Windows Vista™

Notable changes in Windows Vista SP1

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Abstract

Microsoft continuously improves the Windows Vista® Operating System by providing ongoing updates while working with software and hardware vendors to help them to deliver improved compatibility, reliability and performance. Windows Vista Service Pack 1 (SP1) is another vehicle that Microsoft will use to deliver operating system improvements to customers.

Windows Vista SP1 is an update to Windows Vista that, along with improvements delivered to users via these other channels, addresses feedback from our customers. In addition to previously released updates, SP1 will contain changes focused on addressing specific reliability, performance, and compatibility issues, supporting new types of hardware, and adding support for several emerging standards. SP1 also will continue to make it easier for IT administrators to deploy and manage Windows Vista.

This document describes notable changes made to Windows Vista in Service Pack 1.

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SUMMARY

Microsoft continuously improves the Windows Vista® Operating System by providing ongoing updates while working with software and hardware vendors to help them to deliver improved compatibility, reliability and performance. These updates are provided to customers directly by our hardware and software partners, as well as from Microsoft in the form of hotfixes distributed on a regular basis using Windows Update. Updates to Windows are also delivered directly to some affected customers and preinstalled by PC manufacturers.

Windows Vista SP1 is an update to Windows Vista that, along with improvements delivered via these other channels, addresses feedback from our customers and partners. By providing these fixes integrated into a single service pack which is thoroughly tested by Microsoft and by industry partners and customers during the beta cycle, Microsoft provides a single high quality update that minimizes deployment and testing complexity for customers.

In addition to all previously released updates, SP1 contains changes focused on addressing specific reliability and performance issues, supporting new types of hardware, and adding support for several emerging standards. SP1 also will continue to make it easier for IT administrators to deploy and manage Windows Vista. Service Packs are not intended to be a vehicle for releasing significant new features or functionality; however some existing components do gain slightly enhanced functionality in SP1 to support industry standards and new requirements.

This document describes many of the notable changes in Windows Vista SP1. For additional information about the changes in SP1, please see the Knowledge Base (KB) article 936332, which is a compendium of all prior KB articles documenting updates to Windows Vista. Many of these updates are already publicly available and have been released via the Microsoft Download Center or Windows Update. All of these updates are included in Windows Vista SP1. The full list of these updates can be read in the appendix of this document.

SETUP PREREQUISITES

- Windows Vista SP1 requires two prerequisite packages to install; a third is required for versions of Windows Vista that are BitLocker™ Drive Encryption capable (Window Vista Enterprise and Windows Vista Ultimate)

- The first of the three prerequisite packages required for the service pack includes updates to the servicing stack—the component that handles installation and removal of software updates, language packs, and optional windows features. This update is necessary to successfully install and uninstall the service pack; it also improves the performance and reliability of the service pack installation.

- The second of the three prerequisite packages includes updates required to reliably install or uninstall the service pack.

- The third of the three prerequisite packages contains an update necessary for proper servicing of Windows BitLocker Drive Encryption capable PCs.

SERVICE PACK 1 SIZE

In order to make the improvements detailed in this document, a large number of individual files and components have been updated for SP1. Also, the language-neutral design of Windows Vista necessitates that the service pack be able to update any possible combination of the basic languages supported by Windows Vista with a single installer, so language files for the 36 basic languages are included in the standalone installer.

These facts result in a large stand-alone package, which is the delivery vehicle typically used by system administrators. (See Table 1 below for an explanation of the different delivery mechanisms for Windows Vista SP1.) However, most home and small business users will receive SP1 via Windows Update, which utilizes an efficient transfer mechanism to download only the actual bytes changed, resulting in an approximately 65MB download. This is similar in size to many common software and driver updates delivered by other software vendors over the internet and will not be a problem for most customers.

	Usage	Download Size (x86)
Standalone Package	• PCs without internet access • System administrators	About 450 MB (5 Language package) About 550 MB (Full 36 language package)
Windows Update	• Most home users • Many business customers	About 65 MB
Integrated DVD	• New PCs • Fresh Windows installations	N/A

Table 1

HARDWARE ECOSYSTEM SUPPORT & ENHANCEMENTS

- Adds support for new UEFI (Unified Extensible Firmware Interface) industry standard PC firmware for 64-bit systems with functional parity with legacy BIOS firmware, which allows Windows Vista SP1 to install to GPT format disks, boot and resume from hibernate using UEFI firmware.

- Adds support for x64 EFI network boot.

- Adds support for the 64-bit version of MSDASQL, which acts as a "bridge" from OLEDB to a variety of ODBC drivers thus simplifying application migration from 32-bit platforms to 64-bit Windows Vista.

- Adds support for Direct3D$^®$ 10.1, an update to Direct3D 10 that extends the API to support new hardware features, enabling 3D application and game developers to make more complete and efficient use of the upcoming generations of graphics hardware.

- Adds support for exFAT, a new file system supporting larger overall capacity and larger files, which will be used in Flash memory storage and consumer devices.

- Adds support for SD Advanced DMA (ADMA) on compliant SD standard host controllers. This new transfer mechanism, which is expected to be supported in SD controllers soon, will improve transfer performance and decrease CPU utilization.

- Adds support for creating a single DVD media that boots on PCs with either BIOS or EFI.

- Enhances support for high density drives by adding new icons and labels that will identify HD-DVD and Blu-ray Drives as high density drives.
- Adds support to enable new types of Windows Media Center Extenders, such as digital televisions and networked DVD players, to connect to Windows Media Center PCs.
- Enhances the MPEG-2 decoder to support content protection across a user accessible bus on Media Center systems configured with Digital Cable Tuner hardware. This also effectively enables higher levels of hardware decoder acceleration for commercial DVD playback on some hardware.
- Enhances Netproj.exe to temporarily resize the desktop to accommodate custom projector resolutions when connecting to Windows Network Projectors.

APPLICATION COMPATIBILITY IMPROVEMENTS

Since the release of Windows Vista, the ecosystem has made great progress and the number of applications that have the "Works with Windows Vista" and "Certified for Windows Vista" logos has grown to well over 2000.

Thanks to the rich instrumentation capability of Windows Vista, we are able to understand the type of problems that our customers are experiencing (while respecting their personal information and privacy preferences). We use this information to focus improvements in Windows Vista, but we also share this information with our software vendor partners to help improve the reliability and compatibility of 3rd party applications.

It is our goal that applications that run on the Windows Vista Operating System today and are written using public APIs will continue to work as designed on Windows Vista SP1.

Microsoft has already released several application compatibility updates which will allow more applications to work seamlessly for the end user. These will appear in SP1, but are also available via Windows Update. For more information on previous compatibility updates, please refer to http://support.microsoft.com/kb/935280/. SP1 contains

additional application compatibility fixes for individual applications.

RELIABILITY IMPROVEMENTS

Reliability improvements vary from PC to PC based on hardware, environment, and usage. Customers will experience varying levels of benefit.

- SP1 addresses issues many of the most common causes of crashes and hangs in Windows Vista, as reported by Windows Error Reporting. These include issues relating to Windows Calendar, Windows Media Player, and a number of drivers included with Windows Vista.

- Improves reliability by preventing data-loss while ejecting NTFS-formatted removable-media.

- Improves reliability of IPSec connections over IPv6 helping ensure that all Neighbor Discovery RFC traffic is IPsec exempted.

- Improves certain problem scenarios where a driver goes to sleep with incomplete packet transmissions by helping ensure the driver is given enough time to transmit or discard any outstanding packets before going to sleep.

- Improves wireless ad-hoc connection (computer-to-computer wireless connections) success rate

- Improves the success of peer-to-peer connections, such as Windows Meeting Space or Remote Assistance applications, when both PCs are behind symmetric firewalls.

- Improves Windows Vista's built-in file backup solution to include EFS encrypted files in the backup.

- Users who did not opt-in to the Customer Experience Improvement Program (CEIP) will be prompted again to join after installing SP1. The experience will remain the same and the default will continue to be opt-out.

PERFORMANCE AND POWER CONSUMPTION IMPROVEMENTS

Performance improvements vary from PC to PC based on hardware, environment, scenarios, and usage, so different customers will experience varying levels of benefits.

About 20-25% of these improvements will be released separately via Windows update, prior to Windows Vista SP1.

- Improves the performance of browsing network file shares by consuming less bandwidth.
- Improves power consumption when the display is not changing by allowing the processor to remain in its sleep state which consumes less energy.
- Addresses the problem of the Video chipset (VSync interrupt) not allowing the system to stay asleep.
- Improves power consumption and battery life by addressing an issue that causes a hard disk to continue spinning when it should spin down, in certain circumstances.
- Improves the speed of adding and extracting files to and from a compressed (zipped) folder.
- Significantly improves the speed of moving a directory with many files underneath.
- Improves performance while copying files using BITS (Background Intelligent Transfer Service).
- Improves performance over Windows Vista's current performance across the following scenarios[1]:
    - 25% faster when copying files locally on the same disk on the same machine
    - 45% faster when copying files from a remote non-Windows Vista system to a SP1 system
    - 50% faster when copying files from a remote SP1 system to a local SP1 system
- Improves responsiveness when doing many kinds of file or media manipulations. For example, with Windows Vista today, copying files after deleting a different set of files can make the copy operation take longer than needed. In SP1, the file copy time is the same as if no files were initially deleted.
- Improves the copy progress estimation when copying files within Windows Explorer to about two seconds.
- Improves the time to read large images by approximately 50%.
- Improves IE performance on certain Jscript intensive websites, bringing performance

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[1] These numbers, and all other performance numbers in the document, are based on internal testing on pre-release code.

in line with previous IE releases.

- Addresses a problem that caused a delay of up to 5 minutes after boot with specific ReadyDrive capable hard drives.

- Improves the effectiveness of a Windows ReadyBoost™ device in reducing the time to resume from standby and hibernate by increasing the amount of data stored in the ReadyBoost device that can be used during a resume cycle.

- Includes improvements to Windows Superfetch™ that help to further improve resume times, in many environments.

- In specific scenarios, SP1 reduces the shutdown time by a few seconds by improving the Windows Vista utility designed to sync a mobile device.

- Improves the time to resume from standby for a certain class of USB Hubs by approximately 18%.

- Improves network connection scenarios by updating the logic that auto selects which network interface to use (e.g., should a laptop use wireless or wired networking when both are available).

- Improves the performance of the user login experience on corporate PCs outside of corporate environments (e.g., a corporate laptop taken home for the evening), making it comparable with PCs within the corporate environment.

- Reduces the time it takes to return to the user's session when using the Photo screensaver, making it comparable to other screensavers.

- Removes the delay that sometimes occurs when a user unlocks their PC.

- Improves overall media performance by reducing many glitches.

- In SP1, PC administrators are able to modify the network throttling index value for the MMCSS (Multimedia Class Scheduling Service), allowing them to determine the appropriate balance between network performance and audio/video playback quality.

- Windows Vista SP1 includes a new compression algorithm for the RDP (Remote Desktop Protocol) that helps reduce network bandwidth required to send bitmaps or images via RDP. The compression, which can be selected by administrators via Group Policy settings, is transparent to all RDP traffic, and typically reduces the size of the RDP stream by as much as 25-60%, based on preliminary test results.

- The Windows Vista SP1 install process clears the user-specific data that is used by Windows to optimize performance, which may make the system feel less responsive immediately after install. As the customer uses their SP1 PC, the system will be retrained over the course of a few hours or days and will return to the previous level of responsiveness.

- SP1 addresses a number of customer performance concerns with new print driver technologies, including XPS-based printing.

SECURITY IMPROVEMENTS

- Windows Vista SP1 includes all previously released Security Bulletin fixes which affect Windows Vista.

- SP1 includes Secure Development Lifecycle process updates, where Microsoft identifies the root cause of each security bulletin and improves our internal tools to eliminate code patterns that could lead to future vulnerabilities.

- Service Pack 1 includes supported APIs by which third-party security and malicious software detection applications can work alongside Kernel Patch Protection on 64-bit versions of Windows Vista. These APIs have been designed to help security and non-security ISVs develop software that extends the functionality of the Windows kernel on 64-bit systems, in a documented and supported manner, and without disabling or weakening the protection offered by Kernel Patch Protection.

- Improves the security of running RemoteApp™ programs and desktops by allowing RDP files to be signed. Administrators now have the control to differentiate the user experience based on the publisher's identity.

- Data Execution Protection (DEP) is a memory-protection feature available beginning with Windows XP and Server 2003. SP1 improves security with a new set of Win32 APIs to allow programmatic control over a process's DEP policy. This will provide application developers with finer control on a process's DEP settings for security, testability, compatibility, and reliability.

- Improves the trustworthiness of data presented in Windows Security Center (WSC) by

helping ensure that only authenticated security applications can communicate with WSC.

- Improves security on wired networks by enabling single sign on (SSO) for authenticated wired networks. The single sign on experience presents the user with a single point of credential entry rather than being double prompted for local and network logon.

- For customers upgrading from Windows XP to Windows Vista SP1, the MSRT (Malicious Software Removal Tool) will not run as part of the upgrade. Rather the up-to-date MSRT offered monthly by Windows Update will help protect PCs.

- The cryptographic random number generation is improved to gather seed entropy from more sources, including a Trusted Platform Module (TPM) when available, and replaces the general purpose pseudo-random number generator (PRNG) with an AES-256 counter mode PRNG for both user and kernel mode.

- Improves security in smart card scenarios:
  - Introduction of a new PIN channel to more securely collect smart card PINs via a PC. This new capability mitigates a number of attacks that today would require using an external PIN reader to prevent.
  - Enables smart cards that use biometric authentication instead of a PIN.

- Improves security over Teredo interface by blocking unsolicited traffic by default. This has already been addressed in a Security Update for Windows Vista (KB935807).

- Improves BitLocker Drive Encryption by offering an additional multi-factor authentication method that combines a key protected by the TPM (Trusted Platform Module) with a Startup Key stored on a USB storage device and a user-generated Personal Identification Number (PIN).

- Enhanced the BitLocker encryption support to volumes other than bootable volumes in Windows Vista (for Enterprise and Ultimate SKUs).

- Improves the OCSP (Online Certificate Status Protocol) implementation such that it can be configured to work with OCSP responses that are signed by trusted OCSP signers, separate from the issuer of the certificate being validated.

- Enables a standard user to invoke the CompletePC Backup application, provided that user can supply administrator credentials. Previously, only administrators could launch the application.

- The Remote Desktop client in Windows Vista SP1 provides user interface improvements for user and server authentication. The RDP client streamlines the multiple steps end users must follow to providing their credentials to Windows Server 2003 (or earlier) Terminal Servers, and simplifies the management of previously saved credentials.

SUPPORT FOR NEW TECHNOLOGIES & STANDARDS

- Adds support for new strong cryptographic algorithms used in IPsec. SHA-256, AES-GCM, and AES-GMAC for ESP and AH, ECDSA, SHA-256, and SHA-384 for IKE and AuthIP.

- Adds the NIST SP 800-90 Elliptical Curve Cryptography (ECC) pseudo-random number generator (PRNG) to the list of available PRNG in Windows Vista.

- Adds support for SSTP (Secure Sockets Tunnel Protocol), a remote access VPN tunneling protocol that will be part of Microsoft's RRAS (Routing and Remote Access Service) platform. SSTP helps provide full-network VPN remote access connections over SSL, removing some of the VPN connectivity challenges that other VPN tunnels face traversing NAT, web proxies, and firewalls.

- Adds full support for the latest IEEE draft of 802.11n wireless networking.

- Adds support for obtaining identity and invoke identity UI from an inner method via a new EAPHost runtime API as well as a configuration UI for tunnel methods. These APIs are useful for developers working on tunneling/multi-phased EAP authentication methods as well as those who implement networking supplicants which consume EAP authentications.

- Adds support for Windows Smartcard Framework to enable compliance with the EU Digital Signature Directive and National ID / eID.

- Adds support for the Parental Controls Games Restrictions for ratings from the Korean Game Rating Board (GRB).

- Enhances TCP Chimney network card support so that a TCP Chimney network card can also support Compound TCP.

- Adds support in the Wireless Client for a new FIPS (Federal Information Processing)

compliant mode. This mode is FIPS 140-2 compliant because it moves the
cryptographic processing from the wireless network card to an existing FIPS-
approved cryptographic library.

- Enhances Windows Firewall and IPsec to use the new cryptographic algorithms that
  are Suite B compliant.

- Updated drivers are delivered primarily via Windows Update and directly from
  hardware vendors, not as part of a service pack. However, a small number of critical
  drivers are included as part of Windows Vista (e.g., display drivers, audio drivers) and
  some of these have been updated.

DESKTOP ADMINISTRATION & MANAGEMENT

- Allows users and administrators to control which volumes the disk defragmenter
  runs on.

- Allows users and administrators using Network Diagnostics to solve the most
  common file sharing problems, not just network connection problems.

- Enables polling of RMS server at regular intervals to identify new templates and
  download them to the local template store. Previously these templates were pushed
  to clients via a combination of Group Policy and scripting. Additionally SP1 provides
  an API for applications to query and access template in the template store.

- Windows Vista SP1 includes a new Security Policy (UAC: Allow UAccess), which
  allows applications to prompt for elevation without using the secure desktop. This
  allows a remote helper to enter administrative credentials during a Remote
  Assistance session.

- Allows administrators to configure NAP Clients to:
  - Receive updates from Windows Update or Microsoft Update, in addition to
    WSUS (Windows Server Update Services), as is the case for Windows Vista
    today.
  - Define the time a client has to retrieve and submit Statements of Health.
    This allows the NAP client to respond in time when a particular connection
    has a timeout requirement.

- o Use DNS server records to discover health registration authority (HRA) servers when there are no HRA's configured through local configuration or group policy.
- Allow healthy clients used by the Help Desk to establish IPSec connections to unhealthy machines to help resolve problems. This improves the supportability of NAP by allowing Help Desk technicians with health compliant machines to establish connections (e.g. remote desktop, file share) to help resolve issues.
- Allows administrators to add a WSD (Web Services for Devices) Print Device to remote Windows Vista or Windows Server 2008 machines. This can be accomplished by using the Print Management Console.
- Allows the administrators to use a new admin flag to allow WMI scripted enumeration of all contents in the CSC cache. This will enhance WMI scripted administration for offline folders in Windows Vista. Previously this was available only through the COM API.
- Improves printing to local printers from within a Terminal Server session.
- Allows users to rename or delete folders while working offline with redirected folders. This functionality is important to users that use Folder Redirection and work in offline mode for extended periods of time. This functionality is disabled by default but can be enabled by enabling a registry setting.
- Enhances the existing Vista EAPHost service by including an EAP (Extensible Authentication Protocol) Certification Program (ECP) Detection Mechanism. This mechanism makes delivery of EAP Methods submitted to the ECP available through Windows Update.
- Adds a WMI interface as a replacement for the MoveUser.exe tool which was removed from Windows Vista. This allows customers to remap an existing workgroup or domain user account profile to a new domain user account profile.
- Allows an administrator to configure properties of a network, such as the name, and deploy it network-wide via a Group Policy snap-in.
- Allows KMS (Key Management Service) to run within a Virtual Machine environment.

SETUP & DEPLOYMENT IMPROVEMENTS

- Enables global organizations to more easily deploy SP1 in a multi-lingual environment, as SP1 includes all 36 language packs. However, this change contributes to the increased size of the standalone package.

- Enables users to get updated Help content via a separate downloadable package. This package will be released around SP1 release.

- Enables support for hotpatching, a reboot-reduction servicing technology designed to maximize uptime. It works by allowing Windows components to be updated (or "patched") while they are still in use by a running process. Hotpatch-enabled update packages are installed via the same methods as traditional update packages, and will not trigger a system reboot.

- Improves migration and upgrade scenarios relating to the component that allows alternate text input "modalities" like speech, handwriting, and multi-byte character input editors in applications that were not written specifically to support them.

- Improves OS deployment by enabling 64-bit versions of Windows Vista to be installed from a 32-bit OS. This will allow IT professionals to maintain just a single WinPE image.

- Improves OS deployment by supporting the installation of offline boot critical storage drivers. WinPE will automatically look to a hidden partition for drivers. It will search that partition recursively, and if boot critical drivers are present they will be loaded. Non-boot critical drivers will be picked up and staged, but not loaded prior to the OS coming online.

- Improves patch deployment by retrying failed updates in cases where multiple updates are pending and the failure of one update causes other updates to fail as well.

- Enables reliable OS installation by optimizing OS installers so that they are run only when required during patch installation. Fewer installers operating results in fewer points of potential failure during installation, which leads to more robust and reliable installation.

- Improves overall install time for updates by optimizing the query for installed OS

updates.

- Improves robustness during the patch installation by being resilient to transient errors such as sharing violations or access violations.

- Improves robustness of transient failures during the disk cleanup of old OS files after install.

- Improves the uninstallation experience for OS updates by improving the uninstallation routines in custom OS installation code.

- Improves reliability of OS updates by making them more resilient to unexpected interruptions, such as power failure.

- Improved instrumentation allows additional data to be sent to Microsoft via the CEIP (Customer Experience Improvement Program) when enabled. This telemetry data led to the identification of numerous issues that are addressed in SP1 and resulted in improvement in the reliability of OS servicing. (CEIP is respectful of personally identifiable information and adheres to terms discussed in the EULA.)

- After the SP1 version of the OPK (OEM pre-installation kit) is installed, further OPK updates will not be required if a servicing stack update is issued. (The servicing stack is the underlying set of binaries used to update the system). Post SP1, offline images may be updated using the servicing stack binaries contained in the image rather than the servicing stack binaries in the OPK.

INTEROPERABILITY IMPROVEMENTS

- SP1 exposes Ideal Send Backlog (ISB) information to Winsock2 clients to enable better throughput over high bandwidth, high latency links when communicating with Windows Server 2008. Applications that are modified to use the new ISB info will provide better throughput when sending large amounts of data over such links to other Windows Vista or Windows Server 2008 machines. Applications not modified to take advantage of this change will function as before.

- SP1 includes throughput improvements to Send in TransmitFile/TransmitPackets and ftp.exe, when communicating with Windows Server 2008 over high bandwidth, high latency links. Ftp.exe and other applications using TransmitFile/TransmitPackets on Windows Vista SP1 will achieve better throughput when sending files over such links

to other Windows Vista or Windows Server 2008 machines.

FEATURE OR API CHANGES

- GPMC (Group Policy Management Console) will be uninstalled with Service Pack 1 and GPEdit will default to Local Group Policy editing. Following these changes, SP1 users can download an updated version of GPMC which will include new Group Policy capabilities including adding comments to GPOs or individual settings and searching for specific Group Policy settings.

- The MSN Connection Center Dial-up Internet Access connector was removed from the Windows Vista Connection Wizard.

- Includes a new Offline Files interface that exports the dirty byte count for a file that is modified offline. This interface is exposed both through the COM APIs and WMI provider for Offline Files.

GENERAL IMPROVEMENTS & ENHANCEMENTS

- SP1 includes a number of changes which allow computer manufacturers and consumers to select a default desktop search program similar to the way they currently select defaults for third-party web browsers and media players. That means that in addition to the numerous ways a user could access a third party search solution in Windows Vista, they can now get to their preferred search results from additional entry points in the Start Menu and Explorer Windows in Windows Vista with SP1. 3rd party software vendors simply need to register their search application using the newly provided protocol in Windows Vista SP1 to enable these options for their customers.

- With SP1, Windows Vista will report the amount of system memory installed rather than report the amount of system memory available to the OS. Therefore 32-bit systems equipped with 4GB of RAM will report all 4GB in many places throughout the OS, such as the System Control Panel. However, this behavior is dependent on having a compatible BIOS, so not all users may notice this change.

- SP1 reduces the number of UAC (User Account Control) prompts from 4 to 1 when

creating or renaming a folder at a protected location.

- Improvements in the Licensing User Interface and User Experience including more details in the help about activation and what happens if user does not activate; more detailed and descriptive dialog text; raw error codes replaced with easily comprehensible text.

- SP1 modifies the text in the Ultimate Extras Control Panel to describe the Ultimate Extras program in more general terms.

- Upon scanning a photo with the Vista scanning experience, SP1 will open Explorer rather than opening Windows Photo Gallery.

- Users are now required to enter a password hint during the initial setup of Windows Vista SP1. This change was made based on feedback from top PC manufactures that many customers frequently do not remember their password and because the administrator account is turned off by default on Windows Vista, these users do not have a way to access to their PCs. A password hint helps avoid this frustrating scenario.

- Improves compatibility with 3rd party diagnostic tools that rely on raw sockets by applying the same delivery logic to control (ICMP v4 and v6) and regular packages.

- With SP1, Microsoft differentiates the experience customers have using non-genuine versions of our software. This is based on feedback we heard from volume license customers in particular as part of our Windows Genuine Advantage program.   Further details can be found in an interview with Microsoft Corporate Vice President Mike Sievert: http://www.microsoft.com/presspass/features/2007/dec07/12-03wga.mspx

- SP1 also includes updates that deal with two exploits we have seen, which can affect system stability for our customers –
    o The OEM Bios exploit, which involves modifying system files and the BIOS of the motherboard to mimic a type of product activation performed on copies of Windows that are pre-installed by OEMs in the factory.
    o The Grace Timer exploit, which attempts to reset the "grace time" limit between installation and activation to something like the year 2099 in some cases.

WINDOWS VISTA ALIGNMENT WITH WINDOWS SERVER 2008

Windows Vista is aligned with Windows Server 2008, meaning that many files are common to both products. A result of this design is that there are cases where a common binary is modified to enable a server scenario that has limited or no effect on Windows Vista SP1 capabilities. Here are few examples:

- **File Sharing:** The file sharing subsystem on Windows Vista only allows 10 concurrent inbound connections. Windows Server 2008 must scale to support thousands of concurrent connections. During the testing and customer feedback phase of Windows Server 2008 development, the file sharing subsystems are tuned and refined to optimize the file sharing stack for performance, scalability and reliability. This level of tuning and refinement are not typically applicable on a 10-connection limit client, but are critical to a file server role. Changes like this are done primarily for the server scenarios, although these changes may also benefit Windows Vista SP1.

- **IIS 7**: IIS was included in some Windows Vista SKUs to enable web-based developers to write and test their applications. IIS in Windows Server 2008 is a significant server role which requires Internet-level scalability and performance requirements. The IIS7 components have gone through significant performance and reliability enhancements since Windows Vista originally shipped, in order to be a large-scale server component. These changes do not affect most Windows Vista users who do not even have the IIS7 components installed, however because a Windows Vista and Windows Server are aligned, these changes are included in Windows Vista SP1.

- **Concurrent User Support:** Key subsystems such as the Windows Logon process and the core kernel need only support user-switching scenarios on Windows Vista. However, on Windows Server 2008, where a Terminal Server may have thousands of users logged in simultaneously, these subsystems must be tuned for maximum performance and reliability. Changes like this are done primarily for the server scenarios, although they may also benefit Windows Vista SP1.

APPENDIX

The following table is a list of all individual customer requested hotfixes and security updates to Windows Vista which have already been released to customers and partners. All of the security updates and some of the broad applicability hotfixes have been released publicly via the Microsoft Download Center and/or Windows Update, as marked in the 'publicly available' column. As is standard practice for service packs, all of these updates are included in Windows Vista SP1.

Hotfixes and Security Updates included in Windows Vista Service Pack 1

KBArticle	Title	IssueType	Component	Link
942624	MS07-063: Vulnerability in Server Message Block volume 2 (SMBv2) could allow remote code execution	Security	Base Technologies	http://support.microsoft.com/kb/942624
943078	MS07-066: Vulnerability in the Windows kernel could allow elevation of privilege	Security	Base Technologies	http://support.microsoft.com/kb/943078
933579	MS07-042: Description of the security update for Microsoft XML Core Services 6.0: August 14, 2007	Security	Data Access Components	http://support.microsoft.com/kb/933579
925902	MS07-017: Vulnerability in GDI could allow remote code execution	Security	Desktop Technologies	http://support.microsoft.com/kb/925902
929123	MS07-034: Cumulative security update for Outlook Express and for Windows Mail	Security	Desktop Technologies	http://support.microsoft.com/kb/929123
931768	MS07-027: Cumulative Security Update for Internet Explorer	Security	Desktop Technologies	http://support.microsoft.com/kb/931768
933566	MS07-033: Cumulative Security Update for Internet Explorer	Security	Desktop Technologies	http://support.microsoft.com/kb/933566
937143	MS07-045: Cumulative Security Update for Internet Explorer	Security	Desktop Technologies	http://support.microsoft.com/kb/937143
938123	MS07-048: Vulnerability in Windows Gadgets could allow remote code execution	Security	Desktop Technologies	http://support.microsoft.com/kb/938123
938127	MS07-050: Vulnerability in Vector Markup Language could allow remote code execution	Security	Desktop Technologies	http://support.microsoft.com/kb/938127
939653	MS07-057: Cumulative security update for Internet Explorer	Security	Desktop Technologies	http://support.microsoft.com/kb/939653
941202	MS07-056: Security Update for Outlook Express and Windows Mail	Security	Desktop Technologies	http://support.microsoft.com/kb/941202
928090	MS07-016: Cumulative security update for Internet Explorer	Security	Internet Explorer	http://support.microsoft.com/kb/928090
941568	MS07-064: Vulnerabilities in DirectX could allow remote code execution	Security	Multimedia	http://support.microsoft.com/kb/941568
941569	MS07-068: Vulnerability in Windows Media file format could allow remote code execution	Security	Multimedia	http://support.microsoft.com/kb/941569
933729	MS07-058: Vulnerabilities in RPC could allow denial of service	Security	Networking	http://support.microsoft.com/kb/933729
941644	MS08-001: Vulnerability in TCP/IP could allow remote code execution	Security	Networking	http://support.microsoft.com/kb/941644

935807	MS07-038: Vulnerability in Windows Vista Firewall could allow information disclosure	Security	Security	http://support.microsoft.com/kb/935807
930178	MS07-021: Vulnerability in Windows CSRSS could allow remote code execution	Security	Tools	http://support.microsoft.com/kb/930178
942615	MS07-069: Cumulative security update for Internet Explorer	Security	Internet Explorer	http://support.microsoft.com/kb/942615
931213	MS07-032: Vulnerability in Windows Vista could allow information disclosure	Security	Desktop Technologies	http://support.microsoft.com/kb/931213
936782	MS07-047: Vulnerability in Windows Media Player could allow remote code execution	Security	Multimedia	http://support.microsoft.com/kb/936782
939778	MS07-053: Vulnerability in Windows Services for UNIX could allow elevation of privilege	Security	Networking	http://support.microsoft.com/kb/939778
928208	FIX: Custom applications that use the Visual Studio for Applications Visual Basic Runtime may be unable to compile macros or to run macros	Hotfix	.NET Framework	http://support.microsoft.com/kb/928208
939025	FIX: Error message when you use the Microsoft Program Maintenance Utility (Nmake.exe) in Visual Studio 2005: "U1073: The build method of FileName is not specified"	Hotfix	.NET Framework	http://support.microsoft.com/kb/939025
939783	FIX: The value of the ImeMode property automatically changes to the Off value in the .NET Framework 2.0	Hotfix	.NET Framework	http://support.microsoft.com/kb/939783
944652	Icons in administrative MMC snap-ins are displayed incorrectly on a Windows Vista-based computer that has the Windows Server 2003 Administration Tools Pack installed	Hotfix	Admin Tools	http://support.microsoft.com/kb/944652
942763	December 2007 cumulative time zone update for Microsoft Windows operating systems	Hotfix	All	http://support.microsoft.com/kb/942763
929427	The Windows Vista Application Compatibility Update	Hotfix	Applications	http://support.microsoft.com/kb/929427
932246	March 2007 Windows Vista Application Compatibility Update	Hotfix	Applications	http://support.microsoft.com/kb/932246
932593	FIX: You receive an error message when you try to install the original release version of SQL Server 2005 or SQL Server 2005 Service Pack 1 on a computer that is running Windows Vista	Hotfix	Applications	http://support.microsoft.com/kb/932593
935280	July 2007 Windows Vista Application Compatibility Update	Hotfix	Applications	http://support.microsoft.com/kb/935280
939004	After you install Adobe Encore DVD 2.0 on a Windows Vista-based computer, the Adobe Encore DVD 2.0 Library folder content is not available	Hotfix	Applications	http://support.microsoft.com/kb/939004
939677	An application that is packaged by a version of InstallShield that is earlier than InstallShield 12 cannot be installed under the system account context in Windows Vista	Hotfix	Applications	http://support.microsoft.com/kb/939677
942089	You cannot install version 2.0.3 of an Omniquad Total Security program on a Windows Vista-based computer	Hotfix	Applications	http://support.microsoft.com/kb/942089
870853	Office 2003 and 2007 Office documents open read-only in Internet Explorer	Hotfix	Base Technologies	http://support.microsoft.com/kb/870853
925272	FIX: The XML serialization may lose some optional elements in an XSD schema in the .NET Framework 2.0	Hotfix	Base Technologies	http://support.microsoft.com/kb/925272
925369	FIX: A Windows form may not work as expected when you use the Show method in a COM client application to display	Hotfix	Base Technologies	http://support.microsoft.com/kb/925369

	the form on a computer that is running the .NET Framework 2.0			
925492	FIX: Error message when you add a Web reference to a project in Visual Studio 2005: "The custom tool 'MSDiscoCodeGenerator' failed"	Hotfix	Base Technologies	http://support.microsoft.com/kb/925492
926425	FIX: Error message when you try to query data from a column of the XML data type or from a variable of the XML data type in SQL Server 2005: "An error occurred while executing batch"	Hotfix	Base Technologies	http://support.microsoft.com/kb/926425
928188	Ink programs may not work correctly on a digitizer in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/928188
928870	FIX: An exception is not handled correctly when you use a try-catch block to handle an exception from multi-threads in the .NET Framework 2.0	Hotfix	Base Technologies	http://support.microsoft.com/kb/928870
929637	Error message during Windows Vista startup if the Nero InCD program is installed and if the "Special pool" feature is enabled in the Driver Verifier utility: "Stop 00000050"	Hotfix	Base Technologies	http://support.microsoft.com/kb/929637
929777	Error message when you try to install Windows Vista on a computer that uses more than 3 GB of RAM: "STOP 0x0000000A"	Hotfix	Base Technologies	http://support.microsoft.com/kb/929777
929916	Description of the security update for the .NET Framework 2.0 for Windows Vista: July 10, 2007	Hotfix	Base Technologies	http://support.microsoft.com/kb/929916
930261	You randomly receive a "Stop 0000000xA" error in Storport.sys when you start Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/930261
930618	You cannot access files on a memory card in a networked printer's built-in memory card reader, and you receive an error message in Windows Vista or in Windows XP SP2: "\\<IP_Address>\memory_card refers to a location that is unavailable"	Hotfix	Base Technologies	http://support.microsoft.com/kb/930618
930917	An optical disc appears to be blank after you format the disc by using the Live File System component on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/930917
930979	You may receive a "Stop 0x0000007E" error message after you enable the BitLocker Drive Encryption feature in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/930979
931174	Update for the Windows Vista Customer Experience Improvement Program	Hotfix	Base Technologies	http://support.microsoft.com/kb/931174
931338	FIX: Error message when you use DEVPATH environment variables in a .NET Framework 2.0 ASP.NET Web application: "Could not load file or assembly '<AssemblyName>' or one of its dependencies"	Hotfix	Base Technologies	http://support.microsoft.com/kb/931338
931619	When you click the Safely Remove Hardware icon in Windows Vista, the device in question may not be removed as expected	Hotfix	Base Technologies	http://support.microsoft.com/kb/931619
931654	Error message when you format a disc by using the Live File System component on a Windows Vista-based computer: "Windows was unable to complete the format"	Hotfix	Base Technologies	http://support.microsoft.com/kb/931654

931674	You may be unable to use a WSD-based scanner driver to transfer scanned data in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/931674
931689	The Chkdsk.exe tool cannot detect bad clusters or bad sectors on a Windows Server 2003-based computer when the size of a compressed file is larger than 4 gigabytes (GB)	Hotfix	Base Technologies	http://support.microsoft.com/kb/931689
932045	Error message when you use a network connection to copy a large file from one Windows Vista-based computer to another Windows Vista-based computer: "The connection has been lost"	Hotfix	Base Technologies	http://support.microsoft.com/kb/932045
932303	FIX: The WMI service stops responding on a computer that is running the .NET Framework 2.0 and System Center Configuration Manager 2007	Hotfix	Base Technologies	http://support.microsoft.com/kb/932303
932394	A timer does not resume operation after a workflow is reloaded in Microsoft Windows Workflow Foundation	Hotfix	Base Technologies	http://support.microsoft.com/kb/932394
932814	You receive an error message that states that a driver was not installed because of a file copy error in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/932814
933207	You may be unable to read from DVD-R DL or DVD+R DL discs that were recorded in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/933207
933242	Windows ReadyDrive does not work in Windows Vista if the first partition of a hybrid hard disk drive has less than 32 MB of free space	Hotfix	Base Technologies	http://support.microsoft.com/kb/933242
933272	The system time lags when you restart a Windows Vista-based computer that supports High Precision Event Timer	Hotfix	Base Technologies	http://support.microsoft.com/kb/933272
933595	Error message when you try to install a hotfix on a Windows Vista-based computer in a domain: "Installer encountered an error: 0x8007177f. This machine is disabled for file encryption"	Hotfix	Base Technologies	http://support.microsoft.com/kb/933595
933649	A Web page that contains special characters in the URL may not be printed as expected on a WSD printer in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/933649
933662	When a 16-bit application passes command-line parameters to another application on a Windows Vista-based computer, the second application does not receive the command-line parameters	Hotfix	Base Technologies	http://support.microsoft.com/kb/933662
933771	Windows Explorer stops responding or the Svchost.exe process stops responding when you try to copy encrypted files to a WebDAV resource in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/933771
933876	The USN journal record contains an incorrect file name when you move a file in Windows Vista, in Windows Server 2003, or in Windows XP	Hotfix	Base Technologies	http://support.microsoft.com/kb/933876
934111	An update is available for Subsystem for UNIX-based Applications in Windows Vista that addresses daylight saving time changes in 2007	Hotfix	Base Technologies	http://support.microsoft.com/kb/934111
934202	You experience slow performance on a Windows Vista-based computer after you establish a VPN connection	Hotfix	Base Technologies	http://support.microsoft.com/kb/934202
934429	The "Allow hybrid sleep" option is intermittently missing from the Advanced Settings tab of the Power Options dialog box in	Hotfix	Base Technologies	http://support.microsoft.com/kb/934429

	Windows Vista			
934529	An update that lets you configure the location of the temp folder is available for the .NET Framework 2.0	Hotfix	Base Technologies	http://support.microsoft.com/kb/934529
934637	You may be unable to install a device on a computer that is running a non-English version of Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/934637
934839	FIX: You may receive an exception when you browse a .NET Framework 2.0 ASP.NET Web application	Hotfix	Base Technologies	http://support.microsoft.com/kb/934839
935200	Error message when an application calls the RegisterTypeLib API to register a type library in Windows Vista: "Access denied"	Hotfix	Base Technologies	http://support.microsoft.com/kb/935200
935276	When you try to install a Web Services on Devices (WSD)-based device on a Windows Vista-based computer, the installation is not completed successfully	Hotfix	Base Technologies	http://support.microsoft.com/kb/935276
935366	Access may stop responding when you open a remote database	Hotfix	Base Technologies	http://support.microsoft.com/kb/935366
935427	When you transfer a file between a Windows Vista-based client computer and a file server, Windows Vista stops responding	Hotfix	Base Technologies	http://support.microsoft.com/kb/935427
935495	The Windows System Assessment tool displays incorrect processor information about an Intel Ultra Mobile Platform-based computer that is running Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/935495
935509	A software update is available for versions of Windows Vista that include the Windows BitLocker Drive Encryption feature	Hotfix	Base Technologies	http://support.microsoft.com/kb/935509
935553	The WMI Provider Host program may stop responding when you run a program that uses the Offline Files WMI Provider on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/935553
935606	Backup system files are not restored as expected when you use third-party system restore applications on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/935606
935663	Changes to an offline file are not saved to the server when files are synchronized in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/935663
935755	You cannot access a shared network resource that is hosted by a Windows Vista-based computer if the SMB request packet exceeds the MTU size	Hotfix	Base Technologies	http://support.microsoft.com/kb/935755
936205	Files are corrupted if the computer switches to suspend mode while you synchronize offline files in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/936205
936344	FIX: A significant delay may occur when you try to debug an ASP.NET-connected application in Visual Studio 2005	Hotfix	Base Technologies	http://support.microsoft.com/kb/936344
936613	The performance of gaming graphics may be less than you expect, based on the Windows Experience Index score in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/936613
936707	FIX: A .NET Framework 2.0 managed application that has an Authenticode signature takes longer than usual to start	Hotfix	Base Technologies	http://support.microsoft.com/kb/936707
936756	Error message in Windows Vista when you use Registry Editor to load a registry hive file that is on a shared network resource: "Cannot load \\HivePath\filename: Access is	Hotfix	Base Technologies	http://support.microsoft.com/kb/936756

	denied"			
936983	FIX: The call to the System.Transactions.CommittableTransaction.Commit method may always be blocked in a .NET Framework 2.0-based application	Hotfix	Base Technologies	http://support.microsoft.com/kb/936983
937082	You cannot configure the maximum number of concurrent SMB requests that are sent to a Windows Vista-based file server	Hotfix	Base Technologies	http://support.microsoft.com/kb/937082
937187	Error message when you try to install a new hardware device in Windows Vista: "Windows encountered a problem installing the driver software for your device"	Hotfix	Base Technologies	http://support.microsoft.com/kb/937187
937228	A Windows Vista-based computer is frequently unresponsive for 30 seconds if the Documents folder is redirected to a shared folder, and the folder is made available offline	Hotfix	Base Technologies	http://support.microsoft.com/kb/937228
937381	Error message when you try to shut down Windows Vista: "The instruction at 0x77f05148 referenced memory at 0x96ac3ce4. The memory could not be written"	Hotfix	Base Technologies	http://support.microsoft.com/kb/937381
937426	You are prompted to activate Windows Vista after you start the system in diagnostic startup mode	Hotfix	Base Technologies	http://support.microsoft.com/kb/937426
938091	After you resolve an offline files synchronization conflict by using the "Keep both versions" option, the conflict occurs again on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/938091
938092	You may be unable to delete the cache of offline files from the client-side caching (CSC) cache on an offline Windows Vista-based client computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/938092
938475	Error message when you use a Windows Vista-based computer to try to access files on a Windows Vista-based file server: "<DriveLetter>:\ is not accessible. Insufficient system resources exist to complete the API"	Hotfix	Base Technologies	http://support.microsoft.com/kb/938475
938716	You may be unable to save a file in a Microsoft Office program on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/938716
938758	FIX: The Unload method may stop responding (hang) in a Windows Workflow Foundation project	Hotfix	Base Technologies	http://support.microsoft.com/kb/938758
939008	Error message when you start a Windows Vista-based computer on which Windows ReadyBoost is running: "STOP: 0x0000006F SESSION3 INITIALIZATION FAILED"	Hotfix	Base Technologies	http://support.microsoft.com/kb/939008
939165	An update is available for the Windows Vista Customer Experience Improvement Program	Hotfix	Base Technologies	http://support.microsoft.com/kb/939165
939423	The Windows Aero feature may be disabled when you have a graphics card that uses system memory to augment dedicated video memory on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/939423
939720	Error message when you start a Windows Vista-based computer: "STOP: 0x00000050 PAGE_FAULT_IN_NONPAGED_AREA"	Hotfix	Base Technologies	http://support.microsoft.com/kb/939720
939750	After you encrypt resources by using the PACE Anti-Piracy InterLok system on a Windows Vista-based computer, some	Hotfix	Base Technologies	http://support.microsoft.com/kb/939750

	applications may work incorrectly			
940199	Error message when you try to install a new hardware device on a Windows Vista-based computer: "Windows encountered a problem installing the driver software for your device"	Hotfix	Base Technologies	http://support.microsoft.com/kb/940199
940526	Audit event ID 560 incorrectly displays the name of a deleted file in an 8.3 file name format if you delete the file at a command prompt in Windows Server 2003, in Windows XP, or in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/940526
940716	The time is incorrect by one hour when you use the System.TimeZone property in Windows Vista in the Jerusalem time zone during daylight saving time	Hotfix	Base Technologies	http://support.microsoft.com/kb/940716
940856	You experience a 45-second delay when you try to start the Windows Remote Assistance component in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/940856
941020	You receive occasional Stop errors after you install a driver that manages on-board flash memory on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/941020
941021	Error message when you repeatedly restart a Windows Vista-based computer: "Stop 0x0000007E"	Hotfix	Base Technologies	http://support.microsoft.com/kb/941021
941025	When you press a keyboard button to start a program, there is a delay before the program starts on a portable computer that is running Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/941025
941029	FIX: You can still interact with Internet Explorer 7 when a Visual Basic 6.0 modal form is displayed from an ActiveX control in Internet Explorer 7	Hotfix	Base Technologies	http://support.microsoft.com/kb/941029
941067	All the contents are pinned and are filled in a redirected folder when the "Folder Redirection" policy setting is applied to a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/941067
941137	The EQUAL SIGN key does not work on a USB PC98 keyboard that is connected to a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/941137
941298	Error message when you try to access a WebDav shared file from a Windows Vista-based computer: "System error 1397 has occurred. Mutual Authentication failed"	Hotfix	Base Technologies	http://support.microsoft.com/kb/941298
941311	An Ultra DMA Mode 5 transfer mode may be listed as an Ultra DMA Mode 2 transfer mode in Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/941311
941386	FIX: Error message when you run an ASP.NET 2.0 Web application that is built on the .NET Framework 2.0 after you install the MS07-040 security update: "Type 'System.Web.HttpHeaderCollection' is not marked as serializable"	Hotfix	Base Technologies	http://support.microsoft.com/kb/941386
941492	Stop error message when the computer resumes from hibernation in Windows Vista: "STOP 0x0000000A"	Hotfix	Base Technologies	http://support.microsoft.com/kb/941492
941794	You receive an access denied message on a Windows Vista-based computer when you click offline files that are not synchronized with the file server	Hotfix	Base Technologies	http://support.microsoft.com/kb/941794
941853	You are prompted to type your user credentials when you use Internet Explorer to access files on a Web Distributed	Hotfix	Base Technologies	http://support.microsoft.com/kb/941853

	Authoring and Versioning (WebDav) site on a Windows Vista-based computer			
941890	On a Windows Vista-based computer, you are prompted to enter your user credentials when you use Internet Explorer to access files on a WebDAV site	Hotfix	Base Technologies	http://support.microsoft.com/kb/941890
942365	On a Windows Vista-based computer, you cannot view the pop-up menu when you try to access a DVD-VR format DVD that was created by using a consumer electronics DVD recorder	Hotfix	Base Technologies	http://support.microsoft.com/kb/942365
942392	On a Windows Vista-based computer, you cannot access certain directories on a Web Distributed Authoring and Versioning (WebDAV) server	Hotfix	Base Technologies	http://support.microsoft.com/kb/942392
942524	Stop error message when you put a Windows Vista-based computer in hibernation: "STOP: 0x000000A0 (0x00000009, 0xc0000001, 0x00000001, 0x00000000) INTERNAL_POWER_ERROR (a0)"	Hotfix	Base Technologies	http://support.microsoft.com/kb/942524
942682	Error message when you try to use the Computer Management tool on a Windows Vista-based computer that has a USB card reader or a built-in card reader: "Windows - No Disk"	Hotfix	Base Technologies	http://support.microsoft.com/kb/942682
942845	You cannot delete or rename the Offline Files when you work offline on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/942845
942894	An update that addresses the change to daylight saving time in 2007 is available for Windows Server 2003 R2-based computers and for Windows Vista-based computers that are running Subsystem for UNIX-based Applications	Hotfix	Base Technologies	http://support.microsoft.com/kb/942894
943302	December 2007 Windows Vista Application Compatibility Update	Hotfix	Base Technologies	http://support.microsoft.com/kb/943302
943412	FIX: You may experience delays when an operating system shuts down if the computer is running a managed service together with the .NET Framework 2.0	Hotfix	Base Technologies	http://support.microsoft.com/kb/943412
943451	You cannot access a network share on a Unisys MCP server from a Windows Vista-based computer by typing a UNC path that does not include the share name	Hotfix	Base Technologies	http://support.microsoft.com/kb/943451
944141	FIX: You receive an HTTP 400 error message the first time that you access an ASP.NET page in an application that is built on the .NET Framework 2.0 and hosted on IIS 7.0	Hotfix	Base Technologies	http://support.microsoft.com/kb/944141
945145	On a Windows Vista-based computer, you may be prompted for your passport credentials every time that you try to access documents on a WebDAV site from a new workspace	Hotfix	Base Technologies	http://support.microsoft.com/kb/945145
945435	You experience a long delay when you try to access to a WebDAV share for the first time on a Windows Vista-based computer	Hotfix	Base Technologies	http://support.microsoft.com/kb/945435
945783	Error message when you try to install an earlier operating system in Windows Preinstallation Environment 2.0: "<Task Sequence Name> has failed with the error code (0x800004005)"	Hotfix	Base Technologies	http://support.microsoft.com/kb/945783

928365	Description of the security update for the .NET Framework 2.0 for Windows Server 2003, Windows XP, and Windows 2000: July 10, 2007	Hotfix	Computer Management	http://support.microsoft.com/kb/928365
930597	Some registry-based policy settings are lost and error messages are logged in the Application log on a Windows XP-based computer or on a Windows Vista-based computer	Hotfix	Computer Management	http://support.microsoft.com/kb/930597
933778	A program that uses Windows HotStart does not start as quickly as expected after a Windows Vista-based computer wakes up from sleep	Hotfix	Computer Management	http://support.microsoft.com/kb/933778
934907	Error results when you run the "gpupdate /force" command on a computer that is running Windows Vista: "User policy could not be updated successfully"	Hotfix	Computer Management	http://support.microsoft.com/kb/934907
935977	A string appears as a question mark if an application uses the ReadEventLogA function to read the string from the event log in Windows Vista	Hotfix	Computer Management	http://support.microsoft.com/kb/935977
936162	Windows Management Instrumentation may not correctly report information about certain USB disk devices	Hotfix	Computer Management	http://support.microsoft.com/kb/936162
937085	The Perfmon.exe process may continuously start and stop when you click the "Resource Monitor" button on a Windows Vista-based computer	Hotfix	Computer Management	http://support.microsoft.com/kb/937085
937630	Error message in Windows Vista when you use Event Viewer to try to connect to another computer: "There are no more endpoints available from the endpoint mapper"	Hotfix	Computer Management	http://support.microsoft.com/kb/937630
937658	When a program calls Task Scheduler 1.0 APIs to display the general page property of a task, the check boxes on the task page overlap in Windows Vista	Hotfix	Computer Management	http://support.microsoft.com/kb/937658
936021	Description of the security update for Microsoft XML Core Services 3.0: August 14, 2007	Hotfix	Data Access Components	http://support.microsoft.com/kb/936021
933251	FIX: Internet Explorer may use a high percentage of the CPU resources when error code 404 is returned	Hotfix	Data Services	http://support.microsoft.com/kb/933251
937248	Description of the Jet 4.0 Database Engine update rollup for the release version of Windows Vista: May 11, 2007	Hotfix	Data Services	http://support.microsoft.com/kb/937248
941179	FIX: The MSXML 6.0 old parser does not convert line feeds to spaces as expected	Hotfix	Data Services	http://support.microsoft.com/kb/941179
928439	Windows PowerShell 1.0 Installation Package for Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/928439
929735	You may not find the file that you want when you use Advanced Search to search by date and you use a non-Gregorian calendar format in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/929735
930955	Moveuser.exe is incompatible with Windows Vista and is replaced by the new Win32_UserProfile WMI functionality	Hotfix	Desktop Shell	http://support.microsoft.com/kb/930955
931969	The Microsoft Software License Terms appear in the incorrect language when you try to view them in a program in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/931969
932404	A folder does not open when you click the folder in the All Programs list in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/932404

932406	The Windows desktop may stop updating correctly after a Windows Vista-based computer has been running for an extended period of time	Hotfix	Desktop Shell	http://support.microsoft.com/kb/932406
933360	August 2007 cumulative time zone update for Microsoft Windows operating systems	Hotfix	Desktop Shell	http://support.microsoft.com/kb/933360
934056	Error message when you try to print a picture from the Search window in Windows Vista: "Windows can't find this picture"	Hotfix	Desktop Shell	http://support.microsoft.com/kb/934056
935415	The original file is overwritten when you select a file name from the history list in the Save As dialog box in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/935415
935855	Error message when you try to start Internet Explorer 7 in Windows Vista: "You must be an administrator to open Internet Explorer on this desktop"	Hotfix	Desktop Shell	http://support.microsoft.com/kb/935855
936054	Error message when you try to move a folder to a mount point folder that is located on the same disk in Windows Vista: "Access Denied"	Hotfix	Desktop Shell	http://support.microsoft.com/kb/936054
936460	Error message when a domain user tries to change the password of a client computer that is running the German version of Windows Vista: "Status: C000006C/C000006C"	Hotfix	Desktop Shell	http://support.microsoft.com/kb/936460
937230	An incorrect cell is selected when you click to select a cell in a ListView common control in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/937230
938062	A red "X" appears in the icon for a mapped network drive in Windows Vista, even though you can successfully access the drive	Hotfix	Desktop Shell	http://support.microsoft.com/kb/938062
938838	Windows Vista displays the incorrect dedicated video memory size for certain display adapters	Hotfix	Desktop Shell	http://support.microsoft.com/kb/938838
938885	"Performance Information and Tools" lists the DirectX version as "DirectX 9.0 or better" even though the computer is running DirectX 10 in Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/938885
938906	Error message when you run the NetProj.exe utility on a Windows Vista-based computer to connect to a network projector: "The network projector is unable to display your desktop at the current screen resolution."	Hotfix	Desktop Shell	http://support.microsoft.com/kb/938906
938977	A hotfix is available to add a new time zone in Venezuela (GMT-4:30) for the year 2007 in Windows XP, Windows Server 2003, and Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/938977
939021	The link for the Documents folder may be redirected to the Desktop folder on a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/939021
940427	A hotfix is available to change the daylight saving time for the (GMT+02:00) Cairo time zone in the year 2007 for Windows XP, Windows Server 2003, and Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/940427
940508	In Windows Vista, a USB device may lose data if you right-click the device in Windows Explorer and then click Eject	Hotfix	Desktop Shell	http://support.microsoft.com/kb/940508
940894	Two identical Catalan entries are listed for the language selection on the first page of the Out Of Box Experience (OOBE) Wizard on a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/940894

941436	Redundant Prf<x>.tmp files are generated after a user who uses roaming user profile logs off from a Windows Vista-based client computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/941436
941673	After you add the CopyFileBufferedSynchronousIo registry entry in Windows Vista, a file copies only slightly more quickly when you use Windows Explorer to copy the file to another computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/941673
942220	Folders on a Windows Vista-based client computer are not redirected as expected in a Windows Server 2003 domain	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942220
942435	Error message when you try to copy files from a Windows Vista-based computer to another computer by using Windows Explorer: "Out of memory There is not enough memory to complete this operation"	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942435
942488	On a Windows Vista-based computer, the language settings and the keyboard settings are displayed incorrectly in the "Country or region" page of the OOBE Wizard	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942488
942493	You are prompted to provide your administrative credentials when you try to open a Systems Management Server (SMS)-based item in Control Panel on a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942493
942543	You cannot view certificate information in Windows Internet Explorer 7 or in Certificate Manager if you use an unattended answer file to install Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942543
942869	The read speed of the DVD-R/RW drive is much slower than the expected speed on a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/942869
943000	A hotfix is available to update the "(GMT-3:00) Brasilia" time zone and the "(GMT-4:00) Manaus" time zone for 2007 through 2008 in Windows XP, Windows Server 2003, and Windows Vista	Hotfix	Desktop Shell	http://support.microsoft.com/kb/943000
943440	You cannot unlock a Windows Vista-based computer after you log on to an Active Directory domain	Hotfix	Desktop Shell	http://support.microsoft.com/kb/943440
943632	The volume label of the storage media is not updated and the AutoPlay dialog box is not displayed after you insert the storage media into a removable drive on a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/943632
943805	An item that you copy to a Windows Vista desktop does not appear on the desktop even though it appears in the Desktop folder	Hotfix	Desktop Shell	http://support.microsoft.com/kb/943805
944242	A Windows Explorer window appears instead of the AutoPlay dialog box when you connect a removable storage device to a Windows Vista-based computer	Hotfix	Desktop Shell	http://support.microsoft.com/kb/944242
944297	When you insert a DVD-VR-formatted disc into the DVD drive on a Windows Vista-based computer, a Windows Explorer window appears instead of the AutoPlay dialog box	Hotfix	Desktop Shell	http://support.microsoft.com/kb/944297
945122	User profiles are unexpectedly deleted after you configure the "Delete user profiles older than a specified number of days on system restart" Group Policy setting on a Windows Vista-	Hotfix	Desktop Shell	http://support.microsoft.com/kb/945122

	based computer			
843289	Proxy server settings are not set correctly in Internet Explorer after you download a proxy script that uses chunk encoding	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/843289
884534	FIX: Internet Explorer may stop responding when you set the "display" style for the DIV HTML element to "none"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/884534
889333	Print queue shows incorrect number of pages when you print a Web page in Internet Explorer 6 or Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/889333
905866	Description of the definition updates for Windows Mail	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/905866
906473	FIX: A new window always opens when you click a link that has a specified target in a WebBrowser control-based application	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/906473
925255	Power consumption increases when you run a WPF-based program that runs an animation in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/925255
925271	A Toshiba Tablet PC that is running Windows XP with Service Pack 2 stops responding when you try to run a command	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/925271
925832	FIX: Error message when you browse a file that uses a custom MIME type in Internet Explorer 6 and Internet Explorer 7: "The file you are downloading cannot be opened by the default program"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/925832
928089	The computer may respond very slowly as the Phishing Filter evaluates Web page contents in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/928089
928387	Internet Explorer stops responding after you click a link on a Web site	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/928387
928494	InfoPath 2003 crashes when you click inside the Date Picker control on a form and then press the LEFT ARROW key	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/928494
929763	Version 5.00 of the Mongolian Baiti font may be displayed incorrectly in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/929763
929798	Windows Internet Explorer 7 may not correctly recognize the zone to which a network resource belongs when you access the resource by using a mapped drive in Windows Vista or in Windows XP with Service Pack 2	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/929798
930627	The private data of the DEVMODE data structure may be corrupted when you use raw mode to print a document in a 32-bit application on a computer that is running a 64-bit version of Windows	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/930627
931195	FIX: Error message when an application tries to use Internet Explorer 7 to retrieve a proxy configuration script: "1003 ERROR_CAN_NOT_COMPLETE"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/931195
932044	A Web site cannot set a cookie if the Domain attribute is in uppercase characters and has an odd number of characters in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932044
932243	The updates that you apply to a Multilingual User Interface (MUI) Language Pack are lost when you restart a computer that is running Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932243

932471	FIX: Error message when you try to open or to create a protected XPS document by using the XPS viewer that is included with the .NET Framework 3.0: "Cannot open this document because your permissions have expired"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932471
932562	When you try to open an FTP site by using a Web proxy in Windows Internet Explorer 7, you cannot open the FTP Web site	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932562
932652	A Windows SideShow-compatible device or the related Gadgets do not work reliably in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932652
932653	The pointer for a high performance mouse does not move correctly in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932653
932866	FIX: The right edge or the lower edge of an exclusionary clipping region can be drawn in a GDI+ application on a computer that is running Windows XP, Windows Server 2003, or Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932866
932988	Files from a Canon EOD 1D or 1DS camera may be corrupted after you use Windows Photo Gallery, Windows Live Photo Gallery, or Windows Explorer to edit the file metadata in Windows Vista or in Windows XP SP2	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/932988
933006	A Web page is blank in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933006
933014	FIX: An application uses the Favorites folder of Internet Explorer 7 as the root directory when the application calls the "DoOrganizeFavDlg" function	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933014
933105	Relative file: URIs of the form "/<DriveLetter>:/<path>/<FileName>" do not resolve correctly in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933105
933256	Error message when you try to print an Office document that appears in a frame in Internet Explorer 7: "The document in this frame cannot be printed as laid out"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933256
933288	Touch input stops working when two users are logged on at the same time in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933288
933590	The Flight Simulator X game display flickers and become corrupted on a Windows Vista-based computer that is connected to more than one monitor	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933590
933612	A mail program cannot connect to an Exchange Server 2007 server by using SSL over SMTP port 587	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933612
933942	Error message when you restart a Windows Vista-based computer: "Windows Calendar has stopped working"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/933942
934008	The Windows Vista desktop appears black after you enable the "Hide and disable all items on the desktop" policy setting or the "Disable all items" policy setting	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934008
934014	FIX: Windows Internet Explorer 7 does not download an ActiveX control that is referenced in a CODEBASE attribute when you open a Web page that contains the OBJECT element and the CLSID attribute is missing	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934014
934275	You cannot watch streaming video or download a file after you install Windows Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934275

934282	Warning message when you upgrade Adobe Flash Player in Internet Explorer 7 on a Windows Vista-based computer: "This program will open outside of Protected mode"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934282
934376	You may be unable to use an FTP application to upload a file to a remote server on a computer that has Internet Explorer 7 installed	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934376
934888	Some Korean characters do not appear correctly in the Tablet PC Input Panel on a Windows Vista-based Tablet PC	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/934888
935544	FIX: Windows Internet Explorer 7 may crash when you use it to visit a Web site	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935544
935560	When you use Remote Desktop Connection to connect to a terminal server, PNG images do not appear in Internet Explorer 7 during that RDP session	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935560
935575	FIX: When you try to use Windows Internet Explorer 7 to display a Scalable Vector Graphics (SVG) file on a local computer, Internet Explorer 7 cannot display the SVG file	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935575
935579	FIX: When you access an external document by using a link in an inline frame in Internet Explorer 7, the value of the document object is returned as "undefined"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935579
935607	The CopyImage function may fail in Windows Vista if you use this function to copy a large bitmap	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935607
935729	You cannot open a Web page by using Windows Internet Explorer 7 if the URL of the Web page contains non-ASCII characters	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935729
935775	You receive a script error in Internet Explorer 7 when you include certain characters to specify a window name parameter in the "Window.Open" method	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935775
935776	FIX: The InternetQueryOptionW function returns a value of true when you use the INTERNET_OPTION_URL option flag as the second parameter in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935776
935777	FIX: The buffer size of the InternetQueryOptionW function is half of its actual size if you use INTERNET_OPTION_URL as the second parameter in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935777
935778	Session cookies may be lost after you open a file that has a local file path or a UNC file path in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935778
935779	FIX: An Internet shortcut does not display the correct icon in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935779
935786	You cannot add a Web site to the "Trusted sites" zone when Internet Explorer 7 is installed even when the user account belongs to the Administrators group	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935786
935851	FIX: Internet Explorer 7 in Windows Vista starts to render a Web page before the handling of the "onload" event has finished	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935851
935903	Windows Internet Explorer 7 stops responding if a modal dialog box is open when you try to redraw a Windows Internet Explorer 7 window	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935903

935936	You receive a Stop error message on a Windows Vista-based computer: "Stop 0x00000001 (0x00000000, 0x7FFDC000, 0X0000FFFF, 0X00000000)"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/935936
936060	An incorrect character is displayed when you input a character in an ANSI-based application on a computer that is running Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936060
936176	Underlined Japanese characters print without the underline in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936176
936610	FIX: Error message when you run an application that starts new processes from an impersonated context on a computer that has Windows Internet Explorer 7 installed: "Access is denied"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936610
936611	Internet Explorer 7 incorrectly recognizes an intranet Web site as an Internet Web site	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936611
936710	When a DirectX 10 application runs on a Windows Vista-based computer that has multiple graphics cards, the computer does not use the secondary graphics card	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936710
936775	You cannot set the maximum number of nested windows in Windows Vista or in Windows Server 2003	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936775
936881	Error message when you open an Internet shortcut file on a computer that has Internet Explorer 7 installed: "Problem with Shortcut The target '' of this Internet Shortcut is not valid"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936881
936882	FIX: An access violation may occur and you may receive an error message when you open a Web page that uses SSL in Internet Explorer 6	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936882
936883	FIX: The "Size (bytes)" field displays the file size as Damaged when you view the file properties for an ActiveX control in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936883
936904	Error message when you open a Web page in Windows Internet Explorer 7: "Internet Explorer has encountered a problem and needs to close"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936904
936949	Focus is not set to the Web page if you minimize the browser window and then maximize it from the taskbar in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936949
936950	FIX: Windows Internet Explorer 7 may exit unexpectedly when an application calls the GetAcceptLanguages function on a computer that is running Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936950
936953	FIX: The item may not be selected when you use the windowless SELECT control to create a list in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936953
936955	FIX: Internet Explorer 6 and Internet Explorer 7 may not find the text even though the Web page contains the text	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936955
937053	When you copy text from a Rich Text box in InfoPath on a computer that has Internet Explorer 7 installed, the pasted text unexpectedly appears inside a table cell	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/937053

937229	When you capture a screenshot on a Windows Vista-based computer, the screenshot unexpectedly includes the mouse pointer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/937229
938637	In Internet Explorer 7 on a Windows Vista-based computer, you cannot enter user-defined words that are added to the Microsoft IME user dictionary	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938637
938660	Performance for a WPF-based program that uses the layered windows feature may be less than expected in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938660
938724	An RTF document may be corrupted when it is opened in WordPad on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938724
938725	Battery power may drain more quickly than you expect on a Windows Vista-based portable computer that has a USB SideShow-compatible device attached	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938725
939805	The logon screen is not available after you remove a second monitor when Windows Vista is asleep or in hibernation	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939805
939913	After you append some characters in an HTML page text box in Internet Explorer 7, the original characters in the text box are replaced with the newly typed characters	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939913
939940	A site does not run in the expected security zone in Internet Explorer 7 if the site address in the security zone uses a wildcard character	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939940
939941	Problems may occur when you try to use POST method or the GET method to pass Form data in a Web page in Internet Explorer 7 or in Internet Explorer 6	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939941
939944	The text size setting that you specify is not applied to all Internet Explorer 7 windows that you open on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939944
939946	When you use Internet Explorer 7 to browse a Web page, the state of the "Edit with <HTML editor>" command on the File menu may be inconsistent with the state of the "Edit with <HTML editor>" command on the Page menu	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939946
940105	Virtual address space usage in Windows game development	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/940105
940145	The performance of a computer that is running Windows Vista may decrease as you run an application that calls the StretchBlt function	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/940145
941000	On a computer that has Windows Internet Explorer 7 installed, the security zone of the network drive that you map by using the subst command appears as "Internet"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941000
941001	The "Intranet Sites: Include all local (intranet) sites not listed in other zones" policy setting does not function as expected in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941001
941090	Messages may be stuck in the Outbox when you use Windows Mail on a computer that is running Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941090
941158	After Internet Explorer Maintenance Group Policy settings are configured in a domain, a 20-second delay occurs when you log on to the domain from a client computer that has Internet	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941158

	Explorer 7 installed			
941277	The wrong time zone may be applied after you select a time zone on a Windows Vista-based computer that has the Croatian Language Pack installed	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941277
941938	After you use the Internet Explorer Customization Wizard to remove the default elements of some features in Internet Explorer 7, these elements still exist in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941938
942171	The content color does not appear as expected when you view a Web page that uses an ICM profile for the ICMFilter filter in Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942171
942172	When you open a Web page by typing a File URI in the Windows Internet Explorer 7 Address bar on a Windows Vista-based computer, the query string disappears after the Web page opens	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942172
942173	Error message when you try to move or resize a window on a computer that has Windows Internet Explorer 7 installed: "An error has occurred in the script on this page"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942173
942174	The translucent layers intermittently turn gray when you browse a Web page that contains translucent layers by using Internet Explorer 7	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942174
942198	A user who does not have administrative credentials cannot install an ActiveX control when the CoGetClassObjectFromURL function is used on a Windows Vista-based computer, even if ActiveX Installer Service is enabled	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942198
942642	Issues that you may experience when you use the Chinese Traditional DaYi (version 6.0) Input Method Editor (IME) or the Chinese Traditional Array (version 6.0) IME on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942642
942710	The Address bar is displayed unexpectedly when you use Internet Explorer 7 to browse a Web page that you developed	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942710
942836	Stop error message when you try to print content that includes a bitmap on a Windows Vista-based computer: "Stop 0x00000001"	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942836
942917	The Direct3D (D3D) application stops rendering graphics on a Windows Vista-based computer when you switch from integrated graphics to discrete graphics	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/942917
943112	On a Windows Vista-based computer, the BeforeNavigate2 event is not triggered as expected when you move to a non-standard link	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943112
943242	MIDI notes are played in the wrong order when you perform a capture operation on a MIDI audio device in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943242
943245	When you use Internet Explorer 7 to visit a Web page that contains IFRAME elements, the contents of an edited IFRAME element are not rendered correctly	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943245

943253	You notice timing jitter and clock drift when you perform an editing operation or a playback operation on a MIDI audio device in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943253
943397	The "Turn off display" option does not work correctly on a Tablet PC that is running Windows Vista if you set a programmable button that is associated with the "Press and hold" list	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943397
943411	Microsoft Security Advisory: Update to improve Windows Sidebar Protection	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943411
943510	A memory leak occurs in the Msctf.dll component when you use a WebBrowser control application in Windows XP, in Windows Server 2003, or in Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943510
943544	The date displays incorrectly in the Windows Calendar Sidebar gadget on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943544
943601	On a Windows Vista-based computer, you may notice that some right-to-left characters are displayed incorrectly when they are used with Left-to-Right Override (LRO) and POP Directional Format (PDF) control characters	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/943601
944023	An update package for the Japanese postal code dictionary in Japanese Input Method Editor is now available for Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/944023
944397	The exception handler may not catch an exception in Internet Explorer 7 or in Internet Explorer 6 when you view a Web page that throws an exception from a function that is called through the expando property	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/944397
944515	An application returns incorrect values for the conversion mode and for the sentence mode of an Input Method Editor (IME) on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/944515
944520	After you reapply Internet Explorer Maintenance Group Policy settings on a computer that has Internet Explorer 7 installed, a pop-up blocker exception site that you manually added is missing	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/944520
945007	An Internet Explorer Automatic Component Activation (IE ACA) update is available to disable the "Click to activate" behavior	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/945007
945149	Graphics performance can be improved in certain multiple-GPU scenarios on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/945149
922498	FIX: Error message when you use an IEEE 1394-based scanner on a computer that is running Windows XP 64-bit, Windows Server 2003, or Windows Vista: 0x0000000A or 0x000000BE	Hotfix	Drivers	http://support.microsoft.com/kb/922498
925528	Stop errors occur on a Windows-based computer that has 2GB or more of RAM and is using an NVIDIA nForce USB controller	Hotfix	Drivers	http://support.microsoft.com/kb/925528
928135	A Windows Vista-based computer stops responding when you resume the computer from hibernation	Hotfix	Drivers	http://support.microsoft.com/kb/928135
928631	A USB device may no longer work correctly after Windows	Hotfix	Drivers	http://support.microsoft.com/kb/928631

	Vista resumes from sleep or from hibernation			
929478	After you use the Safely Remove Hardware option to remove a built-in optical drive from a portable Windows Vista-based computer, you may be unable to reconnect the drive	Hotfix	Drivers	http://support.microsoft.com/kb/929478
929550	When you connect a PCI ExpressCard device to a portable Windows Vista-based computer, the device may not work correctly	Hotfix	Drivers	http://support.microsoft.com/kb/929550
929577	A Bluetooth device may no longer work correctly when you wake a Windows Vista-based computer from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/929577
929685	A high definition audio device may no longer work after you resume Windows Vista from hibernation or from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/929685
929734	You may experience problems after you resume a Windows Vista-based computer from sleep or from hibernation	Hotfix	Drivers	http://support.microsoft.com/kb/929734
930495	An IEEE 1394 device is no longer available when you wake a Windows Vista-based computer from sleep or after you reconnect the device	Hotfix	Drivers	http://support.microsoft.com/kb/930495
930568	Error message when you try to put a Windows Vista-based computer to sleep or into hibernation: "STOP 0x000000FE BUGCODE_USB_DRIVER"	Hotfix	Drivers	http://support.microsoft.com/kb/930568
930570	Error message in the Usbhub.sys process when you wake a Windows Vista-based computer from sleep or from hibernation: "STOP 0x00000044"	Hotfix	Drivers	http://support.microsoft.com/kb/930570
930819	Windows Image Acquisition imaging software may stop responding in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/930819
932539	The screen may go blank when you try to upgrade the video driver on a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/932539
933262	Some USB audio devices and some USB audio TV tuners do not work correctly together with a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/933262
933433	Recording quality is poor when you use a USB microphone on a Windows Vista-based computer that has 4 GB of RAM or more	Hotfix	Drivers	http://support.microsoft.com/kb/933433
933442	A USB composite device does not work after you disable and then enable the device in Device Manager on a computer that is running Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/933442
933454	Changes to a printer's device configuration are not applied until the computer restarts or the Print Spooler service restarts in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/933454
933607	UMDF User-mode drivers that use the Windows SideShow class extension return errors when you process commands asynchronously	Hotfix	Drivers	http://support.microsoft.com/kb/933607
933824	The Safely Remove Hardware feature and the Windows Explorer "Eject" command do not work correctly with an Apple iPod that is connected to a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/933824
933847	Availability of the Windows Vista Secure Digital (SD) rollup package	Hotfix	Drivers	http://support.microsoft.com/kb/933847

934237	A high definition audio device may no longer work after you resume Windows Vista from hibernation or from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/934237
934314	Performance is slower than you expect when you read from or write to an IEEE 1394 hard disk that uses a VIA Technologies 1394 host controller in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/934314
934374	Error message when you connect a portable Windows Vista-based computer to a docking station: "STOP: 0x000000fe"	Hotfix	Drivers	http://support.microsoft.com/kb/934374
934455	A "Web Services on Devices"-based printer appears as Offline after you wake a Windows Vista-based computer from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/934455
934633	When you connect a USB multifunction printer device to a Windows Vista-based computer, a second instance of the printer object is created, and the first instance no longer works	Hotfix	Drivers	http://support.microsoft.com/kb/934633
934796	Error message on a Windows Vista-based computer that is running a USB composite device: "STOP 0x000000FE"	Hotfix	Drivers	http://support.microsoft.com/kb/934796
935782	A USB device takes a long time to resume from "selective suspend" mode on a Windows Vista-based computer that uses UHCI USB controllers	Hotfix	Drivers	http://support.microsoft.com/kb/935782
935783	When you resume a Windows Vista-based computer from sleep, you may experience unexpected behavior from a USB device	Hotfix	Drivers	http://support.microsoft.com/kb/935783
936150	Error message when you wake Windows Vista from sleep: "STOP: 0x000000B8"	Hotfix	Drivers	http://support.microsoft.com/kb/936150
936515	You do not receive notification when the USB bus is overloaded on a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/936515
937018	A document that contains vertical and non-vertical fonts does not print correctly on a PostScript printer in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/937018
937077	A high definition audio device may no longer work after you resume Windows Vista from hibernation or from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/937077
937454	An external USB storage device may not appear in the Safely Remove Hardware list in the notification area in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/937454
937500	A Windows Vista-based computer that uses a PCI-E graphics device may stop responding when you wake the computer from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/937500
938101	A WSD scanner may not retrieve an image in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/938101
938636	Message when you use the error-checking tool in Windows Vista to scan a Secure Digital card for errors: "Some problems were found and fixed"	Hotfix	Drivers	http://support.microsoft.com/kb/938636
939772	Some Secure Digital (SD) cards may not be recognized in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/939772
940059	Severe video degradation and a Stop error may occur on a Windows Vista-based computer when you connect a USB Webcam	Hotfix	Drivers	http://support.microsoft.com/kb/940059

941507	Stop error message when you start a portable Windows Vista-based computer that has the lid closed: "STOP: 0x0000000A"	Hotfix	Drivers	http://support.microsoft.com/kb/941507
941858	You receive a Stop error message when you put a Windows Vista-based computer to sleep or into hibernation, or when you resume the computer from sleep or from hibernation: "0x0000009F DRIVER_POWER_STATE_FAILURE"	Hotfix	Drivers	http://support.microsoft.com/kb/941858
941996	A USB device may not work when you start a Windows Vista-based computer or when you wake the computer from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/941996
941997	A Bluetooth device no longer works correctly, and you receive a Code 43 error in Device Manager when you wake a Windows Vista-based computer from sleep	Hotfix	Drivers	http://support.microsoft.com/kb/941997
942693	Windows Vista-based computer may stop responding when you install or uninstall some update packages for a USB HID component and then restart the computer	Hotfix	Drivers	http://support.microsoft.com/kb/942693
942732	An exclamation mark (!) may appear next to a USB device in Device Manager after you resume a Windows Vista-based portable computer from standby (S3)	Hotfix	Drivers	http://support.microsoft.com/kb/942732
943169	You cannot apply the hotfix that is described in Microsoft Knowledge Base article 935276 on a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/943169
943336	When you use a Bluetooth printer to print multiple documents on a Windows Vista-based computer, the second print job and all successive print jobs may fail	Hotfix	Drivers	http://support.microsoft.com/kb/943336
943599	The audio from a USB speaker is distorted after you connect an additional USB device to a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/943599
944020	The file transfer from the attached devices to the system internal hard disk cannot be completed on a Windows Vista-based computer	Hotfix	Drivers	http://support.microsoft.com/kb/944020
944054	Error message when you try to shut down or to restart a Windows Vista-based portable computer that has Bluetooth devices installed: "Stop: 0x0000008E"	Hotfix	Drivers	http://support.microsoft.com/kb/944054
944151	An IEEE 1394 device cannot unload from Device Manager on a Windows Vista-based computer when you unplug the IEEE 1394 device from an IEEE 1394 standard-based external hub	Hotfix	Drivers	http://support.microsoft.com/kb/944151
944240	An application that sends an IOCTL_SFFDISK_DEVICE_COMMAND request to a Secure Digital (SD) card receives an error message on a 64-bit version of Windows Vista: "ERROR_ACCESS_DENIED"	Hotfix	Drivers	http://support.microsoft.com/kb/944240
945533	When you try to shut down a Windows Vista-based computer on which a Bluetooth device is installed, the computer stops responding	Hotfix	Drivers	http://support.microsoft.com/kb/945533
945680	A USB keyboard does not work after you restart a Windows Vista-based computer that has an NVIDIA 680i motherboard installed	Hotfix	Drivers	http://support.microsoft.com/kb/945680
946723	Error message after you resume a Windows Vista-based computer from hibernation: "Stop 0x000000FE"	Hotfix	Drivers	http://support.microsoft.com/kb/946723

947382	Error message when you bring the computer out of the "Hibernate system" power state in Windows Vista: "Stop 0x000000D1"	Hotfix	Drivers	http://support.microsoft.com/kb/947382
930857	An update is available for Windows Error Reporting in Windows Vista to make sure that problem reports are sent only after you have granted permission	Hotfix	Feedback and Supportability Platform	http://support.microsoft.com/kb/930857
932538	When you print an e-mail message in either Office Outlook 2003 or Outlook Express, the printed message is so small that it is unreadable	Hotfix	Internet Explorer	http://support.microsoft.com/kb/932538
940848	A hotfix rollup package is available for Microsoft Management Console (MMC) in Windows Server 2003	Hotfix	Kits	http://support.microsoft.com/kb/940848
930585	Uppercase letters "Ţ" and "Ş" are displayed in the middle of words in the Romanian-language version of Windows Vista	Hotfix	Localization	http://support.microsoft.com/kb/930585
938723	"Hibernates" or "hibernation" appears instead of "sleeps" or "sleep" in Power Options in the Traditional Chinese (CHT) version of Windows Vista	Hotfix	Localization	http://support.microsoft.com/kb/938723
942900	A file is not overwritten when you try to overwrite the file by using copy in the command shell on a Windows Vista-based computer that has Italian Language Pack installed	Hotfix	Localization	http://support.microsoft.com/kb/942900
927084	Error message when you try to watch live TV in Windows Media Center on a Windows Vista-based computer: "Restricted Content - Display Driver"	Hotfix	Multimedia	http://support.microsoft.com/kb/927084
929011	Windows Media Center does not correctly configure a combo TV tuner that supports both ATSC and NTSC signals on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/929011
929399	FIX: Subscription services cannot extract metering data when the services try to synchronize metering data on a client computer that is running the Windows Media Format 11 SDK	Hotfix	Multimedia	http://support.microsoft.com/kb/929399
929615	You may not receive audio in the desired language when you use Windows Media Center to view television in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/929615
929790	On a Windows Vista-based computer, DVD movies that are contained in a Niveus Disc Changer are not displayed in Windows Media Center after you click "DVD library"	Hotfix	Multimedia	http://support.microsoft.com/kb/929790
930883	Programs that play audio stop working and duplicate entries appear in the Default Format audio format list in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/930883
931756	FIX: Content plays longer than the time that is specified by the duration element in a Windows Media Player 11 playlist for content that is 30 minutes or more	Hotfix	Multimedia	http://support.microsoft.com/kb/931756
931812	On a Windows Vista-based computer, the Sony VAIO Camera Capture Utility (VCCU) may not work correctly until you restart it	Hotfix	Multimedia	http://support.microsoft.com/kb/931812
931967	You cannot hear the audio in Live TV or on a DVD in Windows Media Center after you wake a computer that is running Windows Vista Home Premium or Windows Vista Ultimate	Hotfix	Multimedia	http://support.microsoft.com/kb/931967

932390	FIX: The encoder cannot use the Windows Media Audio 9 Voice codec after you install Windows Media Player 11 on a computer that uses Windows Media Encoder 9 Series	Hotfix	Multimedia	http://support.microsoft.com/kb/932390
932649	You may experience poor video quality when you use interlaced mode on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/932649
932753	When you resize the Windows Media Center window in Windows Vista, video playback may stop	Hotfix	Multimedia	http://support.microsoft.com/kb/932753
932757	When you play a Windows Media High Definition Video DVD in Windows Media Center in Windows Vista, the video may not be synchronized with the audio	Hotfix	Multimedia	http://support.microsoft.com/kb/932757
932818	April 2007 Cumulative Update for Media Center for Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/932818
933245	A handle leak in Lsm.exe may occur every time that Windows Media Player 11 plays an audio file in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/933245
933620	The operating system stops unexpectedly and you receive a Stop error message after you start the Sony VAIO Camera Capture Utility on a Sony VAIO UX Series Micro PC that is running Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/933620
933750	On a computer that is running Windows Vista, all the check boxes on the Supported Formats tab of an installed device are unexpectedly selected	Hotfix	Multimedia	http://support.microsoft.com/kb/933750
935333	When you play a Windows Media High Definition Video DVD in Windows Media Center in Windows Vista, the video may not be synchronized with the audio	Hotfix	Multimedia	http://support.microsoft.com/kb/935333
935652	June 2007 Cumulative Update for Media Center for Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/935652
935685	Error message when you configure the Media Center feature or when a scheduled program guide download occurs in Windows Vista: "Windows Media Center Store Update Manager stopped working"	Hotfix	Multimedia	http://support.microsoft.com/kb/935685
935878	The enhanced video renderer (EVR) sends the EC_DISPLAY_CHANGED event when you play a video stream in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/935878
935901	The screen may be black or the menu screen may be unresponsive in Windows Media Center in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/935901
936004	A USB telephony device that is installed on a Windows Vista-based computer is unexpectedly set as the default audio device	Hotfix	Multimedia	http://support.microsoft.com/kb/936004
936136	You may experience problems when you use the Microsoft GS Wavetable Synthesizer on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/936136
936225	You do not hear any audio when you use a 32-bit program to play a DVD movie in a 64-bit version of Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/936225
936229	Error message when you start a Windows Vista-based computer: "Windows Media Center Receiver Service stopped working and was closed"	Hotfix	Multimedia	http://support.microsoft.com/kb/936229
936315	FIX: When you are developing an application by using Media Foundation SDK, the application cannot load the unsigned	Hotfix	Multimedia	http://support.microsoft.com/kb/936315

	drivers list the second time or any later time that the application tries to load the list			
936316	Error message when you run a program that uses the "waveOutWrite" function on a Windows Vista-based computer: "MMSYSERR_NODRIVER"	Hotfix	Multimedia	http://support.microsoft.com/kb/936316
937188	When an Adobe RGB profile-embedded TIFF image is printed to the Windows XPS Document Writer on a Windows Vista-based computer or on a Windows XP SP2-based computer, the colors may be incorrect	Hotfix	Multimedia	http://support.microsoft.com/kb/937188
937328	The screen of an external monitor is black, or it appears to be broken when the monitor is connected to a Windows Vista-based portable computer that is running Windows Media Center in full-screen mode	Hotfix	Multimedia	http://support.microsoft.com/kb/937328
938055	Ports for a MIDI device may still appear as available in a MIDI application after you disconnect the device from a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/938055
938098	A Mastering dialog box appears when you try to copy files to an Iomega REV drive that contains a write-protected disk in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/938098
938232	FIX: You may experience various symptoms when you use Windows Media Player 11	Hotfix	Multimedia	http://support.microsoft.com/kb/938232
938927	You lose channel listings for some channels and the recordings that you schedule cannot run when you configure Windows Media Center to use a digital TV tuner in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/938927
938928	Error message when you start a Windows Vista-based computer that has more than one TV tuners: "Windows Media Center Receiver Service stopped working and was closed"	Hotfix	Multimedia	http://support.microsoft.com/kb/938928
938929	Windows Media Center stops responding when you resume a Windows Vista-based computer from hibernation	Hotfix	Multimedia	http://support.microsoft.com/kb/938929
939130	FIX: After you use the AVIStreamWrite function to create an AVI file in Windows Vista, you cannot play the AVI file	Hotfix	Multimedia	http://support.microsoft.com/kb/939130
939207	FIX: On a computer that is running Windows Vista, an application that uses Video Mixing Renderer 9 does not play a video that requires Certified Output Protection Protocol (COPP)	Hotfix	Multimedia	http://support.microsoft.com/kb/939207
939210	FIX: Windows Vista appears to stop responding during the device initialization phase when you start Windows for the first time	Hotfix	Multimedia	http://support.microsoft.com/kb/939210
939211	FIX: Windows Media Player cannot synchronize media to an MTP-capable device on a Windows-Vista based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/939211
939331	A Windows Vista-based computer may stop responding if a USB camera is connected	Hotfix	Multimedia	http://support.microsoft.com/kb/939331
941102	When you watch Live TV or Recorded TV in Windows Media Center on a computer that is running Windows Vista, the picture may appear distorted or pixilated	Hotfix	Multimedia	http://support.microsoft.com/kb/941102

941229	October 2007 Cumulative Update for Media Center for Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/941229
941234	Error message when you use Windows Media Center to play music in Windows Vista: "Audio Error: An unknown audio error has occurred"	Hotfix	Multimedia	http://support.microsoft.com/kb/941234
941282	FIX: An application does not receive clipboard viewer messages if Windows Media Player 11 is running, or Windows Media Player 11 does not share .dvr-ms files	Hotfix	Multimedia	http://support.microsoft.com/kb/941282
941651	Cumulative update for Windows Media Player 11 in Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/941651
941895	When you use an integrated LCD screen to watch a video that uses a 50-Hz PAL signal, the video playback quality may be poor in Windows Media Center on a computer that is running Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/941895
942097	When you try to watch live TV on the LA7 channel in Windows Media Center, you hear audio, but you do not see video on a computer that is running Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/942097
942244	On a Windows Vista-based computer, when you try to set the tilt value and the pan value for a UVC-compatible camera, the pan value is out of range	Hotfix	Multimedia	http://support.microsoft.com/kb/942244
942364	When you use Windows Media Center to play live TV or a DVD on a Windows Vista-based computer, you cannot hear the audio after you wake the computer from sleep	Hotfix	Multimedia	http://support.microsoft.com/kb/942364
942541	After you use Windows Photo Gallery to display an image in full-screen mode on a Windows Vista-based computer, the image is not displayed on a network projector that is connected to the computer	Hotfix	Multimedia	http://support.microsoft.com/kb/942541
943195	The TV screen appears as solid green or as blocky pixels when you use Windows Media Center to watch HDTV content on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/943195
943335	FIX: Encoder objects try to create multiple push publishing points on a Windows Media server from a single process	Hotfix	Multimedia	http://support.microsoft.com/kb/943335
943470	A new instance of an MCML-based application starts when the ApplicationContext.ReturnToApplication method is called on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/943470
944883	FIX: Windows Explorer crashes when you minimize Windows Media Player	Hotfix	Multimedia	http://support.microsoft.com/kb/944883
945125	The preview function does not work correctly in Windows Movie Maker on a Windows Vista-based computer	Hotfix	Multimedia	http://support.microsoft.com/kb/945125
945170	FIX: The WMV9 encoder multi-bitrate performance on a multiprocessor system is severely impaired	Hotfix	Multimedia	http://support.microsoft.com/kb/945170
945438	FIX: An application that calls the acmFormatChoose function crashes on a computer that is running Windows Vista	Hotfix	Multimedia	http://support.microsoft.com/kb/945438
945577	Error message when a portable Windows Vista-based computer that has an integrated or external USB camera device resumes from long-term suspend mode: "0x000000E4" or "0x0000000A"	Hotfix	Multimedia	http://support.microsoft.com/kb/945577

945612	After you are prompted to upgrade the DRM components on a Windows Vista-based computer, Windows Media Center cannot perform a security upgrade	Hotfix	Multimedia	http://support.microsoft.com/kb/945612
927546	You see only four available wireless network connections when you use a USB-based wireless network adapter in Windows XP or in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/927546
929547	Some applications and services appear to stop responding for 15 seconds after you install a Windows Filtering Platform driver on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/929547
929824	Windows Vista cannot connect to any off-link addresses when the default gateway is configured to be the same as the client IP address	Hotfix	Networking	http://support.microsoft.com/kb/929824
930163	In Windows Vista, you cannot access any resources on a remote VPN server after you switch a network connection from one network adapter to another network adapter and then dial a VPN connection	Hotfix	Networking	http://support.microsoft.com/kb/930163
930311	Occasional error message on a portable Windows Vista-based computer that wakes from sleep to perform network-related tasks: "STOP 0x0000007E"	Hotfix	Networking	http://support.microsoft.com/kb/930311
930517	Message when a device on a Windows Vista-based computer uses a network bridge to access the network: "Connected with limited access"	Hotfix	Networking	http://support.microsoft.com/kb/930517
931365	Error message when you use an IPsec tunnel mode connection to communicate from a Windows Vista-based computer to another computer: "STOP 0x000000D1 DRIVER_IRQL_NOT_LESS_OR_EQUAL"	Hotfix	Networking	http://support.microsoft.com/kb/931365
931671	Error message when you put a Windows Vista-based computer to sleep while a PPP connection is active: "STOP 0x0000009F"	Hotfix	Networking	http://support.microsoft.com/kb/931671
931770	The copy process may stop responding when you try to copy files from a server on a network to a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/931770
932030	Windows Vista incorrectly detects the miniport edge of PassThru as a WLAN adapter when you use the PassThru Intermediate Driver from the Windows Driver Kit	Hotfix	Networking	http://support.microsoft.com/kb/932030
932063	Several problems occur on a Windows Vista-based computer when you work in a wireless network environment	Hotfix	Networking	http://support.microsoft.com/kb/932063
932173	Error result when you use the NETDOM RENAMECOMPUTER command to rename a computer that is running Windows Vista: "Access is denied"	Hotfix	Networking	http://support.microsoft.com/kb/932173
933049	A Winsock connection may fail when the program that opens the connection calls the Setsockopt function in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/933049
933340	You cannot use a remote access server to apply DHCP options to a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/933340
933468	You cannot access SMB shares on a corporate network through a Remote Access Service (RAS) connection from a computer that is running Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/933468

933657	You intermittently lose access to network resources if more than one Network Device Interface Specification (NDIS) filter driver is installed on a computer that is running Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/933657
933860	DFS failover does not occur when a client computer that is running Windows Vista tries to connect to a DFS root server that is unavailable, and you receive an error message: "System error 1214 has occurred"	Hotfix	Networking	http://support.microsoft.com/kb/933860
933872	The default gateway setting is lost when you wake a Windows Vista-based computer from sleep	Hotfix	Networking	http://support.microsoft.com/kb/933872
934611	Windows Vista may stop responding when you install software that adds legacy network drivers	Hotfix	Networking	http://support.microsoft.com/kb/934611
935222	You cannot connect to a wireless network on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/935222
935458	The behavior of TCP acknowledgments (ACKs) does not change after you modify the TcpAckFrequency registry entry in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/935458
935876	You receive invalid values when you query the ifOperStatus object identifier on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/935876
935945	The packets that are sent to the local computer are dropped after you establish a VPN connection by using a third-party VPN adapter on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/935945
935988	When you try to remotely administer a DHCP server from a Windows Vista-based computer, you cannot find the DHCP scopes	Hotfix	Networking	http://support.microsoft.com/kb/935988
936711	You may notice a delay when you call the CAsyncSocket::ReceiveFrom function in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/936711
937123	You are not prompted to log on to a wired 802.1X network in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/937123
937168	After you configure Internet Connection Sharing in Windows Vista, the network connection stops working after one-to-two hours	Hotfix	Networking	http://support.microsoft.com/kb/937168
937385	The Winsock connection fails when the program calls the setsockopt function in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/937385
938248	Windows Vista-based client computers do not use the node type that you specify for name resolution on the DHCP server	Hotfix	Networking	http://support.microsoft.com/kb/938248
939006	You cannot use Verizon FiOS products at their full speed on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/939006
939214	You cannot use the Connection Manager tool to update the phone book on a Windows Vista-based computer	Hotfix	Networking	http://support.microsoft.com/kb/939214
939718	The MAPI_E_FAILURE error code is generated when you run an application that calls the MAPIFindNext function on a computer that is running Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/939718
939786	An application that is started by a non-administrative user cannot listen to the HTTP traffic of the computer on which the application is running in Windows Vista, Windows Server 2003, or Windows XP	Hotfix	Networking	http://support.microsoft.com/kb/939786

940480	A 32-bit application cannot use the NetBIOS API to receive data on a computer that is running a 64-bit version of Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/940480
940646	Transmission throughput is less than expected for a 3G WWAN data card in Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/940646
943129	In a Network Access Protection (NAP) architecture, a Windows Vista-based client computer loses network connectivity after you run the "gpupdate /force" command	Hotfix	Networking	http://support.microsoft.com/kb/943129
945184	The Rasdial API may free the same memory two times and the dial-up application stops responding on a multiprocessor computer that is running Windows Vista	Hotfix	Networking	http://support.microsoft.com/kb/945184
928570	An access violation occurs when you start Windows Vista from a Windows PE 2.0 image by using the flat file boot method	Hotfix	OS Deployment	http://support.microsoft.com/kb/928570
929761	When you run Wusa.exe together with the /quiet option to try to install certain software packages on a Windows Vista-based computer, the installation fails	Hotfix	OS Deployment	http://support.microsoft.com/kb/929761
929913	An error is logged in the Setuperr.log file when you run the "sysprep –reseal" command on a Windows Vista-based computer	Hotfix	OS Deployment	http://support.microsoft.com/kb/929913
930193	Error message when you run the Sysprep command on a Windows Vista-based computer: "A fatal error occurred"	Hotfix	OS Deployment	http://support.microsoft.com/kb/930193
932998	Error message during an unattended installation of Windows Vista: "No disk"	Hotfix	OS Deployment	http://support.microsoft.com/kb/932998
933495	An unattended installation of Windows Vista uses the Autounattend.xml file on the Windows Vista installation disc instead of the Autounattend.xml file on a USB flash drive	Hotfix	OS Deployment	http://support.microsoft.com/kb/933495
935772	After you upgrade to WDS, an ACPI Multiprocessor image does not appear in the menu of operating system images when you start a PXE client that uses an ACPI Uniprocessor computer HAL	Hotfix	OS Deployment	http://support.microsoft.com/kb/935772
937333	WDS cannot generate more than 255 client names when you use WDS to deploy Windows Vista	Hotfix	OS Deployment	http://support.microsoft.com/kb/937333
939727	Error message when you use Windows Vista Setup to try to create a partition: "Error code: 0xE0000100"	Hotfix	OS Deployment	http://support.microsoft.com/kb/939727
941061	Trace events in the log output are randomly lost on a Windows Vista-based computer that has the ETW trace log enabled	Hotfix	OS Deployment	http://support.microsoft.com/kb/941061
941595	You cannot create a Windows Vista-based WIM build in Solution Accelerator for Business Desktop Deployment	Hotfix	OS Deployment	http://support.microsoft.com/kb/941595
941698	The wrong language is applied when you restart a Windows Vista-based computer after you run the Out Of Box Experience (OOBE) Wizard	Hotfix	OS Deployment	http://support.microsoft.com/kb/941698
942813	Stop error when you try to restart a Windows PE 2.0 system that uses AMD Barcelona processor and that has the Operating System Capabilities (_OSC) method enabled in the BIOS: "STOP: 0x0000007B (INACCESSIBLE_BOOT_DEVICE)"	Hotfix	OS Deployment	http://support.microsoft.com/kb/942813

943360	You cannot start Windows Preinstallation Environment (Windows PE) 2.0 from certain media on a Windows Vista-based computer	Hotfix	OS Deployment	http://support.microsoft.com/kb/943360
945683	Error message when you use an Unattend.xml file to install Windows Vista through a .wim file: "Windows could not calculate how much space is required for installation"	Hotfix	OS Deployment	http://support.microsoft.com/kb/945683
931675	Error message when you perform a scan by using a WSD-based scanner driver in Windows Vista: "A problem prevented Windows from saving the settings"	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/931675
932206	Error message when you try to automatically install a printer that has an unknown printer driver in Windows Vista: "STATUS_ACCESS_VIOLATION (0xc0000005)"	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/932206
934327	You may be unable to use a WSD-based scanner driver to transfer data if the scanned data is very large in Windows Vista	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/934327
935963	Customized property pages are not displayed in the Advanced Settings dialog box of a WIA scanner on a Windows Vista-based computer	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/935963
936608	A shared printer that is hosted on a Windows Server 2003-based computer does not work correctly when you use the "Point and Print" feature to connect to the printer in Windows Vista	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/936608
936713	Private Branch Exchange (PBX) software obtains only half of the telephone number of a call in Windows Vista	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/936713
937713	An access violation occurs in the Explorer.exe process when you right-click a shared color printer and then click "Properties" in Windows Vista	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/937713
938956	Error message when you use a third-party scanning program such as IrfanView in Windows Vista: "A problem caused the program to stop working correctly"	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/938956
941542	When you try to connect a Windows Vista-based computer to a network printer whose name is not a UNC path, the connection fails	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/941542
941962	You experience problems when you try to print a document in a 32-bit program on a computer that is running a 64-bit version of Windows Vista	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/941962
943300	An application does not function correctly if you click Cancel during a scan operation when you use the Windows Image Acquisition scanner in an application on a Windows Vista-based computer	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/943300
943668	Error message when you try to use a shared printer to print a Word 2007 document on a computer that runs a 64-bit version of Windows Vista: "Word has encountered a problem"	Hotfix	Printing & Imaging Technologies	http://support.microsoft.com/kb/943668
931573	You may be prompted to activate Windows Vista on a computer on which Windows Vista was already activated by a Volume License or OEM installation	Hotfix	Security	http://support.microsoft.com/kb/931573
932596	Microsoft Security Advisory: Update to improve Kernel Patch	Hotfix	Security	http://support.microsoft.com/kb/932596

	Protection			
933228	Error message when you use Internet Explorer 7 in Windows Vista to try to access a Web server that is configured to use OpenSSL: "Page cannot be displayed"	Hotfix	Security	http://support.microsoft.com/kb/933228
933664	Error message when you try to connect to a shared resource from a Windows Vista-based client computer: "A device attached to the system is not functioning"	Hotfix	Security	http://support.microsoft.com/kb/933664
933928	Update for Windows Vista to improve the product activation and validation process	Hotfix	Security	http://support.microsoft.com/kb/933928
934797	The size of the Ntds.dit file on the domain controller grows continually larger after you enable the "Credential Roaming" feature for Windows Vista-based client computers in the domain	Hotfix	Security	http://support.microsoft.com/kb/934797
935576	After you use a smart card certificate to establish a remote access connection, you cannot connect a Windows Vista-based computer to a shared resource in a foreign domain	Hotfix	Security	http://support.microsoft.com/kb/935576
935765	A long environment variable is truncated to 1024 characters the next time that you log on to Windows Vista	Hotfix	Security	http://support.microsoft.com/kb/935765
935881	A Windows Vista-based computer restarts repeatedly after you install a security package	Hotfix	Security	http://support.microsoft.com/kb/935881
936029	The "Request For Permission to Use a Key" dialog box appears whenever you try to send an e-mail message in Outlook 2007 after you configure Outlook 2007 to use a digital signature in Windows Vista	Hotfix	Security	http://support.microsoft.com/kb/936029
936183	In Windows Vista, the Multiple Provider Router calls the "NPPasswordChangeNotify" function to notify the credential manager DLL of a password change event, even though the password change is unsuccessful	Hotfix	Security	http://support.microsoft.com/kb/936183
936686	Icons are missing from Control Panel, or you cannot start Control Panel, the Welcome Center, or games in Windows Vista	Hotfix	Security	http://support.microsoft.com/kb/936686
937063	The system automatically restarts when you try to encrypt files or to decrypt files by using EFS on a computer that is running Windows Vista	Hotfix	Security	http://support.microsoft.com/kb/937063
940810	When use the Certificate Import Wizard to try to install a certificate on a Windows Vista-based computer, the Rundll32.exe process may crash	Hotfix	Security	http://support.microsoft.com/kb/940810
941797	A roaming user profile does not load as expected when a domain user logs on to the domain from a Windows Vista-based computer	Hotfix	Security	http://support.microsoft.com/kb/941797
941808	After you lock and then unlock a Windows Vista-based client computer, you may be prompted for user credentials before you can access network resources	Hotfix	Security	http://support.microsoft.com/kb/941808
942003	Error message on a Windows Vista-based computer when you try to connect to Microsoft SQL Server Management Studio by using a VPN connection: "The user is not associated with a trusted SQL Server Connection"	Hotfix	Security	http://support.microsoft.com/kb/942003

942219	You are prompted to type your user credentials when you try to access a business application that is configured to use the Single Sign-On (SSO) feature on a Windows Vista-based client computer	Hotfix	Security	http://support.microsoft.com/kb/942219
925876	Remote Desktop Connection (Terminal Services Client 6.0)	Hotfix	Server Technologies	http://support.microsoft.com/kb/925876
929451	A client computer that is running Windows Vista registers an old IP address when the GUID of a network adapter changes	Hotfix	Server Technologies	http://support.microsoft.com/kb/929451
930451	FIX: Internet Information Services 7.0 removes custom values in the Web.config file	Hotfix	Server Technologies	http://support.microsoft.com/kb/930451
932385	FIX: CGI applications that set multiple instances of a response header in IIS 7.0 do not work as expected	Hotfix	Server Technologies	http://support.microsoft.com/kb/932385
934274	Applications that use CDO process the current time in the incorrect time zone after you apply DST updates on a computer that is running Windows Vista	Hotfix	Server Technologies	http://support.microsoft.com/kb/934274
936970	Error message when you work in a Terminal Services session and save a document in a 2007 Office program to a redirected drive: "There has been a network or file permission error"	Hotfix	Server Technologies	http://support.microsoft.com/kb/936970
938080	Some later keystrokes are interpreted as part of the previous keyboard shortcut in the Terminal Services session of a Remote Desktop window on a Windows Vista-based computer	Hotfix	Server Technologies	http://support.microsoft.com/kb/938080
939882	The DNS client in Windows Vista incorrectly creates a negative DNS cache entry for the NetBIOS name of a remote host	Hotfix	Server Technologies	http://support.microsoft.com/kb/939882
940069	An Indexing Service query that uses the LIKE predicate returns an incorrect result in Windows Vista	Hotfix	Server Technologies	http://support.microsoft.com/kb/940069
941561	After you set the value of the EventMask parameter to WTS_EVENT_FLUSH in the WTSWaitSystemEvent function, no pending calls to the function return on a Windows Vista-based computer	Hotfix	Server Technologies	http://support.microsoft.com/kb/941561
941603	Error message when you execute a Remote Assistance invitation file to connect to a novice's computer on a Windows XP-based computer that has RDC 6.0 installed: "A Remote Assistance connection could not be established"	Hotfix	Server Technologies	http://support.microsoft.com/kb/941603
944917	Windows Vista uses the profile path that is defined on the Terminal Services Profile tab instead of on the Profile tab when a user logs on to a Windows Vista-based client computer by using a Remote Desktop session	Hotfix	Server Technologies	http://support.microsoft.com/kb/944917
942146	You receive a message when you try to open an Excel 2007 document on a Windows Vista-based computer from a remote shared folder, even if no other user is using the document: "File in use"	Hotfix	Shell	http://support.microsoft.com/kb/942146
927341	The Manage Discs feature in Windows Media Center stops responding after you resume a Windows Vista-based computer from sleep or hibernation	Hotfix	Storage	http://support.microsoft.com/kb/927341
928253	SATA optical drives are not available after you start a	Hotfix	Storage	http://support.microsoft.com/kb/928253

	Windows Vista-based computer			
929762	You receive a Stop 0x9F error when you wake a Windows Vista-based computer that is connected to an IEEE 1394-based device	Hotfix	Storage	http://support.microsoft.com/kb/929762
929909	A Windows Vista-based computer that uses a Mobile Intel 945GM Express Chipset may occasionally not wake from sleep	Hotfix	Storage	http://support.microsoft.com/kb/929909
930194	A computer uses an SiI PATA chip does not recognize an attached optical drive as a drive that supports recording after you install Windows Vista	Hotfix	Storage	http://support.microsoft.com/kb/930194
931263	Disk enumeration optimizations are disabled on certain Windows Vista-based computers that are using a hot swappable drive bay	Hotfix	Storage	http://support.microsoft.com/kb/931263
931369	The Windows Vista installation process may take several hours on a system that uses an ATI SB600 Series chipset	Hotfix	Storage	http://support.microsoft.com/kb/931369
931936	Incorrect recording speeds are displayed in the "Recording speed" list in the "Burn to Disc" dialog box when you burn a DVD on a Windows Vista-based computer	Hotfix	Storage	http://support.microsoft.com/kb/931936
932079	Power consumption may be slightly more than expected on a portable Windows Vista-based computer that uses a SATA hard disk that does not support Host-Initiated Link Power Management	Hotfix	Storage	http://support.microsoft.com/kb/932079
932094	Error message when you try to play a movie file that has an .mov extension by using QuickTime 7 in Windows Vista: "STOP 0x1A MEMORY_MANAGEMENT"	Hotfix	Storage	http://support.microsoft.com/kb/932094
932142	You cannot install some programs after you restore Windows Vista by using a "Windows Complete PC Backup and Restore Image"	Hotfix	Storage	http://support.microsoft.com/kb/932142
932626	Various problems may occur after you disconnect a PCMCIA storage device when a Windows Vista-based computer is asleep	Hotfix	Storage	http://support.microsoft.com/kb/932626
933578	An Ultra DMA Mode 5 device may perform only at the speed of an Ultra DMA Mode 2 device after you swap devices in Windows Vista	Hotfix	Storage	http://support.microsoft.com/kb/933578
934641	A Toshiba Device Bay optical drive is not recognized in Windows Vista	Hotfix	Storage	http://support.microsoft.com/kb/934641
936469	When you use DFS together with the Volume Shadow Copy Service (VSS) in Windows Vista, VSS does not show whether the DFS path is the same as the physical path	Hotfix	Storage	http://support.microsoft.com/kb/936469
937322	Stop error message when you run the "Common Scenario Stress with IO" test, print to a shared printer on the network, or perform a power management operation on a Windows Vista-based computer: "Stop 0x0000009F"	Hotfix	Storage	http://support.microsoft.com/kb/937322
937651	Error message when you reinsert an SD card into a Windows Vista-based computer: "There might be a problem with some files on this device or disc"	Hotfix	Storage	http://support.microsoft.com/kb/937651

938239	Error message on a Windows Vista-based computer that has a storage device inserted into a card bus adapter: "STOP: 0x00000050"	Hotfix	Storage	http://support.microsoft.com/kb/938239
941719	An IBM MicroDrive drive letter does not appear in the Disk Management node of the Computer Management console after you install the hotfix that is mentioned in Microsoft Knowledge Base article 932626 on a Windows Vista-based computer	Hotfix	Storage	http://support.microsoft.com/kb/941719
943974	The "chkdsk /r" command and the "chkdsk /f" command take a long time to run on a Windows Vista-based computer	Hotfix	Storage	http://support.microsoft.com/kb/943974
943986	If you reconnect a removable storage device to a Windows Vista-based computer, Windows Vista cannot find the removable storage device	Hotfix	Storage	http://support.microsoft.com/kb/943986
944292	Windows Vista does not recognize an external USB optical disc drive when you reconnect the USB optical disc drive to the computer	Hotfix	Storage	http://support.microsoft.com/kb/944292
944500	Error message on a Windows Vista-based computer when you try to burn a file to a writable DVD: "There was an error burning this disc. The disc might no longer be usable"	Hotfix	Storage	http://support.microsoft.com/kb/944500
946383	The computer stops responding when you try to shut down a computer that is running Windows Preinstallation Environment 2.0	Hotfix	Storage	http://support.microsoft.com/kb/946383
930828	FIX: A Visual Basic 6.0 modal form is no longer modal when the form is displayed from a user control in Internet Explorer 7	Hotfix	Tools	http://support.microsoft.com/kb/930828
932590	FIX: Windows-based applications that use the TZ environment variable may not work as expected because of changes to DST	Hotfix	Tools	http://support.microsoft.com/kb/932590
932635	Some elements of the user interface in some preinstalled Norwegian versions of Windows Vista contain English text, text that is truncated, or linguistic errors	Hotfix	Tools	http://support.microsoft.com/kb/932635
932636	Certain elements of the user interface in some preinstalled Danish versions of Windows Vista contain English text, text that is truncated, or linguistic errors	Hotfix	Tools	http://support.microsoft.com/kb/932636
933812	The JScript version 5.7 Date object reports time in standard time instead of in daylight saving time after you apply the updates in Microsoft Knowledge Base articles 928388 and 932590 on a computer that is running Windows XP or Windows Server 2003	Hotfix	Tools	http://support.microsoft.com/kb/933812
933873	FIX: You may receive a script error when you try to run a script on a computer that has Internet Explorer 7 installed	Hotfix	Tools	http://support.microsoft.com/kb/933873
941860	You cannot view the list of computers and of shared resources on the network in Windows Explorer or by using the "NET VIEW" command on a Windows Vista-based computer	Hotfix	Tools	http://support.microsoft.com/kb/941860
942309	Error message when you use the Reg.exe tool to query a registry subkey on a computer that is running Windows Vista:	Hotfix	Tools	http://support.microsoft.com/kb/942309

	"ERROR: More data is available"			
931099	An update is available for Windows Defender on Windows Vista	Hotfix	Shell	http://support.microsoft.com/kb/931099
932634	Some elements of the user interface in some preinstalled Swedish versions of Windows Vista contain English text, text that is truncated, or linguistic errors	Hotfix	Shell	http://support.microsoft.com/kb/932634
932637	Some elements of the user interface in some preinstalled Czech versions of Windows Vista contain English text, text that is truncated, or linguistic errors	Hotfix	Shell	http://support.microsoft.com/kb/932637
932638	Some elements of the user interface in some preinstalled Greek versions of Windows Vista contain English text, text that is truncated, or linguistic errors	Hotfix	Shell	http://support.microsoft.com/kb/932638
935759	The preinstalled Norwegian version of Windows Vista may display parts of the user interface incorrectly even after you install update 932635	Hotfix	Shell	http://support.microsoft.com/kb/935759
936824	The Safely Remove Hardware feature and the Windows Explorer "Eject" command do not work correctly with an Apple iPod that is connected to a Windows Vista-based computer	Hotfix	Hardware	http://support.microsoft.com/kb/936824
936825	Availability of the Windows Vista Secure Digital (SD) rollup package	Hotfix	Hardware	http://support.microsoft.com/kb/936825
938194	An update is available that improves the compatibility and reliability of Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938194
938952	The Chinese (Traditional) Language Pack is described as "Chinese (Hong Kong S.A.R.)" on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/938952
938979	An update is available that improves the performance and reliability of Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/938979
939159	An update to prevent a Background Intelligent Transfer Service (BITS) crash on a Windows Vista-based computer	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/939159
941600	Cumulative update rollup for USB core components in Windows Vista	Hotfix	Drivers	http://support.microsoft.com/kb/941600
941649	An update is available that improves the compatibility, reliability, and stability of Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/941649
944110	Windows Media Player cannot load the content from certain URLs after you enable the "Use proxy settings of the Web browser" option	Hotfix	Windows Media	http://support.microsoft.com/kb/944110
931621	FIX: Only the internal storage is available when you synchronize content from Windows Media Player 11 to a Windows Mobile 5-based device with AKU 2.3 or a later AKU	Hotfix	Windows Portable Devices	http://support.microsoft.com/kb/931621
935551	FIX: Device connection is disconnected when you synchronize lots of files between Windows Media Player 11 and a Windows Mobile device	Hotfix	Windows Portable Devices	http://support.microsoft.com/kb/935551
935552	FIX: Windows Media Player 11 may stop responding when you transfer media to a device that uses the Media Transfer Protocol and then you cancel the transfer process	Hotfix	Windows Portable Devices	http://support.microsoft.com/kb/935552

944882	FIX: The memory for an application increases for each file that you transfer when you transfer media from a computer that is running Windows Vista or Windows XP to a portable device	Hotfix	Windows Portable Devices	http://support.microsoft.com/kb/944882
926131	A Web-based software program cannot import an external style sheet after you install security update 916281 on a Windows XP-based computer	Hotfix	Internet Explorer	http://support.microsoft.com/kb/926131
931278	Internet Explorer 7 may stop responding when you try to resize a frame	Hotfix	Internet Explorer	http://support.microsoft.com/kb/931278
931324	FIX: Error message when you try to run a Web application that uses the window.external property in Internet Explorer 7: "Internet Explorer has encountered a problem and needs to close"	Hotfix	Internet Explorer	http://support.microsoft.com/kb/931324
931657	The e-mail message header does not print when you try to print an e-mail message by using either Microsoft Office Outlook 2003 or Microsoft Outlook Express	Hotfix	Internet Explorer	http://support.microsoft.com/kb/931657
931836	February 2007 cumulative time zone update for Microsoft Windows operating systems	Hotfix	Shell	http://support.microsoft.com/kb/931836
933133	When you try to use Internet Explorer 7 to download a file from a Web page, the file name changes	Hotfix	Internet Explorer	http://support.microsoft.com/kb/933133
933182	FIX: The content of a Web page does not appear to update as expected when you use the document.open method in Internet Explorer 7	Hotfix	Internet Explorer	http://support.microsoft.com/kb/933182
936003	Cumulative update rollup for Windows Vista	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936003
936357	A microcode reliability update is available that improves the reliability of systems that use Intel processors	Hotfix	Desktop Technologies	http://support.microsoft.com/kb/936357
941411	Windows Sidebar Protection update for Windows Vista	Hotfix	Base Technologies	http://support.microsoft.com/kb/941411
941660	Windows PowerShell 1.0 does not work correctly with custom locales or with programs that prevent Windows PowerShell 1.0 from accessing the root of each file system drive in Windows Vista, in Windows Server 2003, and in Windows XP	Hotfix	Shell	http://support.microsoft.com/kb/941660
943899	An update that improves the performance, responsiveness, and reliability of Windows Vista is available	Hotfix	Base Technologies	http://support.microsoft.com/kb/943899
942979	A cumulative update for the XML Paper Specification (XPS) in Windows Vista is available	Hotfix	Drivers	http://support.microsoft.com/kb/942979