



## **ΛΕΙΤΟΥΡΓΙΚΑ ΣΥΣΤΗΜΑΤΑ**

### **ΑΣΚΗΣΗ 5**

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## **ΕΡΩΤΗΜΑ Α**

### **Λίστα τροποποιηθέντων αρχείων**

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

/usr/src/severs/vfs/table.c

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

/usr/src/servers/vfs/do\_myopen.c (νέο αρχείο)

/usr/src/servers/vfs/Makefile

/usr/src/servers/vfs/my\_call.c(νέο αρχείο)

## Τροποποιήσεις

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

Line	Code
106	#define MYOPEN 108 /*MY OPEN*/

/usr/src/severs/vfs/table.c

Line	Code
126	do_myopen.c /*108=do_myopen*/

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

Line	Code
173	int do_myopen(void);
174	int do_commopen(char path[PATH_MAX]);

/usr/src/servers/vfs/do\_myopen.c (νέο αρχείο)

Line	Code
1	#include "fs.h"
2	#include <sys/stat.h>
3	#include <sys/statfs.h>
4	#include <minix/com.h>
5	#include <minix/u64.h>
6	#include <string.h>
7	#include "file.h"
8	#include "fproc.h"
9	#include "path.h"
10	#include "param.h"
11	#include <minix/vfsif.h>
12	#include <minix/callnr.h>
13	#include "vnode.h"
14	#include "vmnt.h"
15	#include <stdio.h>
16	#include <stdlib.h>
17	
18	int do_myopen()
19	{
20	

21	struct vnode *vp;
22	struct vmnt *vmp;
23	char fullpath[PATH_MAX];
24	vir_bytes vname1;
25	size_t vname1_length;
26	vname1 = (vir_bytes) job_m_in.name1;
27	vname1_length = (size_t) job_m_in.name1_length;
28	struct lookup resolve;
29	lookup_init(&resolve, path, PATH_NOFLAGS, &vmp, &vp);
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	return do_commpopen(fullpath);
42	
43	
44	}
45	
46	int do_commpopen(char path[PATH_MAX])
47	{
48	
49	struct vnode *vp;
50	struct vmnt *vmp;
51	struct lookup resolve;
52	lookup_init(&resolve, path, PATH_NOFLAGS, &vmp , &vp);
53	/* Scan path name */
54	resolve.l_vmnt_lock = VMNT_READ;
55	resolve.l_vnode_lock = VNODE_READ;
56	
57	if ((vp = eat_path(&resolve, fp)) == NULL) {

58	//printf("inode: -\n");
59	return(0);
60	}else{
61	
62	//printf("inode: %d\n", vp->v_inode_nr);
63	return(vp->v_inode_nr);
64	
65	}
66	
67	unlock_vmnt(vmp);
68	unlock_vnode(vp);
69	put_vnode(vp);
70	}

/usr/src/servers/vfs/Makefile

Line	Code
10	tll.c comm.c worker.c coredump.c do_myopen.c

usr/src/servers/vfs/my\_call.c

Line	Code
1	#include <unistd.h>
2	#include <stdlib.h>
3	#include <stdio.h>
4	#include <sys/cdefs.h>
5	#include <string.h>
6	#include <lib.h>
7	
8	int main(int argc, char *argv[])
9	{
10	if(argc<2)
11	{
12	exit(1);
13	}
14	char *fname=argv[1];
15	message m;
16	m.m3_i1=strlen(fname)+1;
17	m.m3_p1=fname;

18	return(_syscall(VFS_PROC_NR,MYOPEN,&m);
19	
20	}

### Screenshot αποτελεσμάτων

```
-bash-4.2# ./my_call my_call.c
inode: 31696
-bash-4.2# ./my_call kkkk
inode: -
-bash-4.2# ./my_call my_call.c ddd
inode: 31696
-bash-4.2# ./my_call ddd my_call.c
inode: -
-bash-4.2# ./my_call
-bash-4.2#
```