Step-by-Step Guide
to
Open-E DSS V7 Asynchronous Data (File) Replication over a LAN

Software Version: DSS ver. 7.00 up11

Presentation updated: July 2013

Setting up Data (File) Replication **over a LAN**

open-e

TO SET UP DATA (FILE) REPLICATION, PERFORM THE FOLLOWING STEPS:

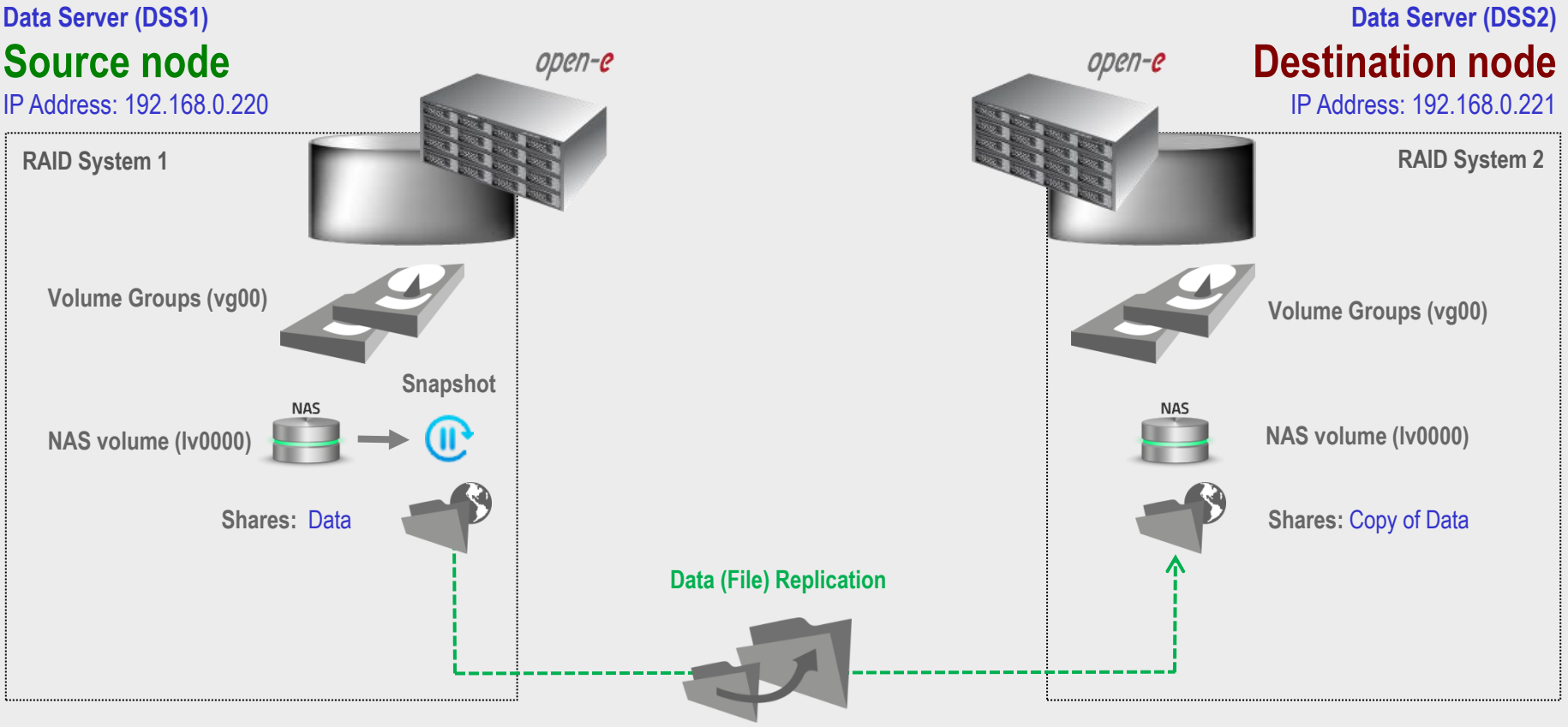
1. Configure hardware
2. Configure the destination node
3. Configure the source node
4. Configure replication schedule
5. Check the status of Data (File) Replication

Setting up Data (File) Replication **over a LAN**

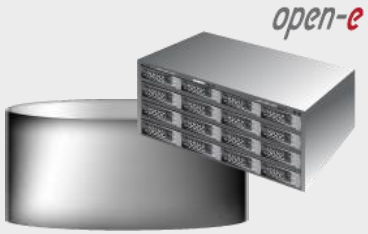
1. Configure hardware

Hardware Requirements

To run the Data (File) Replication on Open-E DSS V7 over LAN, a minimum of two systems are required. Logical volumes working on the source node must have snapshots created and enabled. Both servers are working in the Local Area Network. An example configuration is shown below:



Setting up Data (File) Replication **over a LAN**



Data Server (DSS2)

Destination node

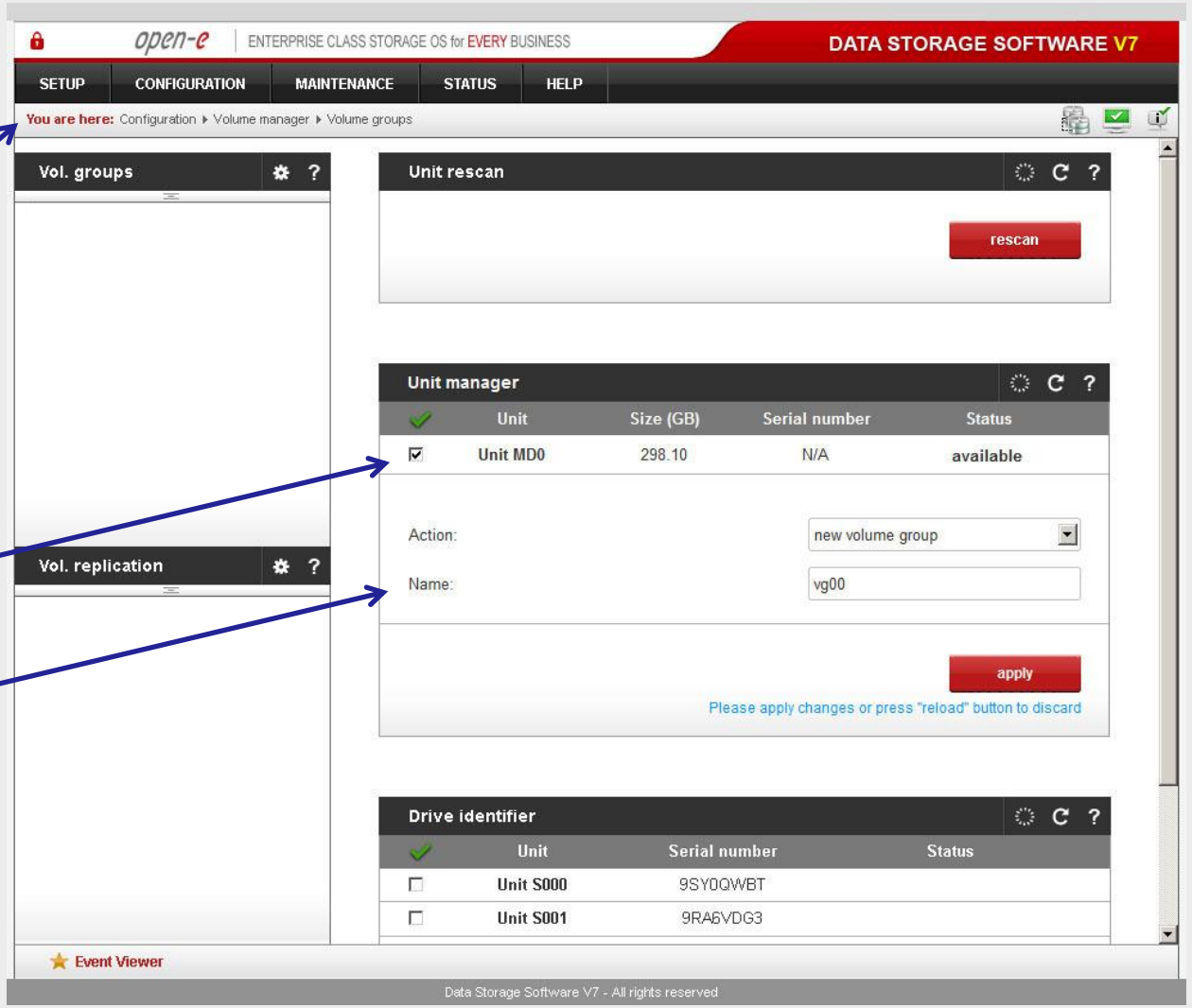
IP Address: 192.168.0.221

2. Configure the destination node

In the "**CONFIGURATION**" menu, select "**Volume manager**" and "**Volume groups**".

Volume Groups (vg00)

Add the selected physical units (**Unit MD0**) to create a new **volume group** (in this case, **vg00**) and click **apply**.



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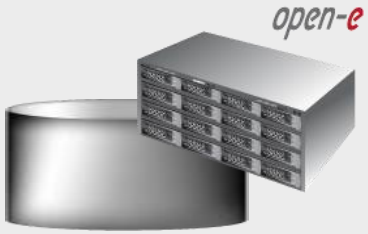


Data Server (DSS2)

Destination node

IP Address: 192.168.0.221

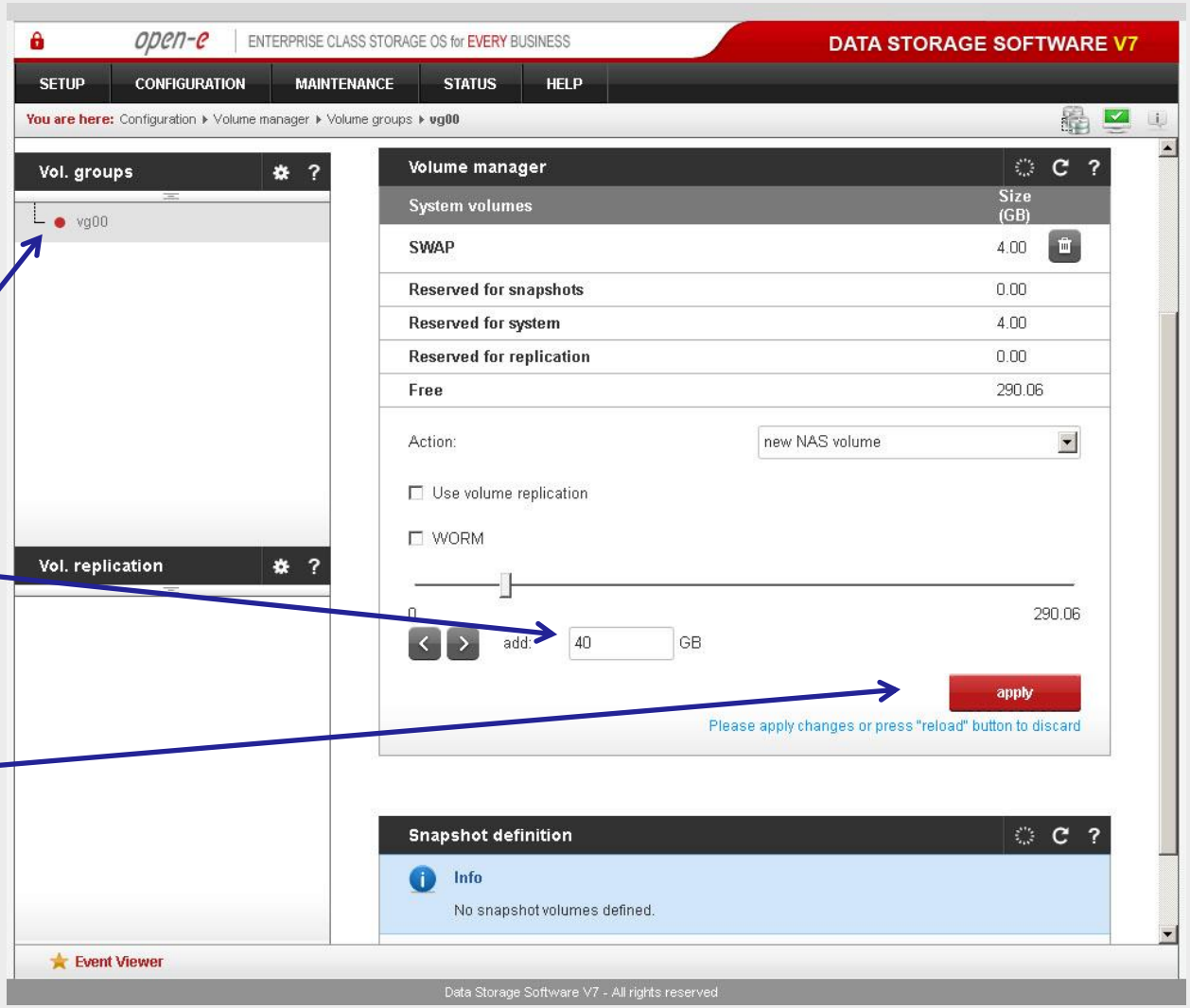
2. Configure the destination node

Volume Groups (vg00)

NAS volume (lv0000)

Select the appropriate **volume group** (**vg00**) from the list on the left and create a **new NAS volume** of the required size. This logical volume will be the destination of the replication process.

After assigning an appropriate amount of space for the NAS volume, click the apply button.



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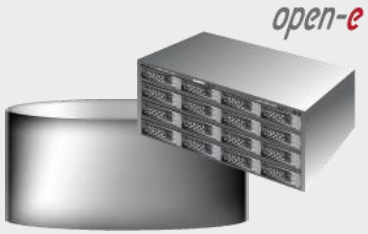


Data Server (DSS2)

Destination node

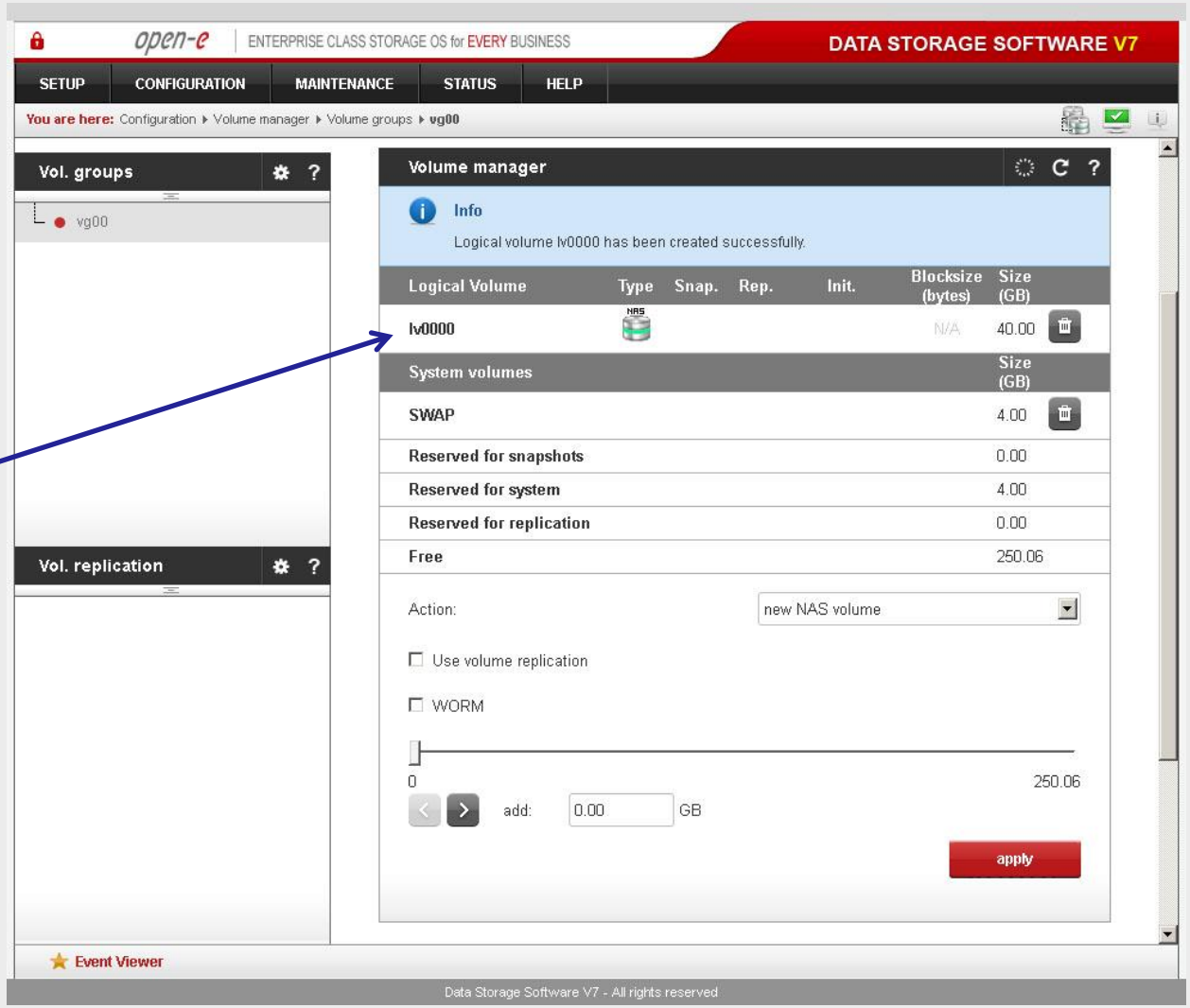
IP Address: 192.168.0.221

2. Configure the destination node

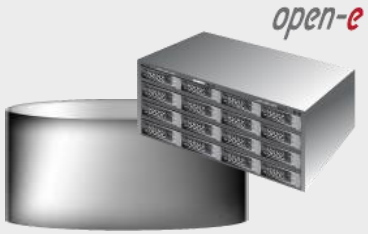
Volume Groups (vg00)

The destination NAS Volume is now configured.

NAS volume (lv0000)



Setting up Data (File) Replication **over a LAN**



Data Server (DSS2)

Destination node

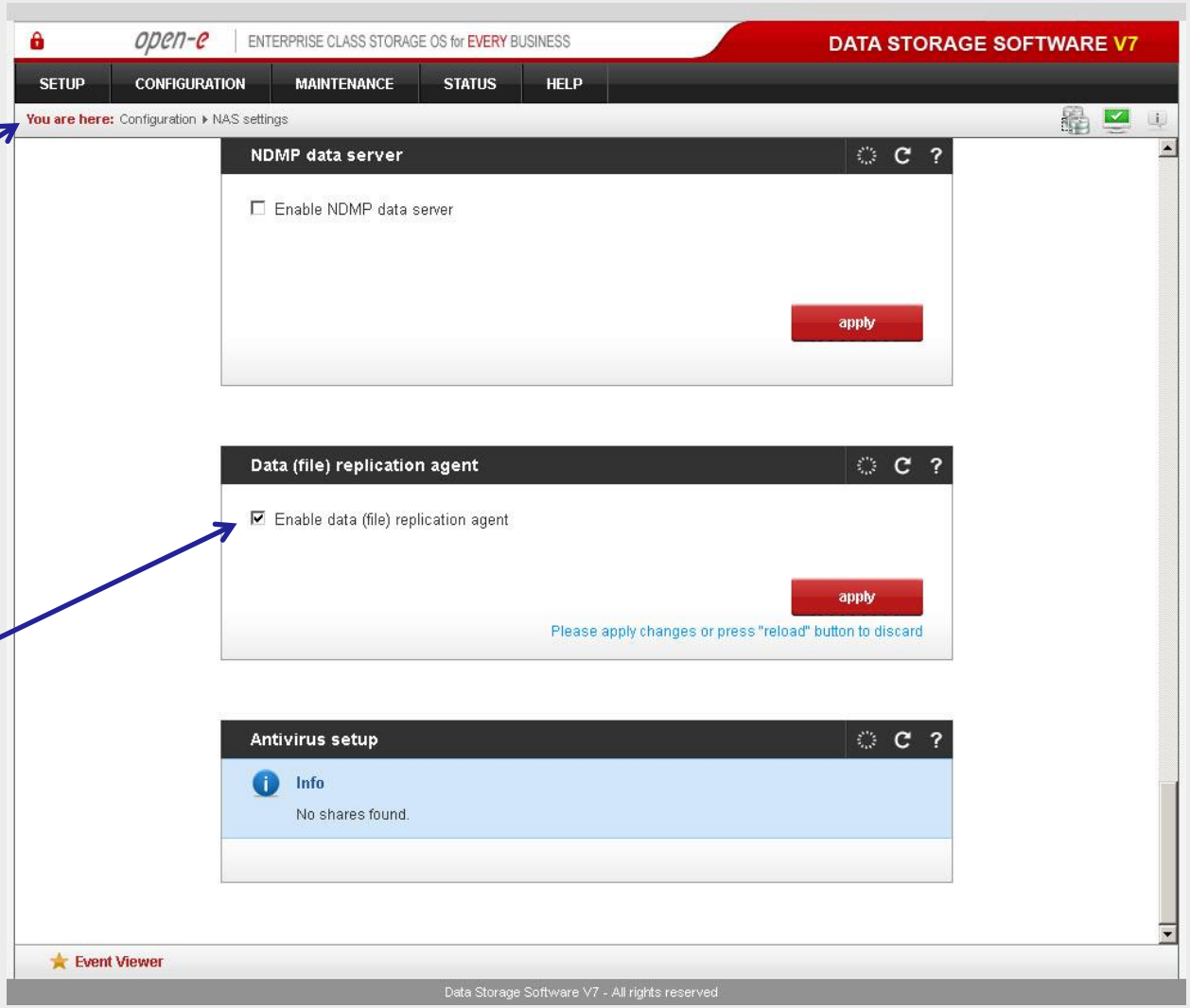
IP Address: 192.168.0.221

2. Configure the destination node

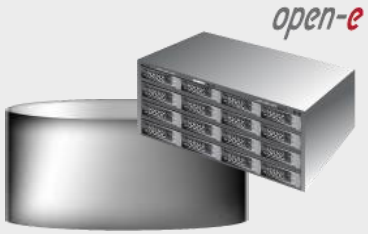
Under the "**CONFIGURATION**" tab, select the "**NAS settings**" menu.

Data (File) Replication

In the **Data (file) replication agent** function, check the **Enable data (file) replication agent** box, and click the **apply** button.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS2)

Destination node

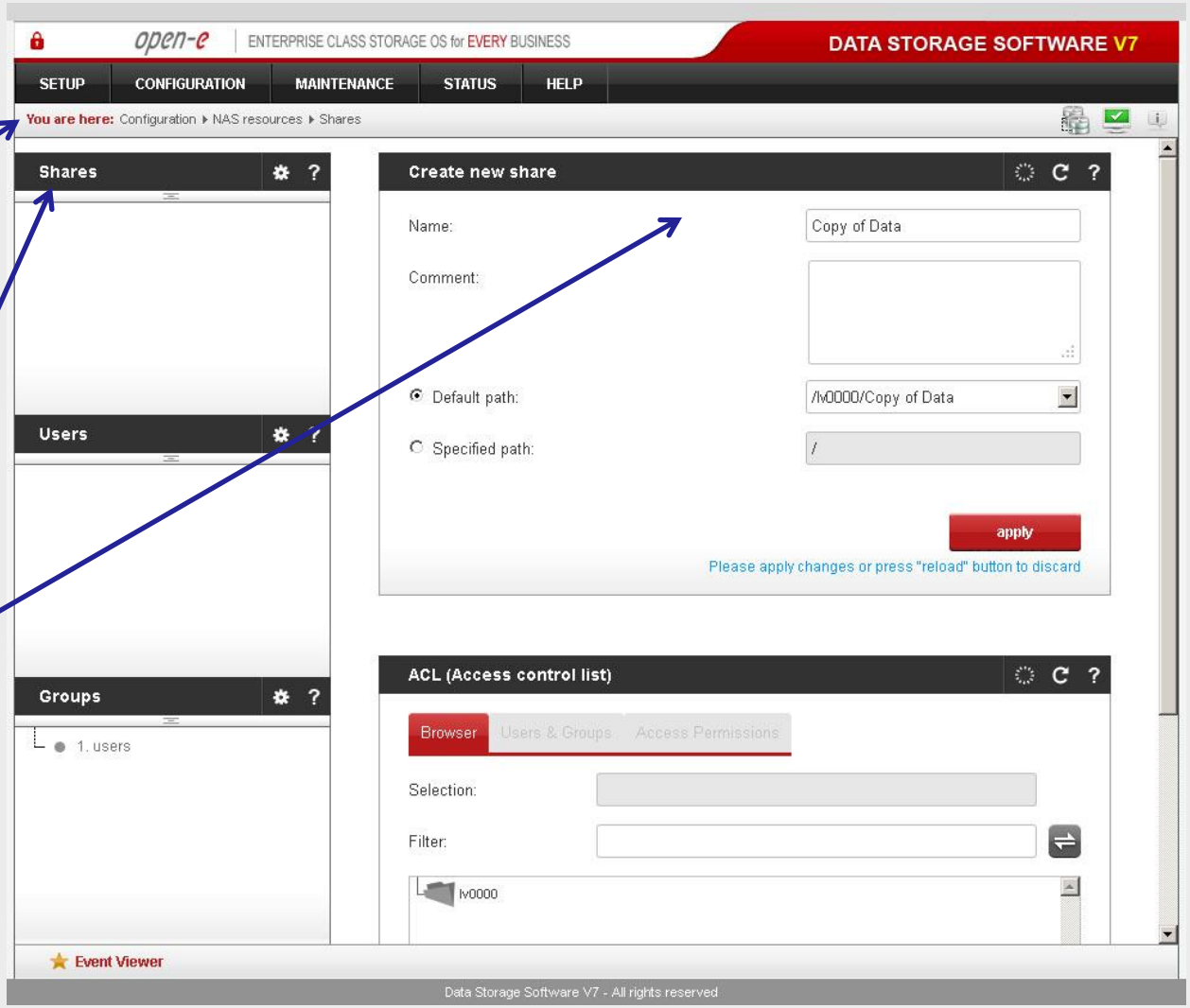
IP Address: 192.168.0.221

2. Configure the destination node

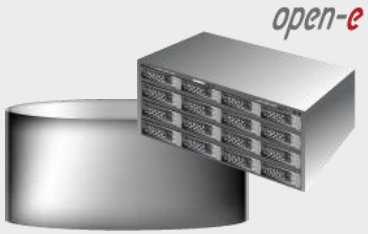
Under the "**CONFIGURATION**" menu, select "**NAS resources**" and "**Shares**".

Shares: Copy of Data

A tree listing of NAS shared volumes (**Shares**) will appear on the left side of the DSS console. In the example, a shared volume named **Copy of Data** on **lv0000** has been created.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS2)

Destination node

IP Address: 192.168.0.221

2. Configure the destination node

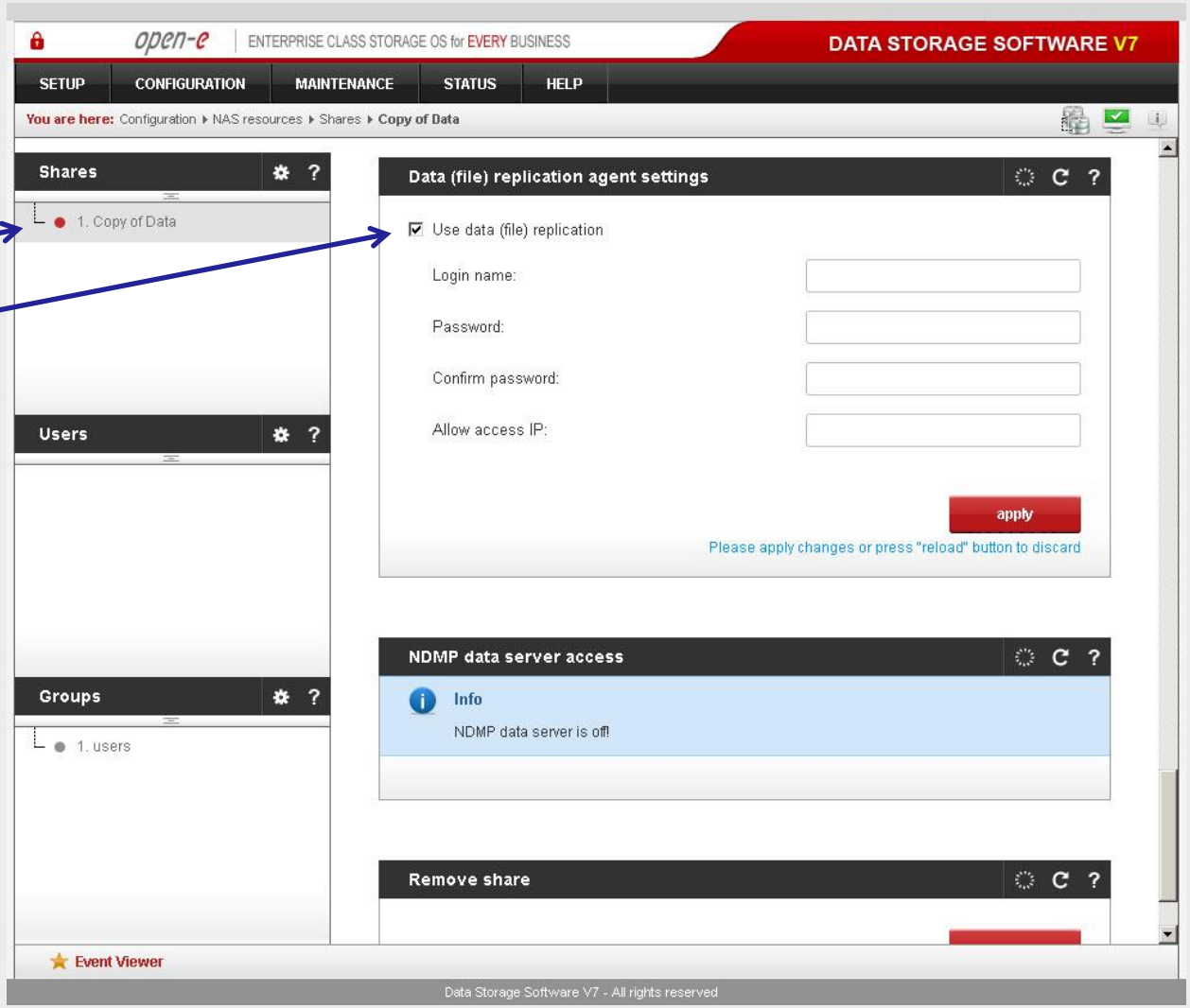
After creating the new shared volume, click on the share name, check the box **Use data (file) replication** within **Data (file) replication agent settings** function and click on the apply button.

Data (File) Replication

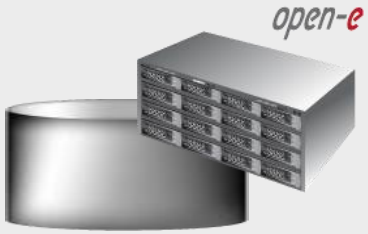
NOTE:

It is strongly recommended to protect the replication protocol with a username and password, along with a list of allowed IP addresses. This will prevent other data (file) replication tasks from accessing this share.

The configuration of the Destination Node (storage server) is now complete.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

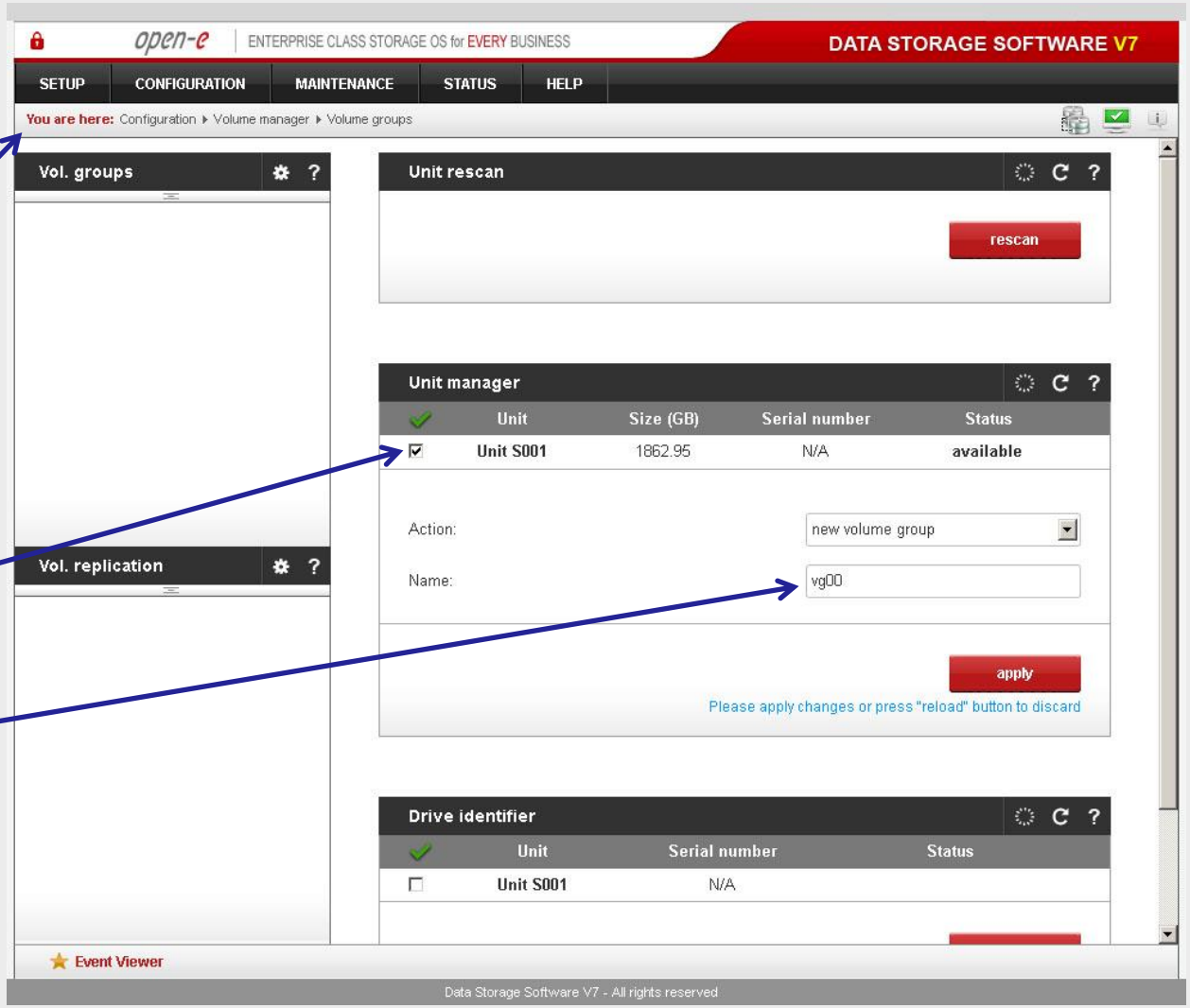
IP Address: 192.168.0.220

3. Configure the source node

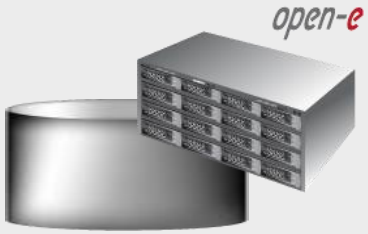
In the "**CONFIGURATION**" menu, select "**Volume manager**" and "**Volume groups**".

Volume Groups (vg00)

Add the selected physical units (**Unit S001**) to create a new volume group (in this case, **vg00**) and click apply.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

IP Address: 192.168.0.220

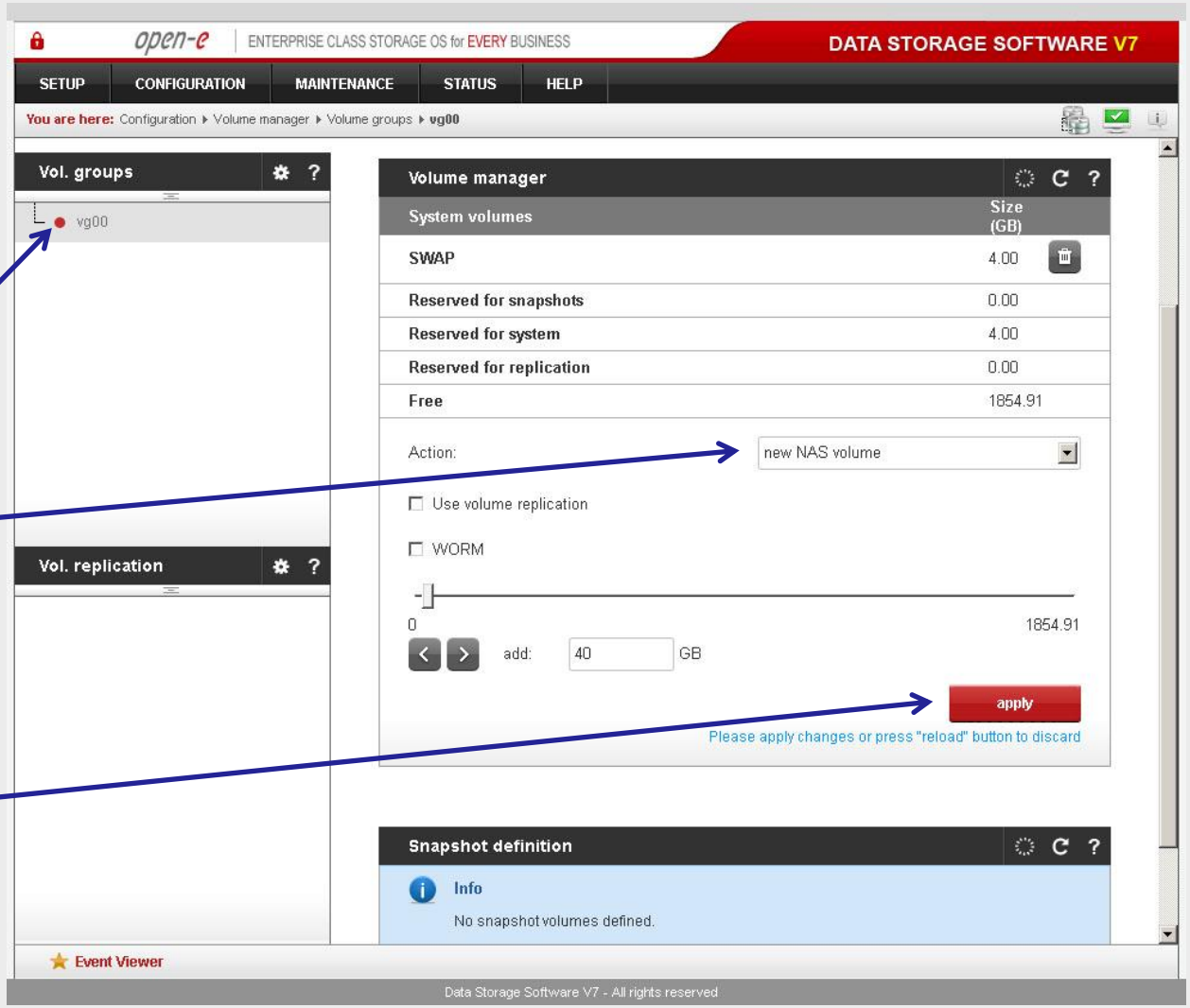
3. Configure the source node

Volume Groups (vg00)

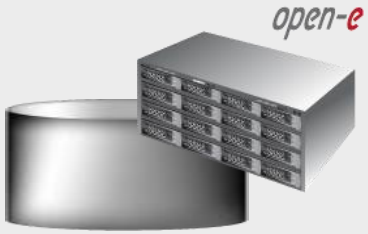
NAS volume (lv0000)

Select the appropriate volume group (**vg00**) from the list on the left and create a **new NAS volume** of the required size. This logical volume will be the source of the replication process.

After assigning an appropriate amount of space for the NAS volume, click the apply button.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

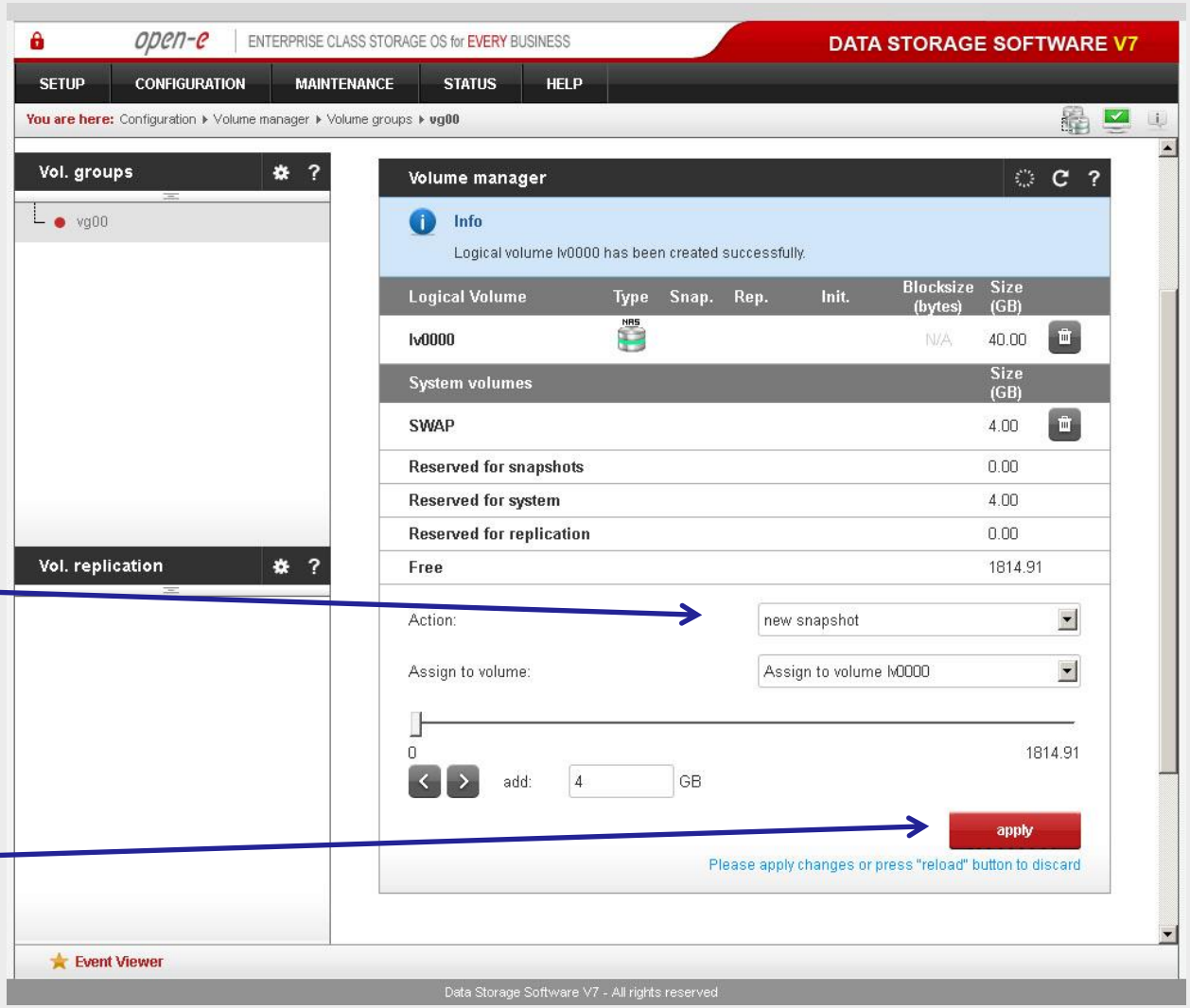
IP Address: 192.168.0.220

3. Configure the source node

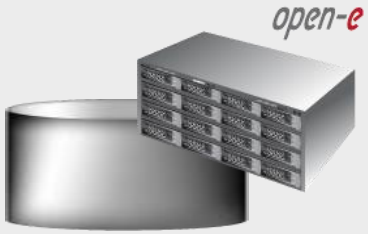
Snapshot

To run the replication process, you must first define a **new snapshot** to be taken of the volume to be replicated. The snapshot size should be large enough to accommodate the changes you anticipate, 10% to 15% of the logical volume is sometimes recommended. Next, select "**Assign to volume lv0000**".

After assigning an appropriate amount of space for the **snapshot**, click the **apply** button.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

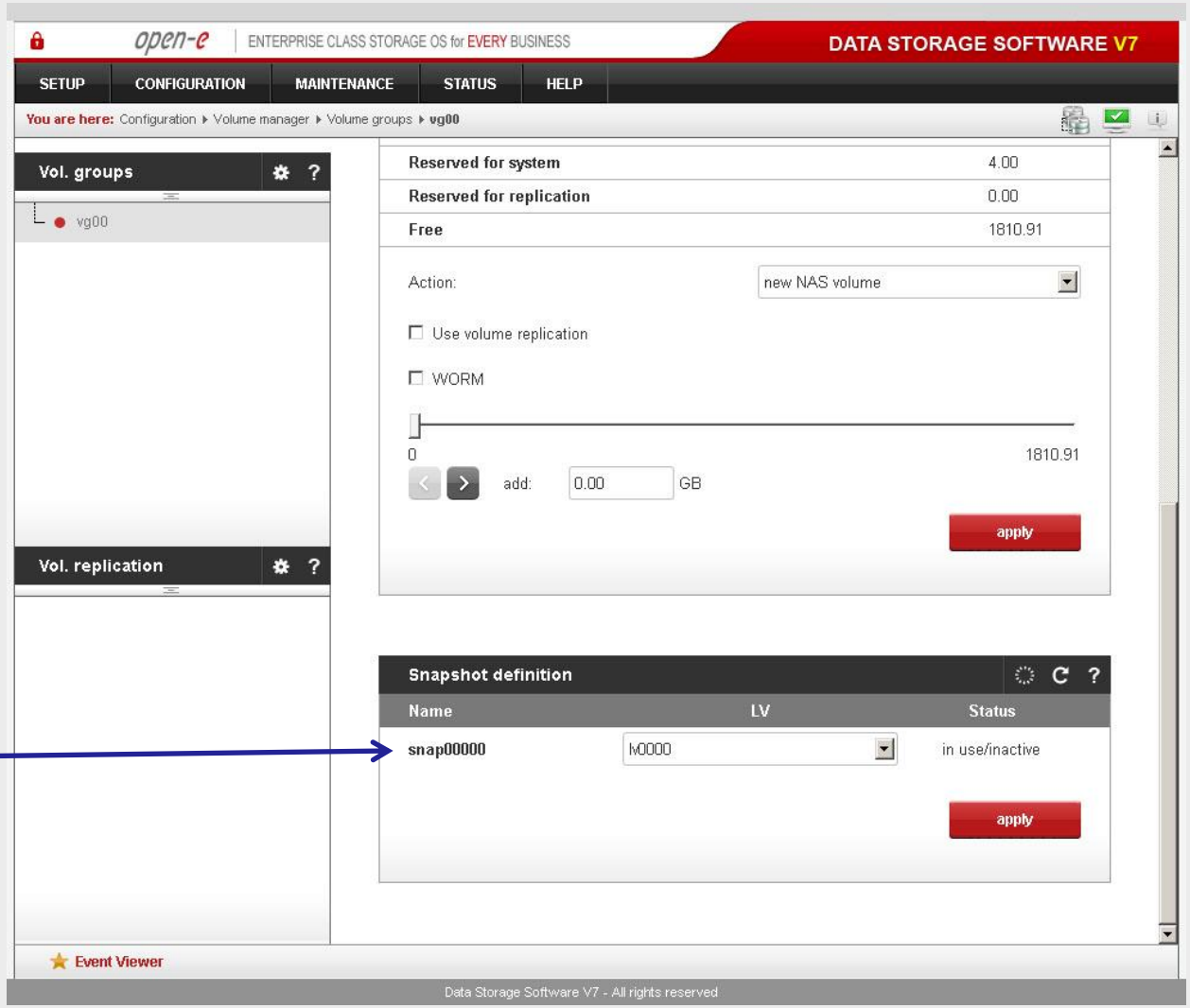
IP Address: 192.168.0.220

3. Configure the source node

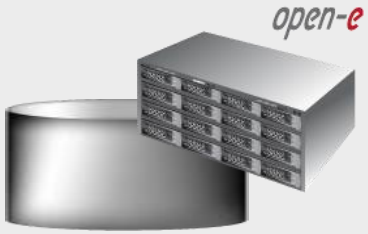
NAS volume (lv0000)

Snapshot

The snapshot is now created, and has been assigned to the logical volume lv0000.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

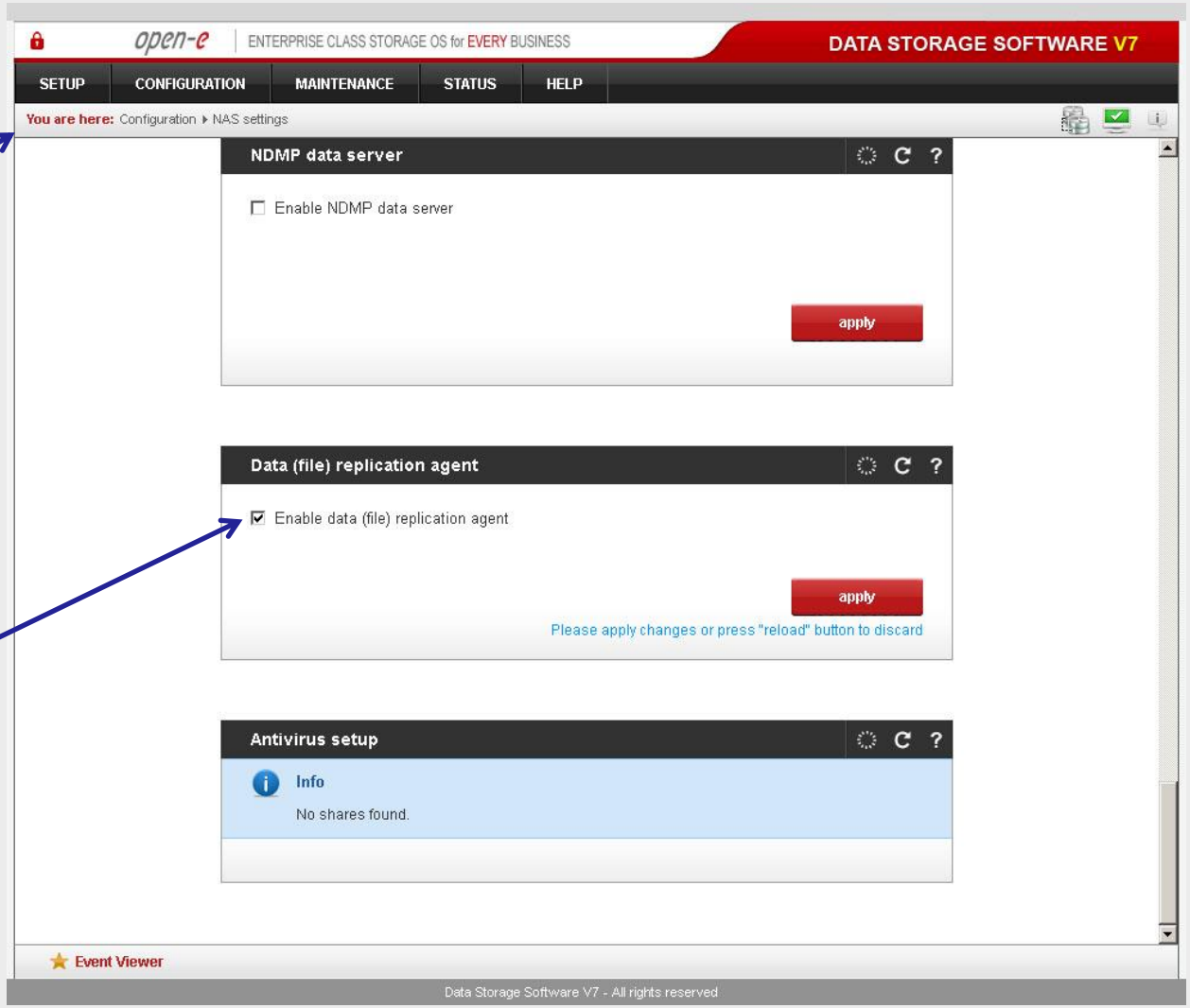
IP Address: 192.168.0.220

3. Configure the source node

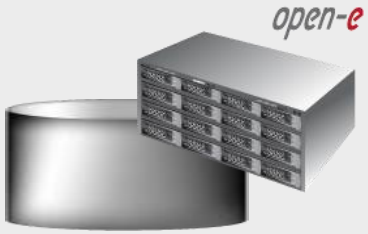
In the "**CONFIGURATION**" menu, select "**NAS settings**".

Data (File) Replication

Check the **Enable data (file) replication agent** box, and click the apply button.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

Source node

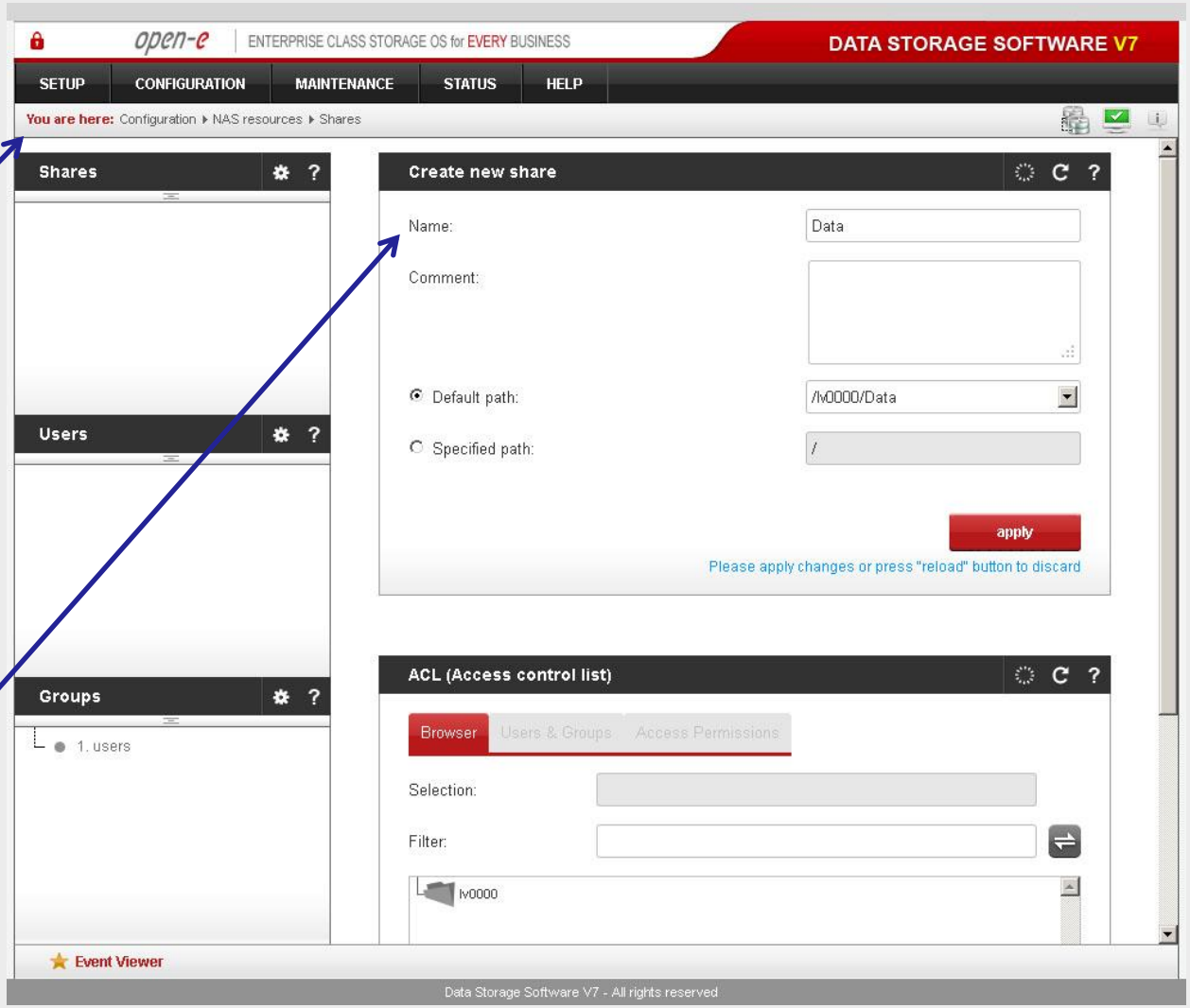
IP Address: 192.168.0.220

3. Configure the source node

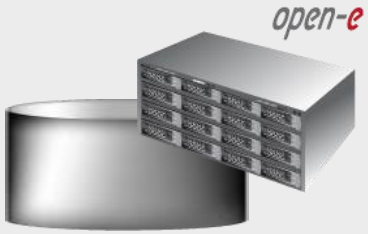
In the "**CONFIGURATION**" menu, select "**NAS resources**" and "**Shares**".

Shares: Data

To create a share, enter the share name in the field **Name**. In this example a new share named **Data** has been created.



Setting up Data (File) Replication **over a LAN**



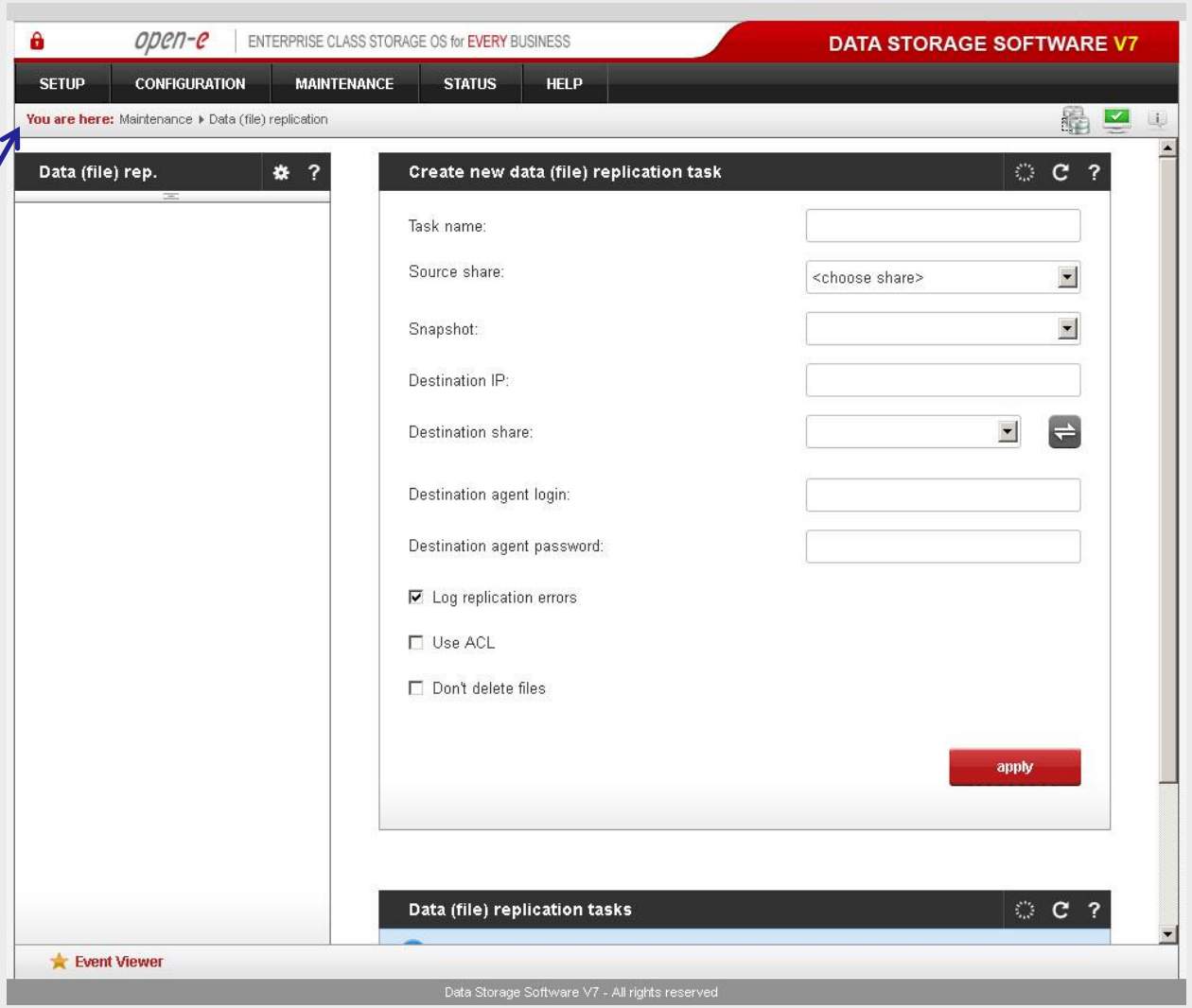
Data Server (DSS1)

Source node

IP Address: 192.168.0.220

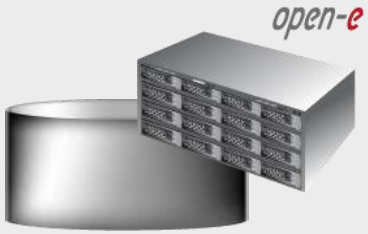
3. Configure the source node

After the share to be replicated has been configured, go to the "**MAINTENANCE**" menu and select "**Data (file) replication**".



Data (File) Replication

Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

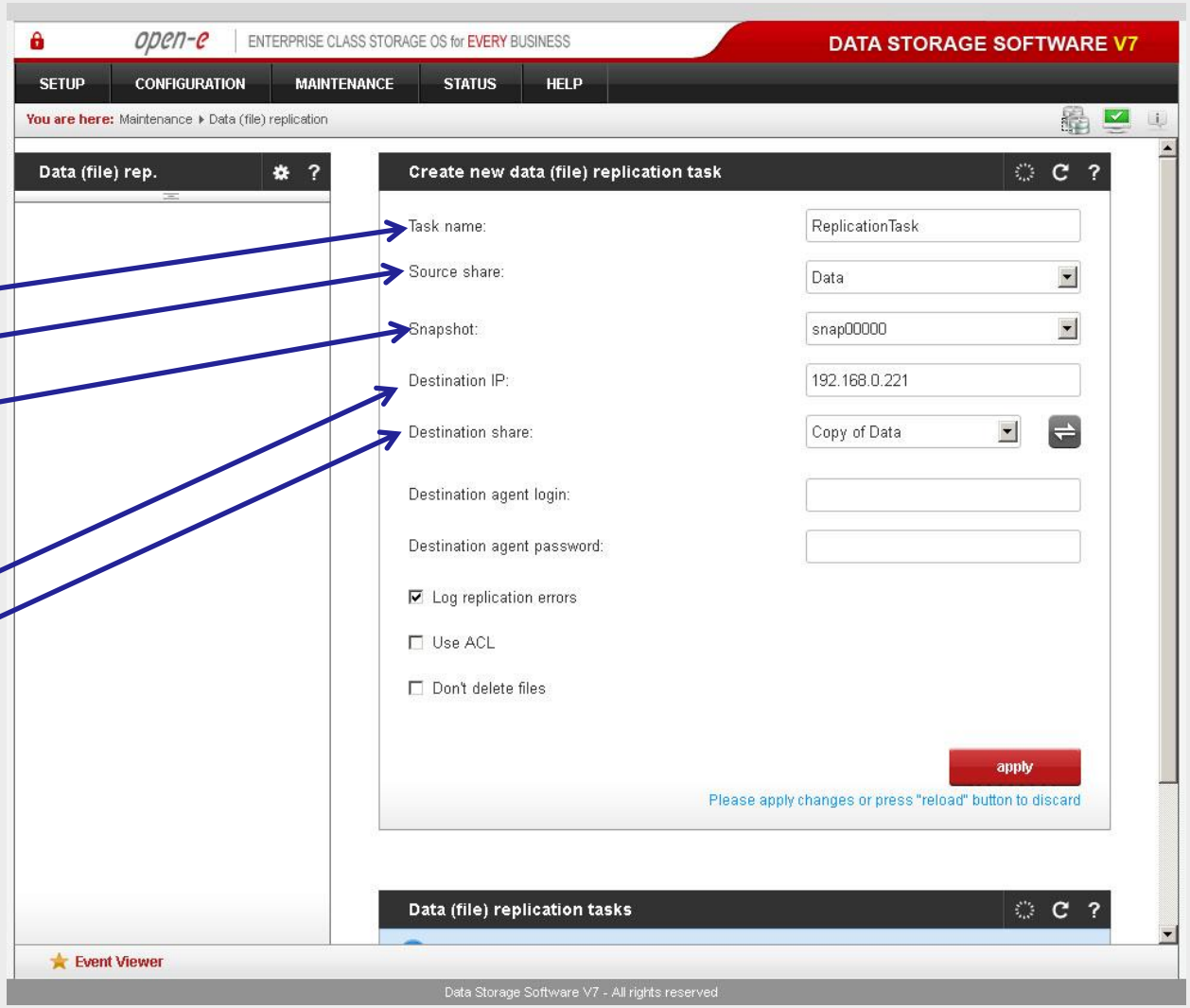
Source node

IP Address: 192.168.0.220

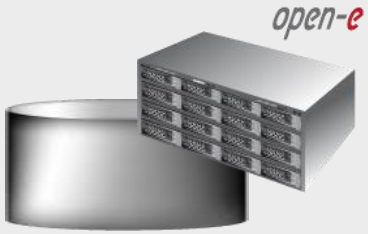
3. Configure the source node

Select the source share to be replicated. Under **Create new Data (File) Replication task** function, enter a name for the task and select the **Source share** to be replicated. At this point, a snapshot (**snap00000**) of the source share will automatically be assigned.

In the **Destination IP** field, enter the IP address of the destination server (in this example, 192.168.0.221) and the username/password (if applicable) for the destination. Next, configure the **Destination share** field by clicking on the ⇌ button. In this example, the **Copy of Data** share will appear. Next, click on the apply button.



Setting up Data (File) Replication **over a LAN**



Data Server (DSS1)

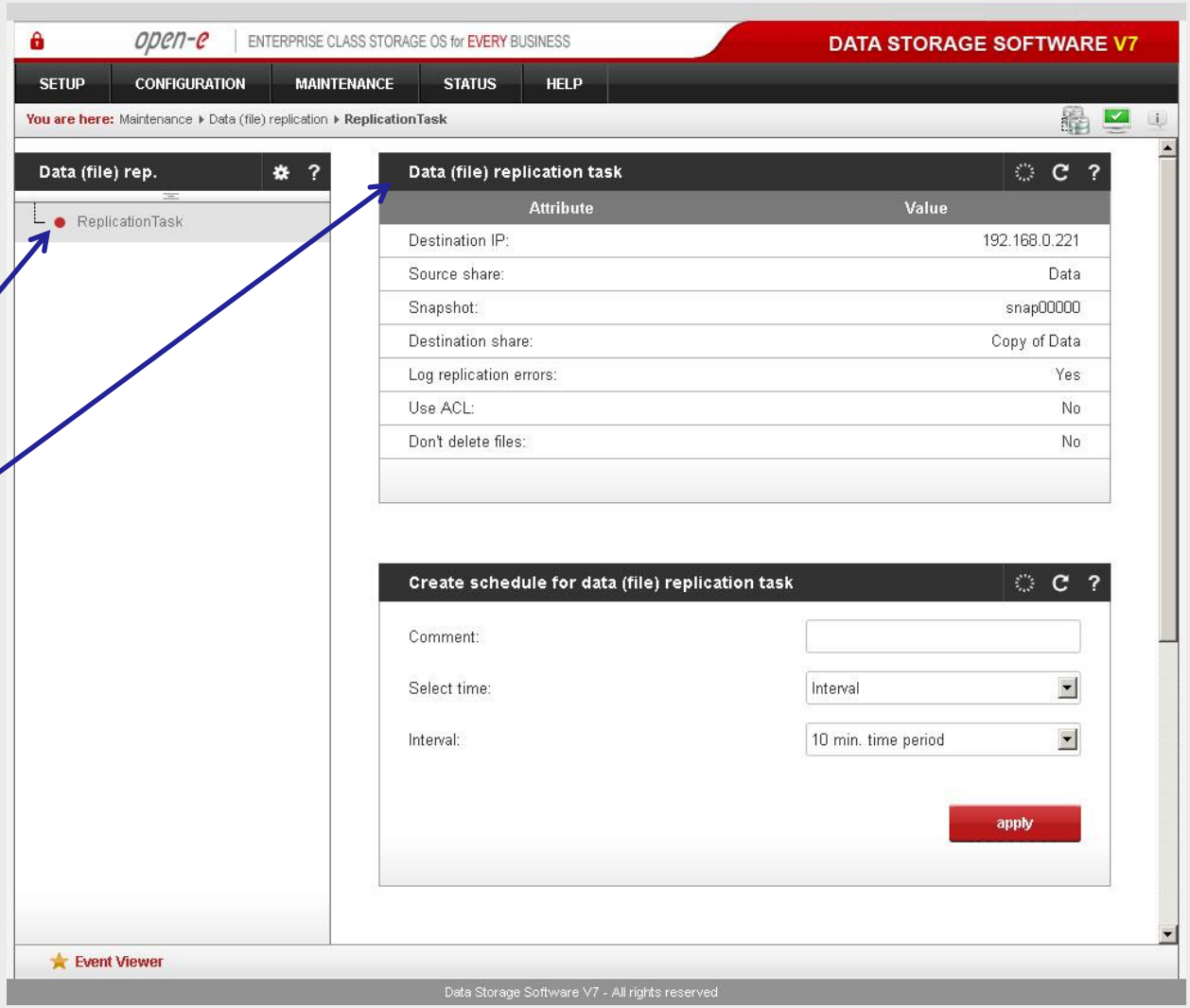
Source node

IP Address: 192.168.0.220

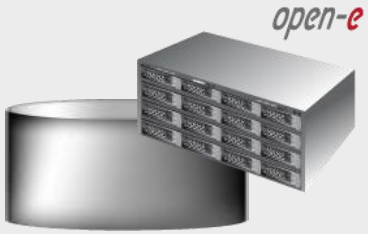
3. Configure the source node

After Open-E DSS V7 Web console, has been reloaded, the new task (**ReplicationTask**) should appear. An additional information about the selected replication task is visible in the **Data (file) replication task** window.

The configuration of the source node (storage server) is now complete.



Setting up Data (File) Replication **over a LAN**



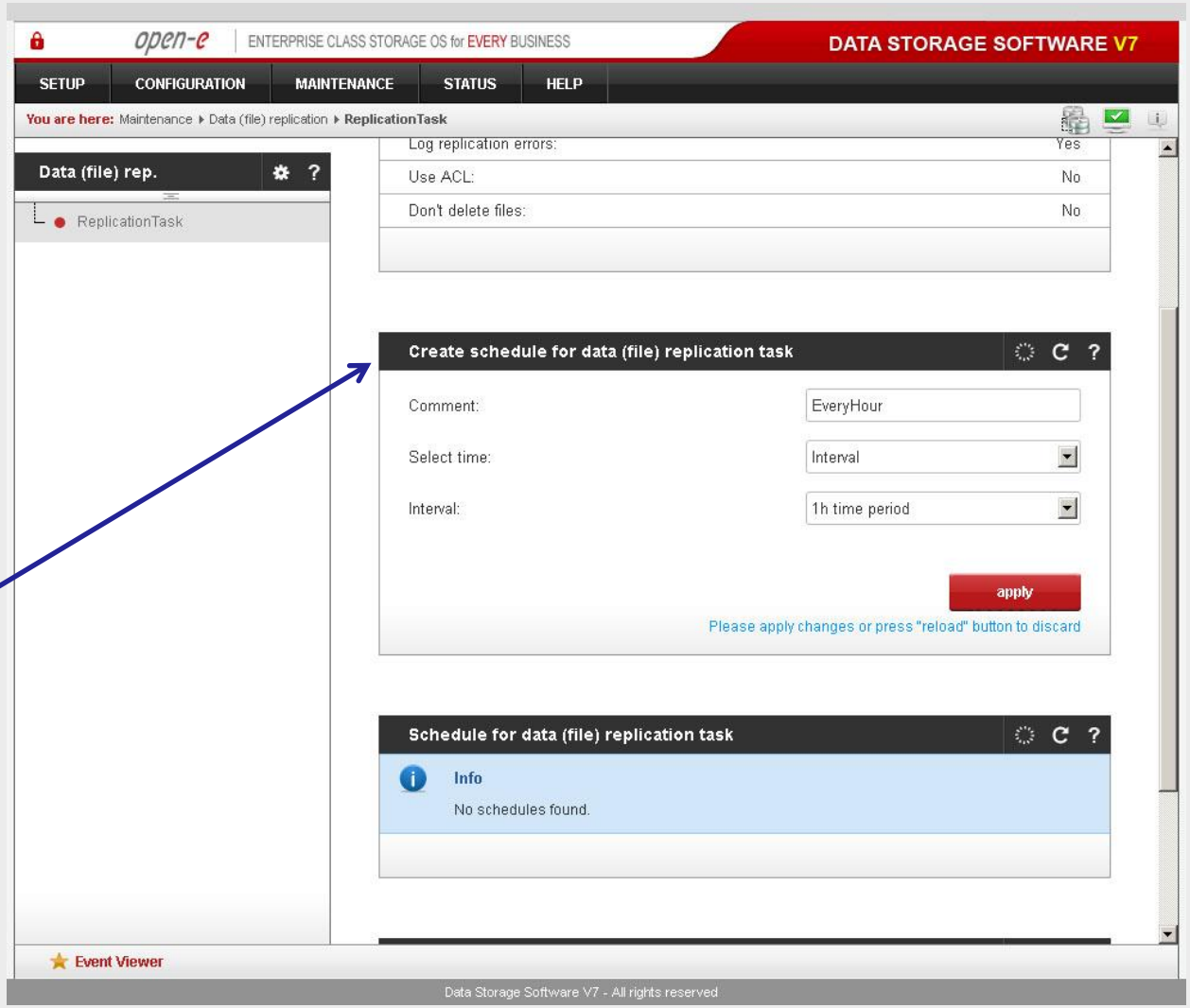
Data Server (DSS1)

Source node

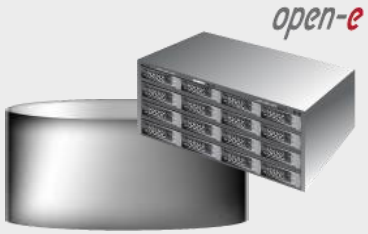
IP Address: 192.168.0.220

4. Configure replication schedule

Using the **Create schedule for data (file) Replication task** function, set the desired replication schedules or explicitly start, stop and delete data (file) replication tasks, as desired.



Setting up Data (File) Replication **over a LAN**



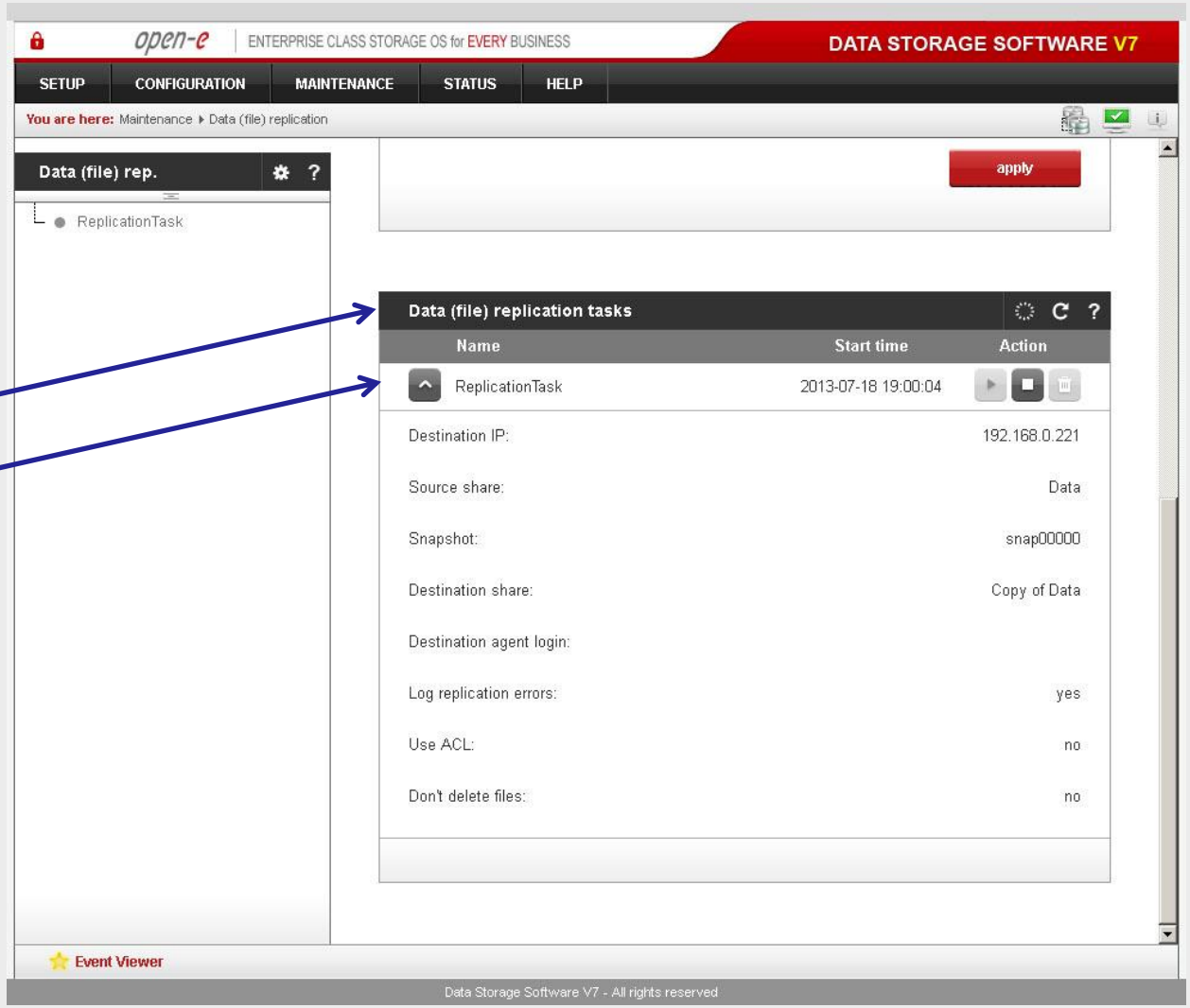
Data Server (DSS1)

Source node

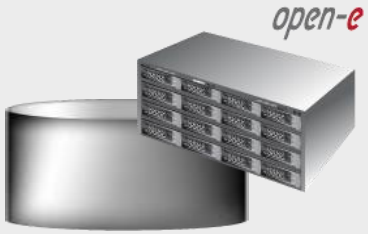
IP Address: 192.168.0.220

5. Check the status of Data (File) Replication

In **Data (file) replication tasks** function set the desired Data (File) Replication to start, stop and delete tasks.
Click on the button with the task name (in this case **ReplicationTask**) to display detailed information on the current replication task (the replication task running at 7p.m.).



Setting up Data (File) Replication **over a LAN**



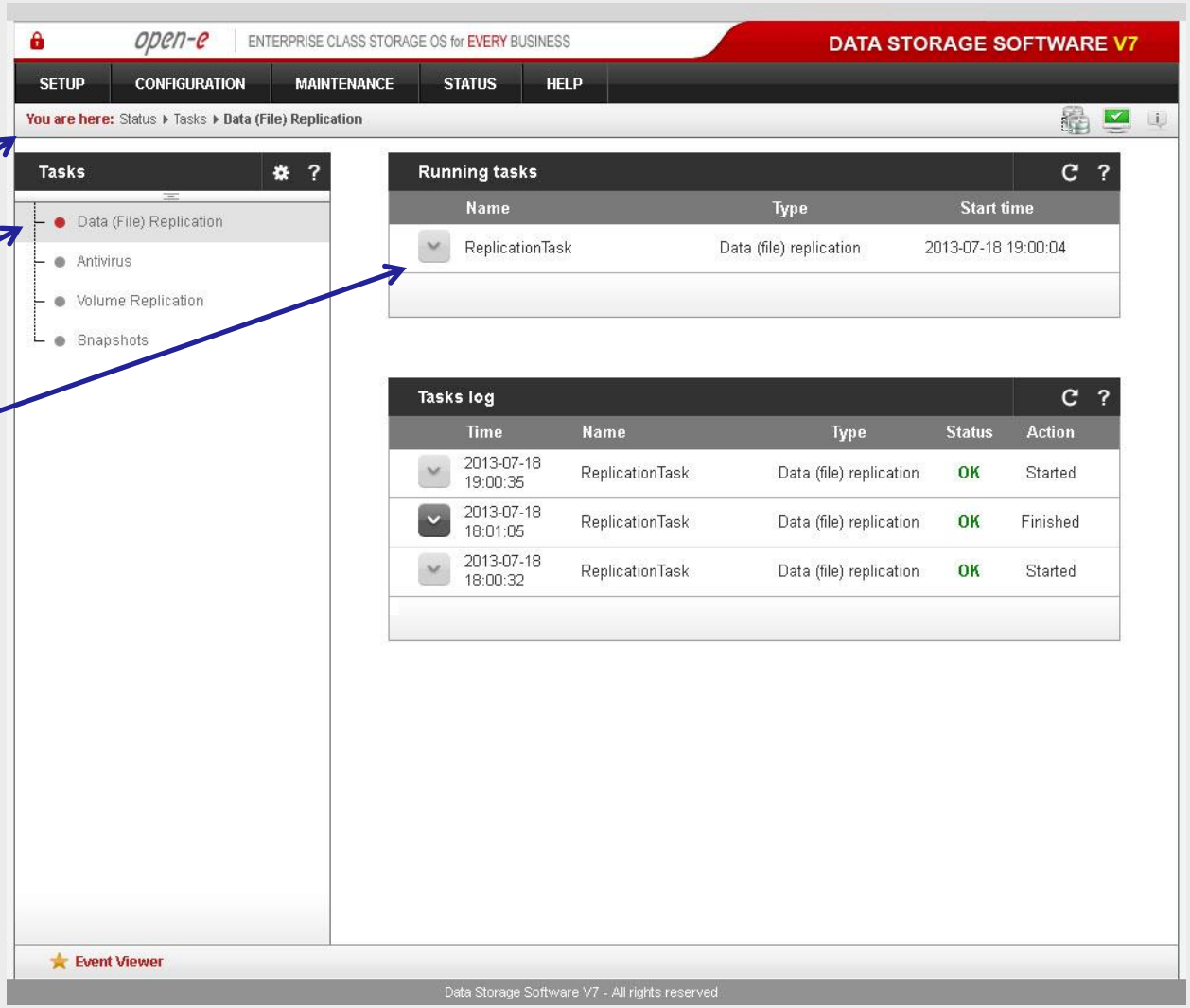
Data Server (DSS1)

Source node

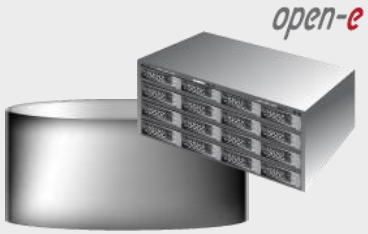
IP Address: 192.168.0.220

5. Check the status of Data (File) Replication

To obtain detailed information about the progress of Data (File) Replication tasks, under the "**STATUS**" menu, select "**Tasks**". Then, click **Data (File) Replication** tasks and select the task.



Setting up Data (File) Replication **over a LAN**



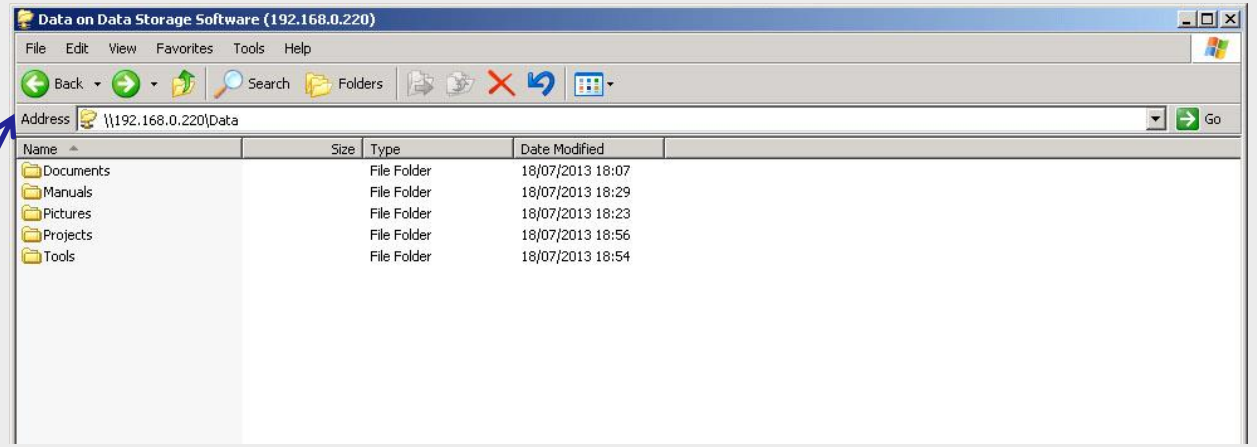
Data Servers (DSS1 and DSS2)

Source and Destination node

IP Address: 192.168.0.220 and 192.168.0.221

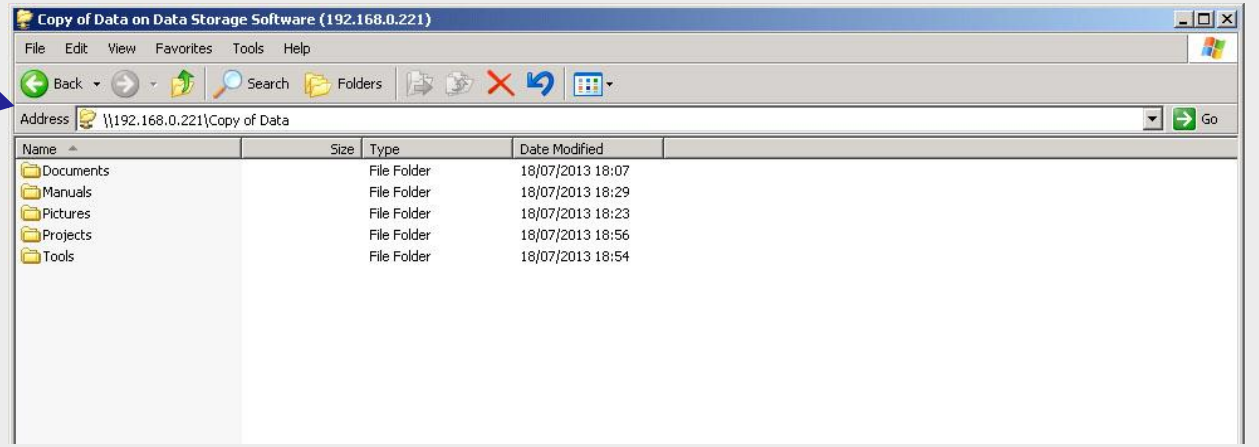
5. Check the status of Data (File) Replication

Share: Data



Once Data (File) Replication task is completed, all data from the "**Data**" share will be available on the "**Copy of data**" share.

Share: Copy of Data



The configuration of the source and destination nodes for asynchronous Data (File) Replication is now complete.

Thank you!

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