Just like previous versions of Windows, the XP operating system can take an inordinately long time to startup each time you boot your PC. Luckily, there are a few minor changes that you can make to your system's set-up allowing you to significantly reduce this boot-up time. These tweaks are summarised in the following table:

!?

Tuning	Description
Edit BOOT.INI file.	BOOT.INI contains important startup information. With 'TimeOut' you can reduce the 'TimeToWait' setting, thus reducing startup time.
Remove unwanted programs.	Check the Startup tab using the System Configuration utility 'MSCONFIG'.
Remove unwanted services.	Remove unwanted services according to the list in the 'Computer Management' window.
Uninstall the network card.	If you do not have a network connection, uninstall the network card or network adapter.

Speed up the Startup Process with BOOT.INI

Each time Windows XP starts, it examines the BOOT.INI file as this contains information such as the startup parameters that are currently set-up. These can include the programs to automatically start and the Windows services to activate.

Edit the **BOOT.INI** file for effortless and faster startup.

BOOT.INI is a text file. It can be opened with Notepad (or another standard text editor), by clicking **Start > Run** and entering the command: **notepad c:\boot.ini** followed by (Enter).

Open the **BOOT.INI** file.

Reduce the TimeToWait period

If you don't have more than one operating system, reduce the wait time to '0' for a faster startup.

When Windows XP starts, a default period of 30 seconds is set in the Start menu. This is so that computers with more than one operating system installed on them have time to determine which operating system is to be loaded. If you have only one operating system installed, the set period is unnecessary. In this case, change the 'Time Out' in the BOOT.INI file to '0'.

Disable Windows XP startup screen

Windows XP shows you a number of different screens each time it starts up. You can disable the first startup screen that displays the Windows XP logo and go straight to your user account screen. Follow these steps to make the change:

Read more about how you can tune Windows XP in article X 15.

1. Click **Start** > Right-click **My Computer** > choose **Properties** from the context menu that opens.
2. Click on the **Advanced** tab from the System Properties window that opens.
3. Click the **Settings** button under the Startup and Recovery heading.
4. Click the **Edit** button. You will see your Boot Loader file open in Notepad.
5. Add **/sos** to the end of the line that ends **/fastdetect/**
6. Click **File > Save**.
7. Close all open windows.
8. Re-boot your PC. You will no longer see the Windows XP logo screen on startup.

```
boot - Notepad
File  Edit  Format  View  Help
[boot loader]
timeout=30
default=multi(0)disk(0)rdisk(0)partition(1)\WINDOWS
[operating systems]
multi(0)disk(0)rdisk(0)partition(1)\WINDOWS="Microsoft Windows XP Home Edition" /fastdetect/sos
```
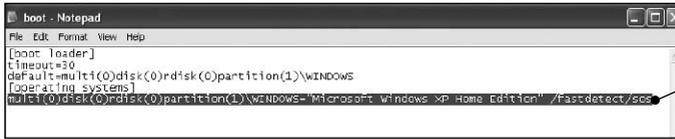
Make the change to this line, and switch off the Windows XP logo screen.

Edit your Boot Loader file for faster startup

If you intend to use the Norton Protected Recycle Bin you may experience problems if you make this change to the Boot Loader file. Visit the Symantec Knowledge Base for more information if you have or intend to install this Norton program on your computer at: http://service4.symantec.com/support/nunt.nsf/pfdocs/199733115529

Remove Unnecessary Software and Functions

Each time that you start Windows a number of programs are loaded automatically into memory. You can save some startup time by switching off any programs you don't need. You can do this via the Startup tab that you can see in the MSCONFIG utility.
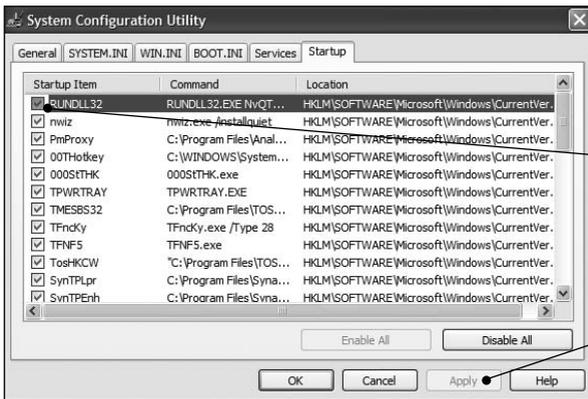
Remove the 'tick' to switch-off a program you don't want loaded.

Click Apply to confirm your actions when you are finished.

Increase your startup speed by removing unwanted programs

!?

Remove Unwanted Windows Services

When you installed Windows XP for the first time a set of tools were also installed. These are stand alone programs that can be removed if you don't require their features. These tools are also loaded when you boot XP, so removing them will reduce your startup time. Follow these steps to remove any unwanted Windows components:

Click **Start** > **Control Panel** > double-click **Administrative Tools** > double-click **Computer Management**.

In the directory tree on the left of the screen select the **Services** option. This is under the **Service and Applications** heading. This will open the general Services list. To remove or disable a service, double-click on its name and in the **Startup type** field use the drop-down menu to switch this to manual or disabled depending on your preference. The table below summarises the main services that you can either disable altogether, or start manually when you need them:

Service	Description
Computer Browser	Maintains an updated list of computers on the network. If you are not on a network you can safely disable this.
Indexing Service	Indexes contents and properties of files. If you don't do a lot of searching for files on your computer, this service can be disabled.

Error Reporting Service	You can disable this as you already have the Event Log built into Windows XP.
IPSEC Services	Used to transfer encrypted files in the network. Again, if you are not on a network you can disable this service.
Messenger	Transmits service messages between clients and servers in the network. You can disable this service if you don't need this function.
Remote Access Connection Manager	If you don't need to access your computer from another location, this service can be switched off.
Server	Used to support file and print sharing over a network. If you are not on a network this service is not required.
TCP/IP NetBIOS Helper	Enables support for NetBIOS over the network and NetBIOS name resolution. These are further network services that can be disabled if not required.
Alerter	Notifies selected users and computers of administrative alerts. Only of use to network administrators.

Windows Time	Maintains date and time synchronization on all clients and servers in the network. Another network service you may not need.

Uninstall Network Card

If your PC is not connected to a network or DSL (Digital Subscriber Line), you can uninstall the network card, or integrated network adapter. To do this, follow these steps:

1. Click **Start** > **Control Panel** > Double-click **System** > click on the **Hardware** tab > click the **Device Manager** button.

2. Right-click on the **Network Adapter**.

3. Click on **Uninstall** from the context menu that appears.

Your computer startup will now be faster because the network card is no longer connected and drivers do not have to be searched for.
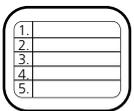
Windows XP is Microsoft's most stable and feature rich operating system, but it still takes an inordinately long time to startup each time you switch on your computer. With the tips in this article you'll be able to disable features you don't want, and make changes to the startup procedure, that will ultimately make Windows XP start much faster.