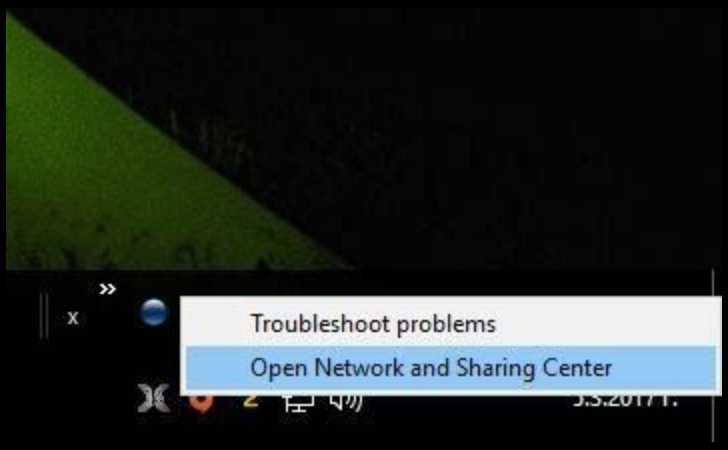
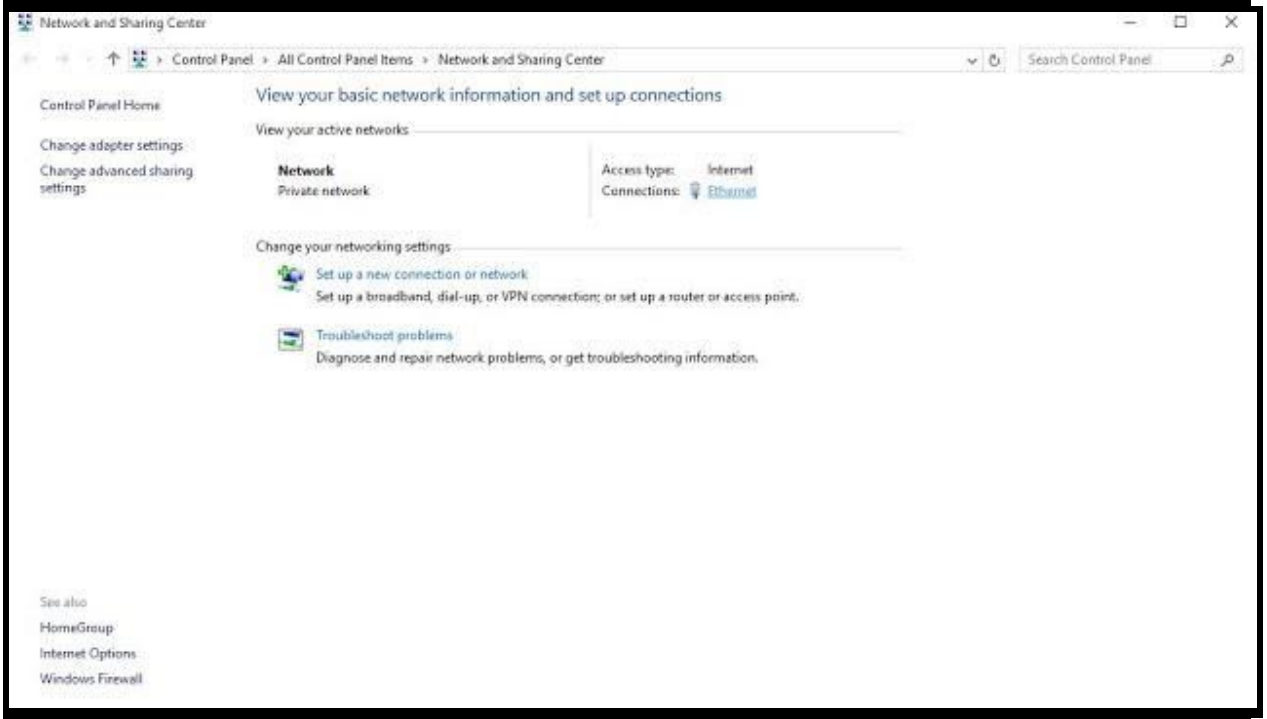
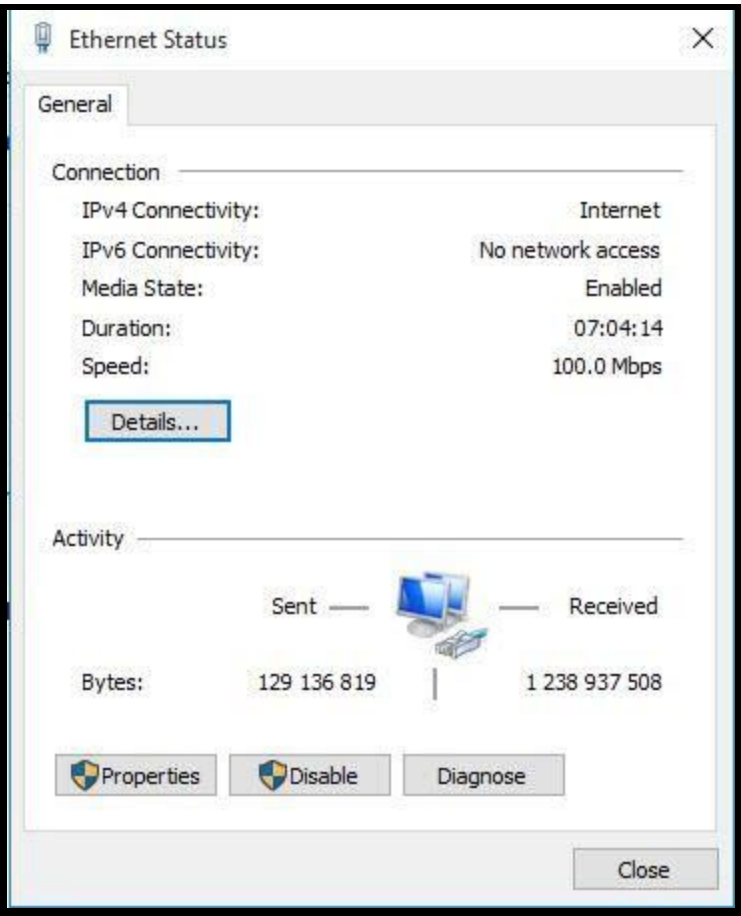
*Right click on Network Internet Access & Open Network and Sharing Center



Go on ETHERNET

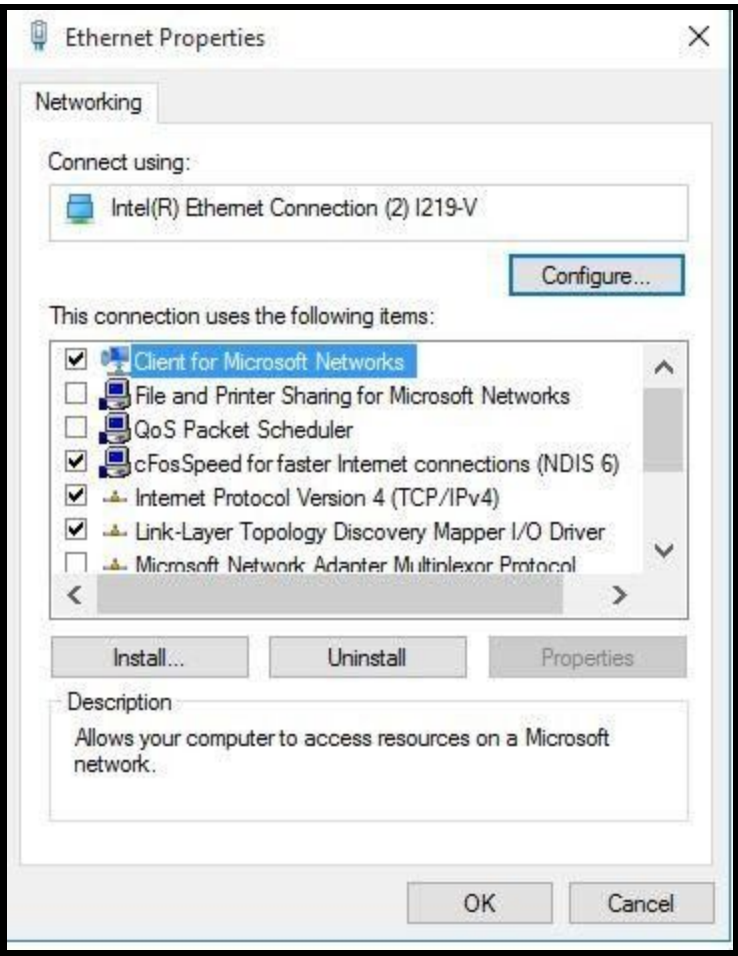


Go on Properties then Advanced



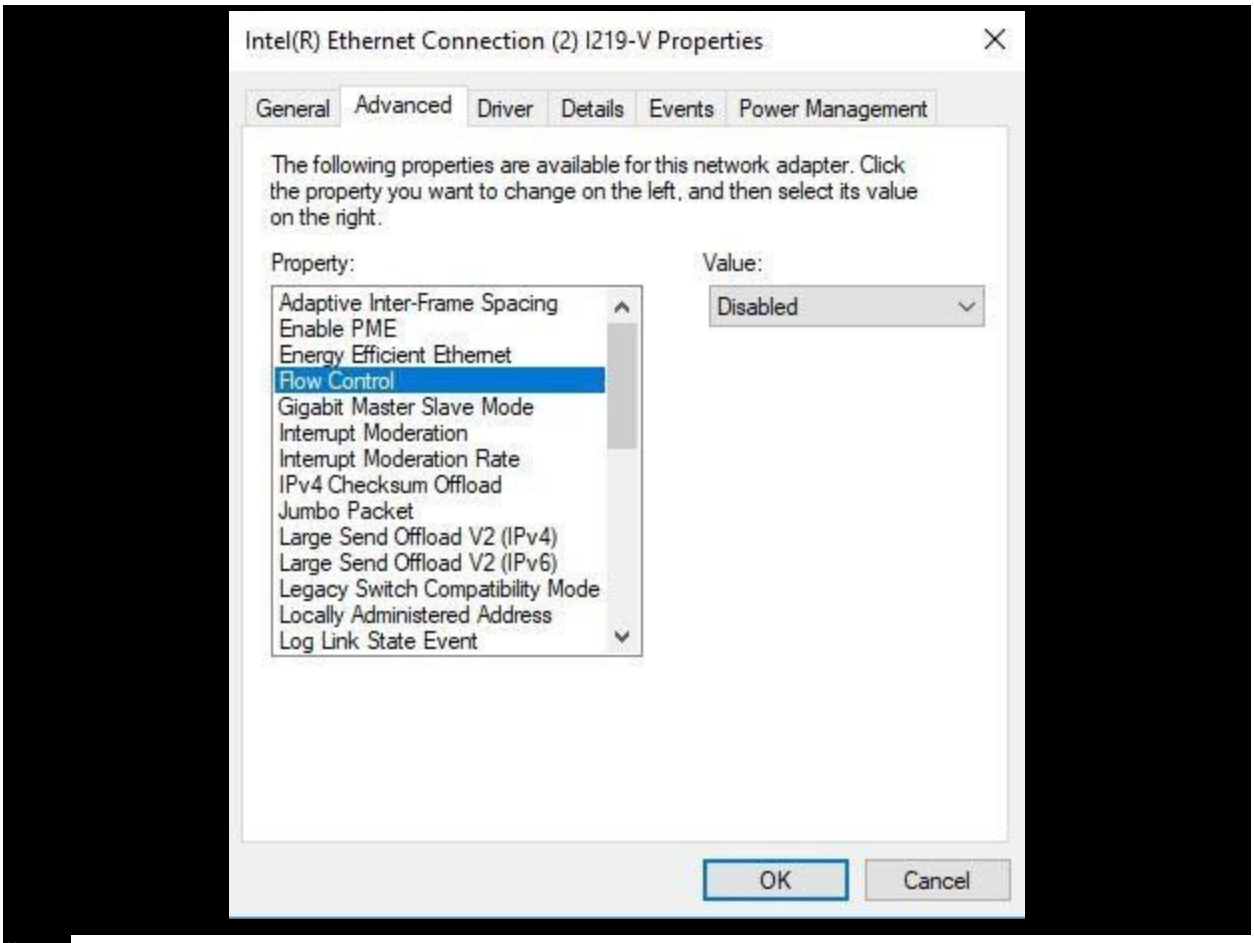
The idea is to disable everything you don't need & use to free processing power and reduce the workload so the packets to travel as efficient and fast as possible.

Uncheck File and Printer Sharing for Microsoft Networks
& if no one else but you is using your internet connection - Disable QoS Packet Scheduler too. But if someone else is using the connection then leave it Checked. In that case, you can consider using cfosspeed or similar program to give priority to the game.



Uncheck Internet Protocol Version 6 (TCP/IPv6). If you are a Home user you don't need IPv6 except if your connection uses IPv6-but that's rare, you can check it on Ethernet Status window after you go on Ethernet. After that hit OK. Then go back here and click CONFIGURE.

Go on Advanced
Your driver may look different but the settings are the same with small exceptions



*and

Disable Adaptive Inter-Frame Spacing

Disable Flow Control

Disable Interrupt Moderation

Set Interrupt Moderation Rate to OFF :

(no need if you disable Interrupt Moderation but I still do it)

Set Enable PME to Disabled

Disable Packet Priority & VLAN

Disable Jumbo Packet

Set Receive Side Scaling (RSS) - ENABLED

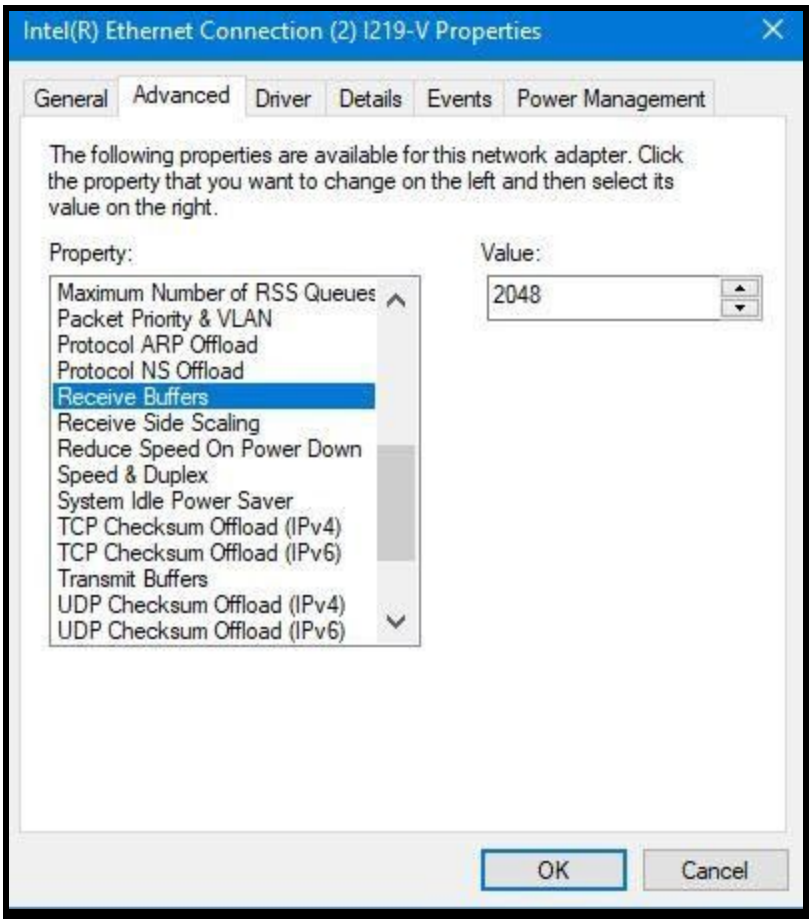
(There are other relevant options but I wont mention them because turns out Cheff-Coch is copy/pasting my guide after he said that its bad. Fuckin Hypocrite)

Disable all “Offload” features:

(IPv4 Checksum Offload, TCP & UDP Checksum Offload, Large Send Offload, NS & ARP Offload). The Only Scenario You can leave the Offload is if you have a slow CPU or want to use RSS, then you have to enable IPv4 Checksum. Or maybe on some laptops, IDK.

You have to enable Receive Side Scaling and Checksum Offload if you want to use the RSS Queues (although, for Checksum, I haven't seen this in Intel documents, only in old Microsoft Server ones, it's possible that be the case only if you want to use the NIC or in old versions and CPU can calculate this on its own, but not sure*). The number of the allocated RSS Queues depends on the CPU core count. Keep that in mind. Enable only IPv4 Checksum Offload if you want to use RSS for gaming or disable RSS completely. Don't enable all Checksum settings if you have a fast CPU. Also, keep in mind that it also has some very minor delay but in many games that don't matter. Increasing the queues improves the throughput for different kind of workload environments, including gaming. Since v1803 Microsoft introduced RSSv2 which is faster & more responsive (technically in v1709 but its preview only).

If you have old or slow CPU you can consider disabling RSS. Otherwise set the number of RSS Queues to the highest value (2 or 4 Queues). There is a way for Intel NICs to increase the number of Queues from the registry.



Two options here: Set Receive & Transmit buffers to the lowest you can set OR the highest - Test it. I find 64-96 is good for me but you can have packet loss if it's too low. Intel recommends these 2 options to be increased to max. Enable DCA for Windows 7.
Disable all power saving settings (Green, Eco, Power Saving etc)

Leave Gigabit Master Slave Mode as it is - Auto Detect
Don't touch Speed & Duplex, leave it on Auto Negotiation
They can disable your internet on Intel NICs.