#ifndef \_\_myftp\_h\_\_

#define \_\_myftp\_h\_\_

#include <stdio.h>

#include <sys/socket.h>

#include <string.h>

#include <arpa/inet.h>

#include <stdlib.h>

#include <netdb.h>

#include <unistd.h>

#include <netinet/in.h>

#include <net/if.h>

#include <linux/sockios.h>

#include <time.h>

#include <errno.h>

#include <signal.h>

#include <sys/select.h>

#include <sys/stat.h>

#include <sys/ioctl.h>

#define DEVICELEN 64

#define HOSTNAME 64

#define ADDRLEN 15

#define FNAMELEN 128

#define MAXLINE 1500

#define errCTL(x) {perror(x); return -1;}

#define FRQop 01 /\* file request \*/

#define DATAop 02 /\* data packet \*/

#define ACKop 03 /\* acknowledgement \*/

#define ERRORop 04 /\* error code \*/

#define MFMAXDATA 512 /\* data size \*/

struct myFtphdr {

short mf\_opcode;

unsigned short mf\_cksum;

union {

unsigned short mf\_block;

char mf\_filename[1];

}\_\_attribute\_\_ ((\_\_packed\_\_)) mf\_u;

char mf\_data[1];

}\_\_attribute\_\_ ((\_\_packed\_\_));

#define mf\_block mf\_u.mf\_block

#define mf\_filename mf\_u.mf\_filename

struct bootServerInfo {

char servAddr[ADDRLEN];

int connectPort;

char filename[FNAMELEN];

};

int getIFname(int socketfd, char \*device);

int initServAddr(int socketfd, int port, const char \*device,struct sockaddr\_in \*servaddr);

int initCliAddr(int socketfd, int port, char \*sendClent,struct sockaddr\_in \*servaddr);

int findServerAddr(int socketfd, char \*filename,const struct sockaddr\_in \*broadaddr, struct sockaddr\_in \*servaddr);

int listenClient(int socketfd, int port, int tempPort, char \*filename, struct sockaddr\_in \*clientaddr, struct sockaddr\_in \*servaddr);

int startMyftpServer(int tempPort, struct sockaddr\_in \*clientaddr, const char \*filename);

int startMyftpClient(int socketfd, struct sockaddr\_in \*servaddr, const char \*filename);

unsigned short in\_cksum(unsigned short \*addr, int len);

#ifdef DEBUG

#define debugf(fmt, args...) fprintf(stderr, fmt, ## args)

#else

#define debugf(fmt, args...)

#endif

#endif