

Boot from the installation media

Proxmox VE 8.0.3

Intro to Proxmox

- From the documentation : "Proxmox Virtual Environment is a complete open-source platform for enterprise virtualization. With the built-in web interface you can easily manage VMs and containers, software-defined storage and networking, high-availability clustering, and multiple out-of-the-box tools using a single solution."
- based on Debian stable
- Bare-metal install
- Fully-featured and ideal for Enterprise installations at a fraction of the cost of an ESXi solution

Booting into the installation media

- Select `Install Proxmox VE (Graphical)` option and accept the EULA. This can CERTAINLY be done from the console, but for simplicity's sake, I'll use the graphical installation for this walkthrough. Note that Proxmox is a bare metal install - it WILL automatically partition your harddisk and you will lose all existing partitions and data



Welcome to Proxmox Virtual Environment

Install Proxmox VE (Graphical)

Install Proxmox VE (Console)

Advanced Options

enter: select, arrow keys: navigate, esc: back



Proxmox VE Installer

END USER LICENSE AGREEMENT (EULA)

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Abort

Previous

I agree



Proxmox VE Installer

Proxmox Virtual Environment (PVE)

The Proxmox Installer automatically partitions your hard disk. It installs all required packages and makes the system bootable from the hard disk. All existing partitions and data will be lost.

Press the Next button to continue the installation.

- **Please verify the installation target**
The displayed hard disk will be used for the installation.
Warning: All existing partitions and data will be lost.
- **Automatic hardware detection**
The installer automatically configures your hardware.
- **Graphical user interface**
Final configuration will be done on the graphical user interface, via a web browser.

Target Harddisk: /dev/vda (200.00GiB) Options


Abort

Previous

Next

- You'll run through several configuration screens providing the necessary information to configure your Proxmox server. You'll start with configuring your country, timezone and language, setting the password for the `root` user and verifying your Management Network Configuration. This last step is **very** important for accessing the management interface after installation.
 - Management interface
 - Hostname (FQDN)
 - IP Address
 - Gateway
 - DNS Server

- You'll be asked to verify everything before installing

 Proxmox VE Installer

Summary

Please confirm the displayed information. Once you press the **Install** button, the installer will begin to partition your drive(s) and extract the required files.

Option	Value
Filesystem:	ext4
Disk(s):	/dev/vda
Country:	France
Timezone:	Europe/Paris
Keymap:	en-us
Email:	
Management Interface:	
Hostname:	
IP CIDR:	
Gateway:	
DNS:	

☒ Automatically reboot after successful installation

Abort

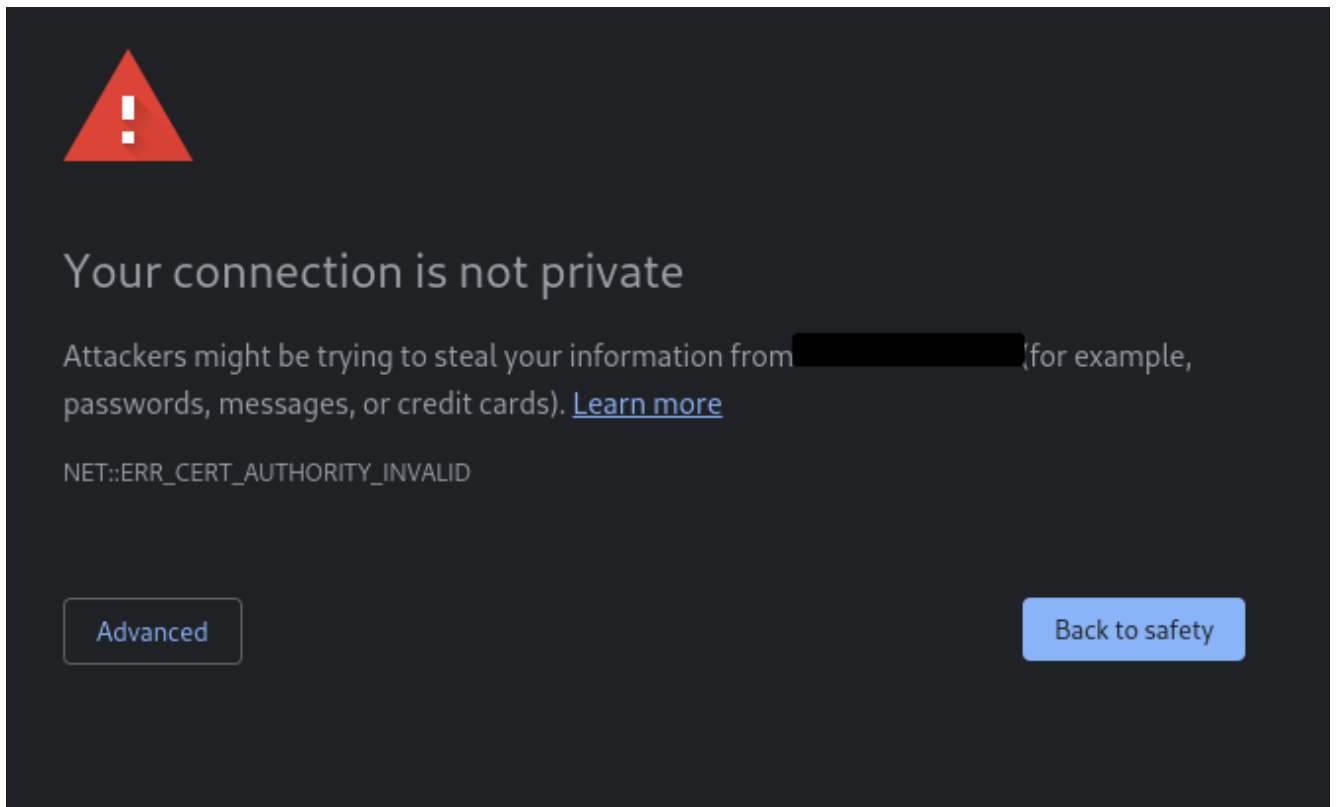
Previous

Install

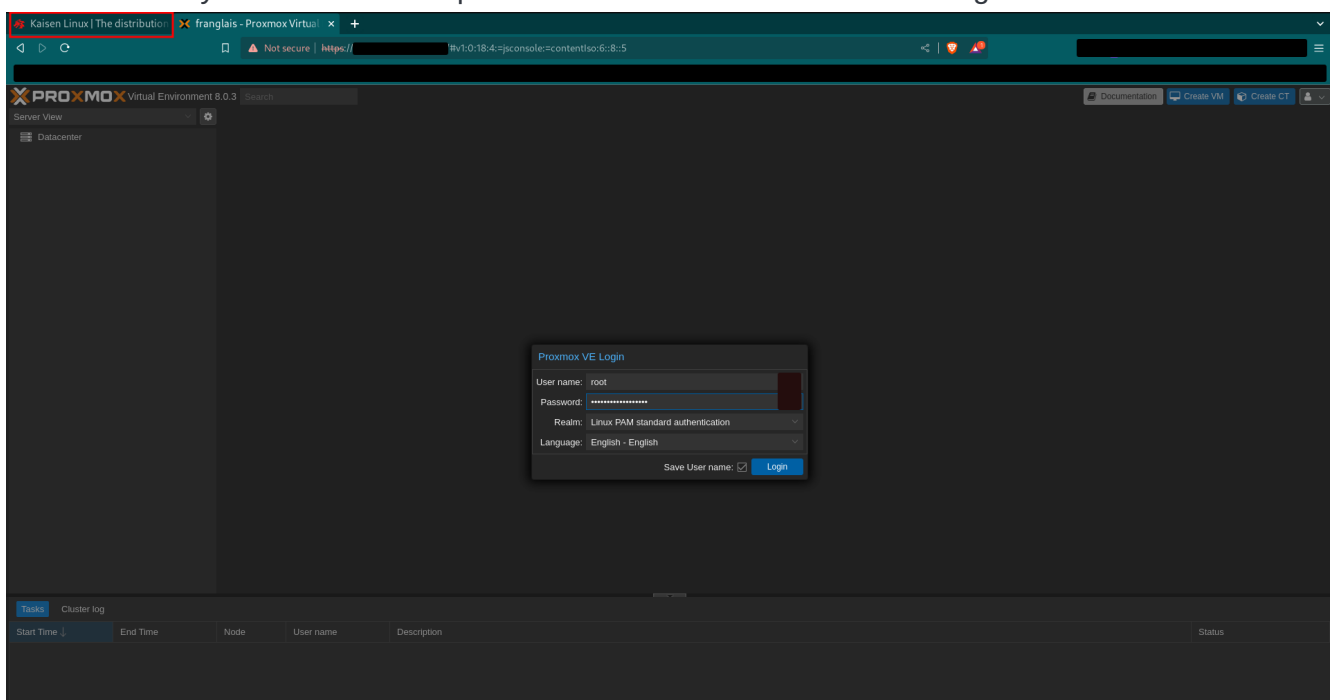
- After installation, you'll see a screen similar to the following with an IP address and port directing you to log into the browser-based management interface

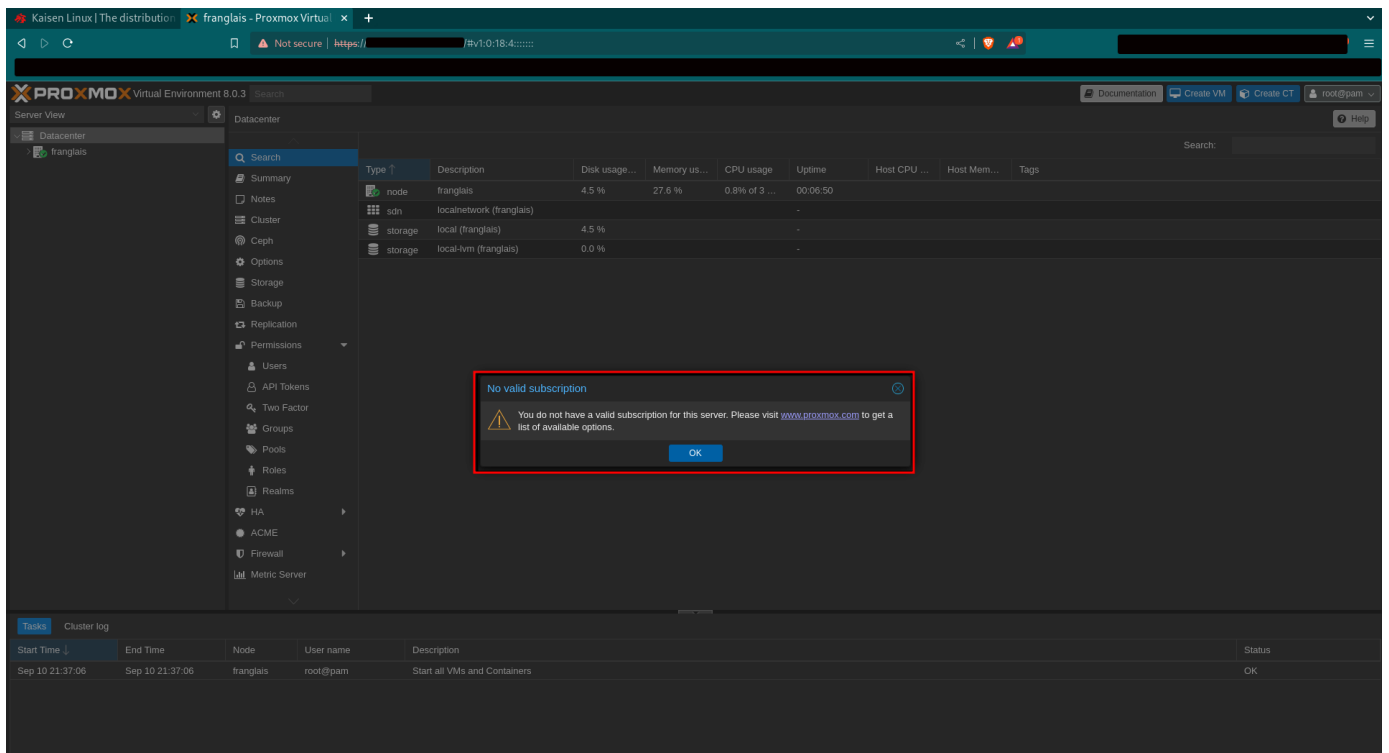
```
-----  
Welcome to the Proxmox Virtual Environment. Please use your web browser to  
configure this server - connect to:  
  
https://          8006/  
  
-----  
  
franglais login:
```

- Because Proxmox uses a self-signed cert, you may get a warning. Accept it and continue



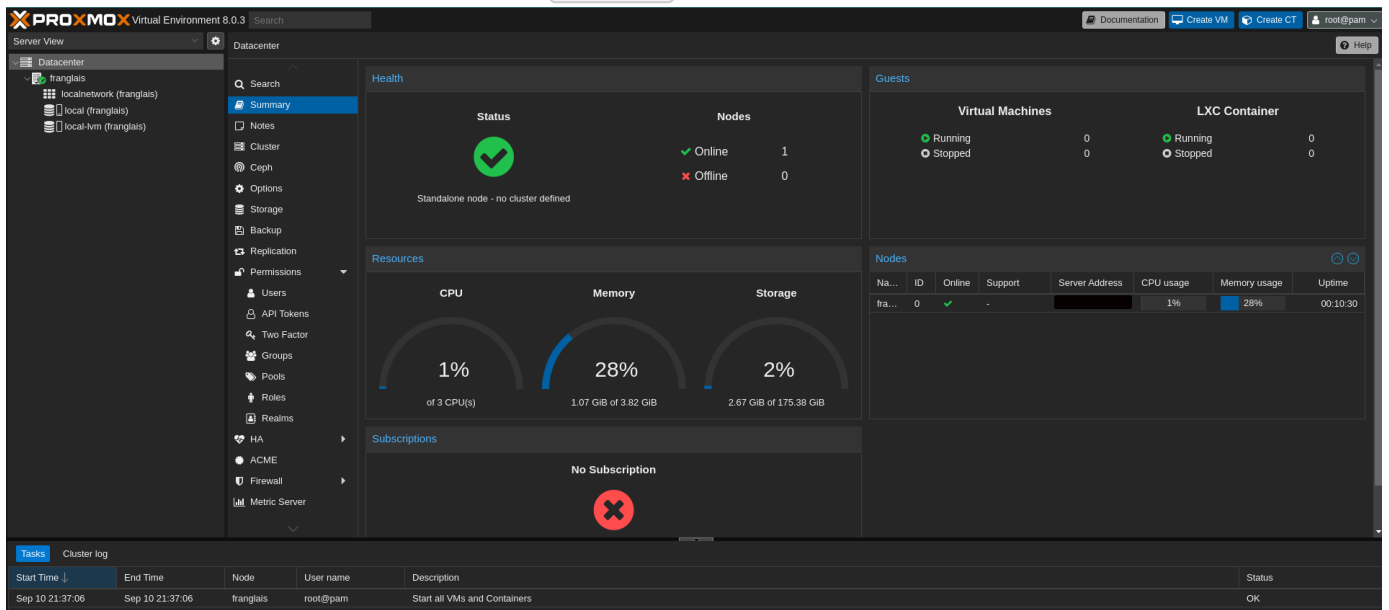
- From your browser of choice, login with the root account credentials you created earlier. Note that you will get a popup for nothaving a valid subscription. That is for the support and is optional - Proxmox is fully featured in the unpaid version as it is FOSS. Click ok to ignore.





Getting Familiar with the Interface

The initial page you are brought to is in the **Datacenter** section. From this console you can see a high-level summary of your server in the **summary** subsection



- In the **users** section you can configure and manage user accounts, password policies, API tokens, authentication and more
- In the **roles** menu you can see built-in roles and their privileges and even create custom roles. Note the granularity of the roles

Datacenter			Help
<div> <div> <div>Search</div> <div>Summary</div> <div>Notes</div> <div>Cluster</div> <div>Ceph</div> <div>Options</div> <div>Storage</div> <div>Backup</div> <div>Replication</div> <div>Permissions</div> <div>Users</div> <div>API Tokens</div> <div>Two Factor</div> <div>Groups</div> <div>Pools</div> <div>Roles</div> <div>Realms</div> <div>HA</div> <div>ACME</div> <div>Firewall</div> <div>Metric Server</div> </div> <div> <div>Create</div> <div>Edit</div> <div>Remove</div> </div> </div>			
Built-In	Name ↑	Privileges	
Yes	Administrator	Datastore.Allocate Datastore.AllocateSpace Datastore.AllocateTemplate Datastore.Audit Group.Allocate Mapping.Audit Mapping.Modify Mapping.Use Permissions.Modify Pool.Allocate Pool.Audit Realm.Allocate Realm.AllocateUser SDN.Allocate SDN.Audit SDN.Use Sys.Audit Sys.Console Sys.Incoming Sys.Modify Sys.PowerMgmt Sys.Syslog User.Modify VM.Allocate VM.Audit VM.Backup VM.Clone VM.Config.CDROM VM.Config.CPU VM.Config.Cloudinit VM.Config.Disk VM.Config.HWType VM.Config.Memory VM.Config.Network VM.Config.Options VM.Console VM.Migrate VM.Monitor VM.PowerMgmt VM.Snapshot VM.Snapshot.Rollback	
Yes	NoAccess	-	
Yes	PVEAdmin	Datastore.Allocate Datastore.AllocateSpace Datastore.AllocateTemplate Datastore.Audit Group.Allocate Mapping.Audit Mapping.Use Pool.Allocate Pool.Audit Realm.AllocateUser SDN.Allocate SDN.Audit SDN.Use Sys.Audit Sys.Console Sys.Syslog User.Modify VM.Allocate VM.Backup VM.Clone VM.Config.CDROM VM.Config.CPU VM.Config.Cloudinit VM.Config.Disk VM.Config.HWType VM.Config.Memory VM.Config.Network VM.Config.Options VM.Console VM.Migrate VM.Monitor VM.PowerMgmt VM.Snapshot VM.Snapshot.Rollback	
Yes	PVEAuditor	Datastore.Audit Mapping.Audit Pool.Audit SDN.Audit Sys.Audit VM.Audit	
Yes	PVEDatastoreAdmin	Datastore.Allocate Datastore.AllocateSpace Datastore.AllocateTemplate Datastore.Audit	
Yes	PVEDatastoreUser	Datastore.AllocateSpace Datastore.Audit	
Yes	PVEMappingAdmin	Mapping.Audit Mapping.Modify Mapping.Use	
Yes	PVEMappingUser	Mapping.Audit Mapping.Use	
Yes	PVEPoolAdmin	Pool.Allocate Pool.Audit	
Yes	PVEPoolUser	Pool.Audit	
Yes	PVESDNAdmin	SDN.Allocate SDN.Audit SDN.Use	
Yes	PVESDNUser	SDN.Audit SDN.Use	
Yes	PVESysAdmin	Sys.Audit Sys.Console Sys.Syslog	
Yes	PVETemplateUser	VM.Audit VM.Clone	
Yes	PVEUserAdmin	Group.Allocate Realm.AllocateUser User.Modify	
Yes	PVEVMAAdmin	VM.Allocate VM.Audit VM.Backup VM.Clone VM.Config.CDROM VM.Config.CPU VM.Config.Cloudinit VM.Config.Disk VM.Config.HWType VM.Config.Memory VM.Config.Network VM.Config.Options VM.Console VM.Migrate VM.Monitor VM.PowerMgmt VM.Snapshot VM.Snapshot.Rollback	
Yes	PVEVMUser	VM.Audit VM.Backup VM.Clone VM.Config.CDROM VM.Config.CPU VM.Config.Cloudinit VM.Console VM.PowerMgmt	

- The **Firewall** menu allows you to configure firewall options to further secure your Proxmox server

Managing your Proxmox server

- In the **user** section, you have more system information and a shell to interact with your server and administer it

Creating a VM

- Select **Create VM** in the upper right hand corner to create and manage your first VM, or **Create CT** to create and manage a container

- The **Create: Virtual Machine** menu is very intuitive and easily navigates you through the step-by-step of creating a VM, adding to a node or cluster, and allocating resources

Create: Virtual Machine

General
OS
System
Disks
CPU
Memory
Network
Confirm

Node:
franglais
Resource Pool:

VM ID:
100

Name:
TestVM_openSUSE

? Help
Advanced
Back
Next

- Note that the ISO image must already be stored on the Proxmox server. This is done in the local storage on the user node and can be downloaded from your workstation

Create: Virtual Machine

General
OS
System
Disks
CPU
Memory
Network
Confirm

☒ Use CD/DVD disc image file (iso)
Guest OS:

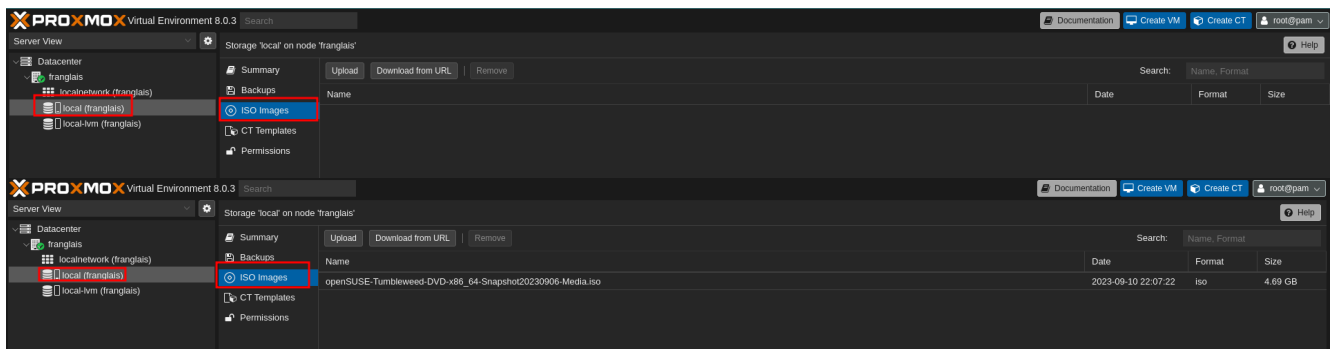
Storage:
local
Type:
Linux

ISO image:
Version:
6.x - 2.6 Kernel

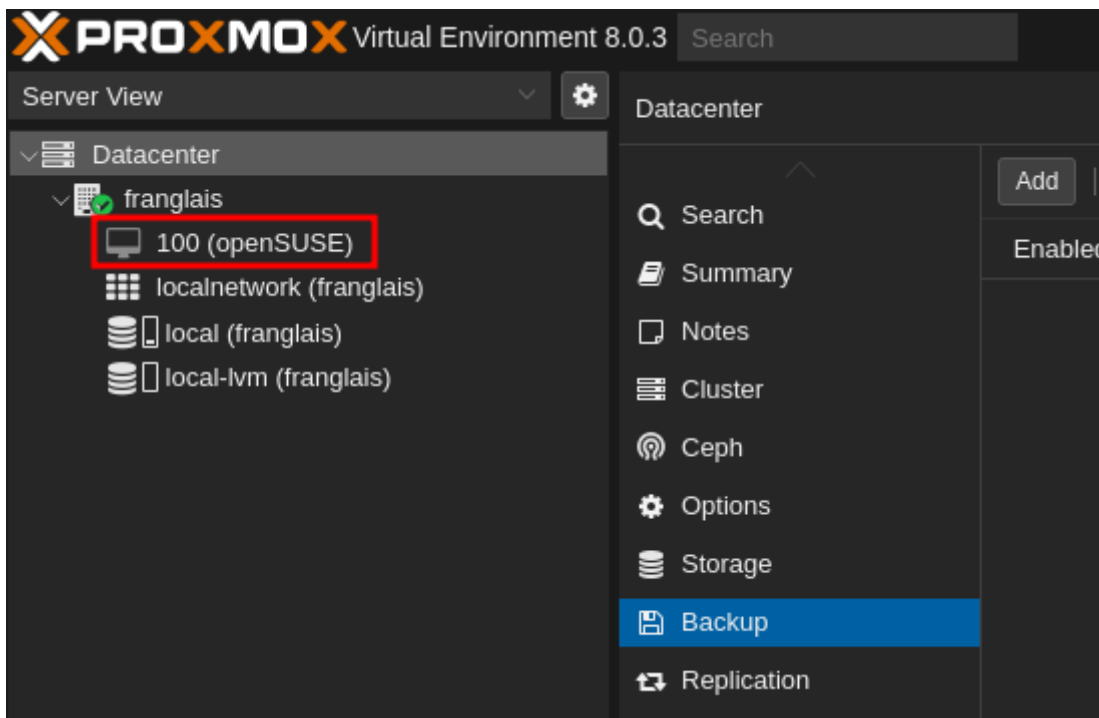
☐ Use physical C
☐ Do not use any

Name	For...	Size
openSUSE-Tumbleweed-DVD-x86_64-Snapshot20230906-Media.iso	iso	4.69 GB

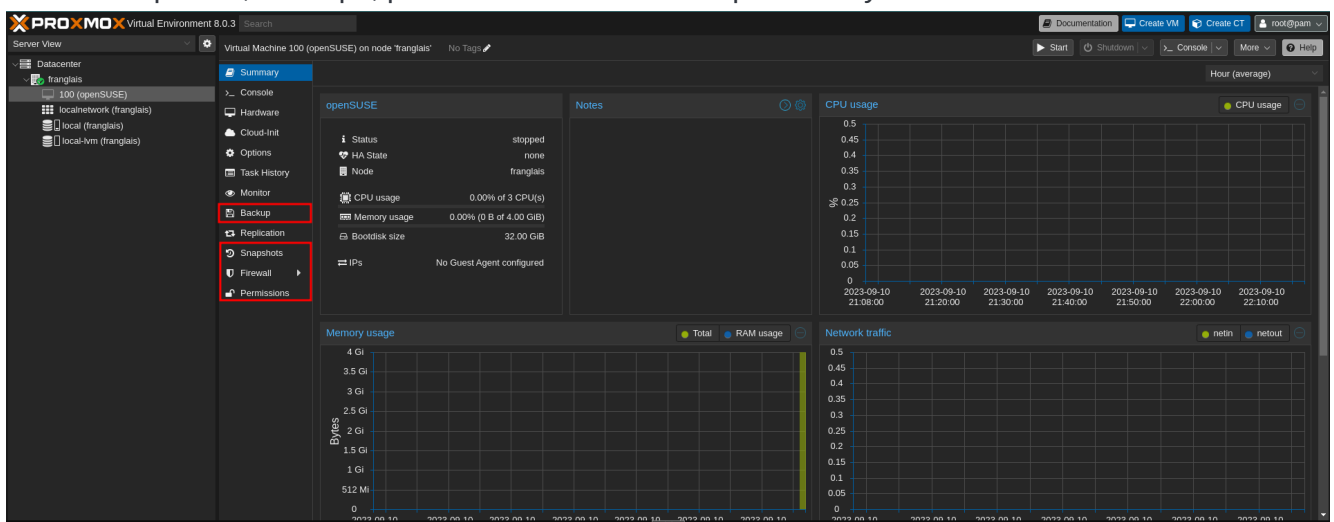
Advanced
Back
Next



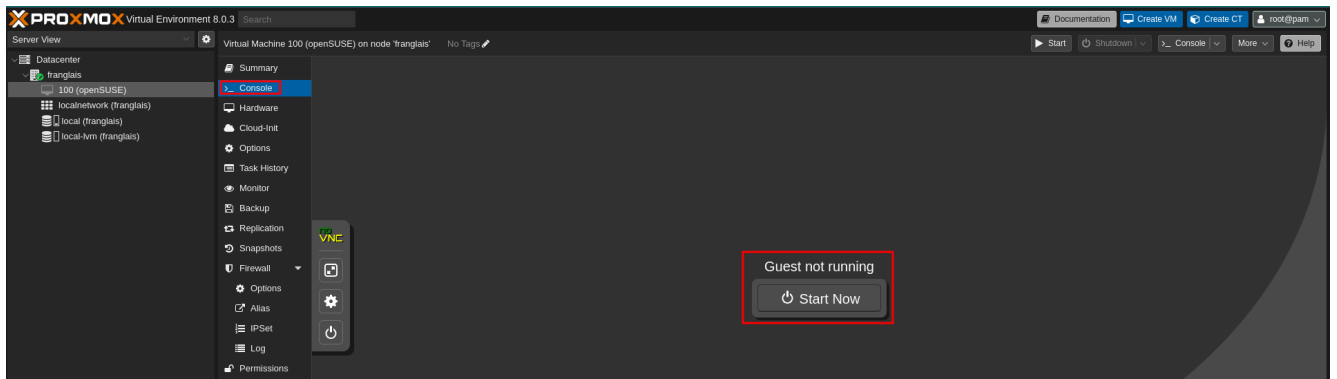
- Once you navigate through the menu and create/configure your VM, it will appear in your menu on the left



- Selecting that machine shows you an overall dashboard that gives you high level VM statistics as well as snapshots, backups, permissions and firewall options for your new VM



- Selecting **console** on the left or **start** at the upper right will give you the option to start your machine if you did not configure it to automatically start up on boot



- From there, interact with your VM !!

