

Moving Files between Computers

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Moving files can be a pain. If there are a lot of them, the moving procedure might mean filling up a whole bunch of 3½-inch floppies, then copying the contents of each one of them to their new site on a second computer. This can be tedious, to say the least. To compound the problem, what happens when a single file is larger than the 1.44 Mbyte capacity of a floppy? How can it be done?

Let us explore all of the common possibilities so that you can choose what works best for you.

FLOPPIES: Already described above, this is the simplest answer, but tedious. You can get around the 1.44 Mbyte limit to file size by using PKZIP. Did you know that you could zip a file across several floppies? Let me give an example. Suppose you have a 4.2-Mb program named MYPROG.EXE on your desktop that you want to copy to your laptop. PKZIP may compress the file to perhaps 70% of its original size (to 2.94 Mbytes), but that is still much too large to put on a 1.44-Mb floppy. However, by giving the proper commands to PKZIP, it will not only compress the file, but it will also copy the compressed image to as many floppies as it takes. In our example above, it will put the first part of the compressed image of MYPROG.EXE on a floppy as MYPROG.ZIP, then ask you to insert a second floppy for the rest of the file. When done, you can reverse the process by having the companion program PKUNZIP.EXE uncompress the program from the two disks to your laptop. The technique will also work with multiple files, allowing you for example to ZIP an entire subdirectory for moving from one machine to another. I have used this method to fill and transfer over a dozen floppies worth of files at a time. PKZIP and PKUNZIP are safe and slick programs. Best of all, you can find free evaluation copies nearly everywhere. Try FilePile at execpc.com.

THE INTERNET: Sure! So long as both machines have modems and access to the Web, why not send the file over the Internet! It may take some time, but it works. Send the file as an attachment to an email message, and pick up the message with the second computer. Then click the attachment and tell your browser to save it as a file. Don't forget to put it in a subdirectory where you can find it. You can easily move it to its final resting-place later. The only caveat besides lack of speed for this method is that some Internet providers put a limit on the size of an email message (and attachments). The size limitation, when there is one, is often 1 megabyte.

DIRECT CABLE CONNECTION: This is almost certainly the fastest method, and it is ideal for getting stuff from your desktop to your laptop. You can purchase programs (LAPLINK and others) that supply you with the software and a cable. However, remember that we are hams and can do a lot of stuff that others can't! You can make your own cable, and you probably have the software lying around already! The remainder of this article will tell you how to "homebrew" your own file-transfer setup. It is easy and it works. The only caveats: 1. You need to be able to solder to create the cable. 2. You need to be able to work with your machine in DOS (I frankly do not know if the method will work from Win95/98, or even from a DOS box in either Windows program). I can tell you it does work from native DOS. Don't know how to get to native DOS in your Windows machine? See #39 in this series, HOW TO OPEN AND SHUT THE WINDOWS IN 95, February 1997. It is included in THE FIRST 48, a compilation of the first 4 dozen Computer Corner articles. Copies can be had by contacting Dave Barrow, N9UNR. So, fellow hams, here is how.

THE CABLE: All you need are two male DB-25 connectors and the wire. You will need to solder 11 connections at each end, and will therefore need 11 conductors. I made one the other day using 3 5-conductor cables (4 conductors unused) because that is what I had in my junkbox. It works like a charm! If you look carefully at the bare DB-25 connectors, you will see that each pin is labeled with an embossed number. Those numbers correspond to the numbers shown in the table below.

DB25 (#1)	DB25 (#2)
2	15
3	13
4	12
5	10
6	11
15	2
13	3
12	4
10	5
11	6
25	25

Pins 25 are ground. You will notice the others are symmetrical, which means that you can plug in either end of the cable to either computer ... it makes no difference. Just be sure you are plugging into the printer port on both machines.

Next, make sure the programs INTERLNK.EXE and INTERSVR.EXE are present on both machines; if not, copy them. These two programs came with MS-DOS 6.22 and are likely in the C:\DOS subdirectory of your old 286 gathering dust in the basement if not on your Windows machine. Decide which machine will be the client (boss!) and which will be the server (slave!). Execute the server program by typing INTERSVR and pressing the ENTER key. You will be presented with a special screen that covers everything else up; it will show you the status of transfers as you make them. Add the statement: Device=c:\dos\INTERLNK.EXE to the CONFIG.SYS file on the client machine and reboot it. You will be presented with a table that shows you how the drives have been remapped. For example, my client (laptop, boss) machine showed 3 new drives. Drives A: and C: were as usual (my laptop has no B: drive), but new drive D: was the A: floppy drive of my desktop machine, new drive E: was the B: floppy of the desktop and new F: was the desktop's C: (hard) drive. I could copy a file from my laptop's hard drive to the desktop's hard drive by typing the command: COPY (name of file) F: on the laptop keyboard. Alternatively I could copy a file from my desktop's root directory to my laptop with the command COPY F:\(name of file) C:, again using the laptop keyboard since it was the client (boss) machine. Slick. And FAST.

Some things to watch for. Make sure there is a LASTDRIVE=M line in the CONFIG.SYS file on both machines, just so DOS doesn't run out of drive letters to assign. Work with DOS to avoid several problems that will certainly crop up if you try to work through Windows of any vintage. Forget about trying to use programs such as CHKDSK, DISKCOPY, SYS, FDISK and others that work with disk drive hardware or file systems. Other than that, the interlink suite is really powerful and you can do just about anything with the server from the client's keyboard. Pretty neat, very useful, and FAST. Happy computing!