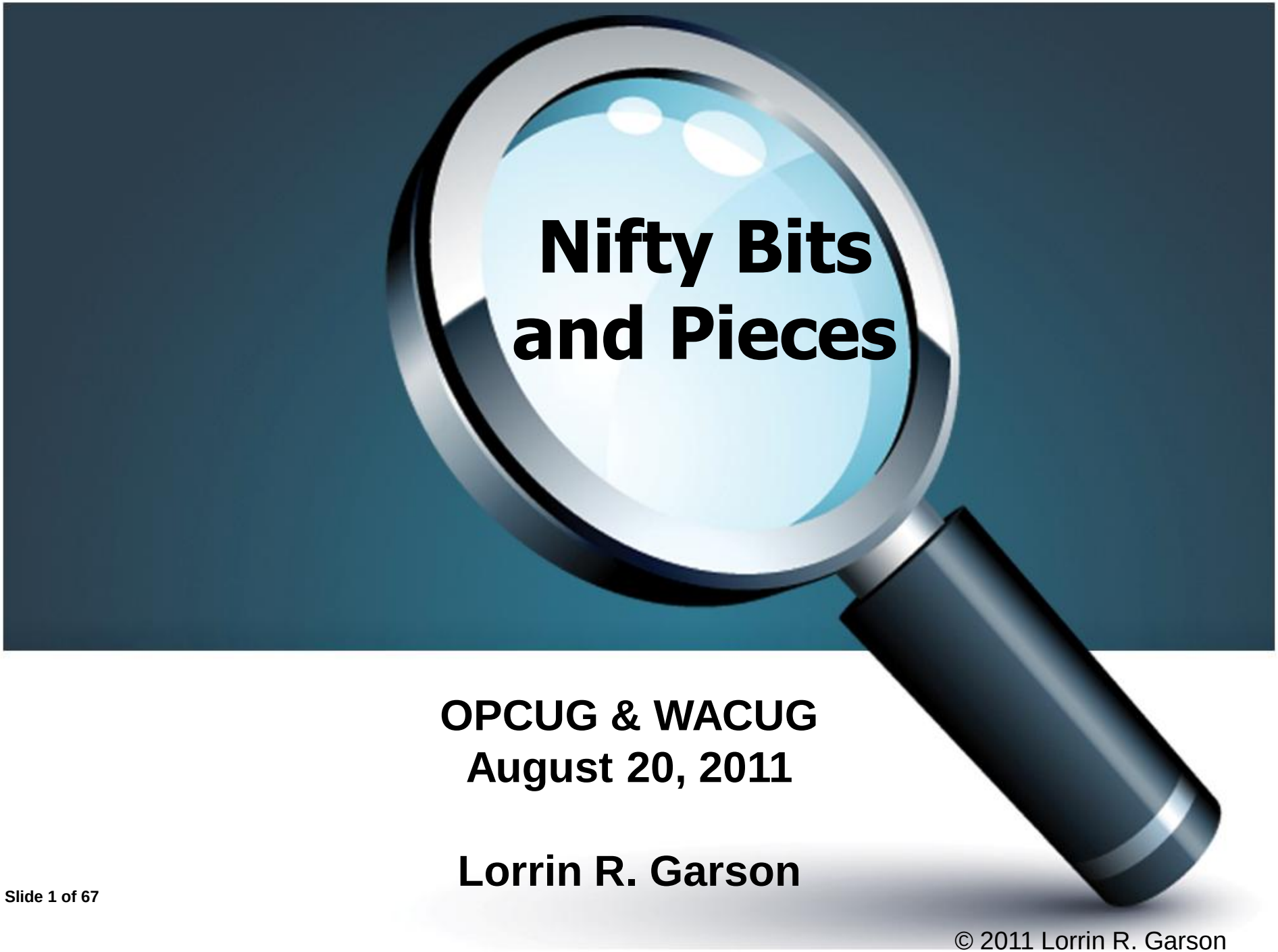

OPCUG & WACUG
August 20, 2011

Lorrin R. Garson

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Geeks

Beginners

An obvious challenge...

Backup & Restore

There are two kinds of people who do backup…

- Those who do
- Those who will

Windows 7 Backup & Restore

Three components

1. Users' data (not system folders or program files)
2. System image
3. Bootable system recovery disc (system repair)

See ⓘ for information from Microsoft

↑Click here

Macintosh OS-X* Backup

- Time Machine, to external disk drive
- Time Capsule, wireless/wired backup device
- See ⓘ for information from Apple

* Current version is “Lion”; upgrade from “Snow Leopard” $29.95

Acronis True Image Home 2011

- Disk imaging
- File backups
- Full, differential & incremental backups
- $39.99 to $79.99 (3-pack)
- See ⓘ for information and to download

Other Backup Schemes

- See Wikipedia for 17 free backup utilities and 46 for a price
- Cloud backup
  - For a comparison of 37 offerings, see
  - For more information see (*PCWorld*)

Other Backup Schemes (cont.)

- Consider RAID 1 (mirroring) dual disk drives for desktop computers:
  - Apple
  - Dell
  - HP
  - For information on RAID, see
- Window Home Server, see and

Other Backup Schemes (cont.)

- Linux backup systems
  - Time Vault, see
  - Clonezilla, see
  - Duplicity, see
  - Amanda, see
  - Rsync, see

Remember…

- Monitor backup to assure yourself it is working
- Periodically test backup by recovering sample files
- Backup is not a set and forget function!

"Just because you're paranoid doesn't mean someone *isn't* out to get you!"

Price of External Disk Drives

Capacity	Price ($)	$/GB
500 GB	74	0.148
1 TB	95	0.095
1.5 TB	109	0.073
2 TB	120	0.060
3 TB	167	0.056

Price Change of Disk Drives

(a slight digression)

In 1979, the price of a 75 MB disk drive was $12,500 ($37,349 in 2011 dollars). $498/MB

In 2011, the price of a 3 TB disk drive is $167. $0.000055/MB

A drop (or ratio) of 8.946 million to 1 in 32 years

Price of Cars
2011 Mercedes-Benz SLS AMG

2.3¢ or 5 for a dime

Anti-Virus/Malware

There are two kinds of people who use anti-virus/malware software…

- Those who do
- Those who will

See Wikipedia for a list of 61 offerings

Anti-Virus/Malware (free)

- Microsoft Security Essentials (free) from
  - Malwarebytes (free) from
  - SUPERAntiSpyware (free and fee versions) from

Anti-Virus/Malware (free)

- Avast! see
- AVG, see
- Avira, see
- Comodo, see
- Panda, see

Anti-Virus/Malware (paid)

- Norton Products, see
- McAfee products, see
- Kaspersky Anti-Virus, see
- AVG, see
- ZoneAlarm, see

Anti-Virus/Malware (paid)

- BitDefender Antivirus, see
- ESET Nod32 Antivirus, see
- Trend Micro Titanium Antivirus, see
- Panda Antivirus Pro, see
- CA Anti-Virus, see

Those Without Backup & Anti-Virus Software…

Security Utilities
Password Management

- RoboForm, see ⓘ ($29.95)
- Password Genie, see ⓘ $15.00). Also see *SmartComputing*, **22**, 05 (May), p. 28 (2011)
- LastPass, see ⓘ (free)
- Password Safe, see ⓘ (free)
- KeePass, see ⓘ (free)
- 1Password, see ⓘ for PC & Macintosh ($39.99)
- IronKey, see ⓘ [$79 (1 GB) to $298 (32 GB) flash drives]

Security Utilities
Password Checkers

See ⓘ for a password “strength test” from Rumkin.com

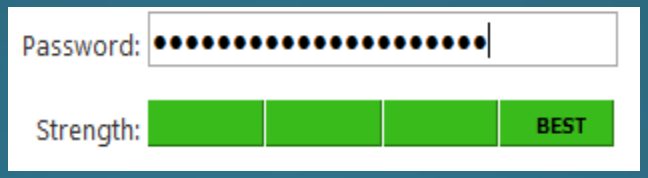
Enter your password or passphrase here:

••••••••••••

Length: 12
Strength: Reasonable - This password is fairly secure cryptographically and skilled hackers may need some good computing power to crack it. (Depends greatly on implementation!)
Entropy: 42.3 bits
Charset Size: 26 characters

Security Utilities
Password Checkers

See ⓘ for Microsoft's password checker



Security Utilities
Password Calculator

See ⓘ for Gibson Research Corporation

Which of the following two passwords is stronger, more secure, and more difficult to crack?

D0g.....

PrXyc.N(n4k77#L!eVdAfp9

GRC's Interactive Brute Force Password "Search Space" Calculator

*(**NOTHING** you do here ever leaves your browser. What happens here, stays here.)*

6 Uppercase | 9 Lowercase | 4 Digits | 4 Symbols | 23 Characters

PrXyc.N(n4k77#L!eVdAfp9

Enter and edit your test passwords in the field above while viewing the analysis below.

Brute Force Search Space Analysis:

Search Space Depth (Alphabet):	26+26+10+33 = **95**
Search Space Length (Characters):	23 characters
Exact Search Space Size (Count): (count of all possible passwords with this alphabet size and up to this password's length)	3,106,266,216, 369,922,375,245,484,442, 102,782,269,741,626,495
Search Space Size (as a power of 10):	3.11×10^{45}

Time Required to Exhaustively Search this Password's Space:

Online Attack Scenario: (Assuming one thousand guesses per second)	9.88 hundred million trillion trillion centuries
Offline Fast Attack Scenario: (Assuming one hundred billion guesses per second)	9.88 trillion trillion centuries
Massive Cracking Array Scenario: (Assuming one hundred trillion guesses per second)	9.88 billion trillion centuries

Note that typical attacks will be online password guessing limited to, at most, a few hundred guesses per second.

GRC's Interactive Brute Force Password "Search Space" Calculator

*(**NOTHING** you do here ever leaves your browser. What happens here, stays here.)*

1 Uppercase | 1 Lowercase | 1 Digit | 21 Symbols | 24 Characters

D0g.....................

Enter and edit your test passwords in the field above while viewing the analysis below.

Brute Force Search Space Analysis:

Search Space Depth (Alphabet):	26+26+10+33 = **95**
Search Space Length (Characters):	24 characters
Exact Search Space Size (Count): (count of all possible passwords with this alphabet size and up to this password's length)	295,095,290,555, 142,625,648,321,021,999, 764,315,625,454,517,120
Search Space Size (as a power of 10):	2.95×10^{47}

Time Required to Exhaustively Search this Password's Space:

Online Attack Scenario: (Assuming one thousand guesses per second)	93.83 billion trillion trillion centuries
Offline Fast Attack Scenario: (Assuming one hundred billion guesses per second)	9.38 hundred trillion trillion centuries
Massive Cracking Array Scenario: (Assuming one hundred trillion guesses per second)	9.38 hundred billion trillion centuries

Note that typical attacks will be online password guessing limited to, at most, a few hundred guesses per second.

GRC's Interactive Brute Force Password "Search Space" Calculator

*(**NOTHING** you do here ever leaves your browser. What happens here, stays here.)*

2 Uppercase | 5 Lowercase | 3 Digits | 4 Symbols | 14 Characters

<><>M0mis95Yrs

Enter and edit your test passwords in the field above while viewing the analysis below.

Brute Force Search Space Analysis:

Search Space Depth (Alphabet):	26+26+10+33 = **95**
Search Space Length (Characters):	14 characters
Exact Search Space Size (Count): (count of all possible passwords with this alphabet size and up to this password's length)	4,928,630,108, 082,482,617,642,017,120
Search Space Size (as a power of 10):	4.93×10^{27}

Time Required to Exhaustively Search this Password's Space:

Online Attack Scenario: (Assuming one thousand guesses per second)	1.57 thousand trillion centuries
Offline Fast Attack Scenario: (Assuming one hundred billion guesses per second)	15.67 million centuries
Massive Cracking Array Scenario: (Assuming one hundred trillion guesses per second)	15.67 thousand centuries

Note that typical attacks will be online password guessing limited to, at most, a few hundred guesses per second.

Compromised E-Mail Address?

- See ⓘ to check if you e-mail address has been compromised (ShouldIChangeMyPassword.com)
- For Gmail, see ⓘ to check if your account has been hacked (activity log)
- Verizon activity log?
- Yahoo activity log?

See ⓘ ⓘ

Should I Change My Password? - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Should I Change My Password?
Should I Change My Password?
shouldichangemypassword.com
Most Visited Getting Started Latest Headlines Most Visited
Logins Bookmarks (passcards) Lorrin Save
SHOULD I CHANGE MY PASSWORD
ShouldIChangeMyPassword.com has been created to help the average person check if their password(s) may have been compromised and need to be changed.
This site uses a number of databases that have been released by hackers to the public. No passwords are stored in the ShouldIChangeMyPassword.com database.
Tweet Like 11K Send
LGarson2009@gmail.com
Check it!
Bulk Check
It looks like your passwords may be safe. No instances of compromise are recorded in this database. However, it's good practice to change your critical passwords regularly and ensure they are not re-used across multiple sites.
About Sources FAQ Media
If you have any questions or concerns, please contact us on twitter @sicmyp (https://twitter.com/sicmyp).
The email you enter will NOT be stored, transmitted, or otherwise used beyond this check.

What Happens When a File Is Deleted?

1. Delete → Recycle Bin
2. Empty Recycle Bin → file marked “deleted” in
   A. the Master File Table (MFT) and
   B. clusters (4 KB) marked free in $BitMap

Security Utilities
Eraser

See (free)

A tool that completely removes “deleted” data by overwriting it several times with carefully selected patterns

NOTE: In Windows 7 holding down the SHIFT key when deleting avoids the Recycle Bin and presumably completely erases files

Security Utilities
CCleaner

- See (free)*
- Completely removes unused files
- Overwrites deleted files
- Cleans traces of online activities such as Internet history
- Has an uninstaller
- Has a registry cleaner

* Piriform is also the provider for “Recuva”

Assorted Utilities
Recuva

See (free)*

Recovers files deleted from Windows computers, Recycle Bin, digital camera card, MP3 player, etc.

* Piriform is also the provider for “CCleaner”

Security Utilities
Ad-Aware

See (free)

- “A spyware and malware killer”
- Protects against rootkits*
- Is not an anti-virus program

*Hidden malware with privileged access

Security Utilities
Secunia Personal Software Inspector (psi)

See (free)

- Detects vulnerable and out-of-date programs and plug-ins
- Provides direct links for updates and patches

Security Utilities
Panda USB Vaccine

See (free)

- Allows users to disable the AutoRun feature on computers, USB drives and other devices

Security Utilities
File Encryption

- TrueCrypt, see ⓘ (free)
- Cryptainer, see ⓘ (free or $29.95 to $69.95, see ⓘ)
- 7-Zip, see ⓘ (free)
- CryptoForge, see ⓘ ($29.95 to $39.95, see ⓘ)

Updating Device Drivers

- See for information on updating device drivers
- Intel driver update utility, see
- SlimDrivers, see
- DriverZone.com, see
- See also *PCWorld*, **29**, 5 (May), p. 61 (2011)

Updating Device Drivers Computer Specific

- HP device drivers, see
- Dell device drivers, see
- Sony VAIO device drivers, see
- Toshiba, see
- Apple, see

Assorted Utilities
PDF Viewers

- Adobe Reader X, see . See also (*Wikipedia*)
- Foxit Reader, see . See also (*Wikipedia*)
- Sumatra PDF, see . See also (*Wikipedia*)
- Google Chrome built-in PDF viewer

Assorted Utilities
Belarc Advisor

See (free)

- Builds a detailed profile of installed software and hardware, missing Microsoft hotfixes, anti-virus status, security benchmarks, etc.
- Results are displayed in a Web browser.
- All PC profile information is kept private on the PC and is not sent to any Web server

Belarc Advisor

The license associated with the Belarc Advisor product allows for **free personal use only.** Use on multiple computers in a corporate, educational, military or government installation is prohibited. See the license agreement for details. The information on this page was created locally on your computer by the Belarc Advisor. Your computer profile was not sent to a web server. Click here for more info.

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Your Privacy

In page Links:

Network Map new

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Software Versions & Usage new

Missing Hotfixes

Installed Hotfixes

System Security Status	CIS Benchmark Score	Virus Protection	Microsoft Security Updates
	? Available only for Windows 2000, XP Pro, and 2003	✔ Up-to-date	✔ Up-to-date

Computer Profile Summary

Computer Name Garson1 (in WORKGROUP) | Lorrin's Win7 Desktop Computer
Profile Date Thursday, January 06, 2011 8:14:14 AM
Advisor Version 8.1k
Windows Logon SuperUser

Plan for your next computer refresh...
click for Belarc's System Management products

Operating System

Windows 7 Professional (x64) (build 7600)
Install Language: English (United States)
System Locale: English (United States)

Processor [a]

2.40 gigahertz Intel Core2 Quad Q6600
64 kilobyte primary memory cache
4096 kilobyte secondary memory cache
64-bit ready
Multi-core (4 total)
Not hyper-threaded

Drives

1000.09 Gigabytes Usable Hard Drive Capacity
796.72 Gigabytes Hard Drive Free Space

ATAPI DVD A DH16A3L [CD-ROM drive]
SanDisk U3 Cruzer Micro USB Device [CD-ROM drive]
TSSTcorp DVD-ROM TS-H353B [CD-ROM drive]

Generic USB CF Reader USB Device [Hard drive] -- drive 3
Generic USB MS Reader USB Device [Hard drive] -- drive 5
Generic USB SD Reader USB Device [Hard drive] -- drive 2
Generic USB SM Reader USB Device [Hard drive] -- drive 4
RAID 1 [Hard drive] (500.10 GB) -- drive 0, s/n RAID 1
SanDisk U3 Cruzer Micro USB Device (4.10 GB) -- drive 6, s/n
ST3500630AS USB Device [Hard drive] (500.11 GB) -- drive 1, s/n , SMART Status: Healthy

System Model

HP-Pavilion KC787AV-ABA d4996t
System Serial Number: MXG74906GH
Chassis Serial Number: DM0001
Enclosure Type: Desktop

Main Circuit Board [b]

Board: ASUSTeK Computer INC. Burbank 1.01
Serial Number: MS1C7BR82801053
Bus Clock: 267 megahertz
BIOS: American Megatrends Inc. 5.21 12/17/2008

Memory Modules [c,d]

4096 Megabytes Usable Installed Memory

Slot 'DIMM0' has 1024 MB
Slot 'DIMM1' has 1024 MB
Slot 'DIMM2' has 1024 MB
Slot 'DIMM3' has 1024 MB

Local Drive Volumes

c: (NTFS on drive 0)	488.47 GB	369.19 GB free
d: (NTFS on drive 0)	11.52 GB	1.15 GB free
h: (NTFS on drive 1)	500.10 GB	426.37 GB free

Network Drives

None detected

Users (mouse over user name for details)

local user accounts	last logon	
Ann	12/14/2010 8:09:09 AM	
Lorrin	1/6/2011 6:43:03 AM	
SuperUser	1/6/2011 8:13:38 AM	(admin)
local system accounts		
✕ Administrator	7/14/2009 1:08:59 AM	(admin)
✕ Guest	never	
HomeGroupUser$	1/6/2011 7:33:10 AM	

✕ Marks a disabled account; 🔒 Marks a locked account

Printers

Canon Inkjet i960	on USB001
Epson ESC/P-R	on \\Garson2\Epson ESC/P-R
Epson ESC/P-R	on \\Garson2\Epson ESC/P-R
EPSON Stylus CX4200 Series	on USB002
Microsoft Shared Fax Driver	on SHRFAX:
Microsoft XPS Document Writer	on XPSPort:
PrimoPDF	on PrimoPort:

Controllers

None detected

Display

NVIDIA GeForce 8500 GT [Display adapter]
HP w2207 [Monitor] (22.0"vis, s/n CND7353PJN, August 2007)

Bus Adapters

Intel(R) ICH8R/ICH9R/ICH10R/DO/PCH SATA RAID Controller
Intel(R) ICH9 Family USB Universal Host Controller - 2934
Intel(R) ICH9 Family USB Universal Host Controller - 2935
Intel(R) ICH9 Family USB Universal Host Controller - 2936
Intel(R) ICH9 Family USB Universal Host Controller - 2937
Intel(R) ICH9 Family USB Universal Host Controller - 2938
Intel(R) ICH9 Family USB Universal Host Controller - 2939
Intel(R) ICH9 Family USB2 Enhanced Host Controller - 293A
Intel(R) ICH9 Family USB2 Enhanced Host Controller - 293C
NEC PCI to USB Open Host Controller (2x)
Standard Enhanced PCI to USB Host Controller

Multimedia

Creative SB X-Fi
Logitech Mic (QuickCam S5500)
Realtek High Definition Audio

Virus Protection [Back to Top]

Microsoft Security Essentials Version 3.0.8107.0
Scan Engine Version 1.1.6402.0
Virus Definitions Version 1.95.3331.0
Realtime File Scanning On

new Group Policies

None discovered

Communications

Intel(R) 82566DC-2 Gigabit Network Connection

primary	Auto IP Address:	192.168.150.13 / 24
	Gateway:	192.168.150.1
	Dhcp Server:	192.168.150.1
	Physical Address:	00:1E:8C:36:39:9D

Microsoft ISATAP Adapter
Teredo Tunneling Pseudo-Interface

Networking Dns Servers:	192.168.150.1
	8.8.8.8

Other Devices

LSI 1394 OHCI Compliant Host Controller
APC Battery BackUP
Microsoft Composite Battery
American Power Conversion USB UPS
HID-compliant consumer control device (3x)
HID-compliant device (2x)
USB Input Device
Epson CX4100/4200/DX4200
Logitech QuickCam S5500
Microsoft USB Dual Receiver Wireless Mouse (IntelliPoint)
Generic USB Hub (2x)
Logitech USB Camera (QuickCam S5500)
Microsoft Mouse and Keyboard Detection Driver (USB)
USB Composite Device
USB Mass Storage Device (3x)
USB Printing Support (2x)
USB Root Hub (11x)
USB Virtualization Connector Driver
Generic volume shadow copy

Software Licenses [Back to Top]

Adobe Systems - Adobe Photoshop Elements 8.0	1057-1537-2769-2460-6029-0583
Belarc - Advisor	3d9151ad
Encyclopaedia Britannica - Deluxe Edition	ffdaafc3-1eea-11b2-9a1f-c62a8e06c05c
Microsoft - Internet Explorer	00371-152-0761554-85454 (Key: 9X4VK-2VXQP-TD7DP-W4HJB-QGR6X)
Microsoft - Learning Essentials	84874-828-3910602-04472 (Key: R2D43-3DHG9-DQ79W-W3DXQ-929DY)
Microsoft - Learning Essentials for Microsoft Office	84874-828-3910602-04472
Microsoft - MSDN	91909-152-0000052-60246 (Key: D7HX7-7W6B7-M49QD-QJM6K-9X69M)
Microsoft - Office Outlook Connector	95140000-007A-0409-0000-0000000FF1CE
Microsoft - Office Professional Hybrid 2007	89451-OEM-6672806-53221 (Key: H4369-72DV9-YGC6X-CYVKK-DYPXM)[e]
Microsoft - PowerShell	89383-100-0001260-04309
Microsoft - VBExpress	91908-152-0000043-60835 (Key: 91908-152-0000043-60835)
Microsoft - VCExpress	91909-152-0000052-60246 (Key: 91909-152-0000052-60246)
Microsoft - VCSExpress	91910-152-0000061-60205 (Key: 91910-152-0000061-60205)
Microsoft - Visual Basic 2008 Express Edition with SP1 - ENU	91908-152-0000043-60835
Microsoft - Visual C++ 2008 Express Edition with SP1 - ENU	91909-152-0000052-60246
Microsoft - Visual C# 2008 Express Edition with SP1 - ENU	91910-152-0000061-60205
Microsoft - Visual Studio Web Authoring Component	82503-694-0000007-62710 (Key: GRXPP-JRYBX-7JWJB-M2H2C-G486T)
Microsoft - Visual Web Developer 2008 Express Edition with SP1 - ENU	91911-152-0000077-60390
Microsoft - VWDExpress	91911-152-0000077-60390 (Key: 91911-152-0000077-60390)
Microsoft - Windows 7 Professional (x64)	00371-152-0761554-85454 (Key: 9X4VK-2VXQP-TD7DP-W4HJB-QGR6X)
Microsoft - Windows SDK for Visual Studio 2008 Headers and Libraries	12345-111-1111111-76869
Microsoft - Windows SDK for Visual Studio 2008 SP1 Express Tools for Win32	12345-111-1111111-97844

Find unused software and reduce licensing costs...
click for Belarc's System Management products

new Software Versions & Usage (mouse over i for details, click i for location) [Back to Top]

- 2007 Microsoft Office system Version 12.0.6546.5000
- Accesso Software Inc. - FLEXnet Publisher (32 bit) Version 11.6.1.0 build 66138
- Acrobat_com
- Adobe Photoshop Elements Version 8.0
- Adobe Systems Inc. - A Version 2.5.1
- Adobe Systems Incorporated - Elements Organizer Version 8.0
- American Power Conversion Corporation - APC PowerChute Personal Edition Version 2, 2, 0, 0
- American Power Conversion Corporation - APC PowerChute Personal Edition Version 2.2.0.0
- Apple Inc. - Bonjour Version 2.0.3.0
- Apple Inc. - iTunes Version 10.1.1.4
- Apple Inc. - MobileDeviceService Version 3.3.0.0
- Apple Inc. - QuickTime QuickTime 7.6.9 (1680.9)
- Apple Software Update Version 2.1.1.116
- Belarc, Inc. - Advisor Version 8.1k
- Creative ALchemy AL6 Licensing Service Version 2.80.12.6
- Creative ALchemy Version 1.0.0.0
- Creative Audio Console Version 2.0.0.0
- Creative Audio Engine Licensing Service Version 2.80.12.6
- Microsoft Corporation - Office Diagnostics Service Version 12.0.6413.1000
- Microsoft Corporation - Office Diagnostics Version 12.0.6413.1000
- Microsoft Corporation - Office Source Engine Version 12.0.4518.1014
- Microsoft Corporation - Windows Installer - Unicode Version 5.0.7600.16385
- Microsoft Corporation - Windows Live Family Safety Filter Version 15.4.3502.0922
- Microsoft Corporation - Windows Live Family Safety Service Version 15.4.3502.0922
- Microsoft Corporation - Windows Live Mail Version 15.4.3508.1109
- Microsoft Corporation - Windows Live Mesh Version 15.4.5722.2
- Microsoft Corporation - Windows Live Messenger Version 15.4.3508.1109
- Microsoft Corporation - Windows Live Photo Gallery Version 15.4.3508.1109
- Microsoft Corporation - Windows Live? Photo Gallery Version 15.4.3508.1109
- Microsoft Corporation - Windows Live| Movie Maker Version 15.4.3508.1109
- Microsoft Corporation - Windows Virtual PC Version 6.1.7600.16393
- Microsoft Corporation - Windows® Search Version 7.00.7600.16385

Assorted Utilities
Revo Uninstaller

See (free and paid)

- Complements/supplements Windows uninstaller
- “Pro” version includes several additional utilities

Assorted Utilities
Ditto

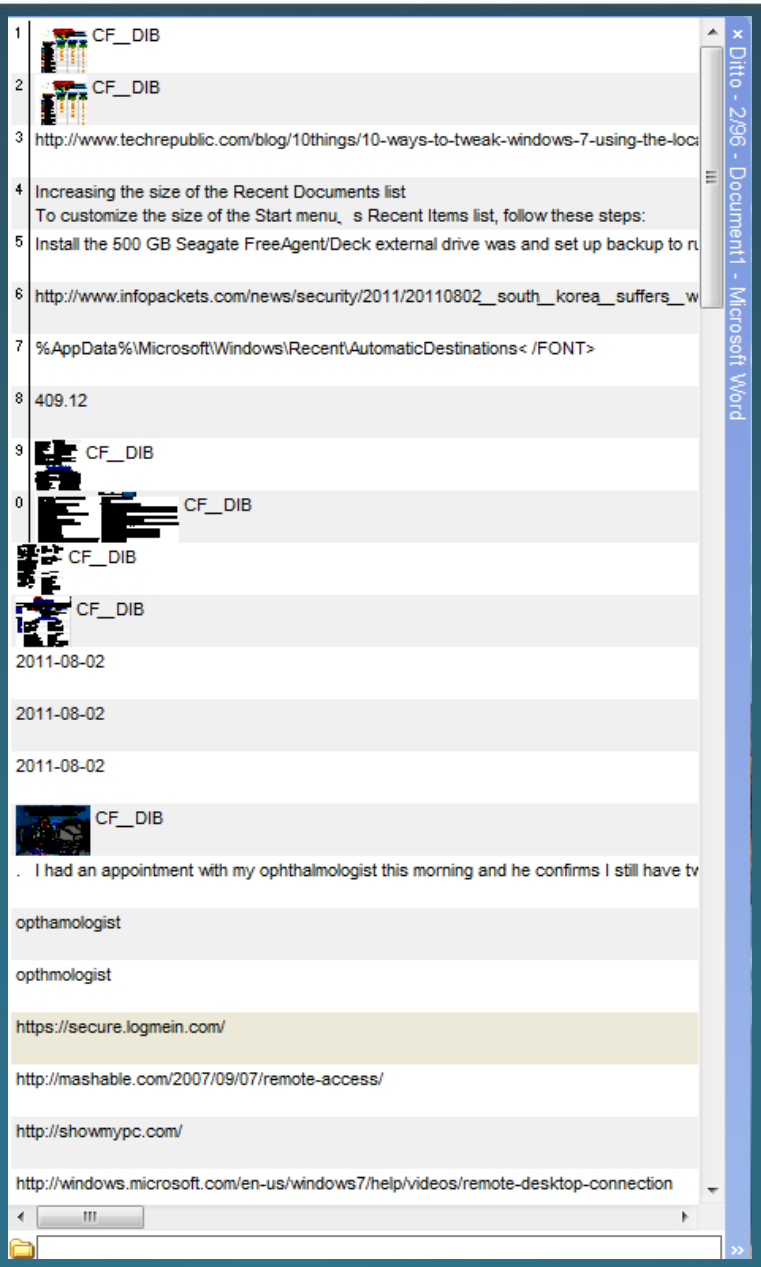
See (free)

- An extension to the standard Windows clipboard (CTRL-C then CTRL-V)
- Items are placed on the clipboard allowing access to any of those items at a later time.
- Includes any type of information that can be put on the clipboard: text, images, html, JPEG, custom formats, etc.

Assorted Utilities
Ditto (cont.)

- To display extended clipboard key CTRL-` (Note the ` character uses the same key as the ~)
- 100s or 1000s of items can be retained
- Double-click on the item to be pasted

Upon keying
CTRL-`



Assorted Utilities
PC Decrapifier

See ⓘ (free)

- Removes dozens of bloatware programs that typically are installed on new computers
- NOTE: Sony VAIO “Fresh Start” (free). See ⓘ for a discussion

Assorted Windows 7 Tips
Keyboard Shortcuts

- See for an extensive list from Microsoft
- See for an extensive list from *Windows Secrets*
- Don't forget +Tab or Alt+Tab to invoke Windows Aero

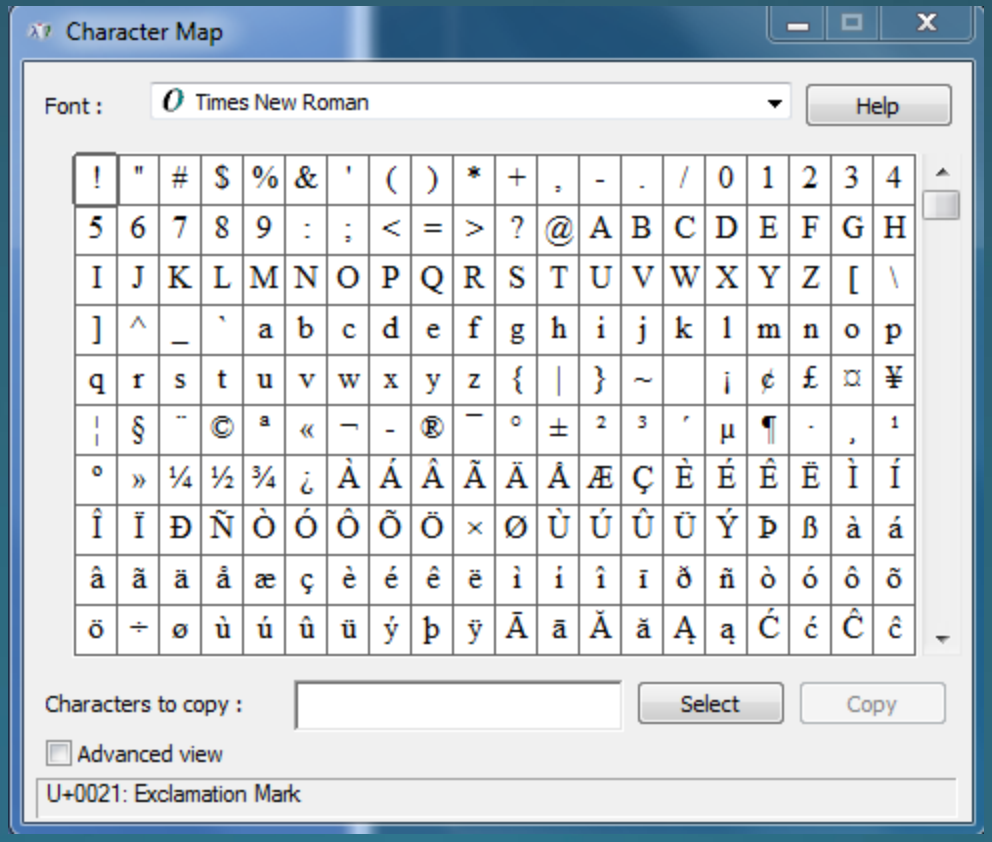
Assorted Windows 7 Tips
Character Map

- Easy insertion of special characters

- To pin the “Character Map” to the taskbar…

Start ➔ All Programs ➔ Accessories ➔ System Tools ➔ [right-click] pin Character Map to taskbar

Assorted Windows 7 Tips
Character Map (cont.)



Assorted Windows 7 Tips
Reliability Monitor

- Provides detailed information on crashes, hanging and quitting applications, etc.

Start ➔ [key] reliability ➔ [left-click] View reliability history

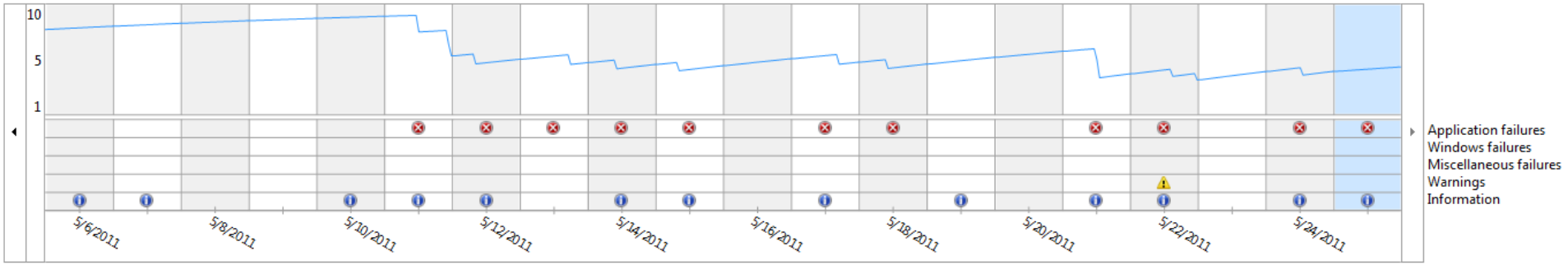
Assorted Windows 7 Tips
Reliability Monitor (cont.)

Review your computer's reliability and problem history

The stability index assesses your system's overall stability on a scale from 1 to 10. By selecting a specific period in time, you may review the specific hardware and software problems that have impacted your system. How to use Reliability Monitor.

View by: Days | Weeks

Last updated: 5/25/2011 1:00 PM



Reliability details for: 5/25/2011

Source	Summary	Date	Action
Critical events			
Microsoft Office Outlook	**Stopped working**	**5/25/2011 1:17 PM**	Check for a solution
Informational events (8)			
Update for Windows 7 for x64-based Systems (KB2541014)	Successful Windows Update	5/25/2011 6:14 AM	View technical details
Intel(R) 82566DC-2 Gigabit Network Connection	Successful driver installation	5/25/2011 6:16 AM	View technical details
Intel - Network - Intel(R) 82566DC-2 Gigabit Network Connection	Successful Windows Update	5/25/2011 6:16 AM	View technical details
Windows Internet Explorer 9 for Windows 7 for x64-based Systems	Successful Windows Update	5/25/2011 6:26 AM	View technical details
Definition Update for Microsoft Security Essentials - KB2310138 (Definition 1.105.443.0)	Successful Windows Update	5/25/2011 6:27 AM	View technical details
Microsoft Office Outlook Gadgets for Windows SideShow	Successful application installation	5/25/2011 11:21 AM	View technical details
Microsoft Office Outlook Gadgets for Windows SideShow	Successful application reconfiguration	5/25/2011 11:25 AM	View technical details
Microsoft Office Outlook Gadgets for Windows SideShow	Successful application reconfiguration	5/25/2011 11:26 AM	View technical details

Save reliability history... View all problem reports Check for solutions to all problems ... OK

Assorted Windows 7 Tips
Problem Steps Recorder (PSR)

Record events when an app misbehaves

- Start ➔ [key] psr.exe ➔ [left-click] Start Record
- Run the application that is misbehaving
- Add comments in the record as appropriate
- [left-click] Stop Record
- Save recording (a zip file) as prompted
- See *Maximum PC*, **16** (9), p. 64, September 2011

Remote Access

Allows someone to remotely access your computer (or vice versa)

- Windows Remote Desktop Connection *
- ShowMyPc
- LogMeIn
- “40+ Ways to Access Your Computer Remotely”

* Not available for all versions of Windows.

Assorted Windows 7 Tips
Resource Monitor

Resurrect locked up applications (processes)

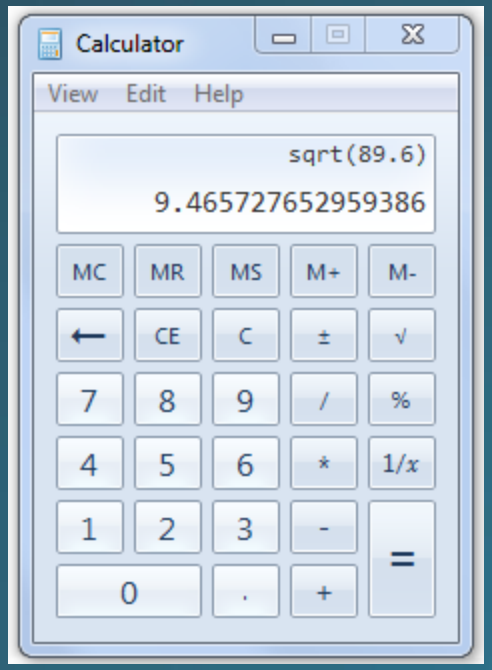
- Start ➔ [key] resmon ➔ [left-click] resmon.exe
- Locate frozen process (highlighted in red), right-click and select Analyze Wait Chain
- If > 2 processes displayed, the lowest one is freezing the program
- Check the box next to this process, [left-click] then [left-click] End Process

Assorted Windows 7 Tips
Windows Calculator

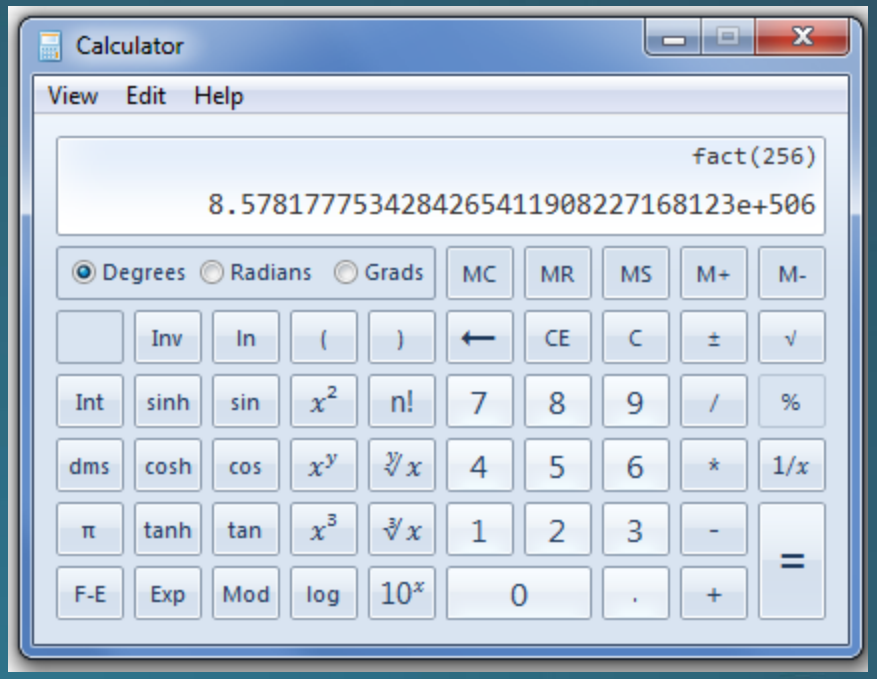
Start ➔ [key] calculator ➔ [left-click] calculator

(If frequently used, pin to Taskbar)

Assorted Windows 7 Tips
Windows Calculator (cont.)

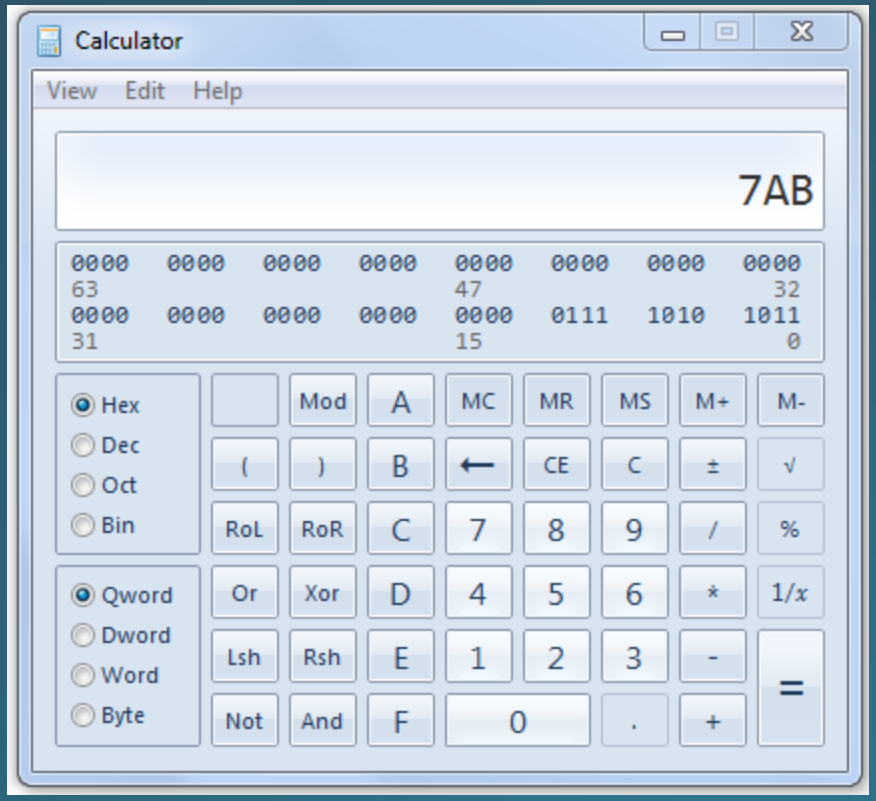


Standard

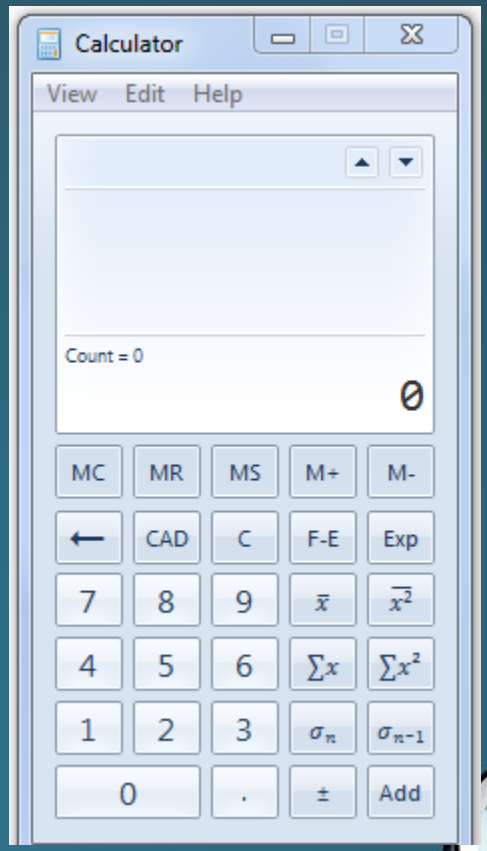


Scientific

Assorted Windows 7 Tips
Windows Calculator (cont.)



Programmer



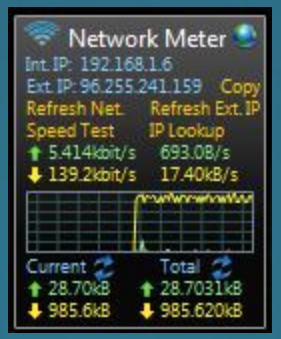
Statistics

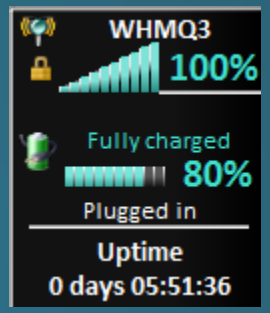
Assorted Windows 7 Utilities & Tips

- See ⓘ for a list of 92 free utilities
- See ⓘ for a list of 85 “Windows 7 tips, tricks and secrets”

Windows 7 Gadgets
System Tools

- System Monitor, see ⓘ. Shows heads up display CPU, RAM, IP, Battery, WiFi, network, etc.
- Network Meter, see ⓘ. Displays a wide variety of network characteristics
- Margu-notebookInfo2, see ⓘ. Displays numerous system attributes



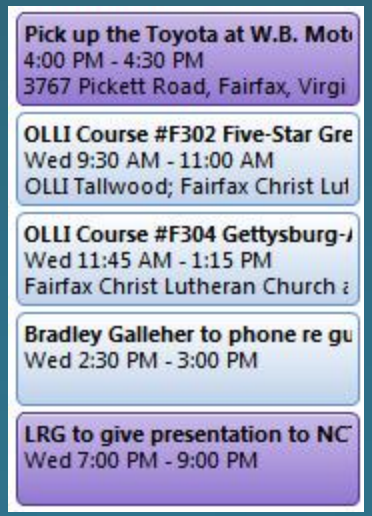


Windows 7 Gadgets
Radio Players

- BBC Radio Player, see ⓘ. 11 BBC radio stations
- iClassical Radio Player, see ⓘ. 16 classical music radio stations
- TrueTone Desktop Radio, see ⓘ. Numerous music genre

Windows 7 Gadgets
Outlook Appointments

- See
- Shows next 3-5 upcoming appointments in Outlook



Windows 7 Gadgets

- Gadgets from Microsoft, see and

Time to wake up!!

The End