Services in Windows XP - part 2

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Back to Services in Windows XP - part 1
Performance Logs and Alerts
Collect performance data on a schedule and send the information to a log or trigger an alert. This may be a super geek tool, but I feel that the overhead associated with it is not worth the benefit. You decide.
Dependencies: What service Performance Logs and Alerts to function properly: * None
What other service require Performance Logs and Alerts to function properly: * None
Plug and Play
This service is the heart and soul of the Plug and Play environment. I do not recommend disabling this service, but if you want to, you are on your own. Take note: UPnP is NOT PnP. UPnP is for connectivity on

networks via TCP/IP to devices, such as scanners or printers. Your sound card is PnP. Do NOT disable Plug and Play service. Leave this on automatic. Dependencies: What service Plug and Play to function properly: * None
What other service require Plug and Play to function properly: * Fax Service
* Logical Disk Manager
* Logical Disk Manager Administrative Service
* Messenger
* Smart Card
* Telephony
* Fax Service
* Remote Access Auto Connection Manager
* Remote Access Connection Manager
* Internet Connection Firewall (ICF) / Internet Connection Sharing (ICS)
* Remote Access Auto Connection Manager
* Windows Audio

Portable Media Serial Number

Retrieves serial numbers from portable music players connected to your computer. I have not really found a good reason to keep this service always running. I am not aware of anything that actually requires it. Disable it unless something of yours ceases to function properly, such as Windows Media Player, Microsoft's integration with "Digital Rights Management" and copy protection. Disable this service.
Dependencies: What service Portable Media Serial Number to function properly: * None
What other service require Portable Media Serial Number to function properly: * None
Print Spooler
Queues up print jobs for later printing. This service is required if you have printers, even if they are network printers. If this does not fit your needs, disable it. You will save about 3.8 MB by making this service go away. Your printers will still be "installed" if you disable this service, but not visible in the printers folder. After restarting Print Spooler, they will reappear and be available for use. I place this service into manual mode and only start it up when printing is required. In manual mode, the service will not automatically start at boot time. Leave this on automatic.
Dependencies: What service Print Spooler to function properly: * Remote Procedure Call (RPC)

What other service require Print Spooler to function properly: *Fax Service

* TCP/IP Printer Server

Protected Storage

Allows for the saving of local passwords or even web sites information (AutoComplete). This service is set to

Automatic by default. Due to security reasons, I recommend leaving this "feature" disabled to make things all that much more difficult to steal vital information if you do not "save" it. On the other hand, you may need this service to manage private keys for encryption purposes. If so, leave this service on automatic to ensure the "higher" security settings you choose work. If you disable this service, you will no longer have any of your passwords saved, no matter how many times you click the box. If you enjoy having your passwords saved in applications like Outlook or Dial up networking or you are connecting to the internet via a domain controller/server that requires authentication, set this service to Automatic.

Dependencies:

What service Protected Storage to function properly:
* Remote Procedure Call (RPC)

What other service require Protected Storage to function properly:

None

OoS RSVP

Provides traffic control on a network using IPSEC and applications that support QoS, and have an adapter that supports it. The QoS Packet Driver installs by default on any TCP/IP connections. I recommend uninstalling it if it is not needed on your network. As far as I can tell, you also need an ACS Server (Provided with Windows 2000 Server and Advanced Server) for the QoS Packet Scheduler and Applications to request the needed bandwidth. Since my network is not straining under any load, this is rather pointless. You may require this service to be placed on Automatic if you use Windows Media Player or NetMeeting. Take note: Some people (as I did before I completed extensive research on this) reported that QoS uses 20% of your bandwidth and does not allow any activity, regardless. This is false. For more information, please view this KB article from Microsoft (I normally do not post links to them, but this warrants it): http://support.microsoft.com/default.aspx?scid=kb;EN-US;q316666

Regardless, if you uninstall the packet scheduler, no "bandwidth" is still reserved. Put this service on disabled

Dependencies:

What service QoS RSVP to function properly:

- AFD Networking Support Environment
- * Remote Procedure Call (RPC)
- * NetBIOS over TCP/IP

* TCP/IP Protocol Driver
* IPSEC driver
What other service require QoS RSVP to function properly: * None
Remote Access Auto Connection Manager
Creates a connection to a network when a program requests a remote address. This service may be required for your internet connection. If things cease to function after disabling this service, put it to automatic. Note: you may require this service for some direct cable or DSL providers and connections, depending on how they implement their logon process. If your Dial-up, cable or DSL internet access no longer functions properly with this service disabled, place this service into automatic. If you use a hardware gateway or router, this service is not required. Leave this on manual.
Dependencies: What service Remote Access Auto Connection Manager to function properly: * Remote Access Connection Manager
* Telephony
* Plug and Play
* Remote Procedure Call (RPC)
What other service require Remote Access Auto Connection Manager to function properly: * None
Remote Access Connection Manager

Creates a network connection. This service is required if you use Internet Connection Sharing. If things cease to function after disabling this service, put it to automatic. Note: you may require this service for some direct cable or DSL providers and connections, depending on how they implement their logon process. If your Dial-up, cable or DSL internet access no longer functions properly with this service disabled, place this service into automatic. If you use a hardware gateway or router, this service is not required. Leave this on manual.
Dependencies: What service Remote Access Auto Connection Manager to function properly: * Telephony
Plug and Play

What other service require Remote Access Auto Connection Manager to function properly: * Internet Connection Firewall (ICF) / Internet Connection Sharing (ICS)

Remote Procedure Call (RPC)

Remote Desktop Help Session Manager

Manages and controls Remote Assistance. If you do not want or need to use this feature, disable it. In an idle state, this service sucks up 3.4 MB to 4 MB of RAM. Disable this service.

Dependencies:
What service Remote Desktop Help Session Manager to function properly:
* Remote Procedure Call (RPC)

What other service require Remote Desktop Help Session Manager to function properly: * None

Remote Procedure Call (RPC)

^{*} Remote Access Auto Connection Manager

This service is rather vital. Practically everything depends on this service to be running. This is also the only service that you cannot disable via the Services MMC. Previously, if you disabled this service in Windows 2000, your computer would become unbootable. What I am trying to tell you is leave this service on automatic and absolutely DO NOT disable it. If, for whatever reason, the service became disabled and you can no longer boot your system.

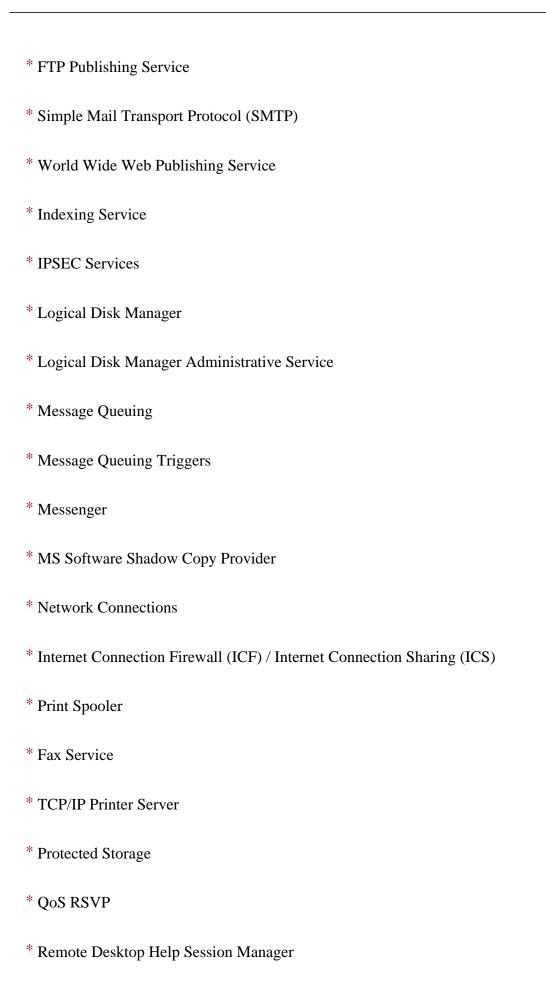
Dependencies:

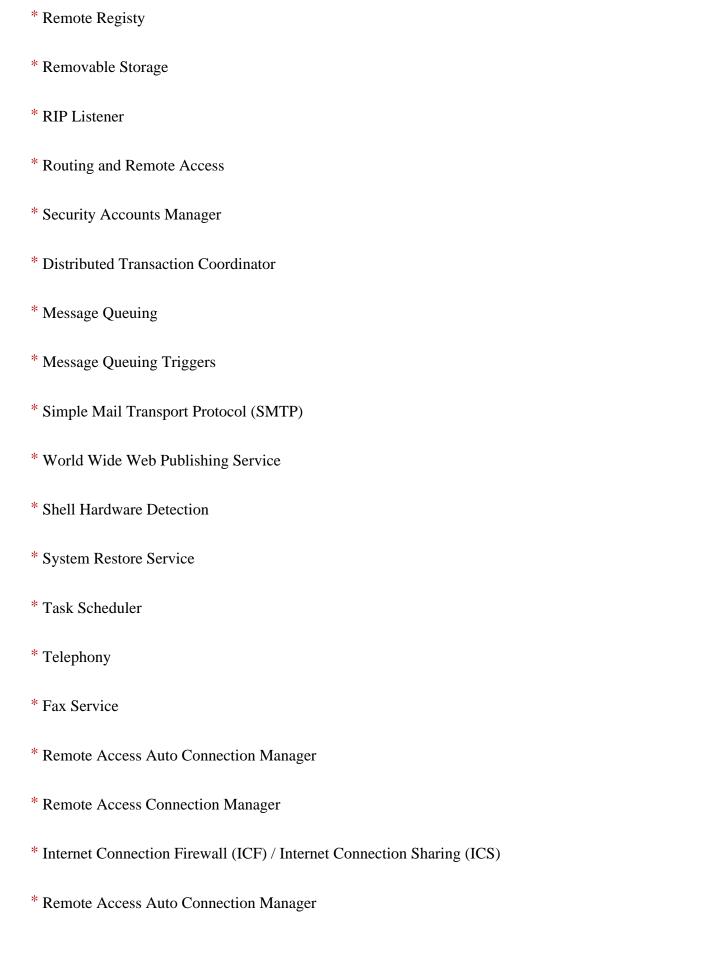
What service Remote Procedure Call (RPC) to function properly:

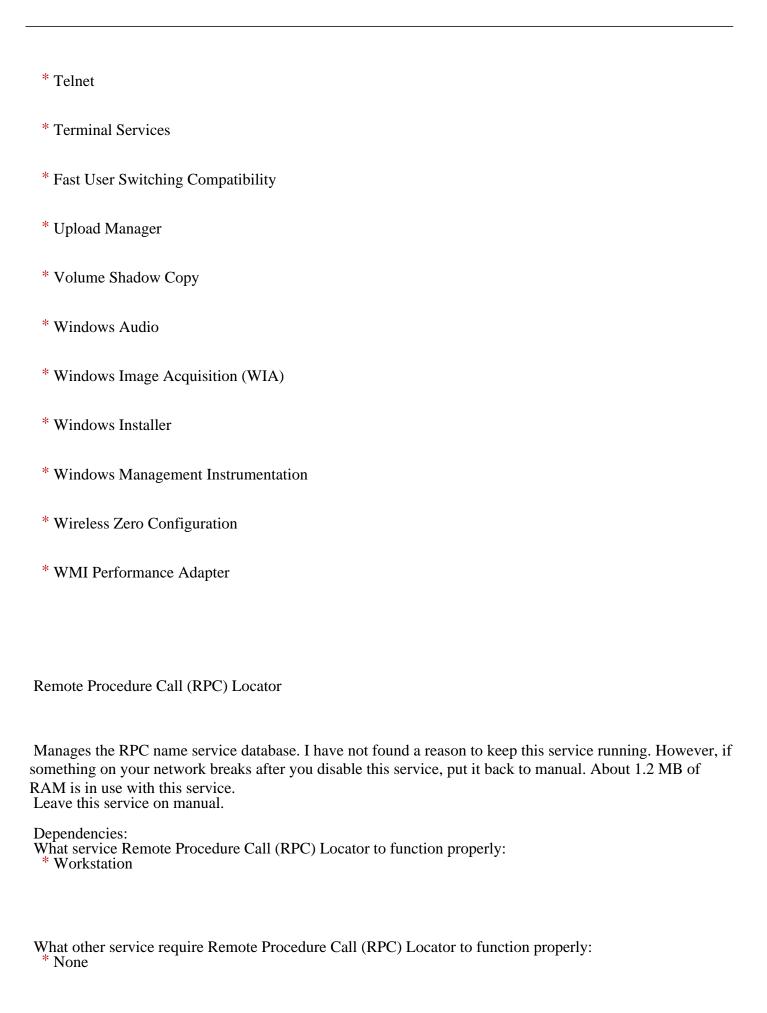
* None

What other service require Remote Procedure Call (RPC) to function properly: *Background Intelligent Transfer Service

- * COM+ Event System
- * System Event Notification
- * COM+ System Application
- * Cryptographic Services
- * Distributed Link Tracking Client
- * Distributed Transaction Coordinator
- * Message Queuing
- * Message Queuing Triggers
- * Error Reporting Service
- * Fax Service
- * Help and Support
- * Human Interface Device Access
- * IIS Admin







Remote Registry Service
This feature is not available on Windows XP Home. This is one of those not needed services. One of the first I disable. If you are paranoid about security, disable this service. Even if you are not or do not care, disable it anyway.
Dependencies: What service Remote Registry Service to function properly: * Remote Procedure Call (RPC)
What other service require Remote Registry Service to function properly: * None
Removable Storage
Used for managing removable media. Disable this service if you do not have items like tape backup devices, etc. If your CD ROM / DVD drive starts acting funny, (no auto play, etc) place this service into automatic. Normally, this service does not need to be running and you will not miss any of its functionality. Leave this service on manual.
Dependencies: What service Removable Storage to function properly: * Remote Procedure Call (RPC)
What other service require Removable Storage to function properly: * None

This feature is not available on Windows XP Home or installed by default on Windows XP Pro, but if needed, you may install it later off the Windows XP CD. If you do not know what RIP protocol is, you do not need this service installed. :)

RIP Listener

Dependencies: What service RIP Listener to function properly: * Remote Procedure Call (RPC)
What other service require RIP Listener to function properly: * None
Routing and Remote Access
Allows computers to dial in to the local computer through a modem (or other devices) to access the local network using a standard or VPN connection. Unless you require this functionality, disable it for security reasons. Upon enabling this service, "Incoming Connections" icon will be available in the "Network Connections" control panel. Disable this service.
Dependencies: What service Routing and Remote Access to function properly: * NetBIOSGroup
* NetBIOS Interface
* Remote Procedure Call (RPC)
What other service require Routing and Remote Access to function properly: * None
Secondary Logon
Enables starting processes under alternate credentials. I have never found a reason to keep this service running. I have always considered "Alternate Credentials" someone other than me! Not my idea of fun Really, though, it allows a "limited user" account to start an application or process with higher privileges, such as the Administrator account or another user. You can also have a privileged user start an application or

process with limited privileged account. If you right-click a file, the menu will display "Run As" option. If you disable this service, that function will no longer be available. Disbale this service.
Dependencies: What service Secondary Logon to function properly: * None
What other service require Secondary Logon to function properly: * None
Security Accounts Manager
Like Protected Storage, it saves profile and security information for local users. This service is required for IIS Admin. If you have ever used the Group Policy Editor (gpedit.msc) to modify your settings, you need to keep this service running; otherwise, your modifications will not apply. For "Safe" configurations, place this into automatic.
Dependencies: What service Security Accounts Manager to function properly: * Remote Procedure Call (RPC)
What other service require Security Accounts Manager to function properly: * Distributed Transaction Coordinator
* Message Queuing
* Message Queuing Triggers
* IIS Admin
* FTP Publishing Service

* Simple Mail Transport Protocol (SMTP)

* World Wide Web Publishing Service

Server

Used for file and print sharing from your computer or Message Queuing. For security purposes, you may disable this service if you do not require local printers and files shared across your network. Connectivity, however, still exists even on incoming shared network drives. Workstation needs to be running to connect to another computer that has the files you are looking for. Note: If you disable File and Print sharing, the Server Service may disappear from the Services listing. Just enable File and Print sharing again and the Server Service will return.

Disable this service.

Dependencies:

What service Server to function properly:

* None

What other service require Server to function properly:

* Computer Browser

* Message Queuing

* Message Queuing Triggers

Shell Hardware Detection

Used for the auto play of devices like memory cards, CD drives, etc. Also, set to automatic if you are experiencing problems with laptop docking stations. In "My Computer," you may not see your hardware (example: DVD drive) displayed as a "DVD Drive" if this service is disabled. However, all functionality still exists. In addition, when checking the properties of an "auto play" device, such as a DVD drive, you will not have an auto play tab displayed or available. This service also allows the option of selecting what action you wish to take with a particular "type" of file. If you enjoy the auto play function of CD's and DVD's after inserting them into your drive, leave this service on automatic.

Dependencies:

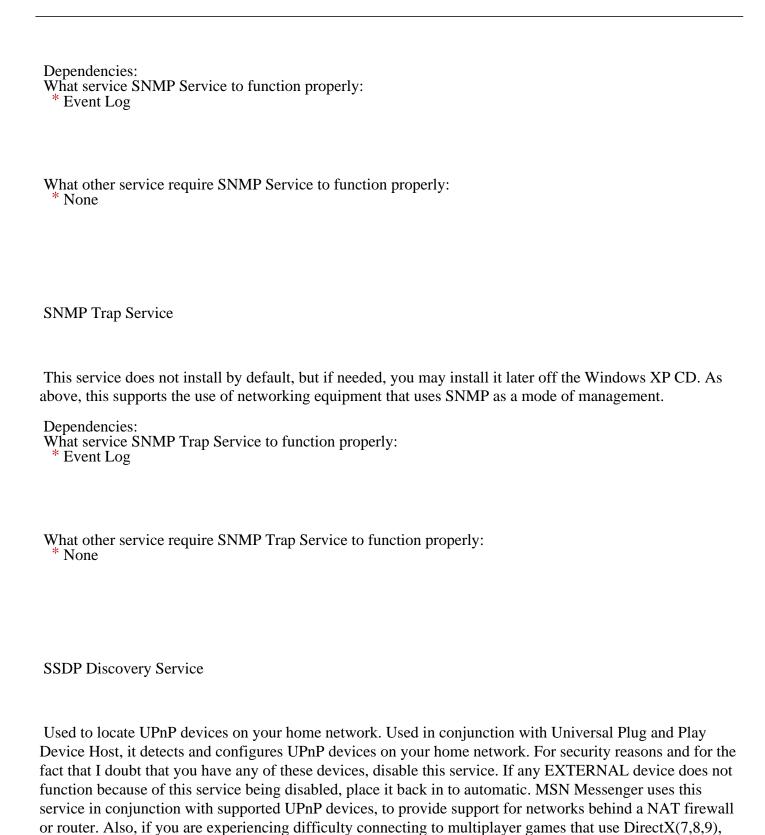
What service Shell Hardware Detection to function properly:

* Remote Procedure Call (RPC)

What other service require Shell Hardware Detection to function properly:

* None
Simple Mail Transport Protocol (SMTP)
This feature is not available on Windows XP Home or installed by default on Windows XP Pro, but if needed you may install it later off the Windows XP CD. This service supports the use of a local (outbound) E-Mail server.
Dependencies: What service Simple Mail Transport Protocol (SMTP) to function properly: * Event Log
* IIS Admin
* Security Accounts Manager
* Remote Procedure Call (RPC)
What other service require Simple Mail Transport Protocol (SMTP) to function properly: * None
Simple TCP/IP Services
This service does not install by default, but if needed, you may install it later off the Windows XP CD. This service supports some old school UNIX networking services.
Dependencies: What service Simple TCP/IP Services to function properly: * AFD Networking Support Environment
What other service require Simple TCP/IP Services to function properly: * None

Smart Card
Supports the use of a Smart Card for local or network computer authentication. If you do not have a "Smart Card," or you do not know what a Smart Card is, you do not need this service running. Save the 1.1 MB to 1.4 MB of RAM this service uses. Change it to disabled.
Dependencies: What service Smart Card to function properly: * Plug and Play
What other service require Smart Card to function properly: * None
Smart Card Helper
Supports the use of a Smart Card for local or network computer authentication. If you do not have a "Smart Card," you do not need this service running. Disable this service.
Dependencies: What service Smart Card Helper to function properly: * None
What other service require Smart Card Helper to function properly: * None
SNMP Service
This service does not install by default, but if needed, you may install it later off the Windows XP CD. This service supports the use of networking equipment that uses SNMP as a mode of remote management.



Disable this service.

NOT disable Plug and Play service.

Dependencies:

place this service to automatic and ensure you download all security updates. The problem that I have found with this service is that it broadcasts UDP port 1900 "a lot." If you notice plenty of network activity even though nothing is happening, this serivice is sometimes the cause. Take note: UPnP is NOT PnP. UPnP is for connectivity on networks via TCP/IP to devices, such as scanners or printers. Your sound card is PnP. Do

What service SSDP Discovery Service to function properly: * None
What other service require SSDP Discovery Service to function properly: * Universal Plug and Play Device Host
System Event Notification
Used in conjunction with COM+ Event System, this service notifies particular services when system events, such as logon and power events occur. I doubt the average user really cares about this. I have also not seen any applications that use this. You will receive, in the Event Log, an entry complaining about not having this service running if disabled. I have yet to find a side effect, though. For a "safe" configuration, leave this service on automatic.
Dependencies: What service System Event Notification to function properly: * COM+ Event System
* Remote Procedure Call (RPC)
What other service require System Event Notification to function properly: * None
System Restore Service
Read all of this before disabling! This service creates system snap shots or restores a point for returning to later. This is the OTHER service that is a massive resource hog. Indexing Service is number one. Every time you install a program or new driver, and on a schedule, this service creates a "restore point" to roll back to if a problem occurs. This service would have been nice in the Windows 95 days due to plenty of problems occurring (new DirectX version every 15 minutes) but not required for the "much" more stable Windows XP. This is the FIRST thing that I get rid of on a clean installation. I feel it is faster and less hassle to just install

clean. A rather GOOD (and possibly the only) reason to use this "feature" is to roll back your OS after installing an unknown program or testing software. For example, if you use BETA software of any kind.

NOTE: If you disable this service, your previous "restore points" will delete. If, for whatever reason, you do not want this to happen, do not disable this service. By default, System Restore Service uses a LARGE amount of disk space to store rollback points. On large hard drives, this could be well over 10 to 20 GB. Disable this service.

Dependencies:

What service System Restore Service to function properly:

* Remote Procedure Call (RPC)

What other service require System Restore Service to function properly:

* None

Task Scheduler

You use this service to schedule maintenance, Microsoft Backup sessions, or maybe even Auto Update. I do everything manually, to avoid having this service running all the time. Some third party software may require this service to be active for automated functions, such as virus scanners, system maintenance tools, and automatic patch/driver lookups. Take note: BootVis requires Task Scheduler and COM+ Event System to be running if you wish to take advantage of the "optimize system" function. Why may you need this service? It is due to the pre-fetching function built into Windows XP. Another Note: Pre-fetching only occurs on boot up and application start, so if you do not care about a few extra seconds of boot time, do not even bother with it and disable Task Scheduler. On some applications, the pre-fetching feature really does help. Only you can decide whether to use its functionality and if it helps in the performance of your system. Leave this on automatic.

Dependencies:

What service Task Scheduler to function properly:

* Remote Procedure Call (RPC)

What other service require Task Scheduler to function properly:

* None

TCP/IP NetBIOS Helper Service

This feature provides legacy support for NetBIOS over TCP/IP. If your network does not use NetBIOS and /

or WINS, disable this function. Disbale this service.
Dependencies: What service TCP/IP NetBIOS Helper Service to function properly: * AFD Networking Support Environment
* NetBIOS over TCP/IP
* TCP/IP Protocol Driver
* IPSEC driver
What other service require TCP/IP NetBIOS Helper Service to function properly: * None
TCP/IP Printer Server
This service does not install by default, but if needed, you may install it later off the Windows XP CD. Used for setting up a local UNIX print server. If you do not need this function, leave it uninstalled.
Dependencies: What service TCP/IP Printer Server to function properly: * Print Spooler
* Remote Procedure Call (RPC)
* TCP/IP Protocol Driver
* IPSEC driver
What other service require TCP/IP Printer Server to function properly: * None

Telephony

Controls telephony devices on the local computer. This service is required for dial-up modem connectivity. Note: you may require this service for some direct cable or DSL providers, depending on how they implement their logon process or some AOL functionality, depending on software used. If Dial-up, cable or DSL internet access no longer functions properly with this service disabled, place it into automatic. If you are connecting via a hardware router or gateway, this service is not needed. Leave this on manual.

Dependencies:

What service Telephony to function properly:

* Plug and Play

* Remote Procedure Call (RPC)

What other service require Telephony to function properly:

- * Fax Service
- * Remote Access Auto Connection Manager
- * Remote Access Connection Manager
- * Internet Connection Firewall (ICF) / Internet Connection Sharing (ICS)
- * Remote Access Auto Connection Manager

Telnet

This service is not available on Windows XP Home. It allows remote login to the local computer via the telnet function. For security reasons, disable this unless you specifically require its functionality. You will save about 2 MB of RAM by plugging this security hole. Disable this service.

Dependencies:

What service Telnet to function properly:

* NT LM Security Support Provider

* Remote Procedure Call (RPC)
* TCP/IP Protocol Driver
* IPSEC driver
What other service require Telnet to function properly: * None
Terminal Services
Allows remote login to the local computer. This service is required for Fast User Switching, Remote Desktop Server and Remote Assistance. You will not be able to view who is logged on to a particular computer by viewing the "user" tab located in the Task Manager if this service is disabled. For security reasons, disable this unless you specifically require its functionality. For some reason, start this service to install Norton 2003. Disbale this service.
Dependencies: What service Terminal Services to function properly: * Remote Procedure Call (RPC)
What other service require Terminal Services to function properly: * Fast User Switching Compatibility
Themes
Used to display all those new XP themes and colors on your desktop. If memory conscious and does not care about the "new" XP look, disable this service to save RAM. I have observed between 4 MB to 12 MB of RAM used for the new themes. Leave this on automatic.
Dependencies: What service Themes to function properly: * None

What other service require Themes to function properly:
* None

Uninterruptible Power Supply

I have not found a need for this. My UPS that connects via USB does NOT need this service to run. However, some APC UPS install a totally different service for communication. Windows Update also has a "patch" for the UPS service. Some UPS connected via serial port may require this service to be running. Disable this service.

Dependencies:

What service Uninterruptible Power Supply to function properly:

* None

What other service require Uninterruptible Power Supply to function properly:
* None

Universal Plug and Play Device Host

Used in conjunction with SSDP Discovery Service, it detects and configures UPnP devices on your home network. For security reasons and for the fact that I doubt that you have any of these devices, disable this service. If any EXTERNAL device does not function because of this service being disabled, place it back in to automatic. MSN Messenger uses this service in conjunction with supported UPnP devices, to provide support for networks behind a NAT firewall or router. Also, if you are experiencing difficulty connecting to multiplayer games that use DirectX(7,8,9), place this service to automatic and ensure you download all security updates. Furthermore, if you use Internet Connection Sharing and wish to make use of the "allow others to modify this connection" feature, enable UPnP. Take note: UPnP is NOT PnP. UPnP is for connectivity on networks via TCP/IP to devices, such as scanners or printers. Your sound card is PnP. Do NOT disable Plug and Play service.

Disable this service.

Dependencies:

What service Universal Plug and Play Device Host to function properly:

* SSDP Discovery Service

What other service require Universal Plug and Play Device Host to function properly: * None
Upload Manager
This service sends driver information to Microsoft to track availability of driver information. This service is not required for basic File and Print sharing. I have yet to find a need for this service, nor do I wish to send my hardware information to Microsoft. Disable this service.
Dependencies: What service Upload Manager to function properly: * Remote Procedure Call (RPC)
What other service require Upload Manager to function properly: * None
Volume Shadow Copy
Used in conjunction with the MS Software Shadow Copy Provider service. Microsoft Backup also uses these services. You will receive, in the Event Log, an entry complaining about not having this service running if disabled. I have yet to find a side effect, though. If you do not like the errors, place it in manual. By taking it out of automatic, you will save about 3.0 MB of memory. Leave this service on manual.
Dependencies: What service Volume Shadow Copy to function properly: * Remote Procedure Call (RPC)
What other service require Volume Shadow Copy to function properly: * None

WebClient

I have not found a reason to have this service running. I have a hunch that this is going to be required for Microsoft's ".Net Software as a service." For security reasons, I recommend for this service to be disabled. If some MS products, such as MSN Explorer, Media Player, NetMeeting or Messenger fail to provide a particular function, try to enable this service to see if it is "required" for your configuration. Disable this service.

Dependencies:

What service WebClient to function properly:

* WebDay Client Redirector

What other service require WebClient to function properly: None

Windows Audio

This service is required if you wish to hear any audio at all. If your computer does not have a sound card, disable this service.

Leave this service on automatic.

Dependencies:

What service Windows Audio to function properly:

* Plug and Play

* Remote Procedure Call (RPC)

What other service require Windows Audio to function properly:

* None

Windows Image Acquisition (WIA)

Used for some scanners, web cams, and cameras. If, after disabling this service, your scanner or camera fails to function properly, enable this service by placing it into automatic.
Dependencies: What service Windows Image Acquisition (WIA) to function properly: * Remote Procedure Call (RPC)
What other service require Windows Image Acquisition (WIA) to function properly: * None
Windows Installer
This service is required for software applications that install using MSI files. If no applications that you have will install properly or you get an error that involves "RPC Service," place this service in to Automatic or Manual. Only disable this service after you have completed installation of your applications, mainly Office and such. I am not aware how many Games actually use MSI Files. In an idle state, this service uses about 3.4 MB of RAM. Put it to manual to save that amount. Leave this service on manual.
Dependencies: What service Windows Installer to function properly: * Remote Procedure Call (RPC)
What other service require Windows Installer to function properly: * None
Windows Management Instrumentation
This service is required if you want to see the "Dependencies" tab in service configuration and you want

Dependencies: What service Windows Management Instrumentation to function properly: * Event Log

everything to go smoothly. I do not recommend disabling this service as strange things may start to happen. Leave this on Automatic.

* Remote Procedure Call (RPC)
What other service require Windows Management Instrumentation to function properly: * None
Windows Management Instrumentation Driver Extension
This feature is not available on Windows XP Home. This service is not as vital as Windows Management Instrumentation, but I recommend leaving this service in manual.
Dependencies: What service Windows Management Instrumentation Driver Extension to function properly: * None
What other service require Windows Management Instrumentation Driver Extension to function properly: * None
Windows Time
Automatically sets your clock by contacting a server (Microsoft's server by default) on the internet. Great ide if your network connects to the internet 24/7. The Event Log fills up with "cannot find server" messages on a non-dedicated setup, though. After successful synchronizing, this service will not attempt to do it again for 7 days, meanwhile, taking up resources. You may also need Task Scheduler running. You may choose to set your clock manually on a dial up connection, but with a 24/7 broadband setup, this could keep you on time for work. Note: as mentioned, "time.windows.com" is the default server for synchronization. For those privacy conscious people that prefer to connect to a government site rather then MS, use "time.nist.gov." Disable this service.
Dependencies: What service Windows Time to function properly: * None

What other service require Windows Time to function properly: * None
Wireless Zero Configuration
Provides automatic configuration for wireless network devices and connection quality feedback. If you do not have any wireless network devices in use on the local system, disable this service. You may require this service for connectivity with some "hot sync" software for a PDA, laptop or other portable computer. Disable this service.
Dependencies: What service Wireless Zero Configuration to function properly: * NDIS Usermode I/O Protocol
* Remote Procedure Call (RPC)
What other service require Wireless Zero Configuration to function properly: * None
WMI Performance Adapter
I have not found a use for this service. Save the 2.5 MB to 6 MB of memory, this service consumes. Disable this service.
Dependencies: What service WMI Performance Adapter to function properly: * Remote Procedure Call (RPC)
What other service require WMI Performance Adapter to function properly: * None

Workstation

Used to connect local computer to remote computers. Examples may include local network connectivity and File and Print sharing. Many services depend on Workstation to be functioning. Leave it on automatic for safe configurations.

Leave this on Automatic.

Dependencies:

What service Workstation to function properly:

* None

What other service require Workstation to function properly:

- * Alerter
- * Background Intelligent Transfer Service
- * Computer Browser
- * Messenger
- * Net Logon
- * Remote Procedure Call (RPC) Locator

World Wide Web Publishing Service

This feature is not available on Windows XP Home or installed by default on Windows XP Pro, but if needed, you may install it later off the Windows XP CD. Used for setting up a local web server. If you do not need this function, leave it uninstalled, mainly because this service requires IIS Admin to be running and IIS has been "popular" for crackers to break.

Dependencies:

What service World Wide Web Publishing Service to function properly:

* IIS Admin

* Remote Procedure Call (RPC)

* Security Accounts Manager

What other service require World Wide Web Publishing Service to function properly: * None