msconfig Tool

To open msconfig tool in Windows 7, we can enter "msconfig.exe" in Search, and then select it. We can use msconfig to configure startup type, boot options, service startup, and the startup of other applications.

General Tab

In the General tab we can select the startup type for our computer. As we can see, we can have the normal startup, diagnostic startup and selective startup. In diagnostic startup the system will be booted but with basic device drivers and basic services. In selective startup we can choose if we want to load system services and startup items (which are visible in the Startup tab).
Boot Tab

On the Boot tab we can manage different operating system boot options.

Here we can choose the default operating system that will be booted. In our case we only have one OS installed, but if we had more dual-boot or multi-boot, we would see other installations here. Also, we can select to start our OS in Safe mode (Safe boot option). The Safe boot modes are:

- Minimal - safe mode.
- Alternate shell - safe mode with command prompt.
- Active Directory repair - Active Directory restore mode.
- Network - safe mode with networking.
Other boot options are:

- No GUI boot - removes the graphical moving bar and / or Windows animation (Windows Welcome screen) during start-up.
- Boot log - set up a boot logger that will log everything that is loaded during the boot process, for troubleshooting purposes. Log file is available after the boot in C:\Windows\ntbtlog.txt.
- Base video - boot with base video drivers using lowest resolution and color depth. This is also known as VGA mode in advanced boot options.
- OS boot information - shows driver names as drivers are being loaded during the startup process.

We can also set the number of seconds in which the boot menu is displayed (the timeout option). We can also make all those settings permanent for all future reboots, not just one single reboot.

On the Advanced settings we can specify the number of CPUs to be used, maximum memory, and debug port and baud rate for remote debugging.
On the Services tab we can see a list of services and their status (running or stopped).

Note that we can't start or stop a service here, but we can enable or disable it. When we disable a service, it won't start the next time we boot.
When we enable it, it will start when the machine reboots. This won't stop or start the service immediately. The great thing here is that we can hide all Microsoft services by checking the "Hide all Microsoft services" option. This gives us a great view of the third party services and their status.

**Startup Tab**

On the Startup tab we can see all the items that start during the user or computer boot.

![Startup Tab](image)

We can see the item name, manufacturer, path to the executable, and the location of the registry key or shortcut that causes the application to run. We can clear the check box for a startup item to disable it on the next startup. Startup is a great place for viruses and other malware to plant themselves, so this is a good place to check if
we have some suspicious startup items. Keep in mind that some startup items are important for our system, and disabling those items can lead to undesired results.

We should always check the name of the executable on the Internet and find out why it is used, if its malware or not, and if we can safely disable it.

**Tools Tab**

Under the Tools tab, we can find and launch virtually all of the support and troubleshooting tools that we might need to manage our system.

[Image of System Configuration window]

Tools Tab

When we select a specific tool, we will also see the command that is used to start the selected item.

**Source:** [http://www'utilizewindows.com/7/management/524-using-msconfig-in-windows-7](http://www'utilizewindows.com/7/management/524-using-msconfig-in-windows-7)