Install and Setup Proxmox VE

This guide will explain how to install Proxmox VE on a bare metal system. You don't need a fancy server to run Proxmox.

Recommended Hardware

- Intel EMT64 or AMD64 with Intel VT/AMD-V CPU flag.
- Memory, minimum 2 GB for OS and Proxmox VE services. Plus designated memory for guests. For Ceph or ZFS additional memory is required, approximately 1 GB memory for every TB used storage.
- Fast and redundant storage, best results with SSD disks.
- OS storage: Hardware RAID with batteries protected write cache ("BBU") or non-RAID with ZFS and SSD cache.
- VM storage: For local storage use a hardware RAID with battery backed write cache (BBU) or non-RAID for ZFS. Neither ZFS nor Ceph are compatible with a hardware RAID controller. Shared and distributed storage is also possible.
- Redundant Gbit NICs, additional NICs depending on the preferred storage technology and cluster setup – 10 Gbit and higher is also supported.
- For PCI(e) passthrough a CPU with VT-d/AMD-d CPU flag is needed.

Here, you can see more on Proxmox hardware requirements.

Install Proxmox VE

An album with all of the following screenshots can be found here: https://imgur.com/a/lSg9Lzt

1. The first step to installing Proxmox is downloading the installation ISO (
   https://i.imgur.com/76OXSL2) from their website (https://www.proxmox.com/en/downloads), and make a bootable USB stick out of it. For this tutorial, we assume you know how to do this.
2. Make sure virtualization support is turned on in the BIOS of the server. The Intel version of this is called VT-d or VT-x. The AMD version is called AMD-V. If your server for some

reason does not support this, you can unfortunately not make use of the full power of Proxmox. Unfortunately, this is probably the hardest part of the tutorial. Turning virtualization support on will be different on every server/motherboard thus making it very difficult for us to show how this is done. Usually this option is turned on by default, but it is a good idea to check this. You can google "[motherboard name] virtualization bios" to see how to do this for your specific motherboard.

3. Insert the earlier created bootable USB drive into the server and boot from it. You should see this (https://imgur.com/tHEP7u8) screen.

4. Now press [Enter] on "Install Proxmox VE". After a few seconds you should see a screen with the user licence agreement (https://imgur.com/B02f7a3). After reading the User Licence Agreement, press "I agree".

5. Now select the physical disk you want to install Proxmox on next to "Target-Harddisk". We recommend NOT installing Proxmox on a USB device. Unlike some hypervisor operating systems you may have heard of, Proxmox does not run from memory. This means that if you install Proxmox on a USB drive, it will cause a lot of wear, and your USB drive might fail sooner than expected[3]. Press "Next" after selecting the right hard drive. (https://imgur.com/cNC3S9U)

6. Enter your Country, Time zone and Keyboard Layout accordingly. Press "Next". (https://imgur.com/UI5lyoN)

7. Enter a password for your root account with a valid email address. This email address will be used by Proxmox for important notifications. Press "Next". (https://imgur.com/tmJmwJa)

8. Enter your preferred network settings. Proxmox should automatically detect these settings, so you can press "next" without changing anything, and it should work fine. (https://imgur.com/vyjH51z). For now, we will not make any changes to these settings.

9. The next step of the installation will be a summary of your settings. Make sure they are all ok and then press install. ProxMox will now install itself on the selected hard drive (https://imgur.com/0g3BDLr).

10. The last screen of the installation should say that it was a success. Press "Reboot". (https://imgur.com/h1TIMXo)

11. After the system reboots, you will see a blue screen with several startup options. Do not press any button. Proxmox will continue to boot normally after a few seconds. (https://imgur.com/Vy5O8oe)

12. The next screen should be a console showing the IP address chosen during the installation of Proxmox. To access the Proxmox UI, use a browser on a different computer on the same network to navigate to the IP Address and the specified port as shown on the Proxmox server. Make sure to use "https" as well. (https://imgur.com/G8TzBkf)

13. Once you access the Proxmox UI on another computer in the same network you will be greeted with a login screen (https://imgur.com/5zFcC0I). Log in with the username "root" and the password you chose during the installation. Congratulations, your Proxmox install is now complete and working.

This guide was sited from the Proxmox forum.