Υποβολή 5ης Άσκησης

Σωτήρης Σουκαράς	6205

Ερώτημα Α

Λίστα τροποποιηθέντων αρχείων

/usr/src/include/minix/callnr.h

/usr/src/servers/vfs/table.c

/usr/src/servers/vfs/proto.h

/usr/src/servers/vfs/Makefile

Λίστα νέων αρχείων

/usr/include/mycallib.h

/usr/src/servers/vfs/mycall.c

/root/test.c

Τροποποιήσεις

/usr/src/include/minix/callnr.h

Line	Code
68	#define MYCALL 69

/usr/src/servers/vfs/table.c

Line	Code
87	do_mycall, /*69 = mycall */

/usr/src/servers/vfs/proto.h

Line	Code
145	int do_mycall();

/usr/src/servers/vfs/Makefile

Line	Code
7	filedes.c stadir.c **mycall.c** protect.c table.c \

/usr/include/mycallib.h

Line	Code
1	#include <lib.h>
2	#include <unistd.h>
3	
4	void mycall(char *var)
5	{
6	message m;
7	m.m1_i1=strlen(var)+1;
8	m.m1_p1=(char*)var;
9	return (_syscall(VFS_PROC_NR, MYCALL, %m));
10	}

/usr/src/servers/vfs/mycall.c

Line	Code
1	#include <sys/statfs.h>
2	#include <sys/stat.h>
3	#include "fs.h"
4	#include "param.h"
5	#include "vmnt.h"
6	#include <string.h>
7	#include "fproc.h"
8	#include <minix/com.h>
9	#include "path.h"
10	#include <minix/u64.h>
11	#include "file.h"
12	#include <minix/callnr.h>
13	#include <minix/vfsif.h>
14	#include "threads.h"
15	#include <assert.h>
16	#include "dmap.h"
17	#define __VFS_VNODE_H__
18	#include "vnode.h"
19	EXTERN struct vnode {

20	endpoint_t v_fs_e;
21	endpoint_t v_mapfs_e;
22	ino_t v_inode_nr;
23	mode_t v_mode;
24	uid_t v_uid;
25	gid_t v_gid;
26	off_t v_size;
27	int v_ref_count;
28	int v_fs_count;
29	int v_mapfs_count;
30	#if 0
31	int v_ref_check;
32	#endif
33	endpoint_t v_bfs_e;
34	dev_t v_dev;
35	struct vmnt *v_vmnt;
36	tll_t v_lock;
37	ino_t v_mapinode_nr;
38	}vnode[NR_VNODES];
39	#define VNODE_READ TLL_READ
40	
41	int do_mycall()
42	{
43	struct vnode *vp;
44	struct vmnt *vmp;
45	char fullpath[PATH_MAX];
46	struct lookup resolve;
47	
48	vir_bytes vname1, statbuf;
49	size_t vname1_length;
50	
51	vname1 = (vir_bytes) job_m_in.name1;
52	vname1_length = (size_t) job_m_in.name1_length;
53	statbuf = (vir_bytes) job_m_in.m1_p2;
54	
55	lookup_init(&resolve, fullpath, PATH_NOFLAGS, &vmp,&vp);
56	resolve.l_vmnt_lock=VMNT_READ;

57	Resolve.l_vnode_lock= VNODE_READ;
58	
59	
60	if(fetch_name(vname1, vname1_length, fullpath) !=OK) printf("inode: -\n");
61	
62	if((vp = eat_path(&resolve, fp)) == NULL) printf("inode: -\n");
63	
64	else
65	printf("inode: %d\n", vp→v_inode_nr);
66	
67	unlock_vnode(vp);
68	unlock_vmnt(vmp);
69	
70	put_vnode(vp);
71	return 0;
72	}

/root/test.c

Line	Code
1	#include <lib.h>
2	#include <stdio.h>
3	#include <stdlib.h>
4	#include <sys/cdefs.h>
5	#include <string.h>
6	#include <mycallib.h>
7	
8	int main (int argc,char **argv){
9	if (argc <2)
10	exit(1);
11	
12	mycall(argv[1]);
13	
14	
15	return 0;
16	}

Screenshot αποτελεσμάτων

```
-bash-4.2#
-bash-4.2#
-bash-4.2#
-bash-4.2# ./test test.c
inode: 629
-bash-4.2# ls -li
total 104
621 -rw-r--r--  1 root  operator   646 Feb 15  2013 .ashrc
579 -rw-------  1 root  operator   529 Dec 26 11:19 .bash_history
649 -rw-r--r--  1 root  operator    55 Apr 13  2016 .bashrc
622 -rw-r--r--  1 root  operator    44 Feb 15  2013 .exrc
582 -rw-------  1 root  operator    35 Dec 26 09:57 .lesshst
623 -rw-r--r--  1 root  operator   300 Feb 15  2013 .profile
625 drwx------  2 root  operator   192 Dec 24 18:48 .ssh
664 -rwxr-xr-x  1 root  operator   132 Dec 26 18:33 create_patch
605 -rw-r--r--  1 root  operator  5253 Dec 27 19:18 hw5.patch
628 -rwxr-xr-x  1 root  operator  4985 Dec 27 19:24 test
629 -rw-r--r--  1 root  operator   209 Dec 27 18:50 test.c
-bash-4.2# ./test .ashrc
inode: 621
-bash-4.2# _
```