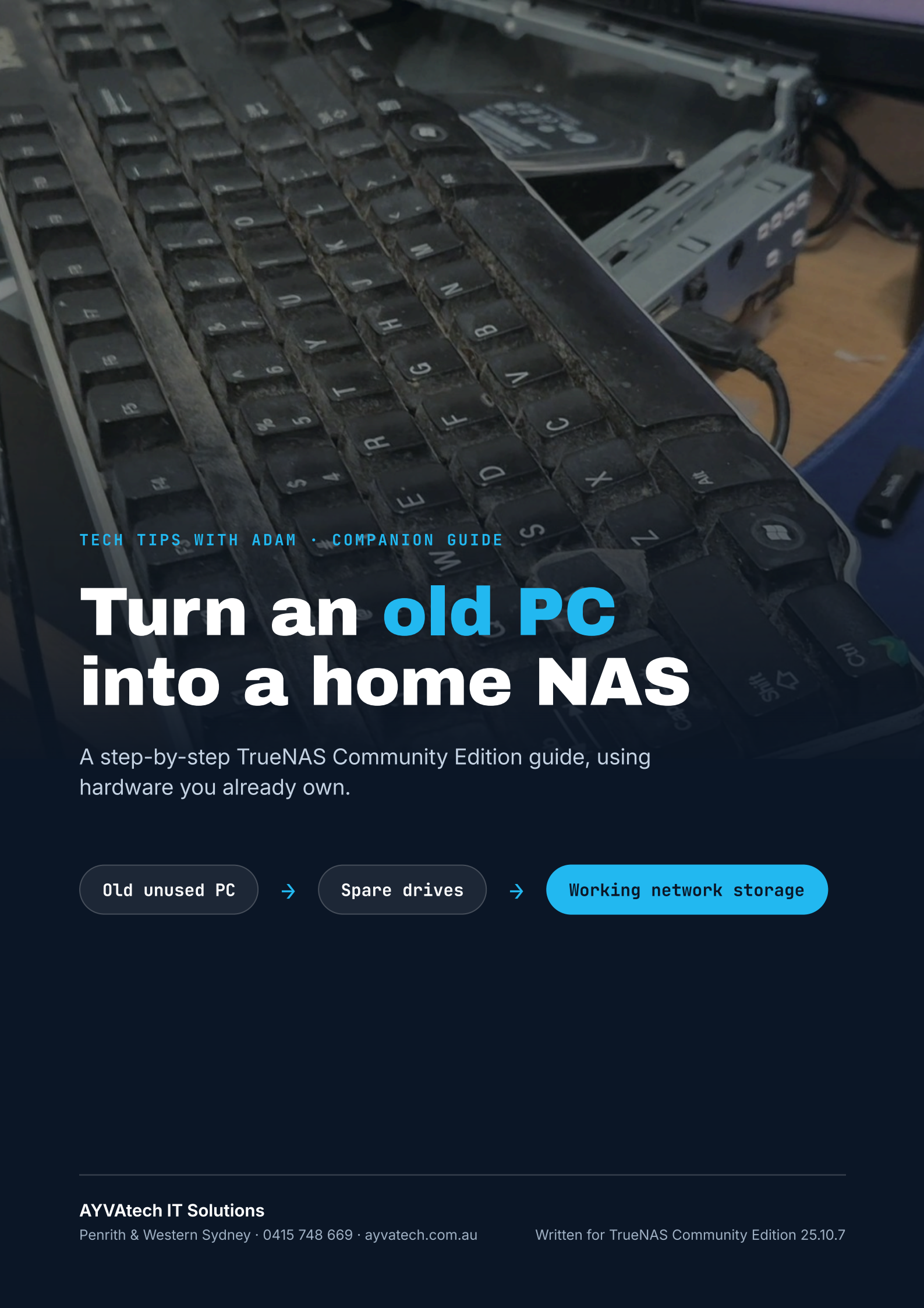




TECH TIPS WITH ADAM · COMPANION GUIDE

Turn an **old PC** into a home **NAS**

A step-by-step TrueNAS Community Edition guide, using hardware you already own.

Old unused PC



Spare drives



Working network storage

BEFORE YOU START

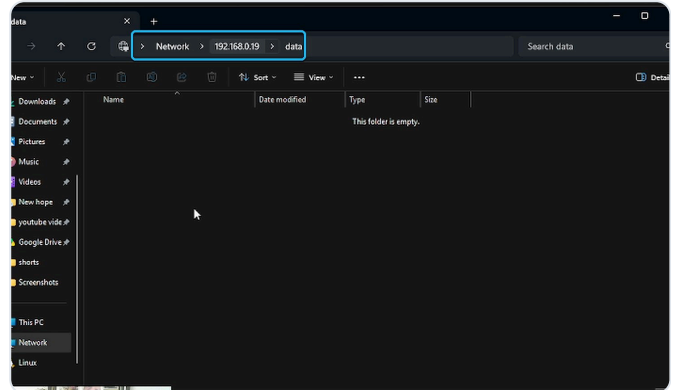
What you're building

Got an old PC and a couple of spare hard drives? This guide turns them into your own **network storage (a NAS)**. Your files, photos and movies stay in your house, not on Google Drive or OneDrive, and every computer on your home network can reach them.

It follows the *Tech Tips With Adam* video step by step, with screenshots from the actual build, so you can work through it at your own pace. Nothing new was bought. It's an old Dell OptiPlex and a couple of mechanical drives.



Before: spare drives gathering dust



After: a working network share at \\192.168.0.19\data

What you need

- **An old PC.** Nothing fancy. The video uses a Dell OptiPlex with an i7-3770 and 16 GB of RAM.
- **A boot drive** for TrueNAS itself. The video uses a 1 TB 2.5" HDD. TrueNAS takes over this whole drive.
- **One or more storage drives** for your files. The video uses a 3 TB HDD.
- **A USB stick** for the installer. Everything on it gets wiped.
- **A network cable** from the old PC to your router, plus a Windows PC on the same network.

The steps

- 01 Download TrueNAS
- 02 Make a bootable USB with Rufus
- 03 Boot the old PC from the USB
- 04 Install TrueNAS onto the boot drive
- 05 Find your NAS address and log in
- 06 Create a storage pool
- 07 Share it to your Windows PC
- 08 Create a user who can open the share
- 09 Open your NAS from Windows
- 10 What else can it do?

Download TrueNAS

TrueNAS Community Edition is free and open source. On truenas.com, go to **Support → TrueNAS Community Edition**, scroll to the bottom and click **Download Community Edition**.

Professional Support & Guaranteed SLAs	✓	Community Support	✓
Virtualization Integration	✓	Virtualization Integration	✗
Fibre Channel	✓	Fibre Channel	✗
RDMA for NFS, iSCSI, and NVMe-oF	✓	RDMA for NFS, iSCSI, and NVMe-oF	✗
FIPS-validated Encryption	✓	FIPS-validated Encryption	✗
NIST 800-209 Compliance	✓	NIST 800-209 Compliance	✗
High Availability Options	✓	High Availability Options	✗
Advanced Enclosure Management	✓	Advanced Enclosure Management	✗

Trusted by global leaders, TrueNAS Enterprise is built for businesses that can't afford downtime.

TrueNAS Community Edition is open core, providing a hands-on way to explore the features trusted by professionals and enthusiasts alike.

[Speak with a Product Specialist →](#) [Download Community Edition →](#)

The Download Community Edition button at the bottom of the page.

Pick the current stable version and save the **.iso** file somewhere easy to find, like your desktop.

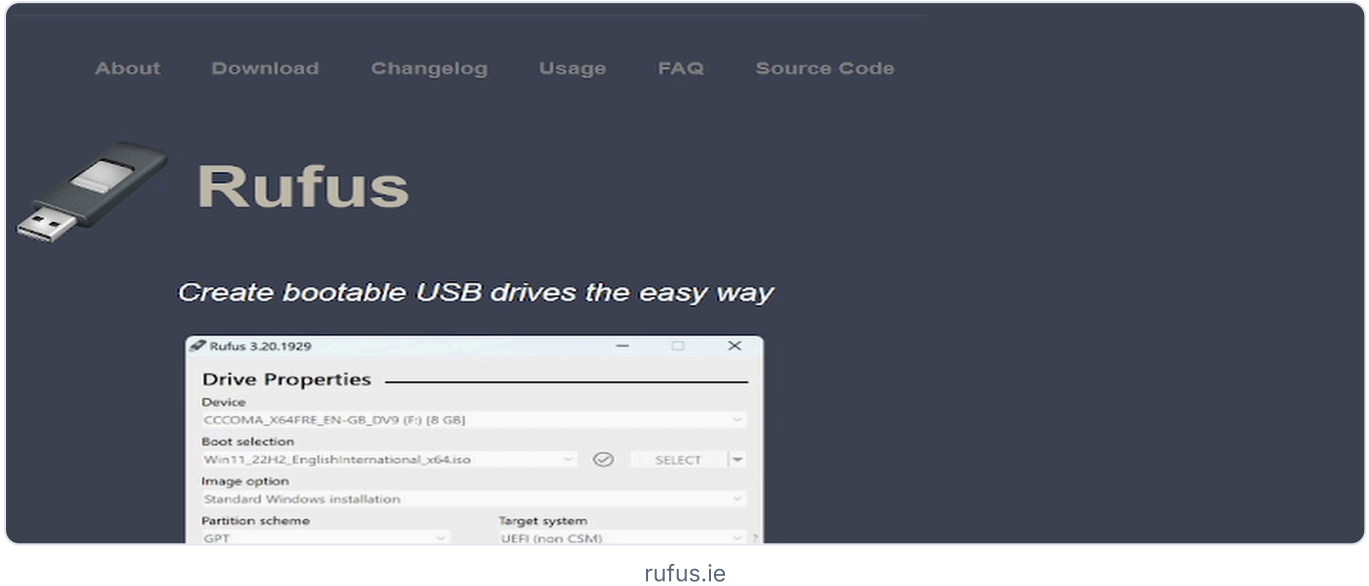
Download TrueNAS Community Edition



The video uses 25.10.7. Use the stable release, not one marked BETA.

Make a bootable USB with Rufus

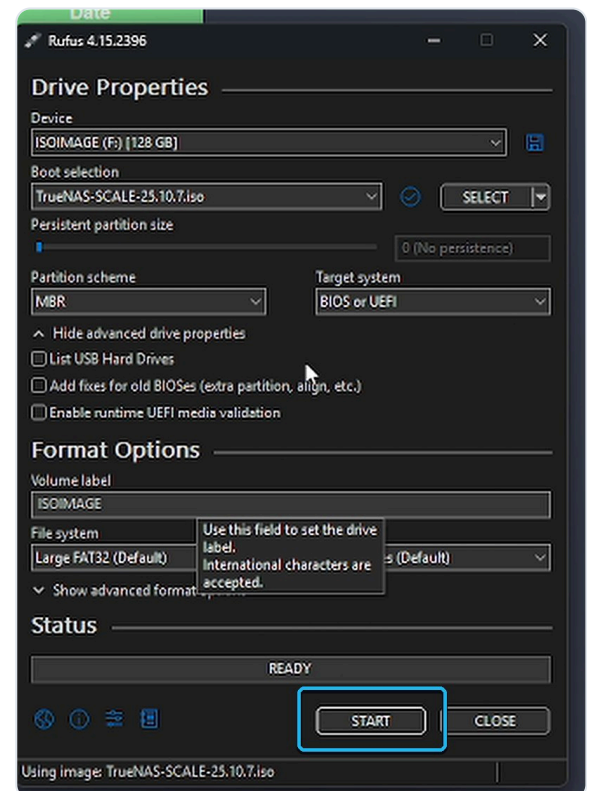
Rufus writes the installer onto your USB stick. Get it from rufus.ie. Either the portable or the installed version works.



Everything on the USB stick gets wiped

Copy off anything you want to keep before you start.

- 1 Plug in the USB stick and open Rufus. Check that **Device** shows your USB stick.
- 2 Under **Boot selection**, click **SELECT** and choose the TrueNAS .iso you downloaded.
- 3 Leave every other setting as it is.
- 4 Click **START**. If Rufus asks how to write the image, keep the recommended option and click **OK**.
- 5 Confirm the warning that the USB stick will be wiped, then wait for the status bar to finish.



Device = your USB stick, Boot selection = the TrueNAS .iso, then START.

Boot the old PC from the USB

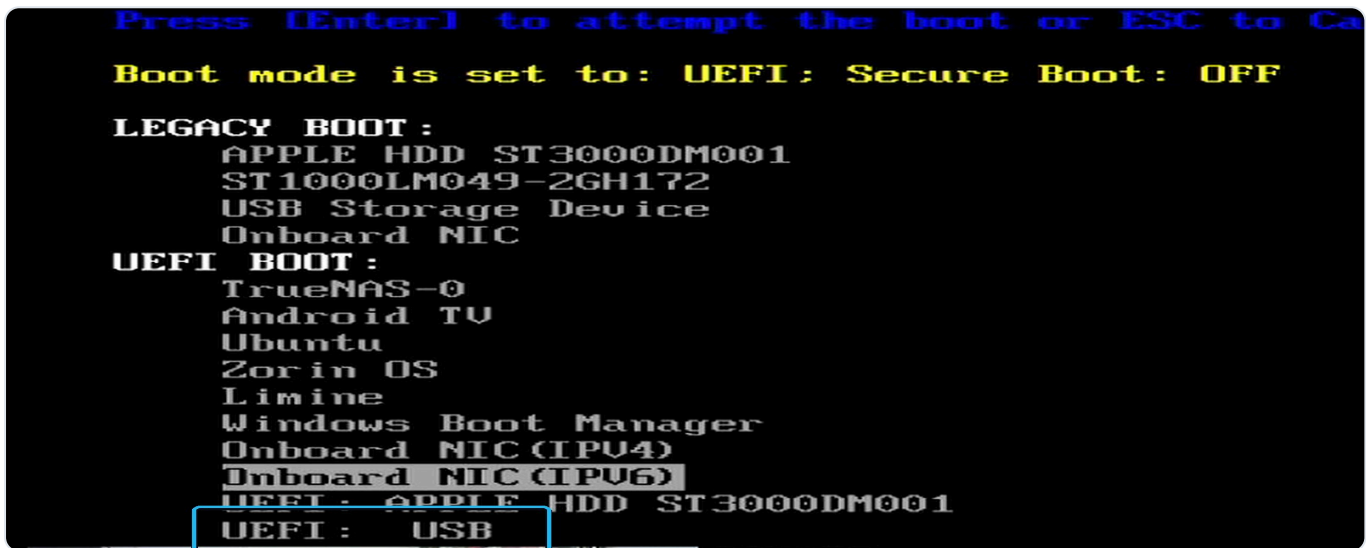
Plug the USB stick and the network cable into the old PC and turn it on. Tap the **boot menu key** straight away.



Boot menu key

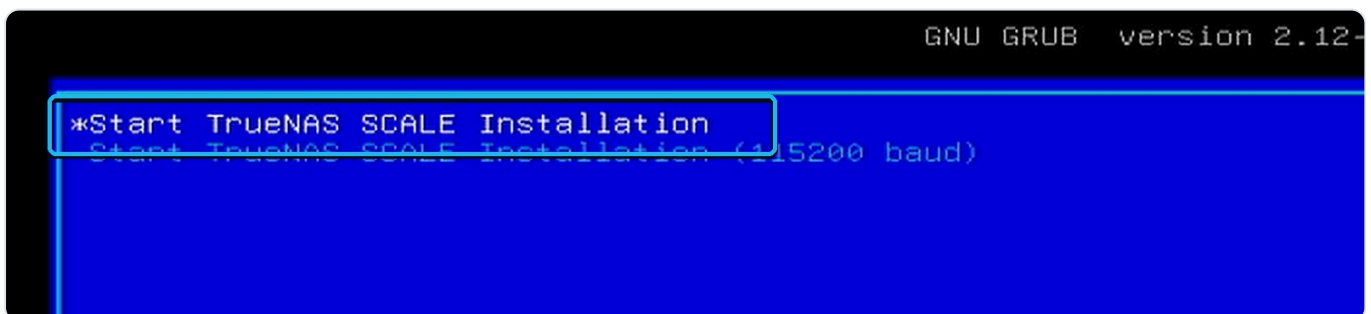
It's **F12** on a Dell. On other brands, search for "<your model> USB boot" to find yours.

Arrow down to your USB stick and press Enter. In the video it's listed as **UEFI: USB**.



Pick the USB stick from the boot menu.

On the next screen, pick the top option, **Start TrueNAS SCALE Installation**.



Start the installer.

Install TrueNAS onto the boot drive

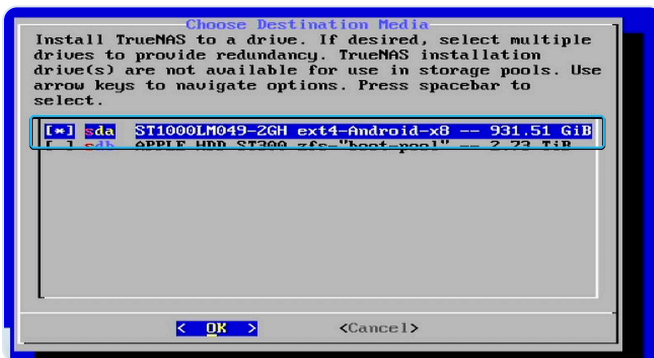
Go with the defaults on the installer menus. The one choice that really matters is **which drive to install onto**.



Boot drive vs storage drive

TrueNAS uses the **whole** boot drive, and nothing else can go on it. Your files go on the **other** drive or drives. Pick the boot drive here, not your big storage drive.

- 1 Highlight your boot drive (the 1 TB drive in the video) and press the **spacebar** to select it, then **OK**.
- 2 TrueNAS warns that it will erase that drive. Confirm.
- 3 Set a password for the **truenas_admin** user and confirm it. Write it down, because you need it to log in.
- 4 Let it install. On older mechanical drives this takes a little while.

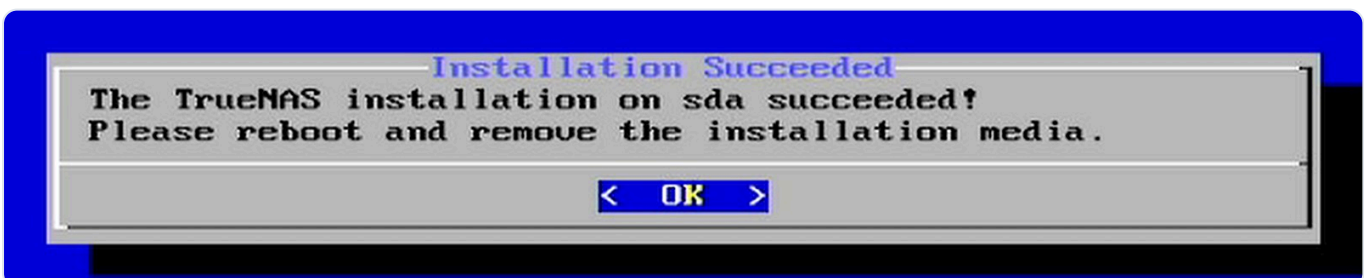


Select the boot drive with the spacebar.



Set the truenas_admin password.

When it says **Installation Succeeded**, click **OK**, pull out the USB stick, and choose **Reboot System**.



Remove the USB stick, then reboot.

Find your NAS address and log in

Once it boots, the old PC shows a console screen. The line that matters is "The web user interface is at:". That's your NAS's address on your network.

```
Starting nmbd.service - Samba NMB Daemon...
[ OK ] Started nmbd.service - Samba NMB Daemon.

Console setup
-----

The web user interface is at:
http://192.168.0.19
https://192.168.0.19

1) Configure network interfaces
2) Configure network settings
3) Configure static routes
4) Change local administrator password
5) Create one-time password for root
6) Reset configuration to defaults
7) Open TrueNAS CLI Shell
8) Open Linux Shell
9) Reboot
10) Shutdown

Enter an option from 1-10: _
```

Your NAS address (yours will be different), and option 4 if you need to reset the admin password.

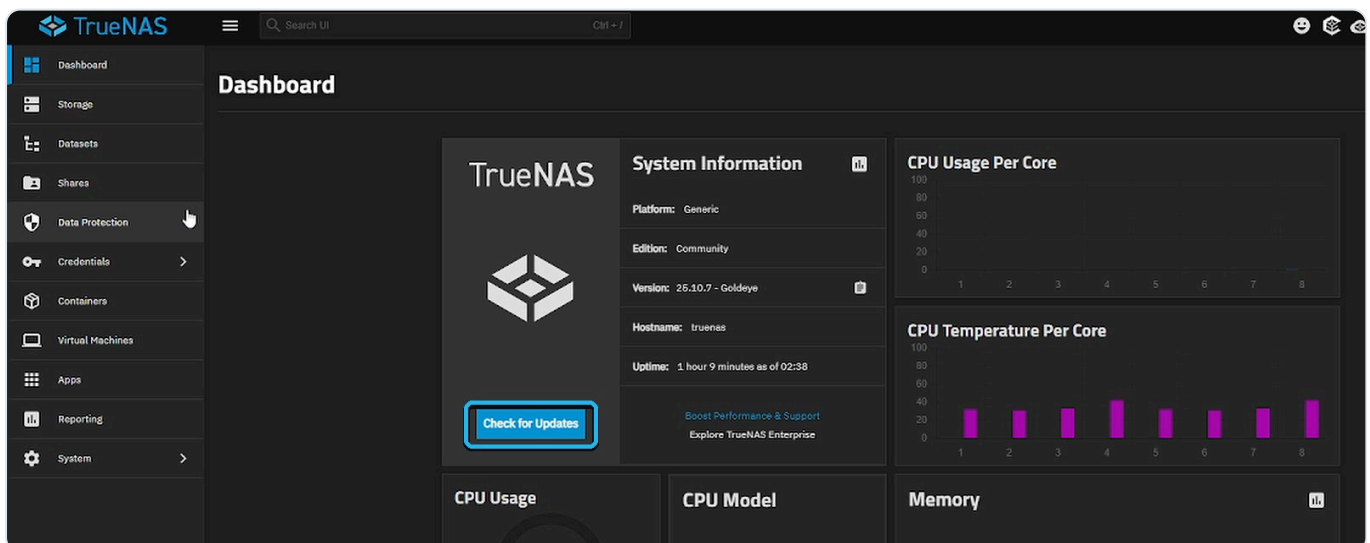
On your normal PC, type that address into a browser. Log in with username **truenas_admin** and the password you set during install.



Password not working?

Back on the old PC's console, type **4** (*Change local administrator password*), choose **truenas_admin** and set a new password. Then log in again from your browser.

The first thing to do once you're in: click **Check for Updates** on the Dashboard. Do that every time you set up something new.



You're in. Check for updates first.

Create a storage pool

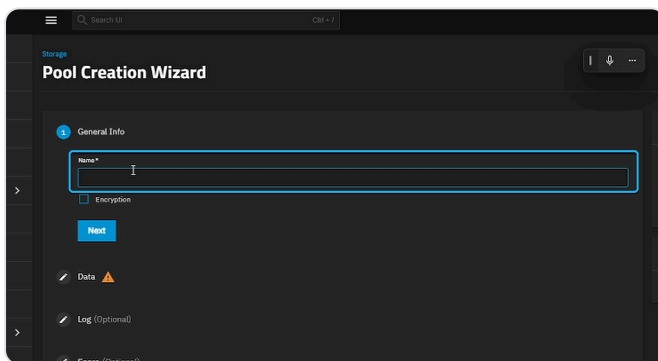
A **pool** is the storage TrueNAS builds out of your data drive or drives. Go to **Storage → Create Pool**.



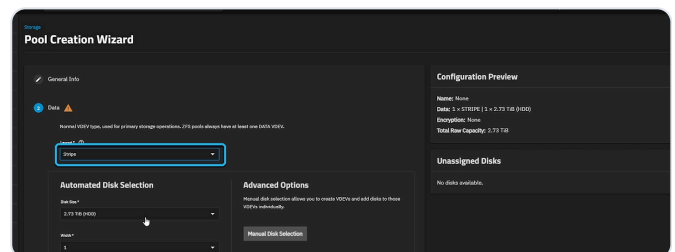
Anything on the storage drive gets wiped

Make sure there's nothing on it you still need.

- 1 **Give the pool a name.** The Name box is right at the top of the wizard and easy to miss. The video calls it **data**.
- 2 Click **Next**. Under **Layout**, a single drive shows as **Stripe**. TrueNAS has already found the drive.
- 3 Skip the optional sections, click **Save And Go To Review**, then **Create Pool**, tick **Confirm** and click **Continue**.



The pool Name box sits at the very top.

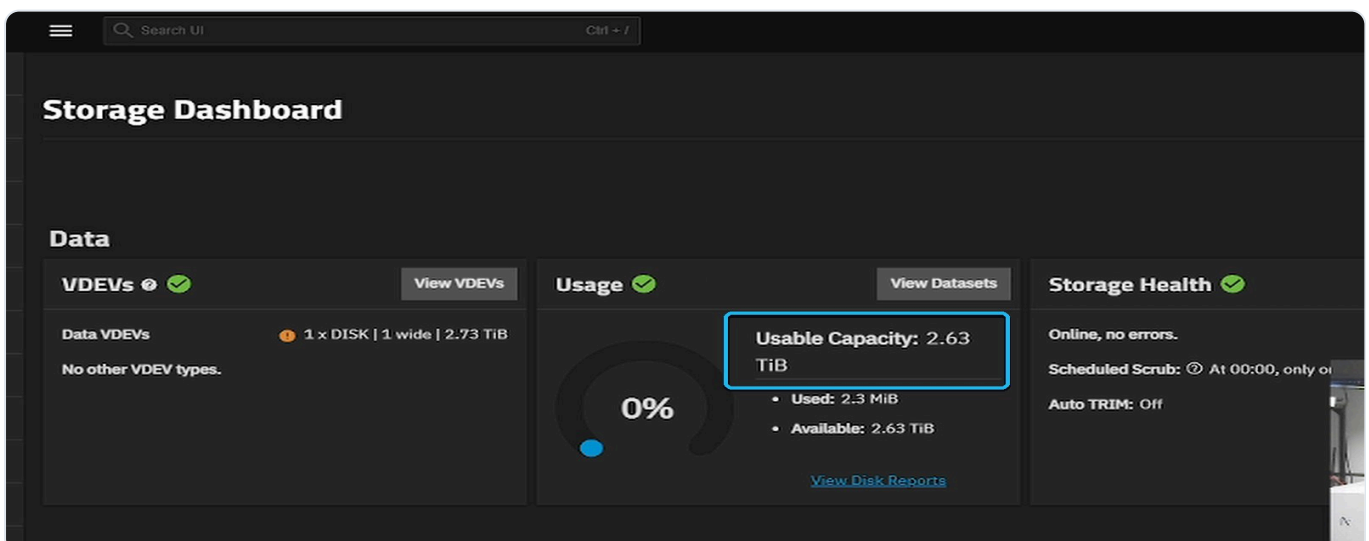


One drive = Stripe layout.



Stripe = no redundancy

With one drive, if that drive dies, the data goes with it. That's fine for a test. For anything important, use two drives as a **mirror** and keep a backup somewhere else.

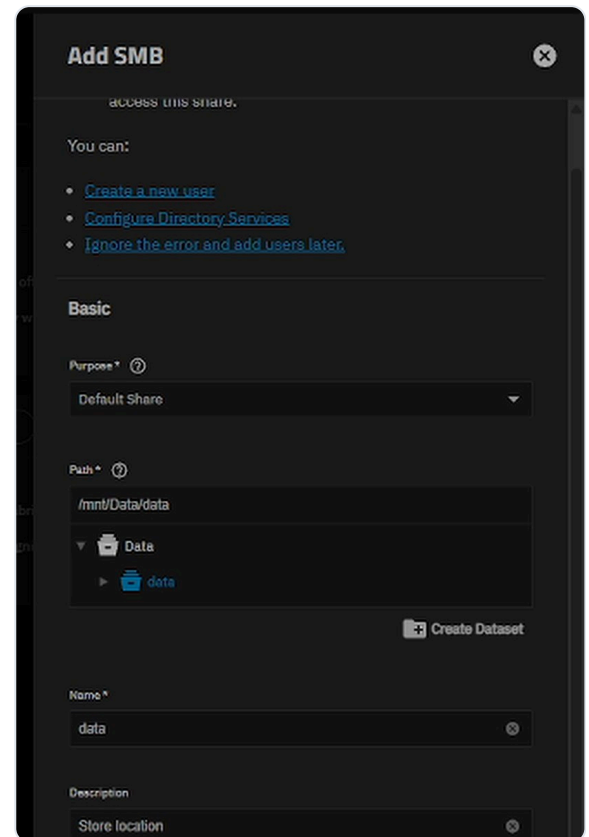


Done. A "3 TB" drive shows as about 2.6 TiB usable. That's normal: TiB is a bigger unit than the TB on the box.

Share it to your Windows PC

Now make a Windows (SMB) share so your PCs can open the storage like a folder.

- 1 Go to **Shares**. Next to **Windows (SMB) Shares**, click **Add**.
- 2 Leave **Purpose** on **Default Share**.
- 3 Under **Path**, click your pool, then **Create Dataset**, and call it **data**. A dataset is simply the folder where the share's files are stored. Using the same name everywhere keeps it easy to follow.
- 4 Set **Name** to **data** and click **Save**.



The screenshot shows the 'Add SMB' dialog box. At the top, it says 'access this share.' Below that, 'You can:' is followed by three links: 'Create a new user', 'Configure Directory Services', and 'Ignore the error and add users later.' The 'Basic' section contains the following fields: 'Purpose*' with a dropdown menu set to 'Default Share'; 'Path*' with a text input showing '/mnt/Data/data' and a file explorer view below it showing a folder 'Data' containing a file 'data'; 'Name*' with a text input set to 'data'; and 'Description' with a text input set to 'Store location'. A '+ Create Dataset' button is located to the right of the file explorer view.

Add SMB: Default Share, path to the new data dataset, name it data.

Create a user who can open the share

If you try the share now with the admin login, Windows says **access denied**. The share needs a user that has **SMB access**, and the admin account doesn't have it.

- 1 Go to **Credentials** → **Users** → **Add**.
- 2 Pick a username. The video uses **adam**.
- 3 Under **Allow Access**, tick **SMB Access**.
- 4 Set a password and click **Save**.



Other people in the house?

Give each person their own user. Only give full admin rights to people who need them.

Add User

Username *

adam

Allow Access

☒ SMB Access

☐ TrueNAS Access

☐ Shell Access

☐ SSH Access

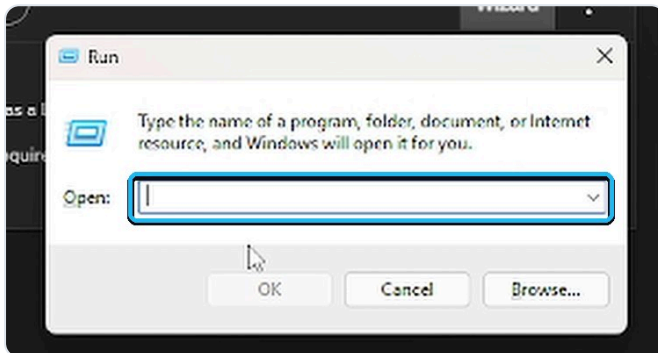
Authentication

Password *

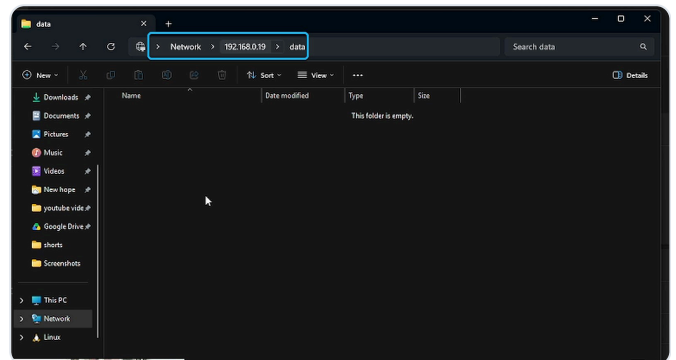
Tick SMB Access. This is the bit that fixes "access denied".

Open your NAS from Windows

- 1 Press **Windows + R** to open the Run box.
- 2 Type two backslashes and your NAS address, for example `\\192.168.0.19`. Use your own address from the console screen.
- 3 Press Enter and sign in with the user you just created.



Win + R, then `\\<your NAS IP>`



Your share, served from the old PC.

That's it. You've turned a derelict PC and some spare drives into network storage you can use every day.

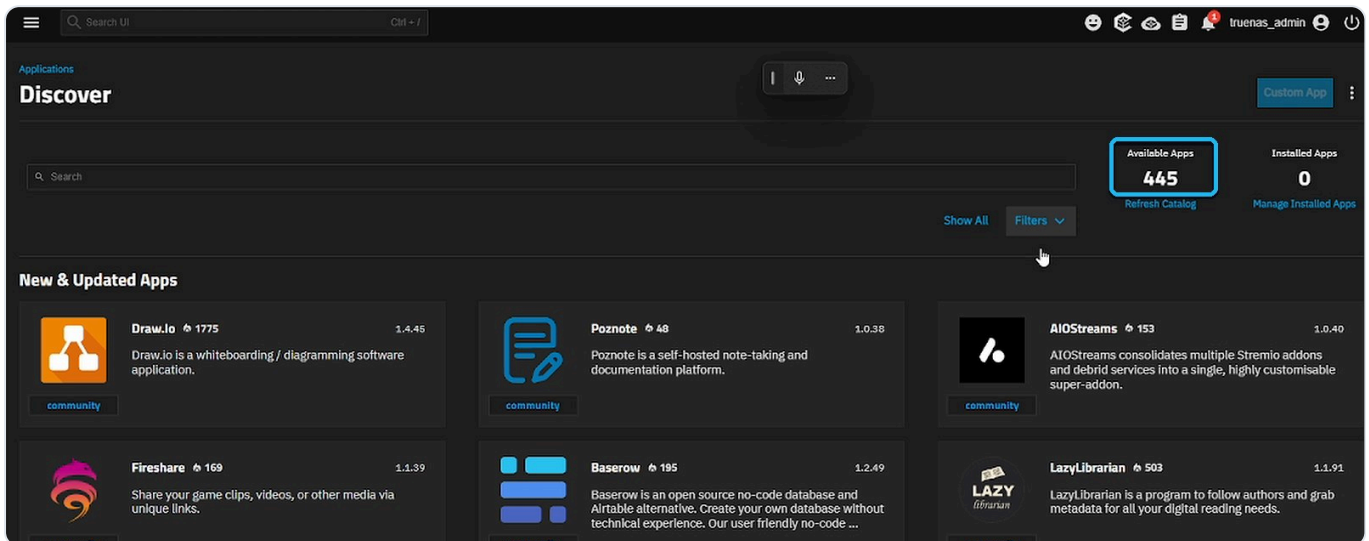


Make it a drive letter

In File Explorer, right-click the **data** folder and choose **Map network drive**. It then shows up under This PC every time you log in.

What else can it do?

A shared folder is just the start. In the left menu you'll find **Apps**, **Containers** and **Virtual Machines**. The app catalogue in the video lists **445 apps**, including media servers like **Jellyfin** and **Plex**.



The Apps catalogue.

Part 2 of the series puts this same old PC to work with apps and a media server. Subscribe so you don't miss it.



QUICK FIXES

Troubleshooting

Can't get into the boot menu	Tap the key repeatedly as soon as you power on. Search " <i><model> USB boot</i> " for your brand's key.
Create Pool won't go ahead	Scroll back to the top of the wizard and fill in the pool Name .
Wrong username or password in the browser	On the NAS console, use option 4 to set a new truenas_admin password.
Windows says access denied	Create a user with SMB Access ticked and sign in as that user, not the admin.
The address won't load	Check the network cable on the NAS, and make sure both PCs are on the same home network.

Rather have someone set it up for you?

AYVAtch IT Solutions does home and small business IT in Penrith and Western Sydney. Call **0415 748 669** or visit ayvatech.com.au.

More plain-English how-tos: [Tech Tips With Adam on YouTube](#) · ayvatech.com.au/blog.html

Screenshots are from the build shown in the video (TrueNAS Community Edition 25.10.7). Menus can move between versions. Your NAS address will be different from the one shown. Back up anything important before wiping a drive.