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#####

Karl Fogel

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**#####: #####**

by Karl Fogel

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# Dedication

#####Karen Underhill#Jim Blandy#

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#####	71
####	71
#####	71
####	72
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#####	75
####	76
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---

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---

##

#####

#####“#####—##linux#”#####”#####”#####  
#####“#####”#####  
#####

#####<sup>1</sup>#####—#####—#####  
#####“#####”

#####  
#####  
#####“##”#####/#####  
#####—###—#####  
#####

#####  
#####  
#####

#####  
#####

#####

#####  
###

#####

#####  
#####

####

#####Subversion###http://subversion.tigris.org/#####Subversion#####  
####CVS#####CollabNet###http://www.collab.net/##2000#####Col-  
laNet#####50#####CollabNet#  
###

#####Subversion#####  
#####Subversion#####  
#####Subversion#####50%#  
#####50%#####

####5#####Subversion#####12#####

- #####(Free Software Foundation)#GNU Emacs#####

---

<sup>1</sup>##“##”#“####”#####Chapter 1, ####the section called ““##”##“##””#



- Concurrent Versions System (CVS)#####1994–1995###Jim Blandy#####  
#####
- Apache#####Apache Software Foundation#####Apache#####Apache Portable Run-  
time (APR)#Apache HTTP####
- OpenOffice.org #####Sleepycat#####Berkeley Database#####MySQL#####  
#####
- GNU Debugger(GDB)#####
- Debian#####

#####  
#####

##

#####  
#####

#####O'Reilly####Andy Oram#####  
#####Andy#####Chuck Toporek#####Andy#

Brian Fitzpatrick#####Brian####  
###Ben Collins-Sussman#Mike Pilato#####  
#####

#####Biella Coleman#####  
#####Alex Golub#####  
#####

Micah Anderson#####  
#####Micah#

Jon Trowbridge#Sander Striker#####—#####

####Greg Stein#####Subversion#####  
Brian Behlendorf#####

##Benjamin “Mako” Hill#Seth Schoen#####Zack Urlocker#Louis Suarez-  
Potts#####Slashcode####Shane#####Haggen So##### #

##Alla Dekhtyar#Polina##Sonya#####“#  
##”#

##Jack Repenning#####  
#####

#####CollabNet#####  
#####Sandhya Klute####Mahesh Murthy#####—#####

##Subversion#####  
#####Subversion#####—#####

#####Rachel Scollon#####—###

#####Noel Taylor#####Noel#####Golosá#####  
#####Matthew Dean#Dorothea Samtleben#####  
#####Megan Jennings##### —#####  
#####

#####Yoav Shapira#Andrew Stellman#Dayanum Srinivas#Ben Hyde#####  
#####

####Frances#Henry#####

#####Karen Underhill#Jim Blandy#####Karen#####  
#####Jim#####Jim#####

**####**

#####CollabNet##Subversion#####

---

# Chapter 1. ##

```
#####

#####1#####
#####
#####6#####
#####

#####SourceForge.net###Google#####
#####90–95%#####/#####
#####

#####
#####
#####

#####
#####
#####

#####/#####
Jamie Zawinski##Mozilla#####

#####"#####"#####
#####

###http://www.jwz.org/gruntle/nomo.html#

#####
#####
#####
#####
## Chapter 2, #####

#####—#####—#####
#####//#####
#####

#####“#####”#####
#####—#####—#####
#####
#####

#####—#####
#####
```

---

<sup>1</sup>SourceForge.net#####2004#4#####79225#####SourceForge#####

## ##

#####  
#####  
#####

##### — #####  
#####  
#####  
#####

#####  
#####  
#####  
#####

## #####

##### — #####“##”###  
#####“##”#####  
#####  
#####

#####“###”#####  
#####  
#####

## #####

#####.#####Richard Stallman##70###80#####  
#####“###”#<sup>2</sup>#####

#####“###”#####  
#####

###<http://www.gnu.org/gnu/thegnuproject.html>#

1980#####  
#####

#####

#####VAX#68020#####

#####“#####”  
#####

#####  
#####GNU#####FSF###GNU<sup>3</sup>#####  
#####

#####GNU#####GPL#####  
#####

<sup>2</sup>#####“##”###“#####”#####“#####”

<sup>3</sup>“GNU's Not Unix”#####GNU#####

#####  
##### —#####GPL#####  
#####GPL#####GPL#####Chapter 9, #####

#####GNU#####  
#####GNU#####GNU#####Emacs##C####GCC#####  
#####1990#GNU##### —#####  
#####

#####GNU#####  
###Linux Torvalds#####Linux#####GNU#####  
#####<sup>4</sup>

#####GNU#####GNU#####NetBSD#FreeBSD#####  
#####  
#####GPL#####  
#####

## ####

#####GNU#####Berkeley Software  
Distribution#BSD##Unix##### —#####1970###AT&T#####  
##BSD#####Unix#####  
#####/#####BSD#####

#####X Window System###MIT#####80#####  
#####X##### —#####X#####X Windows<sup>5</sup>####  
#####GNU#####TeX#Donald Knuth####  
#####"TeX"#####“####”#####  
#Chapter 9, #####Knuth#####  
—##### —#####

#####1980#####GNU GPL  
#####GNU#####“#  
##”#####  
#####bug#####  
#####

#####  
#####

#####  
#####IT#####  
#####/  
#####

## “##”##“##”

#####“##”#####“####”#free software####free#####  
#####“####”#####<sup>6</sup> #####1990#####

<sup>4</sup>#####Linux#####Linux#####IBM#####386BSD###386BSD#####Linux#####  
#####

<sup>5</sup>#####“X Windows System”#####“X Windows”#####

<sup>6</sup>#####

#####“###”#####<sup>7</sup>#####  
#####

#####“##”#“##”#####*gratis#libre*#####  
#####  
#####“It’s *free* as in *freedom*—think *free speech*, not *free beer*”#####  
#####

#####free#####  
#####“free as in freedom”#####  
#####

#####  
#####  
#####  
#####

#####1998#####Open  
Source Initiative#OSI#<sup>8</sup>#####“##”#OSI#“####”#####“##”#####  
#####

##### ...

#####“###”##

#####“###”##### ...

#####  
#####

#####CEO#CTO#####“##”#  
#####

#####

#####

###<http://opensource.feratech.com/advocacy/faq.php>[http://opensource.feratech.com/advocacy/case\\_for\\_hackers.php](http://opensource.feratech.com/advocacy/case_for_hackers.php)#marketing#

#####“#####”#####  
#####“#”#####—#####  
#####

#####OSI#####OSI#####“#”##“##  
#####”#####—#####

#####  
#####—#####“###”#####/##  
#####  
#####Debian#####100%#####  
#####

<sup>7</sup>##Navigator#####1998#####Mozilla#####<http://www.mozilla.org/#>

<sup>8</sup>OSI##<http://www.opensource.org/#>

##

#####  
#####“#####”##### — #####  
#####/#####

#####  
#####  
#####  
#####

#####/#####  
#####

#####

#####Chapter 5, #  
#####  
#####

# Chapter 2. ##

```
#####Eric Raymond#####  
  
#####  
  
###http://www.catb.org/~esr/writings/cathedral-bazaar/#  
  
##Raymond#####  
#####  
  
#####1997#Raymond#####——#####  
#####  
  
##Raymond#####  
#####OpenAdapter###http://www.openadapter.org/#####investment bank Dresd-  
ner Kleinwort Wasserstein#####  
#####  
#####  
  
#####  
#####“#”#  
  
#####  
#####  
#####  
  
#####  
#####  
  
#####  
##——#####  
#####  
#####  
  
#####  
#####  
#####“#####”#####
```

#####

```
#####  
#####  
#####  
#####  
#####http://freshmeat.net/#####  
#####http://www.sourceforge.net/#####http://directory.fsf.org/#  
#####
```

#####

#####



#####

#####  
##### — #####/### — #####  
#####

##### — #####“##”#####  
#####README#####  
#####  
#####

#####  
#####  
#####

###/#####  
/#####

#####  
#####

## #####

#####

##### — #####/#####  
#####

#####

- #####
- #####“####”####“#####”#####  
#####
- #####  
#####  
  
###the section called “#####”#####http://www.name-protect.org/#http://www.uspto.gov/#
- #####.com#.net###.org#####.org#####  
#####the section called “#####”#####  
#####URL#####

## #####

#####30#####  
#####

#####http://www.openoffice.org/#

#####API#XML#####  
#####

#####“#####”#####“###”####  
#####“#####”#####Unix#####

#####Office#####  
#####“#####”#####Office#####  
#####  
  
#####OpenOffice.org##”#####”#####  
###Sun Microsystems#####”#####”#####Sun#####  
#####  
#####

## #####

#####  
  
#####  
#####  
#####  
  
#####“#####”##“#####”#####  
#####the section called “#####”#####Chapter 9, #####  
  
#####—#####—#####5#####5#####

## #####

#####/#####  
#####/#####  
  
#####API#####  
  
#####  
  
###  
  
• #####HTML#XML##  
  
• #####  
  
• #####  
  
• #####  
  
• #####  
  
###  
  
• Python 2.2####  
  
• #####2##  
  
#####

## ####

#####Bug###  
#####  
  
#####  
#####“##”#####

#####`#####Bug#alpha####  
#####`#####  
#####Bug#####  
#####

### Alpha#Beta

##alpha#####Bug#####Alpha####  
#####beta#####Bug#####  
##Beta#####Bug#####Alpha#Be-  
ta#####

## ##

#####  
## #####

#####  
#####

#####“#####  
#####”#####—#####  
#####  
#####

#####

#####  
#the section called “###”#####the section called “##”##Chapter 7, #####

## #####Bug####

#####bug#####  
#####  
#####Chapter 3, #####  
#the section called “###”#

#####Bug#####Bug#####  
Bug#####Bug#####Bug#####  
#####Bug#####Bug#####  
#####Bug#####Bug#####Bug#####  
bug#####bug#####Bug#####Bug#####

#####Bug#####Bug#####bug#####  
#####Bug#####

###Bug#####Bug#####Bug#####Chapter 3,  
#####the section called “Bug#”#####Bug#####

## ####

#####IRC#####  
#####  
#####

#####“#####”#####  
#####  
#####

#####Chapter 6, ####the section called “#####”#####  
#####

## #####

#####

#####Chapter 4, #####the section called “#####”#####

- #####
- ##Bug#####
- #####—#####

##“##”#####  
#####

#####<http://svn.collab.net/repos/svn/trunk/www/hacking.html>#####  
#[http://www.openoffice.org/dev\\_docs/guidelines.html](http://www.openoffice.org/dev_docs/guidelines.html)#

#####the section called “#####”###

## ##

#####“###”#####  
#####—#####

#####  
#####—#####

#####HTML####Texinfo###XML  
###—#####

#####

- #####
- #####  
#####
- #####//#####  
###—#####...
- #####  
#####—#####

#####  
#####Bug#####  
#####—#####

**##FAQ**

##FAQ#“#####”#####FAQ##### —#####  
 #—#####FAQ#####FAQ#####  
 #####

#####FAQ###FAQ#####  
 #####FAQ#

#####FAQ#####  
 #####FAQ##### ####FAQ#####Chapter 8, #####the  
 section called “FAQ###”#####

**#####**

#####Chapter 7, #####the section called “##”#####  
 #####

#####"monolithic"#"all-in-one"#"single large page"#####  
 ####HTML#####  
 #####  
 #####

**####**

#####  
 #####http://svn.collab.net/repos/svn/trunk/www/hacking.html#####

#####  
 #####  
 #####

#####  
 #####

#####wiki#####Chapter  
 3, #####the section called “Wikis”#

**#####**

#####  
 #####bug#####  
 #####

**####**

#####Gimp#http://www.gimp.org/####File->Ac-  
 quire->Screenshot####Single Window# Whole Screen#### OK#####  
 Gimp#####http://www.gimp.org/tutorials/Lite\_Quickies/#crop#

#####  
 #####

####

#####web#####bug#####  
#####

Chapter 3, #####the section called “####”#####

#####

#####Chapter 9, #####  
####

#####  
#####

“#####”###

#####MIT/X-#####  
#####the section called “MIT / X Window System License”#

GPL

#####GNU#####GPL#####  
#####Chapter 9, #####the section called “GNU General Public License”#

#####

#####

#####COPYING##LI-  
CENSE#####

#####GNU#GPL#####

Copyright (C) <year> <name of author>

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it under the terms of the GNU General Public License as published by  
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(at your option) any later version.

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GNU General Public License for more details.

You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

#####COPYING#####  
#####  
#####



## #####

#####  
### ##### — #####  
#####  
  
#####  
#####  
#####“###”#####  
#####  
  
#####J#####“#####”#####  
#####J#####Bug#####M##J#####  
#####  
  
#####M#####...

#####  
— #####“#####”#####  
#####  
#####  
#####  
  
#####“###”#####  
#####  
#####

## #####

##### — #####the section called “###  
#”#####the section called “#####”###diff#####  
#####Bug#####<sup>2</sup>  
  
#####Bug#####  
#####Bug#####  
#####  
  
#####  
#####  
  
#Subversion#####Bug###  
#####Greg Stein#####  
#####Greg#####Bug#####  
#####  
##Greg#####  
#####Greg#####Subversion#  
#####  
  
#####API#####/  
#####  
  
#####  
#####  
#####

---

<sup>2</sup>#####“###”#####



#####

##### —#####

#####  
#####  
#####Bug  
##### —#####  
#####Bug#####Bug#####the section called “#####”#####  
#####

#####  
#####  
#####  
##### —#####  
#####

#####Chapter 4, #####Chapter 9, #####  
#####“###”#####

##

##### —#####http://freshmeat.net/#####Submit#####  
#####Freshmeat#####

#####//#####Re-  
ply-to#####

To: discuss@lists.example.org  
Subject: [ANN] Scanley#####  
Reply-to: dev@scanley.org

####Scanley#####Scanley#####API####  
#####Scanley  
#####

##: http://www.scanley.org/

##:  
- #####HTML#XML  
- #####  
- (##) ####  
- (##) #####  
- (##) #####

####:  
- Python 2.2###  
- ##### (#####2###)

#####scanley.org#

###  
-J. Random

#####Chapter 6, ###the section called “###”##

#####/#####  
#####

#####Subversion#####  
#####Subversion#####Mozilla#####  
##web###

#####  
#####—#####  
#####

#####  
#####/  
#####

---

## Chapter 3. #####

```
#####  
#####1 #####  
#####  
#####  
  
#####“###”###  
#####“#####”#####  
#####  
#####  
  
#####  
#####  
#####  
#####  
#####  
  
#####  
#####  
#####the section called “Bug#####”#####  
#####the section called “#####”#####Reply-to#####  
#####  
  
#####  
#####—###  
#####http://en.wikipedia.org/wiki/Wiki#####  
#####  
  
#####—#####—#####  
#####
```

## #####

```
#####  
  
##  
#####  
  
####  
#####“#####”#  
  
####  
#####“#####”#####  
  
Bug##  
#####Bug#####Bug#####bug####  
#####  
  
####  
#####
```

---

<sup>1</sup>#####1975###http://en.wikipedia.org/wiki/The\_Mythical\_Man-Monthhttp://en.wikipedia.org/wiki/Brooks\_Law#

#####  
#####  
  
#####  
#####the section called “####”#

## ####

##### —#####  
##“##”#####1##  
  
##### —#####  
  
#####  
#####  
  
#####  
#####  
  
#####  
  
#####  
#####  
#####  
  
#####  
#####  
#####  
  
####  
#####“##”#####a) #####b) #####  
###  
  
####  
#####“#####”#####  
#####  
  
#####  
#####  
  
##  
#####MHonArc#http://www.mhonar-  
c.org/#####Chapter 6, ###the section called “#####”#####  
  
#####  
#####

## #####

##### —#####  
#####  
#####  
  
#####

## ####

#####

## 1. #####

#####  
#####  
#####

## 2. #####

#####  
##########the section called “##”#####  
#####SpamAssassin (<http://spamassassin.apache.org/>) #  
SpamProbe (<http://spamprobe.sourceforge.net/>)#####  
#####

## 3. ###

#####  
#######  
#####“accept”#####“allow”#####  
#######  
####“reject”##“deny”#####  
##########  
#####  
#####

## #####

#####

jrandom@somedomain.com

#

jrandom\_AT\_somedomain.com

#

jrandomNOSPAM@somedomain.com

#####—#####—#####“@”#####  
##########  
#####<http://www.cdt.org/speech/spam/030319spamreport.shtml>#

#####

#####yes/no#####  
#####  
#####  
#####

#####

#####/#####  
#####

From: ...  
To: ...  
Subject: ...  
Date: ...

#####

Reply-to: sender@email.address.here

#####

#####  
#####

Subject: Making the 2.5 release.

#####

Subject: [discuss@lists.example.org] Making the 2.5 release.

#####  
#####/#####  
#####

#####To#####

To: <discuss@lists.example.org>

#####To#

#####“To”#“Cc”#####

list-help: <mailto:discuss-help@lists.example.org>  
list-unsubscribe: <mailto:discuss-unsubscribe@lists.example.org>  
list-post: <mailto:discuss@lists.example.org>  
Delivered-To: mailing list discuss@lists.example.org  
Mailing-List: contact discuss-help@lists.example.org; run by ezmlm

#####http://www.nisto.com/listspec/list-manager-intro.html#####  
#####http://www.faqs.org/rfcs/rfc2369.html#

```
#####“list”#####“list-help”#“list-unsubscribe”#####“list-sub-
scribe”#####“list-owner”#####
#####“####”#####
#####“#####”#####URL##
###
```

```
#####
#####
```

## ###Reply-to##

```
####the section called “#####”#####
#####
```

```
#####Bug#####—#####
#####
```

```
#####Reply-to#####Reply-to#####
#####
```

Reply-to: discuss@lists.example.org

```
#####Reply-to#####
#####
```

```
#####“###”#####Reply-to#####
#####From#####
###IT#####Reply-to##### Reply-to#####
#####
```

```
#####Reply-to#####reply-to-all#reply-to-au-
thor#####reply-to-all#####
reply-to-author#####—#####
#####
```

```
#####Reply-to#####reply-to-author#####
#####
#####Reply-to#####Reply-to#####
#####Reply-to#####
```

```
#####Reply-to#####
#####
#####//#####
#####
```

```
#####
#####
```

```
#####
```

- **##reply-to**, by *Chip Rosenthal*

<http://www.unicom.com/pw/reply-to-harmful.html>

- **#Reply-to#####**, by *Simon Hill*

<http://www.metasystema.net/essays/reply-to.mhtml>

#####“##”#####Reply-to#####

####

#####reply-to-list#####  
#####Mutt [<http://www.mutt.org/>]#####<sup>2</sup>#

#####Reply-to#####Reply-to#####Re-  
ply-to#####<sup>3</sup>

##

#####

####

#####  
#####

####

#####URL#####URL#####URL####  
#####Internet#####Bug#####the  
section called “Bug##”#####

#####URL#####  
#####  
#####

##

#####  
##### — #####

####

#####URL#####

####

##### — ##### — #####Google [<http://www.google.com/>]#####

#####the section called “#####”#

##

#####  
ailman#Ezmlm#MHonArc#Hypermail#####  
#####

- **Mailman** — <http://www.list.org/>

<sup>2</sup>#####Michael Bernstein [<http://www.michaelbernstein.com/>]####“####Mutt#####reply-to-list#####Evolution#####  
#####Ctrl+L##”

<sup>3</sup>#####Siesta [<http://siesta.unixbeard.net/>]#####<http://www.perl.com/pub/a/2004/02/05/siesta.html>



#####

- **SmartList** — <http://www.procmal.org/>

#####Procmail#####

- **Ecartis** — <http://www.ecartis.org/>
- **ListProc** — <http://listproc.sourceforge.net/>
- **Ezmlm** — <http://cr.yp.to/ezmlm.html>

####Qmail [<http://cr.yp.to/qmail.html>]#####

- **Dada** — <http://mojo.skazat.com/>

#####GNU#####

#####

- **MHonArc** — <http://www.mhonarc.org/>
- **Hypermail** — <http://www.hypermail.org/>
- **Lurker** — <http://sourceforge.net/projects/lurker/>
- **Procmail** — <http://www.procmal.org/>

#SmartList#####

## ####

#####  
##########Bug#####  
#####  
#####

#####

## #####

#####  
#####

“##”#“####”

#####version#####“####”#####—#####“#  
# 1.0#Version 1.0#”#####“####”#####“#####”#“####”#####

###commit#

##### “##”#####“#  
##change#”#####“#####Mac OS X#####Bug#####Jay#####”

---

#####log message#

#####Bug#####  
#####Chapter 6, ###the section called “#####”#####  
#####

###update#

#####“#####”#####  
#####Bug#####“#####bug#”“#####  
#####—#####”

###repository#

#####  
#####  
#####

###checkout#

#####“#####”#####  
#####

###working copy#

#####  
###“#####”#####

#####revision#, ###change#, ###changeset#

##“#####”#####F#####6#####F#####F  
#####7#####“#####”#“##”#“###”#####

#####Bug  
#####“#####10#####”##“#####foo.c#####10#####”  
#####

###diff#

#####  
Bug#

###tag#

#####/#####  
#####Release\_1\_0#Delivery\_00456###

###branch#

#####“##”#####“###  
#lines of development#”#####“###”###“##”#“###trunk#”#  
#####  
#####  
#####the section called “#####”#

#####merge, a.k.a. port#

#####  
###the section called “#####”#  
“##”#####  
#####“##”#####

###conflict#

#####re-  
solve#####

###lock#

#####“#####Alfred#####”#####  
#####

#####-##-#####-##-#####http://svn-  
book.red-bean.com/svnbook-1.0/ch02s02.html#####-##-#####

## #####

#####CVS#http://www.cvshome.org/#Subversion#SVN#http://  
subversion.tigris.org/#

CVS#####CVS#  
#####  
#####

CVS###Bug#####Subversion#####<sup>4</sup>#####Sub-  
version#

#####Subversion#####Appendix A, #####  
#####  
#####Subver-  
sion#####

## #####

#####

## #####

#####FAQ#####  
#####  
#####

#####  
#####

#####configure.in###con-  
figure####configure#####configure.in#####configure.in#“#####”#  
#####<sup>5</sup>

#####Bug###Bug#####  
#####

## ####

#####web#####

#####web#####bug#####  
#####

<sup>4</sup>#####http://cia.vc/stats/vcs#http://subversion.tigris.org/svn-dav-securityspace-survey.html#

<sup>5</sup>#####configure#####Alexey Makhotkin#####http://versioncontrolblog.com/2007/01/08/configurein-and-version-control/#“config-  
ure.in and version control”#

#####URL#####  
#####www/hacking.html”####“#####http://svn.collab.net/repos/svn/trunk/www/hack-  
ing.html#”#####hacking.html#####URL#####

#####ViewCVS#http://viewcvs.source-  
forge.net/##CVSWeb#http://www.freebsd.org/projects/cvswb.html###WebSVN#http://web-  
svn.tigris.org/#####CVS#Subversion#####CVS#####Subversion#

## ####

#####  
#####the section called “###  
#####”#####

#####hooks#####post-  
commit hook#CVS####loginfo hook#Post-commit#####  
#####—#####

#####

1. #####web#####URL####URL#####  
#####  
URL#####  
#####web#####

#####URL#####  
#####

2. #####Reply-to#####  
#####  
#####  
#####

#####Reply-to#####the section called “###Reply-to##”#####Reply-to##  
#####Reply-to#####

**CIA#####**

#####CIA#http://cia.navi.cx/#####CIA#####  
##CIA#####IRC#####  
#####

#####post-commit####CIA#####XML#####cia.navi-  
i.cx#####

CIA#####RSS [http://www.xml.com/pub/a/2002/12/18/dive-into-xml.html]#####  
#http://cia.navi.cx/####

#####CIA#####IRC####irc.freenode.net####commits#

## #####

#####CVS#####CVS#####

#####

##### — ##### — #####  
#####  
#####“##”#####

#####bug#####<Chapter 7,  
#####the section called “#####”the section called “#####”#####  
#####

#####  
#####

## ####

#####  
##### — #####

#####  
#####“###”#“#####”#####  
#####

##### — ##  
#####

#####  
#####  
#####

#####Bug#####CVS####  
#“path/to/file/in/project/tree:REV”####REV##CVS#####“1.76”#####Subver-  
sion####1729#####“r1729”#####Subversion#####  
#####Chapter 6, ###Chapter 7, #####  
#####

#Chapter 7, #####the section called “#####”#####

## ##

#####  
##### ##Chapter 8, #####the section called “###”#####

#####  
#####  
##### — #####

#####  
#####

#####X#####Y#####Y#####Y#####  
#####/  
#####

##### — #####“#####  
#####”#####“#####”#####  
#####

Subversion#####4#####33#####43#####  
#####

#####  
#####  
#####  
#####  
#####Chapter 4, #####the section called “#####”#####

## Bug##

Bug#####Bug#####  
##Bug#####Bug#####  
#####Bug#####issue trackers#####defect trackers#####artifact trackers#####  
#request trackers#####trouble ticket systems##Appendix B, ##Bug#####  
#####“Bug###bug tracker#”#####issue####Bug#####  
#####Bug#####Bug#####Bug#####  
####  
#####  
1. #####Bug####Chapter 8, #####the section called “#####  
#####”#####—Bug#####  
#######open#####unverified#####unstarted#####  
#####  
2. #####  
3. Bug####reproduced#####bug#####bug#####  
#####bug#####  
4. Bug####diagnosed#####bug#####  
#####  
#####“##”#####assign####Chapter 8, #####the section called “#####  
#”#####priority#####  
#####  
5. #####schedule#####bug#####  
bug#####  
6. Bug#####resolved#####  
#closed##  
#####bug#####  
#####  
#####the section called “Bug#####”#####  
#####bug#####Chapter 8, #####the section called “#####”#  
#####1#####duplicate#####  
bug#####regression#####Bug#####  
#####  
#####bug#####  
#####

#####bug####

###1#####  
#####  
#####  
#####

#####

- #####  
#bug#####Reply-to#####
- #####  
#####the section called “#####”##

## #####

###bug#####bug#####

#####Bug#####bug#####  
#####bug#####Chapter 8, #####the section called “#####”#####Chapter 6, ##the section called “Bug#####”#####bug#####

###bug#####  
#####Bug#####  
#####

## Bug#####

#####bug#####  
#####bug#####bug#####bug#####bug#####

#####bug#####  
#####

#####bug#####  
bug#

#####Debian#http://bugs.debian.org/#bug#####315,929#####  
#####//#####Debian#####Debian#####  
##### — #####  
#####

#####  
IRC#####bug#####bug#####  
#####bug#####“###bug#####  
###”#####

#####  
#####  
#####

1. #####
2. #####

3. #####  
URL##

#####/#####bug#####  
#####

#Chapter 8, #####the section called “#####”#####

## IRC / #####

#####IRC#####IRC#####  
#####Freenode#http://freenode.net/#####IRC###Freenode#####IRC###<sup>6</sup>#####  
IRC#####

#####—###Freenode#####  
#####Subversion#####

*If you're using Subversion, we recommend that you join the users@subversion.tigris.org mailing list, and read the Subversion Book [http://svn-book.red-bean.com/] and FAQ [http://subversion.tigris.org/faq.html]. You can also ask questions on IRC at irc.freenode.net channel #svn.*

##### #Chapter 6, #####the section called “#  
###”#####

#####

#####<sup>7</sup>#####

You are now talking on #svn

Topic for #svn is Forum for Subversion user questions, see also  
http://subversion.tigris.org/. || Development discussion happens in  
#svn-dev. || Please don't paste long transcripts here, instead use  
a pastebin site like http://pastebin.ca/. || NEWS: Subversion 1.1.0  
is released, see http://svn110.notlong.com/ for details.

#####

####

##IRC#####  
#####

#####pastebin#pastebo#####http://pastebin.ca/#####  
#####IRC#####URL#####URL#####

#####http://www.nomorepasting.com/# http://pastebin.ca/#  
http://nopaste.php.cd/# http://rafb.net/paste/# http://sourcepost.sytes.net/# http://extraball.sun-  
site.dk/notepad.php# # http://www.pastebin.com/#

<sup>6</sup>#####Freenode#####

<sup>7</sup>##/topic#####IRC#####/#####IRC#####http://www.irchelp.org/#http://www.irchelp.org/irchelp/irctutorial.html#  
#####



## ####Bots#

#####IRC#####bot#####  
#####

<kfogel> ayita: learn diff-cmd = http://subversion.tigris.org/faq.html#diff-cmd  
<ayita> Thanks!

#####ayita#####URL##"diff-cmd"#####ayita#####diff-cmd####

<kfogel> ayita: tell jrandom about diff-cmd  
<ayita> jrandom: http://subversion.tigris.org/faq.html#diff-cmd

#####

<kfogel> !a jrandom diff-cmd  
<ayita> jrandom: http://subversion.tigris.org/faq.html#diff-cmd

#####ayita#http://hix.nu/svn-public/alexis/trunk/#####freenode##svn#####  
#####Dancer#http://dancer.sourceforge.net/##Supybot#http://supybot.com/#####  
#####/###

#####  
#####

## ##IRC

#####IRC#####IRC#####  
#####

#####IRC#####bug##  
#####URL#

## RSS##

RSS#Really Simple Syndication#####“###”#####RSS#####  
##feed#####RSS Bandit [http://www.rssbandit.org/]#eponymous Feedreader  
[http://www.feedreader.com/]####RSS####

#####RSS#####<sup>8</sup>##### — #####RSS  
#####RSS#####  
#####RSS#####“Subscribe to this site”#“News feed”#####  
#####

#####RSS##### — ##the section called “###” — #####  
#####  
#####RSS#####<sup>9</sup>

<sup>8</sup>###http://www.xml.com/pub/a/2002/12/18/dive-into-xml.html#

<sup>9</sup>#####Brian Aker###"Release Criteria, Open Source, Thoughts On..." [http://krow.livejournal.com/564980.html]####RSS#####

# Wikis

##wiki#####“wiki”#####“#”#“###”#####Wikis#  
1995#####2000#2001#####Wikipedia#http://www.wikipedia.org/#####  
#wiki#####wiki####IRC#####wikis#####  
#####

wikis#####—#####wiki###  
#####

#####wiki#####wiki###  
#####wiki#####  
#####wikis#####

- #####“##”#“##”#####wiki#####  
#####
- #####wikis#####  
###
- #####  
#####

#####wikis#####  
#####wikis#####

#####wiki#####  
#####  
#####  
#####

##wiki#####http://en.wikipedia.org/wiki/Wiki#####wiki#####wiki####http://  
www.c2.com/cgi/wiki?WelcomeVisitors#http://www.c2.com/cgi/wiki?WhyWikiWorks#http://  
www.c2.com/cgi/wiki?WhyWikiWorksNot#####

## ##

#####  
#####bug#####  
#####

## ####

#####  
#####bug#####  
#####

#####  
#####

#####—#####FAQ#####HTML#PDF#####  
#####the section called “#####”#####  
#####HTML###FAQ#####

#####

#####SourceForge#  
#####“SourceForge##”#####SourceForge#####  
##SourceForge#####bug###CVS#####SourceForge#####  
#####

SourceForge#####—#SourceForge#####  
##SourceForge#####

#####“###”#####URL#  
#####URL#####

## #####

#####SourceForge [http://www.sourceforge.net/]#savannah.gnu.org [http://savan-  
nah.gnu.org/]#BerliOS.de [http://www.berlios.de/]#####Apache Software###  
[http://www.apache.org/]#Tigris.org [http://www.tigris.org/]<sup>10</sup>#####  
##

Haggen So#####*Construction of an Evaluation Model for Free/Open  
Source Project Hosting (FOSPHost) sites*####http://www.ibiblio.org/fosphost/#####http://  
www.ibiblio.org/fosphost/exhost.htm#

## #####

#####  
#####

#####bug#####  
#####  
#####bug#####bug#

#####/#####bug####  
#####wiki##

---

<sup>10</sup>#####CollabNet [http://www.collab.net/]#####Tigris.org#####Tigris#

---

## Chapter 4. #####

```
#####“#####”#####  
#####  
  
##### “##”#####bug  
#####—#####  
#####  
  
#####  
#####  
#####
```

## #####forkability#

```
#####  
#####Chapter 8, #####the section called “##”#  
#####  
  
#####“##”##“##”#####  
#####  
#####  
  
#####  
#####Linux#####Linus Torvalds#####  
#####  
#####  
  
#####  
#####
```

## #####

```
#####  
  
##“#####”#BD#####“#####”#“##”#####  
#####  
#####  
#####  
#####“#####”#####  
#####
```

## #####

```
####BD#####  
#####.#####BD#####  
#####—#####BD#####  
#####BD#####  
  
BD#####BD#####  
#####—#####  
  
#####—#####—###BD#####  
#####
```

#####BD#####  
#####root#####  
#####BD#####  
  
#####BD#####  
#####BD#####

## #####Consensus-based Democracy#

#####BD#####“###”#####  
##### —#####  
#####N#####N - 1#####  
#####BD#####BD#####  
#####  
  
#####  
  
#####  
#####  
  
#####bug#####  
#####“#####  
#####”  
  
#####bug#####“#####bug#####  
#####”#####  
#####

## #####

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## #####

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#####  
#####Chapter  
6, ###the section called “###”#  
  
#####approval voting#####  
#####<http://en.wikipedia.org/wi->

ki/Voting\_system#List\_of\_systems#####  
#####—#####

#####  
#####

### ####

#####—#####  
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#####

#####  
#####“###  
#####”#####  
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#####Chapter 7, #####the section called “#####”#####  
#####

### #####

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#####  
#####//#####  
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#####  
#####  
#####  
#####“#####”##“#  
#####”#####  
#####

#####n#####  
#####//#####  
#####Chapter 8, #####the section called “###”#

### #####

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### ###

#####  
#####  
#####

#####  
##### —#####X#####X#####  
#####

#####“-1”#####Apache#####http://www.apache.org/foun-  
dation/voting.html#Apache#####Apache#  
##“-1”#####

#####  
#####

## #####

#####  
#####  
#####

##Chapter 2, ###the section called “#####”#####  
#####

#####  
#####“#####”#“#####bug###”#  
#####//#####bug#####  
#####//#####API  
#####

#####FAQ## —#####FAQ#####  
#####

#####BD#####  
#####BD####BD#####  
#####

#####  
##### —#####  
#####

#####Subversion#hacking.html####http://svn.collab.net/repos/svn/trunk/www/hack-  
ing.html###Apache#####http://www.apache.org/foundation/how-it-works.html#http://www.a-  
pache.org/foundation/voting.html#ASF#####  
#####

---

# Chapter 5. ##

```
#####
#####

#####
#bug#####
#####

#####
#####
#####
###“##”###

#####
###6#####IBM#####
#####

#####
#####
#####bug#####
#####

#####
#####—##—#####
#####

#####//#####
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## #####

```
#####

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#####

###http://www.openadapter.org/#http://www.koha.org/

####
#####

###CollabNet [http://www.collab.net/]##http://subversion.tigris.org/#####
#####

#####
#####—#####—#####
#####

#####
#####
```



###http://www.openoffice.org/#####OpenOffice#####Office##

####

#####

####

#####Chapter 9, #####

##the section called “#####”#####

##

#####MySQL [http://www.mysql.com/]#####Sleepycat [http://www.sleepy-  
cat.com/]###Berkeley#####

##

##

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#####

#####bug#####

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##### — #####

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#####

#####the section called “#####”#####

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#####“#####”#####

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#####bug#####

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#####

#CollabNet#####Subversion#####bug#####

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#####Chapter 6, ###the section called “#####”#

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#####  
  
##### — ##### — ##########bug  
#####//#####  
#####  
  
#####“#####X#”#####“#####  
#####X#####/#####”#####  
#####  
  
#####  
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#####  
  
#####  
#####  
#####“#####”#####  
##### — ##### #####  
#####  
  
#####“#####A#B#C###  
#####...”#####  
#####  
  
###/#####  
#####  
#####  
#####  
  
#####  
#####

## #####

#####  
#####  
  
#####Subversion###CollabNet [http://www.collab.net/]#2000###Subversion#####  
#####Mike Pilato#####Subversion#  
#####  
  
Mike#####Subversion#####  
#####the section called “###”#####  
#####  
  
CollabNet####Subversion####Mike#####Collab-  
Net#####Mike#####Mike####

####CollabNet#####  
#####—#CollabNet#####

##Mike#####CollabNet#####  
#####Mike#####CollabNet#####  
###

#####  
#####  
###

#Danese Cooper#blog#http://blogs.sun.com/roller/page/DaneseCooper/20040916#####Coop-  
er#Sun Microsystem#“##Diva”—#####—###blog#####Tomcat#####Sun#####Sun####  
#Sun#####

#####Chapter 4, #####the section called “#####”#####  
#####  
#####

##

#####  
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#####—#####—#####  
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#####

#####

#####—#####  
#####

#####  
#####—#####  
#####Subversion#####IRC#####  
####IRC privmsg#####bug#####  
#####

#####  
#CollabNet#####bug#####CollabNet#####bug#####  
###

#####  
#####

#####  
#####

## #####

#####  
#### —#####QA#####

## ####CVS####

1995#####CVS#####http://www.cvshome.org/#####Jim#####  
CVS#####CVS#####

#####CVS#####rsh#####CVS#####  
#####CVS#####

Jim#####  
#####  
##### —##### —#####  
#####

#####  
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## #####

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#####

#####  
#####bug#####bug#####  
#####

#####

## #####

#####bug#####  
#####  
#####

#####bug#####  
#####bug#####bug#####  
#####

#####bug#####  
#####bug#####bug##  
#####  
—#####

##bug#####bug#####  
#####bug#####  
  
#####QA#####  
#####bug#  
  
###QA#####bug#####  
#####QA#####bug#####QA###  
#####QA#####bug#####QA#####  
#####  
  
#####  
#####  
  
#####bug#####

## #####

#####  
#####Chapter 9, #####  
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## #####

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#####  
  
#####  
  
#####Dirk Reiners#####

#### : : #####  
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#####

## ####/##

#####Chapter 3, #####the section called “####”#####  
#####  
  
#####URL#####  
#####  
#####  
#####

####

#####  
#####  
#####Chapter 6, ###the section called “##”#

#####

#####  
#####  
  
#####—#####  
#####Global Megacorp#####Global Megacorp##  
#####  
#####  
  
#####“#####X”#####“X####”#####  
#####  
  
#####  
#####—#####  
  
#####  
  
#####Singer#####Linux#Windows###Singer 5#####  
  
#####“####”#####3#####bug#####  
#####bug#####6#####  
  
#####bug###bug#####  
#####  
  
#####  
#####“#####278#bug#####”#####  
#####  
  
#####Chapter 8, #####the section called “##”#

#####

#####—#####  
#####  
#####  
#####  
  
#####  
#####  
#####  
#####  
#####

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# Chapter 6. ##

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#####  
  
#####  
#####  
#####  
  
##### —#####bug#####  
#####“##”#####  
#####bug#####  
  
#####  
#####  
###1
```

## ####

```
##### —#####  
#####  
  
#####Jim Blandy#####  
  
##1993#####GNU Emacs#19####beta#####beta#####  
#####bug#####  
#####  
  
####FSF#####FSF#####  
#####  
  
#####“#####  
##”  
  
#####“#####”  
  
#####“#####”  
  
#####“#####30#####”  
  
#####30#####
```

## ####

```
#####IRC#####  
#####bug#####  
#####  
#####  
  
#####
```

---

<sup>1</sup>#####Gutwin#Penner#Schneider###Group Awareness in Distributed Software Development#####  
#<http://www.st.cs.uni-sb.de/edu/empirical-se/2006/PDFs/gutwin04.pdf>#####

#####HTML#####72#####80#80#####  
#####80#####  
  
#####  
#####  
  
#####  
#####  
  
#####  
#####  
  
#####  
#####  
#####  
#####

##

#####  
  
#####  
#####URL#####5#10#####  
#####-#####n#####n####  
#####n####  
#####  
  
#####bug#####/##/  
#####  
  
“##### #J. Random#####”  
  
#####  
  
“#####J. Random's#####...”

#####  
#####  
  
#####  
#####  
#####

##

#####  
#####  
  
#####  
####  
  
#####Slash#####  
#####apache/mod\_perl##



#####slashcode.com#Apache 2.0####

Shane

#####Shane  
#####

#####bug#####  
#####  
#####bug#####“###<#####>”#####  
#####

#####  
#####a)#####b)#####  
#####  
#####  
#####  
#####

#####  
#####

####

#####—#####—#####  
#####

#####

#####  
#####

#####Shane#####  
#####“#####”#####  
###“#####...”##  
#####  
#####

#####

#####  
#####  
#####“#####”#####  
#####  
#####

#####Chapter 2, ###the section called  
“#####”#

##

#####“#####”#####  
#####

#####  
#####@#####IRC#####“##”#####  
#####

#####“kfogel”#####

From: "Karl Fogel" <kfogel@whateverdomain.com>

#####

From: "Wonder Hacker" <wonderhacker@whateverdomain.com>

Paul Steiner#####1993#6#5#####“#####”####  
#####—#####“Wonder Hacker”#####  
#####  
#####

#####“##”##“#”##“#####”#####  
#####  
—#####

#####  
#####

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#####  
#####  
#####

#####gmail.google.com [http://  
gmail.google.com/]#www.hotmail.com [http://www.hotmail.com/]#www.yahoo.com [http://www.ya-  
hoo.com/]#####

**#####**

**#####**

#####  
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1. #####
2. #####
3. ####

#####  
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#####a) #####b) #####  
#####  
#####Appendix C, #####  
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**##VS#####**

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#####—#####  
  
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#####“##”#####  
#####—#####  
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#####—#####/#####  
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#####

## #####

#####  
#####  
  
#####  
#####  
  
#####*Bikeshed*#####Poul-Henning Kamp#BSD#####  
  
#####C. Northcote Parkinson#20##60#####  
#“Parkinson#”#####  
  
[...]  
  
#####  
  
Parkinson#####  
  
Parkinson#####  
##Richard P. Feynmann#####  
##1942#####1947##1962#####  
  
#####  
#####  
  
#####“#####”#####“#####/##”#####  
#####

#####Appendix C, #####http://bikeshed.com##

#####Kamp#####  
—#####  
#####

### ####

#####  
#####  
#####

#####  
#####  
#####—#####

#####“#####”#####  
##—#####

#####  
#####

#####

#####

#####Chapter 9, #####the section called “GPL#####”#####  
##Chapter 3, #####the section called “###Reply-to##”#####  
#####  
#####  
#####—#####  
#####

#####  
#####

#####  
#####Perl#####  
#####

#####http://catb.org/~esr/jargon/html/H/holy-wars.html#Danny Cohen#####http://  
www.ietf.org/rfc/ien/ien137.txt#

### “#####”##

#####filibuster#####  
#####

#####  
#####  
#####

#####  
#####“#####”#####  
#####“#####”#####  
#####

###

```
#####“#”##“##”#####  
#####  
  
#####  
#####filibuster#####  
#####  
#####
```

#####

```
#####“#####”###  
#####—#####  
#####//#####  
#####  
  
#####  
#####  
  
#####—#####  
#####  
#####  
  
#####//#####  
#####  
#####  
  
#####//#####  
#####
```

####

```
#####10#####  
#####  
  
#####“J.  
Random”#####3#####
```

From: "Brian W. Fitzpatrick" <fitz@collab.net>  
To: [... recipient list omitted for anonymity ...]  
Subject: The Subversion Energy Sink  
Date: Wed, 12 Nov 2003 23:37:47 -0600

In the last 25 days, the top 6 posters to the svn [dev|users] list have been:

```
294 kfogel@collab.net  
236 "C. Michael Pilato" <cmpilato@collab.net>  
220 "J. Random" <jrandom@problematic-poster.com>  
176 Branko #ibej <brane@xbc.nu>
```

130 Philip Martin <philip@codematters.co.uk>  
126 Ben Collins-Sussman <sussman@collab.net>

#####5#####Subversion##1.0#

#####5#####  
#####Subversion#####  
####vgrep##Subversion#####5##  
#2#####

#####  
#####

dev@subversion#####  
#####

-Fitz#####3##svn#####

#####J. Random#####filibuster#####  
#####

Fitz#####  
J. Random#####  
#####Chapter 3, #####the section  
called “#####”#####Fitz#####

## ####

#####  
#####—#####“users”#“discuss”#“help”#####  
#####

#####  
#####Windows XP#####Windows XP#####24#####  
#####IRC#####  
#####

#####IRC#####  
#####—#####  
#####  
#####/#####

1. #####

2. #####

###1#####  
#####“###X#”#####bug####  
#####  
#####

#####IRC#####  
#####  
#####

###2#####Chapter 2, ###the section called “##”###  
#####

## #####

#####IRC#####  
##

#####  
#####  
#####

#####

####Scanley####fronbnicated###unfrobnicate#####

1. ##Scanley####
2. ##Scanley# 'defrobnicate' ###
3. #####

#####frobnicated#####  
#####

####Scanley#####frobnicated####7#####  
####J. Random#http://blahblahblah/blah#####  
###J. Random###unfrobnicate#####

1. ##Scanley####
2. #####Scanley#####
3. ##### 'defrobnicate' ###
4. ####Scanley#####
5. #####

#####“##”#####  
#####

#####  
#####  
#####a) #####b) #####

## #####

#####FAQ#####

#####FAQ#

1. #####
2. #####
3. #####Google#####FAQ#####FAQ###
4. #####FAQ#####
5. #####FAQ#####—FAQ#####



#1#####FAQ#####2##3###FAQ###HTML#####2###HTML#####  
#####4#####FAQ#####HTML###Anchor#####5###FAQ#####  
####Chapter 3, #####the section called “#####”#####

### ###Anchor#ID##

#####Anchor#id###

###anchor#####HTML anchor###<a>...</a>#####“name”###

<a name="mylabel">...</a>

#####HTML#####id#####HTML#####<a>####

<p id="mylabel">...</p>

###anchor#id#####URL#####

http://myproject.example.com/faq.html#mylabel

#####anchor#####id#####anchor#####anchor#id

#####anchor#####—#####

<a name="mylabel"></a>

...#####

#####anchor###id#####

FAQ#URL#####“name”#/#“id”#####title###

<a name="mylabel" title="#mylabel">...</a>

#####title#####title#####URL#####

##

###FAQ#####—#####  
#####bug#####  
####Chapter 8, #####

## #####

#####  
#####

#####Chapter 2, ###the section called  
“#####”#Chapter 4, #####the section called “#####”#####  
#####

#####  
#####

#####IRC#####  
IRC#####  
#####IRC#####

#####Chapter 3, ###  
####the section called “IRC / #####”##

#####linuxhelp

###linuxhelp#####

<http://www.catb.org/~esr/faqs/smart-questions.html> &&

<http://www.tldp.org/docs.html#howto> ##### | ####

#[http://www.nerdfest.org/lh\\_rules.html](http://www.nerdfest.org/lh_rules.html) | #####2.6.x

## <http://kerneltrap.org/node/view/799>

| #####: <http://tinyurl.com/4s6mc> ->

###2.6.8.1#2.4.27 | #####: <http://tinyurl.com/6w8rf>

| reiser4##

#####“#####”#####/#####FAQ#####

#####—#####

#####Subversion#####Chapter 3, #####the section called “Bug#####”#####

bug#####bug#####500#####

#####

#####bug#####<http://subver->

sion.tigris.org/project\_issues.html##### —#####

#####bug#####bug#####

#####

#####

#####Chapter 2, ###the sec-  
tion called “#####”#####

Subversion#####“r12908”##“###12908”#####“r”#####

#####

-----  
r12908 | qsimon | 2005-02-02 14:15:06 -0600 (Wed, 02 Feb 2005) | 4 lines

Patch from J. Random Contributor <jrcontrib@gmail.com>

\* trunk/contrib/client-side/psvn/psvn.el:

Fixed some typos from revision 12828.

-----  
...#####“#####‘r12828’#####revision#12828#####

#####—#

#####“r12828”#####“revision 12828”#####

#####“revision”#####“r12828”#####

#####FAQ#####Anchor#ID#####URL####

#####URL####ID##

#####

#####

#####

#####

#####

# Bug#####

```
#####bug#####
#####

#####bug#####—#####
#####

#####—#####

#####//#####
#####
#####—#####
#####

#####bug#####IRC#####

#####bug#####
#####bug#####bug#####
#####

#####bug#####

#####
#####-#####bug#####

#####
#####
#####
```

## ###

```
#####
—###slashdot.org [http://slashdot.org/]#####—#####
#####

#####4#5#####

1. #####

2. #####“##”#“###”#####“###”#####
#####

3. #####RSS####the section called “RSS##”#####

4. #####http://freshmeat.net/#####the section called “##”#####Fresh-
meat#####Freshmeat#####Freshmeat#####
#http://slashdot.org###Freshmeat#####Freshmeat####

5. #####“announce”###announce@yourprojectdomain.org####
#####
#####the section called “#####”#####an-
nounce#####—#####announce##
#####
```

```
#####  
#####  
  
#####  
#####  
  
#####  
#####  
  
#####2005#8#####Scanley#2.0#####http://www.scanley.org/sta-  
tus.html#####  
  
##### ...#####bug##### ...  
  
#####URL#####  
#####  
####
```

## #####

```
#####bug#####bug#####  
#####  
  
##bug#####—#####bug#####  
####bug#####  
#####  
  
1. #####bug#####bug#####  
  
2. #####—#####bug#####  
  
#####
```

## ####

```
#####bug#####bug#####  
#####—#####“###”#####“#####”####  
#####bug####  
  
#####  
#####  
#####Chapter 3, #####the section called “#####”#####  
#####http://subversion.tigris.org/security.html#####HTML####
```

## #####

```
#####  
  
1. #####  
  
2. #####  
  
3. #####  
#####anonymous14@globalhackerz.net#####  
#####
```

```
#####bug#####
##bug#####

##“anonymous14@globalhackerz.net”#####bug#####
#####
#####bug#####
#####bug#####
#####

#####bug#####—#####
#####
#####

#####
#####

#####
#####
#####bug##### Arch#SVK#####
#####
```

## CAN/CVE##

```
#####CAN##CVE#####“CAN-2004-0397”#“CVE-2002-0092”#

#####http://cve.mitre.org/#####“#####”#####
##### “CAN”#“CVE”#####CVE#####
##### —##“CAN”#####“CVE”#

CAN/CVE#####bug#####
#####http://cve.mitre.org/#####http://
cve.mitre.org/cgi-bin/cvename.cgi?name=2002-0092#####
http://cve.mitre.org/data/refs/refkey.html#

#####CVE#####CAN#####
#####CVE#####CVE#####
#####CAN##### a) ##MITRE###
##### b) #####CAN#CVE#####bug#####http://
www.cert.org/####http://www.securityfocus.com/#BugTraQ#####
#####

#####CAN/CVE#####bug#####CAN#####
#####bug#####

##CAN/CVE#####http://cve.mitre.org/about/candidates.html#####CAN/CVE#####
http://www.debian.org/security/cve-compatibility#
```

## ###

```
#####

#####
#/######
##
```

#####  
#####

#####  
#BCC#####BCC#####BCC#####

#####

From: ####  
To: admin@large-famous-server.com  
Reply-to: #####  
Subject: ##Scanley####

#####Scanley#####

#####3#19#####  
#####

#####Scanley#####19##  
#####  
###  
=====

CAN-2004-1771: Scanley#####  
=====

#####locale#####  
#####

#####  
=====

#####

#####  
=====

#scanley.conf##'natural-language-processing'#####'off'#####  
#####

###  
=====

#####Scanley 3.0#3.1#3.2#

#####Scanley 3.2.1####3#19#####  
#####3.2#3.2.1#####  
###

[...#####...]

####CAN#####MITRE#####CAN#####  
#bug#####bug#####CAN/CVE###

#####

```
#####bug#####CAN/CVE#####
##“##”#####
#####
#Chapter 7, #####the section called “###”##

#####Freshmeat#####
#####bug#####
#####
#http://cve.mitre.org/about/terminology.html#

#####
```

---

# Chapter 7. #####

```
#####

#####
#bug#####
#####
##########—#####
#####

#####
#####

#####—#####
#####
#####
#####—#####

#####
####API####
```

## ###

```
#####

• #bug#####
• ####bug#####the section called “####”##
• #####
• #####
• #####

#####
#####

#####
#####

#####Chapter 6, ##the section called “#####”#####
#####
```

## #####

```
#####

#####

Scanley 2.3
Singer 5.11.4

...#####“5.3.9”#####“5.3.10”#####Linux####Linux 1.0####
#“0.95”#“0.96”... “0.99”#####3#
4#####
```



#####“Alpha”#“Beta”##Alpha#Beta####

Scanley 2.3.0 (Alpha)  
Singer 5.11.4 (Beta)

Alpha#Beta#####“2.3.0 (Alpha)”####“2.3.0”#####  
#####

Scanley 2.3.0 (Alpha 1)  
Scanley 2.3.0 (Alpha 2)  
Scanley 2.3.0 (Beta 1)  
Scanley 2.3.0 (Beta 2)  
Scanley 2.3.0 (Beta 3)  
Scanley 2.3.0

#####“Alpha”#####Scanley#“2.3”##“2.3.0”##### — #####0#### — #####  
#####

#####“Stable”#“Unstable”#“Development”#“RC”#“####”#####“Alpha”#“Beta”##“RC”#  
#####“RC”#####“Scanley 2.3.0 (RC)”####“Scanley 2.3.0 (RC 1)”####RC2###  
###

“Alpha”#“Beta”#“RC”#####  
#####

#####“0.X.Y”##“1.0”####“1.0.0”##“3.14.158”#“3.14.159”####  
####“3.14.160”#“3.15.###”##“3.14.158”#####

#####  
#####“2.10.17”####2#####10#####17###“###”#“##”#####  
#####“2.4.0”#“3.4.1”#####4####  
####“2.4.0”#“2.4.2”#####“2.4.1”#####

#####4#####  
#####“##micro#”####“##”#####  
#####bug#####

##### — #####

## ####

#####  
#####APR#####<http://apr.apache.org/versioning.html>#

1. #####bug#####  
#####

2. #####

3. #####

#####/#####“####”#####2.6.0####2.5.4###  
#####bug#####2.6.0#####2.5.4#####“###  
#”#####2.5.4####2.6.0#####2.6.0####

#####bug#####2.5.3###2.5.4#####2.5.3#####2.5.4####  
bug#####bug#####

###/#####  
##2.6.0#####2.5.4#####2.5.4#####  
###API#####

#####  
#####  
#####

#####pre-1.0#####0.1#0.2#0.3#####  
###1.0#####pre-1.0#####0.1.0#0.1.1####pre-1.0##  
#####

#####  
#####

## #####

#####bug###  
#####

#####Linux#####“2.4.21”#####  
#####web#####“2.5.1”#####bug#####  
#####“0”#####

#####  
#####the  
section called “#####”#####/#####

## ####

#####bug#####  
#####24#####

#####“3.5.0”#####  
#####bug#####  
#####

#####“3.5.0”#####“3.5.1”#####  
3.5.0#####bug#####  
##3.5.0##bug#####

#####branch#####  
#####—#####“###”#####  
#####

#####—#####  
#####  
#####  
#####“#####”###“#####”

## #####

#####trunk#####  
#####“1.0”#####CVS#####

```
$ cd trunk-working-copy
$ cvs tag -b RELEASE_1_0_X
```

```
###Subversion####
```

```
$ svn copy http://.../repos/trunk http://.../repos/branches/1.0.x
```

```
#####CVS#Subversion#####
#####
```

```
#####“1.0.x”#####“x”#####“1.0.0”##### —##### —#####
#####the section called “#####”#####
###
```

```
$ cd RELEASE_1_0_X-working-copy
$ cvs tag RELEASE_1_0_0
```

```
#
```

```
$ svn copy http://.../repos/branches/1.0.x http://.../repos/tags/1.0.0
```

```
#####1.0.0#####
1.0.x#####1.0.1#####1.0.2#####1.1.x#####
```

```
$ cd trunk-working-copy
$ cvs tag -b RELEASE_1_1_X
```

```
#
```

```
$ svn copy http://.../repos/trunk http://.../repos/branches/1.1.x
```

```
#####1.0.x#1.1.x#####
#####1.1#####
#####
```

```
#####
#####
```

**#####**

```
#####
```

```
“##”#####
#####
#####bug#
```

```
#####bug#####bug#####
#####
#####
#####
```

#####“#”#####“#”#####  
#####  
#####

## #####

#####  
#####

#####“#####”#####  
#####  
#####

#####Chapter 4, #####the section called “#####”#####  
#####

#####the section called “#####”#

## ####

#####  
#####Chapter 4, #####the section called “#####”#####  
#####  
#####

###Subversion#####3#####  
###“#”#####“#”#####the section called “###”#####  
#####  
#####

#####bug#####  
#####—#####  
#####bug#####bug##

## #####

#####  
#STATUS#VOTES#####—#####  
#####

\* r2401 (issue #49)  
Prevent client/server handshake from happening twice.  
Justification:  
Avoids extra network turnaround; small change and easy to review.  
Notes:  
This was discussed in <http://.../mailing-lists/message-7777.html>  
and other messages in that thread.  
Votes:  
+1: jsmith, kimf  
-1: tmartin (breaks compatibility with some pre-1.0 servers;  
admittedly, those servers are buggy, but why be  
incompatible if we don't have to?)

#####tmartin#####—##tmartin#####  
##“Notes:”#####”Description: “#####  
#####r2401#####  
#####

#####conflict#####  
#####

\* r13222, r13223, r13232  
Rewrite libsvn\_fs\_fs's auto-merge algorithm  
Justification:  
unacceptable performance (>50 minutes for a small commit) in  
a repository with 300,000 revisions  
Branch:  
1.1.x-r13222@13517  
Votes:  
+1: epg, ghudson

#####Subversion 1.1.4#####STATUS#####  
#####trunk#####r13517#####  
#####Chapter 3, #####the section called “####  
#”#####r13517#####“##r13222#r13223#r13232####1.1.x#”#####

**####**

#####merge, a.k.a. port#####  
#####

#####  
#the section called “#####”#####  
#####  
#####the section called “##  
##”#####

**##**

#####Perl#Python#PHP#####C#C++#Java####  
#####the section called “#####”#####  
#####“Scanley 2.5.0”#####“#####  
##Scanley 2.5.0”#

#####

**##**

#####Unix##Unix#####TAR#####compress# gzip# bzip#bzip2####Win-  
dows#####zip#####

#### **TAR##**

TAR###“Tape ARchive”###tar#####  
#####tar###tarballs#####tar#####

## #####

#####Scanley 2.5.0#Unix###GNU Zip#gzip#####

scanley-2.5.0.tar.gz

####Windows###zip###

scanley-2.5.0.zip

#####scanley-2.5.0#####

#####README#####README###

#####INSTALL#####Chapter 2, ###the section called “#####”###

#####COPYING#LICENSE#####

#####CHANGES#####NEWS#####CHANGES#####

#####

#####

Version 2.5.0

(20 December 2004, from /branches/2.5.x)

<http://svn.scanley.org/repos/svn/tags/2.5.0/>

New features, enhancements:

- \* Added regular expression queries (issue #53)
- \* Added support for UTF-8 and UTF-16 documents
- \* Documentation translated into Polish, Russian, Malagasy
- \* ...

Bugfixes:

- \* fixed reindexing bug (issue #945)
- \* fixed some query bugs (issues #815, #1007, #1008)
- \* ...

#####bug#####

#####the section called “#####”#####

**CHANGES##ChangeLog**

#####ChangeLog#####ChangeLog#####

#####

CHANGES#####

#####“NEWS”###“CHANGES”#####“ChangeLog”#####

CHANGES#####

##ChangeLog#####CVS#####CVS#####

####ChangeLog#####

ChangeLog#####

#####the

section called “#####”#####

#####working copy#####

#####

---

```
#####“Scanley 2.5.0”—#zip###tarball#####  
#####
```

```
scanley-2.5.0.tar.bz2  
scanley-2.5.0.tar.gz  
scanley-2.5.0.zip
```

```
...#####Windows#####  
CRLF#####Unix#####LF#####  
#####
```

## #####

```
#####”MySQL5.0“#”Scanley2.5.0“#####  
##Scanley-2.5.0.tar.gz#scanley-2.5.0.tar.gz#####shift#####  
#####tarball#####
```

## ###

```
#####the section called “#####”###alpha#be-  
ta#####
```

```
scanley-2.3.0-alpha1.tar.gz  
scanley-2.3.0-alpha2.tar.gz  
scanley-2.3.0-beta1.tar.gz  
scanley-2.3.0-beta2.tar.gz  
scanley-2.3.0-beta3.tar.gz  
scanley-2.3.0.tar.gz
```

```
#####scanley-2.3.0-alpha1####scanley-2.3.0-alpha2#####
```

## #####

```
#####C#C++#####Unix#####
```

```
$ ./configure  
$ make  
# make install
```

```
#####root#####  
#####Vaughan#Elliston#Tromey#Taylor#####GNU Autoconf, Autotools, and Libtool#####New  
Riders#treeware#####http://sources.redhat.com/autobook/#####
```

```
#####Ant#http://ant.apache.org/#####Java#####  
#####Perl#Python#####Perl#####perl Makefile.pl#####  
#####
```

```
#####INSTALL#####  
#####Chapter 2, ###the section called “##”#####  
#####
```

```
#Windows#####Developer Studio#Visual Stu-  
dio#VS.NET#MSVC++#####/#####Cygwin#http://www.cygwin.com/#####  
Unix#####—##Perl#Python—#####Windows#U-  
nix#Mac OS X#####
```

#####  
#####

### ####

#####“###”#####“###”###  
#####RedHat GNU/Linux####RPM####  
Debian GNU/Linux#####.deb#####MS Windows#####.MSI#####.exe###

#####//#####bug#####  
#####

#####  
#bug#####trunk#####  
#####bug#####bug#####bug#####bug#  
#####

#####bug#####bug#####  
#####bug#####  
#####

#####  
#####bug#####  
#####  
#####bug#####  
#####  
#####

### #####

#####tarball#####tarball#####  
#####tarball#####Chapter 8, #####the section called “#  
###”#####GnuPG#http://www.gnupg.org/##PG-  
P#http://www.pgpi.org/#####PGP#####tarball#####

#####  
#####tarball#####

#####tarballs#zip#####MD5/SHA1##  
#seehttp://en.wikipedia.org/wiki/Cryptographic\_hash\_function#####  
#####scanley-2.5.0.tar.gz#####scan-  
ley-2.5.0.tar.gz.asc#####tarball#####scanley-2.5.0.tar.gz.md5####MD5#  
#####scanley-2.5.0.tar.gz.shal#####SHA1#####scan-  
ley-2.5.0.sigs#####

#####  
——#####the section called “#####”#####

### ####

#####scanley-2.5.0###scanley-2.5.0-beta1#####  
#####scanley-2.5.0-beta2#####bug  
#####——#####



#####alpha#beta#rc#####  
#####bug#####

### ####

#####Chapter 6, ##the section called “###”#####

#####tarball#URL#####MD5/SHA#####  
#####  
#####

#####CHANGES#####  
#####bug#####

#####bug#####  
###Chapter 8, #####the section called “##”##

### #####

#####1.0.0#####1.0.1#1.0.2#####1.1.0  
#####1.0.x#####—#####bug#####1.1.0#####1.1.1#  
#####bug#####1.1.0####1.0.3#####bug#  
#####bug#####1.1.0#####1.0.x#####1.1.0#####1.1.0#1.0.4#####

#1.1.x#####1.0.x#####end of life#EOL#####1.1.x#####  
#####

#####“##”#####bug#####bug#####  
#####bug#####

#####bug#####bug#####“##”#“##”#####  
#####—#####—#####

### ####

####bug#####Chapter 6, ##the section called “#####”#####

#####bug#####  
#####

#####bug#####bug#####  
bug#####

#####1.1.3###1.1.2###bug#####  
#####1.1.3#####1.1.3#####1.1.2#####1.1.4#####  
#####

#####1.1.2.1###1.1.2#####1.1.3#1.2.0##  
#####3#####4#####  
#####

### #####

#####  
#####N#####

#####

-----  
r6228 | jrandom | 2004-06-30 22:13:07 -0500 (Wed, 30 Jun 2004) | 8 lines

Fix Issue #1729: Make indexing gracefully warn the user when a file is changing as it is being indexed.

\* ui/repl.py  
  (ChangingFile): New exception class.  
  (DoIndex): Handle new exception.

\* indexer/index.py  
  (FollowStream): Raise new exception if file changes during indexing.  
  (BuildDir): Unrelatedly, remove some obsolete comments, reformat some code, and fix the error check when creating a directory.

Other unrelated cleanups:

\* www/index.html: Fix some typos, set next release date.

-----

#####BuildDir#####—###1729#####  
#####index.html#####BuildDir#####  
#####  
#####  
  
#####1729#####BuildDir#####BuildDir####  
#####index.html#####  
  
#####  
#####

**####**

#####  
#####  
#####  
  
#####  
#####—#####  
#####—#####  
  
#####  
#####<sup>1</sup>#####  
#####  
#####  
  
#Thomas Jefferson#####Jefferson and His Time##Dumas Malone#####Jefferson#####  
#####Jefferson#####

---

<sup>1</sup>#####Martin Michlmayr#####Quality Improvement in Volunteer Free and Open Source Software Projects: Exploring the Impact of Release Management#<http://www.cyrius.com/publications/michlmayr-phd.html>#####Michlmayr##Google#####Google Video#<http://video.google.com/videoplay?docid=-5503858974016723264>###

#####Jefferson#####Jefferson#  
#####Jefferson#####  
#####  
  
#####`##`#####bugs###  
#####  
  
#####  
#####Chapter 8, #####the section called “#####”#####  
#####  
  
#####  
#####3##6#####

---

## Chapter 8. #####

#####  
#####

#####Subversion#####  
#####

#####“#####”###  
#####—#####  
#####—#####

#####”##“#####  
#####”#  
##“#####  
#####

#####  
#####

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#####<sup>1</sup>

#####bug#####  
#####  
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#####—#####—#####  
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### ##

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#####—#####  
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### #####

#####bug#####  
#####  
#####

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<sup>1</sup>#####Karim Lakhani#Robert G. Wolf#####Why Hackers Do What They Do: Understanding Motivation and Effort in Free/Open Source Software Projects##<http://freesoftware.mit.edu/papers/lakhaniwolf.pdf>

#####  
#####bug#####  
#####bug#####  
#####bug#####

#####bug# #####“#####bug##” “#  
##” “#####” “###”#####  
#####

#####jrandom#####

#####  
#####

## #####

#####“#####X#####  
#####`##### —#####X#####  
#####  
#####

#####  
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## #####

##### —#####

####Subversion#####1.0#####1.0#####  
#####1.0#####  
#####

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## ####

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#####

#####Chapter 6, ###the section called “####”#####  
##### —###/##### —#####“###”#####  
#####3####4#####  
##### —### —#####

#####the  
section called “##”#####  
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### ####

#####  
#####“####”#####  
#####  
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#####Subversion#####  
Apache#####ASF##Sander Striker#####

#Apache#####  
#####  
#####95%#####  
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#####5#####

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#####  
#####  
#####<sup>2</sup>

#####contrib/#####  
#####  
#####

# indexclean.py: #Scanley#####  
#  
# ####: K. Maru <kobayashi@yetanotheremailservice.com>  
# ####: Scanley##<<http://www.scanley.org/>>  
# #K. Maru#  
#  
# ...

#####

#####  
#####

### ####

#####20####

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<sup>2</sup>#####[http://groups.google.com/group/sage-devel/browse\\_thread/thread/e207ce2206f0beec](http://groups.google.com/group/sage-devel/browse_thread/thread/e207ce2206f0beec)“having authors names in .py files”#####  
#####William Stein#####  
#####

#####“#####”#####  
#####  
#####

#####“###”#####1#2#####Chapter 3, ##  
#####  
XML#####—#####  
#####

#####  
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## ####

#####  
##—#####—#####  
#####

### ####

#####bug#####  
#####

#####//#####bug#####bug#####  
#####bug#####

##[http://en.wikipedia.org/wiki/Regression\\_testing](http://en.wikipedia.org/wiki/Regression_testing)#

#####  
#####bug#  
#####

#####“#####”#####  
#####

#####bug  
#####  
#####

#####/bug#####CVS#<http://www.cvshome.org/>#####CVS#####  
###CVS#####shell#####sanity.sh#####  
#####CVS#####CVS#####sanity.sh####  
#####

#####bug#####CVS#####  
#####35000##Bourne shell#####CVS#####

#####—#####<sup>3</sup>#####  
#####bug#####CVS#####  
#####bug#####

<sup>3</sup>#####

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```
#####Bourne shell#####  
#####
```

## #####

```
#####bug#####  
#####bug#####FAQ#####  
#####  
#####
```

```
#####bug#####  
bug—#####bug#####  
##/bug#####bug#####
```

```
#####bug#####  
#####
```

```
#####Scanley#####
```

```
#####—#####—#####
```

```
#####Scanley#####
```

```
#####/#####bug#####bug#  
#####
```

```
#####Scanley#####  
#####http://www.scanley.org/how\_to\_report\_a\_bug.html#
```

```
#####bug#####  
#####bug#####—#####“###  
##”#####”#####bug#####  
#####bug#####  
#####
```

```
Subversion###bug#####Appendix D, ##bug#####bug#####  
#####—#####bug#####  
#####  
#####/###—#####  
#####
```

```
#####bug#####Subver-  
sion#####
```

```
#####6#####Windows#####  
#####“RC”#####
```

```
#####  
#####
```

```
#####Subversion##### [...]
```

```
...#####50#####Chapter 2, ###the  
section called “#####”#####“###”#####  
###
```



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## #####

##### —##  
#####

#####Subversion#####  
#####the  
section called “####”#the section called “#####”#####

#####FAQ#####FAQ#####  
#####  
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#####“##”#####  
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## ####

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##### —##### —#####  
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#####bug#####bug#####  
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#####/  
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#####Subversion#####“#####  
#####”##### —###  
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#####Subversion#####  
#####the section called “##”#####  
#####

## ####

#####“##”##### —#####  
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#Subversion##### — #####10  
####12#####

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#####  
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#####Subversion#####  
#####Subversion#####  
#####  
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##### — #####  
#####

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#####

###(I18N)###(L10N)#####  
#http://en.wikipedia.org/wiki/G11n###

#####

#####Unicode(http://en.wikipedia.org/wiki/Unicode)#####  
#####

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#####  
#####bug#####

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#####the section called “#####”###  
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##bug#####bug#####  
#####

#####  
#####bug##### — #####bug#####  
#####

#####bug#####  
#####bug#####

#####Subversion#####“##bug  
X#####”#####“#####”#####IssueZilla#####<sup>4</sup>##  
#####Subversion#####bug#####  
#####bug#####bug#####bug#####  
#####

#####bug#####bug#####  
#####  
#####  
#####

## FAQ###

FAQ#####FAQ#####FAQ#####  
#####  
#### —##### —#####

FAQ#####FAQ#####  
#####FAQ#####  
##FAQ#####FAQ#####FAQ#####FAQ#

FAQ#####FAQ#####FAQ#####Chapter 6, ###the section called “#####”####  
####FAQ#####FAQ#####

#####FAQ#####FAQ#####FAQ#####  
wiki#####FAQ####Chapter 3, #####the section called “Wikis”#####Faq-O-Matic#  
#####http://faqomatic.sourceforge.net/#####Faq-O-Matic#####  
FAQ#####FAQ#####FAQ#####  
###FAQ#####FAQ#####FAQ#####

#Sean Michael Kerner#http://osdir.com/Article1722.phtml###The FAQs on FAQs#####FAQ####

## ##

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#####

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##### —##### —#####100%#####  
#####  
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#####  
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#####

<sup>4</sup>IssueZilla#####BugZilla###

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#####—#####

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#####

>#####  
>#####  
>  
##### “”#

#####6##7#... #####  
#####  
#####... ##[#####]##  
##

#####  
#####  
#####

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#####—#####—#####  
#####“#####” “#####”#####  
#####  
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#####—#####—#####  
####Subversion#####  
#####

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### ###

#####“##”#####  
#####  
#####<sup>5</sup># #####  
#####

#Chapter 4, #####the section called “#####”#####  
#####

<sup>5</sup>#####“#####”#“#####”####  
#####

## #####

#Subversion#####  
#####bug#####  
#####  
#####  
  
#####IRC#####  
#####  
##“#####”#####  
##### — #####  
  
##### — #####  
#####“#####”##“#####”  
#####”###100#####10#####90#####bug#####10#####

## #####

#####  
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#####  
#####“#####”#####  
#####  
#####  
  
#####the section called “#####”#####

## #####

#####RedHat  
RPM#####  
  
#####Chapter 4, #####the section called “#####”#####  
#####Subversion#####  
#####"+0"#+1 #####"+1"##.....  
  
#####  
##“##”#####  
  
#####  
#####  
  
#####Chapter 3, #####the section called “##”#

## #####

#####  
  
#####  
#####  
#####  
  
#####the section called “#####”#####  
#####

## ####

#####  
#####Subversion#####  
#####  
#####MAINTAINERS#COMMITTERS#####  
#####Chapter 3, #####the section called “#####”##  
#####  
#####

## ##

#####  
#####  
#####  
#####Chapter 3, #####  
#####"##J. Random <jrandom@example.com>"#####"##J. Random jrandom@example.com>#bug#####bug###"  
#Subversion###bug#####bug#####  
#####14525###Subversion#####10%#####bug#####  
#####Subversion#80#####55#####  
#####  
#####“Daniel#####  
###X”#####Daniel#####Daniel#####  
#####  
• ##### #IRC#####bug#####  
#####  
#####  
#####  
#####  
#####  
#####  
• #####  
#####

## ##

#Chapter 4, #####the section called “#####forkability#”#####  
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#####  
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#####“#”#####F####P###P#####F#####  
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#####—#####

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#####—#####  
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### ####

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###—#####—#####  
#####  
#####

#####GCC/EGCS  
###GNU Compiler Collection#GCC####GNU C Compiler#####  
#GCC#####Cygnus#####<sup>6</sup>GCC#####Cygnus####GCC#####EGCS#####  
#####EGCS#####GCC#####EGCS#####GCC#####  
##EGCS#####EGCS###GCC#####GCC#####“GCC”##  
#####EGCS#####GCC###EGCS#####GCC#####  
#####

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#####—#####

### #####

#####  
#####“#####”#####  
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#####—“#####”—#####  
#####—#####—#####  
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#####—#####  
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<sup>6</sup>###RedHat#<http://www.redhat.com/>#####

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# Chapter 9. #####

##

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#####  
#####

#####FOSS#F/OSS#FLOSS#####  
####

####

#####Richard Stallman#####GNU General Public License (GPL)#####  
#####http://www.fsf.org/#####

##“####”#####“##”#####FSF#####  
##FSF#####—#####“0##”#“free”####“##”#“free”—#####  
#####“free”#“##”#####“0##”####

####

#####Open Source Initiative http://www.opensource.org/###  
#“####”#####“####”#####  
####“###”#####

#####“####”#####  
#####“##”#####Chapter 1, ###the section called  
““##”##“##””#

#####—#####—#####http://www.fsf.org/licensing/es-  
says/free-software-for-freedom.html#####http://www.opensource.org/advoca-  
cy/case\_for\_hackers.php#marketing#http://www.opensource.org/advocacy/free-notfree.php#

FOSS, F/OSS, FLOSS

#####FOSS###F/OSS##  
#“Free / Open Source Software”#####FLOSS####“Free / Libre Open Source Software”#libre##  
#####“free”#####http://en.wikipedia.org/wiki/FLOSS##

#####—#####—#####

DFSG-##

##Debian#####http://www.debian.org/social\_contract#guidelines#####free#li-  
bre#####Debian#####Debian#  
#####Debian#####Debian#####http://  
en.wikipedia.org/wiki/DFSG#####DFSG-  
#####DFSG-####

OSI-##

#####OSI#####Debian#####  
#####niche licenses#####Debian###OSI#####  
#http://www.opensource.org/licenses/#####“OSI-##”#####

#####http://www.fsf.org/licensing/licenses/license-list.html#####FSF#####  
#####GNU#GPL#####GPL#####the section called “GPL#####”###

```
##, ##
“##”#“##”#####
#####

###“##”#“##”#####“##”#####
#####“##”#“##”#####
#####

#####“##”#####
#####
#####

###
#####
#####

#####//#####
#####“##”#####
#####

copleft
#####
#####//#####FSF#####
#——#####

#####GNU GPL#####GPL#####the section called
“GPL#####”#
```

## #####

```
#####
#####

#####
#####Apache###X Consor-
tium###BSD#####MIT#####

#####
#####GNU GPL#
#####GPL#####GPL#####GPL#####GPL#####the section called
“GPL#####”#####

#####
#####

####
#####
#####

#####
#####

“#####”##
#####Perl#####Donald Knuth#TeX#####
#####
#####

#####//#####
#####

#####
#####Perl#####Donald Knuth#TeX#####
#####
#####

#####//#####
#####
```

## GPL#####

#####GNU GPL#####GPL#####GPL##  
#####GPL#####<http://www.fsf.org/licensing/licenses/gpl.html>#####

1. #####—#####GPL#####—####GPL####

2. #####“#####”#

#####GPL#####GPL#####//—#####GPL#####  
#####GPL#####—#####—#GPL#“###  
#####...””#####GPL#####

#####Chapter 6, ###the section called “#####”#####  
GPL#####GPL#####<http://freshmeat.net/stats/#license###68%>#####  
#####6%#####GPL#####—#####GPL###—#####GPL#####GPL#####  
#####GPL#####//#####GPL#####  
#####

#####GPL#####<http://www.gnu.org/licenses/license-list.html>#####  
#####

## #####

#####

- #####
- #####  
##

#####Chapter 2, ###the section called “#####”#

## MIT / X Window System License

#####MIT / X Window System#####  
#####X Window System#####“#####”##GNU GPL#####  
####

Copyright#c# <##> <#####>

#####  
#“##”#####  
#####/##  
#####  
#####

#####  
####

####“##”#####  
#####  
#####  
#####

#####

#####

##http://www.opensource.org/licenses/mit-license.php##

## GNU General Public License

#####GNU GPL#http://www.fsf.org/licensing/licenses/gpl.html##GPL#####GPL#####

#####GPL##### —#####  
## —#####GPL#GNU Library  
GPL#####GNU Lesser GPL#####LGPL##LGPL#GPL#####  
#####GPL#####MIT/X#####

## GPL#####

##GPL##### —##### —#####GPL#####“##”##### —#####  
#####GPL##MIT/X#####“#####”#####“#####”#####  
#####GPL#####

#####Chapter 6, ##the section called “#####”#####GPL#####  
#####GPL#####  
#####

#####“GPL#####”###GPL#####  
#####

#####

## #BSD####

#####BSD#####BSD#####Berkeley#####Unix#####  
#####http://www.xfree86.org/3.3.6/COPYRIGHT2.html#6#2.2##MIT/X#####

#####Lawrence Berkeley#####

#####BSD##### —#####“##  
##Lawrence Berkeley##” —#####  
###1999#####

#####BSD#####“BSD##”#####MIT/  
X#####BSD#####MIT/X#####BSD#####

#####<##>#####

#####BSD#####MIT/X##  
##### —#####

#####BSD#####http://www.opensource.org/licenses/bsd-license.php#

## #####

#####  
##CLA#####CLA#####email#####  
#####

#####<sup>1</sup>#####  
#####  
#####CLA#####

## ####

#####CLA#####  
#####SCO###  
Linux#####http://en.wikipedia.org/wiki/SCO-Linux\_controversies#####  
#####

## #####

CLA#####CLA#####  
#####  
#####CLA#####"...#####  
#####"#####CLA##  
#####  
#####CLA#####CLA#####  
#####  
#####  
#####

- #####CLA#
  - <http://apache.org/licenses/icla.txt>
  - <http://code.google.com/legal/individual-cla-v1.0.html>
- #####CLA#
  - <http://apache.org/licenses/cla-corporate.txt>
  - <http://code.google.com/legal/corporate-cla-v1.0.html>

## ####

#####  
#####  
#####  
#####—##“#####  
”#####  
#####  
##FSF#####  
FSF#####GPL#####FSF#####  
FSF#####  
#####CLA#####

<sup>1</sup>#####“##”#####

# #####

## ##

4###RedHat#####[http://www.redhat.com/legal/patent\\_policy.html](http://www.redhat.com/legal/patent_policy.html)#

7. #####  
#####  
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#####  
#####  
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#####

[...]

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#####  
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#####  
#####

Apache#####2.0#<http://www.apache.org/licenses/LICENSE-2.0>#####  
#####  
###

3. #####

#####  
##### ( ##  
##### ) #####  
#####  
#####  
#####  
#####  
##### ( ##### ) #####  
#####  
#####

#####  
#####<http://www.nosoftwarepatents.com/>#####  
#[http://en.wikipedia.org/wiki/Software\\_patent](http://en.wikipedia.org/wiki/Software_patent)#####blog##<http://www.rants.org/2007/05/01/how-to-tell-that-software-patents-are-a-bad-idea/>#

####

#####  
#####

- *Understanding Open Source and Free Software Licensing*##Andrew M. St. Laurent. O'Reilly#  
#####2004#8## ISBN: 0-596-00581-4.

#####<http://www.oreilly.com/catalog/osfreesoft/>#

- *Make Your Open Source Software GPL-Compatible. Or Else.*##David A. Wheeler### <http://www.d-wheeler.com/essays/gpl-compatible.html>.

#####GPL#####GPL#####

- <http://creativecommons.org/>

#####  
#####copyleft#####copyleft#####  
#####



---

## Appendix A. #####

####2007#####Subversion###Subversion#CVS#####  
#####http://en.wikipedia.org/wiki/List\_of\_revision\_control\_software#

### CVS — <http://www.nongnu.org/cvs/>

CVS#####  
#####CVS#####  
####[#####CVS#Subversion#####CVS#####5##]

### Subversion — <http://subversion.tigris.org/>

Subversion#####CVS###—#####CVS#####CVS#####Subversion##  
#####CVS#####Subversion#####Subversion#####[#####Subver-  
sion#####]

### SVK — <http://svk.elixus.org/>

##SVK###Subversion#####Subversion#SVK#####  
SVK#####

### Mercurial — <http://www.selenic.com/mercurial/>

Mercurial#####“#####CPU##HTTP#SSH#####  
web##UNIX#MacOS X#Windows#####”#####Mercurial###

### GIT — <http://git.or.cz/>

GIT#Linux Torvalds#####Linux kernel#####GIT#####kernel#####  
Linux kernel#####“...#####Linux kernel# Git#####  
#####GNU Arch#Monotone#####BitKeeper###Git#####  
#####”

### Bazaar — <http://bazaar.canonical.com/>

Bazaar#####GNU Arch#####GNU Arch#####GNU Arch#####  
#####

### Bazaar-NG — <http://bazaar-ng.org/>

Bazaar-NG##bzd###Canonical#http://canonical.com/#####  
#####

### Darcs — <http://abridgegame.org/darcs/>

“David#####Advanced Revision Control System#####CVS#####Haskell#####Linux#Ma-  
cOS X#FreeBSD#OpenBSD#Microsoft Windows#Darcs#####cgi###”

## Arch — <http://www.gnu.org/software/gnu-arch/>

```
GNU Arch#####"###archive#"#####
##Arch##CVS#####Arch#####Arch###
```

## monotone — <http://www.venge.net/monotone/>

```
"monotone#####
#####RSA#####GNU GPL###linux#so-
laris#OSX#windows##"
```

## Codeville — <http://codeville.org/>

```
"#####Codeville#####
#####"

"Codeville#####
#####codeville##CVS#####"
```

## Vesta — <http://www.vestasy.org/>

```
"Vesta#####SCM[#####]#####10000#####10000000#####"

"Vesta#####Compaq/Digital#####10#####Compaq#Alpha#####
##Alpha#####150#####Vesta#####130MB#####1.5GB##
#####10#15GB#####Vesta#####Vesta Alpha#####
#####Vesta#####Vesta#####Alpha#####Intel#####
#####Vesta#"
```

## Aegis — <http://aegis.sourceforge.net/>

```
"Aegis#####Aegis#####
#####"
```

## CVSNT — <http://cvsnt.org/>

```
"CVSNT#####CVS##### ... CVSNT#####GNU GPL#####"##
#####CVS#####Windows###SSPI#####sserver###SSPI#####Windows#
Unix###NT###Win32#####MergePoint#####
```

## META-CVS — <http://users.footprints.net/~kaz/mcvs.html>

```
"Meta-CVS#####CVS#####CVS#####CVS#####"META-CVS#
#####CVS
###
```

## OpenCM — <http://www.opencm.org/>

```
"OpenCM#####CVS#####CVS##'####'#####CVS#####
##OpenCM#####"
```

## Stellation — <http://www.eclipse.org/stellation/>

```
”Stellation#####IBM#####Stellation####SCM#####
#####“
```

## PRCS — <http://prcs.sourceforge.net/>

```
”PRCS#####CVS##### ... #####SC-
CS#RCS#CVS#####“
```

## ArX — <http://www.nongnu.org/arx/>

```
ArX#####HTTP#####
```

## SourceJammer — <http://sourcejammer.org/>

```
”SourceJammer####Java#####
##### “
```

## FastCST — <http://www.zedshaw.com/projects/fastcst/index.html>

```
”#####‘##’#####FastCST#####FTP#####HTTP
#####‘serve’#####
#####“
```

## Superversion — <http://www.superversion.org/>

```
”Superversion#####
#####Superversion##### “
```

---

## Appendix B. ##Bug####

#####bug#####bug#####bug#####  
##### — #####

#####`###issue#`#####`###artifact#`#`bug`####

### Bugzilla — <http://www.bugzilla.org/>

Bugzilla#####  
###Bugzilla#####

### GNATS — <http://www.gnu.org/software/gnats/>

GNU GNATS#####bug#####  
#####GNATS#####  
#####/#####

### RequestTracker (RT) — <http://www.bestpractical.com/rt/>

RT####`RT#####`RT#####web#####  
#####RT####GNU GPL#####web#####

### Trac — <http://trac.edgewall.com/>

Trac#####bug#####wiki#bug#####wiki#####wiki#####  
Subversion####Appendix A, #####

### Roundup — <http://roundup.sourceforge.net/>

Roundup#####Python 2.1#####web#email#####web#####  
#####

### Mantis — <http://www.mantisbt.org/>

Mantis#####web#bug#####PHP#####MySQL#####web#####  
####

### Flyspray — <http://www.flyspray.org/>

Flyspray#####PHP#####web#bug#####`#####`MySQL#PGSQL##  
####`##`#####email#Jabber#####CSS#####RSS/Atom###wiki#  
#####

### Scarab — <http://scarab.tigris.org/>

Scarab#####bug#####bug#####  
  
#####web#####Scarab#####`##`#####  
#####

2004##Scarab#####1.0#####

## Debian Bug#####DBTS# — <http://www.chiark.greenend.org.uk/~ian/debbugs/>

Debian Bug#####DBTS#####<http://bugs.debian.org/#277,741>####

#####DBTS#####  
#####web#####bug#####bug#####**reportbug**###  
Emacs##debbugs-el#####bug#####

DBTS#####web#####

## Trouble-Ticket Trackers

#####bug#####bug#####  
#trouble-ticket#####bug###

- **WebCall** — <http://myrapid.com/webcall/>
- **Teacup** — <http://www.altara.org/teacup.html>

#Teacup#####web#####

## Bluetail Ticket Tracker (BTT) — <http://btt.sourceforge.net/>

BTT#####trouble-ticket tracker#bug#####bug#####Staff#Friend#Customer#Anonymous#####  
#####FAQ#

---

# Appendix C. #####

#####

Poul-Henning Kamp###“##”#####Chapter 6, #####  
#http://www.freebsd.org/cgi/getmsg.cgi?fetch=506636+517178+/usr/local/www/db/text/1999/freeb-  
sd-hackers/19991003.freebsd-hackers#

Subject: #####...  
##: Poul-Henning Kamp <phk@freebsd.org>  
##: 1999#10#2# ### 16:14:10 +0200  
Message-ID: <18238.938873650@citter.freebsd.dk>  
###: phk@citter.freebsd.dk  
##: Blind Distribution List: ;  
MIME-Version: 1.0

[###committers, hackers]

#####  
#####

#####committers#hackers#  
#####hackers#####  
###

#####“sleep(1)#####”#####  
#####

#####

#####sleep(1)#####  
#####  
#####

sleep(1)#####FreddBSD#####  
#####OpenBSD#NetBSD#####  
#####

#####  
#####

“#####”#####

#####  
“#####”#####

#####  
#####

#####50%#####  
#####35

###

#####  
##########  
##########  
#####  
Richard P. Feynmann#####  
##########  
#####  
##########`####`#####  
#####`#####`#####  
##########  
#####  
#####

#####hackers#

#####hackers#####  
##########/dev/null#####[###]  
#####ports#  
#####

#####

#####

#####  
#####

#####

#####  
#####  
##########  
#####





#####  
#####  
#####

#####FreeBSD#####  
##### [ ### ] #####  
#####

#####  
#####

Poul-Henning

---

# Appendix D. ##bug####

##Subversion#####bug#####Chapter 8, #####the section  
called “#####”#####http://svn.collab.net/repos/svn/trunk/www/bugs.html#

Subversion#####Bug

#####Bug#####Bug### - ###  
#####

####Bug

-----

- \* ###Subversion###Bug#####users@subversion.tigris.org#  
#####bug#####Bug  
#####dev@subversion.tigris.org###  
#####users@#####  
#####
- \* ###APR##Bug#####  
dev@apr.apache.org#dev@subversion.tigris.org
- \* ###Neon HTTP##Bug#####  
neon@webdav.org#dev@subversion.tigris.org
- \* ###Apache HTTPD 2.0#Bug#####  
dev@httpd.apache.org#dev@subversion.tigris.org#Apache httpd  
#####  
http://httpd.apache.org/bug\_report.html###bug#
- \* #####bug#####

#####Bug

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#####bug###Subversion#####  
#####  
##Subversion#####  
#####users@subversion.tigris.org  
#####IRC#irc.freenode.net#####svn####

#####bug#####  
#####bug#####5####10#####  
#####bug#####

#####bug#####  
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#####Subversion#####:-)##bug##

#####Subversion#####

#####Bug#####

\* #####  
\* Subversion#####  
\* ##Subversion#####  
\* ##Subversion#####  
\* ##Subversion#Berkeley DB#####  
\* #####

#####Bug#####

##Subversion#####Bug#

#####

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####bug##### - #####

<http://svn.collab.net/repos/svn/trunk/www/hacking.html#patches#>

#####dev@subversion.tigris.org#####

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#####bug#####

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# Appendix E. ##

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#####Karl Fogel<kfogel@red-bean.com>#

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