01 / START HERE / VIDEO 0:00

Install Debian 13 on Proxmox

Build a Debian virtual machine with an SSH server and no graphical desktop. This is the starting point for adding applications later; we are installing Debian inside an existing Proxmox host.

What you will build

A new Debian 13 amd64 VM. The video uses a **32 GB virtual disk**, **2 CPU cores** and **4 GB RAM**. These are the example settings, not minimum requirements for every future application. Choose capacity for the job you plan to give it.

Before you start

- ☐ An existing Proxmox VE host, browser access and permission to create a VM.
- ☐ Enough available RAM and VM storage, plus storage that accepts ISO images.
- ☐ Internet access from Proxmox for the ISO download and from the VM for Debian packages.
- ☐ A working VM network bridge and a source of network settings, normally DHCP.
- ☐ An unused VMID, a unique hostname, and passwords stored securely.

In the video I call the new VM and hostname **special**. Choose your own name. Keep the Proxmox VM console available: it is useful during installation and if networking needs attention.

Use a new virtual disk

Partitioning will erase the selected disk. This guide uses a newly created VM disk. Do not attach a physical host disk or an existing guest disk containing data you need.

Watch the Debian installation Short. Pause as needed; the edited video is not a promise about how long your installation will take.

My Proxmox node / VMID / VM name / intended use

02 / DOWNLOAD THE ISO / VIDEO 0:10

Get Debian onto Proxmox

Download the installer directly to Proxmox. There is no need to send the whole ISO on a sightseeing trip through your Windows downloads folder.

1 Find the official installer link

Open Debian network installation. For an Intel or AMD x86-64 Proxmox VM, choose **amd64 netinst**. amd64 is the architecture name; it also works with suitable Intel processors. Use Debian 13 for this walkthrough.

Copy the ISO link address. The video starts a browser download, cancels it and copies the download link from the browser download list. Copying the link directly from the Debian page is also fine. Use the official link, not a search advert.

2 Download directly into ISO storage

In Proxmox, select your target **node > local > ISO Images > Download from URL**. If your ISO storage has a different name, select that storage instead.

- ☐ Paste the complete official ISO URL.
- ☐ Click Query URL and check that the filename is a Debian amd64 netinst ISO.
- ☐ For an additional integrity check, use the matching official checksum and the supported hash option. Do not substitute a checksum from a different release.
- ☐ Click Download and wait for the task to finish successfully.
- ☐ Close the task window and confirm the ISO appears in ISO Images.

If local is not suitable

The selected storage must accept ISO images and have enough space. A storage used only for VM disk images may not offer ISO Images. Select suitable existing storage; do not reformat a disk to make this menu appear.

If the download fails, check the complete URL, available space and the Proxmox host's DNS and internet access. Do not continue with an incomplete file.

ISO filename / storage / successful download confirmed

03 / CREATE THE VM / VIDEO 0:53

Create the virtual machine

The ISO is the installation media. The virtual disk is where Debian will live. They are different things, even when the wizard puts them one screen apart.

3 Open Create VM and give it a name

Right-click the intended Proxmox node and choose **Create VM**. Use an unused VMID and enter your VM name. The video enables **Start at boot**, so the VM can start when the host starts. Enable that only if you want it.

4 Select the installer and resources

- ☐ OS: select Use CD/DVD disc image file, the ISO storage and your Debian 13 ISO.
- ☐ Guest OS: Linux. The 7.x - 2.6 Kernel label in this video is a Proxmox compatibility category, not Debian 7.
- ☐ System: retain the normal settings used for this new VM unless your host has a specific requirement.
- ☐ Disks: create a NEW 32 GB virtual disk on suitable VM storage.
- ☐ CPU: set 2 total cores for this example.
- ☐ Memory: set 4096 MiB, approximately 4 GiB.
- ☐ Network: select the intended LAN bridge. Use the VLAN tag only if your network requires it; do not copy an unrelated bridge or tag.

5 Review and create

Check the node, VMID, ISO, disk destination, CPU, memory and network summary. Finish the wizard and wait for successful VM creation. Select the new VM, open **Console** and click **Start**.

If the installer does not start

Check that the ISO is attached to the VM's virtual CD/DVD drive and is available on this node. Check the boot order. Do not change firmware repeatedly or reinstall the Proxmox host to solve a guest boot problem.

VMID / disk storage / cores / RAM / bridge and VLAN

04 / DEBIAN INSTALLER / VIDEO 1:34

Install into the new VM

Work inside the VM console from this point. The choices apply to this Debian guest, not to the Proxmox host.

6 Set location and create the accounts

Choose your language, country and keyboard. The video uses English, United Kingdom and British English; use the settings appropriate to you. Allow network configuration to complete, normally using DHCP. If it fails, check the VM's bridge and network first.

Enter a unique hostname. Leave the domain blank if you do not have one. The video sets a **root password** and then creates a **normal user** with its own password. Keep both securely. Use the normal account for everyday login.

An important Debian choice

Setting a root password can leave your normal user without sudo initially; the companion sudo guide covers that next. If you instead leave the root password blank, Debian normally disables root login and grants the first user sudo. That is an alternative route, not the choice shown here.

7 Partition only the intended virtual disk

Use the guided whole-disk route on the **new VM disk**, then choose **All files in one partition**. Review the proposed partitions before selecting **Finish partitioning and write changes to disk**.

Check the disk before confirming

Writing changes erases the selected disk's existing contents. Check the virtual disk identity and size. The example 32 GiB disk may display as roughly 34.4 GB because the unit conventions differ. Do not select an existing data disk.

Confirm writing only when that review is correct. Let Debian install its base system. Installer screens and the number of prompts can vary with the ISO and firmware.

Hostname / normal username / correct virtual disk checked

05 / FINISH AND CHECK / VIDEO 2:24

Finish with SSH enabled

Install a server you can manage remotely, without adding a graphical desktop you do not need for this walkthrough.

8 Choose packages and the bootloader

Skip scanning extra media if you have none. Choose a suitable Debian package mirror and leave the proxy blank unless your network uses one. At Software selection, use **Space** to toggle choices:

- ☐ Deselect Debian desktop environment and the individual desktop choices.
- ☐ Select SSH server. Keep Standard system utilities selected.
- ☐ Continue and allow the selected packages to install.
- ☐ When asked, install GRUB on the intended VM boot disk, not an individual partition or another data disk.

When installation finishes, continue to reboot. Eject the installer ISO from the virtual CD/DVD drive if prompted. If the installer starts again, check the ISO and boot order before doing another installation.

9 First boot checks and next steps

After reboot, log into the VM console as your normal user. These extra checks help confirm the installation before moving on:

```
whoami
hostname
cat /etc/os-release
hostname -I
systemctl is-active ssh
```

Expect your account, the intended hostname, Debian 13, a usable LAN address and an active SSH service. No address? Check the guest network and DHCP. SSH inactive? Check the selected software and service status from the console. Keep recovery access while troubleshooting.

Next: explain public and private keys, set up SSH key login, then configure sudo, updates and the QEMU guest agent. Those are separate guides; they are not configured by selecting SSH server here.

Official Debian netinst downloads
Debian 13 installer choices and troubleshooting