Quick-Start Examples

This is an overview of some quick-start computers you can use to create a server for your self-hosted cloud services.

- Single-Board Computers
- Mini PC
- Workstation Computer

Single-Board Computers

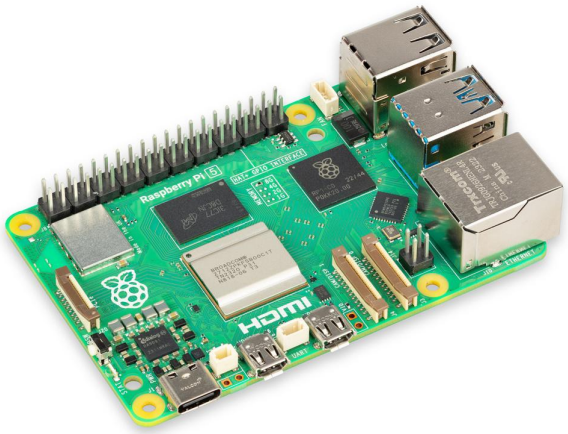
The Raspberry Pi – who popularized this style of computer – currently sell three versions of their board: 3B+, 4, and 5. Other options include: similar vendors such as Banana Pi, Orange Pi and Pine Board; the completely open hardware Libre Board; the Asus TinkerBoard and the Texas Instruments Beagle Board.

Sell

Cost

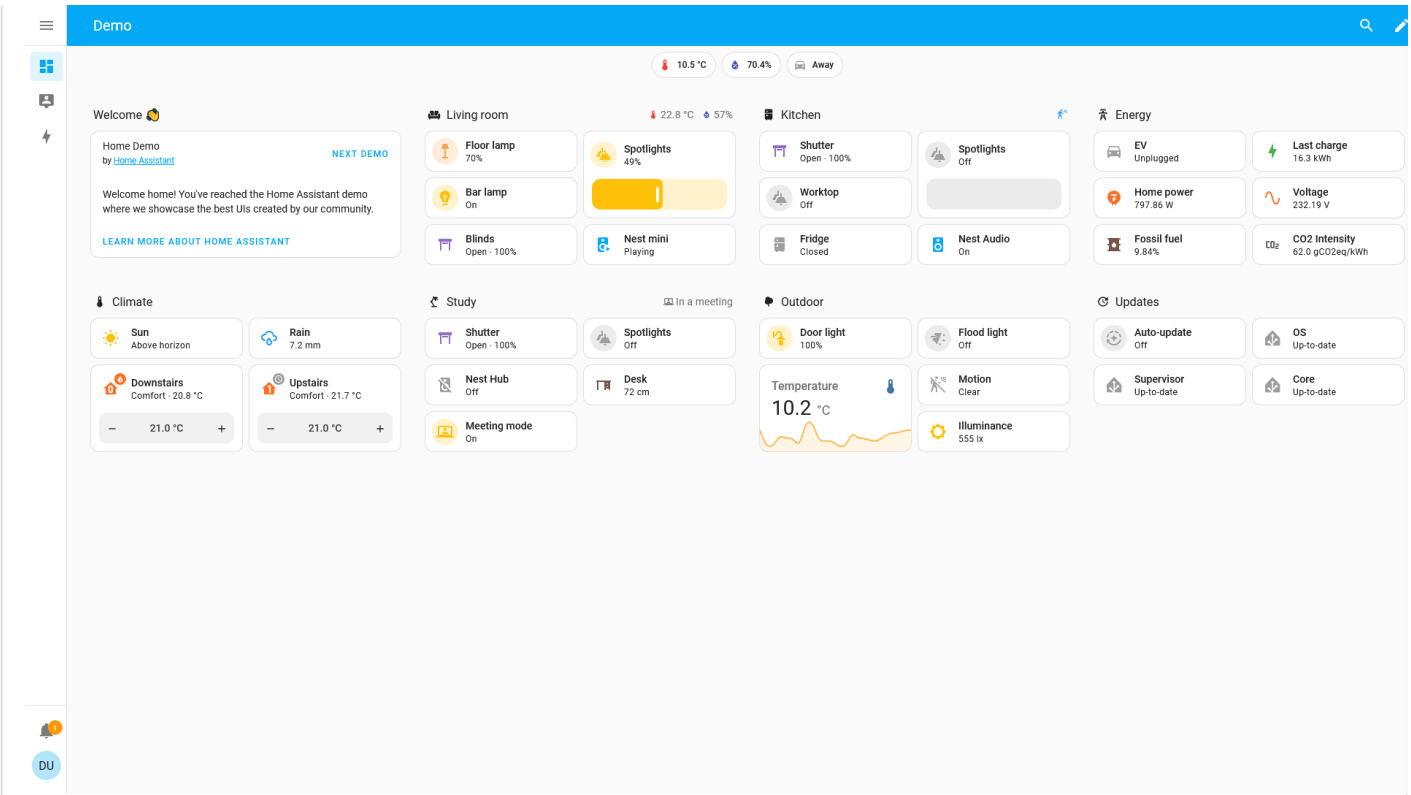
$50 – $200

Single-board computers work well for small servers, but can struggle under heavy usage. While cost-effective, they are also examples er, but these computers can run for months without needing to be restarted.



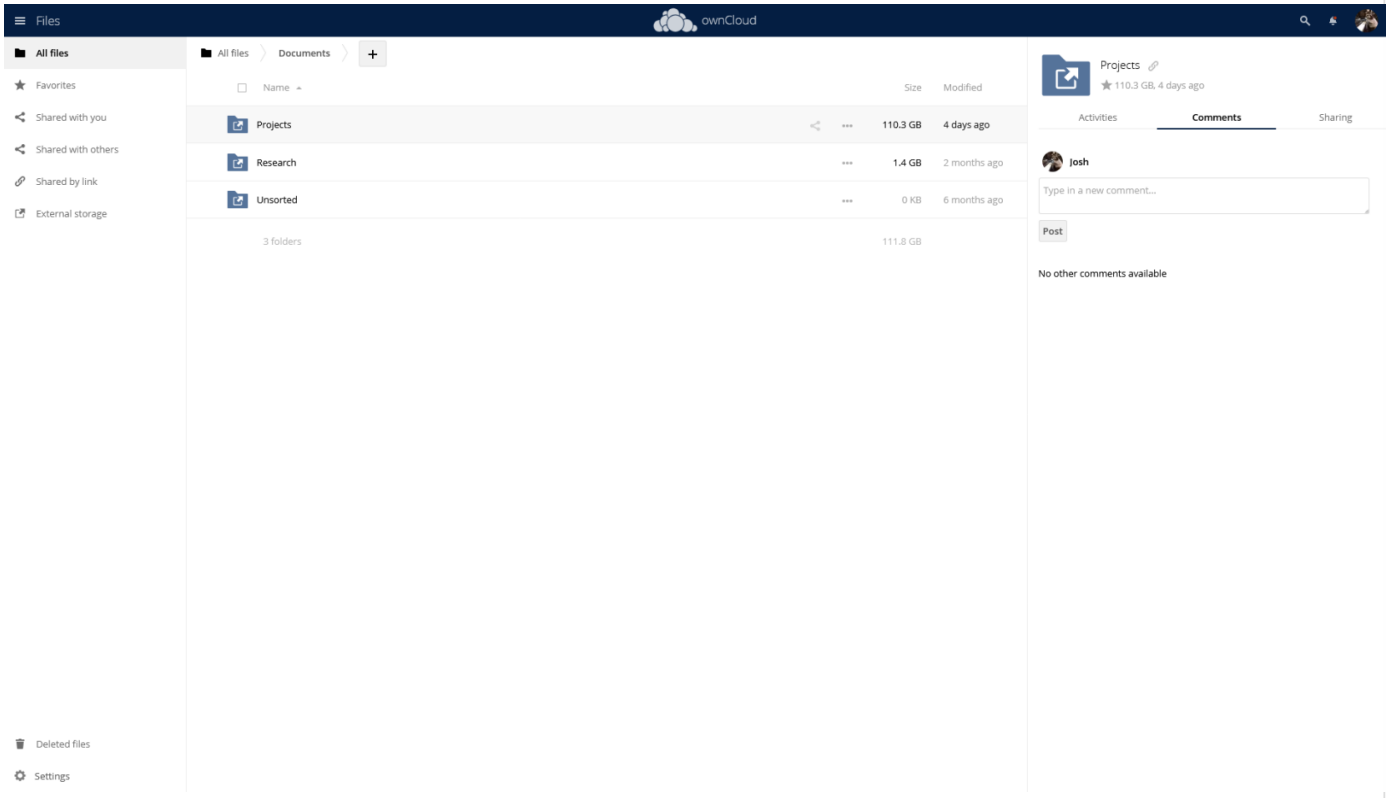
> Great for hosting a small server where you run services only for yourself.

Home Server



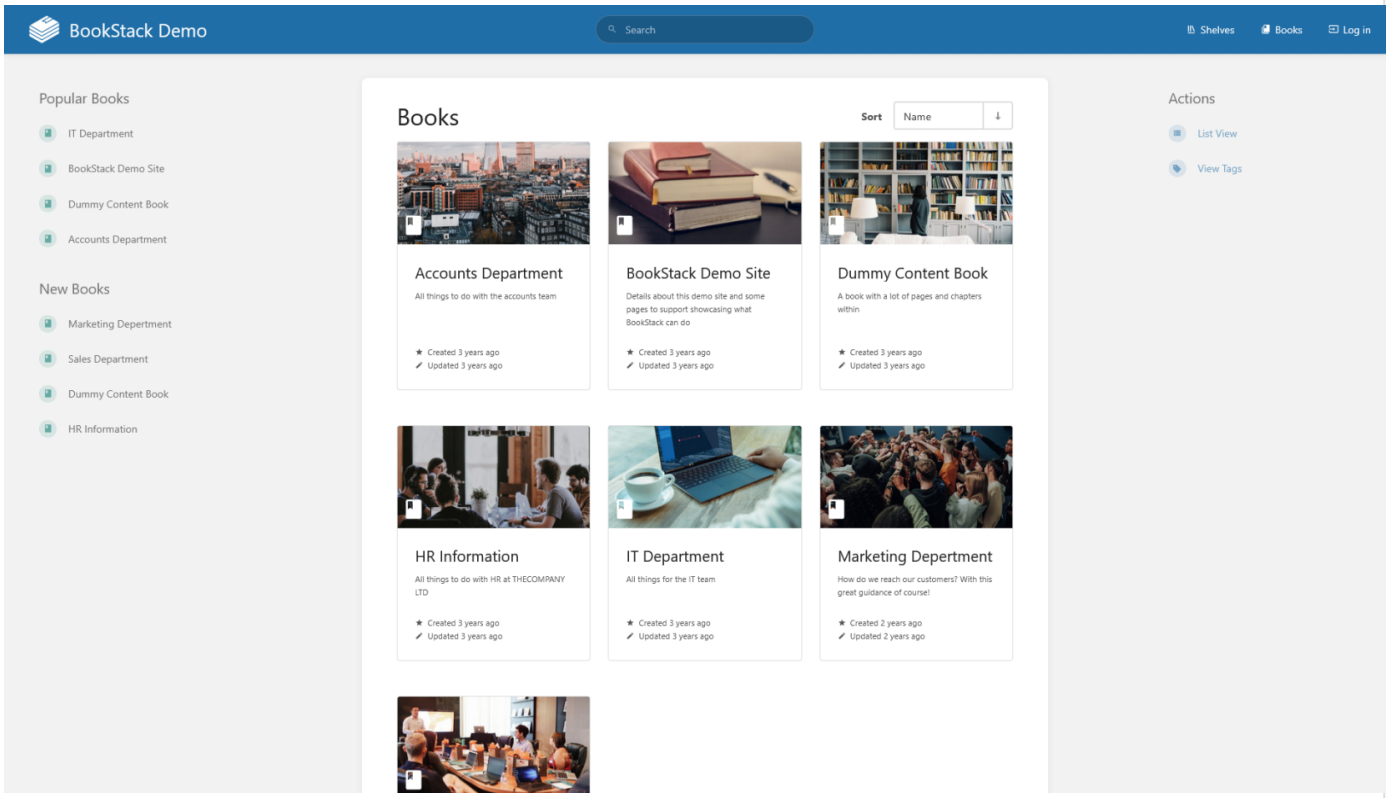
Use a Raspberry Pi 4 for Home Assistant to manage your smart devices and Grocy to keep track of your kitchen inventory.

Personal Cloud



The Raspberry Pi 5 and a USB 3.0 Hard Drive can be a personal OwnCloud server for your calendar, contacts and files. Add Collabora to edit documents, slideshows and spreadsheets directly in your browser.

Personal Wiki



Use the Libre Computer Solitude for hosting your own BookStack to keep track of your personal knowledge.

> **Your experiences may vary.**
> Always make sure to test for stability when installing new services.

This class of commodity computers use ARM processors that are part of a system-on-a-chip. They are extremely power efficient with performance specifics being dependent on the model you purchase. Generally, they are powered using a USB connector and a high-quality cable.

By default, many come with an Ethernet port, Wi-Fi, Bluetooth, USB, HDMI and 3.5mm audio output. These board also come with a GPIO port which offers programmable pins for HAT add-ons and project development.

Minimum Specifications

Developer_board	**Where To Buy**	**Processor**
		• 1.5GHz • Quad-Core

Mini PC

Small form-factor traditional computers have become popular for creating your own personal media server and set-top boxes using Plex or Jellyfin. These are sold by many notable PC manufacturers, such as Intel NUCs or Dell's OptiPlex and Precision series. There are other direct-to-consumer options like System76, BeeLink and GeekomPC.

Sell

Cost

$150 – $1500

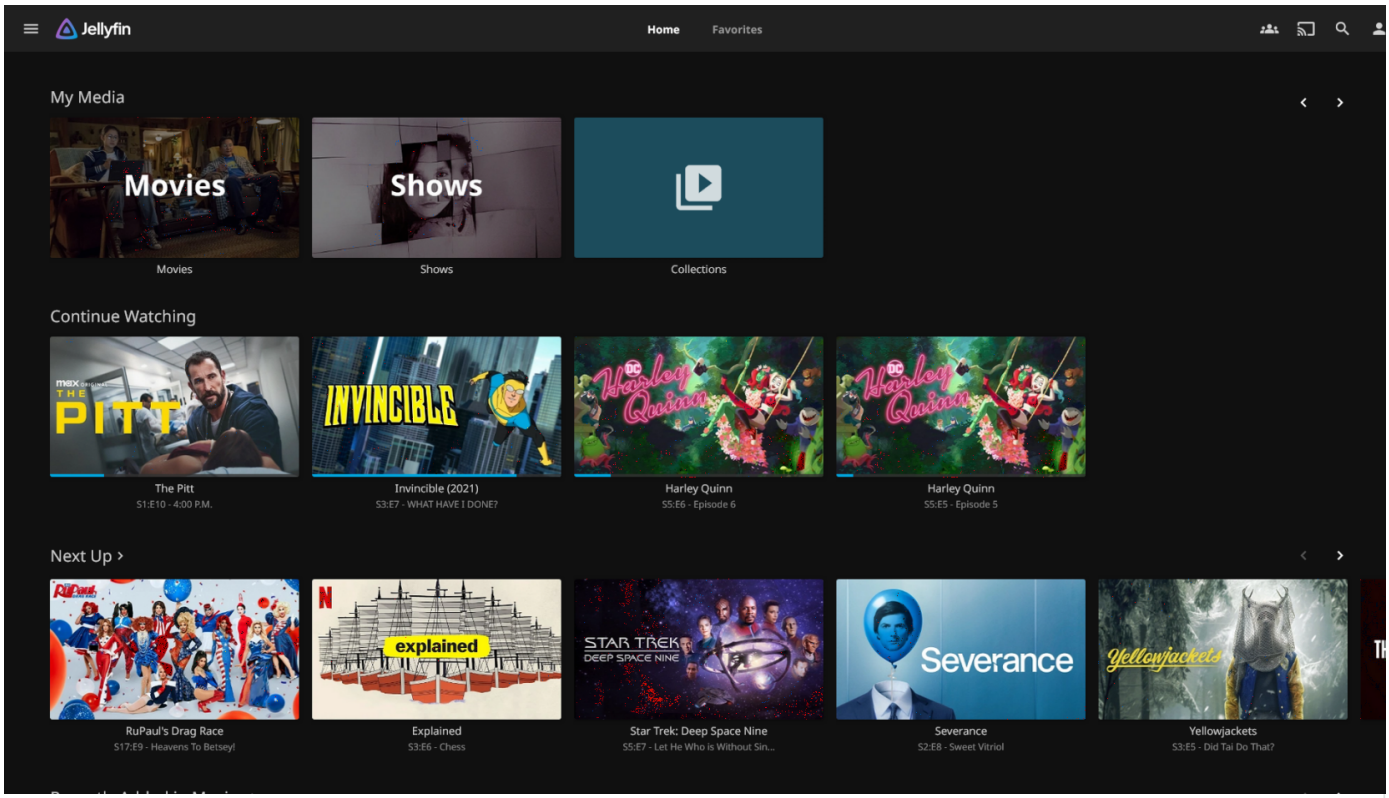
Mini PCs can work well for a small pe power to support multiple users. Many computers in t card or additional hard drives. High-speed NVME hard nproving



performance for basic cloud servers.

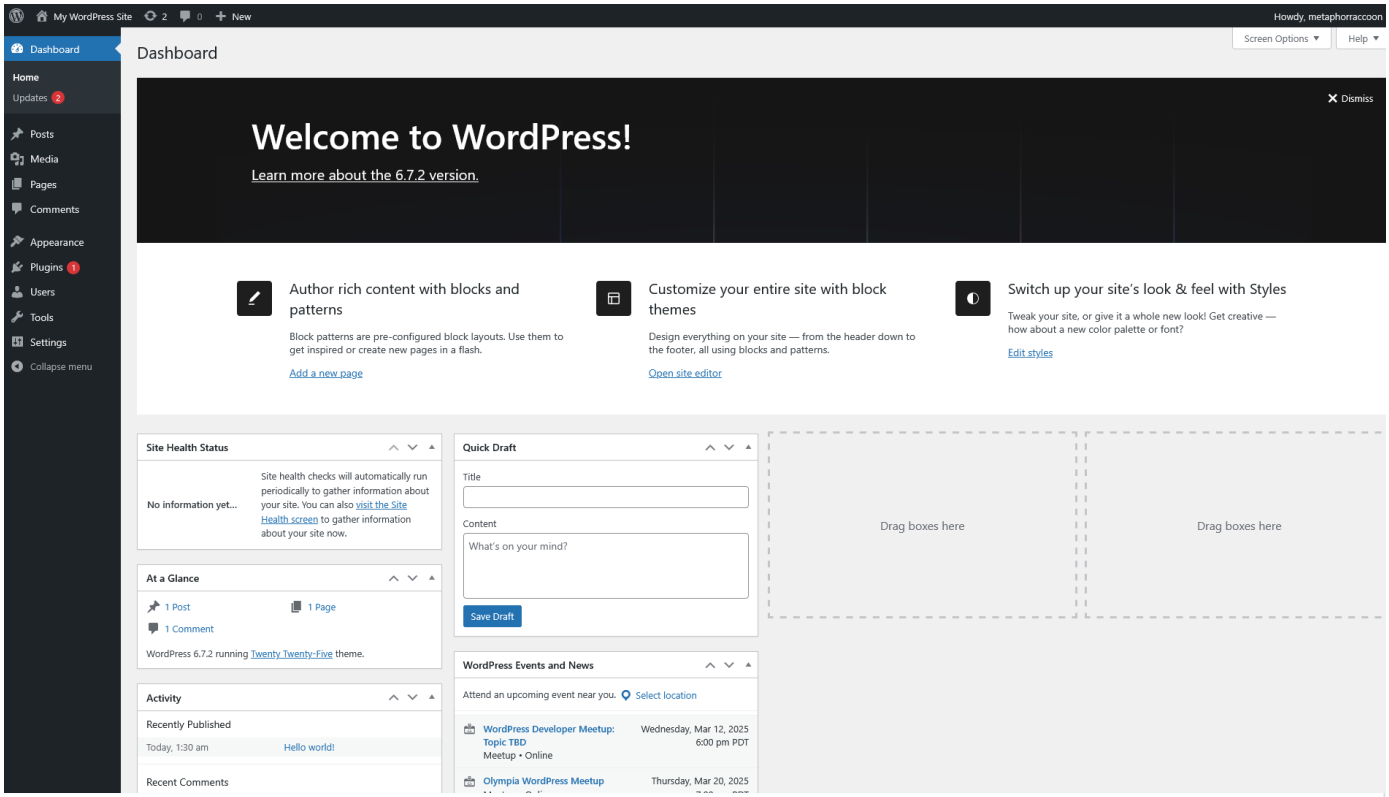
> Great option for hosting a small media server or a cloud solution for your family.

Media Manager and Server



Host your own Jellyfin media server to stream your media remotely. Personal media managers like Radarr, Sonarr, Lidarr, Readarr and Bazarr can help keep track of your media, while Prowlarr can aggregate search results for missing media to send to your peer-to-peer qBittorrent server.

Personal Blog, Website and Wiki



Express yourself with a WordPress blog, build a knowledge base with MediaWiki and host your own personal website or resume.

> **Your experiences may vary.**
> Always make sure to test for stability when installing new services.

These types of computers uses the traditional x86 architecture which gives them more processing power at the cost of more power usage. Depending on the model, they may use a desktop or mobile processor and have differing levels of extensibility for add-ons like graphics cards or hard drives.

These computers can be reasonably priced with a traditional x86 processor and expandable storage. Many mini PCs come with different connectivity options such as USB, HDMI, 3.5mm audio, optical audio, Ethernet, Wi-Fi and Bluetooth.

Minimum Specifications

Memory	**Memory** • 16GB or higher • DDR4
View_in_ar	**Graphics** • Integrated Graphics • Shared Memory
Hard_drive	**Storage** • 250GB SSD • 2TB+ HDD
Lan	**Connectivity** • Gigabit Ethernet • BlueTooth • USB 3.0

Where To Buy	
Language	**Online**

Workstation Computer

These desktops offer the most versatility and can be upgraded over time. Desktop computers are reliant and extensible, making them a great option for always-on server. They can be upgraded over time, making it easy to add more storage, RAM or a more powerful graphics card as your user base grows.

Sell

Cost

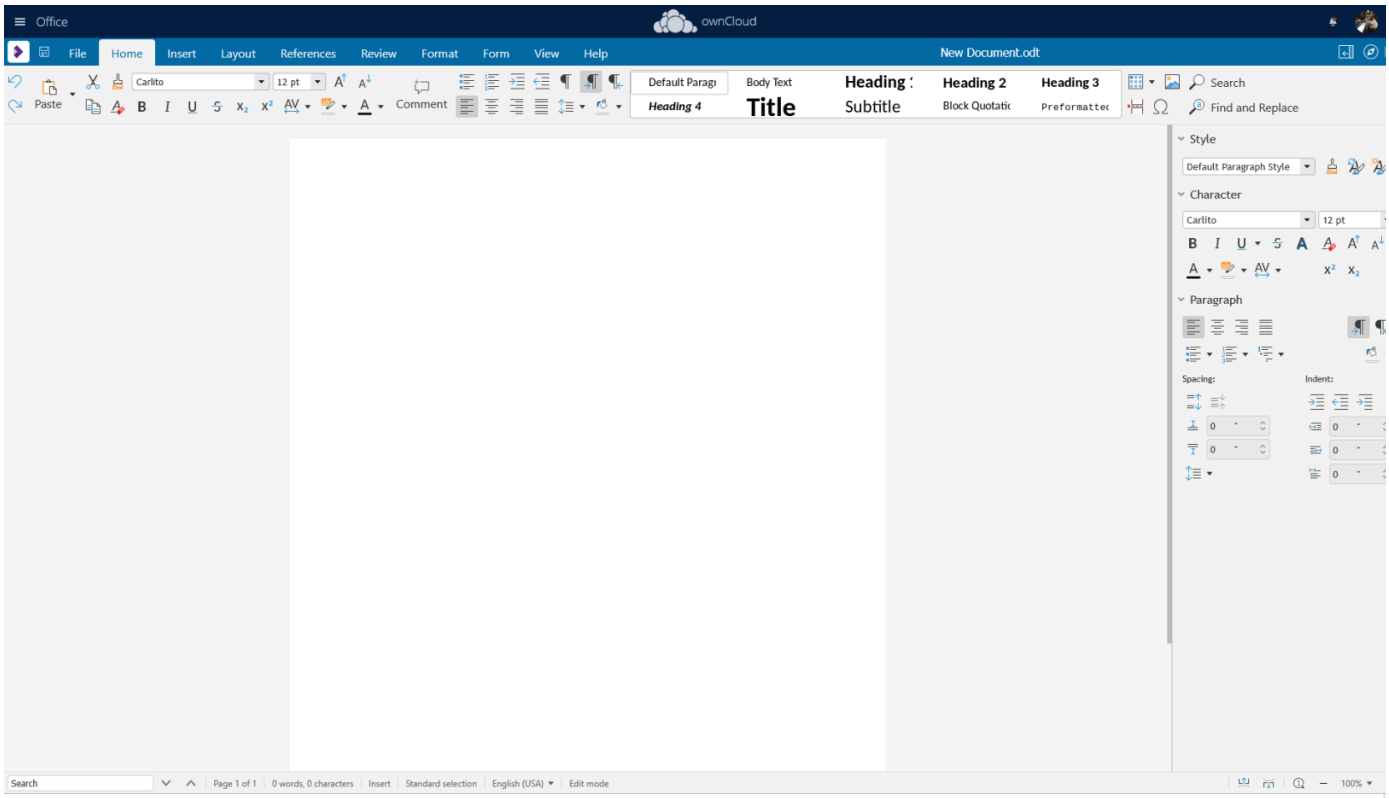
$500 – $2000

Desktop tower computers offer the most power and extensibility for a versatile personal server. They can run multi-purpose services including an OwnCloud personal cloud, Collabora office software, Jellyfin media server, qBittorrent peer-to-peer server and procurement services to curate your media.



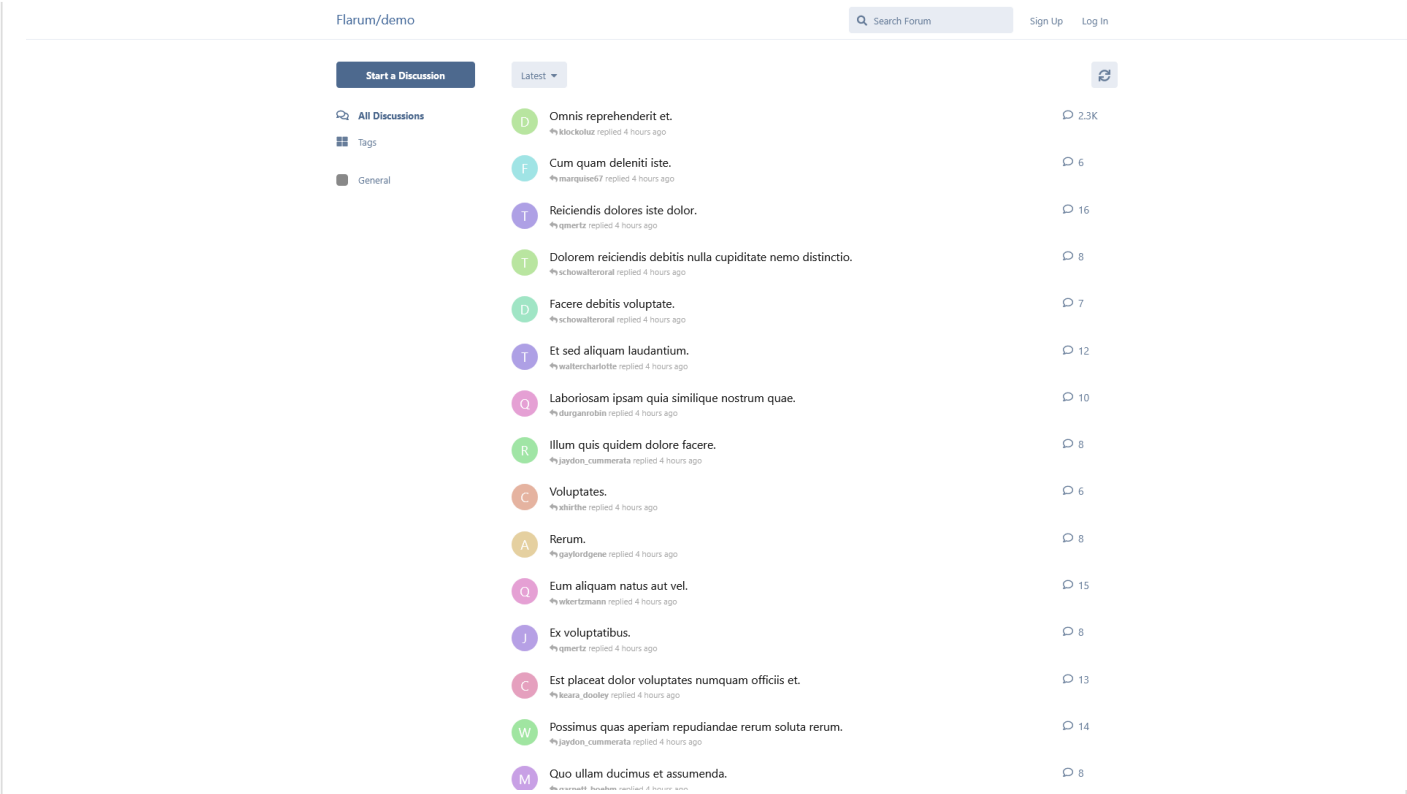
> Best option for hosting a server for use by yourself, friends and family.

Cloud Office Suite



Host OwnCloud for calendars, contacts and remote document access, as well as Collabora to edit files directly in your browser. Plan our your next project with Vikunja, organize documents with Paperless-NGX, and develop code right in your browser with vscode. Manage your passwords, Two-Factor Authentication and secure documents using BitWarden.

Online Community



Host a WordPress blog to share updates, document a project using MediaWiki, build community through a Flarum forum, and manage your own streaming with OwnCast.

> **Your experiences may vary.**
> Always make sure to test for stability when installing new services.

These computers have space for a dedicated graphic cards, as well as both traditional hard drives and NVME solid state disks. There are even external USB or Thunderbolt storage options to use for your backup solutions. RAM can also be easily upgraded as needed to run more concurrent services.

Minimum Specifications

Memory	**Memory** • 16GB or higher • DDR4
View_in_ar	**Graphics** • Dedicated Graphics • 4GB or more • AMD Preferred
Hard_drive	**Storage** • 250GB SSD NVMe • 6TB+ SATA HDD
Lan	**Connectivity** • 1Gbit Ethernet • USB 3.0

Where To Buy	
Language	**Online** • System76 • Newegg • MicroCenter • GreenPC • PCs For People • Dell Refurbished • HP Refurbished • other online marketplaces.
Storefront	**In-Store** • BestBuy