01 / PLAN THE JOB • VIDEO 0:00

Home Assistant on a dedicated PC

Give a spare computer a proper job. This guide takes you from preparation to a working smart home, with fewer mysteries and only a modest amount of muttering.

What you will build

A computer dedicated to Home Assistant OS (HAOS). It becomes the home for your smart-home setup. This is the direct-to-disk route shown in the video, without a virtual machine or Docker to look after.

Your equipment checklist

- ☐ A dedicated 64-bit Intel or AMD PC that supports UEFI, plus its power supply.
- ☐ An internal drive you are happy to overwrite; keep the PC's valuable files elsewhere.
- ☐ A spare USB stick of at least 8 GB, plus a keyboard and screen for setup.
- ☐ Ethernet to your router, working internet and a second device with a browser.
- ☐ For a migration: your downloaded Home Assistant backup and its emergency kit.

Two drives can lose their contents

Creating the Ubuntu USB erases that USB stick. Writing HAOS erases the selected installation drive, including its old operating system. Check both targets before confirming. This is the one place where 'that one, probably' is not a strategy.

Choose your route

Starting fresh? Prepare the PC and USB, then create a new home on page 4.
Moving an existing home? Complete the backup steps on page 2 first. Leave the old setup intact until you know the new one works.

Companion to Home Assistant Setup That Even Your Nan Could Follow. Follow the timestamps alongside the video. Technical references are listed on page 5.

02 / PREPARE • VIDEO 2:01 AND 5:32

Back up before you get brave

A backup is boring right up to the moment it becomes the most interesting file you own.

1 Save the home you already have

In the old Home Assistant, open **Settings > System > Backups**. Choose **Backup now**, then a manual backup. Select the data you need, give it a recognisable name and create it. Wait for completion. [2]

Open the completed backup and download it to another computer. Save the matching emergency kit somewhere safe too: its key unlocks encrypted backups. Downloads made through the backup interface are decrypted; copies obtained elsewhere may remain encrypted. Treat either as private data. [2]

The very unglamorous checkpoint

Find the downloaded file in your file browser. Confirm its name, date and that it is not empty. Know where you saved the emergency kit. A shortcut to a file is not a backup, however confidently it sits on the desktop.

2 Make the Ubuntu USB on Windows

Download an Ubuntu Desktop ISO to your computer and get Rufus from its official site. Insert the spare USB. In Rufus, check **Device**, choose **SELECT** and pick the ISO. Click **START**; use ISO Image mode if asked. Confirm erasure only after checking the USB again. Wait for **READY**. [3]

Simply dragging the ISO onto an ordinary USB does not make this kind of boot stick. The image-writing step is doing the useful work. If it will not boot on a UEFI PC, consult the official guide's GPT/UEFI guidance. [3]

Two downloads, two jobs

Ubuntu ISO: starts the temporary desktop from USB.
HAOS image: goes onto the PC's internal drive.
Ubuntu is the removal van. Home Assistant is moving in.

03 / INSTALL • VIDEO 5:32 TO 14:58

The big disk decision

Slow down here. A careful minute beats a long afternoon explaining where Windows went.

3 Start the temporary desktop

Open the PC's firmware settings: enable **UEFI** and disable **Secure Boot** for HAOS. Start the USB through the boot menu and select **Try Ubuntu**. [1] This session supplies the tools for the installation; you are not setting up Ubuntu as your permanent system.

4 Get the right image and select the drive

In Ubuntu, download the current **Generic x86-64** image from the official HAOS guide. Open **Disks** and select the intended internal drive. [1] Compare its model and capacity with your notes below; do not rely on the order drives appear in the list.

About the wipe at 10:18 in the video

The video description includes a command that fills /dev/sda with zeroes. That drive name may refer to something different on your PC. Do not run it just because it appears in the video. The standard image-restoration route does not require a separate full-disk zero-fill.

5 Write Home Assistant OS

Choose **Restore Disk Image** in Disks, select the HAOS download and recheck the destination. Start restoring and wait until it finishes. Shut down, remove the Ubuntu USB and start the PC with Ethernet connected. [1]

What success looks like

The image write completes without an error, and the next boot starts Home Assistant. If the Ubuntu desktop returns, check that you removed the USB. The computer has probably followed its instructions, which is more than can be said for most flat-pack furniture.

Intended installation drive model and capacity

04 / FIRST START • VIDEO 16:39 AND 18:22

Bring your home to life

The exciting part: a browser page. Smart-home glamour really is relentless.

6 Open the setup screen

On another device on the same network, enter **http://homeassistant.local** in the browser's address bar. If the name does not resolve, use **http://** followed by the PC's IP address. Leave the PC connected to the internet while first-start preparation finishes. [1, 4]

2026 update: port 80

New Home Assistant OS installations now use standard HTTP port **80**, so you normally do not need a port number in the address. If that does not work, try **http://homeassistant.local:8123** or the PC's IP address with **:8123**. Port 8123 remains useful for older setups or when port 80 is already in use. [1, 4]

7A Starting a new home

Select **Create my smart home**. Set your name, a lowercase username without spaces and a strong password. Keep the login safely in your password manager. This is the owner account, with administrative control. [4]

Set your home location, check the associated time zone and units, choose your data-sharing preferences and finish onboarding. [4] Start with one familiar device and one simple action. A working lamp is a better first victory than an entire house developing opinions.

7B Bringing an existing home with you

At the welcome screen, use the backup upload/restore option. Select the saved backup, provide its encryption key if requested and follow the restore prompts. A large restore may take around 45 minutes. Keep the PC powered on and avoid interrupting it. [2]

8 Prove it works before celebrating

- ☐ Sign in and confirm the expected dashboard appears.
- ☐ Control one device and check one important automation safely.
- ☐ For migration, check radio adapters and integrations before retiring the old PC.
- ☐ Create a fresh backup once the new setup is working.

05 / KEEP THIS PAGE • TROUBLESHOOTING AND NOTES

When the tech gets dramatic

Change one thing at a time. Otherwise you will fix it and have absolutely no idea how. A proud tradition, but a poor maintenance plan.

Quick checks before you start again

USB will not start: check the boot-menu selection and USB-writing result. [3]
No bootable device: revisit the HAOS guide's UEFI and boot-entry advice. [1]
No setup page: confirm the address, Ethernet and that both devices share a network.
Restore needs a key: find the emergency kit matching that backup. [2]
A device is missing: check its power, connection and integration; reinstalling everything is a rather enthusiastic first move.

Make tomorrow's problem smaller

Set up automatic backups in Home Assistant's interface. The Backup integration exposes status and the last successful backup time, so check that backups are actually succeeding. [5] An optimistic schedule is not the same as a recoverable home.

Home Assistant address / PC location

Backup filename and date / where the emergency kit is stored (not the key itself)

Useful links you can click

Video: Home Assistant Setup That Even Your Nan Could Follow
[1] Home Assistant: Generic x86-64 installation and boot troubleshooting
[2] Home Assistant: creating, downloading and restoring backups
[3] Ubuntu: create a bootable USB stick (Windows, Linux and alternatives)
[4] Home Assistant: first-time onboarding
[5] Home Assistant: backup status and monitoring

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