

How to recover from a corrupted Registry in Windows XP

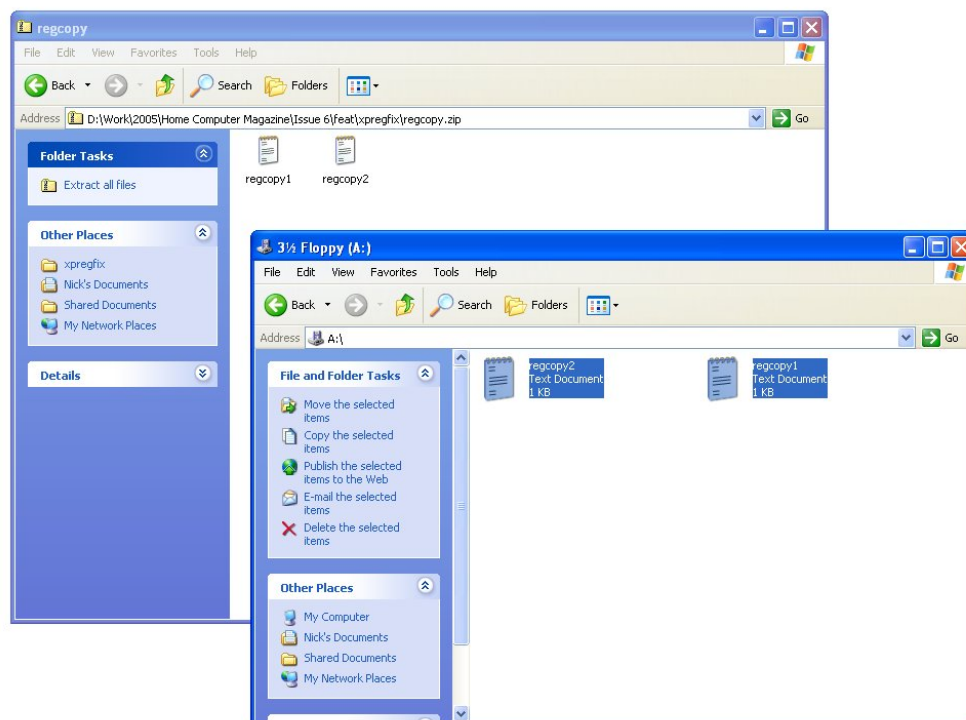
```
Windows could not start because the following file is missing
or corrupt:
\WINDOWS\SYSTEM32\CONFIG\SYSTEM

You can attempt to repair this file by starting Windows Setup
using the original Setup CD-ROM.
Select 'r' at the first screen to start repair.
```

1. First, how do you know if you have a corrupted Registry or not? There are two symptoms: first, your PC continually restarts whenever you try to start it. Try as you might you cannot get into Windows, either using Last Known Good Configuration or any of the Safe mode options. The second is if you are told there's a Registry File Error, or that one of the following files is missing or corrupt:

```
\WINDOWS\SYSTEM32\CONFIG\SYSTEM
\WINDOWS\SYSTEM32\CONFIG\SOFTWARE
```

This tutorial will show you how to recover from such a scenario.



2. First, if you have access to a working PC with Web access, visit www.pchelpermonkeys.co.uk/resources/regcopy.zip and save the file to its hard drive. regcopy.zip contains two batch files that simplify the process of replacing your corrupt Registry files with working versions.

Once downloaded, open regcopy.zip and copy the two text files - regcopy1 and regcopy2 to a floppy disk.

```
Microsoft Windows XP(TM) Recovery Console.
The Recovery Console provides system repair and recovery functionality.
Type EXIT to quit the Recovery Console and restart the computer.

1: C:\WINDOWS
Which Windows installation would you like to log onto
<To cancel, press ENTER>? 1
Type the Administrator password:
C:\WINDOWS>
```

3. The first thing to do is load the Windows Recovery Console from your Windows XP CD (this will not work with recovery CDs - instead, see <http://support.microsoft.com/kb/310994> for details on creating six floppy disks that will give you access.

If you're using your Windows CD, make sure your PC can boot from CD. Switch it on with your Windows XP CD inserted and when prompted, press the key displayed to enter setup – typically [Del] or [F2]. Within the BIOS set-up screen, navigate through the various menus looking for the Boot Priority options. When you find them, make sure the first boot device selected is the CD-ROM, with the hard drive (or HDD-0) the second one. Save your changes and restart.

When the initial set-up screens vanish, you'll see a message asking if you wish to boot from CD. Press any key to do so. Let Windows Setup load its various files, then press [R] when prompted to launch the Recovery Console. Once loaded, press [1] followed by [Enter] when asked which Windows installation to access. Next you'll be asked for your administrative password – in most cases just press [Enter] to get limited access to your system.

```
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1: C:\WINDOWS
Which Windows installation would you like to log onto
<To cancel, press ENTER>? 1
Type the Administrator password:
C:\WINDOWS>a:
A:\>batch regcopy1.txt
```

4. Insert the floppy disk from step 2 into the floppy drive, type in **A:** and press [Enter]. The command prompt should change from C:\Windows\ to A:\. Now type in **batch regcopy1.txt** and press [Enter].

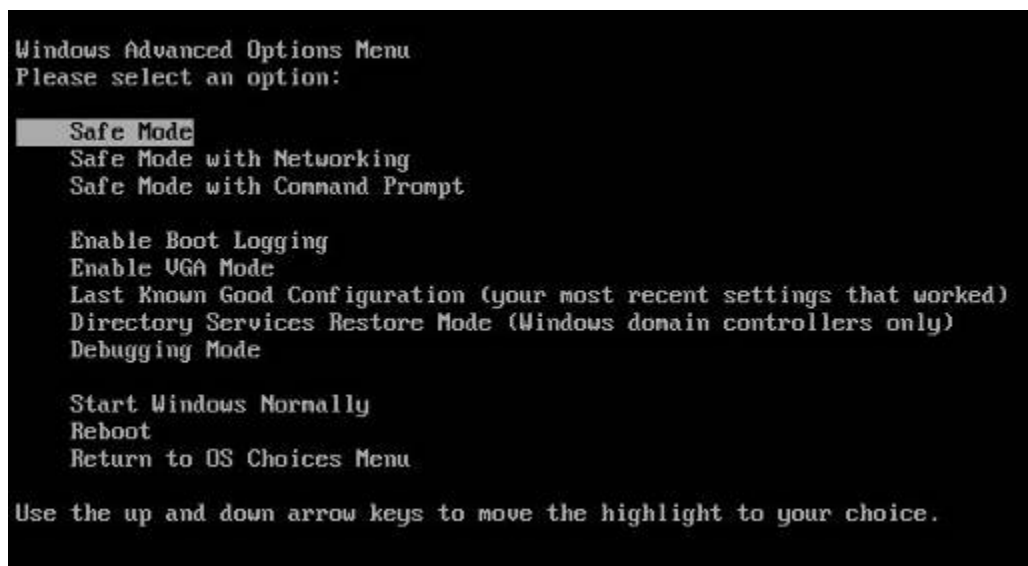
5. This executes a batch file on the cover disc that will copy your corrupted Registry files into a TMP folder, delete the original files, and then replace them with new files. These new files will enable you to boot into Windows, but because they were created when Windows was first installed on your PC they will enable your PC to boot correctly. As an aside, your user settings are stored in a separate file (ntuser.dat) that's held inside your personal Documents and Settings folder, which isn't affected by this procedure, so they're safe.

If you don't have the floppy disk to hand (or you don't have access to a working PC), you can type in the following commands, pressing [Enter] between each line:

```
md c:\windows\tmp
copy c:\windows\system32\config\system c:\windows\tmp\system.bak
copy c:\windows\system32\config\software
c:\windows\tmp\software.bak
copy c:\windows\system32\config\sam c:\windows\tmp\sam.bak
copy c:\windows\system32\config\security c:\windows\tmp\security.bak
copy c:\windows\system32\config\default c:\windows\tmp\default.bak

delete c:\windows\system32\config\system
delete c:\windows\system32\config\software
delete c:\windows\system32\config\sam
delete c:\windows\system32\config\security
delete c:\windows\system32\config\default

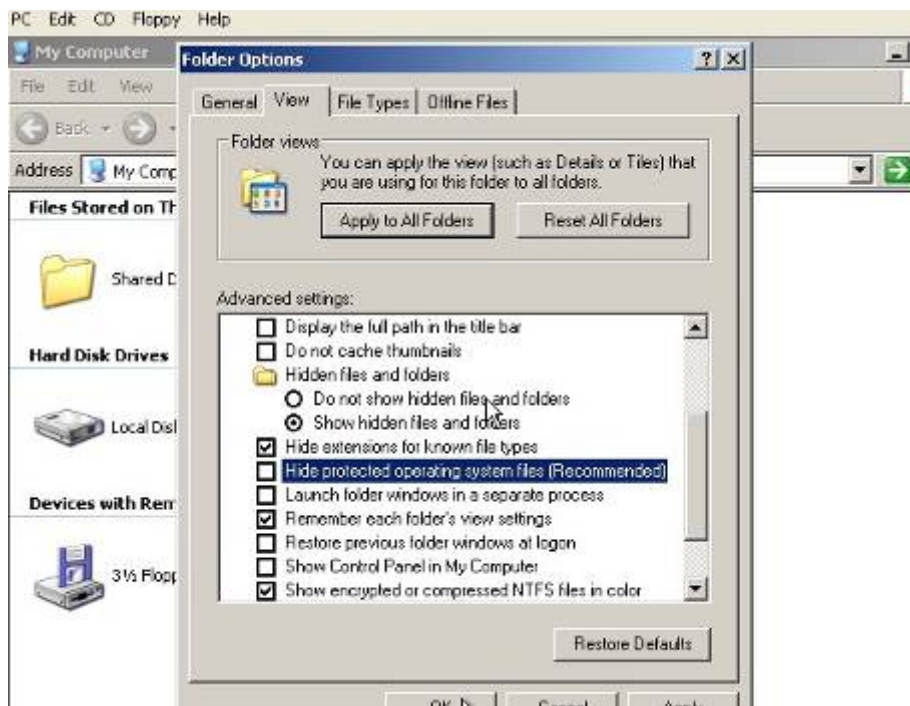
copy c:\windows\repair\system c:\windows\system32\config\system
copy c:\windows\repair\software c:\windows\system32\config\software
copy c:\windows\repair\sam c:\windows\system32\config\sam
copy c:\windows\repair\security c:\windows\system32\config\security
copy c:\windows\repair\default c:\windows\system32\config\default
```



6. Switch off your PC, and switch it on again. Press [F8] as Windows starts and the start-up menu should appear. Use the cursor keys to select the **Safe Mode** option and then press [Enter] twice.



7. Because all of your user data has been lost (for now – don't panic!), you should automatically log into Safe mode as an Administrator. If not, then select it from the log-on menu. Next click **Start > Run** and select **My Computer**. Then choose **Tools > Folder Options**.



8. Switch to the **View** tab, then do the following:
 Under **Hidden files and folders** select **Show hidden files and folders**.
 Click on the tick next to **Hide protected operating system files (Recommended)**
(Recommended) to remove it, followed by **Yes** when asked to confirm this choice.
 Click **OK**.

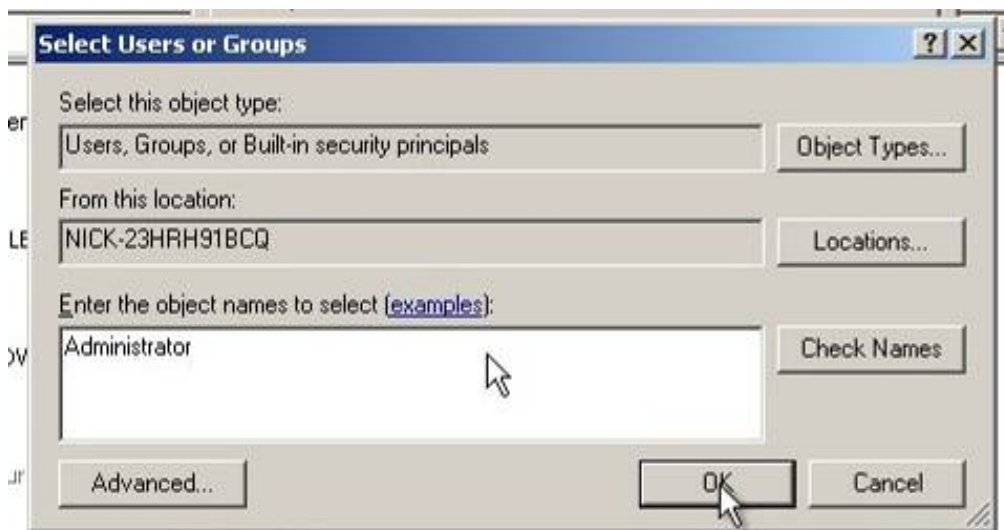


9. Now double-click on the drive where Windows is installed. You should see a System Volume Information folder. Try double-clicking on it: if it opens, go to step 12; if it doesn't, carry on to the next step. As a rule of thumb, it will open if Windows is installed on a FAT32 drive, but not if it is installed on a NTFS one.

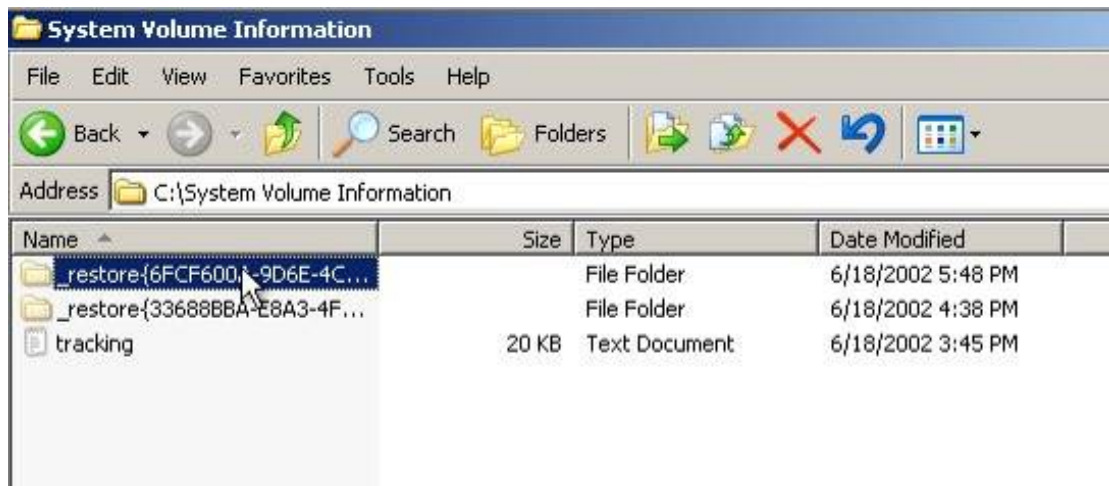
```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\Nick Peers>c:
C:\>cacls "c:\System Volume Information" /E /R Administrator :F
```

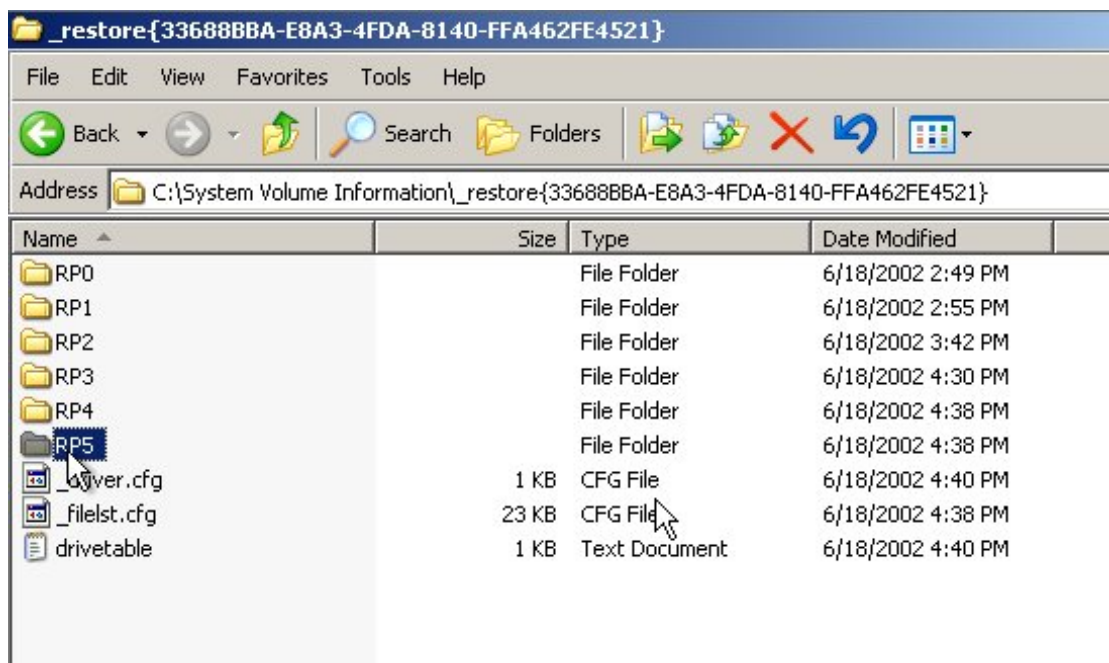
10. If you're running Windows XP Home Edition, click **Start > Run**, type **cmd** and click **OK**. Now type the following, pressing **[Enter]** to gain access to the folder.
cacls "c:\System Volume Information" /E /R Administrator :F



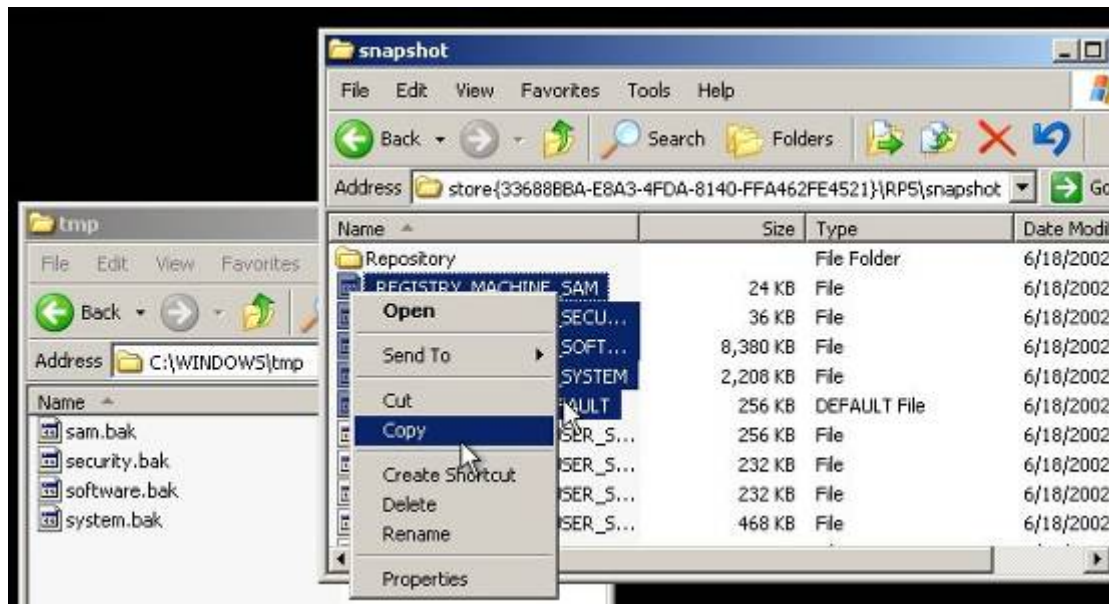
11. If you're running Windows XP Professional, right-click the **System Volume Information** folder and choose **Properties** (or **Sharing and Security** if you're on a domain). Click the **Add** button and enter **Administrator** before clicking **OK** twice. You should now have access.



12. Choose **View > Details**. Double-click on a folder that wasn't created at the current time to open it.



13. You'll notice a load of folders beginning with 'RP'. These are Restore Point folders. Choose **View > Details** again and double-click on the one with the latest date and time on it.



14. Inside the RP folder is a snapshot folder. Double-click on it again to open it, then copy the following files to the **Windows\Tmp** folder:

_REGISTRY_USER.DEFAULT
_REGISTRY_MACHINE_SECURITY
_REGISTRY_MACHINE_SOFTWARE
_REGISTRY_MACHINE_SYSTEM
_REGISTRY_MACHINE_SAM

To do this, open the two windows, right-click on the files above and choose **Copy**. Click on the **C:\Windows\Tmp** window to highlight it, then choose **Edit > Paste** or press [Ctrl] + [V].



15. Re-insert your Windows XP CD, then choose **Start > Turn Off Computer**. Select **Restart** and then reboot to the Recovery Console.

```
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Type EXIT to quit the Recovery Console and restart the computer.

1: C:\WINDOWS

Which Windows installation would you like to log onto
<To cancel, press ENTER>? 1
Type the Administrator password:
C:\WINDOWS>map

C: NTFS          8002MB   \Device\Harddisk0\Partition1
D:              8370MB   \Device\Harddisk0\Partition2
A:              \Device\Floppy0
E:              \Device\CdRom0

C:\WINDOWS>e:

E:\>batch regcopy2.txt
```

16. Once the C:\Windows\ prompt appears, follow step 4 again, except this time type in **batch regcopy2.txt** and press [Enter] instead. Alternatively, type the following in at the C:\Windows\ prompt, pressing [Enter] at each line space:

```
del c:\windows\system32\config\sam

del c:\windows\system32\config\security

del c:\windows\system32\config\software

del c:\windows\system32\config\default

del c:\windows\system32\config\system

copy c:\windows\tmp\_registry_machine_software
c:\windows\system32\config\software

copy c:\windows\tmp\_registry_machine_system
c:\windows\system32\config\system

copy c:\windows\tmp\_registry_machine_sam
c:\windows\system32\config\sam

copy c:\windows\tmp\_registry_machine_security
c:\windows\system32\config\security

copy c:\windows\tmp\_registry_user_.default
c:\windows\system32\config\default
```

17. Restart your PC and you will be returned to your last System Restore point. More importantly, your PC should be able to boot again!

For more information on this fix, browse to the following site:

<http://support.microsoft.com/kb/307545>