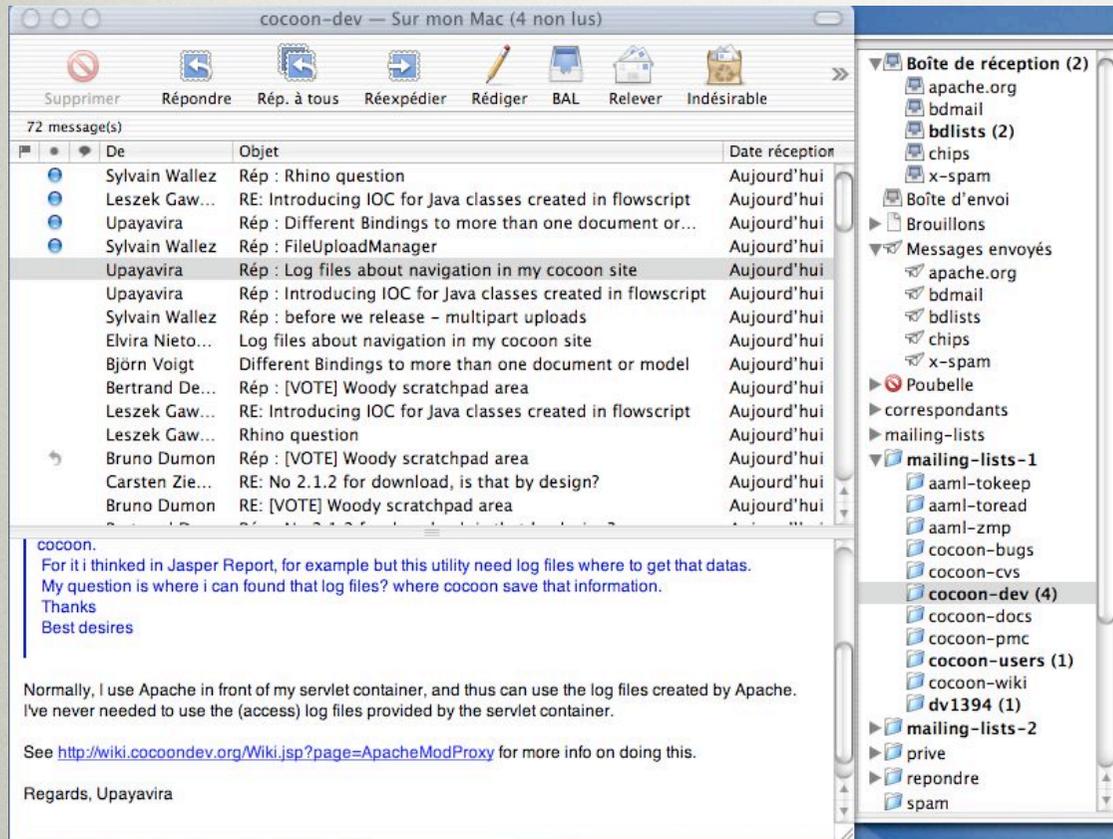
SELF-SERVICE



Team members need *self-service* answers.

THE TOOLS

MAILING LISTS AND ARCHIVES



The default
tool...

Not much
structure

Too much
information

Archives help

SOURCE CODE REPOSITORY

```
$ cvs log status.xml
1.156 (cziegele 25-Sep-03): Fixing release of Source in the
1.156 (cziegele 25-Sep-03): </action>
RCS file: /home/cvs/coc 1.154 (antonio 25-Sep-03): <action dev="AG" type="update">
Working file: status.xml 1.155 (antonio 25-Sep-03): Update lib commons-lang to 2.0,
head: 1.158 1.154 (antonio 25-Sep-03): </action>
----- 1.151 (sylvain 24-Sep-03): <action dev="SW" type="add">
revision 1.158 1.151 (sylvain 24-Sep-03): New event-handling system for Wo
date: 2003/09/28 05:01:05; author: a
Update status.xml
-----
revision 1.157
date: 2003/09/26 14:46:23; author: b
YAPT presentation tool sample added
-----
revision 1.156
date: 2003/09/25 16:57:44; author: c
<action dev="CZ" type="add" fixes-
services.com">
Fixing release of Source in the
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76
A quick refresher about
note: User view of these
slide: CVS
TODO screenshots: commi
slide: Bugzilla
img_rightHalf: bugzilla
Structured author and c
Simple workflow ("assign
Task history ("comments
Attachments
Powerful queries.
slide: Wiki
img_rightHalf: wiki-shc
Easy content creation.
Easy linking.
Fully open.
slide: Weblogs
```

Stores all
revisions of
all code

Traceable code,
differences

Log messages,
what changed

ISSUE TRACKER

Bug#: 86168 alias: _____
bz-template

Product: Bugzilla

Component: User Interface

Status: NEW

Resolution: _____

Assigned To: myk@mozilla.org (Myk Melez)

QA Contact: matyt-bugzilla@tpg.com.au

URL: <http://www.template-toolkit.org/>

Summary: Bugzilla should use template pages instead of hard-coded HTML

Status: _____

Whiteboard: _____

Keywords: meta

Hardware: All

OS: All

Version: 2.1.0

Priority: P1

Severity: normal

Target Milestone: Bugzilla 2.1.8

Reporter: kiko@async.com.br (Christian Reis)

Add CC: _____

CC: asd@suespammers.org
barnboy@trilobyte.net
bugzilla@chimpychompy.org
dkl@redhat.com
ezh@infonet.ee

Remove selected CCs

Flags: (Help!) Requestee:
approval

Attachment	Type	Created	Flags	Actions
Fix Makefile.PL of Template Toolkit 2.06	patch	2002-01-11 08:34:44	none	Edit
Create a New Attachment (proposed patch, testcase, etc.)				View All

Bug 86168 depends on: [80183](#) [98602](#) [98707](#) [103778](#) [103953](#) [110013](#) [124274](#) [170213](#) [190212](#) [80183](#), [98602](#), [98707](#), [103778](#), [103953](#), [110013](#), [124274](#), [170213](#), [190212](#) [Show dependency tree](#)
Bug 86168 blocks: [100089](#) [104690](#) [100089](#), [104690](#) [Show dependency graph](#)

Votes: 5 [Show votes for this bug](#) [Vote for this bug](#)

Additional Comments:

- Leave as NEW
 - Accept bug (change status to ASSIGNED)
 - Resolve bug, changing resolution to
 - Resolve bug, mark it as duplicate of bug #
 - Reassign bug to
 - Reassign bug to owner and QA contact of selected component
-

[View Bug Activity](#) | [Format For Printing](#)

[Description:](#)

Opened: 2001-06-15 16:24

One page per issue

History, decisions

Not only for bugs!

Powerful search and classification

Dependencies, critical paths

ISSUE DEPENDENCIES

Bugs that [bug 86168](#) depends on

([view as bug list](#))

- [80183 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - configurable index page (using Template Toolkit).
 - [37339 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - Bugzilla sidebar, containing info in footer.
 - [76484 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - Allow multiple QuickSearch forms in a single document.
- [98602 \[Bugzilla 2.16, myk@mozilla.org\]](#) - Templatize createattachment.cgi.
- [98707 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - query.cgi redesign/templatisation.
- [103778 \[Bugzilla 2.16, myk@mozilla.org\]](#) - templatize buglist.cgi.
- [103953 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - Templatise enter_bug.cgi.
- [110012 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - Spank show_bug.cgi hard - templatize and combine.
- [124274 \[Bugzilla 2.16, myk@mozilla.org\]](#) - RFE: make link names in "Actions" footer customizable.
 - [140435 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - Templatise GetCommandMenu.
- [170213 \[Bugzilla 2.18, gerv@mozilla.org\]](#) - Make all static HTML files into page.cgi pages.
- [190212 \[---, justdave@bugzilla.org\]](#) - Templatize all administrator-facing pages in Bugzilla.
 - [119485 \[Bugzilla 2.18, myk@mozilla.org\]](#) - Templatise editusers.cgi.
 - [92905 \[Bugzilla 2.16, bbaetz@acm.org\]](#) - editusers.cgi errors in apache errorlog: fetchrow failed.
 - [148147 \[Bugzilla 2.18, preed@sigkill.com\]](#) - Templatize whineatnews.pl.
 - [190196 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - editproducts.cgi needs templating.
 - [190220 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editcomponents.cgi.
 - [190222 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editgroups.cgi.
 - [190223 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editkeywords.cgi.
 - [190224 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editmilestones.cgi.
 - [190226 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editversions.cgi.

Answer “why is this not done?”

Show critical paths

PROJECT WIKI

Your trail: [Main](#) | [Generator](#) | [DevelopingComponents](#) | [Components](#)

WritingPipelineComponents

Writing Pipeline Components

This page describes common information needed to write generators, transformers and serializers.

Using the sitemap, you describe how pipelines should be assembled. The resulting pipeline always has the following structure: one generator, zero or more transformers, and one serializer. The only exception to this rule are readers, which implicitly combine the generation and serialization step and thus also prevent you from declaring transformation steps (within that pipeline). The generator could also be an aggregator, which is just a special type of generator.

These components (generator, transformer(s) and serializer) are put together in what is usually called a "SAX pipeline". In this pipeline, SAX events are propagated. SAX-events are events corresponding to what appears in an XML document: "start element", "characters" and "end element" being the most important. A generator will start generating SAX events. The transformer that follows the generator will receive these events and can react on them, producing new SAX-events itself. The SAX-events generated by the transformer will then be received by the next transformer, which will then again start generating new events, and so on. At the end, the SAX-events are consumed by the serializer which will convert the SAX-events to some binary stream. This could be an XML document, but also a HTML document, an image, or a PDF file. The following picture shows this concept.

```
graph LR; generator -- "SAX events" --> transformer1[transformer 1]; transformer1 -- "SAX events" --> transformer2[transformer 2]; transformer2 -- "SAX events" --> dots["..."]; dots -- "SAX events" --> serializer;
```

While Cocoon sets up the pipeline, it will assign a "consumer" to each generator and transformer. The consumer is where the SAX-events should be sent to, thus the next component in the pipeline. The consumer of the generator will be the first transformer, the consumer of the first transformer will be the second transformer, and so on. Finally the consumer of the last transformer will be the serializer. The serializer itself does not have a consumer, but an output stream to which it can write its bytes. All the consumers must implement the SAX "ContentHandler" interface. This interface contains methods for each of the SAX-events. The SAX-events are then propagated in the pipeline by calling ContentHandler-methods on the consumer (= the next component in the pipeline).

To give an idea of the different SAX-events, the ContentHandler interface is displayed here:

```
package org.xml.sax;

public interface ContentHandler
{
    public void setDocumentLocator (Locator locator);
    public void startDocument () throws SAXException;
    public void endDocument () throws SAXException;
    public void startPrefixMapping (String prefix, String uri) throws SAXException;
    public void endPrefixMapping (String prefix) throws SAXException;
    public void startElement (String namespaceURI, String localName,
        String qName, Attributes attrs) throws SAXException;
    public void endElement (String namespaceURI, String localName,
        String qName) throws SAXException;
    public void characters (char ch[], int start, int length) throws SAXException;
    public void ignorableWhitespace (char ch[], int start, int length) throws SAXException;
    public void processingInstruction (String target, String data) throws SAXException;
    public void skippedEntity (String name) throws SAXException;
}
```

Note that there is also another SAX event interface, the LexicalHandler. That interface is used to pass on less

[XML](#)

Collaborative editing

Traceable writing

Centralized content

Potentially chaotic

PROJECT BLOG

Inside Firefox

The Inside Track on Firefox Development.

< The "Joy" of XUL? | [Main](#) | [Code for the Wise](#) >

May 08, 2006

Feed Content Now Visible

Today's nightly builds now show some basic entry content for feed entries:

NYT > Home Page - Mincfield

http://www.nytimes.com/services/xml/rss/nyt/HomePage.xml

Inside Firefox - The Inside Track on Fire... NYT > Home Page

This is a "feed" of frequently changing content on this site. You can subscribe to this feed to receive updates when this content changes.

[Choose a Feed Reader](#) to subscribe to this feed.

NYT > Home Page The New York Times

New York Times > Breaking News, World News & Multimedia

[Bush Names C.I.A. Pick Over Objections](#)

President Bush said Gen. Michael V. Hayden would bring "vast experience" to the C.I.A. after senior Republicans voiced concerns.

[Iranian President Writes Letter to Bush](#)

The letter would be the first in 27 years from an Iranian leader to an American president.

[Wachovia to Acquire Golden West Bank for \\$26 Billion](#)

The deal gives Wachovia an important foothold in California and along the West Coast.

[Funds Out, Gaza Faces a Plague of Health Woes](#)

Curbs on Hamas have saddled the Palestinian medical system with crippling shortages.

[Rove Is Using Threat of Loss to Stir Republicans](#)

Done

After a2 I'm going to go through and make some more UI changes (see [Mike Beltzner's post](#) to dev.apps.firefox for more info) but this is a good start.

Thanks to Robert Sayre for writing the new [Feed Processor](#) which provides a

Chronological posts, news, articles

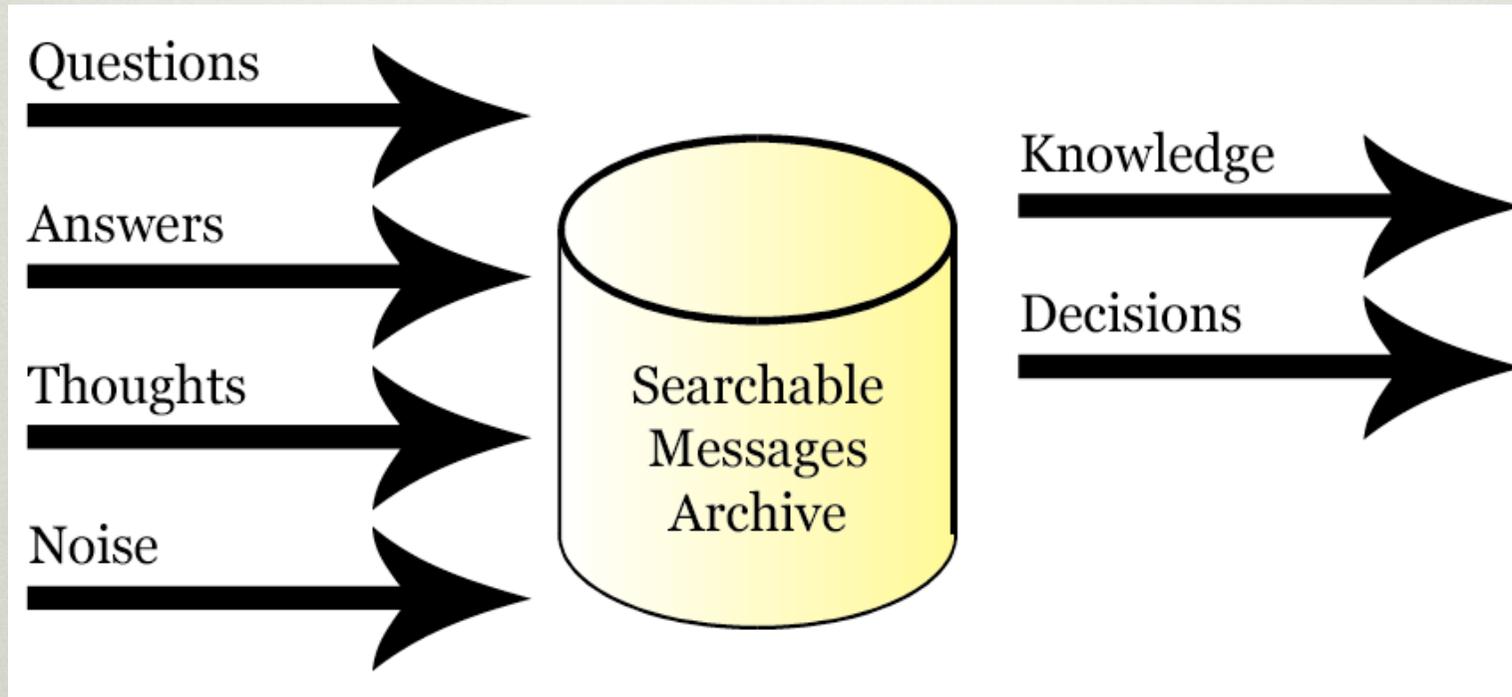
Categories, search

Central source of news, gossip, stories

RSS feeds, broadcasting

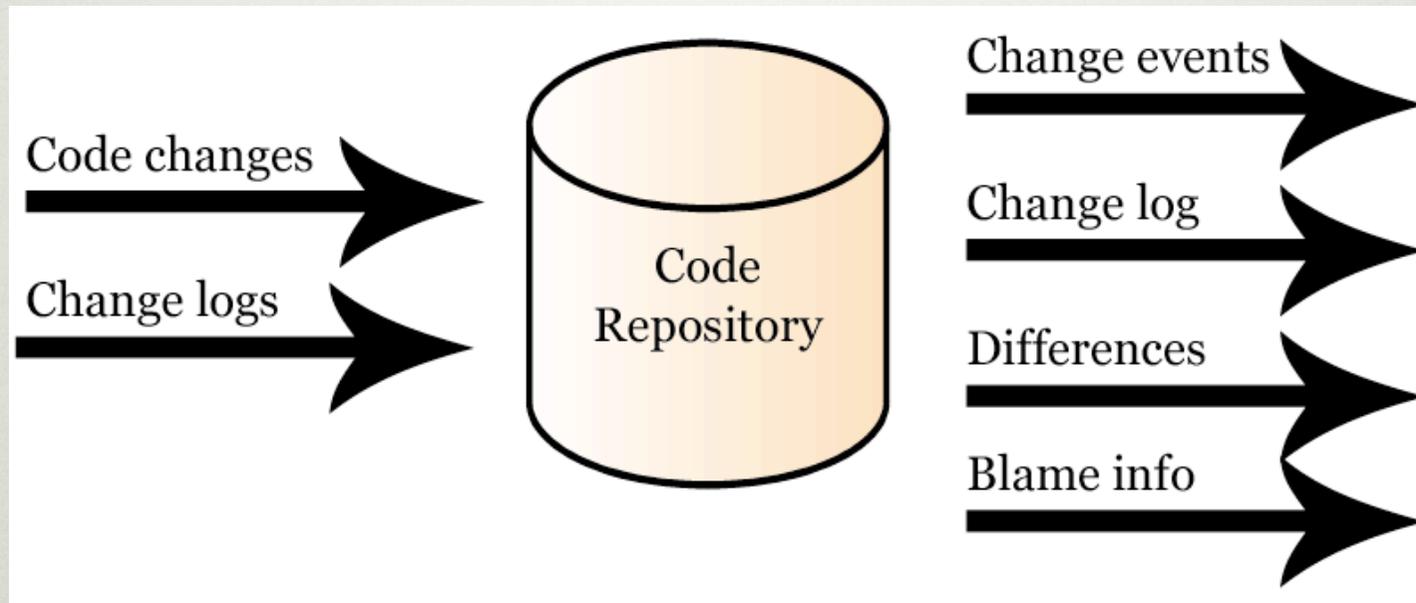
WHAT DOES
EACH TOOL BRING?

MAILING LISTS AND ARCHIVES



Lists require *lots* of discipline to be useful.
Searching is often hard.

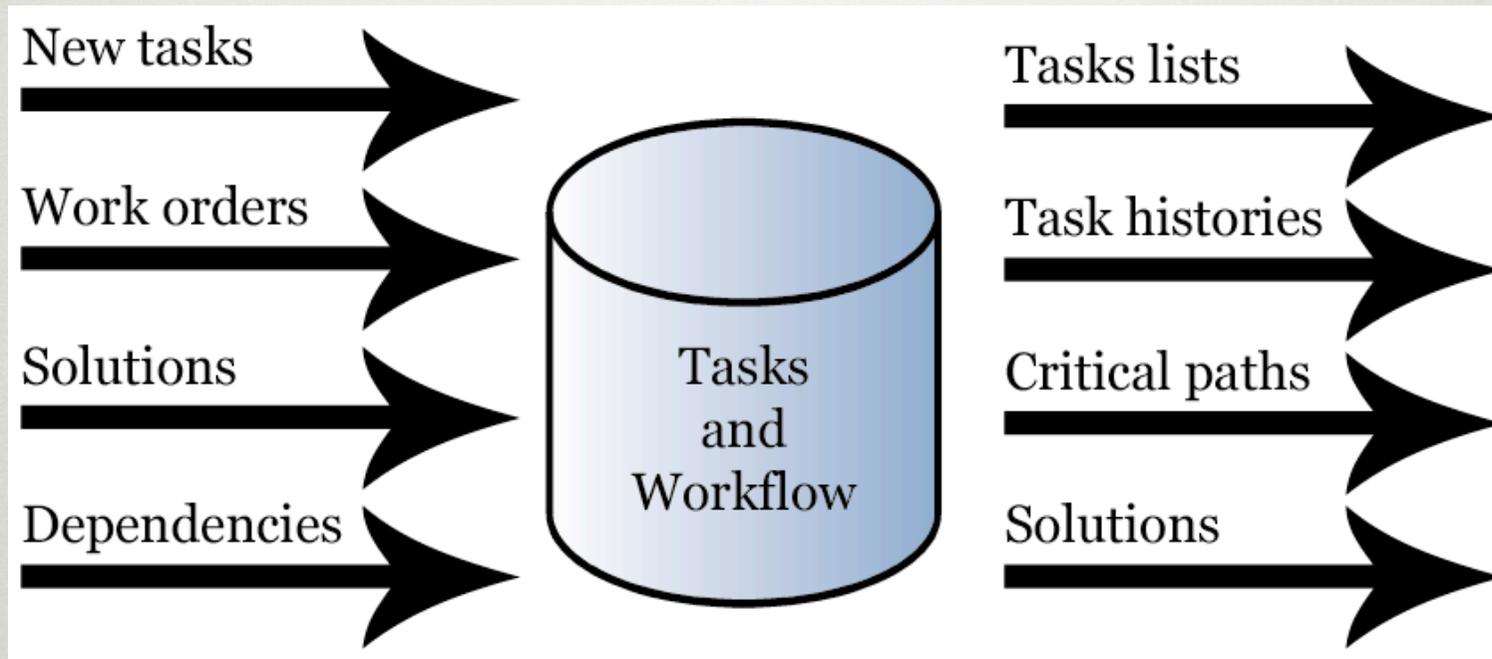
SOURCE CODE REPOSITORY



Adds a lot of value to simple checkout
and commit operations.

Tells the story of the code in detail.

ISSUE TRACKER

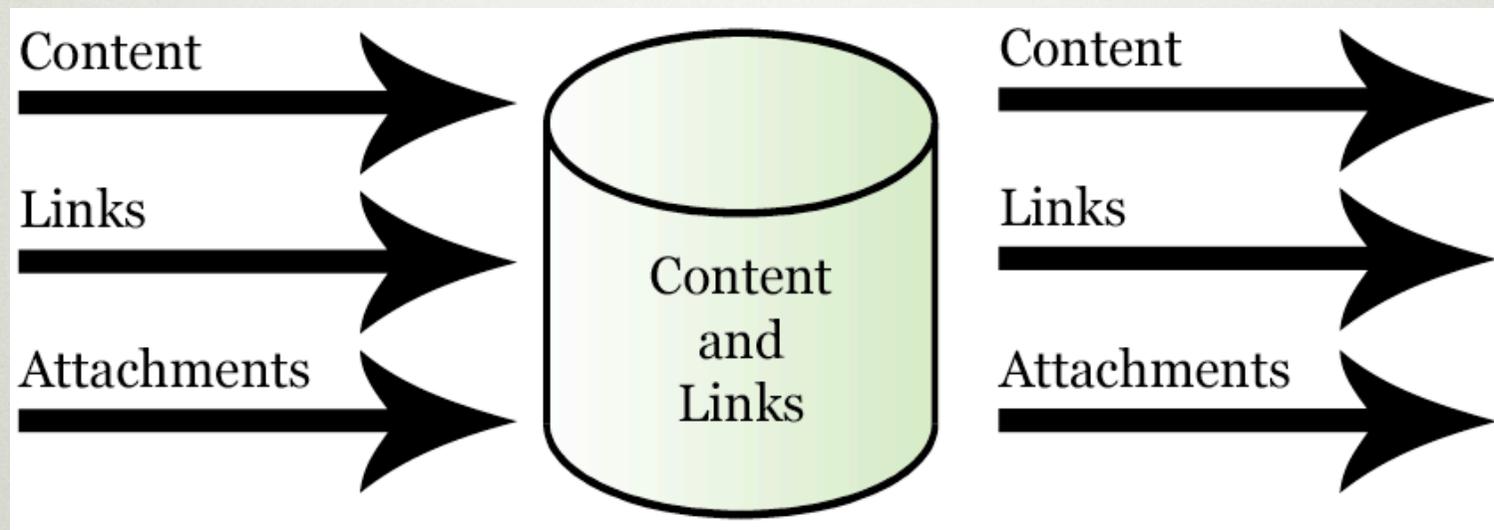


Structuring and classification add a lot of value.

Gives each issue a unique ID.

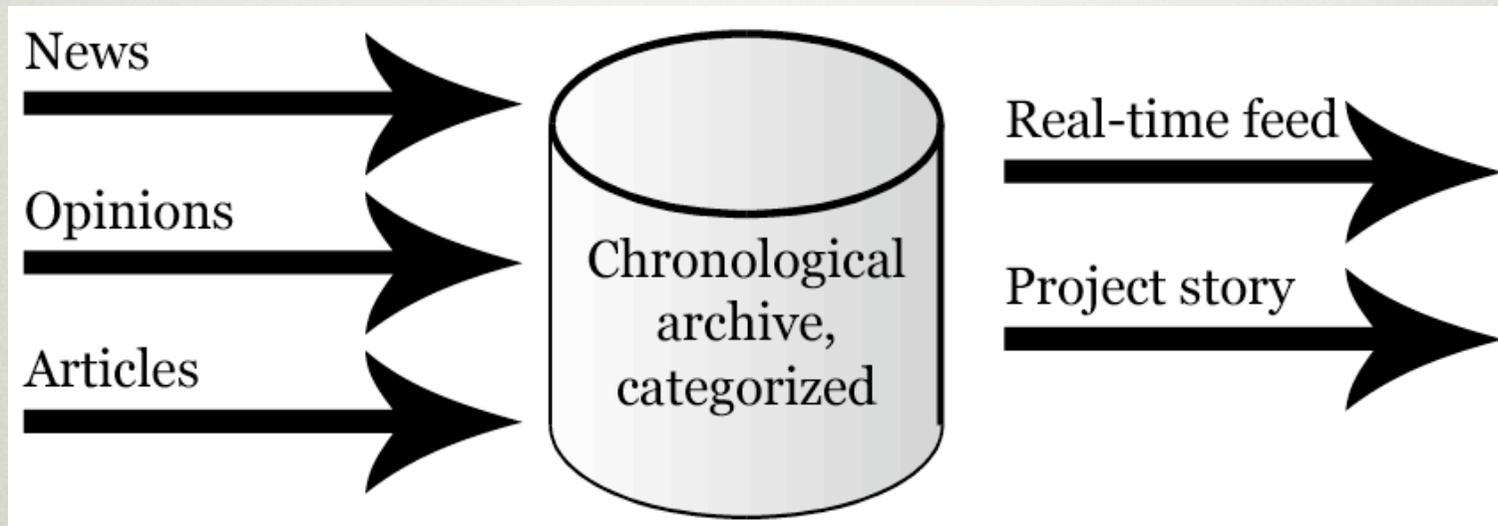
Very detailed story of the project, knowledge base.

PROJECT WIKI



Does not add much value to the content.
Needs discipline to stay useful.
Strong linking features.

PROJECT BLOG



The best way to disseminate news.

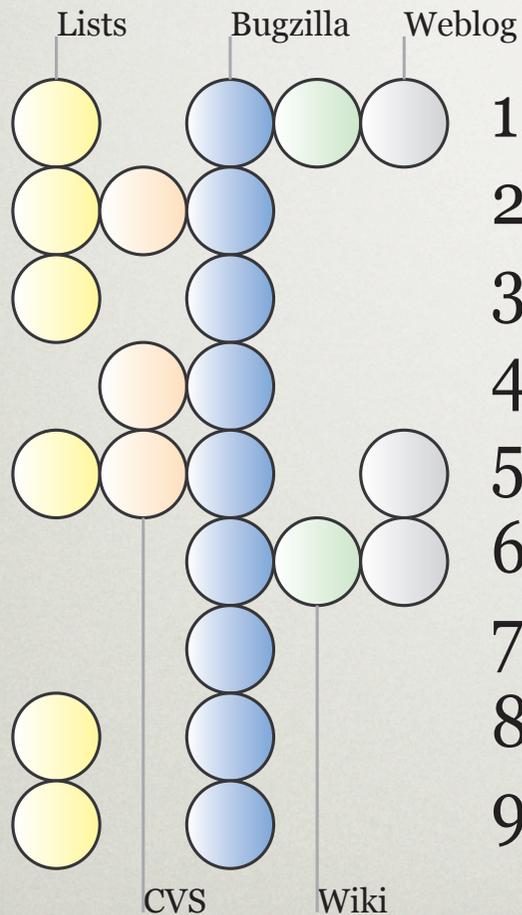
Celebrate milestones.

Leave space for Random Thoughts.

Does your customer subscribe?

ANSWERS?

ANSWERS



1. What are we doing?
2. Who knows what?
3. Who usually does what?
4. Who did what, precisely?
5. What happened while I was away?
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7. When will this be ready?
8. Who said what on that topic?
9. Wasn't this said before?

EXAMPLES

Apache HTTP Server

Mozilla, Firefox

Linux

Open Office

etc., etc...

Using *public* instances of these tools...

COUNTER-EXAMPLES

Let's have a show of hands...

WHAT NOW?

START SMALL...

```
$ cvs log status.xml 1.156 (cziegele 25-Sep-03): Fixing release of Source in the
1.156 (cziegele 25-Sep-03): </action>
RCS file: /home/cvs/co 1.154 (antonio 25-Sep-03): <action dev="AG" type="update">
Working file: status.x 1.155 (antonio 25-Sep-03): Update lib commons-lang to 2.0,
head: 1.158 1.154 (antonio 25-Sep-03): </action>
----- 1.151 (sylvain 24-Sep-03): <action dev="SW" type="add">
revision 1.158 1.151 (sylvain 24-Sep-03): New event-handling system for Wo
date: 2003/09/28 05:01:05; author: a
Update status.xml
|lide: Part One: Tools 46 49
|int-style: LittleText 47 50
| 48 51 note: User view of the
| 49 52 slide: CVS
| quick refresher about CVS. 50 53
| 51 54 TODD screenshots: comm
| note: User view of these toc 52 55
| 53 56 slide: Bugzilla
|lide: CVS 54 57
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| 57 60 Structured author and c
|lide: Bugzilla 58 61
| 59 62 Simple workflow ("assig
| 60 screenshots: task lists 60 63
| 61 64 Task history ("comments
|lide: Wiki 62 65
| 63 66 Attachments
| 64 67
| 65 68 Powerful queries.
| 66 69
|lide: Weblogs 67 70
| 68 71 slide: Wiki
| 69 72 ing_rightHalf: wiki-shc
| 70 screenshots: stories, 70 73
| 71 74 Easy content creation.
| 72 75
|lide: Part Two: analysis 71 74
|int-style: LittleText 72 75
| 73 76 Easy linking.
| 74 77 Fully open.
| 75 78
| 76 79 slide: Weblog
| mat does each tool bring? 76 79
```

A source code repository and issue tracker bring the most value.

Bugs that bug 86168 depends on

([view as bug list](#))

- [80183 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - configurable index page (using Template Toolkit).
 - [37339 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - Bugzilla sidebar, containing info in footer.
 - [76484 \[Bugzilla 2.16, jake@bugzilla.org\]](#) - Allow multiple QuickSearch forms in a single document.
- [98602 \[Bugzilla 2.16, myk@mozilla.org\]](#) - Templatize createattachment.cgi.
- [98707 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - query.cgi redesign/templatisation.
- [103778 \[Bugzilla 2.16, myk@mozilla.org\]](#) - templatize buglist.cgi.
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- [110012 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - Spank show_bug.cgi hard - templatize and combine.
- [124274 \[Bugzilla 2.16, myk@mozilla.org\]](#) - RFE: make link names in "Actions" footer customizable.
 - [140435 \[Bugzilla 2.16, gerv@mozilla.org\]](#) - Templatise GetCommandMenu.
- [170213 \[Bugzilla 2.18, gerv@mozilla.org\]](#) - Make all static HTML files into page.cgi pages.
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 - [92905 \[Bugzilla 2.16, bbactz@acm.org\]](#) - editusers.cgi errors in apache errorlog: fetchrow_ failed.
 - [148147 \[Bugzilla 2.18, preed@sigkill.com\]](#) - Templatize whineatnews.pl.
 - [190196 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - editproducts.cgi needs templating.
 - [190220 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editcomponents.cgi.
 - [190222 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editgroups.cgi.
 - [190223 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editkeywords.cgi.
 - [190224 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editmilestones.cgi.
 - [190226 \[Bugzilla 2.18, justdave@bugzilla.org\]](#) - templatize editversions.cgi.

THE RULES

If you're working on something,
it *must* be an issue from our tracker.

If something's not in the source
code repository, it *doesn't exist*.

CODA

CONCLUSIONS

These tools work!
Self-service answers are the key.
You can start small.
Don't forget *openness*.

LINKS

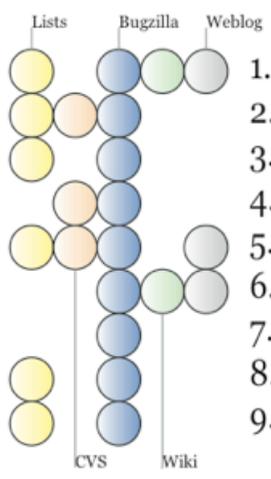
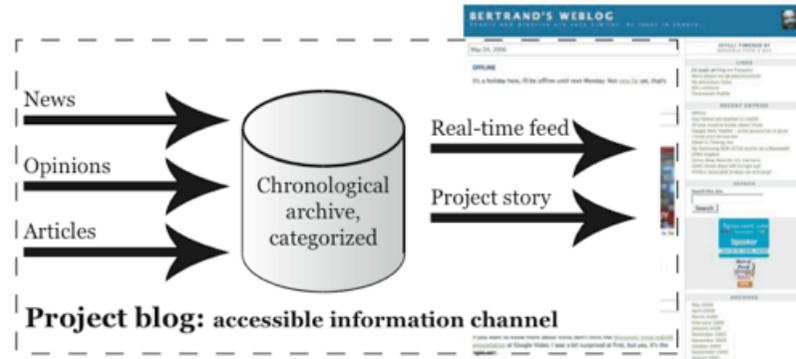
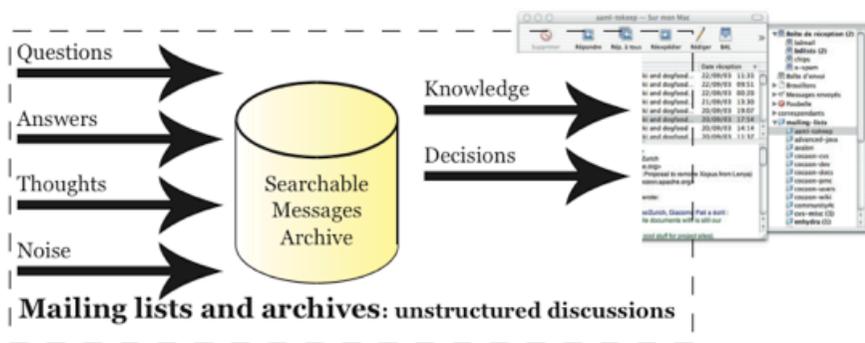
<http://www.bugzilla.org/>

<http://www.atlassian.com/software/jira/>

<http://www.nongnu.org/cvs/>

<http://subversion.tigris.org/>

<http://www.ezmlm.org/>



1. What are we doing?
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7. When will this be ready?
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9. Wasn't this said before?

Open Source project tools for corporate projects?

ApacheCon Europe 06
Bertrand Delacrétaiz
www.codeconsult.ch

