



Walt Disney World Swan and Dolphin Resort
Orlando, Florida

Windows Stuff Even I Didn't Know

Tom Conti - Disney Imagineering

CM41-1 Last year's hit class revised and updated for 2005. This course will delve into the inner workings of Windows XP Professional and show you how to manipulate and customize the OS in convenient ways that suit your work style and save you time. Come learn productivity-boosting tips and techniques for Windows Explorer, registry hacks, and much more.

About the Speaker:

Tom is a senior principal CAD systems analyst for Walt Disney Imagineering, and is an expert on system and Windows configuration and troubleshooting. He supports over 200 AutoCAD users in a Wide Area Network environment, does custom programming in VB and VBA, specifies hardware system requirements and configurations, does system and product testing and implementation, and provides strategic planning for the engineering groups at WDI. Tom has 25+ years of CAD and computer systems experience and is one of the top-rated speakers at Autodesk University.

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Customizing the Start Menu

To change from XP's Start menu to the classic Start menu, right-click on the Taskbar, then click *Properties...* Select *Classic Start menu* and click OK. To change back to XP's Start menu, do the same thing and select *Start menu*.

The size of the icons and number of the shortcuts in the more recently used programs list can be changed by right-clicking the Taskbar, then click *Properties... Start Menu tab... Customize...* Select either large or small icons, and pick the desired number of programs on the Start menu.

The *Advanced* tab of the Customize Start Menu dialog gives you control over many of the items in the Start menu. You can set whether to display, and if so as a link or a menu, Control Panel, My Computer, My Documents, My Music, My Pictures, and Network Connections. You can control if submenus open when the mouse pauses over them or whether Windows highlights newly installed programs.

You can modify the items in the area above the recently used programs list. This list remains the same until you change it. To delete a shortcut from this list, simply right-click on the item then click *Remove from This List*. You can add an item to this list by finding the item in the Start menu, press Ctrl and click and drag the item to the list. You can also re-order the list by clicking-and-dragging an item up or down the list.

The Start menu can get to be a jumbled mess after installing a number of apps. You don't have to move each item individually to re-organize it. Right-click anywhere in the Start menu then click *Sort by Name* and the menu sorts into folders then files.

You can also edit the menu by opening the current user Start menu and the All Users Start menu and cutting-and-pasting items. Right-click on *Start* button and you'll see *Open* at the top and *Open All Users* second from the bottom. Each of these will open a window displaying the contents of their respective menus. You can then click and drag, or cut and paste, items as desired.

I get asked how to have the Taskbar clock display more than the time. By making the taskbar two lines tall, the clock displays time, day, and date. To change the Taskbar size, move the mouse over the top edge of the Taskbar. When it changes to the double arrow sizing pointer, click and move upward till the Taskbar expands. If the mouse pointer doesn't change to the sizing pointer, unlock the Taskbar by right-clicking on it and click *Lock the Taskbar*.

Registry Hacks

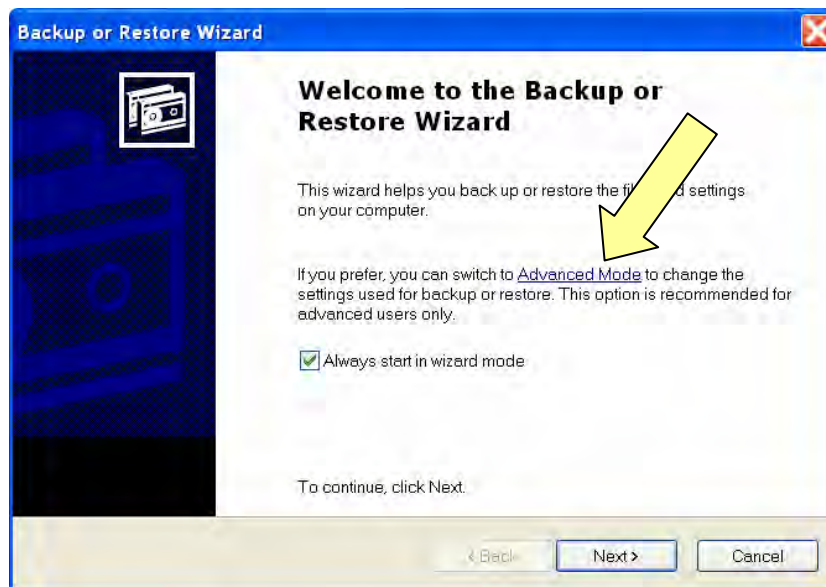
Some of the things covered in this section can also be set through the user interface. So why would you want to do it by editing the Registry? By knowing where Windows stores configuration information you can export the Registry settings and use the resulting .reg file to give your users a standard configuration or reset a system to your standard configuration.

How to back up your registry

Pretty much anytime you read about editing the registry, the first thing it says is, "Back up your registry before you begin." So how exactly do you do this?

One way to do this is to open the registry (*Start... Run... regedit*), click on *My Computer* at the very top, then *File... Export...* browse to where you want to file to go and give it a name. You can also back up just the area you're going to be modifying by selecting the key and then *File... Export*.

Another way is to use the Windows XP Backup utility (*Start... All Programs... Accessories... System Tools... Backup*). When you first start the Backup utility, click on the *Advanced Mode* link.



Then click the *Backup Wizard (Advanced)* button. At the *What to Back Up* dialog, select *Only back up the System State data*.

The system state includes the registry, the COM+ Class Registration Database, and your boot files. When I did this for my laptop the resulting backup file was 384MB.

Monitoring Registry activity

Ever want to monitor registry activity during booting? www.sysinternals.com has a free utility called RegMon that enables you to capture registry activity from very early in a system boot. Registry activity is captured to a log file, and the logging continues in the background until the next system boot, or until the Regmon user interface is started. Thus, you can capture registry activity through a system's entire boot-to-boot life cycle, including startup, login, logout, and shutdown, or just through its boot sequence. You can use registry activity logs generated by Regmon's boot-logging capability to learn how the system uses the registry during what are normally black-out periods for system monitors, and to troubleshoot system, service or driver registry configuration problems that would otherwise be difficult or impossible to track down. Be aware that the log file will contain thousands of records. Be sure to read the information about boot logging in Regmon at www.sysinternals.com.

There's also Advanced Registry Tracer, available at www.elcomsoft.com/art.html. You can use this to see what changes installing an application made to the registry. There's a shareware free trial version, and \$40 for full version. This software lets you take a snapshot of the Registry and compare it with another snapshot. This is especially useful if you want to see the changes made by installing an app, or trying to find where an app stores a particular setting.

How to edit the Registry

The direct method of editing the Registry is using the Windows Registry editor, `regedit.exe`. You can also use third-party editors such as RegEditX (www.dcsoft.com/products/regeditx/) and

RegWorks (www.regwrks.com). For our discussion, we'll be using regedit.exe.

When you run regedit.exe, you'll see the Registry displayed in a two-pane window. The left pane is the navigation pane and the right is the detail pane. The navigation pane only displays folders (they're called keys in the Registry) and the detail pane only displays values. Values can be a string value, binary value, or DWORD value, multi-string value, or expandable string value. These values types use the following type of data.

String – a fixed-length text string; shows as REG_SZ type

Binary – raw binary data, displayed in hexadecimal form; shows as REG_BINARY type

DWORD – data represented by a number that is 4 bytes long, displayed as hexadecimal or decimal format; shows as REG_DWORD type

Multi-string – value can contain lists or multiple values, entries are separated by spaces, commas, or other marks; shows as REG_MULTI_SZ

Expandable string - variable-length data string, includes variables that are resolved when a program or service uses the data; shows as REG_EXPAND_SZ

You can also effect changes in the Registry by using .reg files. When you double-click a .reg file, Windows will ask if you're sure you want to add the information to the Registry and, if you click Yes, will do so and display a dialog telling you if it successfully completed.

You can have Windows automatically load a .reg file everytime you log into Windows by adding a new string value to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run. You can name it anything you want, and give it the value...

```
regedit /s path\YourRegFile.reg
```

The /s parameter tells Windows to not display the "Is it alright to load the .reg file" and the "Successful" dialogs. The /s parameter is also useful when you want to use a regedit command in a batch file.

So whaddyasay? Let's hack a little.

How to make your Start menu "Sort by Name" permanently

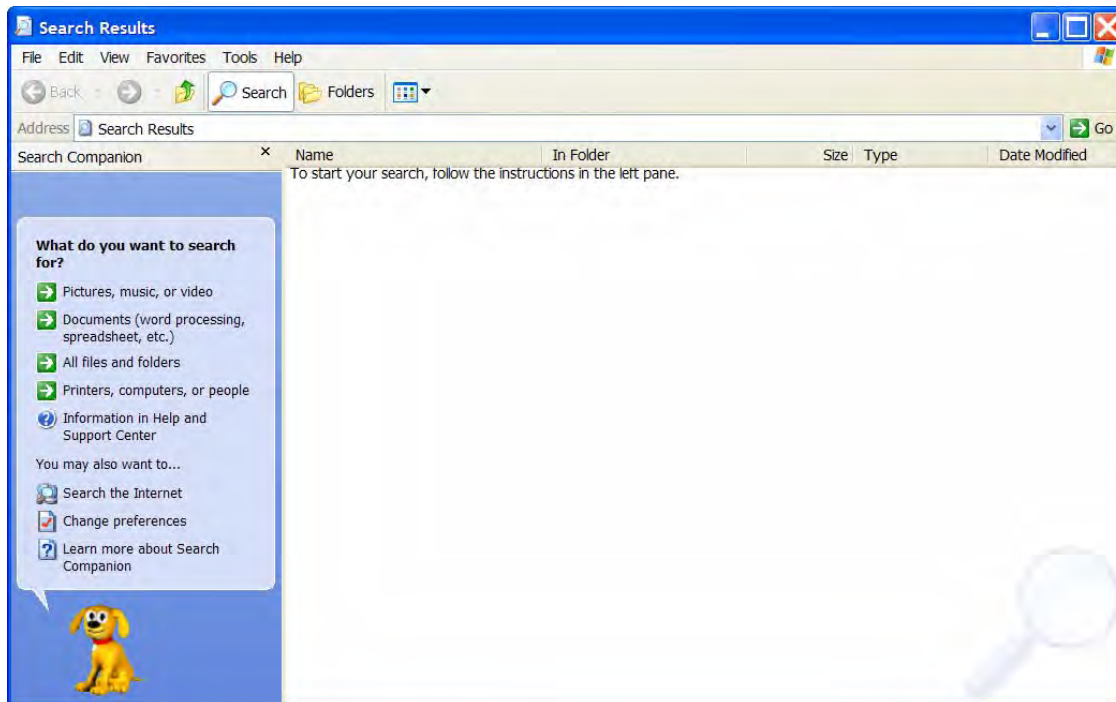
As mentioned earlier, you can sort your Start menu items by going to Start... All Programs... then right-click on any item in the list then click *Sort by Name*. If you install a new program its program group will go at the end of the list.

You can have your Start menu always be sorted by navigating to My Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\MenuOrder\StartMenu(or may be Start Menu2)\Programs in the left pane, then right-click *Order* in the right pane and select *Delete* from the pop-up menu. You can do the same for your Favorites, located in the same StartMenu folder.

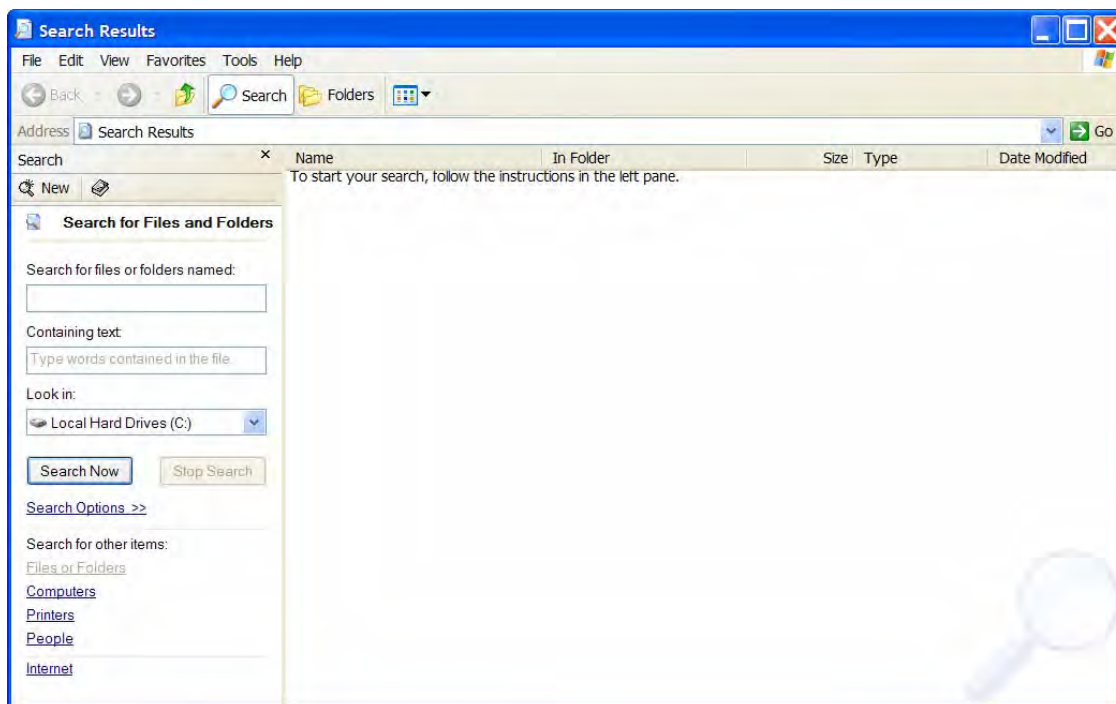
After you close Regedit and reboot your system, the Windows Start menus will always appear in alphabetical order.

Setting the type of Search dialog

How do you feel about the new XP search window?



Do you miss the old search dialog?



Go to My Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\CabinetState add a new string value *Use Search Asst* and set it to *no* (note: "*no*" **has to be in lower case**).

If you like the new search dialog you can change the search companion by simply clicking on the companion, which will change the choices in the left pane. One of the choices now available is *Choose a different animated character*.

How to change the Windows login background

Navigate to My Computer\HKEY_USERS\DEFAULT\Control Panel\Desktop
Set *Wallpaper* to the .BMP file you want to use. Note: **this has to be a .bmp file**.
Set *WallpaperStyle* to 0 and *TileWallpaper* to 0 for center,
or *WallpaperStyle* to 2 and *TileWallpaper* to 0 for stretch,
or *Wallpaper* to 0 and *TileWallpaper* to 1 for tile.

How to change the Windows login screen saver

Navigate to My Computer\HKEY_USERS\DEFAULT\Control Panel\Desktop
Set *SCRNSAVE.EXE* to the .SCR file you want to use.
Set *ScreenSaveTimeOut* to number of seconds you want for the screen saver timeout.
When *ScreenSaveActive* is set to 1, the screen saver is enabled. If set to 0 it is disabled.

And speaking of the screen saver... screen saver grace period

If you have your screen saver set for *On resume, password protect*, you may want to set a grace period that if you move the mouse or press a key within a specified number of seconds you aren't required to enter your password. Here's how.

Navigate to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon. Create a new string value named *ScreenSaverGracePeriod* and set it to the desired number of seconds.

How to set a default background for all users

Use the Microsoft Management Console (MMC) to set the default background in the Local Computer Policy as follows.

Start... Run... MMC
File... Add/Remove Snap-in... Add... Group Policy... Add... Finish... Close... OK
Expand Local Computer Policy... expand User Configuration... expand Administrative Templates... expand Desktop... select Active Desktop... double-click Enable Active Desktop... select Enabled... OK
double-click Active Desktop Wallpaper... Enabled... enter wallpaper to use (path\filename)... OK

close the console, save the console settings if desired

You can use a .bmp, .jpg, .htm, or .html file for the wallpaper.

How to turn off the Windows firewall alert

You can go to Control Panel ... Security Center... Change the way Security Center alerts me... turn off check boxes for items you don't want alerts for. To disable the firewall alerts in the Registry, go to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Security Center, add a new DWORD value named *FirewallDisableNotify* and set to 1.

How to change the title bar in Internet Explorer

Did you download a free ISP and now IE's title bar says "Internet Explorer Provided by *blah blah blah*"? Want to get rid of it? Navigate to My Computer\HKEY_CURRENT_USER\SOFTWARE\Microsoft\Internet Explorer. Double click on *Main* to expand its contents in the right pane....now scroll down till you see *Window Title* and you will see it says *Internet Explorer provided by blah-blah-blah*. Double click on *Window Title* and a dialog will come up where you can change the title to anything you like. Close the registry editor.

Note, another way to get to the *Windows Title* is go to Edit... Find... in REGEDIT, and type in *provided by blah-blah-blah* for the search and let REGEDIT find it for you. The Find feature is extremely useful when trying to figure out where things are stored.

Removing something from Control Panel... Add/Remove Programs

Have you ever uninstalled a program but it still shows up in the Add/Remove Programs list? You can manually remove it by navigating to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall. You'll see a whole bunch of keys listed under Uninstall. Right-click on Uninstall then click Find... and search for the string you're looking for. When you find it, click on the key in the left pane that contains the string and delete it. The item will be gone from your Add/Remove Programs list.

Removing the blank space after AutoCAD 2002 in Add/Remove Programs

Have you ever found a big blank space in the Add/Remove Programs list? Navigate to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\{5783F2D7-0101-0409-0000-0060B0CE6BBA} and look at the *DisplayIcon* value. The data is
C:\Program Files\AutoCAD 2002\acad.exe,-1
Remove the , -1 at the end and the space goes away.

How to change the registered owner's name in your computer

Let's say you inherit a computer from someone else and it has their name and/or organization listed as the licensed owner in Windows and now, it's yours, and you want to change it. Navigate to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\Current Version. In the right pane, you'll see *RegisteredOrganization* and *RegisteredOwner*. Double-click the one you want to change (or right-click it and select Modify), type the desired information into the Value Data text box, and click OK. Repeat these steps for the other value, if desired, and close the registry editor.

How to tell any program that hangs when windows is shutting down to automatically shutdown

Go to My Computer\HKEY_CURRENT_USER\Control Panel\Desktop and create a new string value named *AutoEndTasks*. Double-click it and give it a value of *1*.

This works with some programs, and not with others. But it's worth a try if you are experiencing this problem.

How to make your computer automatically logon

If you have a computer that always needs to be up and logged in, you can make it automatically logon and not stop at the login dialog. You may need to make one or more of the string values needed for this. Navigate to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon.

Set *AutoAdminLogon* to *1*

Set *DefaultDomainName* to the domain name you want to login to

Set *DefaultPassword* to the login password

Set *DefaultUserName* to the login name you want to use

You can also use the power toy Tweak UI to make your computer automatically logon.

Something else to note, if you want the system to be up as much as possible, you can go to *Control Panel... System... and Advanced tab... Startup and Recovery Settings...* and turn on the check box for *Automatically restart*. In the event of a blue screen of death, the system will automatically reboot instead of waiting for the user to power off and on.

Windows Taskbar grouping

Right-click on the Taskbar, then click Properties... and you'll see a check box for *Group similar taskbar buttons*. When this is checked, Windows will group multiple windows for a common app (like when you have your Inbox, Calendar, and a couple of email messages open in Outlook) on the taskbar. You can set how many of the same application appear before Windows groups them together.

Go to My Computer\HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Explorer\Advanced. Make a new DWORD value named *TaskbarGroupSize* and set it to the desired number. A smaller the number will give you a less cluttered taskbar. Use a higher number if you like to see each open window.

Autorun CD

Would you like to stop Windows from trying to open files when you insert a CD? You can right-click on the CD drive letter in Windows Explorer, then Properties... On the Autoplay tab, you can set the action for the various types of discs.

To turn off Autorun in the Registry, go to My Computer\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\CDRom. Look for *Autorun*. If it's there, set it to *0*. If it's not there, create a DWord value named *Autorun* and set it to *0*.

Hiding the Windows system tray icons

Go to My Computer\HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\Explorer. Make a new DWORD value named *NoTrayItemsDisplay* and set it *1*, close the registry and reboot. You can still access the programs through the Task Manager.

The Recycle Bin

If you should happen to lose the Recycle Bin on your desktop, you can restore it by navigating to My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Explorer\Desktop\NameSpace. Add a new key named {645FF040-5081-101B-9F08-00AA002F954E}. Set the (*Default*) value to *Recycle Bin*. Go back to the desktop, right-click and then click *Refresh*.

Here's some other information about the Recycle Bin you may find useful.

Right-click the *Recycle Bin... Properties...* to see what percentage of each hard drive is set aside for the Recycle Bin. You can use the same percentage for all drives or set a different percentage for each drive. The range is 0-100%. There is also an option to not move deleted files to the Recycle Bin at all and instead immediately delete them. And if you'd prefer not to get the "Are you sure..." dialog when you empty the Recycle Bin, you can turn this feature off.

A deleted item that is larger than the storage capacity of the Recycle Bin will not be saved and will be permanently deleted. You will get a dialog box telling you this.

Items in the Recycle Bin remain there until you decide to permanently delete them from your computer. These items still take up hard disk space and can be undeleted or restored back to their original location. When the Recycle Bin fills up, Windows automatically cleans out enough space in it to accommodate the most recently deleted files and folders.

And did you know that if you hold down the *Shift* key when you delete a file or folder it's permanently deleted without going to the Recycle Bin?

Once you empty the Recycle Bin the files and folders are gone, gone, gone. Or are they? There are a number of programs available for recovering deleted files. See the *Handy Utilities and Sites* section for a few of them.

Command Prompt

Setting font, colors size, and buffer

Open a command prompt window. Click on icon at the left of the title bar, then click Properties...

The *Font* tab gives you font selection and size settings.

On the *Colors* tab, you can set the font and background colors.

On the *Layout* tab, you can set the window size. The width is in characters. The height is the number of rows that will fit in the window. The screen buffer values define the number of characters per row (width) and number of rows Windows will retain. I find the width is best set to the same as set for the window size width, but I set the height to 400, which lets me scroll back up through a long help file, directory listing, etc.

Copying text from a command prompt window

You can copy text from a command prompt window by clicking on the icon at the left of the title bar, then click Edit... Mark... select the text you want to copy, then click on the icon at the left of the title bar, Edit... Copy (or you can press Enter after marking the text).

Pasting text into a command prompt window

Click on the icon at the left of the title bar, Edit... Paste.

Dragging a folder path or a path\filename from Windows Explorer

With an Explorer Window and a command prompt window open, drag the folder or file from Explorer to the command prompt window. You can do this while partway through a command. For example, you can type in `CD` and then drag in a path that you don't want to type in.

DEL and ERASE commands

One of the things to be aware of when using the DEL or ERASE command is that files deleted using the command line do not go to the Recycle Bin. These are extremely powerful commands.

Enter `DEL /?` or `ERASE /?` at a command prompt and you'll see the following.

Deletes one or more files.

```
DEL [/P] [/F] [/S] [/Q] [/A[:attributes]] names
ERASE [/P] [/F] [/S] [/Q] [/A[:attributes]] names
```

names	Specifies a list of one or more files or directories. Wildcards may be used to delete multiple files. If a directory is specified, all files within the directory will be deleted.	
/P	Prompts for confirmation before deleting each file.	
/F	Force deleting of read-only files.	
/S	Delete specified files from all subdirectories.	
/Q	Quiet mode, do not ask if ok to delete on global wildcard	
/A	Selects files to delete based on attributes	
attributes	R Read-only files	S System files
	H Hidden files	A Files ready for archiving
	- Prefix meaning not	

If Command Extensions are enabled DEL and ERASE change as follows:

The display semantics of the /S switch are reversed in that it shows you only the files that are deleted, not the ones it could not find.

RMDIR and RD commands

Here's something that can be very useful in a batch file. Have you ever wanted to remove a directory and all of its sub-directories in Windows 2000 or XP? Back in the DOS days you'd use the *deltree* command. There is no *deltree* command in Windows 2000 and XP. The RMDIR or RD command is used to remove a directory. There are two arguments, /s and /q. /s removes all files and sub-directories (ie., the entire branch), and /q tells it not to ask if it's okay to delete everything when using /s.

As with DEL and ERASE, folders deleted at the command line do not go to the Recycle Bin.

Shutting down or restarting your computer from a command prompt

Go to a Command Prompt window and enter `shutdown /?` and you'll get the following.

You could make three batch files, `LogMeOff.bat`, `ComputerShutdown.bat` and `ComputerRestart.bat`, on your Desktop to have a double-click log off, shutdown or restart instead of having to go to Start... Shutdown... select Log Off, Shutdown or Restart.. click OK.

`Shutdown.exe` cannot be used to put a system in Standby.

Handy system variables

Here are a few variables that will come in handy when writing batch files.

`windir` - this gives the path where Windows is installed

`USERPROFILE` - this gives the path to the current user's profile (C:\Documents and Settings*loginname*)

`ALLUSERSPROFILE` - this gives the path to the AllUsers profile (C:\Documents and Settings\All Users)

Batch files, drives, etc.

When writing batch files, it's best not to use drive letters when referring to a network location. It is better to either use a UNC path or IP address in batch files. If you're going to be giving the batch file to users in different domains, always use a fully qualified server name or the server's IP address to assure that the server can be located no matter where the batch file is run from. You can get the server's fully qualified name and its IP address by pinging the server.

Getting file lists

Have you ever wanted to get a list of files in a given directory? Windows does not provide a way to do that from Explorer. Here are a couple of ways to do this.

The first step is to create a batch file. The following is the essence of what we want.

```
dir %1 /b > c:\myfiles.txt
notepad c:\myfiles.txt
```

The first line does the directory listing and sends it to a file. The second line opens the file in Notepad.

The `/b` argument tells the `dir` command to return only the bare file name, with no heading information or summary. You can, of course, use any of DIR's other optional arguments as well. To have it search all sub-directories include the `/s` argument.

```
dir %1 /b /s > c:\myfiles.txt
notepad c:\myfiles.txt
```

To have it only list AutoCAD drawings, change it to..

```
dir %1\*.dwg /b /s > c:\myfiles.txt
notepad c:\myfiles.txt
```

To have it add to an existing text file, change the redirector from `>` to `>>`.

```
dir %1\*.dwg /b /s >> c:\myfiles.txt
notepad c:\myfiles.txt
```

Now that you have your batch file, navigate to My Computer\HKEY_CLASSES_ROOT\Folder\Shell and create a new key named *Directory Listing Here*. Below that create another key named *command*. Set the (*Default*) value to the path\filename of your batch file. Go to Windows Explorer and right-click on a folder in the folder pane (the left pane), click on *Directory Listing Here*, and voila!, instant directory listing!

This method does have a limitation. If you click on a folder in the right pane of the Explorer window, you'll get the listing of the current folder contents in the right pane and not the contents of the folder you right-clicked on.

Once you have the list in Notepad, you can copy and paste it into Excel if you want to do a sort.

Another solution for getting a list of files and/or folders is FileGrab. This utility, available from www.pcmag.com, allows you drag-and-drop folders and files from Windows Explorer and then save the resulting list to a file (.txt or .csv), print it, or copy it to the Clipboard. You can select what information you'd like included from the following list.

- Full Path
- DOS Name
- Size
- Creation Date
- Modified Date
- Accessed Date
- Attributes

NET USE

The NET USE command can be useful for redirecting LPT1 to a network printer for use with programs that don't understand network printers (yes, there are still a few out there that don't).

Enter NET USE /? at the command prompt and you'll get...

```
NET USE
[devicename | *] [\\computername\sharename[\volume] [password | *]]
    [/USER:[domainname\]username]
    [/USER:[dotted domain name\]username]
    [/USER:[username@dotted domain name]
    [/SMARTCARD]
    [/SAVECRED]
    [[/DELETE] | [/PERSISTENT:{YES | NO}]]
```

```
NET USE {devicename | *} [password | *] /HOME
```

```
NET USE [/PERSISTENT:{YES | NO}]
```

The you include the `/persistent:yes` argument the connection will be remembered for the next time you logon.

To redirect LPT1...

```
net use lpt1 \\server\printerqueue
```

Handy Sites and Utilities

Shields Up!!

<https://grc.com/x/ne.dll?bh0bkyd2>

This is a great site for testing how vulnerable your computer is to a hacker's attack. It will test file sharing, common ports, all service ports, messenger spamming, and browse headers. The goal is to have your computer in full stealth mode.

Sygate Online Services

<http://scan.sygate.com>

This is another site you can use to check your system's vulnerability to attack. There are different levels of check that take as quick as a minute or as long as 45 minutes.

Windows XP PowerToys

<http://www.microsoft.com/windowsxp/downloads/powertoys/xppowertoys.msp>

Alt-Tab Replacement

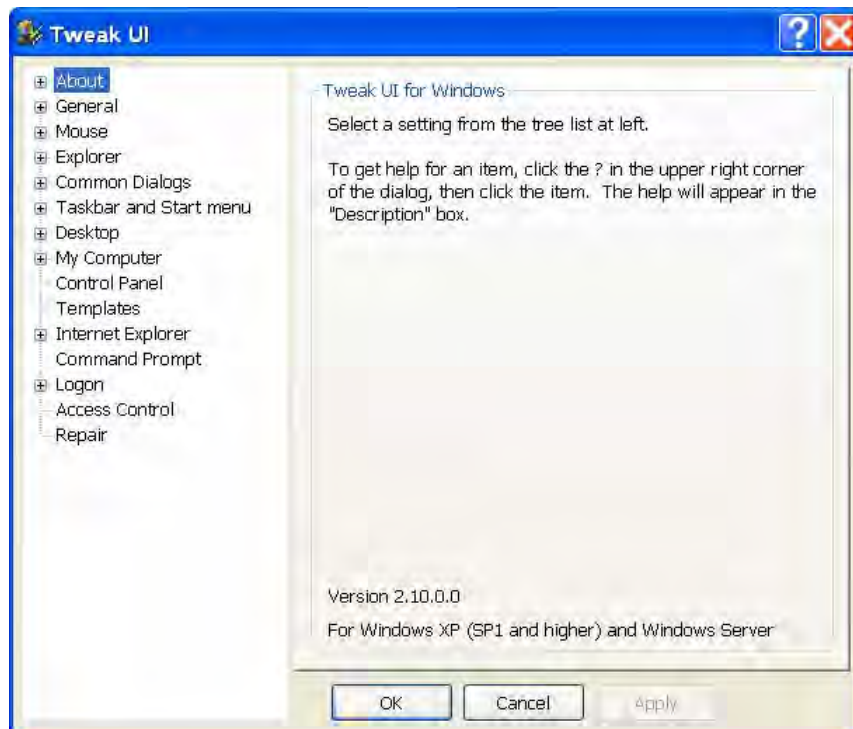
With this PowerToy, in addition to seeing the icon of the application window you are switching to, you will also see a preview of the page. This helps particularly when multiple sessions of an application are open.

Open Command Window Here

This PowerToy adds an *Open Command Window Here* context menu option on file system folders, giving you a quick way to open a command window (cmd.exe) pointing at the selected folder.

Tweak UI

This PowerToy gives you access to system settings that are not exposed in the Windows XP default user interface, including mouse settings, Explorer settings, taskbar settings, and more.



There is also a Tweak UI specifically for Itanium-based computers.

Power Calculator

With this PowerToy you can graph and evaluate functions as well as perform many different types of conversions.

Image Resizer

This PowerToy enables you to resize one or many image files with a right-click.

CD Slide Show Generator

With this PowerToy you can view images burned to a CD as a slide show. The Generator works downlevel on Windows 9x machines as well.

Virtual Desktop Manager

Manage up to four desktops from the Windows taskbar with this PowerToy.

Taskbar Magnifier

Use this PowerToy to magnify part of the screen from the taskbar.

HTML Slide Show Wizard

This wizard helps you create an HTML slide show of your digital pictures, ready to place on your Web site.

Webcam Timershot

This PowerToy lets you take pictures at specified time intervals from a Webcam connected to your computer and save them to a location that you designate.

X-Setup Pro

<http://www.x-setup.net/>

X-Setup Pro offers more Windows XP tweaks than Microsoft's TweakUI. This is freeware. Home users and non-commercial institutions can download and use X-Setup Pro for free.

<http://www.tweakxp.com/>

This site is dedicated to customizing Windows XP. Tons of stuff to keep you busy for days.

UltimateZip

<http://www.ultimatezip.com/>

A very nice freeware zip tool. Supports practically every type of compression.

Advanced registry Tracer

<http://www.elcomsoft.com/art.html>

Use Advanced registry Tracer to see what changes installing an application makes to the registry. There's a shareware free trial version, and \$40 for full version

Sissoftware SANDRA

<http://sisoftware.net/index.html?dir=&location=pinformation&langx=en&a=>

Sissoftware **S**ystem **A**nalyser, **D**iagnostic and **R**eporting **A**ssistant is an information & diagnostic utility. The standard version is free for personal and educational use. The current version at the time of this writing includes the following modules.

- System Summary

- CPU/BIOS Info (inc. voltage/temperature)

- Mainboard/Chipset/System Monitors Info

- APM & ACPI (Advanced Power Management) Info

PCI & AGP bus and devices Info
Video Information (monitor, card, video bios, caps, etc.)
OpenGL Information
DirectX (DirectDraw, Direct3D, DirectSound (3D), DirectMusic, DirectPlay, DirectInput) Info
Keyboard Info
Mouse Info
Sound Card (wave, midi, aux, mix) Info
MCI Devices (mpeg, avi, seq, vcr, video-disc, wave) Info
Joystick Info
Printers Info
DOS Memory Info (base, HMA, UMB, XMS, EMS, DPMI, VCPI) (ANSI Sandra Only)
Windows Memory Info
Windows (& DOS SubSystem (ANSI Sandra Only)) Info
Font (Raster, Vector, TrueType, OpenType) Information
Modem/ISDN TA Information
WinSock (Internet) Information
Drives Information (Removable Hard Disks, CD-ROM/DVD, RamDrives, etc.)
Ports (Serial/Parallel) Info
Remote Access Service Connections (Dial-Up, Internet)
Processes (Tasks) & Threads Info
Modules (DLL, DRV) Info
Services & Device Drivers (SYS) Info
ATA/ATAPI Information
CPU Arithmetic Benchmark (MP/MT support)
CPU Multi-Media Benchmark (including MMX, MMX Enh, 3DNow!, 3DNow! Enh, SSE(2))
(MP/MT support)
File System (Removable, Hard Disks, Network, RamDrives) Benchmark
Removable Storage/Flash Benchmark
CD-ROM/DVD Benchmark
Memory Bandwidth Benchmark (MP/MT support)
Cache/Chipset/Memory Bandwidth Benchmark (MP/MT support)
Network/LAN Bandwidth Benchmark
Internet/ISP Connection Benchmark
Internet/ISP Peerage Benchmark
Hardware registry settings
Environment settings
Registered File Types
Listings of system files (.ini, .sys, .bat)
Add new/delete module Wizard
Burn-in Wizard
Create a report or script Wizard (save, print, fax or e-mail in CIM (SMS/DMI), HTML, XML,
RPT or TEXT format)
Performance Enhancing Tips
Performance Tune-Up Wizard
Register Wizard
WebUpdate Wizard for automatic version updating
Tip of the day
Extensive help file documenting over 500 tips
Extensive on-line documentation (HTML) with Q & A knowledge base

EventID

<http://www.eventid.net/>

Ever look in the Windows Event Viewer and wish you had more information about a Windows event? Type in the event ID number and EventID.Net gives you a list of all sources for the event, what type of event it is (error, warning, information), and details about the specific event.

<http://www.sysinternals.com/>

A great site for Windows information and utilities. There are far too many things on this site to list them all here. Trust me. Go here and poke around for a while. You will find a plethora of useful tools and info.

FreeUndelete

officerecovery.com/freeundelete

PC Inspector File Recovery

www.pcinspector.de/file_recovery/UK/welcome.htm

Restoration

www.snapfiles.com/get/restoration.html

Miscellaneous Stuff

Transparent desktop text

Do you have a picture for a background on your desktop? Do your desktop icons have a colored rectangle around them? Would you rather the background for the icon text be transparent? Go to Control Panel... System... (or right-click on My Computer... Properties...), on the *Advanced* tab click the *Settings* button in the *Performance* section. Turn on check box for *Use drop shadows for icon labels on the desktop*.

What happened to the listings for IRQs, I/O, etc.?

If you go to *Control Panel... Administrative Tools... Computer Management...* and expect to be able find information about the system, it's not there! Windows XP now has all of this stuff in *Start... All Programs... Accessories... System Tools... System Information*.

How to tell what is loading when Windows starts

There are several places to look for programs that automatically get loaded when Windows starts. The first is the *Startup* folder in the Start menu. Another is the My Computer\HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run key in the Registry. And finally, go to *Start... Run...* enter *MSCONFIG*.

Using *MSCONFIG* you can see what's being loaded and from where. Is it in the SYSTEM.INI or WIN.INI file, or a service? On the *Startup* tab in *MSCONFIG* you'll see what's loading in the Start menu's *Startup* folder and in the Registry. You can turn off services and programs in Startup and save system resources and shorten how long it takes Windows to start. If you turn off items using *MSCONFIG*, when you restart Windows and login, you'll get a dialog telling you that you're using a modified configuration. Turn on the check box to tell Windows not to show you this dialog again or you'll see it every time.

How to turn off Windows error reporting

Are you tired of having the dialog come up that asks you if you want to send the error information to Microsoft? Go to *Control Panel... System... Advanced tab... Error Reporting...* select *Disable error reporting*.

Keyboard window control

You can resize or move a window without using your mouse. This is especially helpful when a program (usually one you don't want running) places its window so the title bar is off the screen. Pressing *Alt-spacebar* will activate the window's system menu. This is the menu you get when you click the program's icon at the left end of the title bar. With the system menu open, you can type M for move or S for size.

On-screen keyboard

Did you know that there's a built-in on-screen keyboard in Windows? If you need to type something and your keyboard isn't available, press the Windows key or *Ctrl-Esc* to get to the Start menu, then arrow up to *Run* and enter *osk.exe*.

Remove auto-complete items

Yahoo remembers strings you searched for. Outlook remembers nicknames. Have you ever wanted to get rid of one of these? Simply type in the first few characters so the list appears, arrow down to the one you want to remove, and press the *Del* key.

Change a drive's letter assignment

There are times when you want to change the assigned drive letter for a hard drive or CD/DVD drive. To do this, go to *Control Panel... Administrative Tools... Computer Management... Disk Management* (in the Storage section on the Computer Management dialog). Right-click on the disk you want to change, then select *Change Drive Letter and Paths...* Click the *Change...* button on the resulting dialog. Select the desired drive letter from the dropdown list.

Stop Microsoft Messenger from loading

Would you like to stop Microsoft Messenger from loading? Open Microsoft Messenger by double-clicking on the icon in the system tray. Go to *Tools... Options... Preferences tab...* and turn off the check boxes for *Run Windows Messenger when Windows starts* and *Allow Windows Messenger to run in the background*. Close Messenger.

Add Your Places

Here's how to modify the *Places* bar of the Open dialog. Unfortunately, there's not one place you can modify that will affect all programs, so we'll look at three of them.

Let's start with AutoCAD. Go to *File... Open...* and browse to the folder you want to add. You can use any of several ways to add the folder to the *Places* bar.

Go to the *Tools* pulldown menu on the Open dialog and select *Add Current Folder to Places*.

Right-click in the *Places* section, then click *Add Current Folder*.

Drag the folder onto the *Places* bar.

To remove an item on the *Places* bar, right-click on it, then click *Remove*.

For AutoCAD 2006, the *Places* settings are stored in the Registry at My Computer\HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R16.2\ACAD-4001:409\Profiles*yourprofilename*\Dialogs\

AllAnavDialogs. You can also add more folders to the *Places* bar by adding the following string values to the AllAnavDialogs key.

PlacesOrder*n* – this is the path to the folder; *n* is the next available number

PlacesOrder*n*Display – this is what is displayed for the folder name in the *Places* bar; *n* is the next available number

PlacesOrder*n*Ext – leave this value blank; *n* is the next available number

The settings for the *Places* bar are stored for each version of AutoCAD. If you have more than one version installed, you'll need to modify the *Places* bar for each. Here are the Registry keys for AutoCAD 2004, 2005 and 2006.

AutoCAD 2004: My Computer\HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R16.0\ACAD-201:409\Profiles*yourprofilename* \Dialogs\AllAnavDialogs

AutoCAD 2005: My Computer\HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R16.1\ACAD-301:409\Profiles*yourprofilename* \Dialogs\AllAnavDialogs

AutoCAD 2006: My Computer\HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R16.2\ACAD-4001:409\Profiles*yourprofilename* \Dialogs\AllAnavDialogs

Changes you make to the *Places* bar affect all of AutoCAD's file selection dialogs.

You'll probably want to add folders to the *Places* bar for Microsoft Office as well as AutoCAD. There's only one method for adding folders through the Open dialog; once you've browsed to the folder you want to add, go to the *Tools* pulldown and select *Add to Favorites*.

You can also add folders by editing the Registry. Navigate to My Computer\HKEY_CURRENT_USER\Software\Microsoft\Office\10.0\Common\Open Find\Places\UserDefinedPlaces and create a new key named *place1*. For the next folder you want to add, create a key named *place2*, etc. After adding the key, create two string values for the key.

Name - this is what is displayed for the folder name in the *Places* bar

Path - is the path to the folder

If you have different versions of the Office apps installed, you'll have to modify the *Places* bar for each version of you have. Here are the Registry keys for Microsoft Office 2002, 2002 (XP), and 2003.

MS Office 2000: My Computer\HKEY_CURRENT_USER\Software\Microsoft\Office\9.0\Common\Open Find\Places\UserDefinedPlaces

MS Office 2002: My Computer\HKEY_CURRENT_USER\Software\Microsoft\Office\10.0\Common\Open Find\Places\UserDefinedPlaces

MS Office 2003: My Computer\HKEY_CURRENT_USER\Software\Microsoft\Office\11.0\Common\Open Find\Places\UserDefinedPlaces

So that covers AutoCAD and Microsoft Office, but what about other apps? Windows has a Registry key for a *Places* bar, too. This is located at My Computer\HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Policies\comdlg32\PlacesBar. There are three standard places, My Documents, My Recent Documents, and Desktop. These are stored as Place0, Place1, and Place2, respectively, and have DWORD values of 5, 8, and 0.

To add a new place, add a string value with the name Place*n*, where *n* is the next available number. The data for the value is the path to the folder. The name that shows up in the *Places* bar is the folder name with no preceding path.

You can also add places for the Windows *Places* using Tweak UI.

One other thing to note about the *Open* dialog. The file list can be displayed as a list, large icons, small icons, thumbnails, etc., just as when viewing folder contents in Windows Explorer. You can even turn on details or turn on preview.

How to have Windows Explorer open wherever you want

Speaking of Windows Explorer, you can have multiple shortcuts for Windows Explorer that open to different folders. Right-click on the shortcut, click *Properties*, and edit the *Target* text from

```
%SystemRoot%\explorer.exe
to
%SystemRoot%\explorer.exe /e, TheFolderYouWantToOpenIn
```

The /e parameter tells Explorer to open with the folder pane open. There are a lot of things you can set to have Explorer display things how you want them to display. Open Explorer and go to Tools... Folder Options... *View* tab. One setting that I always turn off is *Hide extensions for known file types*. Another is *Remember each folder's view settings*. And I like to have *Display the full path in the address bar*, *Display the full path in the title bar*, *Display the contents of system folders*, and *Show pop-up description for folder and desktop items* turned on.

Go through all the options and set them how you like to see them, then click the *Apply to All Folders* button.

And if you like to view details, you can customize which details are shown. Right-click on any of the detail titles and you'll be presented with a menu of all available properties. The only one you can't turn off is Name. The other properties to choose from are:

Size	Type	Date Modified	Date Created	Attributes	Owner
Author	Title	Comments	Artist	Album Title	Year
Track Number	Genre	Duration	Bit Rate	Protected	Camera
Model					

If that's not enough, there's "More..." at the bottom. Click this and you can also select:

Date Accessed	Status	Subject	Category	Pages	Copyright
Date Picture Taken		Dimensions	Company	Description	
File Version		Product Name		Product Version	

Note, you can also get to the list of properties by going to View... Choose Details....

You can sort by any detail you have showing simply by clicking on the detail title. Click it again and it sorts in reverse order.

You can resize the width of all detail columns to best fit by *Ctrl-NumPad +*. To best fit a single column, double-click the divider line to the right of the detail title.

You can resize a toolbar to best fit by double-clicking the left end of the toolbar (when you see the resize icon). *View... Toolbars... Lock the Toolbars* must **not** be checked to be able to do this.

How to expand a branch

Have you ever wanted to see all the sub-folders below a particular folder, and kept clicking and clicking and clicking? There's an easier way. Simply select the folder and press the asterisk (*) key on the numeric pad.

How to change your "Send To" list

Open Windows Explorer and browse to `C:\Documents and Settings\yourprofile\SendTo` and you will see a number of shortcuts. You can delete shortcuts you don't want or add a shortcut that you want.

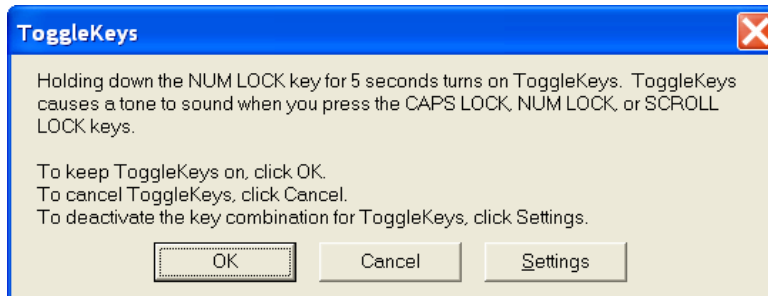
Add "Copy To" and "Move To"

There's never too many ways to copy and move files. Here's how to add *Copy To* and *Move To* options to the right-click menu in Windows Explorer.

Navigate to `My Computer\HKEY_CLASSES_ROOT\AllFileSystemObjects\shellex\ContextMenuHandlers`. For *Copy To*, create a new key named *Copy To* and set (*Default*) to `{C2FBB630-2971-11D1-A18C-00C04FD75D13}`. For *Move To*, create a new key named *Move To* and set (*Default*) to `{C2FBB631-2971-11D1-A18C-00C04FD75D13}`.

CapsLock warning

Do you ever accidentally turn on CapsLock? Or NumLock or ScrollLock? Wouldn't it be nice if there was something that would let you know that you turned on CapsLock other than the CapsLock light? Well there is. Windows XP has a built-in feature called ToggleLock. To turn it on, hold down the *NumLock* key for five seconds. The following dialog will appear.



Press *Enter* or click *OK* and from then on you'll hear a high pitched beep when you turn on any of the locks and a low pitched beep when you turn them off. To turn this off, hold down the *NumLock* key again.

No To All

You know how when you copy a bunch of files from one folder to another and some number of them already exist there and you get the Confirm File Replace dialog and there's a *Yes to All* button but no *No to All* button? Press the Shift key when you click the *No* button and it acts like a *No to All*.

Faster than scrolling

The newer versions of Internet Explore, Windows Explorer, Notepad, and other apps, support a new scroll feature, Scroll Here. When you right-click on either of the scroll bars you'll see the following menu.



You can also use this to jump to the top or bottom of the document.

File permissions

When copying or moving folders and files on drives that have various security settings for different folders, as is commonly done on network volumes, understanding how permissions behave is a good thing to know. If you *copy* folders/files from one folder to another, and the source and target folders are both on the same volume/drive, the permissions for the folders/files being copied *inherit the permissions of the folder they're being copied into*. On the other hand, if you *move* folders/files from one folder to another, and the source and target folders are both on the same volume, the permissions for the folders/files being moved *remain the same*. If you are copying or moving and the source and target folders are on different volumes/drives, the folders/files will *inherit the permissions of the folder they're being moved/copied into*.

How to cascade/tile selected windows

If you're like me, there are times when you have *a lot* of windows open. Wouldn't it be great if there was a quick way to get three or four windows brought to the front and arranged in a cascade? Well, there is. Click on one of the desired window's *Taskbar* button, then Ctrl-click additional *Taskbar* buttons. Once you're done selecting, right-click on any of the selected buttons and click the desired option.

If you have Group similar taskbar buttons enabled, right-click the button and select the desired tile option and all of the windows in that group will be affected.

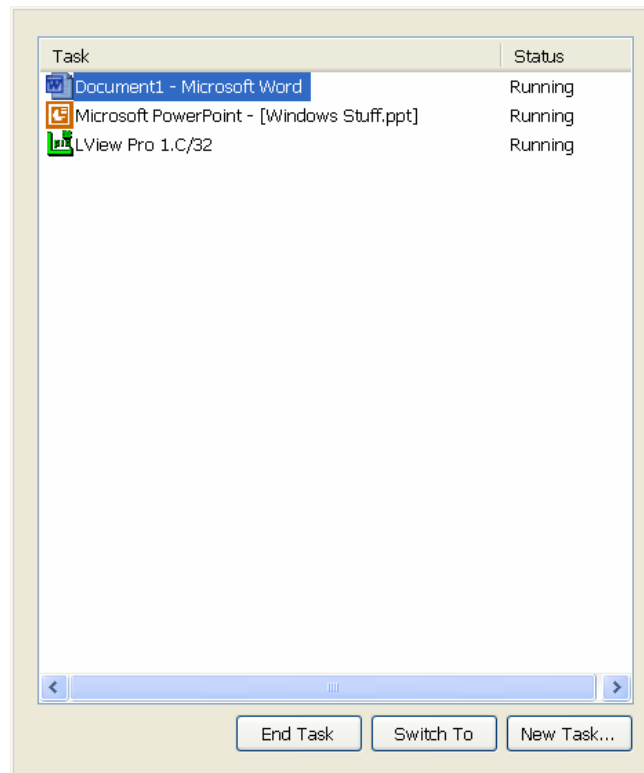
How to keep an eye on your CPU usage

You can have a CPU monitor all the time. It's done using Task Manager. Here's how.

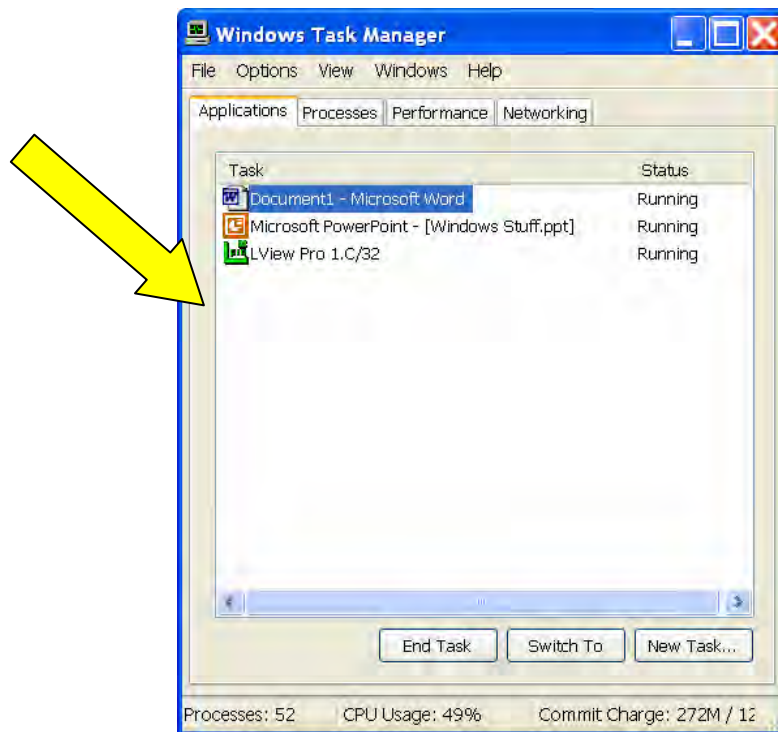
Start Task Manager, go to Options and turn on *Hide When Minimized*. Close Task Manager.

Go into Windows Explorer, navigate to C:\Windows\System32, right-click on taskmgr.exe and then click *Send To*, then on *Desktop (create shortcut)*. Once you have the shortcut, rename it to whatever you want, then right-click on it and go to *Properties* and set the *Run* selection to *Minimized*. Right-click on *Start* and select either *Open* (if you only want to do this for your login) or *Open All Users* (if you want to do it for anyone that logs on), and move the shortcut from the Desktop to the Programs\Startup folder.

Have you ever seen Task Manager look like this?



Where'd the tabs go? How did it get like this and how do I get it back? This will happen if you double-click the frame area around the data window.



To get it back to the normal Task Manager, double-click the frame again.

How to change the location of the My Documents subfolders

To ensure that files are backed up, many network administrators prefer that their users store work-related files in their network home directories by default, rather than in their local My Documents subfolders. To change where My Documents is pointing, right-click on My Documents... Properties... click on the *Move* button, and browse to the desired location. Note that the location that you select does not have to be named My Documents. My Documents is merely a link that points to a folder.

You may want to have multiple users shared a common My Documents folder. While you wouldn't do this at work, you may want to do this on your home computer. Create a folder named *Our Documents* in C:\ and set My Documents for both you and your spouse to point to it.

How to stop XP from restoring deleted My Documents subfolders

If you delete the default subfolders in My Documents (My eBooks, My Music, My Pictures, My Video) from a local computer Windows XP will recreate them.

You can stop XP from restoring deleted My Documents subfolders by following these steps.

Open a Command Prompt window.

Enter the following to unregister the DLL that maintains the My Documents subfolders.

```
regserv32 /u mydocs.dll
```

You'll then see the message *DllUnregisterServer in mydocs.dll succeeded*. Click *OK*.

You can now delete My Documents subfolders without XP restoring them.

To reenable the DLL, open a Command Prompt window and enter the following.

```
regserv32 mydocsdll
```

To change where My Documents points to, right-click on the *My Documents* folder in Windows Explorer, then click *Properties*. Click the *Move* button in the properties dialog, browse and select where you want it to point to and click *OK*. Any files in the existing My Documents location will be moved to the new location.

How to add your own picture for your user account

Don't like any of the pictures Windows XP offers for the login icons at the Welcome screen? You can add any picture you like by doing as follows.

Save your picture as a 48x48 pixel .bmp.

Put the file in C:\Documents and Settings\All Users\Application Data\Microsoft\User Account Pictures\Default Pictures (you can also delete pictures you don't want).

To change the picture associated with your login...

Go to *Control Panel... User Accounts...* select the account to change... click *Change my picture...* select the desired picture.

How to make a hyperlink with spaces in it

If you've ever tried to send an email with a link to a file in it, and either the path had a folder with a space in the name or the filename itself contained a space, you found that the link stopped at the space. The way to make it work is to enclose the path/filename in double < >. For example...

\\computer\share\folder1\folder 2\folder3 (doesn't work)

<<\\computer\share\folder1\folder 2\folder3>> (works)

How to capture your screen

Ever want to capture what your screen looks like? Maybe it's to record an error message. Pressing the PrntScrn button will copy the entire desktop to the clipboard. This is usually more than you really need to capture. Pressing Alt-PrntScrn will copy the active window to the clipboard. PrntScrn will even capture the desktop when you have a menu open, although you can't use Alt-PrntScrn for this.

You can also use third party apps like LViewPro and Grabl! for this.

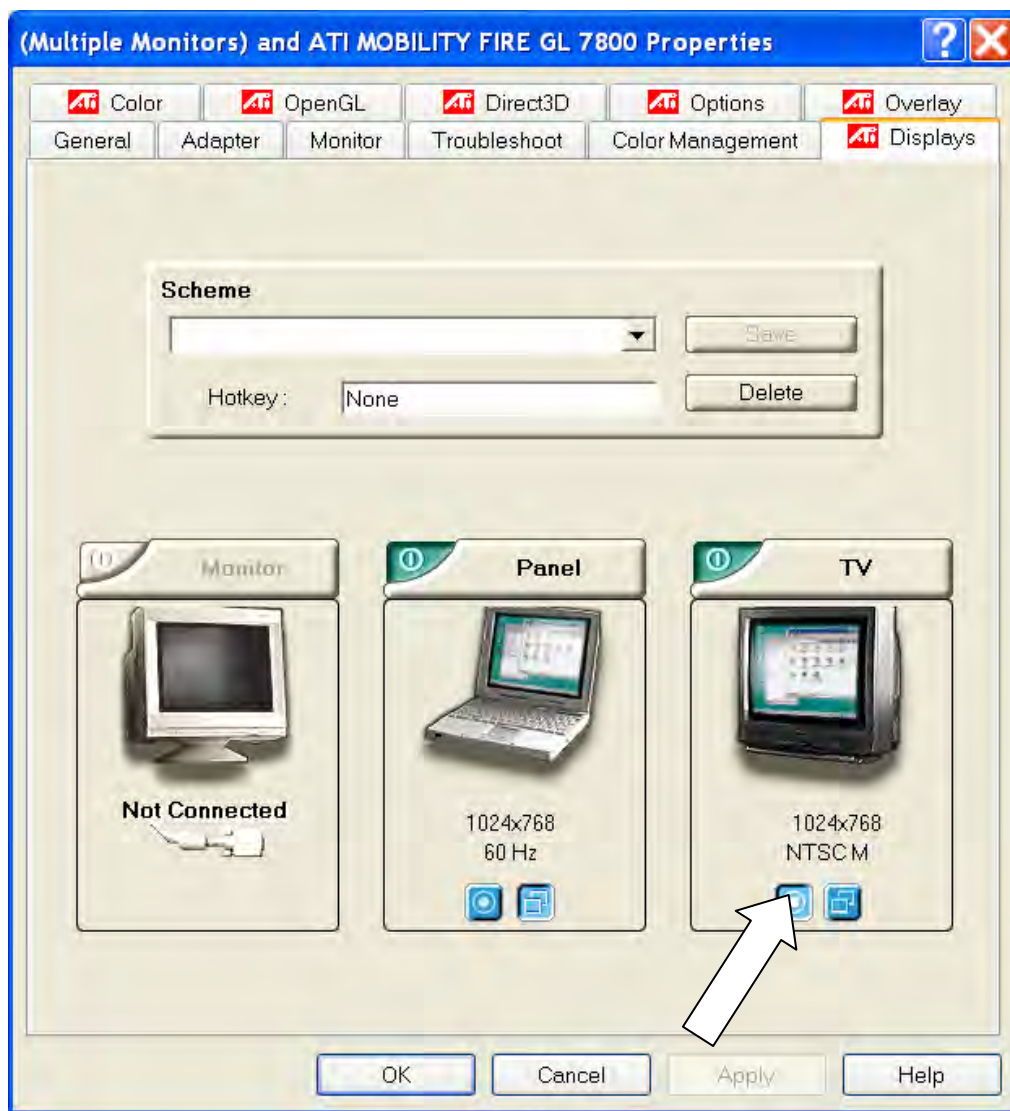
PowerPoint presentation tip

Did you know that you can display your PowerPoint presentation on one display and have the notes page on another? Let's say you're using a laptop connected to a projector. Set the display settings to span across the two instead of displaying the same thing on both. PowerPoint will always put the presentation on the primary display, which by default will be your laptop. Change the settings so the projector is the primary display and the laptop display is the second display. Now when you run the presentation, you can see your notes on your laptop.

How to get video to display on a secondary display

Have you ever connected your computer to a projector and found that if you played a video that the video could be seen on your monitor but the projected image only showed a black area? The trick is to change the primary display to the external monitor. Right-click on the *Desktop*, then

click *Properties*. Go to the *Settings* tab, then click the *Advanced* button. Go to the *Displays* tab and you'll see the following dialog.



The two icons below the pictures are for primary and secondary (left and right, respectively). When you click on the left icon below the external monitor, it sets that display device to be the primary and the panel becomes the secondary device.

Microsoft Outlook

I know that Outlook is outside the scope of this class but this information is so useful I had to include it.

What to do when an Outlook Personal Folder file (.PST) reaches 2GB

If you or someone you support saves lots of email to a personal folder (.PST file) eventually they'll hit the maximum size allowed (just under 2GB) and once that happens they immediately won't be

able to even look at its contents. There's a product called Easy Recovery (they have a number of different editions depending on what you want to recover) available from <http://www.ontrack.com> that can process an oversized .PST file and break it into two files that can be opened. The recovery process can take as much as 8 hours to complete and usually once someone has had to go through this they don't let it happen again (notice I said "usually").

In an effort to avoid this situation I wrote a Outlook VBA macro that automatically runs when Outlook is started that checks the size of the user's .PST files. If any of the .PSTs are larger than 1.5GB it pops up a warning dialog. There's also a button that they can click anytime they're in Outlook that will tell them the current size of their .PSTs. The hardest piece on this macro was finding a way to get the path to the .PST files. It turns out that there is no Outlook object that you can get this information from and the only place it is stored is in the registry. I found code to retrieve this information at <http://www.fabalou.com/Outlook/GetPSTFileNames.asp>.

A great source for Outlook-related code is <http://www.outlookcode.com/d/vb.htm>.

How to remove a password from an Outlook .PST file

Microsoft will tell you if you forget the password you set on a .PST file you're out of luck. Not entirely true. You can download a password remover from <http://www.securiteam.com/tools/6G00B1FOAS.html> which can remove the password. This utility was originally designed to upgrade the .PST format to version 19. One of its side effects, however, is that it strips out the .PST's password. This can therefore be used to remove passwords you may have forgotten on your .PST files.

How to send a quick email

You're working away, Microsoft Outlook isn't running, and it occurs to you that you need to send an email to someone. You could launch Outlook and do the email. Another option is to create a shortcut (on your Desktop or wherever) as follows.

Right-click on the *Desktop*, then click *New... Shortcut*.

Type `mailto:` in the location text box, click *Next*.

Give the shortcut whatever name you want.

Now when you need to send a quick email just double-click your shortcut and a new email message window opens without opening Outlook.

How to recover a deleted email

Everyone knows about going to the Deleted Items folder to get an email you've deleted. But did you know that you can also recover a message that you've deleted from the Deleted Items folder? Here's how.

Select the *Deleted Items* folder.

Go to *Tools... Recover Deleted Items...*

A window will open that has deleted messages that are stored on the mail server.

Once the Recover window is open, you can recover any of the messages or purge them from the server. The length of time the messages are kept is determined by how your mail server is configured.

