

Forum:[Hack Forums](#)

Thread: [Looking to Build a high end Linux Workstation](#)

VoIPv2 - August 12, 2020, 11:29 am

Hi all,

Looking to build a high end linux workstation. Plans are to use for Containerization/VMs, be future proofed. The more current the better! I'm thinking of making this into a 24/7 server.

If you got recommendation, please share them with me!

Breeze26509 - August 12, 2020, 11:37 am

How much are you looking to spend?

raccoonweeweesucker69 - August 12, 2020, 11:37 am

You just looking to buy one machine? And are you on a budget?

VoIPv2 - August 12, 2020, 11:41 am

1,000 - 1500 + and brand new machine no spare parts nothing. First rig, otherwise i'd buy a server but i'm sure my family wouldn't be happy going to sleep /w server blades running

raccoonweeweesucker69 - August 12, 2020, 11:50 am

(Aug 12, 2020 11:41 AM)VoIPv2 Wrote: [\[CITE\]](#) 1,000 - 1500 + and brand new machine no spare parts nothing. First rig, otherwise i'd buy a server but i'm sure my family wouldn't be happy going to sleep /w server blades running

That's really not enough for a server, at least not a strong one. A good threadripper will run you 2k at least.

webdev77 - August 12, 2020, 12:07 pm

(Aug 12, 2020 11:50 AM)raccoonweeweesucker69 Wrote: [\[CITE\]](#) That's really not enough for a server, at least not a strong one. A good threadripper will run you 2k at least.

Wrong. A good threadripper CPU starts around \$400. \$1500 is perfectly fine for a home server.

VoIPv2 - August 12, 2020, 12:07 pm

(Aug 12, 2020 11:50 AM)raccoonweeweesucker69 Wrote: [\[CITE\]](#) That's really not enough for a server, at least not a strong one. A good threadripper will run you 2k at least.

I don't mean a server being used for say hosting a website/game server, really this would be a dev box for me to write code, maybe play some emulation (Retro) and at most be used for containing apps on it.

raccoonweeweesucker69 - August 12, 2020, 12:09 pm

(Aug 12, 2020 12:07 PM)webdev77 Wrote: [\[CITE\]](#) Wrong. A good threadripper CPU starts around \$400. \$1500 is perfectly fine for a home server.

Show me where I can get a good threadripper for \$400 please.

(Aug 12, 2020 12:07 PM)VoIPv2 Wrote: [\[CITE\]](#) I don't mean a server being used for say hosting a website/game server, really this would be a dev box for me to write code, maybe play some emulation (Retro) and at most be used for containing apps on it.

At that point why just no buy regular consumer components?

VolPv2 - August 12, 2020, 12:43 pm

(Aug 12, 2020 12:09 PM)racoonweeweessucker69 Wrote: [\[CITE\]](#) Show me where I can get a good threadripper for \$400 please.

At that point why just no buy regular consumer components?
Pretty much so that i can get the experience with building a PC..

webdev77 - August 12, 2020, 2:30 pm

(Aug 12, 2020 12:09 PM)racoonweeweessucker69 Wrote: [\[CITE\]](#) Show me where I can get a good threadripper for \$400 please.

Amazon has the 12C/24T 1920X for \$340. Alternately, a Ryzen 3900X is largely equivalent for \$430. Sure it's not technically threadripper, but it works just the same for home use.

There is no significant difference between "consumer" components and server components for many purposes. It's largely what kind of support you expect to get. Vendors only certify certain hardware for certain applications.

racoonweeweessucker69 - August 12, 2020, 2:54 pm

(Aug 12, 2020 02:30 PM)webdev77 Wrote: [\[CITE\]](#) Amazon has the 12C/24T 1920X for \$340. Alternately, a Ryzen 3900X is largely equivalent for \$430. Sure it's not technically threadripper, but it works just the same for home use.

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Didn't know first gen threadrippers were so cheap, I stand corrected, props to you sir.

Bastille - August 14, 2020, 2:59 am

Here is an example :

[PCPartPicker Part List](#)

CPU: [AMD Ryzen 9 3900X 3.8 GHz 12-Core Processor](#) (\$429.00 @ Amazon)
Motherboard: [MSI MPG X570 GAMING PLUS ATX AM4 Motherboard](#) (\$169.99 @ Best Buy)
Memory: [G.Skill Ripjaws V Series 64 GB \(4 x 16 GB\) DDR4-3200 CL16 Memory](#) (\$214.99 @ Newegg)
Storage: [Corsair Force MP500 240 GB M.2-2280 NVME Solid State Drive](#) (\$149.00 @ Amazon)
Storage: [Crucial MX500 1 TB 2.5" Solid State Drive](#) (\$103.49 @ Amazon)
Storage: [Seagate Barracuda Compute 2 TB 3.5" 7200RPM Internal Hard Drive](#) (\$54.99 @ Newegg)
Video Card: [MSI Radeon RX 570 8 GB ARMOR OC Video Card](#) (\$171.00 @ Newegg)
Case: [Fractal Design Focus G ATX Mid Tower Case](#) (\$59.99 @ B&H)
Power Supply: [Corsair RM \(2019\) 750 W 80+ Gold Certified Fully Modular ATX Power Supply](#) (\$139.99 @ Best Buy)
Total: \$1492.44

Can go from 64Gb of RAM to 32Gb if it's too much, can change the case as well, can change the GPU as well.

Stock CPU Cooler is good, but if you plan to use it at high perf you should take a look about a Noctua cooler, or an AiO watercooling maybe, and add other fans in the case.

No ECC though

samsepi01 - August 14, 2020, 10:14 am

(Aug 12, 2020 12:43 PM)VoIPv2 Wrote: [\[CITE\]](#) Pretty much so that i can get the experience with building a PC..

There is no "experience" difference between running Linux on server/consumer hardware. Linux is Linux. You want the "server" experience, open a terminal and boom it's like you're SSH'd to a server.

Just build a decent rig with like a 3900x (CPU with good amount of cores for multiple VMs), x570 mobo, 32 or 64 GB ram (depends how much you wanna spend, more lets you allocate more to VMs), RX 570 (mid end cheapish video card)

For something like this, you want something more usable as the base OS, so I'd recommend putting Windows 10 on it. That will give you the most flexibility if you decide to want to try gaming or other stuff. For the Linux stuff, use Oracle Virtualbox or Hyper-V, and run Linux VMs. These are basically "servers", and you can even get the IP address and just SSH into it from the main desktop if you want that "experience".

VoIPv2 - August 14, 2020, 4:54 pm

(Aug 14, 2020 10:14 AM)samsepi01 Wrote: [\[CITE\]](#) There is no "experience" difference between running Linux on server/consumer hardware. Linux is Linux. You want the "server" experience, open a terminal and boom it's like you're SSH'd to a server.

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I want the experience in building the PC, not using Linux.

(Aug 14, 2020 02:59 AM)Yseurk Wrote: [\[CITE\]](#) Here is an example :

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No ECC though

Thanks! Looks right on my budget. :)