Open-E DSS V7 to Open-E JovianDSS Migration Guide

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NOTE:
This guide will help you migrate your NAS data from Open-E DSS V7 to Open-E JovianDSS. Follow the steps carefully to ensure a successful migration.

1 Scenario 1: DSS V7 Single Node to Open-E JovianDSS Single Node Data Migration

Warning:

- Please note that Open-E JovianDSS has higher hardware requirements than Open-E DSSV7. Ensure that your new hardware meets the system requirements for Open-E JovianDSS.
- Use at least a 10Gbps interface.
- **Ensure you have an up-to-date backup of your data.**

Introduction:

This scenario covers the transfer of NAS logical volume/share data from Open-E DSS V7 to Open-E JovianDSS. Repeat the steps for each logical volume/share.

Preparation of the New Environment:

1. **Hardware Requirements Confirmation (Pre-deployment Tests):**
   - **Verify that your new hardware meets the Open-E JovianDSS requirements**.

   Note: Contact the Open-E Support Team if you need help executing this step.
2. **Open-E JovianDSS Installation:**
   - **Open-E JovianDSS Jump Start**.
3. **Open-E JovianDSS Configuration:**
   - Create dataset **vol00** and add share **sh00** with default settings.(please go to shares -> click Add dataset then click on dataset options -> Add share)

NAS Data Migration:

1. **Enable Data Migration Tool on Open-E JovianDSS:**
   - Use **Ctrl-Alt-X** to access the Extended Tools Menu and enable the Data Migration Tool.
2. **Create a New Share on Open-E DSS V7:**
   - Create a new share **sh00** on the NAS logical volume to be replicated to Open-E JovianDSS.
3. **Enable Data Replication Agent on Open-E DSS V7:**
   - Enable the Data (file) replication agent in Open-E DSS V7 NAS settings.
4. **Create a Snapshot on Open-E DSS V7:**
   - In Volume Manager, create a new snapshot and assign it to the appropriate NAS logical volume.

5. **Create Data Replication Task on Open-E DSS V7:**
   - Go to Maintenance > Backup > Data (file) replication and create a task named **rep1**. Use the new share **sh00** as the source and destination share **sh00** on Open-E JovianDSS.
6. **Start Replication:**
   - Start the replication task and monitor the status in the Tasks tab.

iSCSI Data Migration Using a Proxy System:

1. When you have properly created a zpool in Open-E JovianDSS based on our guide **Open-E JovianDSS Jump Start (point 3.3)**, the GUI shows the zpool status of the recently created zpool. To access the zpool setup menu, click on the down arrow button in the middle bottom of the zpool status section.
2. **Create a New iSCI Target in Open-E JovianDSS:**
   - Next, select “iSCSI targets” and click the “Add new target” button. In the “Target Wizard”, you can enter a new “Target name”. If the default target name is OK, click the “Next” button.
3. **Create a New zvol in Open-E JovianDSS:**
   - In the Zvols step, click “Add new zvol”. iSCSI Volumes are called zvols. In “Zvol properties” enter the name of a new Zvol and the appropriate size and click “Add” button.
   - After creating the new Zvols, click the “Next” button
4. **Set up the Target Security Options in Open-E JovianDSS:**
   - In the “Access” step, you can change the security options of the targets. After making these changes click the “Next” button.
   - In “Summary” you can see an overview of the configuration of the target. If the settings need to be modified, click the “Back” button and make the required changes. If it is correct, click “Add”.
5. **Connect iSCI Initiator Open-E JovianDSS:**
   - After completion of the “Target wizard” return to the “Storage”. Below you will see the “iSCSItargets” you can see an overview of the configuration targets.
   - It is now time to connect with your iSCSI initiator and use your targets.

Example (Microsoft Windows Environment).

6. **Run the Microsoft iSCSI Initiator:**
   - Start the software iSCSI initiator, add the targets in the “Discovery” menu, and enter the IP Address of Open-E JovianDSS and Port (default 3260).
   - From the “Targets” menu “Log on” to a target.
   - Now access the Windows “Computer Management” feature and start the Disk Manager function, where you can partition and format the new iSCSI drives for your operating system.
7. **Follow the same steps in Open-E DSS V7.**
8. When you see both Open-E DSS V7 and Open-E JovianDSS disks, copy the data using Windows Explorer.

Datastores Migration Using the Hypervisor:

1. Make sure your data storage from Open-E DSS V7 is available and reachable on the Hypervisor side.
2. **Create data storage resources on Open-E JovianDSS**
   - To migrate VMs using the Hypervisor tools, creating data storage OpenEe JovianDSS is necessary.
3. **Connect Systems:**
   - Connect your storage resource with an appropriate protocol. For details refer to **Open-E JovianDSS Jump Start**.
4. **Migrate VMs:**
   - Migrate VMs using available Hypervisor tools.

Post-Migration Deployment Procedure:

Verify the system's functionality by running tests and send the results for review.

- Follow **the Open-E Deployment Procedure**.

Conclusions:

These steps will ensure a smooth transition from Open-E DSS V7 to Open-E JovianDSS.

2 Scenario 2: Open-E DSS V7 Cluster (Old Hardware) to Open-E JovianDSS Cluster (New Hardware) Data Migration

Warning:

- Please note that Open-E JovianDSS has higher hardware requirements than Open-E DSSV7. Ensure that your new hardware meets the system requirements for Open-E JovianDSS.
- Use at least a 10Gbps interface.
- **Ensure you have an up-to-date backup of your data.**

Introduction:

This scenario describes the migration of NAS data from an Open-E DSS V7 cluster to an Open-E JovianDSS cluster.

Preparation of the New Environment:

1. **Hardware Requirements Confirmation (Pre-deployment Tests):**
   - **Verify that your new hardware meets the Open-E JovianDSS requirements**.

   Note: Contact the Open-E Support Team if you need help executing this step.
2. **Open-E JovianDSS Installation:**
   - **Follow the installation guide**.
3. **Open-E JovianDSS Configuration:**
   - Create a zpool (right corner add zpool), bind your servers into a cluster(go to failover), create dataset **vol00**, and add share **sh00** (please go to shares -> click Add dataset then click on dataset options -> Add share).

NAS Data Migration:

1. **Enable Data Migration Tool on Open-E JovianDSS:**
   - Use **Ctrl-Alt-X** to access the Extended Tools Menu and enable the Data Migration Too(point nr.6)l.
2. **Create a New Share on Open-E DSS V7:**
   - Create a new share **sh00** on the NAS logical volume.
3. **Enable Data Replication Agent on Open-E DSS V7:**
   - Enable the Data (file) replication agent in DSS V7 NAS settings.
4. **Create a Snapshot on Open-E DSS V7:**
   - Create a new snapshot and assign it to the appropriate NAS logical volume.
5. **Create Data Replication Task on Open-E DSS V7:**
   - Create a replication task named **rep1**, using the new share sh00 and destination share **sh00** on Open-E JovianDSS.
6. **Start Replication on Open-E DSS V7:**
   - Start the replication task and monitor the status in the Tasks tab.

iSCSI Data Migration Using a Proxy System:

1. When you have properly created a zpool in Open-E JovianDSS based on our guide **Open-E JovianDSS Jump Start (point 3.3)**, the GUI shows the zpool status of the recently created zpool. To access the zpool setup menu, click on the down arrow button in the middle bottom of the zpool status section.
2. **Create a New iSCI Target in Open-E JovianDSS:**
   - Next, select “iSCSI targets” and click the “Add new target” button. In the “Target Wizard”, you can enter a new “Target name”. If the default target name is OK, click the “Next” button.
3. **Create a New zvol in Open-E JovianDSS:**
   - In the Zvols step, click “Add new zvol”. iSCSI Volumes are called zvols. In “Zvol properties” enter the name of a new Zvol and the appropriate size and click “Add” button.
   - After creating the new Zvols, click the “Next” button
4. **Set up the Target Security Options in Open-E JovianDSS:**
   - In the “Access” step, you can change the security options of the targets. After making these changes click the “Next” button.
   - In “Summary” you can see an overview of the configuration of the target. If the settings need to be modified, click the “Back” button and make the required changes. If it is correct, click “Add”.
5. **Connect iSCI Initiator Open-E JovianDSS:**
   - After completion of the “Target wizard” return to the “Storage”. Below you will see the “iSCSItargets” you can see an overview of the configuration targets.
   - It is now time to connect with your iSCSI initiator and use your targets.

Example (Microsoft Windows Environment).

6. **Run the Microsoft iSCSI Initiator:**
   - Start the software iSCSI initiator, add the targets in the “Discovery” menu, and enter the IP Address of Open-E JovianDSS and Port (default 3260).
   - From the “Targets” menu “Log on” to a target.
   - Now access the Windows “Computer Management” feature and start the Disk Manager function, where you can partition and format the new iSCSI drives for your operating system.
7. **Follow the same steps in Open-E DSS V7.**
8. When you see both Open-E DSS V7 and Open-E JovianDSS disks, copy the data using Windows Explorer.

Datastores Migration Using the Hypervisor:

1. Make sure your data storage from Open-E DSS V7 is available and reachable on the Hypervisor side.
2. **Create data storage resources on Open-E JovianDSS**
   - To migrate VMs using the Hypervisor tools, creating data storage OpenEe JovianDSS is necessary.
3. **Connect Systems:**
   - Connect your storage resource with an appropriate protocol. For details refer to **Open-E JovianDSS Jump Start**.
4. **Migrate VMs:**
   - Migrate VMs using available Hypervisor tools.

Post-Migration Deployment Procedure:

Verify the system’s functionality by running tests and send the results for review.

- Follow **the Open-E Deployment Procedure**.

Conclusions:

These steps will ensure a smooth transition from Open-E DSS V7 to Open-E JovianDSS.

3 Scenario 3: Open-E DSS V7 Cluster (Old Hardware) to Open-E JovianDSS Cluster (Old Hardware)

Warning:

- Please note that Open-E JovianDSS has higher hardware requirements than Open-E DSSV7. Ensure that your new hardware meets the system requirements for Open-E JovianDSS.
- Use at least a 10Gbps interface.
- **Ensure you have an up-to-date backup of your data.**

Introduction:

This scenario covers the migration of NAS data from an Open-E DSS V7 cluster to an Open-E JovianDSS cluster using the same hardware.

Preparation of the New Environment:

1. **Hardware Requirements Confirmation (Pre-deployment Tests):**
   - **Verify that your new hardware meets the Open-E JovianDSS requirements**.

   Note: Contact the Open-E Support Team if you need help executing this step.
2. **Move Data to Node A on Open-E DSS V7:**
   - Transfer all data to node A.
3. **Stop Failover and Shutdown Node B on Open-E DSS V7:**
   - Enable maintenance mode and stop failover.

Open-E JovianDSS Configuration:

1. **Install Open-E JovianDSS:**
   - Install Open-E JovianDSS on the old hardware.
   - **Follow the installation guide**.
2. **Create Pool and Dataset:**
   - Create dataset **vol00** and add share **sh00** with default settings.(please go to shares -> click Add dataset then click on dataset options -> Add share)

NAS Data Migration:

1. **Enable Data Migration Tool on Open-E JovianDSS:**
   - Use **Ctrl-Alt-X** to access the Extended Tools Menu and enable the Data Migration Too(point nr.6)l.
2. **Create a New Share on Open-E DSS V7:**
   - Create a new share **sh00**.
3. **Enable Data Replication agent on Open-E DSS V7:**
   - Enable the Data (file) replication agent in DSS V7 NAS settings.
4. **Create a Snapshot on Open-E DSS V7:**
   - Create a snapshot and assign it to the NAS logical volume.
5. **Create Data Replication Task on Open-E DSS V7:**
   - Create a replication task named **rep1**, using the new share **sh00** and destination share **sh00**.
6. **Start Replication on Open-E DSS V7:**
   - Start the replication task and monitor the status.

iSCSI Data Migration Using a Proxy System:

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3. **Connect Systems:**
   - Connect your storage resource with an appropriate protocol. For details refer to **Open-E JovianDSS Jump Start**.
4. **Migrate VMs:**
   - Migrate VMs using available Hypervisor tools.

Post-Migration Deployment Procedure:

Verify the system's functionality by running tests and send.

Conclusions:

These steps will ensure a smooth transition from Open-E DSS V7 to Open-E JovianDSS.

We hope this guide helps you to execute the migration successfully. However, if you encounter any difficulties or the guide doesn't cover your system configuration, please feel free to contact the Open-E Support Team for further assistance.