

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

What are we talking about?

- Data or files: This may be word processing documents (reports, letters), photographs, movies, music (songs), spreadsheet files, Quicken/Money files, email, presentation files, or other files specific to a particular program you use.
- Programs or applications: This will be the various software you use to do things on your computer including such programs as MS Works, MS Office (Word, Excel, PowerPoint, Access, etc.), WordPerfect, Quicken, Money, TurboTax, Photoshop Elements, Open Office, Google applications, and the entire range of software you have been using to create the data or use your computer as you have been doing.
- Migration: This refers to moving the data and programs so they can be used on a different machine or disk drive.

I should also mention at the outset that I will be referring to migrating data and programs in a Windows operating system only. (Unfortunately, my experience with Apple products ended with the “pizza box” shaped Macintosh LC.)

Why do we need to do this?

There are a variety of circumstances in which you might want to move data or programs or both, some of which are:

- You may have purchased or are planning to purchase a replacement or additional computer for your home system or network.
- You may be upgrading to Vista from a previous operating system (Windows 2000 or XP)
- You may be adding a new external or internal hard disk drive to your current system.

Determining whether you need to move data or programs will be a result of the reasons (as listed in the above examples) for the move.

- If you are replacing a computer, you will likely want to move all of the programs you use as well as the data files you expect to need in using those programs. This will likely be the case in upgrading to a new operating system, too.
- If you are adding a new hard disk drive, you may not need to move the software, but you may want to move some or all of the data files.

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

This, then, points to the need to plan for what you want the finished system or network to be able to do, as well as the considerations about how to actually migrate the data and programs you determine need to be moved.

The first step of the plan, regardless of why you need to move data or programs, is to do a back-up of the current drive(s) from which you are moving data. (See the FHF Computer Newsletter of March 2007, “Backing-up Data”/“Backup Programs”, at http://www.foxhillfarm.org/Groups/Computer/CC_Newsletters/Data_back-up.pdf and at http://www.foxhillfarm.org/Groups/Computer/CC_Newsletters/Backup_Programs.pdf .) This should be a back-up to a device (external hard disk drive or flash drive) or media (CDs) separate from the disk drive on which the data to be transferred resides.

Program migration

Easier option not currently available, but may return

When I agreed to do this presentation, I recalled that I had used a program from Microsoft called Windows Easy Transfer Companion to actually move programs from a Windows XP desktop to a new Windows Vista laptop. I had expected to tell everyone how to use this utility program which, when installed on both the old and new computers linked via a network, would determine which programs were transferrable, inquire which program to move, and move the programs to the Vista computer.

However, according to an Internet posting in July 2008, it appears that Microsoft removed all traces of Easy Transfer Companion in June 2008

(<http://arstechnica.com/journals/microsoft.ars/2008/07/21/windows-easy-transfer-companion-may-reappear-in-windows-7>). According to this posting, it is possible that the new Windows 7 operating system may include some version of this useful software. In the future, if you refer back to this information as you are upgrading to Windows 7, be sure to check whether or not there is a program compatibility and transfer utility included in that new operating system.

Checking compatibility with new version of Windows

In the absence of Windows Easy Transfer Companion, you will need to use the fallback method of installing (sometimes involving uninstalling from the old computer and installing on the new computer as mentioned below) the compatible programs you want to continue to use.

Before doing this, though, you should visit both the “Windows Vista Upgrade Advisor” at <http://www.microsoft.com/windows/windows-vista/get/upgrade-advisor.aspx> and the online “Vista Compatibility Center” at <http://www.microsoft.com/windows/compatibility/> .

The first site allows you to download then run software that evaluates your hardware and software to see if there are any issues or updates needed to function with Vista. If there are software issues, you will need to determine if there is a way to use the program that worked on XP or if you will need to replace

Data and Program Migration

the program. Vista Upgrade Advisor also tells you when drivers for the various parts of your computer and its peripherals need to be updated to run their best in the Vista operating system.

The second site allows you to explore to see which software (and hardware/peripherals) that works in your XP operating system, or that you may be considering using with Vista, will function in the Vista operating system. It will tell you whether it is compatible, requires an update to be compatible, varies in compatibility according to the version of software, or is not compatible. Thus, you will know before you start migrating the programs or buying new ones for use with Vista whether or not to even attempt this transfer.

Program migration when upgrading to a new version of Windows on an old computer

Let's take the easiest scenario first. If you are upgrading to Windows Vista from Windows XP on the same computer, and have determined by using Windows Vista Upgrade Advisor and Vista Compatibility Center that the programs you want to use are compatible with Vista, the installation process will automatically transfer your files, programs, and settings.

Program migration to a new computer

The more complex scenario is moving programs to a new computer. Whether the new computer uses the same operating system as the old one or a different operating system, it is critical that you understand that you cannot simply "drag and drop" or otherwise copy software programs from one computer to another after connecting them with a cable or through a network.

New computer running the same operating system as the old computer

If you are moving the software to a new computer running the same operating system as your old computer (e.g., XP to XP, or Vista to Vista), the software you have been using should normally work on the new computer. However, you should still take the precautions mentioned below regarding restore points and checking the computer's operation after each program's installation.

It is also possible that there are programs on your old computer that you rarely, if ever, use. Therefore, some references recommend installing programs as you need them; i.e., if you need to use your word processor frequently, install that first. If you need to use your spreadsheet program, install it or the office suite that contains it. Of course, you may prefer to reinstall all of the programs you expect to use, one after another, in one long session.

Precautions when reinstalling software

Whether you install the program software individually or all in one long session, you should be prepared for the possibility that you might want to immediately revert to the pre-installation format at any point in the process. Therefore, as with any new program installation, you should create restore points before installing each program. (For information on creating system restore points, please see "What is System Restore?" <http://support.microsoft.com/kb/959063/EN-US> and "How to set a system restore point in Windows XP" <http://support.microsoft.com/kb/948247> . Restore points in Windows Vista may also be

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

created by following the steps in the second article until you reach the “System Restore” window, then following the link at “To create a restore point”).)

To be certain that each program is working smoothly, you should restart the computer then run your anti-virus and malware software before opening the newly installed software after each program is installed. (For more information, see the citations below under “Preparation of data to be moved”).)

You should also be aware of the following caveats, among others:

- Some software needs to be uninstalled from the old or XP computer, reregistered, and reinstalled on the new or Vista computer. This may require you to contact the software manufacturer/ developer to get instructions on how to do this.
- Reinstallation may require the use of the disks that came with the software program or the lengthy key code that is on the case for the software disks.
- There may be instructions in the software manuals or on the manufacturer’s web site pertaining to this migration process.
- These are all good reasons to keep your original program disks and to research what is needed to migrate the programs including uninstallation and reinstallation.
- It is also possible that you may not be able to migrate the programs, even though they are supposed to be compatible with the Vista operating system. This is true especially if the programs were preinstalled on your old computer and you were provided only with the computer manufacturer’s emergency disks rather than the full set of installation disks you would have received if you purchased the software separately.
- It is also possible that some software may expect that specific hardware is already connected (e.g., imaging software that controls data from a scanner). If the hardware is not installed to the new computer first, the imaging hardware may not reinstall correctly. Again, the software manual or web site should provide guidance to you.
- If you were using freeware programs, you may prefer to download the latest tested versions of those programs from the developers’ websites and install them fresh rather than trying to install older versions onto the new computer.

Finally, if you have problems in the Vista computer with a program that ran fine in the XP computer, you may want to try the Program Compatibility Wizard (see <http://windowshelp.microsoft.com/Windows/en-US/Help/99a95df6-04e6-46eb-bb65-6404cd215e641033.msp>). This is done by opening the new computer’s “Start”, “Control Panel”, “Programs”, and “Use an older program with this version of Windows”. This wizard may be able to resolve the poor functioning of the older program in Vista.

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

Data migration

Preparation of data to be moved

Before moving data, you will likely want to be certain that the original files are in the best possible condition. To do this, you should run a scan using your anti-virus software of the disk or disks containing the data you want to move. In addition and just to be safe, you should run an anti-virus scan of the new drive (either internal/external in your existing computer or in a new computer) which often has some pre-installed software on it. Some writers have also suggested that you perform other system maintenance before migrating data; this would include disk cleanup, disk defragmenting, and running adware and spyware (malware detection software) to ensure you were not moving anything but your data. (See the FHF Computer Club Newsletters of September 2007 at http://www.kuhnfamily.com/Kuhn_Consulting/Computer-items/System%20Maintenance4.pdf and of October 2007 at http://www.kuhnfamily.com/Kuhn_Consulting/Computer-items/Protecting_your_computer-Summary.pdf.)

Data migration to a new internal or external hard disk drive

If you are installing a new hard disk drive and determine that you want to move some data to the new disk drive, you should verify that the new drive is being read after it has been recognized and mapped (i.e., it shows up as another disk when you open “My Computer” or “Computer”). Then run your anti-virus software as mentioned above. Following that, you should be able to move the data using Windows Explorer (“Start”, “All Programs”, “Accessories”, “Window Explorer”). Once you open this program, you can use the typical “drag and drop” method to move whatever files you want from your documents, music, videos, pictures, favorites, and so on to the new hard disk drive. It is recommended that you re-run a virus scan and adware and spyware programs on the new drive after the data have transferred.

Data migration to a new computer

There are helpful articles in the Microsoft Help and Support web site regarding such data migration using utilities built into either Windows XP or Vista. In both of these utilities, the utility needs to be run on the new computer then on the old computer and may require you to copy the utility onto a CD in order to copy it to the old computer. You will need to follow the instructions as the utility wizard progresses through the process.

The utility in XP is called “Files and Settings Transfer”. Articles can be found at both “How to use the ‘Files and Settings Wizard’ in Windows XP” <http://support.microsoft.com/kb/293118> and “Using Files and Settings Transfer Wizard in Windows XP” http://www.microsoft.com/windowsxp/using/setup/expert/crawford_november12.msp .

Since the process is similar in Vista, and it is more likely that new computers will be running the Vista operating system, I will focus on the data migration process in Vista. This uses the utility called “Windows Easy Transfer”. Microsoft Help and Support articles about using this utility are at “How to use Windows Easy Transfer to migrate files and settings from one Windows-based computer to another Windows Vista-based computer” <http://support.microsoft.com/kb/928634/> and at “Windows Easy

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

Transfer FAQ” <http://windowshelp.microsoft.com/Windows/en-US/Help/96d5d811-6d52-4dff-b39b-76c64a131dfe1033.msp#E1AAC> . I have borrowed heavily from these articles in preparing the following information.

Windows versions that will work with Windows Easy Transfer

You can use Windows Easy Transfer to transfer files and program settings from a computer running Windows 2000 (files only), Windows XP, or Windows Vista to another computer running Windows Vista. Start Windows Easy Transfer on the computer running Windows Vista (the computer that will be receiving the data), and then follow the instructions.

Note: You can't use Windows Easy Transfer to transfer files and settings from a computer that is running Windows XP Starter Edition. Instead, on your old computer, you'll need to select the files that you want to transfer, and then copy them to a CD, DVD, USB flash drive, or external hard disk. After you've copied the files, you can manually transfer them to your new computer. If your old and new computers are connected to the same network, you can also copy files to a network location, and then copy them from the network location to your new computer. If you're not sure which files you need to copy—for example, to transfer your e-mail inbox or program settings to the new computer—check the Help for the program to try to find the file names and locations on your old computer.

Kinds of files and settings that Windows Easy Transfer moves

You can transfer most files and program settings. Specifically:

- Files and folders. Everything within the Documents, Pictures, and Shared Documents folders. Using advanced options, you can select additional files and folders to transfer.
- E-mail settings, contacts, and messages. Messages, account settings, and address books from Microsoft Outlook Express, Outlook, Windows Mail, and other e-mail programs.
- Program settings. Settings that keep your programs configured as you had them on your old computer. You must first install the programs on your new computer, because Windows Easy Transfer does not transfer the programs themselves. Some programs might not work on this version of Windows, including security programs, antivirus programs, firewall programs (your new computer should already have a firewall running to help ensure safety during the transfer), and programs with software drivers.
- User accounts and settings. Color schemes, desktop backgrounds, network connections, screen savers, fonts, Start menu options, taskbar options, folders, specific files, network printers and drives, and accessibility options.
- Internet settings and favorites. Internet connection settings, favorites, and cookies.
- Music. Electronic music files, playlists, and album art.

Data and Program Migration

- Pictures and video. Pictures—which includes any visual file type (for example, .jpg, .bmp, .gif)—and personal videos.

Deciding what to transfer

When you run Windows Easy Transfer on the old computer, you can transfer all user accounts, files, and settings to the new computer or transfer your user account, files, and settings only. You can also use an advanced option to transfer specific folders. Here are the choices

:

- All user accounts, files, and settings (recommended). Use this option to set up your new computer like your old one. For example, if you've already created user accounts on the new computer, you can match accounts on the old computer to accounts on the new computer (using the same or different names). If you haven't created accounts on the new computer, it doesn't matter. You can transfer accounts from the old computer by creating the accounts, using the same or different names, on the new computer during the transfer process. If you create accounts during the transfer process, you will be asked to create a new password the first time that you log on to the new computer.
- My user account, files, and settings only. If you will be the only user on your new computer, use this option to transfer the information that is associated with your user account on your old computer, and any system and program files or settings that you shared with other users and that you might need on the new computer. If you create user accounts during the transfer process, you will be asked to create a new password the first time that you log on to the new computer.
- Advanced options. If you want to transfer some user accounts but not others, or if you want to transfer specific folders and shared system or program settings, use this option. If you're not sure which folders are important to transfer, we recommend that you use one of the other options, or refer to the Help for each program that you want to use on the new computer to make sure that you transfer the folders and settings you'll need.

Length of time for the transfer

How fast your files and settings are transferred depends on a few factors:

- The amount and size of the files and settings you transfer
- The speed of your computers
- The transfer method you choose: Easy Transfer Cable, networking, DVD or CD, or USB flash drive, or external hard disk.

Generally, the more you transfer, the more time it takes. The faster the computers and the faster the transfer method (for example, an Easy Transfer Cable or networking for many files, a USB flash drive for fewer files), the faster the transfer will be. But whether the transfer takes a half hour or several hours, it's usually more efficient to use Windows Easy Transfer than to copy everything manually.

Fox Hill Farm Computer Club

December 15, 2008

Data and Program Migration

Methods to transfer the files and settings

There are several choices. Be sure to choose a method that works on both computers. For example, if you don't have a DVD drive on your old computer, you can't use DVDs for this procedure. Note that floppy disks cannot be used with Windows Easy Transfer. We'll start with the easier methods first.

Method 1 - Easy Transfer Cable

For this method, you'll need a USB port on both the old and new computers as well as an Easy Transfer Cable. This is a USB cable specially designed to connect two computers for the purpose of transferring data. It is not a regular USB cable that is used to connect a peripheral to your computer. Amazon has Easy Transfer cables from various sources ranging from about \$17 to \$25. Local stores (Micro Center, Best Buy, and Radio Shack) have the cables available from about \$20 to \$45, so you need to check out their current prices.

Using the Easy Transfer Cable is one of the simplest ways to transfer files and settings to your new computer and works with Windows XP and Windows Vista. You should always start Windows Easy Transfer on your new computer and plug in the cable only when you're instructed to do so. Before you plug in the cable on your old computer, for example, you might need to insert the CD that came with it to install the Windows Easy Transfer software, and then continue the transfer process.

Method 2 - Connect through your home network

In this method, you will need to leave your old computer connected to your home network and be sure that your new computer is also on the network so that both computers show up on the network at the same time. Using this method, you have the option of copying the files and settings from your old computer to a network location such as a network hard disk drive before the settings/files are migrated to the new computer. The other option is a straight transfer of the settings/files from the old to the new computer.

First, connect both computers to your network. Start Windows Easy Transfer on the new computer (the computer to which you want to transfer files and settings), and then follow the instructions. To transfer files directly over a network without copying them to and from a network location, you'll need to get a Windows Easy Transfer key (sequence of letters and numbers) from the new computer and then type the key on your old computer before you can collect files and settings to transfer. The Windows Easy Transfer key acts like a password to help protect files and settings when you transfer them over the network. The key is generated by the Easy Transfer utility, so be prepared to copy it down before copying it to the old computer.

Method 3 - Copying onto DVDs or CDs

In this method, you need to be certain that you can record/write the same type of media (your preference of DVDs or CDs) on both computers. Another restriction is that if the old computer is either Windows XP or 2000, you are limited to using CDs. During the transfer process, Windows Easy Transfer will estimate how much disk space and how many discs are needed to transfer your selections. (A dual-layer

Data and Program Migration

DVD holds about 8.5 gigabytes [GB], a single-layer DVD holds about 4.7 GB, and a CD holds about 700 megabytes [MB].) Both computers must be able to read and write DVDs or CDs. Check the information that came with your computer to see if you have a CD or DVD drive that can read and write CDs or DVDs and whether it can read and write to a dual-layer DVD.

You would start Windows Easy Transfer on your new computer, and then follow the instructions for using CDs or DVDs.

Method 4 - USB flash drive or external hard disk

For this transfer method, you will need a USB port on each computer if using a flash drive or whatever the compatible port may be (USB, Fire wire) for the external hard disk drive you plan to use.

You will start Windows Easy Transfer on your new computer (the computer to which you want to transfer files and settings), and then follow the instructions for using a USB flash drive or an external hard disk. During the transfer process, Windows Easy Transfer will estimate how much disk space is needed to transfer your selections. If you use a USB flash drive, try to use one with enough storage space for the entire transfer. If your USB flash drive isn't large enough to transfer everything at once, you can copy as many files as it will hold, transfer those files to the new computer, and then reconnect the drive to the old computer and repeat the process.

Choosing the best method

To decide what method to use, consider how much you are transferring. If you're transferring everything from all users or all of your user account files, for example, an Easy Transfer Cable or a network is a good option because the transfer can take a while and you won't have to worry about having enough room for everything. If you're only transferring a few files or folders, then consider using removable media such as CDs, DVDs, or a flash drive, any of which might be as fast as using an Easy Transfer Cable or a network.

After the transfer

It is important to run anti-virus and malware programs on the new disk or computer after the data is transferred, just to be certain everything is clean on the new computer. After this possibly lengthy task of migrating your programs, files, and settings, you are ready to enjoy your new computer with some of the familiarity of your old computer.

Fox Hill Farm Computer Club
December 15, 2008

Data and Program Migration

Resources:

Much of the information used for this presentation was obtained online at the sources cited throughout the text. In addition, the following are sources of much helpful information on these topics:

“For Dummies” column at pc.com

<http://www.pc.com/learn/expert/fordummies>

Microsoft Knowledge Base articles in Microsoft Help and Support web site

<http://support.microsoft.com/>

Marty Frick