



Computer Best Practices

Alternative Format Statement

This publication is available in alternative media upon request.

Statement of Non-Discrimination

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901; Tel 814-865-4700/V, 814-863-1150/TTY.

Table of Contents

Maintaining Your Computer	2
Freeing Up Disk Space	2
Running Disk Cleanup.....	2
Removing Old Programs.....	3
Speeding Up Access to Data	4
Running Check Disk	4
Running Disk Defragmenter	4
Speeding Up the Boot Process	5
Cleaning Out Startup Folders	5
File Storage Options.....	6
My Documents	6
Local Documents	6
Temporary Storage of Presentation Files.....	6
Temporary Storage of Installer Files	6
Website Files and Folders	7
Archived Outlook Email Files (PST).....	7
FileMaker Databases	7
Personal Data.....	7
County Server Share Folder	8
SharePoint	8
Understanding the Backup Process	8
What Data Gets Backed Up and When.....	8
County Server Share Folder and My Documents	8
Local Documents	9
Personal Data Folder and Other Locations	9
Restoring Data	9
Understanding the Microsoft Update Process	9
What are Microsoft Updates.....	9
How Do EN Computers Get the Microsoft Updates.....	10
How Do Non-EN Computers (such as Home Computers) Get the Microsoft Updates	10
Configuring Automatic Updates.....	11
Manually Updating.....	11
Understanding Re-Directed My Documents and Offline Files.....	12
Working Offline – Tips & Tricks	12
Understanding User Accounts	13
Which Account is Used for What?.....	13
Changing Passwords	14
PSU Account (Full Access)	14
FPS Account.....	14
College of Ag Sciences Account.....	14
Managing Email.....	15
Checking Mailbox Size	15
Reducing Mailbox Size	15
Moving Messages to Local Storage	16
Understanding the Spam Folders	16

Allowed Senders Folder.....	17
Blocked Senders Folder	17
Quarantine Folder	17
Recovering a Deleted Message	17
Locking vs. Logging Off vs. Shutting Down.....	18
Locking.....	18
Logging Off	19
Shutting Down.....	19
Recommendations Checklist.....	20
Daily (End of work day Monday – Thursday).....	20
Weekly	20
Monthly	20
Quarterly or Bi-Monthly	20
Semi-Annually	20

Maintaining Your Computer

To keep your PC performing well, regular maintenance is critical. By following a few simple guidelines, you can maintain your computer and keep it running smoothly.

Freeing Up Disk Space

Freeing up disk space can improve the performance of your computer. Over time, temporary files are left behind when you browse the Internet, your machine crashes, you install and uninstall programs, and various other circumstances occur. These temporary files take up space and may slow your computer.

Windows XP provides a tool called **Disk Cleanup** that helps you delete unnecessary files, freeing storage space on your computer, and keep it running efficiently. During Disk Cleanup your hard drive is scanned for files that can safely be deleted and you are given the option to keep or delete them.

RECOMMENDATION: We recommend you use Disk Cleanup quarterly or every other month.

Running Disk Cleanup

1. Before running Disk Cleanup close all other programs
2. Click the **Start** menu | **All Programs** | **Accessories** | **System Tools** | **Disk Cleanup**
3. Select the drive you want to clean and click **OK**. In most cases this would be C:
 - Disk Cleanup will analyze the drive to determine space that can be freed. Be patient as analyzing the drive can take awhile depending on your hard drive size and contents.
 - Once the drive analysis is complete a “files to delete” list will be presented for your selection. A description of the category is shown at the bottom if you click the name.
4. In the Files to delete list, **check** or clear categories as desired

RECOMMENDATION: The following categories of files can safely be removed:

- ✓ Temporary Internet Files
- ✓ Offline Webpages
- ✓ Recycle Bin
- ✓ Temporary files
- ✓ WebClient/Publisher Temporary Files
- ✓ Compress old files
- ✓ Catalog files for the Content Indexer

The following categories of files **SHOULD NOT** be removed:

- ✓ Downloaded Program Files
- ✓ Temporary Offline Files
- ✓ Offline Files

5. Click **OK** to delete the files
6. Click **Yes** to confirm you want to perform the cleanup actions
7. Click **OK**

A video demonstration of how to run Disk Cleanup is available at:

<http://downloads.cas.psu.edu/it/training/bestpractices/diskcleanup>

Removing Old Programs

Frequently, users have programs installed on their computers that they do not use or need. Sometimes these programs get installed automatically when other programs are installed. Other times these are old programs that were once used, but are no longer needed.

Programs you do not use can easily be uninstalled to free up disk space and improve the overall performance of your computer. To uninstall programs:

1. Click the **Start Menu**
2. Click **Control Panel**
3. Select **Add or Remove Programs**
4. Some programs that are often installed but not needed include:
 - Google Earth, Google Desktop, Google Toolbar
 - WinAmp
 - Logitech Desktop Messenger
 - Logitech (if old software, remove all – then install new)
 - Spybot, Spyware Blaster, Ad-Aware, Windows Defender
 - Webshots
 - Yahoo programs (Yahoo Toolbar, Yahoo Installer, Yahoo Mail)
 - AOL or AIM programs (AOL or AIM Toolbar, AOL or AIM Installer)
 - Viewpoint programs (Viewpoint Toolbar, Viewpoint Player, Viewpoint Manager)
 - Old versions of Java
 - Weather programs
5. Click the program to be removed
6. Click **Change/Remove** or **Remove**
7. Click **OK** if prompted to confirm the uninstall

If you are not sure what a program is or if it should be removed, please submit a support ticket at <http://it.cas.psu.edu/contactform.htm> and provide the name of the program in question.

A video demonstration of removing a software program is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/RemoveJava>

Speeding Up Access to Data

During normal use your computer's hard disk can develop bad sectors, lost clusters, and directory errors and/or become fragmented. This forces your computer to work harder to locate or save files and may cause it to run more slowly.

Running Check Disk

Windows XP provides a tool called **Check Disk** that will scan your hard disk, locate errors, and ask if you would like to fix them. A disk check will take anywhere from 30 minutes to 2 hours depending on the size and speed of your hard drive and the number of errors that are found. You will not be able to use any other programs while the disk check is running so you should run it when you don't need to use your computer for a while.

RECOMMENDATION: We recommend you use Check Disk quarterly or every other month.

1. Before running Check Disk close all programs
2. Click the **Start** Menu
3. Select **My Computer**
4. Right-click on **Local Disk (C:)** and choose **Properties**
5. Click the **Tools** tab
6. Click **Check Now**
7. Check the **Automatically fix file system errors** box
8. Check the **Scan for and attempt recovery of bad sectors** box
9. Click **Start**
 - You will see a window saying that the disk check must be done when you restart your computer.
10. Click **Yes**
11. Click **OK**
12. Click the **Start** Menu
13. Click **Shut Down**
14. Select **Restart** from the menu
15. Click **OK**

Once your computer restarts you will see a blue screen as Check Disk begins analyzing your hard disk. It will go through five separate stages, allowing you to monitor its progress as it works. After Check Disk finishes all of its tasks, it will automatically restart your computer and you will be able to log on and continue working.

NOTE: It is OK if the Check Disk discovers a few errors. But, if it comes up with hundreds of errors, the drive may be failing and you should submit a support ticket at <http://it.cas.psu.edu/contactform.htm>.

Running Disk Defragmenter

Your computer's hard disk becomes fragmented as you browse and download files from the Internet, create and delete files and folders from your computer, and install and uninstall software. Fragmented simply means a file is not stored in one place in its entirety, or what computer folks like to call a contiguous location. Different parts of the file are scattered across the hard disk in noncontiguous

pieces. When you delete files or folders, the empty spaces left behind are filled in randomly as you store new ones. This is how fragmentation occurs. The more fragmented files there are on a computer, the slower the computer will be.

Windows XP provides a tool called **Disk Defragmenter** designed to reorganize noncontiguous files into contiguous files and optimize their placement on your computer.

RECOMMENDATION: We recommend you use Disk Defragmenter quarterly or every other month.

1. Before running Check Disk close all programs
2. Click the **Start** Menu
3. Select **My Computer**
4. Right-click on **Local Disk (C:)** and choose **Properties**
5. Click the **Tools** tab
6. Click **Defragment Now**
7. Click **Analyze**
8. If defragmentation is found, **Defragment** the drive
 - Disk defragmentation may take several minutes to several hours, depending on the number of files to be consolidated.

Speeding Up the Boot Process

Many programs installed on your computer include a component that loads every time you start your computer. For instance, when you install an instant messaging program, a shortcut is added to your Startup folder that launches the instant messenger automatically. The more programs automatically starting when your computer boots, the slower the startup process will be. The easiest way to speed up your computer's boot process is to weed out unneeded items from Startup folders.

Cleaning Out Startup Folders

1. Click the **Start** Menu
2. Click **All Programs**
3. Right-click **Startup**
4. Select **Open**
5. Delete all the files within the Startup Folder EXCEPT desktop.ini, if it exists.
6. Click the **Start** Menu
7. Click **All Programs**
8. Right-click **Startup**
9. Select **Open All Users**
10. Delete all the files within the Startup Folder EXCEPT desktop.ini, if it exists.

Cleaning out your Startup folder will not necessarily prevent all unnecessary programs from automatically running at startup. There are more complicated steps that can be taken to remove programs from startup, but we do not recommend you perform these steps on your own. If you find that your computer still starts very slowly, we recommend that you submit a support ticket at <http://it.cas.psu.edu/contactform.htm> and a support specialist will assist you.

File Storage Options

Users have a variety of locations available for storing work related files. While having many choices is nice, it can also be confusing. It is important that you understand what storage options are available; what types of files are best stored in each location; and how, when, and from where files stored in each location can be accessed.

My Documents

The My Documents folder can be used to store work related files. This folder is special in the way its files are stored and made available to you.

Your My Documents folder and the files within it will be available from your computer AND from other EN computers within your “home” county office AND from your computer when you are out of the office (in the case of a laptop). This is possible because your My Documents folder is “redirected”.

So what does it mean to be redirected? Well, in short it means that the files in your My Documents folder are saved (redirected) to your county server and a copy of them is made in a special location on your local computer. When your computer is offline (disconnected from the network), you are able to work with the copy of the files that is stored on your local computer. This is what we call “working offline” and is what allows you to work with your My Document files when you are out of the office (offline) or when you are logged into another EN computer in your home office. A more detailed explanation of “Re-directed My Documents” is available later in this guide.

Your My Documents folder is backed up daily as part of your county server backup.

Local Documents

The Local Documents folder is another location where you can store work related files. Unlike the My Documents folder, which is redirected to the server, the Local Documents is a folder stored right on your local computer.

This folder is found just off of your computer’s C:\ drive and a shortcut to the folder should be available from your desktop. Files placed in the Local Documents folder are accessible to you when you are logged into the computer. Other users who log into your computer will have the ability to see the files but not edit them in any way. The Local Documents folder is backed up daily as part of your computer backup.

We recommend you use the Local Documents folder in certain instances, such as those described below.

Temporary Storage of Presentation Files

In the normal course of the day, you may create and save files into your My Documents folder. When you take your EN laptop out of the office (and off the network), these files will still be available as you “work offline” from your redirected My Documents. In the unlikely event that Offline Files would fail, before leaving the office, you could copy files to the Local Documents folder. This is something you might want to do if you were taking your laptop out of the office to deliver an important presentation and you wanted to ensure the presentation files would be available.

Temporary Storage of Installer Files

Ag IT understands that at times you may need to install additional software on your EN computer. Often you will download Software installer files from the Internet and save them to your computer for installation. The Local Documents folder is where we recommend you store installer files. You can create a "Downloads" or "Installers" folder in Local Documents. If you need or want to keep the installer file, perhaps to re-install later if you purchased the software online and don't have a physical media (CD or DVD), you can leave it in the folder. Otherwise, it is a good idea to delete the installer file after you have installed the software.

Website Files and Folders

If you are responsible for maintaining your county website, you need a location on your computer to store website files and folders. Instead of the redirected My Documents folder, we recommend you store website files in Local Documents. To keep everything organized, you should create a "Website" folder within the Local Documents folder to hold all of your website files.

Archived Outlook Email Files (PST)

As you collect emails in your Outlook Exchange account your mailbox size grows and grows. As your mailbox grows you may find that your Outlook slows. To prevent this, we recommend you move old emails that you do not need to use regularly out of your Outlook Exchange account into an Outlook Personal File (.PST). Once created, PST files need to be stored in an easily accessible location, such as your Local Documents folder.

FileMaker Databases

Opening and using mission-critical FileMaker (FMP) files from a network location is NOT recommended. Instead, FMP files should be stored in your Local Documents. Why? The answer is that FileMaker is very dependent on being able to write (save) its data to disk as needed. FileMaker does not have a "Save" command. It saves automatically when the computer is idle. If you are using a FileMaker database from a network share and the network is down when it attempts to save, the file will crash and may become unrecoverable.

Personal Data

The Personal Data folder can be used to store any non-work related files that you need to keep on your work computer. It is important that you keep these files to a minimum.

The Personal Data folder is found just off your computer's C:\ and a shortcut to the folder should be available from your desktop. Files placed in your Personal Data folder are only accessible to you when you are logged into the computer. Other users who log into your computer will have the ability to see the files but not edit them in any way.

The Personal Data folder is NOT backed up automatically. If you would like to have your personal data backed up, you will need to do it manually. For instructions on how to manually backup your personal data, visit the Ag IT How To's, <http://it.cas.psu.edu/921.htm>, <http://it.cas.psu.edu/919.htm>, and/or, <http://it.cas.psu.edu/920.htm>. A video demonstration of backing up personal data is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/backupperpersonal>.

County Server Share Folder

Each county server has space that has been allocated as “shared” storage space. This space can be used to store files that need to be shared with others in the county office. From within your county’s share folder you can:

- Open/read shared files and folders
- Copy files from the folder to your Local Documents or My Documents folder
- Create new folders
- Copy files from your Local Documents or My Documents folder into a County Share folder

Files stored in the Server Share folder are available from any computer within the office and all county office employees have access to the files. These files cannot be accessed from outside the office or by employees from other county offices. The only exception to that rule is multi-county educators. Multi-county educators can access the County Share folder from their secondary county office if they request their account be configured in that way. Video demonstrations related to using the County Server Share are available at: <http://downloads.cas.psu.edu/it/training/bestpractices/archiveonserver>, <http://downloads.cas.psu.edu/it/training/bestpractices/savepictures>, <http://downloads.cas.psu.edu/it/training/bestpractices/accessinggroupfiles>, and <http://downloads.cas.psu.edu/it/training/bestpractices/serveraccess>.

SharePoint

A SharePoint site is another option available for file storage. We would recommend SharePoint as a location for storing files that are to be shared with other users. This would be an alternative to using your County Server Share folder.

Unlike your County Server Share folder, files saved on a SharePoint site are accessible when you are not in the office. In fact, files within SharePoint are available from any computer that has Internet access. Another advantage of SharePoint over the County Share folder is that you are not limited to sharing files exclusively with users from within your county office. Users from any office or department, as well as individuals outside of PSU, can get access to files stored on a SharePoint site.

Each Region and County has their own SharePoint site. Additionally, SharePoint sites can be created for program teams or special project teams. To find your region or county SharePoint site, visit the main Cooperative Extension SharePoint site at <http://sharepoint.ag.psu.edu/coext> and select either your Region tab or the County tab across the top of the site. For information on having a SharePoint site created, please submit a support ticket at <http://it.cas.psu.edu/contactform.htm> and a support specialist will assist you.

Understanding the Backup Process

What Data Gets Backed Up and When

All of the files saved in your County Server Share Folder, My Documents, Local Documents, and SharePoint are backed up regularly.

County Server Share Folder and My Documents

The **County Server Share** folder and your **My Documents** folder (because they reside on your server) are backed up each night when your server backup runs. This occurs around 11:30 PM each night.

Local Documents

Your **Local Documents** and your Profile, which contains your Internet Favorites and some necessary application settings, are backed up each night (Monday through Thursday) at 10:00 pm and 10:30 pm, respectively. Each of these backups typically takes less than 20 minutes to complete.

In order for your Local Documents and Profile to be backed up your computer **MUST** be in the office, connected to the network, and turned on.

RECOMMENDATION: At the end of your work day (Monday – Thursday) log-off your computer (Start menu, choose Log Off) and the backup processes will run automatically at the designated time. NOTE: You may choose to Shutdown if storms are threatening your area or over weekends. A video demonstration of logging off is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/logoffnightlyH>.

If you are a laptop user and regularly take your computer out of the office at night, you should arrange to leave it at the office, connected to the network, and logged off at least once a week*. This will ensure that once a week your data will be backed up properly.

*Because of additional maintenance that automatically occurs on EN computers, if you are only able to leave your laptop in the office one day a week, Mondays or Thursdays would be our recommendation.

Personal Data Folder and Other Locations

Files stored in your Personal Data folder or other locations on your computer are **NOT** backed up. It is your responsibility to manually back up any additional data you need. For instructions on how to backup your Personal Data, visit the Ag IT How To's, <http://it.cas.psu.edu/921.htm>, <http://it.cas.psu.edu/919.htm>, and/or, <http://it.cas.psu.edu/920.htm>. A video demonstration of backing up personal data is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/backupperpersonal>.

Restoring Data

In the event of lost or damaged files from any of the backed up file locations (County Server Share Folder, My Documents, Local Documents, and SharePoint), please submit a support ticket at <http://it.cas.psu.edu/contactform.htm> and a support specialist will assist you in restoring the files.

Understanding the Microsoft Update Process

What are Microsoft Updates

After Microsoft releases software, problems are uncovered and solutions are developed. The solutions to the problems are released to the public as updates. Some of the discovered problems are serious flaws that can allow hackers access to your computer and the other computers on your network. It is important that computers have the necessary updates installed in a timely manner.

How Do EN Computers Get the Microsoft Updates

The Ag IT Department reviews Microsoft Updates as they become available, to determine if and when they should be installed. Once the Ag IT Department determines an update is necessary and will not conflict with other EN software programs, it is released for download. Around 3:00 AM every morning, EN computers that are turned on and connected to the network will download and automatically install any updates released by the Ag IT department.

EN computers that are not left on overnight will download and install the updates the next time they are in the office and on the network.

RECOMMENDATION: At the end of your work day log-off (Monday – Thursday) your computer (Start menu, choose Log Off) and the Microsoft Updates will run automatically at the designated time. NOTE: You may choose to Shutdown if storms are threatening your area or over weekends. A video demonstration of logging off is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/logoffnightlyH>.

At times, you may receive a notification in the System Tray (lower right corner of your screen) related to Microsoft Updates. This would indicate that the update process did not complete the previous night. This can happen for a variety of reasons, such as:

- You locked your keyboard instead of logging off, preventing updates from running or the computer from rebooting after the updates.
- Computer processes hung during log off, preventing updates from running or the computer from rebooting after the updates.
- There were a series (multiple updates in a row) of updates to be installed and a reboot was required between the updates.



The notification will appear as a yellow shield with a black exclamation point inside, as shown on the right. A video demonstration of a notification and corresponding action is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/windowsUpdate>.

In most cases, this notification will be informing you that an update was installed and that your computer needs to be restarted. In other cases, you may find that the notification indicates an update still needs to be installed. In either case, you will need to restart or install the update as soon as possible. If you ignore the notification, the alert icon will continue to display and computer will be sluggish as it expends processing power keeping track of the updates.

EN computers are configured to automatically download the updates released by Ag IT. Users should **NEVER** download and manually run updates from the Microsoft Windows Update website on an EN computer.

How Do Non-EN Computers (such as Home Computers) Get the Microsoft Updates

NOTE: This information is for **Non-EN Computers ONLY!**

Ag IT manages the Microsoft Updates for EN computers, but it is important for all computers to be updated. Non-EN computers (such as home computers) can be configured to download and install the updates automatically at a regularly scheduled time or they can manually be downloaded and installed.

Configuring Automatic Updates

To configure a non-EN computer to receive automatic updates, do the following:

1. Click the **Start** Menu
2. Right-click on **My Computer**
3. Choose **Properties**
4. Click the **Automatic Updates** tab
5. Select the **Automatic** radio button
6. Select the desired frequency and time options
7. Click **OK**

Once a computer has been configured to receive automatic updates, you can go about your day working as usual. At times, you may receive a notification in the System Tray (lower right corner of your screen) related to Microsoft Updates. The notification will appear as a yellow shield with a black exclamation point inside, as shown on the right.



In most cases, this notification will be informing you that an update was installed and that your computer needs to be restarted. In other cases, you may find that the notification indicates an update still needs to be installed. In either case, you will want to restart or install the update as soon as possible. If you ignore the notification, the alert icon will continue to display and your computer will be sluggish as it expends processing power keeping track of the updates.

A video demonstration of a notification and corresponding action is available at: <http://downloads.cas.psu.edu/it/training/bestpractices/windowsUpdate>.

Manually Updating

To manually update a Non-EN computer, do the following:

1. Open Internet Explorer
2. From the **Tools** menu choose **Windows Update**
 - The **Welcome to Microsoft Update** page should display. If it does, go to Step 3. If you are asked to update to Microsoft Update, please follow the prompts to do so and then, go to Step 3.
3. To scan for high priority (critical) updates, click **Express**
4. If updates are NOT found, close the browser window and you are finished
5. If updates are found, click the **Install Updates** button
6. Wait while the updates are downloaded and installed
7. If you are asked to **Restart** the computer, please do so; otherwise, click **Close**

Note: If you were asked to restart the computer, repeat Steps 1 - 6 until all the high priority/critical updates are applied (no updates are found in Step 4).

Understanding Re-Directed My Documents and Offline Files

As mentioned earlier in this guide, your **My Documents** folder is special in the way its files are stored and made available to you. You will often hear this described as “Re-directed My Documents”.

Re-directed My Documents means that your My Documents files are saved (redirected) to your county server. In addition, a copy of your My Documents is stored in a special location on your local computer.

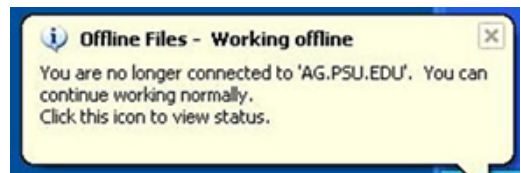
When you are in your home office and a network connection is present, the two copies will be kept in sync. Throughout the day, at any point your computer is idle for 15 minutes, a “Quick Sync” occurs. When you log on and off your computer a “Full Sync” occurs.

The Quick Sync is designed to be... quick. It may not, at all times, keep the local copy and the server copy in complete sync, so it is important that a Full Sync occur each day.

Assuming a Full Sync has occurred, when your computer is taken offline (disconnected from the network) you will have access to all of your My Documents via the copy that is stored on your local computer. This is what we call “working offline” and is what allows you to work with your My Document files when you are out of the office and/or a network connection is not available.

What makes this process possible is the Windows Offline Files feature which uses something called an “offline file cache”. While you don’t need to know all the details of how this feature works, it is important for you to know a few things.

1. When there is no network connection available, you are working offline and the offline file cache takes over. This simply means that your My Documents folder is reading from your local copy of files rather than from the server.
2. When there is no network connection, you will see a message that you are "Working Offline". **This is OK.** You can work with the files the same way that you work with them when you are connected to the network. When you reconnect to the network, changes that you made to the "local" copies will sync to the server.
3. The offline file cache is a **copy** of your server based files and folders that is stored in a hidden folder on your local computer. While the server has a large hard drive and provides a great deal of storage space, you are still limited by the size of your local computer’s hard drive.



Working Offline – Tips & Tricks

Users need to be aware of a few unique situations when working offline.

1. When you are working offline, you can create and delete files and folders and can rename files; however, you cannot rename folders. If you try to rename a folder, you will see the message "Cannot rename <foldername>: This operation is supported only when connected to the server." You must wait for the network to become available before you can rename the folder.
2. As a laptop user, you may be tempted to "just close the lid" to leave the office because that is quick and easy. But, if you do not log off or shut down, a Full Sync will not occur and you may not have access to all your My Documents. You should always log off or shut down your laptop when taking it from the office.

3. When you turn on your laptop outside your home county office, you do not want the computer to "see" or sense a network. You want it to recognize that it is offline. To ensure this happens:
 - a. If your computer has a wireless card, disable it before turning your computer on. When your computer is turned on, it won't try to connect to a wireless network to for synchronization. If you need wireless, you can enable it after the computer is turned on.
 - b. If you are in another office or location with a high speed connection, don't plug in the network/Ethernet cable before you turn on your computer. Wait for the machine to boot completely before you plug in the network cable so it does not see the network and attempt synchronization.
 - c. Seeing the "Working Offline" message when you are disconnected from the network is normal and you should ignore the message. Do not try to re-connect or synchronize, you should be able to work normally from your offline file cache. Once you are back in the office and connected to the office network, plug in the network cable before you turn on the computer and the work you did will be synchronized with the server.

Understanding User Accounts

As a College of Ag Sciences or Cooperative Extension employee, you will normally have TWO user accounts, a PSU account and a College of Ag Sciences account. Your PSU Account is issued by Penn State at the time you first begin employment. For some employees (Penn State paid), the Penn State Account is a "full access account" and for others (County paid) the account will be a "limited access account" often referred to as a Friends of PSU (FPS) account. In either case, the accounts provide a unique user ID and password that will be used to access Penn State resources.

Once you have been issued your Penn State or FPS account, a College of Ag Sciences account is created. The College of Ag Sciences account is what you use to log into your computer each day and access various College of Ag Sciences resources. The user ID for your College of Ag Sciences account is always the same user ID as your Penn State account. This is done to easily identify account holders. Additionally, it helps users remember their user ID's. For the same reason, we strongly recommend that users maintain the same password for both their Penn State and College of Ag Sciences accounts.

Which Account is Used for What?

At times it can be difficult to understand when you should use your College of Ag Sciences account, as opposed to your Penn State account. Below is a table that can help.

NOTE: unless noted with an asterisk (*) resources accessible via the PSU account are only available with a full PSU account and not an FPS account.

College of Ag Sciences Account	PSU Account
Log into EN computers	Log into campus computer lab computers
SharePoint	Log into Adobe Connect Sessions*
Email (College of AG Outlook Exchange)	ESSIC (online system for timecards, benefits, etc.)
Dreamweaver/County Website (website admins)	ANGEL*
	CASPAR
	eCommerce/ePay
	VPN

Changing Passwords

For security purposes, you are required to change your Penn State and College of Ag Sciences account passwords once a year. However, we recommend that you change your password at least every six months. If you do not change your password within the required time period, your account will be deactivated and you will have to take action to have the account reactivated.

RECOMMENDATION: Change your Penn State, FPS, and College of Ag Sciences password at least every six months.

PSU Account (Full Access)

When a Penn State account is created, it is automatically assigned a temporary password made up of random letters and numbers. Users are then expected to change the temporary password to something easier for them to remember. The new password must meet the following guidelines:

1. It must be at least eight characters in length
2. It must contain at least one alphabetic and one numeric character
3. It must be significantly different from the last three passwords
4. It cannot be the same as your user ID
5. It cannot start or end with your initials
6. It cannot include your first, middle, or last name

Eight weeks before your password is set to expire, Penn State will begin sending email notification warnings. It is VERY important that you change your PSU password before it expires. If you do not change your password and it expires, you will need to physically go to a PSU campus to have your account re-activated. Your PSU account password can easily be changed at <http://work.psu.edu/password>.

FPS Account

When a FPS account is created, you specify the password you would like to use with the account. The password must be at least eight characters in length and must contain at least one numeric character.

At this time, you are not required to change a FPS password regularly. However, we still recommend it be changed at the same time you change your College of Ag Sciences password. Your FPS password can be changed at <https://fps.psu.edu/> by clicking the **Change Password** link.

College of Ag Sciences Account

Similar to your Penn State account, when your College of Ag Sciences account is created, you are assigned a temporary password that you are expected to change. We STRONGLY encourage users to make their College of AG Sciences and PSU passwords the same, for easy of remembering them.

Also like your PSU password, your College of Ag Sciences password will expire once a year. We suggest you change your College of Ag Sciences password at the same time you change your PSU password. Your AG password can be changed at <http://work.ag.psu.edu>. More information and steps to change passwords are available from the How To's area of the Ag IT website, <http://it.cas.psu.edu/HowTo.htm>.

Managing Email

The more space your mailboxes take up, the slower your email access will be. This is because of the time it takes the email system to transfer mail from the server to your computer.

The goal for College of Ag Sciences Outlook Exchange accounts is 250 MB of storage space per user. This is roughly equivalent to 12,000 Email messages (including attachments and calendar data) in total for all of your folders. If your storage space goes beyond 500 MB then you may receive a reminder that you should take action to free up disk space.

Checking Mailbox Size

To determine how much space your mailbox is consuming, do the following:

1. Open Outlook
2. From the **Go** menu choose **Folder List**
 - o Outlook 2007, click the **View** menu, select **Navigation Pane** and choose **Normal**
3. Once you can see the Folder List, **Right Click** on **Mailbox - (your name)** and select Properties for **Mailbox - (your name)**
4. Click the **Folder Size** button
5. Write down the number beside **Total size (including subfolders)**
6. This number is total amount of space your Email, calendar, and attachments are using on the Exchange server
 - o This space is listed in kilobytes (KB)
 - o To convert this number to megabytes (MB), divide by 1000 for a rough estimate
 - o Ex: 100,000 KB would equal 100 MB
7. Click **Close**
8. Click **OK**

Reducing Mailbox Size

There are several simple things you can do to reduce or manage your mailbox size.

- ✓ Periodically empty the Deleted Items folder (this is a good end-of-the-week task)
- ✓ Periodically delete items from the Sent Items folder or move to local storage (this is a good end-of-the-month task)
- ✓ Delete items older than a certain date (i.e. items older than 2 years)
 - o You can sort your mailboxes by date received or do an Advanced Find to locate those messages older than a certain date
- ✓ File incoming attachments into the proper folder within My Documents and delete them from the email message
 - o Right-click the attachments and select "Save As"
 - o Right-click the attachment and select "Remove"
- ✓ Delete attachments from Sent messages
 - o Open the sent message, right-click the attachment and select "Remove"
- ✓ Move seasonal or less used message to a local storage folder (See the instructions to Move Message to Local Storage)

Moving Messages to Local Storage

To keep your mailbox size manageable, we recommend you move old or infrequently used items out of your mailbox into a locally stored personal folder (.PST). We recommend that you store the .PST file in your Local Documents folder). Why? This file will contain your email and should be backed up regularly.

RECOMMENDATION: Store personal folders (.PST) in your Local Documents folder.

1. Create a folder called **OUTLOOK-PST** in your **Local Documents** folder
2. Open **Outlook**
3. On the **Tools** menu, click **Options**
4. Click the **Mail Setup** tab
5. Click the **Data Files...** button
6. Click **Add**
 - Personal Folders file (.pst) should be selected
7. Click **OK**
8. Locate and open the **OUTLOOK-PST** folder you created in Step 1
9. Edit the file name to be "**your UserID**".pst. Example: **ntv1.pst**
10. Click **OK**
 - The next dialog box allows you to set options for encoding the information in your personal folder (.PST) file. Encryption encodes the file to make it unreadable by other programs. Password-protecting is optional and provides added security. If you add a password, you will be prompted for the password when you start Outlook or connect to the personal folder file, unless you save the password in the password list. We recommend that you leave the default settings as they are.
11. Click **OK**
 - You will see the "Personal Folders" appear in the Outlook Data Files dialog box.
12. Click **Close**
13. Click **OK**
 - You will now see a "Personal Folders" folder in the Folder List. To view the Folder List, from the Go menu choose Folder List.
14. You can now begin moving folders from the "Mailbox - Your Name" list into this folder by simply clicking and dragging. If you want, you can create Subfolders in the "Personal Folders" folder first. If you are moving a folder with a great deal of information, please be patient as it moves.

Note: Please remember that the "Personal Folders" folder data is now on **this machine only**. You will not have access to this folder from Outlook Web Access (OWA).

Understanding the Spam Folders

The College of Ag Sciences has a spam filter in place that intercepts a large number of the spam messages you would receive. This filter is often referred to as "Ninja".

As email messages are received, Ninja evaluates them to determine the likelihood they are spam. If a message is found likely to be spam, it is quarantined and not placed into your Inbox. Ninja uses three folders when evaluating and consequently quarantining messages. These three folders are found within the Spam folder that is in your Outlook mailbox.

Allowed Senders Folder

The Allowed Senders folder is used to create a list of email addresses that should NOT be quarantined. In other words, email message that come from addresses found in the Allowed Senders folder will always be delivered to your Inbox.

By default, any email address that is found in your Outlook Contact list is automatically considered an “allowed sender”. However, if you find a quarantined email from a sender you would like to receive future emails from, but you do not want to add them to your contact list, you can move or copy the email from the quarantine folder into your Allowed Senders folder. An example of this might be a listserv to which you are subscribed.

Please note that you must keep email in the Allowed Senders folder for as long as you wish to receive email from the sender. Once the email is removed from the Allowed Senders folder, email from the sender may be delivered to the quarantine folder.

Blocked Senders Folder

The Blocked Senders folder is used to create a list of users from whom you do not want to receive email messages. There is no need to maintain a large list in the Blocked Senders folder since most unsolicited spam emails are caught by Ninja before they reach your Inbox. However, if you receive messages that still slip through, simply drop the messages into your Blocked Senders folder and you will not receive future message from that sender.

Remember, just like the Allowed Senders folder, you must keep emails in the Blocked Senders folder for as long as you wish to block email from the sender. Once the email is removed from the Blocked Senders folder, email from that sender may be delivered to your Inbox.

Quarantine Folder

Any email messages that Ninja determines to be spam or messages from addresses that are listed in the Blocked Senders folder are automatically placed into your Quarantine folder.

On a daily basis, you will likely receive large numbers of spam messages. These messages will accumulate in your quarantine folder and eventually consume large amounts of space. You will need to be diligent in keeping the Quarantine folder emptied. We recommend that you delete the messages in the Quarantine folder on a regular basis (at least once a week) to keep the size of the folder small and make sure your mailbox is free of spam.

RECOMMENDATION: Delete the messages in the Quarantine folder once a week.

Optionally, you can delete the entire Quarantine folder, erasing all of spam messages in one easy step. The next time a spam message is quarantined, the system will automatically rebuild the folder and place the new spam message into it.

Recovering a Deleted Message

Have you ever deleted an email message contact or task, emptied your Deleted Items folder, then realized you needed the item after all? Wish there was a way to get the message back? Well...there might be!

The College's Exchange server keeps items deleted from the Deleted Items folder for 7 days. To recover these items:

1. Open Outlook
2. Open the **Deleted Items** folder
3. From the **Tools** menu choose **Recover Deleted Items**
 - This shows you all of the recoverable items. At this point, all the icons will have the same generic icon. (i.e. Contacts don't look like contacts, Tasks don't have the task icon, etc.)
4. Highlight the item(s) you wish to recover or click the Select All button
5. Click the **Recover Selected Items** button (looks like an envelope)

NOTE: This will place the email back into your "Deleted Items" folder. If you want to keep the message, you will need to move it to your Inbox or another folder.

Locking vs. Logging Off vs. Shutting Down

Locking, logging off, or shutting down your computer are ways to leave your computer. Below you will find an explanation of each option and suggestions for when you might want to use each.

Locking

Locking your computer keeps all programs open and the network connection active, but prevents anyone except you or a system administrator from unlocking and viewing any files or programs.

Why would you want to lock your computer? Most simply, to protect your data, instant messages, and email messages by prohibiting others from using your computer when you are not around.

Locking your computer would be a good idea any time you leave your computer unattended for short lengths of time. For instance, you could lock your computer when you go to lunch or a meeting.

RECOMMENDATION: Prior to locking your computer, we recommend that you save any documents, files, messages, etc. on which you are working. This will prevent data loss, in the event of a power outage or your computer being power off while you are gone.

To lock your computer:

1. Press the **Ctrl, Alt** and **Delete** keys at the same time
 2. Click the **Lock Computer** button
- ...OR...
1. Press the **Windows** and **L** keys at the same time.

To unlock your computer:

1. Press the **Ctrl, Alt** and **Delete** keys at the same time
2. Enter your password
3. Click **OK**

Logging Off

Logging off your computer closes all programs, disconnects it from the network, but leaves it powered on. Like locking your computer, logging off is a good way to protect your private data from access by others. Unlike locking your computer, logging off is better used when you will be away from your computer for long periods of time. For instance, it is a good idea to log off your computer when you leave for the night.

The reason we recommend logging off at night, as opposed to locking your computer, is because locking does not guarantee that your data will be safe overnight. If Microsoft Updates requiring a reboot are applied to your machine and it is locked, any open applications would be closed automatically and the data in them might be lost. Logging off ensures your data is saved.

To Log Off:

1. Click the **Start** button
2. Click **Log Off**
3. Click **Log Off**

A video demonstration of logging off is available at:

<http://downloads.cas.psu.edu/it/training/bestpractices/logoffnightly>.

RECOMMENDATION: At the end of your work day (Monday – Thursday) log-off your computer. NOTE: You may choose to Shutdown if storms are threatening your area or over weekends.

Shutting Down

Shutting down your computer closes all programs, disconnects it from the network and powers it down. You should shut down your computer periodically, but not every day. Shutting down your computer at the end of your work day Monday – Thursday would prevent your backup from running.

RECOMMENDATION: At the end of your work day on Friday, shut down your computer.

Recommendations Checklist

Daily (End of work day Monday – Thursday)

- ✓ Log-off your computer

Weekly

- ✓ Empty Outlook's Deleted Items folder
- ✓ Delete the messages in Outlook's Quarantine folder
- ✓ At the end of the work day on Friday, shut down your computer

Monthly

- ✓ Delete items from the Sent Items folder or move to local storage

Quarterly or Bi-Monthly

- ✓ Run Disk Cleanup
- ✓ Run Check Disk
- ✓ Run Disk Defragmenter

Semi-Annually

- ✓ Change your Penn State, FPS, and College of Ag Sciences password