Setup Home Assistant on a Mini PC

NOTE: You will need a dedicated computer to rune Home Assistant. There are other options available, but most of them require a new device. It's possible to use VirtualBox or VMware, but there are big limitations with that so I would only recommend it for trying things out. I found it easier to just dive in fully.

After investigating several options, I decided the easiest route to start out with Home Assistant was to purchase a cheap Mini PC and install HAOS on it directly, without a Hypervisor.

Finding a cheap Mini PC

I browsed https://lowcostminipcs.com/ which is a site that links to good Mini PC deals on eBay. Almost any will do, but I splurged and payed $74 for an HP Elitedesk. If you just want the basics and don't want to set anything up, you can get a Home Assistant Green device, I just knew I could get a lot more computer for a lot less price.

Installing HAOS on a Mini PC

The installation instructions Home Assistant provides for a Generic x86-64 are pretty good. If you've ever installed linux from a Live CD before then it's nothing too complicated. A few things to watch out for though:

- HAOS does not provide a live ISO for installing. You must create an Ubuntu Live USB device and then once in the Ubuntu trial environment you download the HAOS image and use Ubuntu to write that image to your disk. A little odd but it works
- You may need to modify your BIOS boot order and disable Secure Boot.
- Your computer probably won't boot after following the directions. There's a step they hide at the end to create the EFI boot entry. If you follow their instructions step-by-step you'll have to boot back into Ubuntu live mode just to run one more command.
- Once installed, you need ethernet on your first boot, but you don't need a monitor on your first boot. HAOS does a great job of launching a web interface automatically and immediately with everything you need, so don't worry about lugging a monitor around

after the initial install.
    - I installed HAOS over wifi where my monitors were and then moved it to my router where the ethernet was for the first boot and didn't need to bring a monitor.

Backups

One of the first things you should do is enable backups and have them copied off of your device. You'll want to think about where you can send them too. One popular option is an add-on to send them to Google Drive. In my case I have a network share available over Samba/SMB that I can send them to. Connecting to a Samba share no longer requires any add-ons, you can add it directly from **Settings > System > Storage > Add Network Storage**.

In **Settings > System > Backups** select the 3-dot menu in the upper right and select *Change default backup location* to change the backups to use your network share instead of being saved locally. Create a backup and check it. Unfortunately you cannot specify a sub-folder to place the backup in, so if you want it in a folder you may have to do some trickery to do that. For me, I can create a Samba share that goes straight to the desired folder.

Scheduling backups is easy in **Settings > System > Backups**.

Over time I will need to watch the space needed by the backups as I've heard they can grow quite large. I've also heard that the Visual Studio Code Add-on can cause backups to grow quite large, so avoiding that may be one solution.

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