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*****
30306 Wed Nov  8 03:44:23 2017
new/usr/src/uts/common/fs/fifofs/fifosubr.c
5914 pipe generates inodes with ino > 4G
*****
1 /*
2  * CDDL HEADER START
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21 /*      Copyright (c) 1984, 1986, 1987, 1988, 1989 AT&T */

23 /*
24 * Copyright (c) 1988, 2010, Oracle and/or its affiliates. All rights reserved.
25 *
26 * Copyright 2017 Ivan Richwalski <ivan@seppuku.net>
27 *
28 */

30 /*
31 * The routines defined in this file are supporting routines for FIFOPS
32 * file system type.
33 */
34 #include <sys/types.h>
35 #include <sys/param.h>
36 #include <sys/system.h>
37 #include <sys/debug.h>
38 #include <sys/errno.h>
39 #include <sys/time.h>
40 #include <sys/kmem.h>
41 #include <sys/inline.h>
42 #include <sys/file.h>
43 #include <sys/proc.h>
44 #include <sys/stat.h>
45 #include <sys/sysmacros.h>
46 #include <sys/var.h>
47 #include <sys/vfs.h>
48 #include <sys/vfs_opreg.h>
49 #include <sys/vnode.h>
50 #include <sys/mode.h>
51 #include <sys/signal.h>
52 #include <sys/user.h>
53 #include <sys/uio.h>
54 #include <sys/flock.h>
55 #include <sys/stream.h>
56 #include <sys/fs/fifonode.h>
57 #include <sys/strsubr.h>
58 #include <sys/stropts.h>
59 #include <sys/cmn_err.h>
60 #include <fs/fs_subr.h>
61 #include <sys/ddi.h>

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```

64 #if FIFODEBUG
65 int Fifo_fastmode = 1;          /* pipes/fifos will be opened in fast mode */
66 int Fifo_verbose = 0;         /* msg when switching out of fast mode */
67 int Fifohiwat = FIFOHIWAT;   /* Modifiable FIFO high water mark */
68 #endif

70 /*
71 * This is the loadable module wrapper.
72 */
73 #include <sys/modctl.h>

75 extern struct qinit fifo_strdata;

77 struct vfsops *fifo_vfsops;

79 static vfsdef_t vfw = {
80     VFSDEF_VERSION,
81     "fifofs",
82     fifoinit,
83     VSW_ZMOUNT,
84     NULL
85 };
_____ unchanged_portion_omitted_

556 /*
557 * Attempt to establish a unique pipe id. Only un-named pipes use this
558 * routine. Use a 32-bit ino_t so any 32-bit processes that aren't large
559 * file aware can still stat() a pipe fd and not fail with EOVERFLOW.
560 * routine.
561 */
562 ino_t
563 fifogetid(void)
564 {
565     static ino32_t fifo_ino = 0;
566     static ino_t fifo_ino = 0;
567     ino_t fino;

567     mutex_enter(&fino_lock);
568     fino = fifo_ino++;
569     mutex_exit(&fino_lock);
570     return (fino);
571 }
_____ unchanged_portion_omitted_

```