Protecting Windows users from Janet Jackson's **Rhythm Nation**

devblogs.microsoft.com/oldnewthing/20250429-00/?p=111127

April 29, 2025



Some time ago, I retold a story from a colleague about how Janet Jackson's song Rhythm Nation caused a specific model of laptop to crash due to the song containing a natural resonant frequency of the hard drive. (Part 2.)

One thing I wondered was how long this filter remained present.

I learned that the filter remained present at least until Windows 7, because it was then that Microsoft imposed a new rule on Audio Processing Objects (APOs), which is the formal name for these audio filter thingies, such as the one that filtered out the offending frequency. The new rule was that it must be possible to disable all APOs.

The vendor applied for an exception to this rule on the grounds that disabling their APO could result in physical damage to the computer. If it were possible to disable their APO, word would get out that "You can get heavier bass if you go through these steps," and of course you want more bass, right? I mean, who doesn't want more bass? So people would uncheck the box and enjoy richer bass for a while, and then at some point in the future, the computer would crash mysteriously or (worse) produce incorrect results.

Of course, the users wouldn't realize that these problems were due to them unchecking the box several hours or even days ago. From the user's point of view, the computer just started crashing more often. And they would tell their friends, "Don't buy Fabrikam brand laptops. They crash a lot." Or worse, "Don't buy Windows PCs. They crash a lot."

The exception was granted, and the manufacturer's special "Don't crash when somebody plays Rhythm Nation" filter was allowed to exempt itself from the "Disable all audio enhancements" setting.