QUICK START DSS V6

DSS V6 is a standalone bootable storage OS. The software for the Lite version and the regular version of DSS is the same. When you install DSS V6 you can alternatively choose to run the full version in trial mode, use a full version product key, or use a Lite product key.

If you have the zip file you can use Windows or Linux to copy the files to any media you wish to use to boot DSS V6. Typically this is a USB flash drive or a small dedicated disk drive for the DSS V6 software. The logical volumes that DSS manages and shares are on separate drives from the boot media.

The boot media should be either FAT or FAT32. USB flash drives should have a wear leveling capability for long term use, or a USB flash drive failure can occur because of the limitations on writing to any flash memory device.

If you have the ISO image, use a CD creation utility to burn a bootable CD from which you may run or install DSS V6. When you run DSS V6 from a CD it is not able to save some configuration data, such as the DSS V6 network settings and product key, so booting and running from writable media is preferable. Volume group information is always saved on the drive(s) where the volume group resides.

DSS V6 has a boot option to install DSS V6 on a writable FAT or FAT32 Partition or a RAID LUN using the Installer. The Installer automatically creates a 2GB partition on the selected hard drive or you should use a pre-configured RAID LUN (2GB) for the DSS V6 software installation.

The following RAID controllers are supported as a bootable media: MegaRAID, Smart Array, 3ware, Adaptec, ICP vortex, and Areca.

Installing or booting DSS V6 from a USB flash drive or other writable media starting with the ZIP file

Please uncompress the downloaded zip file onto an empty FAT or FAT32 formatted USB-flash drive in Windows, Linux or another OS. If you encounter trouble use FAT for the USB drive and put your system BIOS into legacy mode on the USB port.

It is possible to use other boot media like IDE, SATA or RAID disks. (2GB media size required). After uncompressing the zip file on the USB-stick or other media, the root directory must ONLY contain the following directories: bxxxx, boot and file mmenu_upd.sh where: xxxx is the software build number.

- To make the boot media bootable, enter the directory called "boot" and run the bootinst.exe (in Windows) or bootinst.sh (in Linux). Administrator rights or 'root' login will be required for this operation.
- Continue to boot your storage server with your media.

Installing or booting DSS V6 from a CD starting with the ISO File:

The ISO-File must be burned on a CD with your favorite burning software. (For example: Nero Burning ROM - option: "Burn Image", or ISORecorder, etc.)
- Please set the BIOS to boot from your CD/DVD-ROM drive.
- A USB CD/DVD-ROM can be used as well if your system supports it for booting.

Booting DSS:

The first boot menu will show the software version. You may press enter or it will skip automatically within 5 seconds.

You will see an option to run the memory test on the system by choosing "Run Memtest utility" in the first menu.

In the second menu select the third option to run the software installer to install DSS V6 on writable media in your system:

- 32bit system (2.6.27)
- 64bit system (2.6.27)
- Run software installer

The software defaults to 64 bit system if no key is pressed within 5 seconds. The default boot architecture (32 or 64 bit) can be set and saved once the software is installed. On a 32 bit system the boot will fail unless 32 bit system is selected.

The software defaults to the trial version. DSS V6 can be used for evaluation up to 60 days with the trial product key. When you decide to purchase the full version or switch to the Lite version, you can continue to use the software and all your data and settings will remain intact

In order to convert the full trial version into Lite or the full version, please enter your DSS V6 product key in the WEB GUI from menu: HELP-> about Data Storage Software V6 -> Extensions keys loader.

Storage Configuration:

Step 1. Initialize hardware

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

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

NOTE   **Please check the motherboard BIOS if the "headless mode" is enabled. In some cases systems will not boot if the keyboard is not connected. You'll find more about headless mode in the motherboard's BIOS manual.**

Step 2. RAID controller configuration

If the system has a Hardware RAID, please create the RAID array in RAID controller setup. Then refer to the RAID controller's manual. You do not have to install drivers or RAID array monitoring and maintenance software. If system has a "motherboard BIOS RAID", please do not use it. Motherboard BIOS RAID's are not supported. Please use the built-in software RAID in the DSS V6 web GUI.

Step 3. Time setting

Make sure you have the 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 the manual settings.

NOTE   **Wrong time or time zone settings will cause a malfunction of the system!**

Step 4. Preparing for the remote administration

After the boot process has finished Open-E Data Storage Software V6 will show you information concerning its network settings. The standard IP Address setting for the Open-E Data Storage Software V6 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 5. Logging into Open-E Data Storage Software V6

Connect to Open-E Data Storage Software V6 via network using any standard browser by typing the IP address into the URL entry line:

- https://192.168.0.220 or
- https://dss

Log into Open-E Data Storage Software V6 using the standard password: "***admin"***
Now you will be able to set all server parameters to get started.

NOTE   **Password checking is case-sensitive.**

Step 6. Create software RAID (optional)

- To create a SW RAID array, please go to the menu in "SETUP" -> "S/W RAID".
- All available units will be 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 the units then choose the RAID level and click on the "create" button.

Step 7. Preparing disks

- In the menu, please select the "CONFIGURATION" ->"volume manager" -> "volume groups" 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 volume group, the page is reloaded and the "Status" field will 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 left-hand side of the tree diagram for the volume group name e.g. "vg00" and now you can use the function "Volume Manager" to create a new Fiber Channel, iSCSI and or NAS volume.
- If you want to use the snapshot feature you can create a snapshot volume as well.

NAS Configuration:

Step 8. Preparing shares

In the menu, please select "CONFIGURATION" -> "NAS settings" and select the Authentication method. Next, in the menu from "NAS resources", select "Shares". You should configure at least one user and group, and grant the user access to the share or change access to the share for "Guest". Further details can be obtained from the manual.

Step 9. Exploring shares

Now you can start to explore shares using "network neighborhood" or typing "\\192.168.0.220" or "\\dss" in your browser. Please replace the defaults with your own settings accordingly.

iSCSI Target Configuration:

Step 10. Defining targets

- After creating an iSCSI volume (from step 7) , please select "CONFIGURATION" -> "iSCSI target manager", in the "Create new target" function click "apply" button to create a new iSCSI target.
- Next, click on the previously created target name e.g. "target0" and in the "Target volume manager" function click the "+" sign button by the desired logical volume.
- If you want to restrict access to the target please refer to the manual.

EXAMPLE   **If you create 5 logical volumes, you may create one target with 5 LUNs, or 5 targets each with 1 LUN, or 2 targets, for example 3 LUNs belong to first target and remaining 2 LUNs can belong to the second one. To create many iSCSI logical volumes (LUNs) refer to step 7.**

Step 11. 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 the targets in menu Discovery and enter IP Address of Open-E Data Storage Software and Port (default 3260).
- From the menu of Targets please "Log On" to new added target.
- Now access the Windows "Computer Management" feature and start the Disk Manager function, where you will be able to partition and format your new iSCSI drives for your operating system.

Please register your copy of Open-E Data Storage Software V6
http://www.open-e.com/register/