JNode 0.2.8 The Fosdem09 release

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February 8, 2009



Topics

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- New stuff in JNode
- 4 Future



What is JNode?

A Operating System written completely* in Java

Mission Statement (website)

Welcome to JNode.org, the website of the Java New Operating System Design Effort. JNode is a simple to use & install Java operating system for personal use. It runs on modern devices. Any Java application will run on it, fast & secure! JNode is open source and uses the LGPL license.



What is the goal? Who are we?

goals

- Short term: Server systems (e.g. in virtualized domains)
- Long term: replace Linux

developers

- Project founder: Ewout Prangsma
- Project leader: Levente Santha
- 6 developers (free time developers)



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 - Derby
 - Many many more



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- How can you execute Java code without a VM? How can you write a driver in Java?
- But you still have a nano kernel, right?
- Why no POSIX, JNI,..?



Changes since Fosdem08

VESA

- Setup by grub
- Simple framebuffer implementation
- No mode-switch
 - Vesa 2.x: real mode :/
 - Vesa 3.x: protected mode 16bit (often buggy)



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- Adds xml descriptors
- Bypasses the security system
- makes it easy to test applications



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Code Hotswap

- Parts of JDWP (GNU Classpath's version)
- Can be used in eclipse debugger,..
- Hotswap of kernel code
- No class layout change supported
- Might make troubles for inlined code



Changes since Fosdem08

Bjorn Shell

- Aim: bash compatibility
- Script support, shell redirections, pipelines, '&&', '||',...
- Variable expansions (\$var, \$?,...)
- Completion (try it!!!)
- To be done:
 - Missing features
 - '/dev', '/sys' and '/proc' filesystems
 - Standard variables (\$PWD, \$HOME,...)



Changes since Fosdem08

HFS+

- Reading HFS+ works
- Formatter
- Write support in progress
- File system checker missing



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 - jtreg (difficult!)
- Diff-tool is missing



What's next?

general

- Complete the OpenJDK move
- Extend test-server (especially regression test)
- Finish Isolation
- Bugfixes, speed improvements



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personal

- Complete the Cirrus graphics driver
- Make SMP work ("again")
- Improve memory management



Questions

Any Questions?

