

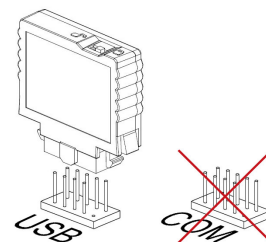
# Quick Start

## Open-E iSCSI-R3 Enterprise

Before using Open-E software you should have hard disk drives connected to SATA, SAS, SCSI, ATA ports on motherboard or Hardware-RAID and LAN Card already in your server. You can use external Fiber Channel storage devices as well.

### Step 1. Install the Open-E iSCSI-R3 Enterprise USB flash module

Make sure that your motherboard has extended USB 2.0/1.1 port connector. Check if module was properly inserted (USB socket lacks one pin). Insert the Open-E USB flash module into the extended USB 2.0/1.1 port connector on the motherboard, such as on figure:



- **note** It is easy to mix USB with COM port. Both have same or similar connector. Please read the motherboard user manual or the connector description on the motherboard to localize the USB port.

### Step 2. Initialize the hardware

Connect the keyboard and monitor (they will be needed for setup only). Later you can run the server in the "headless mode" (without keyboard and monitor).

- **note** Please set the BIOS to boot from USB device. If in the system is more then one USB device, make sure that system boots from PQI Disk-on-Module.
- **note** Some motherboards require following setting in bios relating "USB Mass Storage Device Configuration" in order to boot system from USB, or to work properly with USB:
  - Legacy USB device: enabled,
  - Emulation Type: Hard Disk,
  - USB Mass Storage Reset Delay: 10 sec.,
  - USB V1.1 in case with USB 2.0 can boot but still generates errors.
- **note** Please check in the motherboard BIOS if the "headless mode" is enabled. In some cases computer will not boot, if the keyboard is not connected. You'll find more about headless mode in the motherboard BIOS manual.

### Step 3. RAID controller configuration

If system has Hardware RAID, please create RAID array in RAID controller setup. Please refer to the RAID controller manual. You do not have to install drivers or RAID array monitoring and maintenance software. If system has only "on motherboard BIOS RAID", please do not use it. Such on motherboard RAID are not supported. Please use build-in software RAID in iSCSI-R3 web GUI.

### Step 4. Time setting

Make sure you have proper date and time settings. The settings can be checked and changed by using the following key sequence: left "Ctrl" + left "Alt" + "T" and Enter "Time Configuration" and use manual setting.

- **note** Wrong time or time zone settings will cause malfunction of the system !

## Step 5. Preparing for the remote administration of Open-E iSCSI-R3 Enterprise

After the boot process has finished Open-E iSCSI-R3 Enterprise will show you information on its network settings. The standard IP setting of the Open-E iSCSI-R3 Enterprise is:

- IP address 192.168.0.220 and
- Netmask 255.255.255.0.

This setting can be changed manually by using the following key sequence: left “Ctrl” + left “Alt” + “N”

## Step 6. Logging into Open-E iSCSI-R3 ENTERPRISE

Connect to Open-E Data Storage Server via network using any standard browser by typing the IP address into the URL entry line: <https://192.168.0.220> or <https://iscsi>. Log into Open-E Data Storage Server using the standard password: "admin". Now you can set all server parameters to get started.

## Step 7. Create software RAID (optional)

- For creating a RAID array, please go to menu “SETUP” → “S/W RAID”,
- Here all available units are listed. A unit can be a single hard disk or a disk array (if using a hardware RAID controller),
- Software RAID can be created over a single hard disk or hardware disk arrays,
- To create a software RAID, please select units, choose the RAID level and click on “create” button.

## Step 8. Preparing disks

- In the menu, please select the “CONFIGURATION” → “volume manager” and “Unit manager” function. You find a list of available drives/arrays (units) that can be used,
- While creating the “new volume group”, the system adds selected units only. You can use default volume group name or change it. After creating, the page is reloaded and the “Status” field should show your drives/arrays as "in use",
- It is possible to combine two (or more) units into one Volume Group,
- Next, by clicking on the right-hand side of the tree diagram on volume group name e.g. “vg00” and use function “Volume Manager” you can create new iSCSI volume,
- If you want to use snapshot feature you should create snapshot volume.

## Step 9. Defining targets

- After creating iSCSI volume (in step 8) , please choose “CONFIGURATION” → “iSCSI target manager”, in “Create new target” function click “apply” button to create a new iSCSI target,
- Next, in the diagram “Targets”, click on the previously created target name e.g. “target0” and in “Target volume manager” function click “add” button by the desired logical volume,
- If you want to restrict access to the target please refer to the manual.

- **note** Please create as many logical volumes, as many separate iSCSI volumes (LUNs) are required (in step 8).

- **example** If you create 5 logical volumes, you may create one target with 5 LUNs, or 5 targets with 1 LUN every, or 2 targets, where i.e. 3 LUNs belongs to first target and rest 2 LUNs belongs to the second one.

## Step 10. Exploring targets

Now you can connect with your iSCSI initiator and use your targets. Example (Microsoft Windows environment). Please download Microsoft iSCSI Initiator and follow instructions:

- Start the software and add targets in menu Discovery and enter IP Address of Open-E Data Storage System and Port (default 3260),
- In menu Targets please “Log On” into already added target,
- Please go to the Computer Management, and start Disk Manager, where you will be able to partition and format new iSCSI drives to your operating system.

Please register your Open-E iSCSI-R3 Enterprise  
<http://www.open-e.com/register/>