# A Complete Guide to Using System Configuration Tool on Windows 11

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Windows comes with multiple useful features to enhance your computing experience and solve issues on your PC. However, when your computer takes too long to boot or throws any error before you see your desktop, Windows lets you fix that too. You may use <u>the System Configuration Tool</u> to modify various boot parameters and fix problems that crop up before seeing the Windows desktop screen.

Despite being fairly useful, many don't make the best of the System Configuration Tool. We'll share a bit about the System Configuration Tool and how to easily access it to troubleshoot and fix issues on your Windows 11 PC. **WHAT IS THE SYSTEM CONFIGURATION TOOL** 

The System Configuration Tool (MSConfig) is a handy utility built into Windows to troubleshoot and <u>fix problems that</u> <u>can interfere with the Windows boot process</u>, preventing your PC from starting/booting properly.

Apart from troubleshooting issues, the System Configuration Tool is also useful if you want to <u>reduce your PC's boot</u> <u>time</u>, i.e., the time it takes for your PC to start or choose which programs and services start with your PC.

It's helpful if you have multiple operating systems installed on your computer, and you can choose to assign the order in which they appear on the boot screen. This tools lets you tackle basic tweaks to advanced settings for booting Windows. **HOW TO ACCESS SYSTEM CONFIGURATION TOOL ON WINDOWS 11** 

Akin to most other administrative tools in Windows, there are multiple ways to access the System Configuration Tool on your Windows 11 computer. You can take a look at our guide on the <u>best ways to access System Configuration tool</u> (<u>MSConfig</u>). You can follow the steps listed below:

Step 1: Press the Windows + R keys on the keyboard to access the Run dialog box.

🗐 Run				3
	Type the na Internet reso	me of a pro ource, and '	ogram, folder, do Windows will op	ocument, or en it for you.
<u>O</u> pen:	msconfig	-	_	~
		OK	Cancel	Browse

**Step 2:** In the Run dialog that opens, type *MSConfig*. Then click OK or press Enter.

That'll open the System Configuration Tool window on your computer.

## HOW TO USE SYSTEM CONFIGURATION TOOL ON WINDOWS 11

The System Configuration Tool is divided into five tabs for easy navigation, each with a different set of functions. Here's what you can do under each tab:

# 1. The General Tab

The General tab offers the Startup selection options that you can use to configure your system's startup behavior. The Startup section consists of three startup options that allow you to choose which services, devices and drivers start whenever you boot your PC with varying degrees of control.

System Configuration	$\times$
General Boot Services Startup Tools	
Startup selection           One Normal startup           Load all device drivers and services	
Diagnostic startup Load basic devices and services only	
○ <u>S</u> elective startup	
✓ Load system services	
Load startup items	
✓ Use original boot configuration	
OK Cancel Apply Help	

The three startup options include Normal Startup, Diagnostic Startup and Selective Startup. Here's what each option does:

- **Normal startup:** As the name suggests, this mode loads up all the usual services and drivers as they normally would when the PC boots up.
- **Diagnostic startup:** Similar to Safe Mode, this option only loads up the essential services and devices. However, some of the more advanced services, such as Networking, System Restore, and Windows Error Reporting, are halted to diagnose and fix software issues.
- **Selective startup:** This mode offers two other sub-options that allow you to select whether you want to Load system services, Load startup items, or both.

To boot your PC into a certain Startup mode, click on the boot mode under Startup selection followed by Apply. Next, restart your PC.

#### 2. The Boot Tab

The boot tab of the System Configuration Tool lets change how your computer boots and offers the ability to choose the default operating system (if you have more than one operating system on your PC), <u>enable Safe mode</u> with different configurations or drivers, and more.

Tools	
rrent OS; Default OS	
t as default <u>D</u> elete	
	<u>T</u> imeout:
No GUI boot	30 seconds
Boot log	
Boot log Bas <u>e</u> video	
Boot log Bas <u>e</u> video OS boot information	Make all boot settings
	Trools  rrent OS; Default OS  t as default  Delete  No GUI boot

The primary function of the Boot tab is to let you customize the different settings that may impact booting your PC. Also, it is a quick way to boot your PC into safe mode by clicking the Safe Boot check box, followed by Apply.

As for the four sub-options listed below, you can choose any one according to your use case. Here's what selecting each option does:

- **Minimal:** Selecting this option disables networking and allows you to load Windows in safe mode while running critical system services.
- Alternate shell: This option also disables networking but boots to a Command Prompt Window in safe mode while running critical system services.
- Active Directory repair: Only applicable to Windows Server operating systems, selecting Active Directory repair allows an administrator to repair an Active Directory database.
- **Network:** Pretty similar to the Minimal boot mode, except with networking enabled.

🦉 System Configuration			×
General Boot Services Startu	p Tools		
Windows 11 (C:\WINDOWS) : Co	urrent OS; Default OS		
Advanced options	et as default <u>D</u> elete		
Boot options		<u>T</u> imeout:	
✓ Safe boot	<u>N</u> o GUI boot	30 s	seconds
Minimal	Boot log		
◯ A <u>l</u> ternate shell	Bas <u>e</u> video		
Active Directory regair	OS boot information	Make all boo	t settings
◯ Net <u>w</u> ork		permanent	
	OK Cancel	Apply	Help

Safe boot and its sub-options aside, there are four other options listed under Boot Options. Here's what selecting each one does:

- **No GUI boot:** This option disables the Windows splash screen (manufacturer/Windows logo) when booting. Useful for troubleshooting issues related to graphics/video card.
- **Boot log:** Select this option to create a log file with all the technical information about the boot process.
- **Base video:** This option Boots Windows in minimal VGA (lower resolution) mode. Also useful for troubleshooting issues related to graphics/video card.
- **OS boot information:** Selecting this option lets you reveal the name of every driver and service when loaded during the boot process.

System Configuration		×
General Boot Services Startup To	ols	
Windows 11 (C:\WINDOWS) : Current	OS; Default OS	
Advanced ontions Set as d	lefault Delete	
		Timooutu
Safe boot		30 seconds
<u>M</u> inimal	<u>B</u> oot log	
Alternate shell	Bas <u>e</u> video	
Active Directory regain	OS boot information	Make all boot settings
○ Net <u>w</u> ork		Parmanant
	OK Cancel	<u>A</u> pply Help

You can also use the Boot tab to limit the number of processors (CPU processing cores) and the maximum memory (RAM) your system can utilize. Here's how:

**Step 1:** Head to the Boot Tab of the System Configuration Tool and select your current operating system. Then click on Advanced options.

🦉 System Configuration		×
General Boot Services	Startup Tools	
Windows 11 (C:\WINDOW	S) : Current OS; Default OS	
Advanced options	Set as default Delete	Timeout:
Sa <u>f</u> e boot	<u>N</u> o GUI boot	30 seconds
<u>M</u> inimal <u>A</u> lternate shell <u>Active Directory r</u> <u>Network</u>	□ <u>B</u> oot log □ Bas <u>e</u> video egair □ <u>O</u> S boot information	Ma <u>k</u> e all boot settings permanent
	OK Cancel	Apply Help

**Step 2:** When a 'BOOT Advanced Options' dialog appears on your screen, click on the 'Number of processors' check box, followed by the drop-down list right below it, to select the number of processors your system can use.

BOOT Advanced Options	×
<ul> <li>Number of processors:</li> <li>2</li> <li>PCI Lock</li> <li>Debug</li> </ul>	Maximum memory: 8192
Global debug settings	
Debug port:	Baud rate:
1394 ~	$\sim$
Channel:	
USB target name:	
	OK Cancel

**Step 3:** Change the maximum memory utilized by your system, click on the Maximum memory: check box and use the arrow keys on your keyboard to set its value.

BOOT Advanced Options		×
<ul> <li>Number of processors:</li> <li>2 ~</li> <li>PCI Lock</li> <li>Debug</li> </ul>	Maximum memory: 8192	
Global debug settings Debug port: 1394 Channel: 0 USB target name:	☐ Baud rate:	
	OK Cance	4

**Step 4:** Once configured, click on OK to Save the changes.

BOOT Advanced Option	s		×
Number of processors:		Maximum mer 8192	mory:
PCI Lock			
Global debug settings			
Debug port:		Baud rate:	
1394 ~			$\sim$
Channel:			
USB target name:			
-		ОК	Cancel

You can check the Make all boot settings permanent: Changes made in System Configuration are not tracked. If you want to make changes later, you will have to do so manually. Selecting Normal startup in the General tab does not work if this feature is selected.

#### 3. The Services Tab

The Services tab lets you manually enable or <u>disable the services that start with your PC</u>. It's a perfect way to look for and stop rouge services that might interfere with your system's stability.

System Configuration			$\times$
General Boot Services Startup To	ols		
Service <ul> <li>Adobe Acrobat Update Service</li> <li>AdobeUpdateService</li> <li>Adobe Genuine Monitor Service</li> <li>Adobe Genuine Software Integri</li> <li>AllJoyn Router Service</li> <li>Application Layer Gateway Service</li> <li>Application Identity</li> <li>Apple Mobile Device Service</li> <li>App Readiness</li> <li>AppX Deployment Service (App</li> <li>AtherosSvc</li> <li>Windows Audio Endpoint Builder</li> <li>Windowe Audio</li> </ul>	Manufacturer Adobe Inc. Adobe Inc. Adobe Systems, Incorpora Adobe Systems, Incorpora Microsoft Corporation Microsoft Corporation Microsoft Corporation Apple Inc. Microsoft Corporation Microsoft Corporation Windows (R) Win 7 DDK p Microsoft Corporation Windows (R) Win 7 DDK p	Status     Date Disabled       Running     Running       Running     Running       Running     Stopped       Stopped     Stopped       Stopped     Stopped       Stopped     Stopped       Stopped     Running       Stopped     Running       Running     Running       Running     Running       Running     Running	
<u>H</u> ide all Microsoft services			_
	OK Car	ncel <u>A</u> pply He	elp

To choose which services launch when you boot your PC, click the hide all Microsoft services check box to ensure you're not messing with some important service. Then click on Disable all.

neral Boot Services Startup To	DOIS				
Service	Manufacturer	Status	Date Disa	bled	
Adobe Acrobat Update Service	Adobe Inc.	Running			
AdobeUpdateService	Adobe Inc.	Running			
Adobe Genuine Monitor Service	Adobe Systems, Incorpora	Running			
Adobe Genuine Software Integri	Adobe Systems, Incorpora	Running			
AllJoyn Router Service	Microsoft Corporation	Stopped			
Application Layer Gateway Service	Microsoft Corporation	Stopped			
Application Identity	Microsoft Corporation	Stopped			
Apple Mobile Device Service	Apple Inc.	Running			
App Readiness	Microsoft Corporation	Stopped			
AppX Deployment Service (App	Microsoft Corporation	Stopped			
AtherosSvc	Windows (R) Win 7 DDK p	Running			
Windows Audio Endpoint Builder	Microsoft Corporation	Running			
Mindows Audio to that some secure Microsoft convision	Microsoft Cornoration	Running			
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r that, select the ones yo System Configuration	OK Ca u want by clicking on	the che	Apply eck boxe	Help s before th	heir na
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r that, select the ones yo System Configuration neral Boot Services Startup Service	OK Ca u want by clicking on Tools Manufacturer	the che	Apply eck boxe	Help s before th Date Disable	heir na
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r that, select the ones yo System Configuration neral Boot Services Startup Service Adobe Acrobat Update Servic AdobeUpdateService Adobe Genuine Monitor Servic	ок Ca u want by clicking on o Tools Manufacturer e Adobe Inc. Adobe Inc. ce Adobe Systems, Inco	ncel the che	Apply eck boxe Status Running Running Running	Help s before th Date Disable	heir na
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After you're done, click on Apply. Your PC will restart and boot only with the selected services. You may repeat the process to add or remove more services to run at startup.

Cancel

ОК

### 4. The Startup Tab

Hide all Microsoft services

Note that some secure Microsoft services may not be disabled.

The Startup tab is where you can configure which apps should launch automatically every time your PC starts, at least on Windows 10 and other older versions.

<u>E</u>nable all

<u>Apply</u>

<u>D</u>isable all

Help

 $\times$ 

System Configuration	$\times$
General Boot Services Startup Tools	
To manage startup items, use the Startup section of Task Manager.	
Open Task Manager	
<b>▲</b>	
OK Cancel Apply Help	,

With the advent of <u>Windows 11's resigned Task Manager</u>, Microsoft has changed things up, and the Startup tab found in the System Configuration Tool only offers a link that redirects you to the Startup tab of the Task Manager. **5. The Tools Tab** 

You can use the Tools tab in the System Configuration Tool to launch many other useful utilities built into Windows. The Tools tab organizes all the important tools and utilities into a handy list for easy access when needed.

Tool Name About Windows Change UAC Settings Security and Maintenance Windows Troubleshooting Computer Management System Information	Description Display Windows version information. Change User Account Control settings. Open Security and Maintenance. Troubleshoot problems with your computer. View and configure system settings and components. View advanced information about hardware and software settings.
Event Viewer Programs System Properties	View monitoring and troubleshooting messages. Launch, add or remove programs and Windows components. View basic information about your computer system settings.
Tational Autions	View Televert Descention
Selected command:	
C:\WINDOWS\System32\rstr	ui.exe

If you want to access a utility listed under the Tools tab of the System Configuration Tool, select the tool of your choice and click on Launch.

System Configuration		>
General Boot Services Star	tup Tools	
Tool Name	Description	
About Windows	Display Windows version information.	
Change UAC Settings	Change User Account Control settings.	ш
Security and Maintenance	Open Security and Maintenance.	
Windows Troubleshooting	Troubleshoot problems with your computer.	
Computer Management	View and configure system settings and components.	
System Information	View advanced information about hardware and software settings.	
Event Viewer	View monitoring and troubleshooting messages.	
Programs	Launch, add or remove programs and Windows components.	
System Properties	View basic information about your computer system settings.	
T-1	View Televiel Parallel	
Selected command:		
Selected Command.	al ana /aanaa Misaa a A Taankia ka shira	
C:\winDOws\System32\contr	ol.exe / name Microsoft. I roubleshooting	
		_
	OK Cancel Apply Hel	D

## GET THE MOST OUT OF SYSTEM CONFIGURATION TOOL

Whether it's a new computer or old, you may use the System Configuration Tool to <u>boot your Windows 11 PC into safe</u> <u>mode</u>, diagnose buggy software, <u>launch useful tools</u> and much more without worrying about messing something up. Make sure you take a backup of your data and set System Restore points before you proceed to tinker around. Last updated on 12 October, 2022