

Transparent Decompression in ext4

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Background!

- Firefox on android
 - Custom Linker
 - libxul.so is compressed
 - Decompresses chunks on demand (traps SIGSEGV)

Why ext4

- Devices I was hacking used ext4
- Might (?) be easier to get support in a filesystem as opposed to in the VFS

Quick Status

- v1: Ugly hack to just gauge interest!
- v2: Two buffers, one compressed and one uncompressed. Expose uncompressed buffer.
 - Stuff works, but still randomly crashes. Other times it refuses to boot

Hints on the Mailing List

- Don't do it in the kernel
 - This means, we carry a custom linker
 - Feature is useful for other libraries as well
- Do it in the VFS
 - Reconciling with different filesystems
 - Some have compression, others do not
 - There will always 'n' + 1 compression schemes
- Do something similar to zisofs
 - I plan to hack this bit sometime soon.

Hints at LPC?