

Mac PC OCTANE Network node setup and hardware

V 1.0

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Since this is going to be new “especially for MAC people” I figured I would relate my findings THUS FAR!

This is how I setup a MAC “master” machine.. “MAC Studio M2 Ultra with 192 GIG shared ram/vram for 3d rendering using the RTX 4090 in my windows PC “over in the corner” Once the network is setup and the OCTANE RENDER NODE DAEMON is running I really don’t need to even touch the PC. I just remote into it with VNC/Splashtop to set up or change things.

Once the Render DAEMON is running. its kinda setup and forget it! Everything is done from the MAC side.

NOTE: IN my case I am using Cinema 4D

Here is what I have setup so far

Computers:

- Mac Studio - 10GB networking port (Built-in) or a (Thunderbolt to 10GB dongle if your on a Macbook or PC laptop that doesn’t have 10GB port) (FOR OCTANE NETWORK ONLY)
- Docking Station with 1GB network port (FOR INTERNET ONLY)

- PC with Onboard 1GB lan network port (FOR INTERNET ONLY)
- RTX 4090 GPU
- ADD-ON 10GB network card (FOR SEPARATE OCTANE NETWORK)

NOTE: We will be using THE 10GB card port for the OCTANE network.

NOTE: We will be using a normal 1GB Ethernet port i.e Apple Ethernet dongle or a Thunderbolt Docking station or built in 1GB port on a PC for NORMAL Internet
Some motherboards DO have 1GB and 10GB ports .. if your PC does than.. you can skip the 10GB network card install.

NOTE: IF you use WIFI for Regular internet you still can... if thats all you have)

(I tend to turn “WIFI OFF” After setup since this is a desktop mac in my case.

NOTE: This is a direct Ethernet port to port CAT cable connection - I did NOT need a 10GB switch since it’s just 2 computers in my case. If you had more computers you would need a 10GB switch see the Hardware list for options

NOTE: I set each 10GB network card to the following:

Mac studio 10GB port set to:

IP - 10.0.0.2 - (Manual IP address)

Subnet mask - 255.255.0.0

PC - 10GB card set to:

IP - 10.0.0.3 - (Manual IP address)

Mac Studio Apple Ethernet Dongle or Docking station Ethernet port is set to:

DHCP (192.168.x.x) network.

NOTE: - IF your router happens to use the 10.0.x.x network just swap the ip address you set for OCTANE network and INTERNET network around.. the idea is that they are separate and different networks.

BIG NOTE: Once we take over the 10GB "Built in port" - You will then have to use wifi or a 1GB apple dongle or docking station Ethernet port for your normal INTERNET going forward.

NOTE: you will likely need to go into network settings and change the "INTERFACE Order" so that WIFI / DONGLE / DOCKING STATION 1GB Ethernet devices are ABOVE the 10GB Build in Mac Studio port / 10GB Dongle or you won't get internet!!!!

SEE APPLE Documentation below.

Change the order of the network services your Mac uses

NOTE: Pull down the dropdown for your OS version:

<https://support.apple.com/guide/mac-help/change-order-network-services-mac-mchlp2711/mac>

I Installed the PC Octane network node Daemon on the PC and configured it per OTOY instructions.....

You can get the Render NOTE - DAEMON from your DOWNLOADS area once you are logged into your OTOY account...then choosing enterprise network node and windows as the OS.. MAC daemon is not released yet for 2024.2

NOTE!!!!!! - I think for now you need to have the full subscription to use network rendering which comes with up to 10 RENDER node licenses!

Overview & Setup:

This page and the setup video was very helpful:

NOTE: Some of this might be bit different (This was from 2022) but it should be very similar in 2024.2

<https://www.pixel-planet-studios.com/post/octane-network-rendering>

Once you have the networking going and the OCTANE NODE running on the PC

You should have an area for OCTANE network rendering to enable it and set the port # which should match the PC port number when you setup the Render node DAEMON

The node should show up in the node box which you then then BIND.

So for \$94 bucks USD I created a single node network for Octane using the Mac Studio and my PC with an RTX 4090 and added in a 10GB networking card.

HAPPY RENDERING!

HARDWARE:

- Apple Ethernet Dongle (1GB)
- NOTE: This is for your normal internet going forward and not for the OCTANE NETWORK)

https://www.amazon.com/Apple-Thunderbolt-Gigabit-Ethernet-Adapter/dp/B011K4RKFW/ref=sr_1_9?crid=1EGMMK6AQ6EWX&keywords=apple+ethernet+dongle&qid=1706203912&srefix=apple+eithernet+dongle%2Caps%2C95&sr=8-9

- 10GB Ethernet card - (Amazon) - \$80 -
- NOTE: This is FOR OCTANE NETWORK on the PC

https://www.amazon.com/NICGIGA-Network-Controller-Ethernet-Windows10/dp/B0BFPWSMV2/ref=sr_1_10?crid=VYSOVFJ8HVXY&keywords=QNAP+QXG-10G1T&qid=1706200519&s=electronics&srefix=qnap+qxg-10g1t%2Celectronics%2C95&sr=1-10&ufe=app_do%3Aamzn1.fos.18630bb-fcbb-42f8-9767-857e17e03685

- CAT8 Ethernet Cable (Amazon) -\$14
- NOTE: THIS IS FOR OCTANE NETWORK
- Yes It's overkill (I only have a short 30ft short run)
- If needing longer runs ...the USE of CAT6A might be advised)

https://www.amazon.com/gp/product/B0838YW8PL/ref=ox_sc_act_title_1?smid=A2QJ8FNRT14DDB&th=1

- DOCKING STATION - ???
- NOTE: You can choose your own long as it has an Ethernet port
- THIS IS FOR NORMAL INTERNET going forward

- Network switch (optional with only 1 node)

NOTE: THIS IS FOR OCTANE NETWORK CONNECTIONS NOT Internet!!!

Unless your whole network is going to be 10GB...if you want. (It is still recommended that you keep your normal Internet Traffic off the OCTANE side)

NOTE: If you have to connect to more computers with octane nodes in them you will need to get a 10GB switch like this one i'm sure there might be others out there too look around

NOTE: Just make sure switch and ports are 10GB and not 1GB or 2.5GB speeds:

QNAP QSW-3216R-8S8T-US 16-Port Half-Width Rackmount 10GbE Unmanaged Switch (Amazon) - \$549

https://www.amazon.com/QNAP-QSW-3216R-8S8T-US-Half-Width-high-Speed-Networking/dp/B0CJ44SV3N/ref=sr_1_2?crid=4573B1DTE0QS&keywords=QSW-M3216R-8S8T&qid=1706201554&sprefix=%2Caps%2C153&sr=8-2&ufe=app_do%3Aamzn1.fos.18630bbb-fcbb-42f8-9767-857e17e03685

NOTE for switches that use SFP+ slotsIF you want to use those slots and run CAT6A/CAT8 cables...and not fibre.. you can get these converter adapters so you can use the CAT cable in SFP+ slots

— SFP+ to CAT cable adapter

10Gtek 10GBase-T SFP+ to RJ-45 Transceiver, 10Gbe SFP+ Copper Ethernet CAT6a Module, up to 30-Meter - (Amazon) - \$50

<https://www.amazon.com/10Gtek-SFP-10G-T-S-Compatible-10GBase-T-Transceiver/dp/B01KFBFL16?th=1>

Outstanding issues:

I am still not sure how it will work on the PC side with dual network cards installed.

I suspect you will just have to setup the 2 networks and then make sure that the IP address for the 10GB card is the one you assign in OCTANE network settings for the NODE.

Maybe someone from otoy can let us know how to set affinity for a particular network card in the Node DAEMON.