

# If an asynchronous I/O completes synchronously, is the hEvent in the OVERLAPPED structure signaled anyway?

 [devblogs.microsoft.com/oldnewthing/20140206-00](http://devblogs.microsoft.com/oldnewthing/20140206-00)

February 6, 2014



Raymond Chen

Yes. When an I/O completes (whether synchronously or asynchronously), the event is signaled and completion status notifications are queued. The `GetOverlappedResult/Ex` function can be used to wait on an I/O that has already completed; it will merely return immediately. If you ask `HasOverlappedIoCompleted` whether the I/O has completed, and the I/O completed synchronously, it will correctly report, “Yeah, of course it completed. Heck, it completed a long time ago!”

In other words, you can logically treat the case of an asynchronous I/O request completing synchronously as if it had completed asynchronously. It just completes asynchronously *before you even blinked*.

[Raymond Chen](#)

**Follow**

