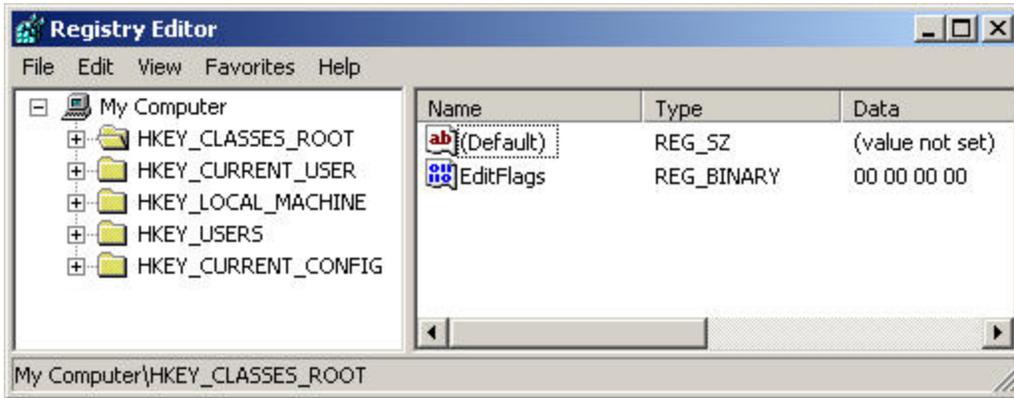


# The anatomy of the Windows registry



Windows XP registry

## How the Windows registry is organized

The Registry Editor presents the registry in a folder tree structure that should be familiar to most Windows users. Although the registry doesn't contain actual folders, this display format allows us to easily navigate and manipulate registry.

Each folder is called a key and each key can contain other keys and values. The keys provide the organization structure and the values contain the actual configuration data. Keys appear in the Registry Editor's left pane and values appear in the right pane.

The registry contains five main, or root, keys. Each key contains specific types of information.

- **HKEY\_CLASSES\_ROOT** contains information about file types.
- **HKEY\_CURRENT\_USER** contains copies of data stored in HKEY\_USERS about the user that is currently logged on.
- **HKEY\_LOCAL\_MACHINE** contains information about all the hardware and software installed on the computer.
- **HKEY\_USERS** contains information about all the system's user accounts.
- **HKEY\_CURRENT\_CONFIG** contains copies of the information from all the other root keys that pertain to the currently running session.

## What the Windows registry is

The registry is essentially a database of Windows' configuration settings. It contains information on each user with an account on the local system, on all internal and external hardware, on installed programs, and on property settings. Windows continually references the registry during operation. When you change Windows configuration setting, the registry stores those changes. For example, most changes you make through the Control Panel or local Group Policy Editor (Gpedit.msc) are stored in the registry.

You manually view and modify the registry via the Registry Editor. To launch the Registry Editor click Start | Run, type **Regedit** in the Open text box, and click OK. Windows NT and Windows 2000 provide two different registry editing tools *Regedit* and *Regedit32*. Windows XP and Server 2003 provide a version of *Regedit* which has the functionality of both tools.

## Backing up the Windows registry

Before editing the registry via the Registry Editor, you should back up the registry.

You can create a backup using Windows XP's Backup Utility by selecting the System State option. Many third-party backup applications will also back up the Windows registry along with your data files. Furthermore, you can also use the Console Registry Tool for Windows (enter *reg /?* At a command prompt for more information) or create a Restore Point.

To back up an individual key before making changes to the values it contains, select the key in the Registry Editor, pull down the File menu, choose the Export command, give the file a name, select a save location, and click save. The end result is a REG file that you can use to easily undo your changes—just locate and double-click the file.

By Greg Shultz

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## Additional resources

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- Sign up for the [Security Solutions](#), delivered on Fridays
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- [10 Windows registry hacks for Microsoft Office](#) (TechRepublic)
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## Version history

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