

Yesterday, the Echolink computer froze mid-net. I tried to restart it, but it kept rebooting into the BIOS. Here's an outline of the steps I took to fix the issue:

Re-install Windows

- From a working Windows computer, I downloaded Windows 11 USB boot drive program from the "Create Windows 11 Installation Media" section of this [Microsoft page](#).
- I booted the Echolink computer using the USB boot drive and tried to "Troubleshoot" the computer (see section 3 of [these instructions](#)). Unfortunately, that option wasn't available.
- Before trying to re-install Windows, I had to find the Windows Product key.
 - If Windows was working, I could have used `regedit`, navigate to `Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\SoftwareProtectionPlatform`, and lookup `BackupProductKeyDefault`. (See Method 3 [from these instructions](#) for more details)
 - But I couldn't boot into Windows so I used a [Linux Mint](#) USB boot drive and tried to

```
sudo strings /sys/firmware/acpi/tables/MSDM | tail -1
```

but the MSDM file didn't exist. I tried that command on in my personal computers and it worked so I made notes of these keys. (See [these instructions](#) for more details.)

- Finally, I installed `reglookup` on the Linux boot drive and ran

```
reglookup -p "/Microsoft/Windows  
NT/CurrentVersion/SoftwareProtectionPlatform/BackupProductKeyDefault" \  
[MountPoint]/Windows/System32/config/SOFTWARE
```

(See [these instructions](#) for more details.)

- I rebooted the computer using the Windows boot drive to re-install Windows 11 from scratch on its old partition (leaving the other partitions alone), but it again booted to the BIOS.
- I rebooted back to LinuxMint and used GParted and delete every partition on the Echolink computer.
- I rebooted back using the Windows boot drive and this time Windows re-installed properly.

Configure Windows

- To load Windows without a Microsoft account (see [these instructions](#) for more details):
 - At the sign-in page, press `Shift+F10` to open a command prompt window and type:

```
oobe\bypassnro
```

- While the computer reboot, disconnect the ethernet cable.
- Choose I don't have internet
- Debloat Windows using [Raphire's script](#). Press `Windows Key+R` and type `cmd` to open a command prompt window and type:

```
& ([scriptblock]::Create((irm "https://debloat.raphi.re/")))
```

- Run Windows updates
- Turn off device sleep and hibernation

Install and Configure Echolink

- Download and install [Echolink](#)
- Add Echolink to the startup folder:
 - Press **Windows Key**+**R** and type `shell:startup` to open the startup folder.
 - Copy (**not** Move) the Echolink link from the Desktop into that folder
- With the radio turned off, plug in the Signalink device and [configure the audio settings](#).