

A driver is software which controls the operation of a specific hardware device. Third-party drivers are those drivers written by companies unaffiliated with the software vendor. Because they provide such basic functionalities, drivers operate at a low level within the operating system. When they are running in parallel with other software that operates on a similar level such as other drivers or security software, this can create conflicts; a driver created by one vendor may not have been written to operate smoothly in conjunction with software from another vendor. Such bugs can be challenging to isolate since the drivers that are causing the issue must be identified. There are many drivers installed on a PC, and the suspect driver must be acquired and then tested by the testing team, so the bug isolation process can be time-consuming.

There are four possible driver/software conditions, in which the software is the product in question. First, the software can be free of bugs and the drivers can be free of bugs; in this case, no compatibility issues arise. Second, the software can have compatibility problems with the drivers and the drivers can be free of bugs (i.e. perfectly written on their own, with only a bug in the software to blame for any compatibility issues), in which case compatibility issues may arise for which the software is fully responsible. Third, the product can be free of bugs and the drivers can have bugs that cause compatibility problems with the software; in this case, the most likely response is for the software vendor to find a workaround to fix the bug, even though the bug is not technically the fault of the vendor's software, because it is still the software vendor's problem if it generates user dissatisfaction or damage to the user's PC. Fourth, the software can have compatibility problems with the drivers, and the drivers can have

compatibility problems with the software, in which case the fix for the issue must still normally come from a workaround on the software end for the same reasons as with the third possibility.