

Take control of your home, and your privacy, with this amazing home automation tool for Raspberry Pi

ome automation is not only useful but can also be a great deal of fun, setting up cool automations or connecting different devices together in new ways. It also can help with energy efficiency and security. There are a wealth of practical reasons to start experimenting with this technology. Although there are different vendor-specific automation systems out there, we prefer one that doesn't 'lock' you into one provider. One such platform is Home Assistant (home-assistant.io), a free opensource operating system designed with flexibility and independence in mind. Home Assistant is a huge topic, but here we'll look at the basics of setting up a server to get you started on your automation journey.

## Prepare your Raspberry Pi 01

Although Home Assistant (HA) isn't strictly an operating system in its own right, it is available as a Raspberry Pi image that significantly reduces the work a user has to do to get up and running. HA is intended to run on a Raspberry Pi as the sole service. It is possible to run HA alongside other apps and services, but we're keeping to the true path here. HA works with Raspberry Pi 3, but we strongly recommend using a Raspberry Pi 4 for the best performance. You should also use a wired Ethernet connection for setup and to ensure reliability. HA is headless, so no monitor or keyboard is needed.

Home Assistant's dashboards are made up of cards. These can be switches, sliders, graphs, images, or video. You can also design your own

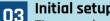
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You can access Home Assistant in any web browser. A popular project is to create a control panel using the Raspberry Pi touchscreen

## Write the Home Assistant image 02

Luckily for us, you can write the latest stable Home Assistant image directly from the Raspberry Pi Imager (magpi.cc/imager). Using a fast SD card 32GB or more in size, insert it into your computer. In Imager, select Choose OS > Other specific-purpose OS > Home assistants and home automation> Home Assistant > Home Assistant OS 9.5 (RPI 4/400 or RPI 3, as needed).

You'll now get a ready-to-boot image. Insert the card into your Raspberry Pi, make sure you've got a wired network connection and power up. After a few minutes, try to connect to http://homeassistant:8123 in your web browser.



Initial setup

Time to grab yourself a favourite beverage. You'll see an initial setup screen stating that it will take about 20 minutes before you can proceed. Soon it will be automatically replaced with the first stage of setup. Provide your name, username, and choice of password. On the next screen, there will be some questions about the server's location. It's important to set this accurately if you want to take advantage of sun-up/down times. Finally, HA will 'look' around your network for any existing smart devices and let you know what it's found. Don't



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