

new/usr/src/uts/common/os/subr.c

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11109 Wed May 8 02:34:15 2019
new/usr/src/uts/common/os/subr.c
10907 hot_patch_kernel_text() has no respect for boundaries
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*****
1 /*
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21 /*
22 * Copyright 2010 Sun Microsystems, Inc. All rights reserved.
23 * Use is subject to license terms.
24 */
25
26 /*
27  * Copyright 2019 Joyent, Inc.
28  */
29
30 /*      Copyright (c) 1984, 1986, 1987, 1988, 1989 AT&T */
31 /*      All Rights Reserved      */
32
33 #include <sys/types.h>
34 #include <sys/sysmacros.h>
35 #include <sys/param.h>
36 #include <sys/vmparam.h>
37 #include <sys/system.h>
38 #include <sys/cred.h>
39 #include <sys/user.h>
40 #include <sys/proc.h>
41 #include <sys/conf.h>
42 #include <sys/tuneable.h>
43 #include <sys/cpuvar.h>
44 #include <sys/archsystem.h>
45 #include <sys/vmem.h>
46 #include <vm/seg_kmem.h>
47 #include <sys/errno.h>
48 #include <sys/cmn_err.h>
49 #include <sys/debug.h>
50 #include <sys/atomic.h>
51 #include <sys/model.h>
52 #include <sys/kmem.h>
53 #include <sys/memlist.h>
54 #include <sys/autoconf.h>
55 #include <sys/onttrap.h>
56 #include <sys/utsname.h>
57 #include <sys/zone.h>
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59 #ifdef __sparc
60 #include <sys/membar.h>
61 #endif
62
63 /*
64  * Routine which sets a user error; placed in
65  * illegal entries in the bdevsw and cdevsw tables.
66  */
67
68 int
69 nodev()
70 {
71     return (curthread->t_lwp ?
72         ttolwp(curthread)->lwp_error = ENXIO : ENXIO);
73 }
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75 unchanged_portion_omitted
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354     *(uint16_t *) (vaddr + pageoff) = new_instr;
355     *(uint16_t *) (vaddr + off) = new_instr;
356     break;
357 case 4:
358     *(uint32_t *) (vaddr + pageoff) = new_instr;
359     *(uint32_t *) (vaddr + off) = new_instr;
360     break;
361 default:
362     panic("illegal hot-patch");
363 }
364 membar_enter();
365 sync_icache(vaddr + pageoff, size);
366 sync_icache(vaddr + off, size);
367 sync_icache(iaddr, size);
368 as_pageunlock(&kas, ppp, ipageaddr, mapsize, S_WRITE);
369 hat_unload(kas.a_hat, vaddr, mapsize, HAT_UNLOAD_UNLOCK);
370 vmem_free(heap_arena, vaddr, mapsize);
371 as_pageunlock(&kas, ppp, iaddr - off, PAGESIZE, S_WRITE);
372 hat_unload(kas.a_hat, vaddr, PAGESIZE, HAT_UNLOAD_UNLOCK);
373 vmem_free(heap_arena, vaddr, PAGESIZE);
374 }
```

unchanged portion omitted