Windows XP services that can be disabled

One of the most effective ways to secure a Windows workstation is to turn off unnecessary services. This reference sheet lists the Windows XP SP 2 services, describes each service's function, specifies whether you can safely disable the service, and outlines the ramifications of disabling the service. The list assumes the machines is running Windows XP SP2 in a corporate network environment. The list offers one of the following three possibilities for safely disabling each service:

- YES = You can disable the service without causing any problems.
- **MAYBE** = The computer's role dictates whether you should or should not disable the service--read the *special considerations* for further information.

  NO = The service is critical to proper Windows operation and should not be disabled.

Service	Description	Safely Disable?	Ramifications if disabled	Suggested setting	Special Considerations
Alerter	Notifies selected users and computers of administrative alerts	**Yes**	Programs that use administrative alerts will not receive them.	Disable	
Application Layer Gateway	Provides support for application-level protocol plug-ins and enables network/protocol connectivity	**Maybe**	Programs that rely on this service, such as MSN Messenger and Windows Messenger will not function.	Enable	Only enable when using the Windows firewall or another firewall. Failure to do so can result in a significant security hole.
Application Management	Processes installation, removal, and enumeration requests for Active Directory IntelliMirror group policy programs	Yes	Users will be unable to install, remove, or enumerate any IntelliMirror programs.	Disable	
Automatic Updates	Enables the download and installation of critical Windows updates	Yes	The operating system cannot automatically install updates, but can still be manually updated at the Windows Update Web site.	Enable	Automatic updates help keep your computer current. If you do disable the service, perform regular, manual updates.
Background Intelligent Transfer	Transfers data between clients and servers in the background	Yes	Features such as Windows Update will not work properly.	Disable	Enable this services if you enable Automatic Updates.

Service	Description	Safely Disable?	Ramifications if disabled	Suggested setting	Special Considerations
ClipBook	Enables ClipBook Viewer to store information and share it with remote computers	Yes	ClipBook Viewer will not be able to share information with remote computers.	Disable	
COM+ Event System/System Application	Allows management of Component Services by providing automatic distribution of events to subscribing COM components	**No**	System Event Notification stops working, which means that logon and logoff notifications will not take place. Other applications, such as Volume Snapshot service, will not work correctly.	Enable	
Computer Browse	Maintains an up-to-date list of computers on your network, and supplies the list to programs that request it. The Computer Browser service is used by Windows-based computers that need to view network domains and resources.	Yes	Your computer will be unable to locate other Windows computers on the network	**Enable**	Enable this service, if you need to share files with other Windows computers.
Cryptographic services	Provides three management services: Catalog Database Service, which confirms the signatures of Windows files; Protected Root Service, which adds and removes Trusted Root Certification Authority certificates from this computer; and Key Service, which helps enroll this computer for certificates	No	The associated management services will not function properly.	Enable	Required if you use the Automatic Updates Windows service; Also used by other Windows services, such as Task Manager.
DHCP Client	Allows the system to automatically obtain IP addressing information, WINS server information, routing information, and so forth; is required to update records in Dynamic DNS	**Maybe**	The system will be unable to obtain an IP address, WINS information, and the like, from a DHCP server and will need to be configured with a static address.	Enable	You can disabled this service if you do not use DHCP.

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Distributed Link Tracking Client	Ensures that shortcuts and OLE links continue to work after the target file is renamed or moved by maintaining links in the file system	**Yes**	Link tracking will be unavailable. Users on other computers won't be able to track links on this computer.	**Disable**	
Distributed Transaction Coordinator	Coordinates transactions that span multiple resource managers, such as databases, message queues, and file systems	**Yes**	Distributed transactions will not occur.	**Disable**	
DNS Client	Resolves and caches DNS names, allowing the system to communicate with canonical names rather than strictly by IP address	**No**	The system will be unable to resolve a name and will be able to communicate only via IP address. A client may be unable to communicate with its domain controller.	**Enable**	Stopping this service will result in the inability for the computer to resolve names to I P addresses.
Error Reporting	Collects, stores, and reports unexpected application crashes to Microsoft	**Yes**	Error Reporting will occur only for kernel faults and some types of user mode faults.	**Disable**	
Event Log	Allows event log messages to be viewed in Event log to assist in problem resolution	No	Administrators won't be able to view logs, including the security log, increasing the difficulty of diagnosing problems and detecting security breaches.	Enable	
Fast User Switching Compatibility	Enables management for applications that require assistance in a multiple user environment	**Yes**	Fast User Switching will be unavailable.	Disable	Doesn't work in domain environments anyway.
Help and Support	Enables Help and Support Center to run on this computer	**Yes**	The Help and Support Center will be unavailable.	**Enable**	

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HID Input	Enables generic input access to Human Interface Devices (HID), which activates and maintains the use of predefined hot buttons on keyboards, remote controls, and other multimedia devices	**Maybe**	Hot buttons controlled by this service will no longer function.	Disable	Required for some "hot buttons" on newer keyboards. Can be safely enabled if these buttons don't work with this service disabled.
IMAPI CD-**Burning COM**	Manages CD recording using Image Mastering Applications Programming Interface (IMAPI)	Maybe	This computer will be unable to record CDs.	Enable	This service can be disabled if you don't have a CD-RW drive in your system.
Indexing Service	Indexes contents and properties of files on local and remote computers; provides rapid access to files through flexible querying language	Yes	Files will not be indexed. Indexing can speed searching.	Disable	Uninstall this service if you don't plan to use it.
Internet **Connection** - Firewall (ICF) / **Sharing (ICS)**	Provides network address translation, addressing, name resolution and/or intrusion prevention services for a home or small office network	Maybe	Networking services such as Internet sharing, name resolution, addressing and/or intrusion prevention will be unavailable.	Disable	If you share your Internet connection, you must enable this service.
IPSEC services	Provides end-to-end security between clients and servers on TCP/IP networks	Maybe	TCP/IP security between clients and servers on the network will be impaired.	**Disable**	If you connect over an IPSec secured connection, don't disable this service.
Logical Disk Manager	Waits for new drives to be added and passes required information to the LDM administrative service; required to ensure dynamic disk information is up to date	Yes	New disks will not be detected by the system.	Enable	Leaving this service enabled makes it easy to add new drives to the system. In a very high security environment, this should not be allowed.

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Logical Disk Manager Administrative	Starts and allows configuration to take place when a new drive is detected or a partition/drive is configured	Yes	None; runs only when needed.	N/A	Started by the Logical Disk Manager service only when needed. Do not disable if you have the Logical Disk Manager Service enabled.
Machine Debug Manager	Manages Visual Studio debugging	**Yes**	Visual Studio debugging information will not be available.	**Disable**	
Messenger	Transmits net send and Alerter service messages between clients and servers. This service is not related to Windows Messenger	Yes	Alerter messages will not be transmitted.	**Disable**	
Microsoft Software Shadow Copy Provider	Manages software-based volume shadow copies taken by the Volume Shadow Copy service	**Yes**	Software-based volume shadow copies cannot be managed.	**Disable**	Leave set at Manual if you intend to use Windows Backup.
NetMeeting Remote Desktop Sharing	Enables an authorized user to access this computer remotely by using NetMeeting over a corporate intranet	Yes	Remote desktop sharing will be unavailable.	**Disable**	If you use NetMeeting, don't disable this service.
Network Connections	Manages the network and dial-up connections for the server, including network status notification and configuration	**No**	Network configuration will not be possible; new connections can't be created and services that need network information may fail.	**Enable**	
Network DDE	Provides network transport and security for Dynamic Data Exchange (DDE) for programs running on the same computer or on different computers	**Yes**	DDE transport and security will be unavailable.	**Disable**	

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Network DDE DSDM	Manages Dynamic Data Exchange (DDE) network shares	**Yes**	DDE network shares will be unavailable.	Disable	
Network Location Awareness (NLA)	Collects and stores network configuration and location information and notifies applications when this information changes. This service is a part of ICS	**Maybe**	Services such as ICS & ICF will not function.	Disable	Enable if this computer has Internet Connection Sharing enabled or if you are using the Internet Connection Firewall.
NT LM **Security Support Provider**	Allows users to log on to the network using NTLM	**Maybe**	Users with versions of Windows prior to Windows 2000 will be unable to log in to the network.	Disable	Enable this service if this computer needs to log on to pre-Windows 2000 computers or domains
Performance Logs and Alerts	Collects performance data for the computer or other computers and writes it to a log or displays it on the screen	**Yes**	Performance information will no longer be logged or displayed.	Disable	
Plug and Play	Allows an administrator to add hardware to a server and have the server automatically detect and configure it	No	The system will be unstable and incapable of detecting hardware changes.	Enable	
Portable Media Serial **Number**	Retrieves the serial number of any portable media player connected to this computer	**Yes**	Protected content might not be downloaded to the device.	Disable	
Print Spooler	Manages all local and network print queues and controls all printing jobs	**Maybe**	Printing on the local machine will be unavailable.	**Enable**	Disable this service if you don't have a printer.
Protected Storage	Protects sensitive information such as private keys from exposure except to allowed persons and services	Yes	Protected information will be inaccessible.	Enable	

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QoS RSVP	Provides network signaling and local, traffic-control, set-up functionality for (Quality of Service) QoS-aware programs and control applets	Yes	QoS aware applications with either not function, or will not have their complete functionality.	**Disable**	Enable this service if you use QoS aware applications.
Remote Access Auto Connection Manager	Detects unsuccessful attempts to connect to a remote network or computer and provides alternative methods for connection	**Yes**	Users will need to manually connect to other systems.	**Enable**	
Remote Access Connection Manager	Manages dial-up and virtual private network (VPN) connections from this computer to the Internet or other remote networks	**Maybe**	The operating system may not function properly.	**Enable**	This service is run on demand by the Remote Access Manager
Remote Desktop Help Session Manager	Manages and controls Remote Assistance	**Yes**	Remote Assistance will be unavailable.	**Disable**	
Remote Procedure Call (RPC)	Allows processes to communicate internally and across the network with each other	No	The system will not boot. Don't	Enable	
Remote Procedure Call (RPC) Locator	Provides RPC name services similar to DNS services for I P	No	Systems that are running third-party utilities looking for RPC information will be unable to find it. OS components do not use this service, but programs such as Exchange do.	Enable	

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Remote Registry	Provides a mechanism to remotely manage the system registry	**Maybe**	Remote systems will be unable to connect to the local registry. Hfnetchk uses this mechanism. Disabling it can affect the patch utility's operation.	**Disable**	Some programs require this functionality in order to operate.
Removable Storage	Manages and catalogs removable media and operates automated removable media devices	**Yes**	Programs that are dependent on Removable Storage, such as Backup and Remote Storage, will operate more slowly.	**Enable**	
Routing and Remote Access	Enables multiprotocol LAN-to-LAN, LAN-to-WAN, virtual private network (VPN), and network address translation (NAT) routing services for clients and servers on this network	Yes	Routing and Remote Access services will be unavailable.	**Disable**	Better yet, don't install this service at all.
Secondary Logon	Enables starting processes under alternate credentials. If this service is stopped, this type of logon access will be unavailable	Yes	Users will be unable to use the "Run As" feature to elevate privileges.	**Disable**	
Security Accounts Manager	Stores account information for local security accounts, which, when started, allows other services to access the SAM	Yes	Services that rely on requests to the SAM database will not function properly. Group Policy objects may not operate properly.	**Enable**	If you use don't use DHCP to obtain an IP address, this service can be disabled.
Server	Allows the sharing of local resources such as files and printers, as well as named pipe communication	**Yes**	Resources can't be shared, RPC requests will be denied, and named pipe communication will fail.	Disable	This service must be enabled on Windows XP computers that share files or printers.
Shell **Hardware Detection**	Provides notifications for AutoPlay hardware events	Yes	CD-ROMs and other devices will not automatically function.	Enable	Much easier to leave this enabled, and not much of a security risk.

Service	Description	Safely Disable?	Ramifications if disabled	Suggested setting	Special Considerations
Smart Card	Manages access to smart cards read by this computer	**Yes**	This computer will be unable to read smart cards.	Disable	If you're using a smart card reader, enable this service.
Smart Card Helper	Provides support for earlier smart card readers attached to the computer	**Yes**	The computer will be unable to read legacy smart cards.	Disable	If you're using a smart card reader, enable this service.
SSDP Discovery	Used to locate UPnP devices on your home network. Used in conjunction with Universal Plug and Play Device Host, it detects and configures UPnP devices on your home network	**Yes**	Your computer will be unable to located uPnP devices on the network.	Disable	
System Event Notification	Required to record entries in the event logs; notifies COM+ subscribers about logon and power-related events	Yes	Certain notifications will no longer work. For example, synchronization won't work, as it depends on connectivity information and Network Connect/Disconnect and Logon/Logoff notifications.	Disable	Leave enabled for laptops to that power notifications are passed to the user.
System Restore	Performs system restore functions, including saving periodic checkpoints	Yes	Automatic system restoration will not be possible.	Disable	While this service does use up some system resources, it can be invaluable for stand alone machines, particularly when a software install goes bad.
Task Scheduler	Enables a user to configure and schedule automated tasks on this computer	Yes	Tasks will not be run at their scheduled times.	Disable	

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TCP/IP NetBIOS Helper	Required for software distribution in a Group Policy (may be used to distribute patches) and provides support for NetBIOS over TCP/IP and NetBIOS name lookups	**Yes**	NetBIOS over TCP/IP clients including Netlogon and Messenger might stop responding. Disabling may also affect the ability to share resources.	Disable	For small networks, this service may be essential if you share files with others. For larger networks with central file servers, keep disabled on desktops.
Telephony	Provides Telephony API (TAPI) support for clients using programs that control telephony devices and I P-based voice connections	Yes	The function of all dependent programs will be impaired.	Disable	Only needed for modem/fax modem use.
Telnet	Enables a remote user to log on to this computer and run programs; supports various TCP/IP Telnet clients, including UNIX- and Windows-based computers	Yes	Remote user access to programs might be unavailable.	Disable	
Terminal Services	Allows users to connect interactively to a remote computer; Remote Desktop, Fast User Switching, Remote Assistance, and Terminal Server depend on this service.	Yes	May make your computer unreliable. To prevent remote use of this computer, clear the check boxes in the Remote tab of the System properties control panel item.	Disable	
Themes	Provides user experience theme management	**Yes**	Themes cannot be used.	Disable	
Uninterruptibl e **Power Supply**	Manages an uninterruptible power supply (UPS) connected to the computer	Yes	The UPS cannot communicate with the computer.	Disable	
Universal Plug and Play Device Host	Used in conjunction with SSDP Discovery Service, it detects and configures UPnP devices on your home network	**Yes**	Your computer will be unable to located uPnP devices on the network.	Disable	

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Upload Manager	Manages synchronous and asynchronous file transfers between clients and servers. Driver data is anonymously uploaded from these transfers and used by Microsoft to help users find needed drivers. The Driver Feedback Server asks the client's permission to upload the computer's hardware profile and then search the Internet for information about how to obtain the appropriate driver or get support.	Yes	Certain file transfers will not take place.	**Disable**	
Volume Shadow Copy	Manages and implements volume shadow copies used for backup and other purposes	**Yes**	Shadow copies will be unavailable for backup and the backup may fail.	Disable	Enable this service if you use Windows Backup on this desktop.
WebClient	Enables Windows-based programs to create, access, and modify Internet-based files	**Yes**	These functions will not be available.	Disable	
Windows Audio	Manages audio devices for Windows-based programs	**Yes**	Audio devices and effects will not function properly.	Enable	Even though it can be disabled, without this service, you will get no sound.
Windows Image Acquisition (WIA)	Provides image acquisition services for scanners and cameras	Yes	Programs that require images, such as Windows Movie Maker, won't function properly.	Enable	This service is required for some scanners and cameras. If you don't have a scanner or a camera, you can disable this service.
Windows Installe	Adds, modifies, and removes applications provided as a Windows Installer (*.msi) package	Yes	People can install no programs, or make use of Add/Remove programs.	Enable	

Service	Description	Safely Disable?	Ramifications if disabled	Suggested setting	Special Considerations
Windows Management Instrumentatio n (WMI)	Provides system management information; required to implement performance alerts using Performance Logs and Alerts	**No**	System management and performance information will be unavailable.	**Enable**	
WMI Driver Extensions	Monitors all drivers and event trace providers that are configured to publish Windows Management Instrumentation (WMI) or event trace information	**Yes**	(extension of WMI only)	**Enable**	
Windows Time	Uses NTP to keep computers in the domain synchronized	**Yes**	Time synchronization won't take place.	**Enable**	
Wireless Zero Configuration	Automatically configured WiFi (802.1 1) network adapters	**Maybe**	You will have to manually configure wireless networking.	**Disable**	Enable this service if you're using wireless networking.
WMI Performance Adapter	Provides performance library information **from Windows Management Instrumentation (WMI) providers to clients on the network**	**Yes**	**This service runs only when Performance Data Helper is activated.**	**Enable**	
Workstation	**Provides network connections and communications using the Microsoft Network services**	**Yes**	**The computer will be unable to connect to remote Microsoft Network resources.**	**Enable**	