

Problem

Apple Mac users: If the Bluetooth mouse or keyboard does not reconnect after a reboot at the login screen and only reconnects after the login, this might be related to FileVault encryption. When FileVault is enabled, Bluetooth mice and keyboards will only re-connect after login.

Testing

Computer

Model: Apple iMac (27-inch, Late 2013) s/n: C02NJ241F8J4 - [technical specifications](#)

Boot Drive: 1TB 7200rpm HDD

OS: macOS Catalina with the latest update

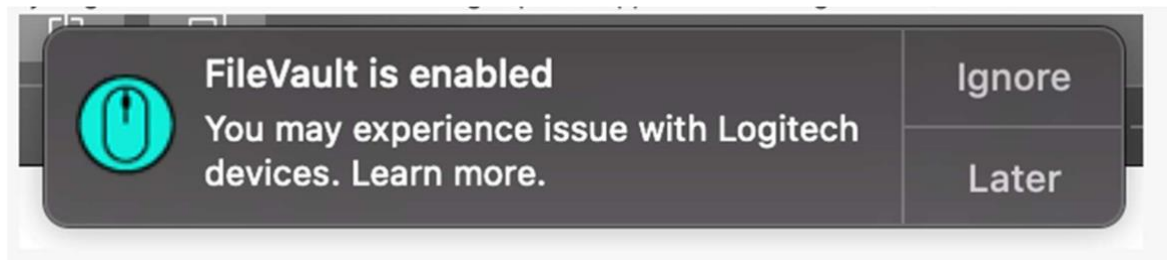
Keyboard: [Logitech MX Keys](#) - connected via Bluetooth

Mouse: [Logitech MX Master 3](#) - connected via Bluetooth

Before enabling FileVault: both Logitech keyboard and mouse functioned as expected and there was no problem interacting with the iMac. They operated at the login screen for password entry. I used [Logitech Options software](#) to manage and customize the two devices.



After enabling FileVault: Logitech Options showed notification as below "You may experience issue with Logitech devices. Learn more."



Observation

After iMac rebooted, the Logitech keyboard/mouse no longer worked at the encryption unlock screen.

I used a wired Apple keyboard with numeric keypad to select user and enter password. After the login screen, both Logitech keyboard/mouse started working, but they were sluggish, and the pre-set specials button functions stopped working properly during the encryption.

Restarting the computer did not resolve this sluggish movement or special button function.

After encryption have completed, both keyboard/mouse started working fine as expected only after login screen.

Workaround

I tried using the Unifying Receiver with the same two devices after enabling FileVault, they both worked at the login screen and function as expected.

Analysis

Types of wireless keyboard/mouse

There are two kind of wireless keyboard/mouse in terms of connectivity: 1. Radio Frequency (RF) and Unifying (Logitech) wireless keyboard/mouse using a USB transceiver or USB receiver, requiring a USB (type A) port on the computer to operate (plug-and-play). 2. Bluetooth keyboard/mouse.

Logitech Bluetooth Keyboard

There is only one Bluetooth keyboard model from Logitech - [Logitech MX Keys](#). It is the one I personally own and used in the testing. This keyboard came with a Unifying Receiver (USB type A) and should be used to solve this issue. All other Logitech wireless keyboards are using Unifying (post 2010), i.e., USB receiver.

Logitech Bluetooth Mouse

According to [this website](#), all Logitech Bluetooth mice include the Unifying Receiver except the 4 below (post 2015):

1. [M337/M535 Bluetooth Mouse](#)
2. [M557 Bluetooth Mouse](#) (for Windows PC)

3. [MX Master 3 for Mac](#)
4. [MX Anywhere 3 for Mac](#)

I think for better user experience, Logitech ditched the USB receiver and made Bluetooth is the only connection option for Mac specific mouse. Because these mice may be used for Mac devices with only USB-C ports.

Logitech Solution

Mac desktop (iMac, iMac Pro, Mac Pro, or Mac Mini) users who have FileVault encryption enabled should use the Unifying Receiver for their MX Keys keyboard. If they have lost the Unifying Receiver that came with the device, a spare receiver can be purchased [here](#). As a result, it does not matter if their mouse can be connected via Unifying Receiver, they can use the keyboard to select user and enter password at the unlock screen.

All Intel-based Mac desktop computers (iMac, iMac Pro, Mac Mini, and Mac Pro), have at least 1 USB type A port, which can be used for the Unifying Receiver for Logitech Bluetooth keyboard/mouse to solve this problem. Logitech's official solution: <https://support.logi.com/hc/en-us/articles/360037899233>

Corner case

What about Mac desktop users who use non-Logitech brand third-party Bluetooth keyboard/mouse, such as [Microsoft Bluetooth keyboard](#) (I don't think a Mac user would want to use a Windows layout keyboard, normally)/mouse or other brands?

iMac, iMac Pro (discontinued), and Mac Pro models all come with Apple Bluetooth keyboard/mouse, so users can take out the Apple keyboard/mouse, recharge them if no power, and use them to enter encryption password before the login screen. After login, users can use their non-Apple non-Logitech Bluetooth only keyboard/mouse.

Mac Mini models can be ordered without Apple keyboard/mouse. The number of Mac Mini users who have not purchased Apple keyboard/mouse, I think, is very small. These users should be identified and communicated first and should be offered solutions such

as using any-brand wired keyboard/mouse or purchasing Apple or Logitech Bluetooth keyboard/mouse.

However, "using the USB receiver, or heaven forbid, a wired keyboard is still far, far preferable to removing full-disk encryption for the sake of a Bluetooth keyboard." - someone on the inter web.

Conclusion

It might be challenging for some users to identify whether their wireless keyboards/mice are using Bluetooth or RF/Unifying. It could be helpful to develop documentations for users to identify the connectivity of their wireless keyboard/mouse.

1. Logitech Bluetooth keyboard/mouse users should use the USB receiver if included. From my observations, people tend to use the included receiver when setting up their Bluetooth keyboard/mouse, because it is much easier - plug and play, there is no need to go to settings and open Bluetooth. If the receiver is lost, users can either purchase a replacement Unifying Receiver or use the Apple keyboard/mouse.
2. Keyboards/mice that are using radio frequency (RF) require USB transceiver. These users will not be affected.
3. Users who use non-Apple non-Logitech Bluetooth only keyboard/mouse, should use the Apple keyboard/mouse. For Apple Mac Mini users who have not purchase Apple keyboard/mouse, a wired keyboard/mouse should be sourced for them.