

# openQRM Frequently Asked Questions (FAQ)

---

This FAQ is brought to you by openQRM Enterprise [<http://www.openqrm-enterprise.com/>]

Document Version : 24.02.2010

## openQRM Enterprise GmbH

Berrenrather Straße 188c

50937 Köln / Germany

Telefon : +49 (0) 221 995589-10

Fax : +49 (0) 221 995589-20

Mail : [info@openqrm-enterprise.com](mailto:info@openqrm-enterprise.com)



---

### Q: Initialization via the WebInstaller fails

A: This can have 2 reasons :

1. The database credentials are given in the WebInstaller are incorrect or the database is not running/reachable
2. The hostname of the openQRM system is still connected to the loopback interface in /etc/hosts
  - fix for 1)

Make sure you can reach the database using the given credentials

- fix for 2)

Make sure the /etc/hosts contains a line with the ip-address dedicated for openQRM plus the hostname of the system

---

### Q: How to change the openQRM Servers Ip-address ?

A: Changing the Ip-address of the openQRM Server changes the setup of the openQRM management network. It can be done manually by following the steps below :

- Stop all active appliances
- Poweroff all active resources
- Take a state backup using the /usr/share/openqrm/bin/openqrm util
- Stop the openQRM Server
- Change the Ip-address of the openQRM Server network interface configured in /usr/share/openqrm/etc/openqrm-server.conf
- Adapt the database entry id 0 in the "resource\_info" table to the new Ip-address
- Depending on the openQRM environment adapt the new Ip-address in the configuration for the

following plug-ins :

- dhcpd - Adapt the network configuration according to the new Ip-address setup in /usr/share/openqrm/plugins/dhcpd/etc/dhcpd.conf
  - tftpd - Adapt the "openqrm=[openQRM-Server-ip]" in all files within the directory /usr/share/openqrm/tftpboot/pxelinux.cfg
  - dns - Adapt the named-configuration and zone files in /etc/bind/\* and /etc/bind/zones/\*
  - cloud - Adapt the location of the soap service location in /usr/share/openqrm/web/boot-service/cloudadmin.wdsl + /usr/share/openqrm/web/boot-service/clouduser.wdsl
- 
- Start the openQRM Server
  - Power on all resources, depending on the new dhcpd configuration the resources will now adapt to the new setup of the openQRM management network automatically
  - Depending on the network change it may be required to adapt the service configuration on the server-images
  - Start the appliances again

Please notice that it is recommended to setup the application-services on the server-images of the appliances to use a separated public network. That way changing the management network does not require any changes on the image setup.

---

**Q: Resources integrated via "local-server" did not start the openQRM Client service**

A: In most cases this is caused by starting the integrated systems before the openQRM Server is up + running.

- possible fix 1)

Make sure the openQRM Server is always started first, then all managed systems.

- possible fix 2)

Make sure the openQRM Server is High-available (please check the High-availability Setup)

---

**Q: PXE booting a onboard Broadcom Net Extreme II NICs**

A: If you like me have a server with onboard Broadcom Net Extreme II NICs and no option to boot from off board NIC, these steps might spare you some hours of agony. Especially if you like me haven't paid attention to the developments in kernel booting the last couple of years. The problem here is that the bnx2 driver need to load custom firmware to the NICs before they will work. The loading requires an extra module and hotplug to work. Here goes:

Go to the tftpboot directory and create a working directory:

```
#> cd /usr/share/openqrm/tftpboot/boot
#> mkdir tmpinit
#> cd tmpinit
```

Unpack the default initrd image:

```
#> gunzip -c ../initrd-default.img | cpio -i -d -H newc --no-absolute-filenames
```

grab the firmware\_class module (so we can load firmware) and the firmware:

```
#> cp /lib/modules/2.6.26-2-amd64/kernel/drivers/base/firmware_class.ko lib/modules/2.6.26-2-amd64
#> mkdir /lib/firmware
#> cp /lib/firmware/bnx2* lib/firmware/
```

edit init:

```
#> vi init
```

add these lines:

```
mkdir /dev/pts
mount -t devpts devpts /dev/pts
mount -t sysfs sysfs /sys
echo /lib/udev/firmware.agent > /proc/sys/kernel/hotplug
mdev -s
```

right after these lines:

```
# main
mount -t proc proc /proc
```

Finally build the initrd image:

```
#> find . -print0|cpio -0 -H newc -ov | gzip -c > ../initrd-default.img
```

Tested on a HP DL380G6 with Debian 5.0 (thanks to Ole Kaas)

---

Copyright 2010, Matthias Rechenburg matt@openqrm-enterprise.com [mailto:matt@openqrm-enterprise.com]

This FAQ is brought to you by openQRM Enterprise [http://www.openqrm-enterprise.com/]

**openQRM Enterprise GmbH**

Berrenrather Straße 188c

50937 Köln / Germany

Telefon : +49 (0) 221 995589-10

Fax : +49 (0) 221 995589-20

Mail : [info@openqrm-enterprise.com](mailto:info@openqrm-enterprise.com)

