IMPORTANT NOTE:	**Properly executed upgrades will preserve user data, but first it is strongly recommended to backup your data.**

Step 1.   Preparing for the upgrade and saving your settings

- Product upgrades to Open-E DSS V7 can only be purchased for DSS V6. It is required to provide the product serial number and licensed storage capacity while placing the purchase order for the DSS V7 upgrade.

    NOTE: The purchased Open-E DSS V7 Product Serial Number is new and different from the V6 one. The old DSS V6 Product Key and Serial Number will be de-activated. The purchased support plan for DSS V6 will stay unchanged after the DSS V7 upgrade.

- Proceed to download current LOGs in menu "STATUS" → "hardware" → "Logs".

- Then download the current settings in the GUI menu located in: "MAINTENANCE" → "miscellaneous" → "Save settings".

Step 2.   Checking version upgrade compatibility

Before you start with the new Open-E DSS V7 software image upload, check the following:

- The base DSS V7 product supports Active-Passive Failover and the iSCSI or NFS Failover may be configured similar to DSS V6. If the Active-Active mode is required, you must purchase the Active-Active Feature Pack and follow up with Active-Active setup. If you face any problems, contact the Open-E support team.
- If iSCSI Failover is running, then keep in mind that upgrading from Open-E DSS V6 to DSS V7 with configured Auto Failover will result in **downtime**. It is best to plan a maintenance window for this procedure. After updating to Open-E DSS V7, the configuration for Auto Failover will be removed and you will have to reconfigure it one more time from the beginning. In order to re-configure the iSCSI Failover cluster, read the Active-Passive or Active-Active Quick Start in GUI menu "HELP"→ "help index". In order to re-configure the NFS Failover cluster follow the link: http://www.open-e.com/site_media/download/documents/Open-E-DSS-V7-Active-Active-NFS-Failover.pdf It is important to read the next paragraph below concerning Volume Replication.

- If the Volume Replication is in use, after the upgrade all Volume Replication tasks will be stopped and removed and the mirror server IP settings will be replaced by the new Host Binding Function. You will need to bind hosts in order to re-create and start the Volume Replication tasks in DSS V7. Additionally, all volumes will be set to "*destination*" mode. In case of Active-Passive setup then set all volumes to "*source*" on the *primary* server. In case of Active-Active setup, set "*source*" mode for volumes you have selected to

be active on *node-a*, and for the rest of the volumes set "*source*" mode on *node-b*. Note: A minimum of two volumes are required to configure the Active-Active Failover.

- If NFS Failover is running the "failover_data" volume and the related replication task will no longer be necessary, it is recommended to delete both of them from active and passive nodes. Make sure to stop and delete the replication task first, then set the "failover_data" volume to "source" mode on passive node. Next, remove the replication functionality on both nodes from "failover_data" volume and delete the volume by using Volume Manager.

- If you use iSCSI or Fibre Channel volumes; in case there is a problem with the availability of iSCSI and/or Fiber Channel volumes after upgrading, performing this step can resolve this issue.
  To do this, in the Console screen enter "ctrl-alt-w" → "Tuning options" → "SCST subsystem options" → "Device Identification (VPD) compatibility" and then set the proper VPD version, regarding the following rules below:
  - o In case of updating from version 6.0up45 or lower, then change the Identification Device (VPD) compatibility to SCST VPD 1.0,
  - o In case of updating from versions starting with 6.0up50 and ending at 6.0up90, then change the Identification Device (VPD) compatibility to SCST VPD 2.0,
  - o In case of updating from version 6.0up95 or higher, then change the Identification Device (VPD) compatibility to SCST VPD 2.1.
  After changing the VPD version on the storage server, you must reboot your storage client.

- If the built-in Backup is running, you must stop the backup task in the GUI menu located in "MAINTENANCE"→ "backup" → "Backup tasks".

- If you use IET iSCSI Target solution, after the upgrade you may face iSCSI connectivity problems as the only supported iSCSI Target solution in DSS V7 is SCST. Then contact technical support if further assistance is needed.

- If you are using 32-bit kernel, we recommend to backup all your data and check if the data can be restored properly. After upgrading, re-create all volumes new and restore your data.

Step 3.   Download of the software image

- Once the DSS V6 product upgrade key has been received, then download the TRIAL version of DSS V7 from the Open-E website. Proceed to use the Open-E DSS V7 Trial version from the link below: (Note: You will need to enter your email address and password)
  http://www.open-e.com/account/demo/
  The DSS V7 TRIAL version is available in a ZIP or ISO file.
  Proceed to download the ISO file.

Step 4. Upload new Open-E DSS V7 ISO image and apply new product key

- Then upload the DSS V7   ISO file to the GUI menu located in "MAINTENANCE" → " software update" → "browse". If you use recent software version up97 (build6335) or higher, then apply the new DSS V7 product key as well. In order to apply a new product key, go to the GUI menu ""HELP"→ "about Data Storage Software V6" and in the key field of the function Extensions keys loader enter the purchased upgrade license key. In order to avoid typo mistakes, then use copy & paste method and reboot the server in order to boot with the new DSS V7.
- If you use older software versions, then reboot the server after uploading the DSS V7 ISO-image and enter the new product key after reboot.

Step 5. Checking Volume groups unit status

- Once DSS V7 is started in the GUI menu located in "CONFIGURATION" → "volume manager" → "Vol. groups" units status must show: "**in use"**.

- If the unit status shows "32 bit not supported" status, it means that the DSS V6 was running in a 32-bit kernel or volumes were formatted with a 32-bit kernel. In such case, then select DSS V6 as the default (in GUI "MAINTENANCE" → " software update" → "click on the check icon" so the default sign will appear on the DSS V6 line. After rebooting with DSS V6, proceed to backup all your data and check if data can be restored properly. Next, select the DSS V7 as default and re-create all new volumes and restore your data. In order to re-create the volumes, use the console tools ctrl-alt-x and function "Delete Content of units". After reboot, create new volume group(s) and logical volume(s) in the GUI. Next, restore all your data from backup and restore all settings in the GUI menu: "MAINTENANCE" → "miscellaneous" → "Restore settings".

Step 6. Activating Open-E DSS V7

- DSS V7 requires the user to activate the product. In order to activate, go to the GUI menu "HELP"→ "about Data Storage Software V7", function: Product activation. We do recommend online activation. For online activation it is required to configure the gateway, DNS and TCP outgoing port **10444** opened in the firewall. In case the internet is not available or there is a connection problem, then continue with the offline activation.