Subject: [PATCH 0/6] fuse: allocate req->pages[] dynamically
Posted by Maxim Patlasov on Fri, 07 Sep 2012 17:40:37 GMT

Hi,

Currently, any fuse request always includes inline pages[] array of
FUSE_MAX_PAGES_PER_REQ elements. This is the waste of memory because
in many cases smaller size would suffice.

The patch-set tries to allocate only as many elements of pages[] array as
actually needed. This will be even more useful in the future because of:

1. Mitsuo's patches making maximum read/write request size tunable.
2. My patches optimizing scatter-gather direct IO. To make them simplier I'll
need to substitute array of 'struct page *' with array of 'struct bio_vec'.
It would make memory overhead worse if implemented w/o this patch-set.

Thanks,
Maxim

Maxim Patlasov (6):
    fuse: general infrastructure for pages[] of variable size
    fuse: categorize fuse_get_req()
    fuse: rework fuse_retrieve()
    fuse: rework fuse_readpages()
    fuse: rework fuse_perform_write()
    fuse: rework fuse_do_ioctl()


```
 fs/fuse/cuse.c   |    2 +-
 fs/fuse/dev.c    |   70 +++++++++++++++++++++++++++++++++++++++++-----------------
 fs/fuse/dir.c    |   38 +++++++++++++++--------------
 fs/fuse/file.c   |   53 +++++++++++++++++++++++++++++----------------
 fs/fuse/fuse_i.h |   45 ++++++++++++++++++++++++++++++++-----
 fs/fuse/inode.c  |    6 ++---
 6 files changed, 143 insertions(+), 71 deletions(-)
```

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Signature