

Windows 7 SP1 INSTALL GUIDE

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DATE: _____ PC OWNER _____ PC NAME _____

OPERATING SYSTEM (Home Premium / Professional / Ultimate) _____

SYSTEM = 64-bit or 32-bit CPU: _____ RAM = _____ GB

GENERAL TIPS & WARNINGS:

- Be sure to read all the "General Tips and Warnings" on page 4 before starting.
- Follow this sequence to help avoid problems booting the PC after installing SP1.
- These tasks are best done from an ADMINISTRATOR Account (except for CCleaner scans)
- Before installing SP1, check out this site: <http://isc.sans.edu/diary.html?storyid=10453>
- If you have "Language Packs" installed, you should consider removing them and reinstalling them after SP1 is done.
- Do NOT install SP1 using the WSUS utility. Many problems have been reported.

PRE-INSTALL TASKS:

- 1) Verify the current SP level= _____. (Right-click Computer > Properties > "Windows edition" area). If SP1 is already on, you are done. If there is no Service Pack listed, then continue.
- 2) RUN FULL-SCANS OF ALL YOUR ANTI-MALWARE PROGRAMS.
- 3) CLEAN TEMP FILES: Run TFC once or Ccleaner in each user Account. *Note: If you don't like TFC Temp File Cleaner or Ccleaner, then use the Windows Cleanup utility: ("Computer", then Right-click Drive C: > Properties > General Tab > Disk Cleanup)*
- 4) HARD-DRIVE ERROR SCAN: Run chkdsk or an HDTUNE Slow Error scan. Chkdsk: (My Computer > right-click Drive C: ICON > Properties > Tools Tab). Then, under Error-checking, click <Check Now>. Choose Automatically fix errors & Scan for and attempt recovery of bad sectors. Click <Start>, OK, OK. Then, restart your PC to actually run the scans (Note: The chkdsk scan will run during the boot sequence).
- 5) HARD-DRIVE FRAGMENTATION. See if the Hard-drive is in need of a defrag. Just type in defrag in the search box then select "Disk defragmentor". Fragmentation will probably be OK, as Windows 7 does an automated weekly scheduled defrag.
- 6) MAKE SURE YOU HAVE AT LEAST 8 GB OF FREE DISK SPACE.
- 7) SYSTEM PROTECTION: (Control Panel > System & security > System > System Protection)
 - Make sure System Protection is running on Drive C and has plenty of room for SP1 restore points (20-30 GB minimum). (Click "Configure"). *Plan to return the size to its original setting after SP1 installs OK, especially if you are running a small SSD as drive C.* (Record the current Max Disk space reserved _____%)
 - CREATE A WINDOWS RESTORE POINT. (Click "Create").
- 8) FULL IMAGE BACKUP: If at all possible, be sure to do a full IMAGE backup. *It is possible that your PC can become unbootable after the install.* Make sure your Image Backup Recovery Boot CD actually boots and recognizes all drives. Otherwise, make sure all your data is backed up in case of disaster. (Acronis True Image Home should be version 2010 or higher).

- 9) IE BROWSER HOME PAGE: Write down the URL of the IE8/9 Home page/s for use later if needed.
- 10) MSE: If Microsoft Security Essentials is installed, (*Open MSE > click the down arrow to the right of Help > About Security Essentials*), and make sure the version is 2.x. If you have the old version (1.x) of MSE installed, you should install version 2.x before installing SP1. (*You can install MSE using Windows Update*).
- 11) POWER OPTIONS: *NOTE: The PC needs to be powered on during the entire SP1 Installation. (Go to Control Panel > Power Options). Set the Power Scheme to "High Performance". (Then click Change Plan settings > Change Advanced Power settings). Go to the Sleep item and make sure the PC is set to NEVER for both sleep and Hibernate. NOTE: POWER CANNOT BE INTERRUPTED DURING THE ENTIRE INSTALL. If you have a battery Backup, make sure it is operational.*
- 12) WINDOWS UPDATE:
- Make sure the Windows Update settings are checked to include all "Recommended" updates and as well as updates for all "Microsoft products".
 - Repeatedly go to Windows Update and do a "Check for Updates" to install all available "Important/Recommended" updates EXCEPT SP1.
 - Install all Optional and Hardware Driver updates. Test hardware after any Driver updates.
 - UPDATES KB 2502285, KB 2533552, and KB 2534366: Make absolutely sure these updates have been installed. Click "View Update History" to look for them. If KB2502285 is not there, make sure it is not "Hidden" by clicking "Restore Hidden Updates" and if it still is not there, then it probably does not apply to your machine. *WARNING: A BSOD, (Blue Screen Of Death) during the reboot, can result if these updates are missing.*
 - Be sure to reboot again before continuing.
- 13) SYSTEM UPDATE READINESS TOOL: Download and run the correct tool for your system: <http://windows.microsoft.com/en-US/windows7/What-is-the-System-Update-Readiness-Tool>
- 14) SYSTEM FILE CHECKER: From the Administrator Account, open a Command Prompt window (Run as Administrator) and run: SFC /scannow
- 15) STOP ALL POSSIBLE PROGRAMS, before you install SP1. *NOTE: After the System restarts, almost every closed program will start up again.*
- Make sure to stop all "Resident Shields" & "Real-time Protections" from AVG, MSE, Trend Micro, Norton, etc. *These programs are the main cause of SP1 complications*
 - Stop all Anti-virus, Anti-spyware, & Pop-up Blocker Programs. *NOTE: Not stopping the anti-virus can lead to big problems.*
 - Stop (or Exit, Quit, Close) Skype, Windows Messenger, and any other programs that are running in the System Tray. (*Right-click the System Tray Icons*).
 - Shutdown ZoneAlarm or any other 3rd party Firewall.
- 16) UNPLUG All flash-drives, external hard-drives & any other un-needed USB Devices.

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INSTALLATION TIPS - *Read these before starting the SP1 update!*

- 1) Per the Windows Secrets website, it is better to install SP1 (KB976932) from either the downloadable standalone .exe file or DVD than by using regular Windows Update. If you download the exe file you must choose the correct file for your CPU (X86, X64, or IA64)
 - 2) BE PATIENT! The total install time can exceed 60 minutes (NOTE: Operator responses may be required during the install process). The older the PC, the longer it will take.
 - 3) DO NOT do any tasks or open any windows while the SP1 update is in progress.
 - 4) DO joggle the mouse every few minutes just to make sure Windows 7 does not time out in any way.
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INSTALL-SP1:

- 1) Start the SP1 Update using the Standalone DVD (KB976932), the downloaded .exe file, or WINDOWS UPDATE. *NOTE: If Autoplay is turned off, you will have to open the DVD and double-click "SETUP"*
 - 2) If asked, you can check "Automatic Restart" to save some manual interventions, then click "Install". If a password or user selection is required to get logged-in, you will have to be there to respond.
 - 3) After the last restart, you should get a windows that says "Windows Service Pack 1 is now installed".
 - 4) Do a System Restart and make sure all comes up clean.
 - 5) Right-click Computer > Properties. Look at the Windows edition, and verify that it now says "Service Pack 1"
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POST-SP1 TASKS

- 1) Windows Update: Repeatedly go to "(Windows Update" > Check for Updates), and install any new "Important" and "Recommended" updates.
 - 2) Re-activate any desired Resident Shields. (MSE and/or your Antivirus Suite)
 - 3) SECUNIA PSI: Run a scan and update any errors.
 - 4) Re-set the Power Options back to their original settings.
 - 5) Change the Automatic Updates setting to "Automatic" or to the PC owner's preference
 - 6) Return the System Protection Max Disk space usage back to that recorder earlier ____%
 - 7) Now is a good time to do another image backup.
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GENERAL TIPS & WARNINGS:

- 1) INSTALL FROM "WINDOWS UPDATE". This is the preferred method for installing SP1 if you are only updating one or two PC's. Note: Do not check the SP1 update unless you are ready to install it. If you download it, the Service Pack may start installing itself when you are not looking. .
- 2) INSTALL FROM DVD: If you are installing SP1 on more than one PC, you can download the DVD ISO Image for Service Pack 1 (KB976932) from Microsoft and burn it to a DVD (2 GB), then install SP1 from the DVD. *NOTE: The DVD works for both 64-bit and 32-bit systems..*
- 3) The Windows Secrets website recommends manually downloading the latest Windows Update Readiness Tool from Microsoft. See: <http://support.microsoft.com/kb/947821> . Use it to test your PC.
- 4) Per ZDNET.COM, if your system has one of the following hotfixes installed - 2406705, 979350 or 983534 - then you are going to have problems installing SP1. Remove them first.
- 5) For more info, see the Microsoft knowledge base:
<http://windows.microsoft.com/en-SG/windows7/learn-how-to-install-windows-7-service-pack-1-sp1>
- 6) BLUE SCREEN OF DEATH: If your install fails with a Blue Screen during the Restart process, be sure to write all the info shown on the Blue Screen before powering down the PC. First try booting with F8 and try to get back to the "Last good configuration". If that does not work, try getting into Safe-Mode to remove SP1. If that fails, hopefully you have made an image backup and you can use it to restore the system to operational status. If no image backup, call Microsoft Support for help with a "Repair" XP Install (1-866-234-6020), otherwise you will be reinstalling windows from Scratch.