Free test tools are like a box of chocolates

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Topics

- Licensing
- Tips on using Open Source tools
- Pros and cons of Open Source
- Types of tools
- References

Licensing

"Don't install any open source until our lawyers tell us what to do!"

- Remember that most tools you use will only be used internally, so rules about redistribution might not affect you.

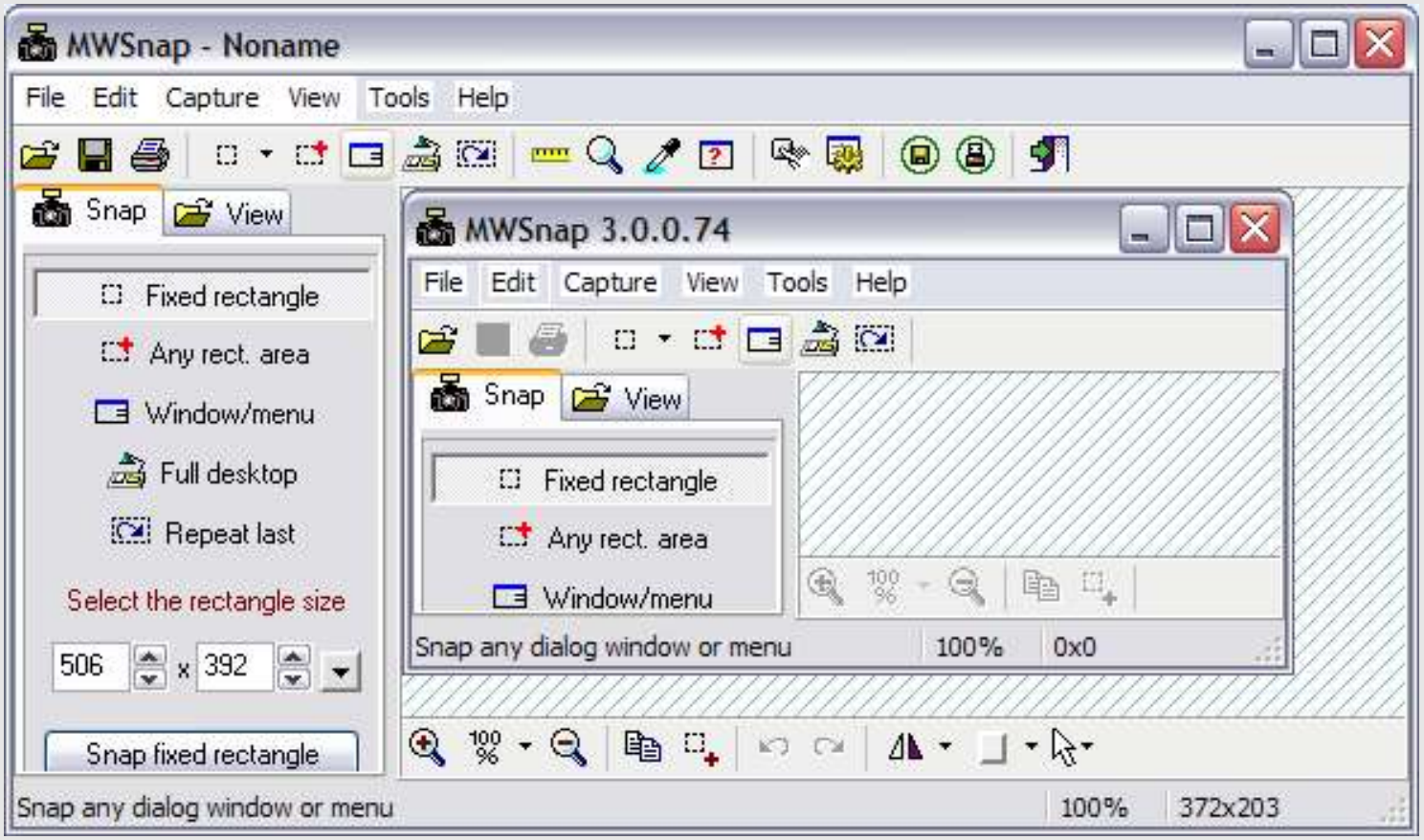
Commercial licenses

- Big dogs
- Underdogs
- Shareware

Alternative licenses

- Open source
  - Public domain
  - Copyleft
  - Permissive
- Freeware
- Own it yourself (homebrew)

MWSnap example



jenny example

```
cmeisenzahl@cmeisenzahl2k ~
$ jenny -n2 -w1a2b 3 2 2
 1a 2a 3a
 1b 2b 3b
 1c 2b 3a
 1b 2a 3a
 1a 2a 3b
 1c 2a 3b

cmeisenzahl@cmeisenzahl2k ~
$
```

What's different?

MWSnap –

- Freeware, no source
- Easy .exe file installer
- Production quality
- GUI interface

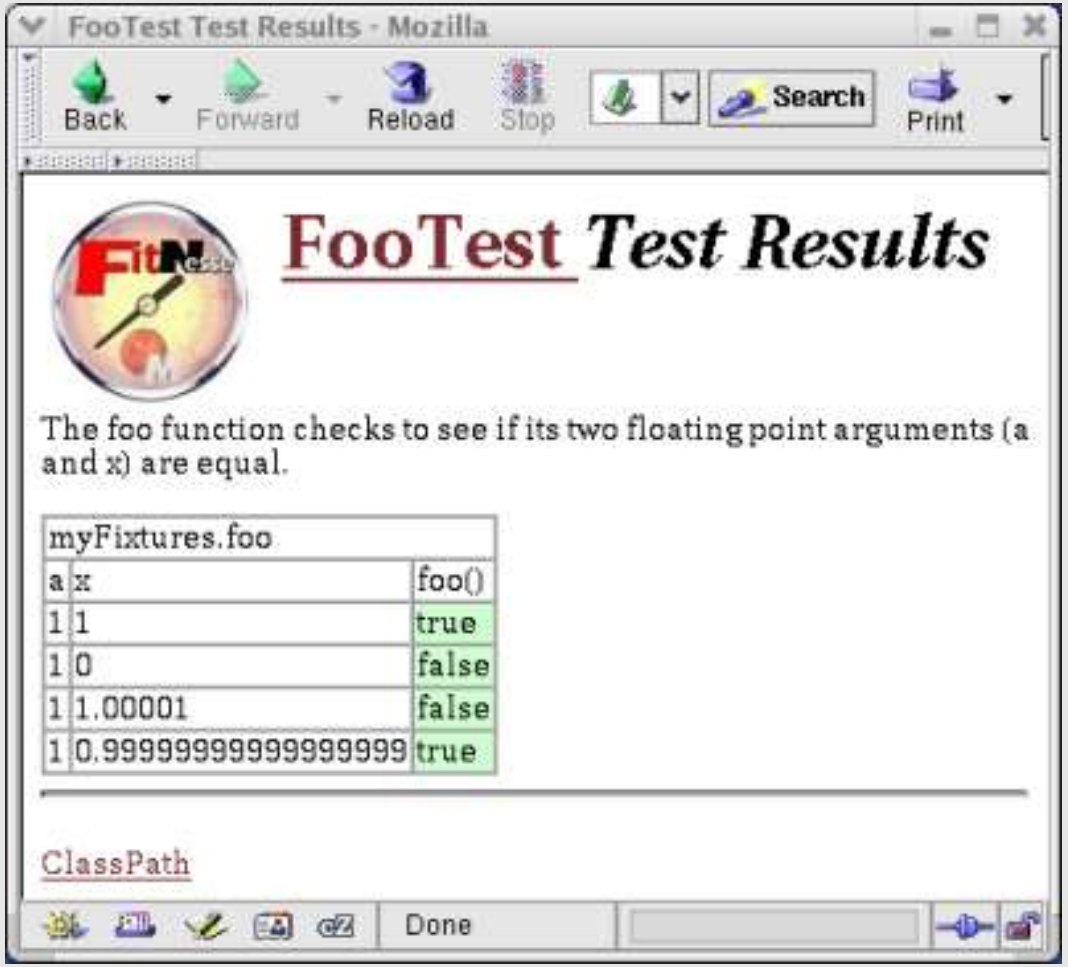
jenny –

- public domain, source included
- Manual compilation
- Beta quality
- Command line

Homebrew user interface

- jenny's user interface is much harder to use than a similar command-line too, ALLPAIRS
- So I wrote nicejenny, a Perl script front end that makes jenny's interface work like ALLPAIRS

FitNesse example



FitNesse notes

- Install from a zip file, but not a standard Windows app
- Must invoke the Java interpreter or use a batch file front end
- Not always easy to tell what files to download and install

A tale of two forges

- fitnesse.org uses SourceForge to distribute its releases, but for little else.

Don't get your hopes up

- Beware services that aren't really used
  (http://sourceforge.net/tracker/index.php?func=detail&aid=881626&group_id=77333&atid=549887)

[881626] run.sh typo.

You may monitor this Tracker item after you login (register an account, if you do not already have one).

Submitted By:
Nobody/Anonymous - nobody

Date Submitted:
2004-01-21 11:20

Last Updated By:
Item Submitter - Tracker Item Submitted

Date Last Updated:
No updates since submission

Number of Comments:
0

Number of Attachments:
0

Category: (?)
None

Group: (?)
None

Assigned To: (?)
Nobody/Anonymous

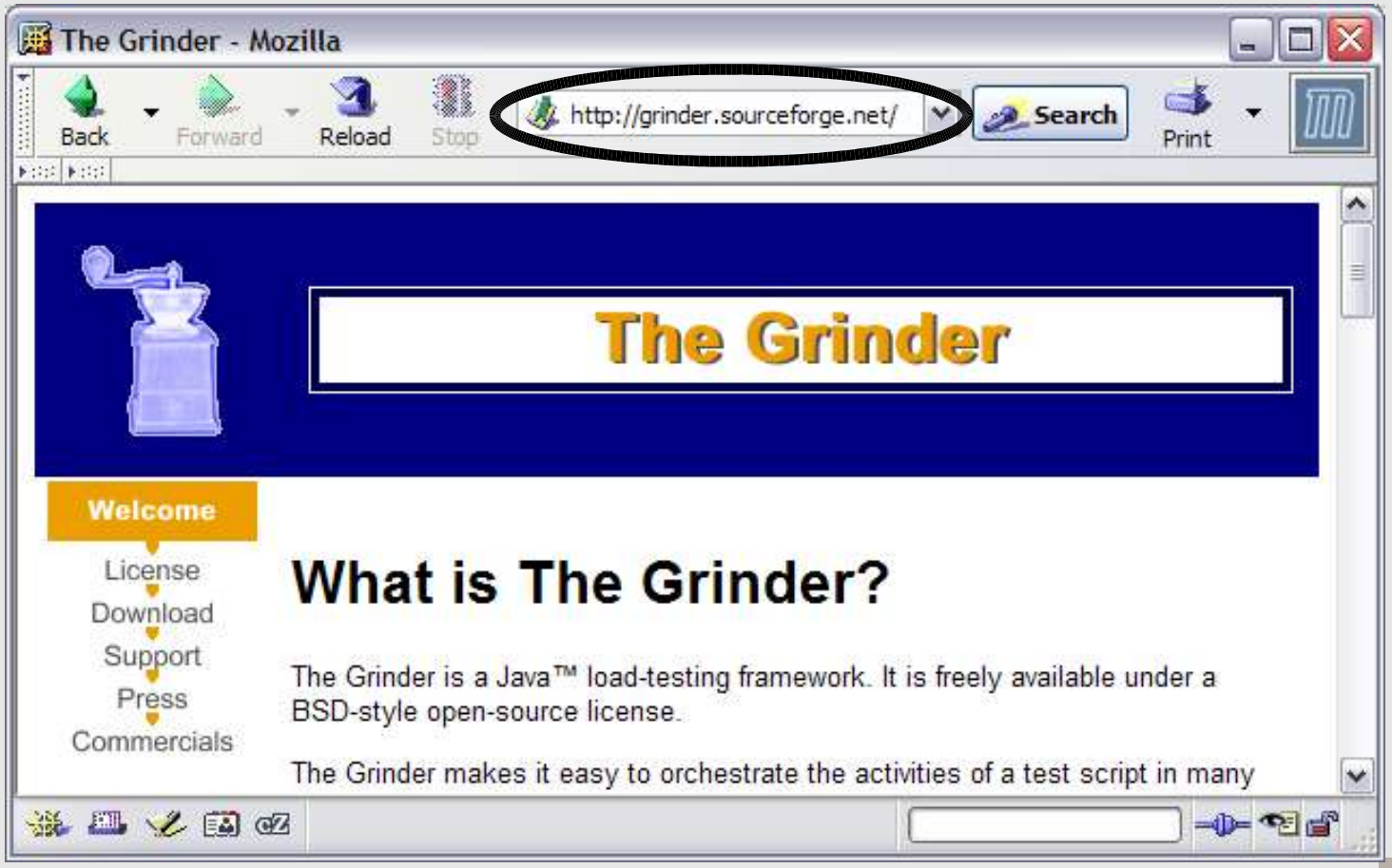
Priority: (?)
5

Status: (?)
Open

Resolution: (?)
None

Summary: (?)
run.sh typo.
run.sh should run class...
fitnesse.Fitnesse
not
fitnesse.FitNesse

A better SourceForge customer



Find the summary page

- The Grinder project uses all of the SourceForge features above (http://sourceforge.net/projects/grinder)

Tips

- Learn what resources to expect on projects hosted on SourceForge (be aware that some projects use alternative resources, too)
- See if there's a bug database, and if people are using it
- Look for mailing lists and/or web forums

More Tips

- Contact the maintainer(s) directly if there isn't a good mailing list
- Figure out where the documentation is hidden
- Find CVS archives if available
- Use Google to find additional information about the tool

Tool URLs

- MWSnap, http://www.mirekw.com/winfreeware/mwsnap.html
- jenny, http://burtleburtle.net/bob/math/jenny.html
- nicejenny, http://tejasconsulting.com/open-testware/contrib/nicejenny
- FitNesse, http://fitnesse.org/
- The Grinder, http://grinder.sourceforge.net/

Pros of Open Source

- Can get started learning, evaluating, and using a tool immediately
- Source code available for bug fixing or adding new features
- Improvements can be shared
- Alternate sources of commercial support may be available
- Free

Cons of Open Source

- Features may change frequently, new releases may not be compatible
- Documentation may be incomplete or wrong
- Commercial support may not be available
- Might not have a strong user community to help with issues
- Cost of internal support might exceed the cost of a commercial tool

Types of tools

- Operating systems, e.g.: Linux, FreeBSD
- Compilers, e.g.: GCC
- Build tools, e.g.: make, gmake, ant.
- Scripting languages, e.g.: Perl, Python, Ruby, tcl, awk, and Rexx
- Editors, e.g.: vi, Emacs
- Version control tools, e.g.: CVS, Arch, Aegis, Subversion
- Bug tracking tools, e.g.: Bugzilla, Mantis

More types of tools

- Symbolic debuggers, e.g.: GDB
- Run-time analysis tools, e.g.: Valgrind, mpatrol, dmalloc
- Flight recorders/screen capture tools, e.g.: Captura, MWSnap, xwd
- Static analysis tools, e.g.: Jlint, sclc, Dependency Walker, LinkChecker
- Test harnesses, e.g. JUnit, QMtest, TET, TCM
- Test coverage analyzers, e.g.: gcov, Javacoverage, ATAC
- Test interface drivers, e.g.: jemmy, syscalltrack, HtmlUnit

Yet more tool types

- Keyword and data-driven test parsers, e.g.: SAFS
- Test data generators, e.g.: ALLPAIRS, jenny, DGL
- Load test tools, e.g.: OpenSTA, The Grinder, TestMaker
- Performance tools, e.g.: ApacheBench, JUnitPerf, iozone
- Stress test tools, e.g.: stress_driver, crashme, torture, dbgrinder
- Integrated development environments, e.g.: Eclipse

References

- "The Free Software Definition" - http://www.gnu.org/philosophy/free-sw.html
- "OSI Approved Licenses" - http://opensource.org/licenses/
- "Various Licenses and Comments about Them" – a good taxonomy – http://www.gnu.org/licenses/license-list.html
- "The Open Source Definition" - http://opensource.org/docs/definition.php

References

- *Open Testware Reviews* – includes surveys and reviews of scripting languages, test harnesses, test design tools, load test tools, etc. - http://tejasconsulting.com/open-testware/
- Roundtable on Homebrew Test Automation – http://www.stickyminds.com/s.asp?F=S7275_ROUND_55
- Blog entries from Bret Pettichord - "Homebrew Test Automation and Extreme Programming" - http://www.io.com/~wazmo/blog/archives/2004_02.html#000064 and "Interest in Open-Source Test Tools Grows" - http://www.io.com/~wazmo/blog/archives/2004_03.html#000074

References

- “Let's Hear It for the Underdogs”, http://tejasconsulting.com/stqe/underdogs.pdf
- Additional information on http://tejasconsulting.com/ and http://tejasconsulting.com/ancient-writings.html, including “What Flavor is Your Freeware?”, several articles on free test tools, and reviews of *The Cathedral & the Bazaar* and *Open Sources*.

Thanks for listening!

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