

## How to configure file sharing in Windows XP

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### SUMMARY

*With Microsoft Windows XP, you can share files and documents with other users on your computer and with other users on a network. There is a new user interface (UI) named Simple File Sharing and a new Shared Documents feature. This article describes the new file sharing UI and discusses the following topics:*

- How to turn Simple File Sharing on and off.
- How to manage and configure levels of access to shares and files.
- Guidelines for file sharing in Windows XP.
- How to troubleshoot file sharing problems.

*Windows XP Home Edition-based computers always have Simple File Sharing enabled.*

### INTRODUCTION

On a Windows XP-based computer, you can share files among both local and remote users. Local users log on to your computer directly through their own accounts or through a Guest account. Remote users connect to your computer over the network and access the files that are shared on your computer.

You can access the Simple File Sharing UI by viewing a folder's properties. Through the Simple File Sharing UI, you can configure both share and NTFS file system permissions at the folder level. These permissions apply to the folder, all the files in that folder, child folders, and all the files in the child folders. Files and folders that are created in or copied to a folder inherit the permissions that are defined for their parent folder. This article describes how to configure access to your files based on permission levels. Some of the information that this article contains about these permission levels is not documented in the operating system files or the Help file.

### MORE INFORMATION

With file sharing in Windows XP, you can configure five levels of permissions. Level 1 is the most private and secure setting, and Level 5 is the most public and changeable (non-secure) setting. You can configure Levels 1, 2, 4, and 5 by using the Simple File Sharing UI. To do this, right-click the folder, and then click **Sharing and Security** to open the Simple File Sharing UI. To configure Level 3, copy a file or folder into the Shared Documents folder under **My Computer**. This configuration does not change when you turn on or turn off Simple File Sharing.


### Turning on and turning off Simple File Sharing

Simple File Sharing is always turned on in Windows XP Home Edition-based computers. By default, the Simple File Sharing UI is turned on in Windows XP Professional-based computers that are joined to a workgroup. Windows XP Professional-based computers that are joined to a domain use only the classic file sharing and security interface. When you use the Simple File Sharing UI (that is located in the folder's properties), both share and file permissions are configured.

If you turn off Simple File Sharing, you have more control over the permissions to individual users. However, you must have advanced knowledge of NTFS and share permissions to help keep your folders and files more secure. If you turn off Simple File Sharing, the Shared Documents feature is not turned off.

To turn Simple File Sharing on or off in Windows XP Professional, follow these steps:

1. Double-click **My Computer** on the desktop.
2. On the **Tools** menu, click **Folder Options**.
3. Click the **View** tab, and then select the **Use Simple File Sharing (Recommended)** check box to turn on Simple File Sharing. (Clear this check box to turn off this feature.)

To view a video about how to turn Simple File Sharing on or off, click the **Play** button (  ) on the following Windows Media Player viewer:

<http://support.microsoft.com/servicedesks/ShowMeHow/304040.aspx>

**Note** To view this video, you must have Microsoft Windows Media Player 7.0 or later installed on your computer.

For additional information about how to obtain Windows Media Player version 7.1, click the following article number to view the article in the Microsoft Knowledge Base:

[299321](http://support.microsoft.com/kb/299321/) (http://support.microsoft.com/kb/299321/) Description and availability of Windows Media Player 7.1

### Managing levels of access to shares and to files

You can use Simple File Sharing to configure five different levels of access to shares and files:

- **Level 1:** My Documents (Private)
- **Level 2:** My Documents (Default)
- **Level 3:** Files in shared documents available to local users
- **Level 4:** Shared Files on the Network (Readable by Everyone)
- **Level 5:** Shared Files on the Network (Readable and Writable by Everyone)

### NOTES

- By default, files that are stored in My Documents are at Level 2.

- Levels 1, 2, and 3 folders are available only to a user who is logging on locally. Users who log on locally include a user who logs on to a Windows XP Professional-based computer from a Remote Desktop (RDP) session.
- Levels 4 and 5 folders are available to users who log on locally and remote users from the network.

The following table describes the permissions:

Access Level	Everyone (NTFS/File)	Owner	System	Administrators	Everyone (Share)
Level 1	n/a	Full Control	Full Control	n/a	n/a
Level 2	n/a	Full Control	Full Control	Full Control	n/a
Level 3	Read	Full Control	Full Control	Full Control	n/a
Level 4	Read	Full Control	Full Control	Full Control	Read
Level 5	Change	Full Control	Full Control	Full Control	Full Control

#### Level 1: My Documents (Private)

The owner of the file or folder has read and write permission to the file or folder. Nobody else may read or write to the folder or the files in it. All subfolders that are contained in a folder that is marked as private remain private unless you change the parent folder permissions.

If you are a Computer Administrator and create a user password for your account by using the User Accounts Control Panel tool, you are prompted to make your files and folder private.

**Note** The option to make a folder private (Level 1) is only available to a user account in its own My Documents folder.

To configure a folder and all the files in it to Level 1, follow these steps:

1. Right-click the folder, and then click **Sharing and Security**.
2. Select the **Make this Folder Private** check box, and then click **OK**.

Local NTFS Permissions:

- Owner: Full Control
- System: Full Control

Network Share Permissions:

- Not Shared

#### Level 2 (Default): My Documents (Default)

The owner of the file or folder and local Computer Administrators have read and write permission to the file or folder. Nobody else may read or write to the folder or the files in it. This is the default setting for all the folders and files in each user's My Documents folder.

To configure a folder and all the files in it to Level 2, follow these steps:

1. Right-click the folder, and then click **Sharing and Security**.
2. Make sure that both the **Make this Folder Private** and the **Share this folder on the network** check boxes are cleared, and then click **OK**.

Local NTFS Permissions:

- Owner: Full Control
- Administrators: Full Control
- System: Full Control

Network Share Permissions:

- Not Shared

#### Level 3: Files in shared documents available to local users

Files are shared with users who log on to the computer locally. Local Computer Administrators can read, write, and delete the files in the Shared Documents folder. Restricted Users can only read the files in the Shared Documents folder. In Windows XP Professional, Power Users may also read, write, or delete any files in the Shared Documents Folder. The Power Users group is only available in Windows XP Professional. Remote users cannot access folders or files at Level 3. To permit remote users to access files, you must share them out on the network (Level 4 or 5).

To configure a file or a folder and all the files in it to Level 3, start Microsoft Windows Explorer, and then copy or move the file or folder to the Shared Documents folder under My Computer.

Local NTFS Permissions:

- Owner: Full Control
- Administrators: Full Control
- Power Users: Change
- Restricted Users: Read
- System: Full Control

Network Share Permissions:

- Not Shared

#### Level 4: Shared on the Network (Read Only)

Files are shared for everyone to read on the network. All local users, including the Guest account, can read the files, but they cannot modify the contents. Any user can read and change your files.

To configure a folder and all the files in it to Level 4, follow these steps:

1. Right-click the folder, and then click **Sharing and Security**.
2. Click to select the **Share this folder on the network** check box
3. Click to clear the **Allow network users to change my files** check box, and then click **OK**.

Local NTFS Permissions:

- Owner: Full Control
- Administrators: Full Control
- System: Full Control
- Everyone: Read

Network Share Permissions:

- Everyone: Read

#### Level 5: Shared on the network (Read and Write)

This level is the most available and least secure access level. Any user (local or remote) can read, write, change, or delete a file in a folder shared at this access level. Microsoft recommends that this level be used only for a closed network that has a firewall configured. All local users including the Guest account can also read and modify the files.

To configure a folder and all the files in it to Level 5, follow these steps:

1. Right-click the folder, and then click **Sharing and Security**
2. Click to select the **Share this folder on the network** check box, and then click **OK**.

Local NTFS Permissions:

- Owner: Full Control
- Administrators: Full Control
- System: Full Control
- Everyone: Change

Network Share Permissions:

- Everyone: Full Control

**Note** All NTFS permissions that refer to Everyone include the Guest account.

All the levels that this article describes are mutually exclusive. Private folders (Level 1) cannot be shared unless they are no longer private. Shared folders (Level 4 and 5) cannot be made private until they are unshared.

If you create a folder in the Shared Documents folder (Level 3), share it on the network, and then permit network users to change your files (Level 5), the permissions for Level 5 are effective for the folder, the files in that folder, and the child folders. The other files and folders in the Shared Documents folder remain configured at Level 3.

**Note** The only exception is if you have a folder (*SampleSubFolder*) that is shared at Level 4 inside a folder (*SampleFolder*) that is shared at Level 5. Remote users have the correct access level to each of the shared folders. Locally logged-on users have writable (Level 5) permissions to the parent (*SampleFolder*) and child (*SampleSubFolder*) folders.

#### Guidelines

Microsoft recommends that you only share folders on the network that remote users on other computers must access. Microsoft recommends that you do not share the root of your system drive. When you do this your computer is more vulnerable to malicious remote users. The **Sharing** tab of the drive's **Properties** dialog box contains a warning when you try to share a root folder (for example, C:\). To continue, you must click the **If you understand the risk but still want to share the root of the drive, click here** link. Only computer administrators can share the root of the drive.

Files on a read-only device such as a CD-ROM shared at Level 4 or 5 are only available if the CD-ROM is in the CD-ROM drive. Any CD-ROM that is in the CD-ROM drive is available to all users on the network.

A file's permission may differ from the containing folder if one of the following conditions is true:

- You use the **move** command at a command prompt to move a file into the folder from a folder on the same drive that has different permissions.
- You use a script to move the file into the folder from a folder on the same drive that has different permissions.
- You run Cacls.exe at a command prompt or a script to change file permissions.
- Files existed on the hard disk before you installed Windows XP.
- You changed a file's permissions while Simple File Sharing was turned off on Windows XP Professional.

**Note** NTFS permissions are not maintained on file move operations when you use Windows Explorer with Simple File Sharing turned on.

If you turn on and turn off Simple File Sharing, the permissions on files are not changed. The NTFS and share permissions do not change until you change the

permissions in the interface. If you set the permissions with Simple File Sharing enabled, only Access Control Entries (ACEs) on files that are used for Simple File Sharing are affected. The following ACEs in the Access Control List (ACL) of the files or folders are affected by the Simple File Sharing interface:

- Owner
- Administrators
- Everyone
- System

## Troubleshooting file sharing in Windows XP

### Expected upgrade behavior

A Windows 2000 Professional-based or a Windows NT 4.0-based computer that is joined to a domain or a workgroup that is upgraded to Windows XP Professional maintains its domain or workgroup membership respectively and has the classic file sharing and security UI turned on. NTFS and share permissions are not changed with the upgrade.

By default, if you upgrade a computer that is running Microsoft Windows 98, Windows 98 Second Edition, or Windows Millennium Edition that has "per share" sharing permissions to Windows XP, Simple File Sharing is always turned on. Shares that have passwords assigned to them are removed, and shares that have blank passwords remain shared after the upgrade.

If you upgrade a computer that is running Windows 98, Windows 98 Second Edition, or Windows Millennium Edition to Windows XP Professional and that computer is logged on to a domain, if that computer has share level access turned on and joins the domain while the Setup program is running, the computer starts with Simple File Sharing turned off.

By default, a Windows 98, Windows 98 Second Edition, or Windows Millennium Edition-based computer that is upgraded to Windows XP Home has Simple File Sharing turned on.

### Known issues

For remote users to access files from the network (Levels 4 and 5), the Internet Connection Firewall (ICF) must be disabled on the network interface that the remote users connect through.

For additional information, click the following article number to view the article in the Microsoft Knowledge Base:

[298804](http://support.microsoft.com/kb/298804/) (<http://support.microsoft.com/kb/298804/>) Internet Connection Firewall can prevent browsing and file share

When Simple File Sharing is turned on, remote administration and remote registry editing does not work as expected from a remote computer, and connections to administrative shares (such as C\$) do not work because all remote users authenticate as Guest. Guest accounts do not have administrative rights. When Simple File Sharing is turned on, if you configure specific user ACEs, remote users are not affected when Simple File Sharing is turned on because all remote users authenticate as Guest when Simple File Sharing is turned on.

Remote users may receive an "Access Denied" message on a share that they had connected to successfully before. This behavior occurs after the hard disk is converted to NTFS. This behavior occurs on Windows XP-based computers that have Simple File Sharing turned on that were upgraded from Windows 98, Windows 98 Second Edition, or Windows Millennium Edition. This behavior occurs because the default permissions of a hard disk that is converted to NTFS do not contain the Everyone group. The Everyone group is required for remote users who are using the Guest account to access the files. To reset the permissions, unshare and reshare the affected folders.

### Behavior that is affected when Simple File Sharing is turned on

- The Simple File Sharing UI in the properties of a folder configures both share and file permissions.
- Remote users always authenticate as the Guest account.

For additional information, click the following article number to view the article in the Microsoft Knowledge Base:

[302927](http://support.microsoft.com/kb/302927/) (<http://support.microsoft.com/kb/302927/>) Computer Management displays user account names when logged on as Guest

- Windows Explorer does not retain permissions on files that are moved in the same NTFS drive. The permissions are always inherited from the parent folder.
- On Windows XP Professional-based computers that have Simple File Sharing turned on and Windows XP Home Edition-based computers, the Shared Folders (Fsmgmt.msc) and Computer Management (Compmgmt.msc) tools reflect a simpler sharing and security UI.
- In the Computer Management and Shared Folders consoles, the **New File Share** command is unavailable when you right-click the **Shares** icon. Also, if you right-click any listed share, the **Properties** and **Stop Share** commands are unavailable.

### Behavior that is not caused by turning on Simple File Sharing

- In Windows XP Home Edition, the Computer Management snap-in does not display the **Local Users and Groups** node. The Local Users and Groups snap-in cannot be added to a custom snap-in. This behavior is a limitation of Windows XP Home Edition. It is not caused by Simple File Sharing.
- If you turn off the Guest account in the **User Accounts** Control Panel tool, only the guest's ability to log on locally is affected. The account is not disabled.
- Remote users cannot authenticate by using an account that has a blank password. This authentication is configured separately.
- Windows XP Home Edition cannot join a domain. It can only be configured as a member of a workgroup.

For additional information, click the following article number to view the article in the Microsoft Knowledge Base:

[303606](http://support.microsoft.com/kb/303606/) (<http://support.microsoft.com/kb/303606/>) Can log on without password by using Guest account after upgrade from Windows 2000

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## APPLIES TO

- Microsoft Windows XP Home Edition
- Microsoft Windows XP Professional

