



ENTERPRISE CLASS STORAGE OS for **EVERY** BUSINESS

### IMPORTANT NOTE

DSS V6 is a standalone bootable storage OS. The software for the Lite version and the regular version of DSS V6 is the same; however the Lite version has a limited feature set. After installation and boot, DSS V6 works as the full version in trial mode. Later you can convert the trial mode to the full or Lite version by entering the appropriate key.

### NOTE

Starting with both the zip and ISO file you can boot DSS V6 or install it onto the storage server hardware. We recommend installing the software onto a hard drive, SSD, or a small Logical Unit (volume) in your RAID. The following RAID controllers are supported as a bootable media: MegaRAID, Smart Array, 3ware, Adaptec and Areca.

Only 2GB is needed for the DSS V6 software, and this drive or Logical Unit cannot be used for your storage volumes. USB flash drives are not recommended for long term use due to reliability issues.

As mentioned above, the DSS V6 software has a boot option to install DSS V6 on a writable FAT or FAT32 partition or a RAID Logical Unit. The Installer automatically creates a 2GB partition on the selected media and copies the DSS software image onto it.

Whole space of a destination media will be reserved for Open-E DSS V6. You will NOT be able to use remaining space for storage purposes. Please use as low capacity device as you can (but not less than 2GB).

## Preparing a USB flash drive as the boot media/installer 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.

After uncompressing the zip file on the USB-stick 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 USB-stick bootable, enter the directory called "boot" and run the bootinst.exe (in Windows) or bootinst.sh (in Linux). In Windows please use "safe hardware remove" function and sync in Linux before removing the USB flash drive from the system.
- Continue to boot your storage server with your media.

## Preparing a CD as the boot media/installer with the ISO file:

The ISO-File must be burned onto 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.

### NOTE

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. The ISO image can be used with a CD creation utility to burn a bootable CD which can be loaded into the storage server CD drive. Then you can boot from this CD to run DSS V6 or select to use the installer to install the DSS V6 software on a drive or Logical Unit in the system.

## Booting DSS

Plug your media into the destination environment. The first boot menu will show the software version. You may press enter or it will skip automatically within 5 seconds.

The second menu allows you to select either 32 or 64 bit architecture to boot DSS V6. The default is 64 bit architecture and will be chosen automatically after 5 seconds if no key is pressed. On a 32 bit system the boot will fail unless 32 bit system is selected. The default boot architecture (32 or 64 bit) can be set and saved after the software is installed. The third menu option is the interactive DSS V6 installer utility. Select this to install DSS V6 on writable media in your system:

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

When you run the installer, please follow the instructions. Finally, reboot your storage server from new media (set you BIOS boot options back from CD/DVD/USB to the media where you installed the software).

### NOTE

The software defaults to the trial version. DSS V6 can be used for evaluation up to 60 days with the default 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. You will see an option to run the memory test on the system by choosing "Run Memtest utility" in the first menu. In order to convert the 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.

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. Instead please use the built-in software RAID in the DSS V6 web GUI.

### Step 3. Preparing for the WEB GUI 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 4. Entering product key and logging into Open-E DSS V6

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

- <https://192.168.0.220> or
- <https://dss>

Next, the window for entering the product key will appear. If you have one already please enter and click apply button. After restart, open the web GUI with your browser again. 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

If you don't have product key yet you can use one of the three links on the right (60 day trial version, FREE 2TB Lite version or buy the full version of the product). Password checking is case-sensitive.

### Step 5. Wizard initial setup

Follow wizard initial setup steps:

- Language settings,
- Password,
- IP address,
- Time zone settings,
- Set time,
- Server name.

### 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 data volumes

- 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 use the function "Volume Manager" to create iSCSI or NAS volume (depending on your needs).
- 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.

#### NOTE

Workgroup name configured in Open-E Data Storage Software V6 must match your network settings. Otherwise your configured share will not be visible in the network neighborhood.

## 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 run 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/>

**Copyright** (c) 2004-2011 Open-E, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Open-E, Inc.

**Trademarks** The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

**Disclaimer** Open-E, Inc. assumes no responsibility for errors or omissions in this document, and Open-E, Inc. does not make any commitment to update the information contained herein.