

# Proxmox

## How do I make my VMs accessible via a bridge?

Note: For information about the gateway, netmask, and IP address, see your customer account.

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## Explanation

A bridge is created in Proxmox to make the VMs on the host system accessible via an additional IP. **The network configuration for a VM on the host system is described here.**

There are 2 ways to create a bridge in Proxmox:

1. via the ssh console
2. via the web interface

### 1. via the SSH console

1) Log in to your server via SSH.

2) Check which network interface is used. To do this, execute the command "**ip r s | grep default**".

```
ip r s | grep default
default via 192.168.178.1 dev eth0 proto static metric 100
```

**eth0 -> the network interface used. The main IP of your server is also configured here.**

3) Now the bridge is created via the file `/etc/network/interfaces`. The network configuration looks like this:

```
cat /etc/network/interfaces
auto eth0
iface eth0 inet static
    address 192.168.178.1
    netmask 255.255.255.0
    gateway 192.168.178.1
    dns-nameservers 192.168.178.1
```

### \*\*\*Important\*\*\*

Please note that you replace "**eth0**" in the example configuration with your previously queried network interface, otherwise you will lock yourself out of your system. Also the line "**iface eth0 inet manual**" (with your network interface) must be present, so that your server is accessible in the connection.

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## 2. Via the web interface

- 1) Open the Proxmox web interface: <https://<Main-ipv4-IP>:8006/>
- 2) Navigate on the left side to: **datacenter** -> "Your host system".

The screenshot shows the Proxmox web interface for node 'srv10120'. The left sidebar is expanded to 'Datacenter' > 'srv10120'. The main content area displays the 'Storage' section with a table of storage configurations.

Type ↑	Description	Disk usage...	Memory us...	CPU usage	Uptime
storage	local (srv10120)	1.6 %			-
storage	mein_storage (srv10120)	0.0 %			-

- 3) Now select "Network".

The screenshot shows the Proxmox web interface for node 'srv10120' with the 'Network' section selected. The left sidebar is expanded to 'Datacenter' > 'srv10120' > 'Network'. The main content area displays a table of network devices.

Name ↑	Type	Active	Autostart	VLAN a...	Ports/Slaves	Bond Mode	CIDR	Gateway
eno5np0	Network Device	Yes	No	No			10.10.10.0/24	10.10.10.1
eno6np1	Network Device	No	No	No				

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4) Now double-click on the network interface and delete all entries.

**Do NOT save the change yet, because you would lock yourself out. Please follow the steps to the end.**

5) Now the bridge is created. To do this, click on "Create" and select "Linux Bridge".

Server View Node 'srv10120'

Search

Create Revert Edit Remove Apply Configuration

	Active	Autostart	VLAN a...	Ports/Slaves	Bond Mode	CIDR	Gateway
Linux Bridge							
Linux Bond							
Linux VLAN							
OVS Bridge							
OVS Bond							
OVS IntPort							

Pending changes (Either reboot or use 'Apply Configuration' (needs ifupdown2) to activate)

```
--- /etc/network/interfaces      2021-01-27 14:30:15.921620378 +0100
+++ /etc/network/interfaces.new  2021-01-27 14:53:04.635651542 +0100
@@ -14,9 +14,7 @@
 auto lo
 iface lo inet loopback

-iface eno5np0 inet static
-   address 10.10.10.1/32
-   gateway 10.10.10.1
+iface eno5np0 inet manual
+   pointopoint 10.10.10.1 10.10.10.2
```

6) The following entries should be made there:

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Create: Linux Bridge

Name:

IPv4/CIDR:

Gateway (IPv4):

IPv6/CIDR:

Gateway (IPv6):

Autostart:

VLAN aware:

Bridge ports:

Comment:

Advanced

Name: vmbr0  
IPv4/CIDR: Main-IP of the host system  
Gateway (IPv4): Gateway of the host system  
IPv6/CIDR: IPv6 Adresse of the host system  
Gateway (IPv6): IPv6 Gateway of the host system  
Autostart: enable  
VLAN aware:  
Bridge ports: Network interfaces of the host system

7) If you have now made all the settings and checked them again, restart the server via the "Restart" item at the top right of the screen.

The Server should be reachable now.

## Important for bridging setup to work

To make the Bridging setup to work, you need to change the routing of the additional ip you want to use in a virtual machine.

Go to the control center of your server in the customer panel and set the following setting for the correct additional ip:

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## Netzwerk-Konfiguration (IPv4)

**Netzadresse** 217.79.181.0

**Gateway** 217.79.181.1

**Subnet** 255.255.255.255 /32

**Anbindung** 1000 MBit/s

**Failover-IP** Keine Failover-IP zugewiesen

**IP-Adresse** 217.79.181.2 **Hauptadresse**  
5.104.108.136  
5.104.107.190

Konfiguration

IP-Adresse hinzufügen

Failover-IP-Verwaltung

RDNS Verwaltung

Bandbreite verwalten

<input type="checkbox"/>	IP-Adresse	Typ	Konfiguration
<input type="checkbox"/>	217.79.181.2	Primär	
<input type="checkbox"/>	5.104.107.190	Zusätzlich	Host-Route Virtualisierung
<input type="checkbox"/>	5.104.108.136	Zusätzlich	Host-Route Virtualisierung
Für ausgewählte IPs übernehmen:			Host-Route Virtualisierung

Änderungen übernehmen

## The VM is then configured as follow:

```
# The primary network interface
allow-hotplug ens18
iface ens18 inet static
address <additional IP>
netmask 255.255.255.255
```

```
up ip route add <host system gateway> dev ens18
up ip route add default via <gateway of host system>
down ip route del default
down ip route del <gateway of the host system>
```

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Please make sure that you change the name of the interface **ens18** to the interface name inside the virtual machine as well.

## Important for Debian 7 with Proxmox

If you want to run VM's and CT's at the same time, change the following entry via SSH:

Datei: `/etc/vz/vz.conf`

Look for the following entry there:

`NEIGHBOUR_DEVS=detect`

and replace it with this

`NEIGHBOUR_DEVS=all`

Unique solution ID: #1476

Author: Bettina Brauer

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