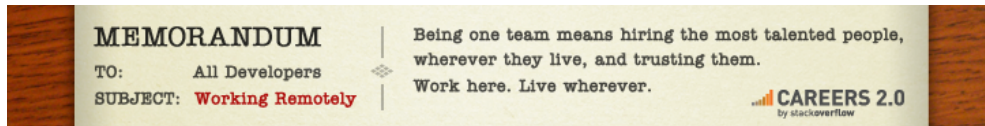




is this a dynamic library linker issue



I have some very simple C code I was trying to compile and link to try to understand how static and dynamic libraries work and also BFDs. The code snippet is below and my question beneath it.

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include "bfd.h"

unsigned int number_of_sections(bfd *abfd)
{
    return bfd_count_sections(abfd);
}

int main (int argc, char *argv[])
{
    bfd *ibfd = NULL;
    unsigned int numSections = 0;

    if (argc < 2)
    {
        printf("Argc < 2\n");
        exit(EXIT_FAILURE);
    }
    else
    {
        bfd_init();
        printf("filename = %s\n", argv[1]);
        ibfd = bfd_openr(argv[1], NULL);
        numSections = number_of_sections(ibfd);
        printf("num sections = %d\n", numSections);
    }
    return 1;
}
```

The code to compile and link it is below, along with the error:

```
make -f makefile
gcc -L. -L/usr/lib64 -L/usr/bin -g -Wall -I. -I/usr/include -o getsections ./getse
./libbfd.a(plugin.o): In function `try_load_plugin':
/home/abuild/rpmbuild/BUILD/binutils-2.23.1/build-dir/bfd/../../bfd/plugin.c:170:
/home/abuild/rpmbuild/BUILD/binutils-2.23.1/build-dir/bfd/../../bfd/plugin.c:177:
/home/abuild/rpmbuild/BUILD/binutils-2.23.1/build-dir/bfd/../../bfd/plugin.c:173:
collect2: error: ld returned 1 exit status
make: *** [build] Error 1
```

Compilation exited abnormally with code 2 at Thu Feb 27 16:26:12

I searched and searched and could not find the answer to what is most likely a very simple question, and I apologize in advance for my ignorance!

c linux dynamic linker libraries

edited 23 hours ago



mah
18.2k 4 22 49

asked 23 hours ago



user1943660
11 2

1 Add the linker flag `-ld1` ? – [Iwillnotexist Idonotexist](#) 23 hours ago

1 Aren't you missing `#include <dlfcn.h>` ? – [Asblarf](#) 23 hours ago

@Asblarf You don't have to include the header file for functions that you only call indirectly through another library. As another example, `fopen` calls `open` but you don't need to include `unistd.h` to call `fopen`. That seems to be the same case here with the `dl*` calls coming from `bfd`. – [Wumpus Q. Wumbley](#) 23 hours ago

[add comment](#)

1 Answer

Add `-ld1` after `-lbfd` to tell the linker where to find the missing functions.

answered 23 hours ago



[Wumpus Q. Wumbley](#)

4,363 2 14

Thank you all for responding! This was the problem. – [user1943660](#) just now [edit](#)

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Answer Your Question