

# What is the Bios and the Windows --- Registry

# The Bios

## How to get into the Bios?

- 1. Get ready to act quickly: You need to start the computer and press a key on the keyboard before the BIOS hands over control to Windows. You have only a few seconds to perform this step.

# The Bios

- 2. Boot (or restart) the PC: Pay close attention to the first screen that appears. Look for a message that indicates which key you need to press in order to access the BIOS. That key is likely to be:
  - --A Function key (such as F1, F2, or F3)
  - --The Esc key
  - --The Delete key
- dell bios startup select IDG
- On this PC, you'd press F2 to enter the BIOS setup menu.



# The Bios

- On some PCs, entering the BIOS may require pressing another key or a combination of keys. Keep your eyes open for an on-screen message that says something like:
- --'Press F1 to enter setup'
- --'BIOS settings: Esc'
- --'Setup = Del'
- --'System configuration: F2'
- If you don't catch it the first time, simply try again. Your computer's documentation may also tell you which key to press.

# The Bios

- 3. When you know the right key, start the computer again and press the key when the first screen pops up: You may hear a confirmation beep or see a new message. If you timed it correctly, you'll be in the BIOS within a few seconds.

# The Bios

PhoenixBIOS Setup Utility				
Main	Advanced	Security	Boot	Exit
System Time:	[09]:21:30]			Item Specific Help
System Date:	[09/02/2016]			<Tab>, <Shift-Tab>, or <Enter> selects field.
Legacy Diskette A:	[1.44/1.25 MB 3½"]			
Legacy Diskette B:	[Disabled]			
▶ Primary Master	[None]			
▶ Primary Slave	[None]			
▶ Secondary Master	[CD-ROM]			
▶ Secondary Slave	[None]			
▶ Keyboard Features				
System Memory:	640 KB			
Extended Memory:	2096128 KB			
Boot-time Diagnostic Screen:	[Enabled]			
F1 Help	↑↓ Select Item	-/+ Change Values	F9 Setup Defaults	
Esc Exit	↔ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit	



# Intermission

Take 5 While I setup for  
The Windows Registry  
Presentation



# The Windows Registry

The registry is essentially a massive internal database containing important, machine specific information regarding almost everything in your machine:

- System Hardware
- Installed Software and Drivers
- System Settings
- Profile Information

Your Windows operating system constantly refers to the registry.



# The Windows Registry

## What Causes a Registry Error?

There are several common causes of registry errors, some worth worrying about, others not:

- **Orphaned Entries:** Not an issue. Orphaned entries occur when you uninstall programs and small fragments of registry entries are left behind. Many registry fix software will proclaim these are an immediate issue, but in reality they amount to nothing more than a few kilobytes of data in your machine.
- **Duplicate Keys:** Not an issue. Duplicate keys are made when you reinstall, upgrade or update software on your machine, including the operating system. Registry fix software will advise that your software will be 'confused' by the duplicate entries, slowing your machine, but in reality this is unlikely.
- **Fragmented Registry:** Not an issue. Similar to duplicate keys, the registry fragments when software is uninstalled, upgraded or updated.
- **System Shutdown Errors:** Unlikely to cause issue. Each time your computer shuts down, a copy of the registry is saved to the system memory. If your computer is suddenly turned off, or crashes, or dies for another reasons, it *could* cause an issue in the future – but this is unlikely.
- **Malware and Viruses:** Massive issue. Malware and viruses of all types regularly attack and modify the registry and will require immediate attention.

Registry cleaner software will commonly identify issues 1-4 as seriously important, device destroying issues, when realistically only issue 5 should cause you to take immediate action.

# The Windows Registry

## Backup Registry

First of all, before attempting to alter, fix or delete registry fields, you should **always** back up the registry to a secure location. This is achieved by:

- Type **regedit**, and then press enter.
- Click **File>Export**
- In the dialogue box, enter a useful name such as **regbackup**, select a useful location – My Document is the default – and click **save**.

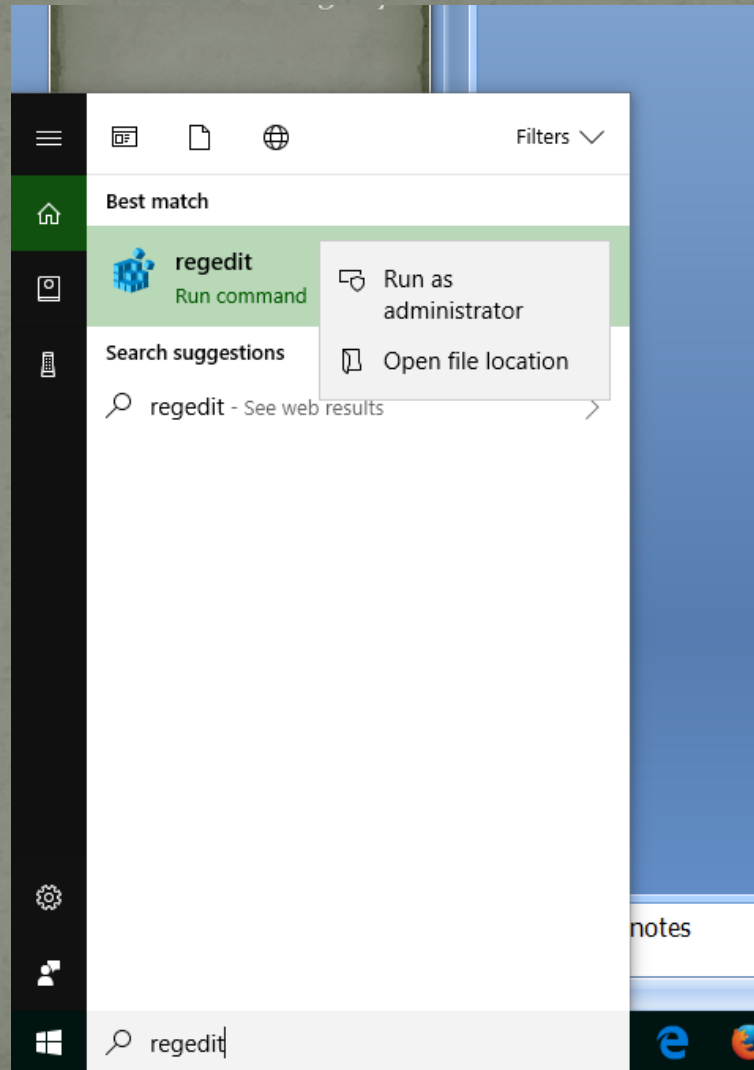
# The Windows Registry

## Restoring Your Registry Backup

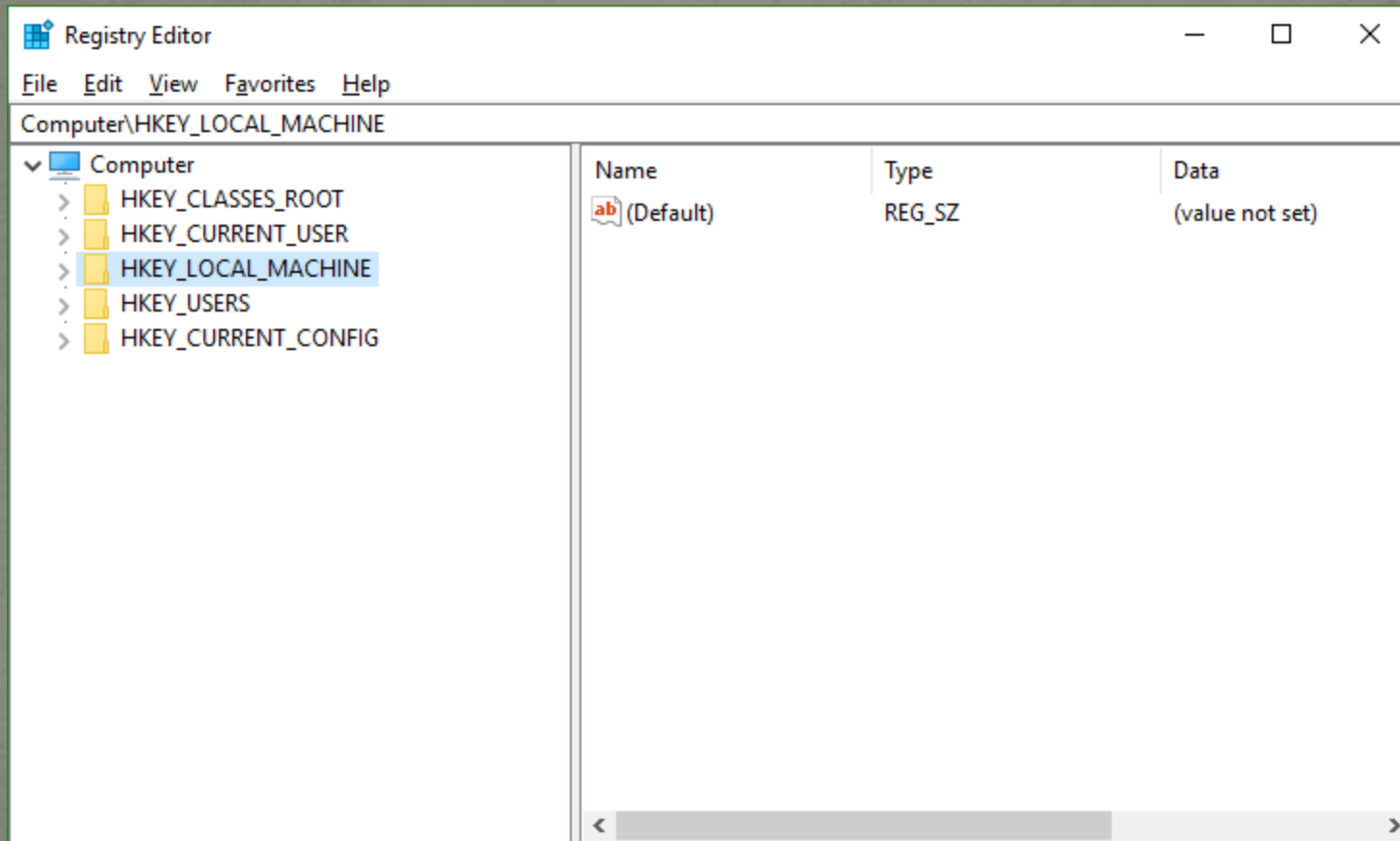
- Boot Windows into **Safe Mode**
- Type **regedit**, and then press enter.
- Click **File>Import**
- In the **Import Registry** dialogue box, browse to the location we saved our backup – remember My Documents is set as the default – and click **Open**



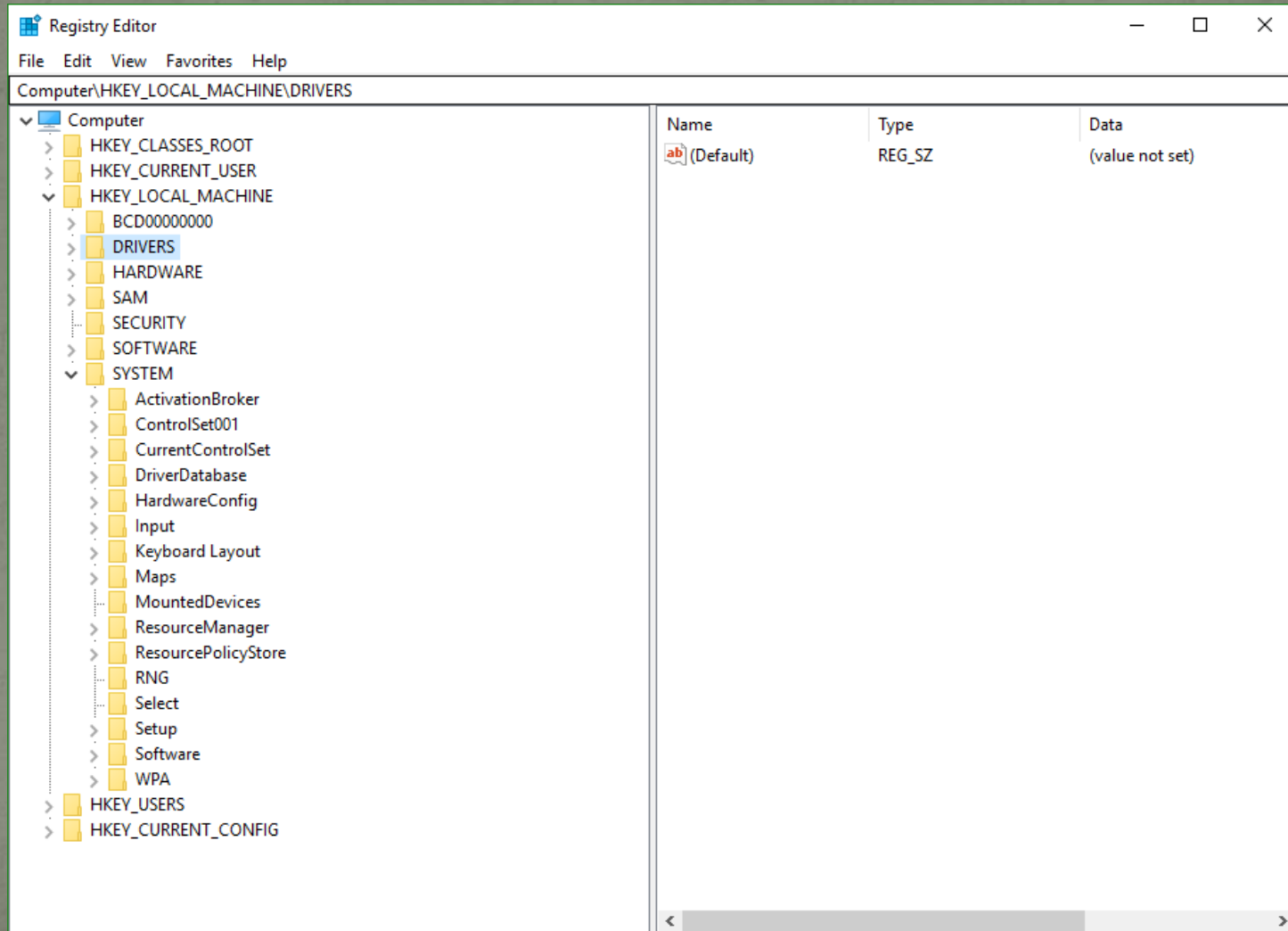
# The Windows Registry



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# The Windows Registry

## User Profile

- HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows NT\CurrentVersion\ProfileList.

## Num Lock Keys

- HKEY\_USERS\Default\Control Panel\Keyboard.

Right-click on the “InitialKeyboardIndicators”, select Modify and change Value data to 2.

# The Windows Registry

## **10 common issues you can fix with a registry hack**

- <https://www.techrepublic.com/blog/10-things/10-common-issues-you-can-fix-with-a-registry-hack/>

THE

END