

Instructions for removing LSE on Lenovo computers

LSE installs a software program called OneKey Optimizer (OKO) available on many Lenovo laptops. OneKey Optimizer is in the 'crapware' category. However, the only weakness is that both LSE and OKO are not safe.

Bloatware are applications that are added to the device that the device manufacturer has included with the operating system. To remove unwanted pre-installed programs, many tech-savvy users often "clean" by reinstalling **Windows** after purchasing a computer.

However, for some Lenovo laptops and computers, you cannot remove the preinstalled programs by the above method. Ars Technica and Y Combinator discussion forums have accused Lenovo of installing unwanted **rootkit** software and cannot be removed on fixed Lenovo laptops and computer systems.

One of the most popular Chinese computer manufacturers "Lenovo" has been caught again using a hidden **Windows** feature to install unwanted **rootkit** software and cannot be removed on a fixed **Lenovo** laptop and Computer systems sold. This feature is called '**Lenovo Service Engine**' (**LSE**) - a piece of code that attaches the firmware on the computer's motherboard.

Lenovo representatives did not acknowledge or deny the presence of this software. Instead, they instructed users to update BIOS software on Lenovo computers to solve '**Lenovo Service Engine**'.

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OneKey Optimizer is in the 'crapware' category . However, the only weakness is that both **LSE** and **OKO** are not safe.

Security researcher **Roel Schouwenberg** reports a number of security issues, including buffer overflows and insecure network connections, to Lenovo and **Microsoft** making Lenovo stopped installing **LSE** on its new systems that were built in June. The company also provided a firmware update for laptops with vulnerabilities and guidelines issued to disable the options on these devices. Affected machine and cleaning **LSE** files.

Lenovo has released the **LSE Windows Disabler Tool**, you can refer to the instructions on how to install the software in the following article of Network Administrator.

1. List of Lenovo computers with LSE installed

1. Flex 2 Pro-15 / Edge 15 (Broadwell)
2. Flex 2 Pro-15 / Edge 15 (Haswell)
3. Flex 3-1470 / 1570
4. Flex 3-1120
5. G40-80 / G50-80 / G50-80 Touch / V3000
6. S21e

7. S41-70 / U41-70
8. S435 / M40-35
9. Yoga3 14
10. Z70-80 / G70-80
11. Yoga 3 11
12. Y40-80
13. Z41-70 / Z51-70

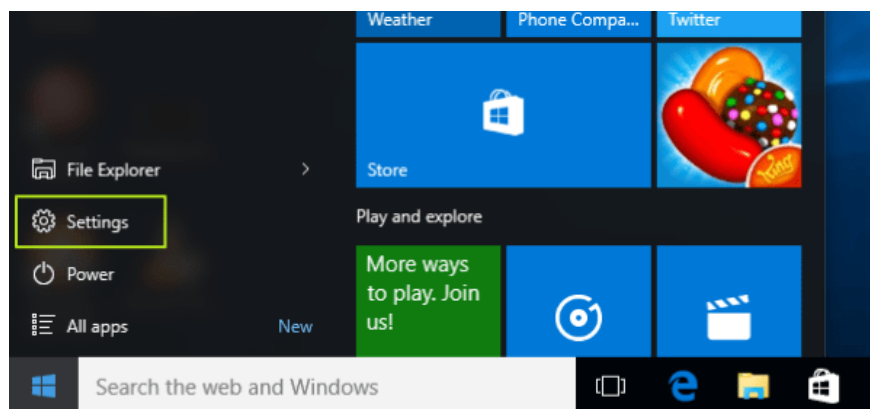
2. How to remove LSE - 1 type of rootkit on Lenovo?

Step 1:



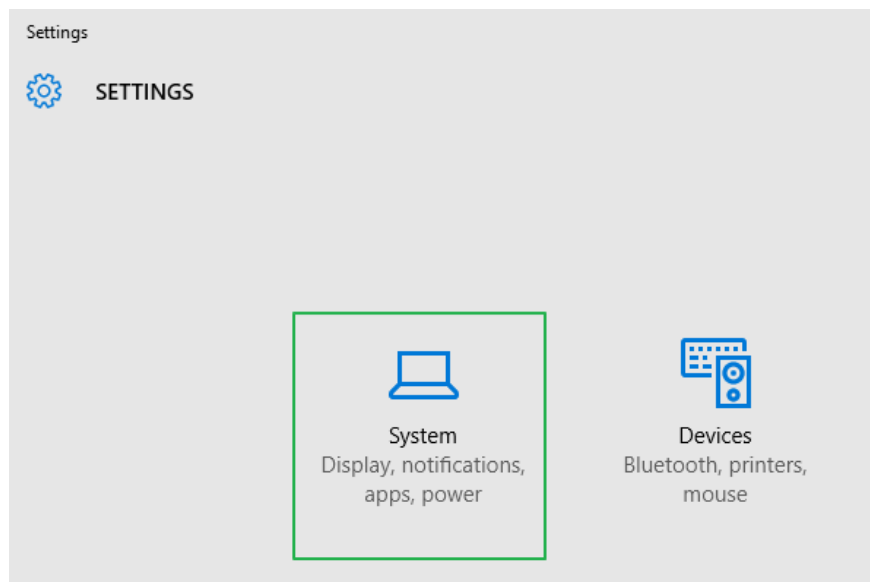
To remove **Lenovo Service Engine** , you first need to determine if your computer is running **32 bit Windows** or **64 bit Windows** , then click on the **Start** button.

Step 2:



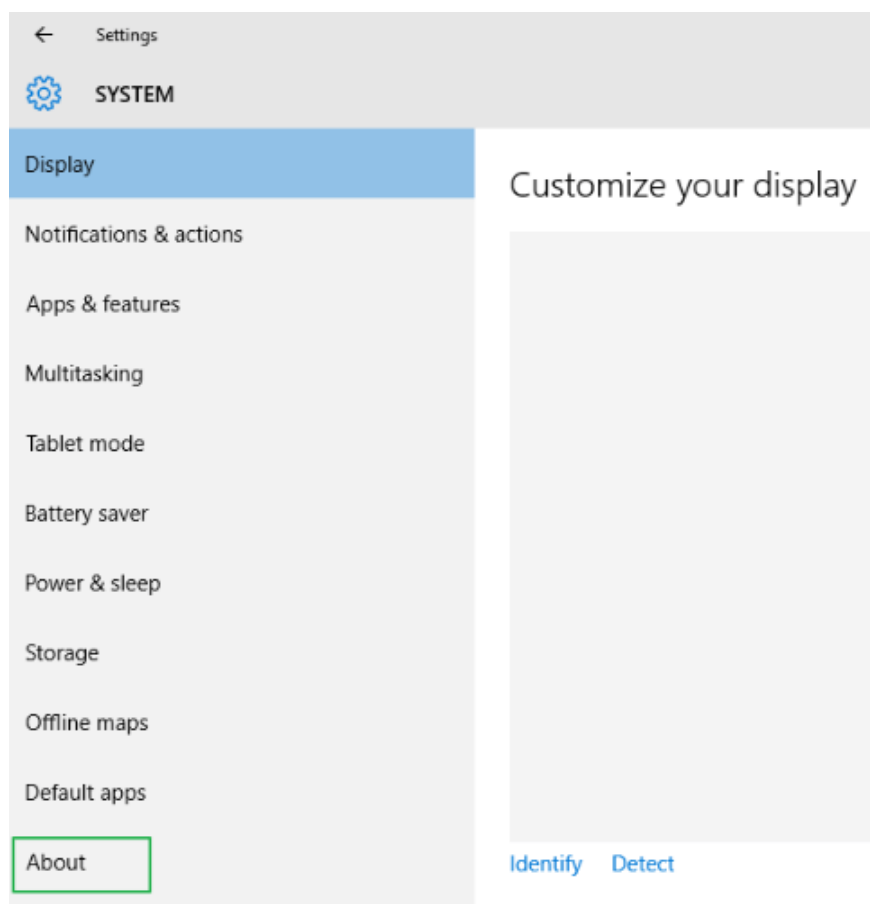
Select **Settings** (Settings).

Step 3:



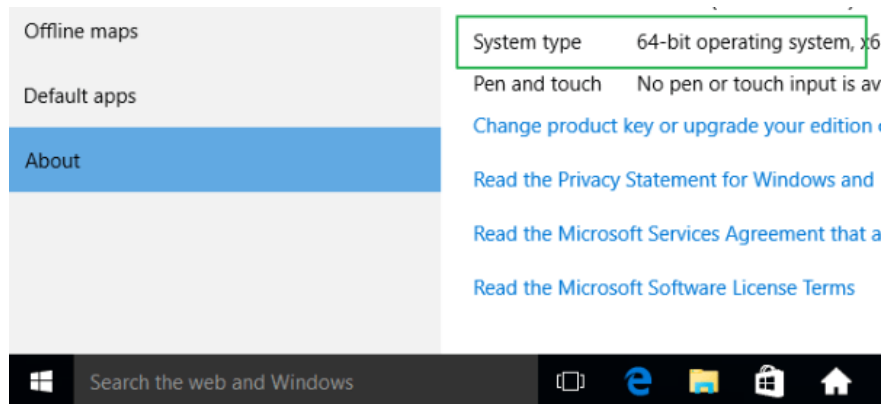
Click on **System**.

Step 4:



Select **About** in the left pane.

Step 5:



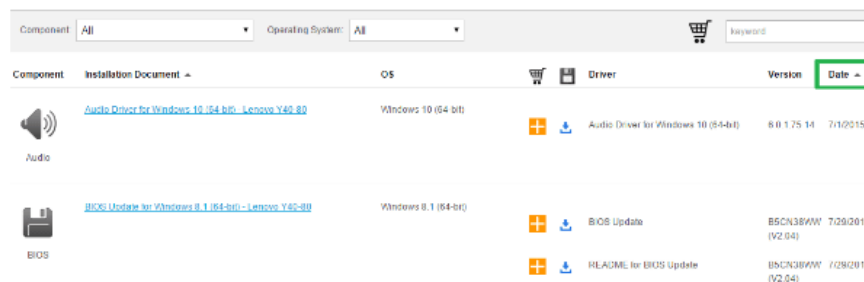
You note down the paper or wherever the notification is on the **System Type** screen.

Step 6:

Model	Minimum Fix Version	Download URL
Flex 2 Pro-15/Edge 15 (Broadwell)	A9CN46WW	http://support.lenovo.com/en/products/laptops-and-netbooks/flex-series/flex-2-pro-15/laptop/lenovo
Flex 2 Pro-15/Edge 15 (Haswell)	B9CN17WW	http://support.lenovo.com/en/products/laptops-and-netbooks/flex-series/flex-2-pro-15/laptop/lenovo
Flex 3-1470/1570	RDCN30WW	http://support.lenovo.com/en/products/laptops-and-netbooks/flex-series/flex-3-1470
Flex 3 1120	C0CN25WW	http://support.lenovo.com/en/products/laptops-and-netbooks/flex-series/flex-3-1120/downloads/D8102815
G40-80/G50-80/G80-80 Touch/V3000	B0CN75WW	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-g-series/laptops/g40-80/downloads/D8102213
S21s	C4CN14WW(V1.04)	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-s-series/laptops/s21s-20/downloads/D8102813
S41-70/U41-70	BDCN30WW	http://support.lenovo.com/en/products/laptops-and-netbooks/s-series/laptops/s41-70
S43/S44/S45	BECN15WW(V1.08)	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-s-series/laptops/s43
Yoga3 14	BACN33WW	http://support.lenovo.com/en/products/laptops-and-netbooks/yoga-series/yoga-3-1470/downloads/D8102759
Z70-80 / G70-80	AECN75WW	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-z-series/laptops/z70-80/downloads/D8102603
Yoga 3 11	BBCN30WW(V2.08)	http://support.lenovo.com/en/products/laptops-and-netbooks/yoga-series/yoga-3-1170/downloads/D8102758
Y40 80	B5CN36WW(V2.02)	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-y-series/laptops/y40-80
Z41 70/Z51 70	C2CN18WW(V1.04)	http://support.lenovo.com/en/products/laptops-and-netbooks/lenovo-z-series/laptops/z41-70/downloads/D8102747

Visit **Lenovo Security Advisory** , and find the link that best matches the **Lenovo** line you are using.

Step 7:



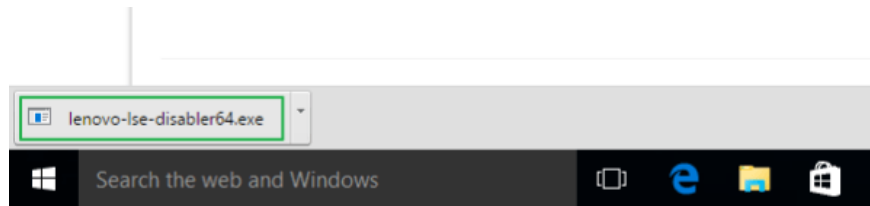
After finding a link that matches your Lenovo line, click on it to navigate to the new link. On the new link interface, click on the **Date** button to update, update the latest version at the top of the page.

Step 8:

Windows 10 (32-bit)					
Windows 10 (64-bit)					
Windows 7 (32-bit)	+	↓	Lenovo LSE Windows Disabler Tool for	1.0.0.9	7/30/2015
Windows 7 (64-bit)			32 bit Windows		
Windows 8.1 (32-bit)	+	↓	Lenovo LSE Windows Disabler Tool for	1.0.0.9	7/30/2015
Windows 8.1 (64-bit)			64-bit Windows		
Windows 8 (32-bit)					
Windows 8 (64-bit)	+	↓	LSE Windows Disabler Tool Readme	1.0.0.9	7/30/2015

Scroll down to find "**Lenovo LSE Windows Disabler Tool**", then click the **Download** icon located next to the version that is appropriate for your version of **Windows** .

Step 9:



After downloading, open the program to remove the **LSE** software from your Lenovo computer.

To better understand Rootkit, you can refer to the article below:

- 1. Differentiate viruses, trojans, worms and rootkits**
- 2. Learn about hidden threats: Rootkit and Botnet**
- 3. Rootkits - potential dangers**

I wish you and your family a happy and prosperous new year!

You finished reading the article "**Instructions for removing LSE on Lenovo computers**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.