

# Windows XP Home and Professional Service Configurations

Original content created July 28, 2001  
Last update was Monday, July 21, 2003

Copyright © 2001-2003 by Black Viper  
All Rights Reserved.

All trademarks mentioned in this document are property of their respective owners.

Up to date content and contact information is located at  
<http://www.blkvip.com> or <http://www.blackviper.com>

## Table of contents:

This Page:	Page 1
Notes for a Happier Computer and User:	Page 2
Table Header Information:	Page 3
Services Configuration Table:	Pages 4-12
Services Information:	Pages 13-40
Strange Processes	Pages 41-44

## Notes for a Happier Computer and User:

- **Do NOT use “msconfig” to disable services, type “services.msc” in the Run box instead!**
- Before disabling **any** service, check out the information about each starting on Page 13 of this document.
- Service settings are **global**, meaning changes apply to all users.
- All of these services are “Standard” with Windows XP. If you discover something other than these listed here running, another program installed them. A few of the more common processes are listed starting on page 41.
- Still unsure? Put your setting to “manual” or the listing under “Safe.” Manual allows Windows XP to start the service when it needs to (or when ever it feels like it), but not at boot up. Depending on your configuration, not all services will start when required while in “Manual” mode. If you find you need a service, place it in Automatic.
- **After adjusting your service settings, reboot your computer.**
- If you do not have some of these services listed, do not panic! If your computer manufacture “pre-installed” your XP, they choose not to have certain services installed for you. This is, in most cases, a fact with OEM versions of Windows XP Home.
- If you find this document helpful and you wish to use this information (forums, web sites), please link to <http://www.blkviper.com> and do not copy or redistribute it. The online information is up to date and I do not want anyone posting old content.
- Disabling all of the “unneeded services” frees up 12-70 MB of RAM, depending on system.
- Do you mean that out of 89 services, 36 are set to Automatic as DEFAULT, but, we MAY only need 8 running?!? YES.

## Table Header Information:

- **Display Name** ~ is how it displays in the Services Control Panel.
- **Service Name** ~ is what the service's "short" name is and what displays in the registry.
- **Process Name** ~ name of the Process running in the background (displays in Task Manager by hitting Ctrl+Alt+Del).
- **Dependencies** ~ describe what other services this service needs to run.
- **Default Home** ~ this is what runs by default on Windows XP Home.
- **Default Pro** ~ this is what runs by default on Windows XP Professional.
- **"SAFE" Configuration** ~ this is the configuration that 95% of the people will be able to use with little or no side effects. It will also minimize the amount of "errors" that is reported in the Event Viewer. This does NOT guarantee it will work for you, but if this scares you, this configuration would be a good starting point.
- **Internet Gateway Configuration** ~ setup to allow multiple computers on a network to share one access point using Microsoft's "Internet Connection Sharing and Personal Firewall" software. If you do not have this type of setup, compare the differences between "SAFE" and "GAMING" to find a middle ground that works for your system. Other software or hardware type firewall and gateway software may require a slightly different configuration.
- **Gaming Configuration** ~ this is the power user setup. This setup is a system that connects through a network (such as a gateway / router) to the internet, provides file and print sharing resources and gaming enjoyment. Some things MAY not function with this setup. No passwords save. Its use is not for a computer with analog modems or some direct DSL/cable connections. Try "Internet Gateway" Configuration first.
- **Super Tweak Configuration** ~ this is the Super Geek setup. This setup is a system that connects through a network (such as a gateway / router) to the internet with a static IP address. This system does not provide file and print sharing resources, nor have the ability to print. Its use is not for a computer with analog modems or many direct DSL/cable connections. You can use this configuration for extreme tweaking and testing purposes. Many things MAY not function with this setup. No passwords save. The Event Log may display "errors" of not being able to start certain services. CDRW functions may no longer work. Please do not ask, "How do I fix" questions while using this configuration. The answer will be "Use SAFE." This information's intention is for reference only. However, I use this configuration on a daily basis.

Display Name	Service Name	Process Name	Dependencies	Default Home	Default Pro	“SAFE”	Internet Gateway	Gaming	Super Tweak
Alerter	Alerter	services.exe	Workstation	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Application Layer Gateway Service	ALG	Alg.exe	None	Manual	Manual	Manual	Automatic	Disabled	Disabled
Application Management	AppMgmt	svchost.exe	None	Manual	Manual	Manual	Manual	Manual	Manual
Automatic Updates	wuauerv	svchost.exe	None	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
Background Intelligent Transfer Service	BITS	svchost.exe	Remote Procedure Call (RPC), Workstation	Manual	Manual	Disabled	Disabled	Disabled	Disabled
ClipBook	ClipSrv	clipsrv.exe	Network DDE	Manual	Manual	Disabled	Disabled	Disabled	Disabled
COM+ Event System	EventSystem	svchost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
COM+ System Application	COMSysApp	dllhost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
Computer Browser	Browser	svchost.exe	Server, Workstation	Automatic	Automatic	Disabled	Automatic	Disabled	Disabled
Cryptographic Services	CryptSvc	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
DHCP Client	Dhcp	svchost.exe	AFD Networking Support Environment, NetBios over TCP/IP, TCP/IP Protocol Driver	Automatic	Automatic	Automatic	Disabled	Automatic	Disabled

<b>Display Name</b>	<b>Service Name</b>	<b>Process Name</b>	<b>Dependencies</b>	<b>Default Home</b>	<b>Default Pro</b>	<b>“SAFE”</b>	<b>Internet Gateway</b>	<b>Gaming</b>	<b>Super Tweak</b>
Distributed Link Tracking Client	TrkWks	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Manual	Manual	Disabled	Disabled
Distributed Transaction Coordinator	MSDTC	msdtc.exe	Remote Procedure Call (RPC), Security Accounts Manager	Manual	Manual	Manual	Manual	Disabled	Disabled
DNS Client	Dnscache	svchost.exe	TCP/IP Protocol Driver	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
Error Reporting Service	ERSvc	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Event Log	Eventlog	services.exe	None	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Fast User Switching Compatibility	FastUserSwitching Compatibility	svchost.exe	Terminal Services	Manual	Manual	Manual	Manual	Disabled	Disabled
Fax Service	FAX	fxssvc.exe	Plug and Play, Print Spooler, Remote Procedure Call (RPC), Telephony	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
FTP Publishing Service	NA	inetinfo.exe	IIS Admin	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Help and Support	helpsvc	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Human Interface Device Access	HidServ	svchost.exe	Remote Procedure Call (RPC)	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
IIS Admin	IISADMIN	inetinfo.exe	Remote Procedure Call (RPC), Security Accounts Manager	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed

<b>Display Name</b>	<b>Service Name</b>	<b>Process Name</b>	<b>Dependencies</b>	<b>Default Home</b>	<b>Default Pro</b>	<b>“SAFE”</b>	<b>Internet Gateway</b>	<b>Gaming</b>	<b>Super Tweak</b>
IMAPI CD-Burning COM Service	ImapiService	imapi.exe	None	Manual	Manual	Automatic	Automatic	Disabled	Disabled
Indexing Service	Cisvc	cisvc.exe	Remote Procedure Call (RPC)	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Internet Connection Firewall/Internet Connection Sharing	SharedAccess	svchost.exe	Application Layer Gateway Service, Network Connections, Network Location Awareness, Remote Access Connection Manager	Manual	Automatic	Automatic	Automatic	Disabled	Disabled
IPSEC Services	PolicyAgent	lsass.exe	IPSEC driver, Remote Procedure Call (RPC), TCP/IP Protocol Driver	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Logical Disk Manager	dmserver	svchost.exe	Plug and Play, Remote Procedure Call (RPC)	Manual	Automatic	Manual	Manual	Disabled	Disabled
Logical Disk Manager Administrative Service	dmadmin	dmadmin.exe	Logical Disk Manager, Plug and Play, Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled

Display Name	Service Name	Process Name	Dependencies	Default Home	Default Pro	“SAFE”	Internet Gateway	Gaming	Super Tweak
Message Queuing	NA	mqsvc.exe	Distributed Transaction Coordinator, Message Queuing access control, NT LM Security Support Provider, Reliable Multicast Protocol driver, Remote Procedure Call (RPC), Server	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Message Queuing Triggers	NA	mqtgsvc.exe	Message Queuing	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Messenger	Messenger	svchost.exe	NetBIOS Interface, Plug and Play, Remote Procedure Call (RPC), Workstation	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
MS Software Shadow Copy Provider	SwPrv	dllhost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
Net Login	Netlogon	lsass.exe	Workstation	Manual	Automatic	Disabled	Disabled	Disabled	Disabled
NetMeeting Remote Desktop Sharing	mnmsrvc	mnmsrvc.exe	None	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Network Connections	Netman	svchost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Automatic	Manual	Disabled
Network DDE	NetDDE	netdde.exe	Network DDE DSDM	Manual	Manual	Disabled	Disabled	Disabled	Disabled

<b>Display Name</b>	<b>Service Name</b>	<b>Process Name</b>	<b>Dependencies</b>	<b>Default Home</b>	<b>Default Pro</b>	<b>“SAFE”</b>	<b>Internet Gateway</b>	<b>Gaming</b>	<b>Super Tweak</b>
Network DDE DSDM	NetDDE	netdde.exe	AFD Networking Support Enviroment, TCP/IP Protocol Driver	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Network Location Awareness (NLA)	Nla	svchost.exe	None	Manual	Manual	Manual	Automatic	Disabled	Disabled
NT LM Security Support Provider	NtLmSsp	lsass.exe	None	Manual	Manual	Manual	Manual	Manual	Disabled
Performance Logs and Alerts	SysmonLog	smlogsvc.exe	None	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Plug and Play	PlugPlay	services.exe	None	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Portable Media Serial Number	WmdmPmSp	svchost.exe	None	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Print Spooler	Spooler	spoolsv.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Automatic	Disabled
Protected Storage	ProtectedStorage	lsass.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
QoS RSVP	RSVP	rsvp.exe	AFD Networking Support Environment, Remote Procedure Call (RPC), TCP/IP Protocol Driver	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Remote Access Auto Connection Manager	RasAuto	svchost.exe	Remote Access Connection Manager, Telephony	Manual	Manual	Manual	Automatic	Disabled	Disabled

<b>Display Name</b>	<b>Service Name</b>	<b>Process Name</b>	<b>Dependencies</b>	<b>Default Home</b>	<b>Default Pro</b>	<b>“SAFE”</b>	<b>Internet Gateway</b>	<b>Gaming</b>	<b>Super Tweak</b>
Remote Access Connection Manager	RasMan	svchost.exe	Telephony	Manual	Manual	Manual	Automatic	Disabled	Disabled
Remote Desktop Help Session Manager	RDSessMgr	sessmgr.exe	Remote Procedure Call (RPC)	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Remote Procedure Call (RPC)	RpcSs	svchost.exe	None (but everything depends on it)	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Remote Procedure Call (RPC) Locator	RpcLocator	locator.exe	Workstation	Manual	Manual	Manual	Manual	Manual	Disabled
Remote Registry Service	RemoteRegistry	svchost.exe	None	Not Available	Automatic	Disabled	Disabled	Disabled	Disabled
Removable Storage	NtmsSvc	svchost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
RIP Listener	NA	svchost.exe	Remote Procedure Call (RPC)	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Routing and Remote Access	RemoteAccess	svchost.exe	NetBIOSGroup, Remote Procedure Call (RPC)	Disabled	Manual	Disabled	Disabled	Disabled	Disabled
Secondary Logon	seclogon	svchost.exe	None	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Security Accounts Manager	SamSs	lsass.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
Server	lanmanserver	svchost.exe	None	Automatic	Automatic	Disabled	Automatic	Disabled	Disabled

<b>Display Name</b>	<b>Service Name</b>	<b>Process Name</b>	<b>Dependencies</b>	<b>Default Home</b>	<b>Default Pro</b>	<b>“SAFE”</b>	<b>Internet Gateway</b>	<b>Gaming</b>	<b>Super Tweak</b>
Shell Hardware Detection	ShellHWDetection	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
Simple Mail Transport Protocol (SMTP)	SMTPSVC	inetinfo.exe	Event Log, IIS Admin	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Simple TCP/IP Services	NA	tcpvcs.exe	AFD Networking Support Environment	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
Smart Card	SCardSvr	SCardSvr.exe	Plug and Play	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Smart Card Helper	SCardDrv	SCardSvr.exe	None	Manual	Manual	Disabled	Disabled	Disabled	Disabled
SNMP Service	NA	snmp.exe	Event Log	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
SNMP Trap Service	NA	snmptrap.exe	Event Log	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed
SSDP Discovery Service	SSDPSRV	svchost.exe	None	Manual	Manual	Disabled	Disabled	Disabled	Disabled
System Event Notification	SENS	svchost.exe	COM+ Event System	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
System Restore Service	srsservice	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Task Scheduler	Schedule	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
TCP/IP NetBIOS Helper Service	LmHosts	svchost.exe	AFD Networking Support Environment, NetBios over TCP/IP	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
TCP/IP Printer Server	LPDSVC	tcpvcs.exe	Print Spooler, TCP/IP Protocol Driver	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed

Display Name	Service Name	Process Name	Dependencies	Default Home	Default Pro	“SAFE”	Internet Gateway	Gaming	Super Tweak
Telephony	TapiSrv	svchost.exe	Plug and Play, Remote Procedure Call (RPC)	Manual	Manual	Manual	Automatic	Disabled	Disabled
Telnet	TlntSvr	tlntsvr.exe	NT LM Security Support Provider, Remote Procedure Call (RPC), TCP/IP Protocol Driver	Not Available	Manual	Disabled	Disabled	Disabled	Disabled
Terminal Services	TermService	svchost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
Themes	Themes	svchost.exe	None	Automatic	Automatic	Automatic	Automatic	Disabled	Disabled
Uninterruptible Power Supply	UPS	ups.exe	None	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Universal Plug and Play Device Host	UPNPhost	svchost.exe	SSDP Discovery Service	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Upload Manager	uploadmgr	svchost.exe	Remote Procedure Call (RPC)	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Volume Shadow Copy	VSS	vssvc.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled
WebClient	WebClient	svchost.exe	WebDav Client Redirector	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Windows Audio	AudioSrv	svchost.exe	Plug and Play, Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Windows Image Acquisition (WIA)	Stisvc	svchost.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Disabled	Disabled

Display Name	Service Name	Process Name	Dependencies	Default Home	Default Pro	“SAFE”	Internet Gateway	Gaming	Super Tweak
Windows Installer	MSIServer	msiexec.exe	Remote Procedure Call (RPC)	Manual	Manual	Manual	Manual	Manual	Manual
Windows Management Instrumentation	Winmgmt	svchost.exe	Event Log, Remote Procedure Call (RPC)	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Windows Management Instrumentation Driver Extension	Wmi	svchost.exe	None	Not Available	Manual	Manual	Manual	Manual	Disabled
Windows Time	W32Time	svchost.exe	None	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
Wireless Zero Configuration	WZCSVC	svchost.exe	NDIS Usermode I/O Protocol, Remote Procedure Call (RPC)	Automatic	Automatic	Disabled	Disabled	Disabled	Disabled
WMI Performance Adapter	WmiApSrv	wmiapsrv.exe	Remote Procedure Call (RPC)	Manual	Manual	Disabled	Disabled	Disabled	Disabled
Workstation	lanmanworkstation	svchost.exe	None (but plenty depend on it)	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
World Wide Web Publishing Service	W3SVC	inetinfo.exe	IIS Admin	Not Available	Not Installed	Not Installed	Not Installed	Not Installed	Not Installed

Up to date content and contact information is located at <http://www.blkviper.com> or <http://www.blackviper.com>

# Black Viper's Windows XP Home and Professional Services 411

Original content created July 28, 2001  
Last update was Monday, July 21, 2003

Copyright © 2001-2003 by Black Viper  
All Rights Reserved.

Up to date content and contact information is located at  
[www.blkviper.com](http://www.blkviper.com) or [www.blackviper.com](http://www.blackviper.com).

---

## **Alerter**

The Alerter service notifies users of administrative alerts on a network. This service usually is not required under normal circumstances. Note: This is NOT “WinPopUp.”

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- Workstation

## **Application Layer Gateway Service**

Provides support for 3rd party plug-ins for Internet Connection Sharing/Internet Connection Firewall. This service is required if using Internet Connection Sharing / Internet Connection Firewall to connect to the internet. This service uses about 1.5 MB of memory in an idle state.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- None

## **Application Management**

Used for Assign, Publish and Remove software services. If you cannot modify your software installation of certain applications, put this service in to Automatic or Manual. If you have Windows XP Home Version, this service may be causing problems described in this knowledge base article:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;Q328213?SD=EE>

I have not tested this, but for now, Disable this service in Windows XP Home until installation of Service Pack 1.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- None

### **Automatic Updates**

This service is used to check up to see if there is any critical or otherwise updates available for download. You may choose to update manually due to the very long lag time from when an update is available and when Windows XP reports it. After the installation of Service Pack 1, you may configure how “often” updates are checked. Using default values, Windows XP “automatically” downloads the updates and asks to “install” them. A few reasons why you may think this is unacceptable in your situation:

- You could have a dial-up connection. If XP feels like downloading whenever it wants, it just may not allow you to do what “you” want.
- You may also: Wish to know what, when and how an update installs BEFORE using any bandwidth.
- Want to read about the update BEFORE downloading.
- Want to know WHY you need it and WHAT it fixes.

**It is very important that if you decide to disable this service, you check the Windows Update site often to ensure the latest patches install properly.**

Take note: Manual (and Automatic) updates via Windows Update web site requires Cryptographic Services to be running. Place both Automatic Updates and Cryptographic Services in to automatic if you do not wish to update manually.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- None

### **Background Intelligent Transfer Service**

This service is used to transfer asynchronous data via http1.1 servers. According to Microsoft's site, Windows Update uses this “feature.” It “continues” a download if you log off or shutdown the system (that is, when you log back in). The problem with that is, I do not like having this “feature” running all of the time. Even though I have found no side effects as to this being disabled, you may require this service for some MSN Explorer, Windows Messenger, Windows Media Player or future .NET functions. Take note: Manual update via Windows Update web site requires Cryptographic Services to be running.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)
- Workstation

### **ClipBook**

Used to store information (cut / paste) and share it with other computers. I have never found enough need for this to allow this service to always be running. This service alone uses about 1.3 MB of memory.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- Network DDE

### **COM+ Event System**

You will receive, in the Event Log, an entry from “DCOM” complaining about not having this service running if disabled. I am unaware of any application that uses COM+, but if set to manual, many services report to it, so it will start anyway. This service is required for System Event Notification. For the fun of it:

“C:\Program Files\ComPlus Applications\”

On your system, see if you have any installed “COM+” Applications. If not, you can probably disable this service with no side effects (besides the Event Log complaining upon reboots). 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 is it required? 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, you may decide to not even bother with it and disable Task Scheduler. Depending on the system, pre-fetching may increase performance. Windows Media Player may also require this service for some “features” to function. MS' .NET may require this service in the future. I recommend disabled for Super Tweaking, automatic for “safe,” and manual for most other configurations.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

## **COM+ System Application**

You will receive, in the Event Log, an entry from “DCOM” complaining about not having this service running if disabled. I am unaware of any application that uses COM+, but if set to manual, many services report to it, so it will start anyway. For the fun of it:

“C:\Program Files\ComPlus Applications”

On your system, see if you have any installed “COM+” Applications. If not, you can probably disable this service with no side effects (besides the Event Log complaining upon reboots). This service is required for System Event Notification.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

## **Computer Browser**

Computer Browser service maintains a listing of computers and resources located on the network. This service is not required on a standalone system. In fact, even if you want to browse the network (workgroup or domain) or have mapped network shares as local hard drives, you can still do so. On a large network, one computer is designated the “master” browser and another one is the “backup” browser. All others just announce they are available every 12 minutes to “take over” duties if one of the other computers fail. No lag time is discernable if this service remains disabled on all but one computer. Honestly, I do not even believe one needs to be running. You could, “just in case,” but it sure does not need to be running on all computers, all of the time.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- Server
- Workstation

## **Cryptographic Services**

Mainly, it confirms signatures of Windows files. You may always get a dialog box complaining about uncertified drivers if this is disabled. This service is required for Windows Update to function in manual and automatic mode and this service is required to install Service Pack 1 unified updates and DirectX 9.0. Windows Media Player and future .NET applications may also require this service for some “features” to function. This service uses about 1.9 MB of memory.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **DHCP Client**

This service automatically receives a Dynamic IP address from your DHCP server and DNS updates. Required for ICS / internet client and if you run IPSEC, disable on a standalone system or one that has a static IP address. Take note: Most DSL/cable ISP's use DHCP to provide internet access. If you disable this service and your Internet connection no longer works, place this back into automatic. Most DSL and cable hardware routers have the option of enabling a DHCP server for the internal network. Ensure that the router is configured the same as your local PC's.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- AFD Networking Support Environment
- NetBIOS over TCP/IP
- TCP/IP Protocol Driver

### **Distributed Link Tracking Client**

Maintains links with NTFS files within your computer or across a domain. For example, you could make a file on "Computer A." You then create a "short cut" or "link" to that file on "Computer B." If you would move the file on Computer A to a different location, this service would tell Computer B to update its information to allow uninterrupted connectivity. Even though this is rather valuable on a large network, I have not found a use for this service on a home network. It uses about 3.5 MB to 4 MB in an idle state.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **Distributed Transaction Coordinator**

Automatically takes care of transactions that span multiple resources. This service is required if using Message Queuing. You may also see complaints in the Event Log if this service is disabled, but I have experienced no side effects. Microsoft's .NET may require this service in the future.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)
- Security Accounts Manager

### **DNS Client**

Resolves and caches DNS names and Active Directory domain controller functions. This service is not required for DNS lookups, but if it makes you happy to have it running, you may. However, DNS Client is required if using IPSEC. If you attempt to “repair” your network connection and a dialog box complains that the “DNS resolver failed to flush the cache,” this service is the reason.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- TCP/IP Protocol Driver

### **Error Reporting Service**

Calls home to Microsoft when application errors occur. I personally do not like this. I feel it is a waste of memory and resources. On the other hand, if you are experiencing system crashes often, the best way to deal with them is to report them using this tool.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **Event Log**

View Event Log messages from applications in Event Viewer. Always helpful to check out the Event Log to see what problems with applications are popping up that is “hidden” from the normal user. To see quickly what, if anything has resulted in your adjustments, you may consider clearing the Event Log. Windows Management Instrumentation also requires Event Log Service to be running. If you disable the Event Log Service, but do not disable Windows Management Instrumentation, your computer may have an extended boot time while Windows Management Instrumentation is waiting for the Event Log to start. It is just best to keep Event Log active for troubleshooting purposes and normal operations.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- None

### **Fast User Switching Compatibility**

Unless you have many users on a system, you probably do not even need this service to be running. You could benefit, however, greatly if you use this service in conjunction with many users on your local computer to allow switching users without closing all existing applications running under a different account.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Terminal Services

### **Fax Service**

Not installed by default, but if needed, you may install it later off the Windows XP CD. Maintains the ability to send and receive FAX documents on your computer.

Default XP Home: Not Installed

Default XP Pro: Not Installed

Safe Setting: Not Installed

Dependencies:

- Plug and Play
- Print Spooler
- Remote Procedure Call (RPC)
- Telephony

### **FTP Publishing Service**

This feature is not available on Windows XP Home or installed by default on Windows XP Pro, but if you need it, you may install it later off the Windows XP CD. This service provides a FTP server on your network.

Default XP Home: Not Installed

Default XP Pro: Not Installed

Safe Setting: Not Installed

Dependencies:

- IIS Admin

### **Help and Support**

This service is required for Microsoft's online (or offline) help documents. If you ever "attempt" to use Help and Support, the service places itself back into "Automatic" and starts even if you already had this service on disabled. I try to avoid as much Microsoft help as I can... :)

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **Human Interface Device Access**

You may not have any peripherals that require this service. If one of yours magically does not function anymore, set it to automatic. Namely, scanners with function buttons (fax, copy) or even an “Internet” keyboard with volume or play controls.

Default XP Home: Disabled

Default XP Pro: Disabled

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **IIS Admin**

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 usually operates in conjunction with a local web site or FTP server. Leave it uninstalled mainly because IIS has been “popular” for crackers to break.

Default XP Home: Not Installed

Default XP Pro: Not Installed

Safe Setting: Not Installed

Dependencies:

- Remote Procedure Call (RPC)
- Security Accounts Manager

### **IMAPI CD-Burning COM Service**

This service operates that cool “drag and drop” CD burn capability. You will need this service to burn CD's. What is the good news? If you set this service to manual, the service starts and stops itself when used with some software packages. This is practically the only service that does do this! If you still cannot burn a CD with it on manual, switch to automatic and feel safe that it starts only when “needed.” This service may take up about 1.6 MB of memory in an idle state.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Automatic

Dependencies:

- None

### **Indexing Service**

This service always has been a major resource hog. I NEVER recommend having this service enabled. Remove the function via the “Add / Remove Programs” icon in the control panel

(Windows Setup Programs). It uses about 500 K to 2 MB in an idle state, not to mention the amount of memory and CPU resources it takes to INDEX the drives. I have had people (and witnessed it on other people's computers) report to me that the Indexing Service sometimes starts up EVEN while the system is NOT idle... as in the middle of a game. You may feel, as I do, that this is unacceptable. If your computer suddenly seems "sluggish," Indexing Service is usually the cause of it.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **Internet Connection Firewall and Internet Connection Sharing**

This service is used to allow multiple computers on your network to access the internet via only one account. This service installs on the "modem" computer. If you are using a third party firewall or Internet Connection Sharing software package, this service is not required.

Default XP Home: Manual

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- Application Layer Gateway Service
- Network Connections
- Network Location Awareness
- Remote Access Connection Manager

### **IPSEC Services**

May be required on some domains or VPN connections, but the "average" user will not need this.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- IPSEC driver
- Remote Procedure Call (RPC)
- TCP/IP Protocol Driver

### **Logical Disk Manager**

This service is vital to run the Disk Management MMC console for dynamic volumes. If you attempt to "Manage" your hard drives and a dialog box pops up complaining about not being able to do this, start this service.

Default XP Home: Manual  
Default XP Pro: Automatic  
Safe Setting: Manual

Dependencies:

- Plug and Play
- Remote Procedure Call (RPC)

### **Logical Disk Manager Administrative Service**

This service is vital to run the Disk Management MMC console for dynamic volumes.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Logical Disk Manager
- Plug and Play
- Remote Procedure Call (RPC)

### **Message Queuing**

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 of the Windows XP CD. May be used on some domains, but the “average” home user will never need this service.

Default XP Home: Not Installed  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- Distributed Transaction Coordinator
- Message Queuing access control
- NT LM Security Support Provider
- Reliable Multicast Protocol driver
- Remote Procedure Call (RPC)
- Server

### **Message Queuing Triggers**

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 is required if you use Message Queuing service.

Default XP Home: Not Installed  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- Message Queuing

### **Messenger**

This service provides the ability to send messages between clients and servers. This service needs not to be running under normal “home” conditions. It is also advisable to make this service go away to avoid the possibility of “net send” messages hitting your computer from the internet. This has nothing to do with MSN Messenger, nor is it “WinPopUp.”

To test for this security vulnerability, at the command prompt, (run: cmd.exe) type:

**net send 127.0.0.1 hi**

If you get a popup “hi” message, you should disable the Messenger service.

If you get an error stating, “The message alias could not be found on the network,” you are safe.

If, for whatever reason, you need the Messenger service running but wish not to have spam popups active, you can disable the particular ports at your firewall. The Messenger service uses UDP ports 135, 137, and 138; TCP ports 135, 139, and 445.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- NetBIOS Interface
- Plug and Play
- Remote Procedure Call (RPC)
- Workstation

### **MS Software Shadow Copy Provider**

Used in conjunction with the Volume Shadow Copy service, Microsoft Backup 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, but to avoid the messages; you can place the service in manual. Some third party hard disk “ghost” or “imaging” software may require this service to be running.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **Net Login**

Used for logging onto a Domain Controller. This service is not required on a standalone system, or for a “home” network.

Default XP Home: Manual  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- Workstation

### **NetMeeting Remote Desktop Sharing**

Enables a user to access your computer using NetMeeting. This may create a BIG open door for the unwanted. If you are paranoid about security, disable this function. Even if you were not worried, I would still get rid of it.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- None

### **Network Connections**

Required for managing network connectivity. Set to disabled if you have no network or you do not toy with the configurations a lot. If your internet connectivity no longer operates after disabling this function, set it back to Automatic! Note: While disabling this service, you will no longer see the system tray icon (lower right) displayed, even for modem connections. Connectivity, however, still exists even on incoming shared network drives.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **Network DDE**

I have not found a good use for this service. Unless you use remote ClipBook, disable it. This uses about 1.5 MB idle.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- Network DDE DSDM

### **Network DDE DSDM**

I have not found a good use for this service. Unless you use remote ClipBook, disable it.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- AFD Networking Support Environment
- TCP/IP Protocol Driver

### **Network Location Awareness (NLA)**

This service is required for use with the Internet Connection Sharing service (server only).

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- None

### **NT LM Security Support Provider**

Manages local system security information on the computer. You need this service if you are running Message Queuing or Telnet server.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- None

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- 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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- None

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- 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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **QoS 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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- AFD Networking Support Environment
- Remote Procedure Call (RPC)
- TCP/IP Protocol Driver

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Access Connection Manager
- Telephony

### **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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Telephony

### **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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **Remote Procedure Call (RPC)**

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 in msconfig. If, for whatever reason, the service became disabled and you can no longer boot your system, please read the information here for a way to fix it: <http://www.blkviper.com/AskBV/2k4.htm>

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- None

### **Remote Procedure Call (RPC) Locator**

Manages the RPC name service database. I have not found a reason to keep this service running. However, if something on your network breaks after you disable this service, put it back to manual. About 1.2 MB of RAM is in use with this service.

Default XP Home: Manual

Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Workstation

### **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.

Default XP Home: Not Available  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- Workstation

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **RIP Listener**

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. :)

Default XP Home: Not Available  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Disabled

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- NetBIOSGroup
- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- 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.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- None

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Not Available  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- Event Log
- IIS Admin

### **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.

Default XP Home: Not Installed  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- AFD Networking Support Environment

### **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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- Plug and Play

### **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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- 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.

Default XP Home: Not Installed

Default XP Pro: Not Installed

Safe Setting: Not Installed

Dependencies:

- Event Log

### **SNMP Trap Service**

This service does not install by default, but if needed, you may install it later off the Windows XP CD. As above, this supports the use of networking equipment that uses SNMP as a mode of management.

Default XP Home: Not Installed

Default XP Pro: Not Installed

Safe Setting: Not Installed

Dependencies:

- Event Log

### **SSDP Discovery Service**

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. 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. The problem that I have found with this service is that it broadcasts UDP port 1900 “a lot.” 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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Disabled

Dependencies:

- None

### **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.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Automatic

Dependencies:

- COM+ Event System

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Disabled

Dependencies:

- AFD Networking Support Environment
- NetBIOS over TCP/IP

### **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.

Default XP Home: Not Installed  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- Print Spooler
- TCP/IP Protocol Driver

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Plug and Play
- Remote Procedure Call (RPC)

### **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.

Default XP Home: Not Available  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- NT LM Security Support Provider
- Remote Procedure Call (RPC)
- TCP/IP Protocol Driver

### **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.

Default XP Home: Manual

Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- 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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- 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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- SSDP Discovery Service

### **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.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Manual

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- WebDav Client Redirector

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Plug and Play
- Remote Procedure Call (RPC)

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Manual

Dependencies:

- Remote Procedure Call (RPC)

### **Windows Management Instrumentation**

This service is required if you want to see the “Dependencies” tab in service configuration and you want everything to go smoothly. I do not recommend disabling this service as strange things may start to happen.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Event Log
- Remote Procedure Call (RPC)

### **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.

Default XP Home: Not Available

Default XP Pro: Manual

Safe Setting: Manual

Dependencies:

- None

### **Windows Time**

Automatically sets your clock by contacting a server (Microsoft's server by default) on the internet. Great idea 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 than MS, use "time.nist.gov."

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- 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

Default XP Home: Automatic

Default XP Pro: Automatic

Safe Setting: Disabled

Dependencies:

- NDIS Usermode I/O Protocol
- Remote Procedure Call (RPC)

### **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.

Default XP Home: Manual  
Default XP Pro: Manual  
Safe Setting: Disabled

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Automatic  
Default XP Pro: Automatic  
Safe Setting: Automatic

Dependencies:

- Remote Procedure Call (RPC)

### **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.

Default XP Home: Not Available  
Default XP Pro: Not Installed  
Safe Setting: Not Installed

Dependencies:

- IIS Admin

Original content created July 28, 2001  
Last update was Monday, July 21, 2003

Copyright © 2001-2003 by Black Viper  
All Rights Reserved.

Up to date content and contact information is located at  
[www.blkviper.com](http://www.blkviper.com) or [www.blackviper.com](http://www.blackviper.com).

# Strange Processes

These are not really “Services,” but are applications or processes running at different times:

Most may be disabled using “msconfig.”

## **csrss.exe**

This is “Client Server Runtime Process” is part of the core of Windows. You cannot kill it and I am not sure why you would even want to. It is a 4k process that sucks up about 3 MB to 6 MB or so, but I do not support making it go away. Usually, if it is “difficult” to get rid of, it is needed.

## **ctfmon.exe**

This is your “Language Bar.” Don't know what it is? I bet you do not need it. Head to Control Panel -> Regional and Language Options -> Languages TAB -> Details BUTTON -> Language Bar BUTTON (under “Preferences”) -> select the “Turn off advanced text services” check box. This little detail will save you between 1.5 MB and 4 MB of RAM. If you are using a “non-US” version, you may be required to install the English localization to remove this “feature.”

## **CTHELPER.EXE**

This is installed with the SoundBlaster Audigy2 drivers. It takes about 4 MB of RAM.

## **CTDVDDDET.exe**

This is also installed with the SoundBlaster Audigy2 drivers. A “DVD Detection” application. It sucks up about 2.2 MB of memory. You can disable it by heading to the MediaSource DVD Audio Player, selecting Tools, then uncheck the “Auto Start” box. It should not start up automatically again.

## **CTSysVol.exe**

Yet another that is installed with the SoundBlaster Audigy2 Card. A “Volume Control” application that, by default, sits in the system tray. It takes about 3.8 to 5 MB of RAM doing nothing. Right click the tray icon and select “Close,” then disable it via msconfig.

## **devldr32.exe**

This is installed if you have a Creative Sound Card (SBLive Series that I am aware of). It sucks up 2.3 MB to 2.6 MB, but I have not completed extensive testing with this NOT being there... After manually killing the process (this is not a service, it is listed as a driver in the hardware properties of the sound card) I loaded up a game of Dungeon Siege and all EAX features and 5.1 positional sound worked (with EAX on or off). Also, all Direct Sound tests completed without errors. Do not get excited, though. After renaming the process, the Windows File Protection dialog pops up. Upon reboot, devldr32.exe is not displayed in the active processes in Task Manager, but the Creative Mixer and AudioHQ applications fail to load. I also searched for a reference in the registry and found little to nothing... Kill it if you want to recover some memory, but I do not support such “drastic” measures... so you are on your own with it. Do not E-Mail me asking for help if you killed this process. :)

### **explorer.exe**

This is NOT related to Internet Explorer. There will ALWAYS be an explorer.exe running in the background. It is the user interface process/desktop/shell, etc. This is one of the many ways how Bill got away with “integrating” IE with Windows... If you load up “Windows Explorer” to rummage through files, you will see an additional explorer.exe in the background. This will fluctuate depending on what you have (fonts, background pics, active desktop) going at any given time. Usage of between 5.8 MB and 36 MB RAM is typical.

### **Idle**

This is a generic process that is used when no other program or process is requiring CPU resources. It is not a bad thing if it is using 99% of your CPU! This process is a 16 k loop that the CPU processes while it is not doing “anything” else. If your computer is called upon to do any other task than “nothing,” the idle process allows that to happen and the % used will decrease accordingly. You can not disable the idle process. If it is using 97% CPU, which only means that the other 3% is used by real programs. If your idle process is constantly at a low rate (for example, 3%) something else, an application or process is using the CPU.

### **IEXPLORE.EXE**

This is the IE browser. Pops up only when you want to suck up 7.3 MB to ?? MB of memory to surf the web. I say ?? MB because every time you open an additional browser, you also start another one of these processes. If you close “all” browser windows, a IEXPLORE.EXE process will still be running. This is a “feature” to allow faster startup the next time you open IE. Unlike Mozilla, you cannot disable this “feature” other than directly killing the offending process.

### **iTouch.exe**

This process is installed with Logitech software for the “internet” key functions on keyboards and iTouch features on compatible mice. Plenty of functions remain with this software disabled, but some of the more “cool” stuff will not. This process takes from 3.6 MB to 12 MB of memory.

### **“Generic Host Process for Win32 Services”**

This is what ZoneAlarm complains about while connected to the internet. “SVCHOST.EXE” is “Generic Service Host.” What that means is it is a “host” for other processes or services. Check this document starting on Page 4 to see “all” of the services that use SVCHOST.EXE as a front for something else.

If your internet connection seems to “no longer work,” it is due to you disallowing various “required” functions to no longer access the internet. A big one is “DNS Lookups.” If you do not allow this to get through, you will no longer be able to type in “blkviper.com” but you will always be able to type in the IP address of the systems. The internet connection is still working, but you are blocking a “vital” part of the process for surfing web pages.

### **mozilla.exe**

This is the Mozilla browser executable. It uses between 14 MB and ?? MB of memory. Optionally, you can disable the system tray icon and not allow the “Quick Launch” feature to tell Mozilla to completely unload from memory when the final browser window is closed. This will, of course, increase the startup time when you fire up the browser window, again.

**msmsgs.exe**

This is Microsoft Windows Messenger that comes with Windows XP Home and Pro. With some applications, namely, Outlook and MSN Explorer, this process will still run in the background to get all of those .NET alerts, etc, that Microsoft is saying will be so cool.

**msn6.exe**

This is the Microsoft “MSN Explorer” bundled with Windows XP Home and Pro. While running this application, you will also have the previous process running. See **msmsgs.exe** for more information.

**Navapw32.exe**

This is installed with Norton AntiVirus 2002 Software. Unless you want your Virus Scanner to no longer function, keep this process running. Do not “end” it. This process is also responsible for automatically updating the virus definitions and displaying that cute little icon in the system tray.

**point32.exe**

This is installed with Microsoft Mouse Software, Intellimouse and the like. Most functions (if not all) are built into XP, so there is NO need to suck up 1.1 MB to 1.6 MB for a useless program also running in the background/system tray unless you require “specially mapped” key configurations for your buttons.

**promon.exe**

This is installed with Intel Pro family graphics adapters. It controls the application that displays in your system tray. It uses about 656K to 1.1 MB just sitting there. I hate icons in the system tray... I have none.

**smss.exe**

Dubbed “Windows NT Session Manager.” Another process (see **csrss.exe** above) that is part of the core of Windows. It is a 45 KB process that uses about 300 KB to 2 MB. You cannot kill this process manually and I do not recommend trying other ways to get rid of it. Usually, if it is “difficult” to get rid of, it is needed.

**svchost.exe**

A generic process that is “Service Host” for other processes. Yes, this is actually a service, but I am placing it here because I have no where else to put it. You may have 3 or 4 copies running in task manager (system, network, user, and ?) If you use my tweaking tips in this document, you can rid yourself of a couple of them.

**SWTrayV4.EXE**

This is installed with the Microsoft SideWinder Version 4 Software. It takes between 4 MB and 5 MB of RAM.

**System IDLE Process**

This is a generic process that is used when no other program or process is requiring CPU resources. It is not a bad thing if it is using 99% of your CPU! This process is a 16 k loop that the CPU processes while it is not doing “anything” else. If your computer is called upon to do any other task than “nothing,” the idle process allows that to happen and the % used will decrease

accordingly. You can not disable the idle process. If it is using 97% CPU, which only means that the other 3% is used by real programs. If your idle process is constantly at a low rate (for example, 3%) something else, an application or process is using the CPU.

### **taskmgr.exe**

If you are looking at the processes running, this is the application that you are using to do it. “Windows Task Manager” is the full name. It uses about 3.2 MB of RAM, so take that into account when you are tweaking your system.

### **TaskSwitch.exe**

This is installed with PowerToys for XP. It uses 1.4 MB to 2 MB to display those cute icons when you hit Alt+tab. I can do without.

### **vptray.exe**

This is the cute Norton AV Tray application that displays in your system tray. It uses about 2.9 MB just sitting there. You may recover SOME memory by making the icon go away, but it is STILL running in the background.

### **winlogon.exe**

This takes care of login and logoff tasks. Really, you cannot get rid of this process. It is required as long as you are “logged in.” I have saw this process fluctuate between 1.2 MB to 8.5 MB on a system that has been up for only an hour and 1.7 MB and 17 MB on a system that has been up for 40+ days.

### **wowexec.exe**

This is as process that is fired off to help “translate” interrupts, etc for 16 bit applications. If you see this process running, you are doing just that, running old applications or a DOS/command line/console window applications. Try and seek out “updated” software. :)

Original content created July 28, 2001  
Last update was Monday, July 21, 2003

Copyright © 2001-2003 by Black Viper  
All Rights Reserved.

Up to date content and contact information is located at  
[www.blkviper.com](http://www.blkviper.com) or [www.blackviper.com](http://www.blackviper.com).