MORE FREE UTILITIES

PETER HIRSCH

IBM PC CLUB

1

AGENDA

- Topic for February PC Club

- PC Club Members Use of Free PC Utilities

- More Free Utilities
  - Auslogics Disk Defragmentation
  - Google Earth Version 6
  - Antibody WizMouse

- Disable Touchpad when using Mouse
  - Built in function in Windows 7
  - TouchFreeze for Windows/XP

- Hard Drive History
  - 2 TB Hard Drive

2

FEBRUARY PC CLUB MEETING

From December Meeting Suggested Topics

- Skype – George Kornbluth, George (February Meeting)

- Graphics – Scott Maiden

- USB Telephone – Ralph Bernstein (April Meeting)

- Hand held iPhone apps – Bob Louden

- Sue Kayton in October

- Joint meeting with San Jose IBM PC Club – George Kornbluth

USE OF FREE PC UTILITIES
FROM PREVIOUS PC CLUB MEETINGS

- TeamViewer
- Join.Me
- Dropbox
- Slickrun
- Glary Utilities
- TweakUI
- FreeClip
- WinDirStat
- Others?

DISK FRAGMENTATION CLUSTERS

On NTFS disks, the cluster sizes are determined based on the drive size as shown below (this information is also available in Microsoft KB 314878). When formatting disks it is possible to change the cluster size, however this may cause additional performance issues.

Drive Size (Logical Volume)	Cluster Size	Sectors
512MB or less	512 bytes	1
513MB - 1,024MB (1GB)	1,024 bytes (1kb)	2
1,025MB - 2,048MB (2GB)	2,048 bytes (2kb)	4
2,049MB +	4,096 bytes (4kb)	8

Using the information above, if you were to take a 100MB video file, the file would be divided into roughly 25,000 pieces.

DISK FRAGMENTATION

Fragmentation

Refers to the condition of a disk in which files are divided into clusters scattered around the disk. Fragmentation occurs naturally when you use a disk frequently, creating, deleting, and modifying files.

At some point, the operating system needs to store parts of a file in noncontiguous clusters. This is entirely invisible to users, but it can slow down the speed at which data is accessed because the disk drive must search through different parts of the disk to put together a single file.

DISK DEFRAGMENTATION

What is it?

- Defragmentation is a process that reduces the amount of fragmentation in file systems.

- It does this by physically organizing the contents of the disk to store the pieces of each file close together and contiguously.

- It also attempts to create larger regions of free space using *compaction* to impede the return of fragmentation.

AUSLOGICS DISK DEFRAG

Auslogics Disk Defrag 3

http://www.auslogics.com/en/software/disk-defrag/

- Optimizes file system
- Consolidates free space
- Can defrag automatically and in the background
- Provides flexible scheduler
- Can defrag a single file or folder or entire disk
- Supports multi-terabyte volumes
- Smart defragmentation algorithms
  - Disk Defrag to run much faster than similar defragmenters and consume less system resources

AUSLOGICS DEFRAG INSTALL

Recommendation

- Do not install Auslogics toolbar

- Do not install Ask toolbar

USE AUGLOGICS DEFRAG TO: SPEEDUP FILE ACCESS WITH OPTIMIZATION

Using Auslogic Defrag Program

- Settings -> Program Settings -> algorithm

- Select Move system files to the beginning of the disk

- Select OK

- Choose Action ->Defrag &optimize

- Note: Optimization can take much longer to Defrag
  - 3 Minutes for no optimization to 1 hour with optimization

USE AUGLOGICS DEFRAG TO:

Defrag on a Schedule

- Settings -> Program Settings -> Schedule

Defrag in the Background

- View->Auto Defragmentation

- To reduce interfering with your work
  - Settings->Defrag Priority->Low Priority

GOOGLE EARTH VERSION 6

- Integrated Street View
- Add on plugin Flight Wise
  - http://www.google.com/gadgets/directory?synd=earth&preview=on&cat=featured&url=http://maps.google.com/maps/gx?oe%3Dutf-8%26output%3Dghapi%26q%3Dhttp://mw1.google.com/mw-earth-vectordb/flightwise/flightwise_root.kml

- Weather
- 3D Buildings and Trees
- Ground Level Navigation

ANTIBODY WIZMOUSE

- Lets you use your mouse's scroll wheel to scroll through the window currently under the mouse pointer instead of the top focused or "active" window
  - You do not need to click on the window to activate the window
- Check box for the function that converts mouse wheel commands into scrollbar commands, for application that do not support mouse wheel
- Wizmouse may not work with touchpads scroll feature
- http://download.cnet.com/WizMouse/3000-18487_4-10907935.html?tag=api&tag=nl.t700

13

DISABLE MOUSE PAD
WHEN USING A USB OR BLU-TOOTH MOUSE

Windows 7 Control Panel/Mouse Setting (may also work for Vista)
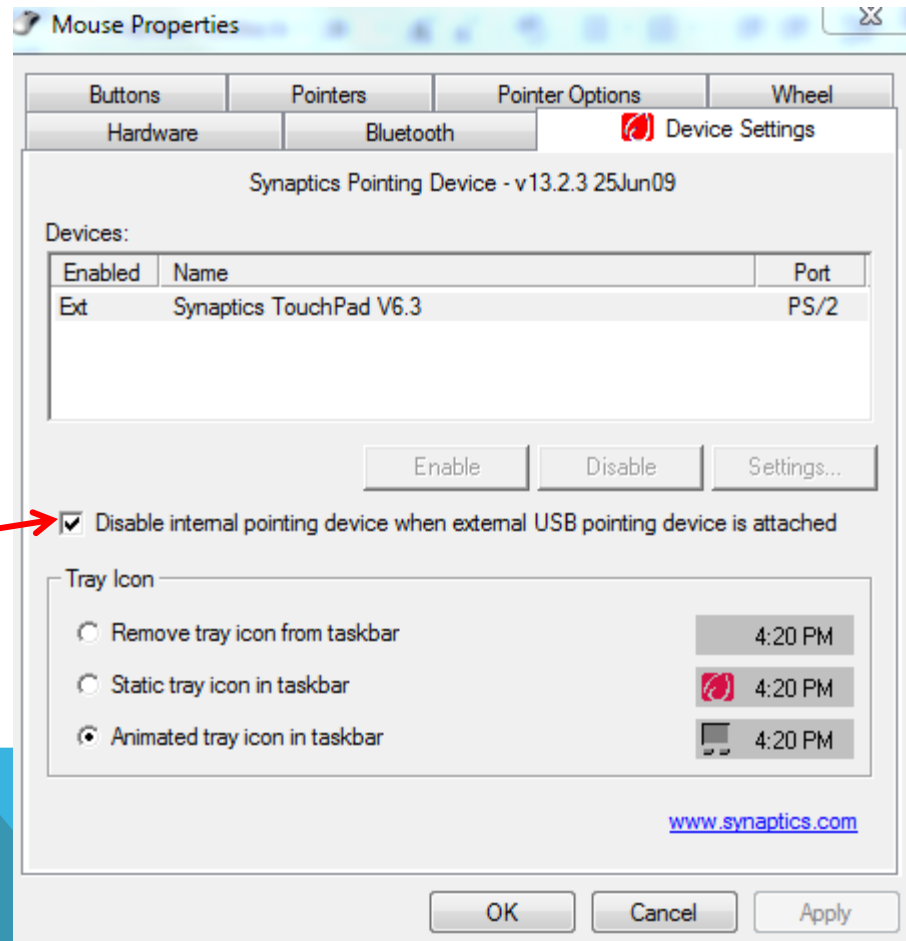
DISABLE MOUSE PAD
WHEN USING A USB OR BLU-TOOTH MOUSE

Windows XP

- Touchfeeze

    http://code.google.com/p/touchfreeze/

- On some computers there is a function key such as Fn+F7 that disables the mouse

HARD DRIVES HISTORY

1956 - First commercial disk drive

1979 - Thin film heads introduced

1980 - The world's first gigabyte-capacity disk drive, the IBM 3380, was the size of a refrigerator, weighed 550 pounds (about 250 kg), and had a price tag of $40,000

1980 ST-506 first 5 1/4 inch drive released with capacity of 5 megabytes

1986 - Standardization of SCSI

1989 - Jimmy Zhu and H. Neal Bertram from UCSD proposed exchange decoupled granular microstructure for thin film disk storage media, still used today.

1991 - 2.5-inch 100 megabyte hard drive

1991 - PRML Technology (Digital Read Channel with 'Partial Response Maximum Likelihood' algorithm)

1992 - first 1.3-inch hard disk drive - HP Kittyhawk

1994 - IBM introduces Laser Textured Landing Zones (LZT)

1996 - IBM introduces GMR (Giant MR) Technology for read sensors

1998 - UltraDMA/33 and ATAPI standardized

1999 - IBM releases the Microdrive in 170 MB and 340 MB capacities

2002 - 137 GB addressing space barrier broken

2003 - Serial ATA introduced

2003 - IBM sells disk drive divison to Hitachi

2005 - First 500 GB hard drive shipping (Hitachi GST)

2005 - Serial ATA 3Gbps standardized

200 MB IBM REMOVABLE DISK PACK 1973

2 TB HARD DRIVE

2 terabytes = 2,048 Gigabytes = 2,097,152 Megabytes
           = 2,199,023,255,552 bytes

About the size of a book