What is a VPS

Thinking of finally making the step towards hosting your own domain? How, where and why do this?

There are many reasons for having your own server. You may want to learn something new and hence need a playground, or you may want full control over your website, and also want it to be located in a particular country.

On the internet everything runs on machines, which are called servers. Common examples include website and mail servers. These machines have become increasingly powerfull but a lot of services are light and not very resource hungry. To cater to these needs "machine sharing" services were developed. One such technology is called virtualisation where physical hardware runs many virtual machines. An example of software that can run on desktop computers is VirtualBox. It can be installed on a number of operating systems, including Linux, macOS and Windows. In this way you have Windows running on MacOS or Ubuntu on Windows, etc.

https://www.virtualbox.org/

The virtual private server aka **VPS** solution that we at Soleus use is Xen. "**Xen Project** (pronounced /zn/) is a hypervisor using a microkernel design, providing services that allow multiple computer operating systems to execute on the same computer hardware concurrently." Wikipedia.

https://xenproject.org/

Hosting your own domain, some options

- Use a commercial webhost like https://www.transip.nl/,
- Buy your own machine and put it in a data hosting centre like https://www.leaseweb.com/nl,
- Or become a member of Soleus association: https://soleus.nu/lidmaatschap/

Each choice has financial and technical advantages.

Soleus Infrastructure

- since 2007
- our core team consists of 4 people, they bought the parts and put it all together
- the machine is based in Amsterdam
- runs Debian 10 (Buster) and Xen 4.11
- a SuperMicro Superserver 2027R-N3RF4+ (2U, 16x2.5" bay barebone with redundant power supply, quad gigabit ethernet, dedicated IPMI, etc.)
- 2x Intel Xeon E5-2620 v2's (6-core Ivy-Bridge EP CPUs, totaal 12 cores)
- Areca ARC-1882ix-16 RAID controller (16-port, SAS2, 1GB cache onboard; no SSD-backing options)
- Areca ARC-6120BA-T121 BBU (Battery Backup)
- 15x Crucial 960GB M500 SSD (14 in RAID10 + hotspare)
- 2x Kingston ValueRAM KVR16R11D4K4/64 (2x 64GB DDR3, total 128GB)
- at the beginning of January 2019 there are 74 (62 user and 12 system VPS's)