

***A Step-by-Step Guide to
Synchronous Volume Replication
(Block Based) over a LAN
with Open-E® DSS™***



Synchronous Volume Replication over a LAN

	Replication Mode		Source/Destination			Data Transfer		Volume Type			
	Synchronous	Asynchronous	w/ System	LAN	WAN	File based	Block based	NAS	iSCSI		FC
									File-IO	Block-IO	
Synchronous Volume Replication over a LAN	✓			✓			✓	✓	✓	✓	✓

- **Volume Replication** is a process of coping a source logical volume to a destination system.
 - Volume replication provides maximal availability in case one of the systems or units fails.

REPLICATION BETWEEN TWO SYSTEMS WITHIN ONE LAN

■ **Recommended Resources**

- Key Hardware (two systems)
 - ✓ x86 compatible,
 - ✓ RAID Controller,
 - ✓ HDD's,
 - ✓ Network Interface Cards.
- Software
 - ✓ Open-E DSS (recommended) or Open-E iSCSI-R3, 2 units.

■ **Benefits**

- Data Redundancy over a LAN,
- Enables continuous data access.

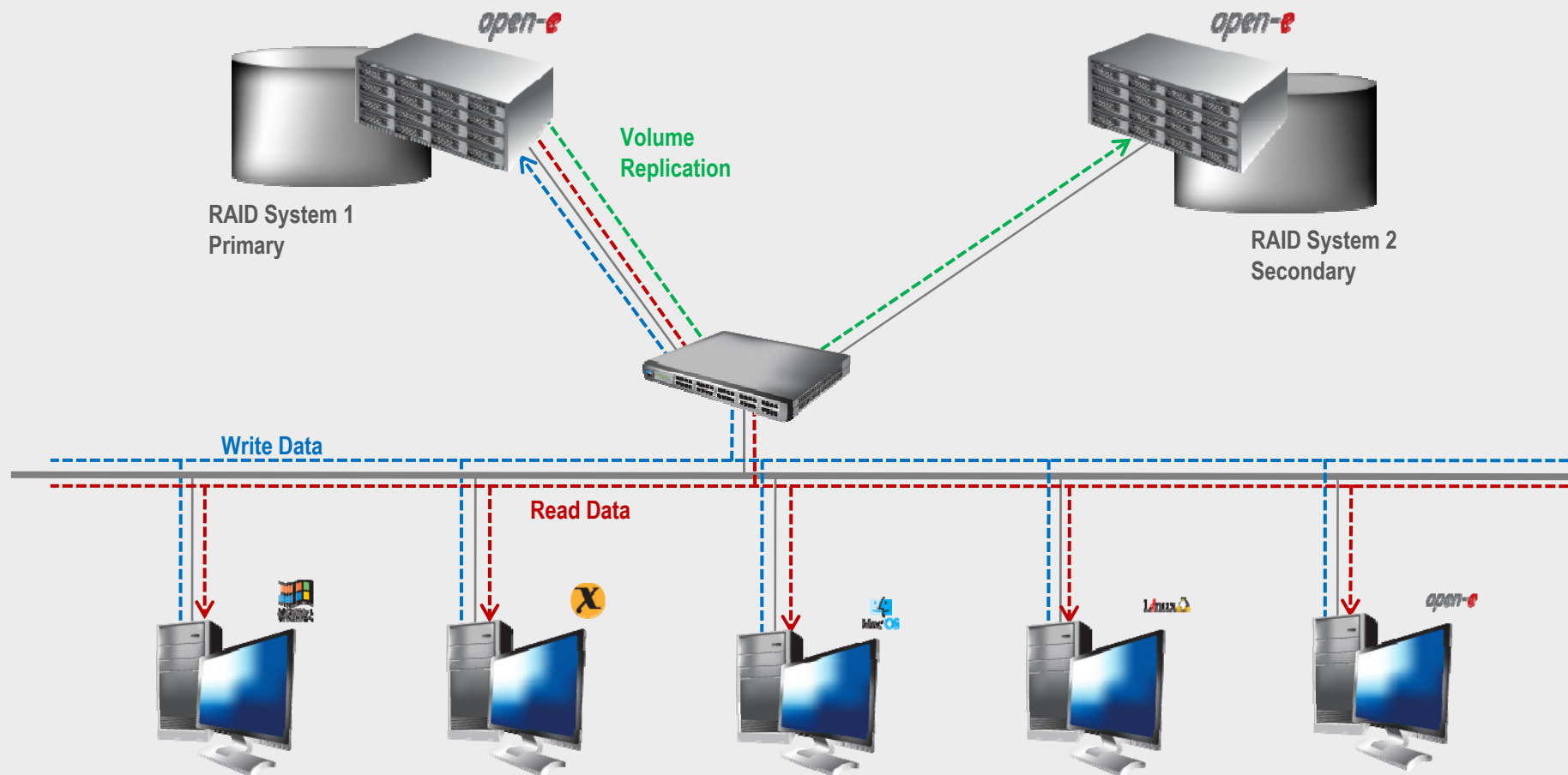
■ **Disadvantages**

- High cost of solution,
- Natural disasters can destroy local systems.

Synchronous Volume Replication over a LAN

open-e

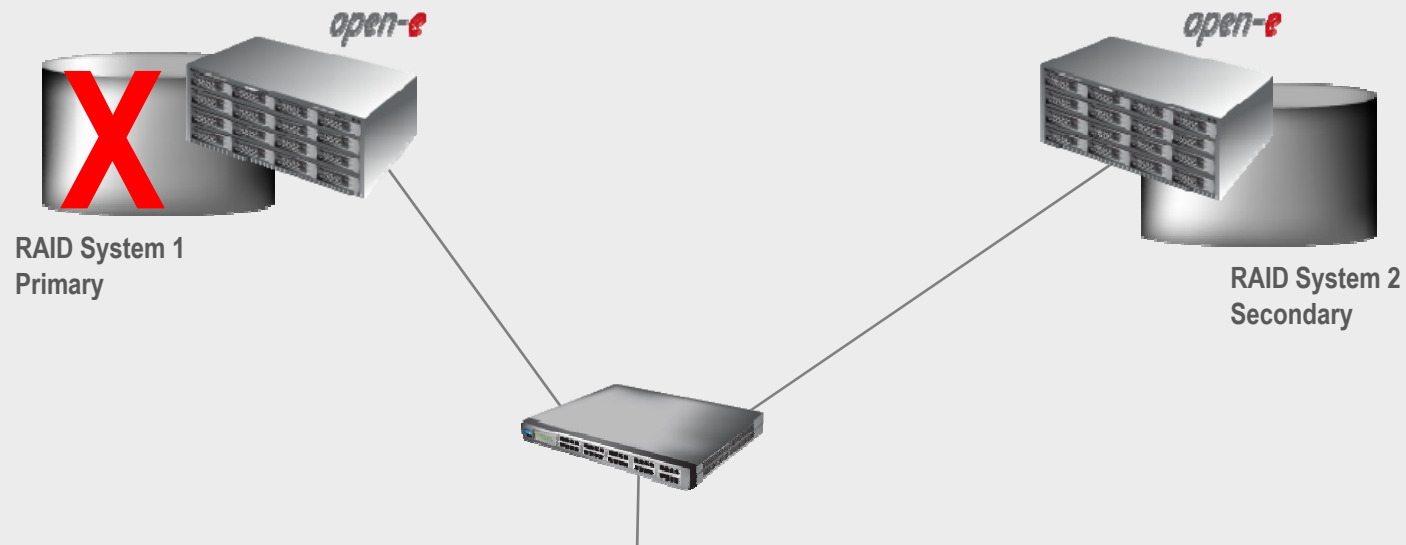
- Data is written and read to System 1
- Data is continuously replicated to System 2



Synchronous Volume Replication over a LAN

open-e

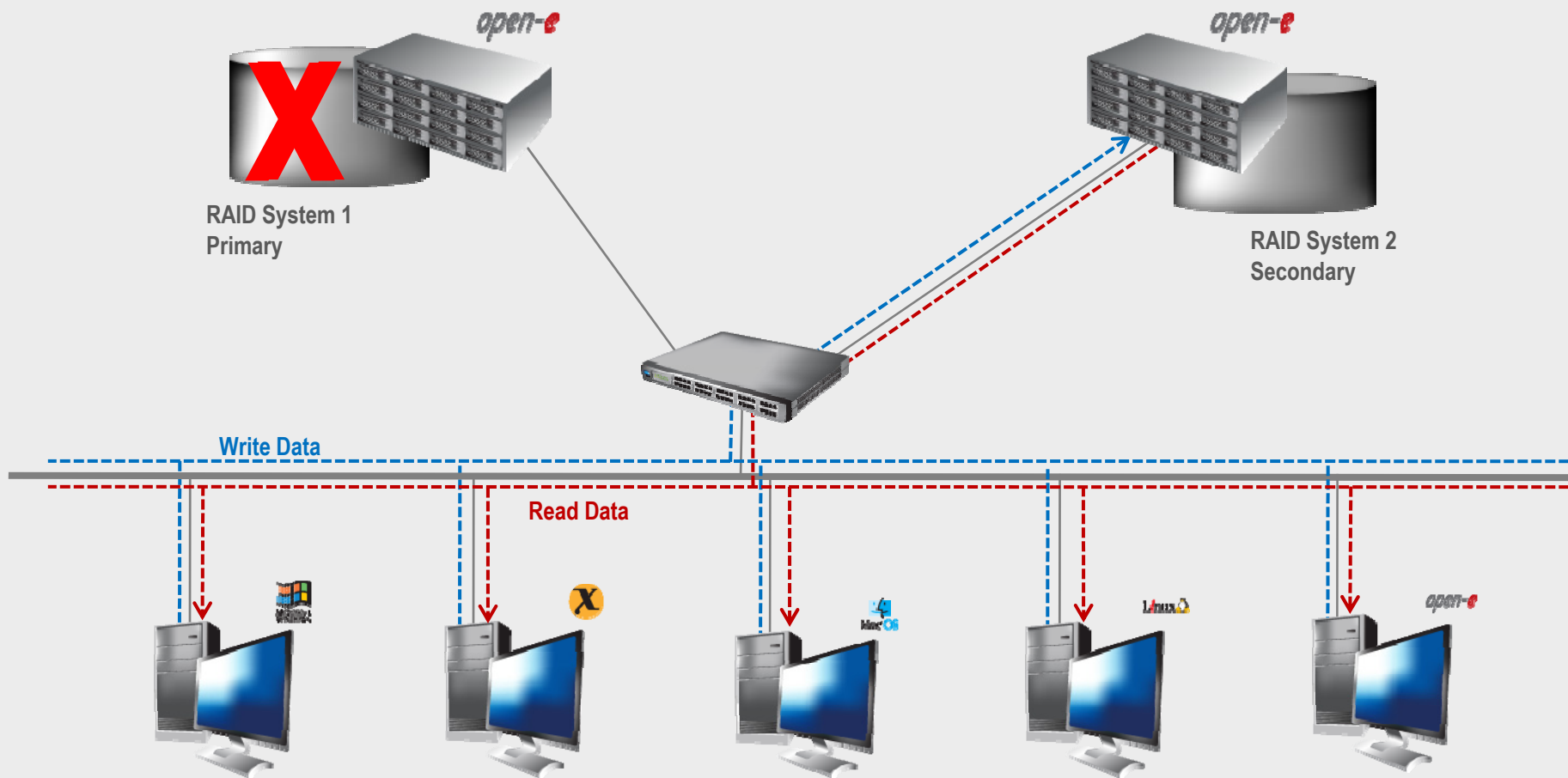
- In case of raid array error or disk drive error on the System 1, the server will send an e-mail notification to the administrator,
- In the case of a failure of system 1, users will be notified,
- Administrator then switches users to the System 2.



Synchronous Volume Replication over a LAN

open-e

- After switching, replicated volume is available on System 2



Setting up Synchronous **Volume Replication** over a LAN *open-e*

TO SET UP VOLUME REPLICATION, PERFORM THE FOLLOWING STEPS:

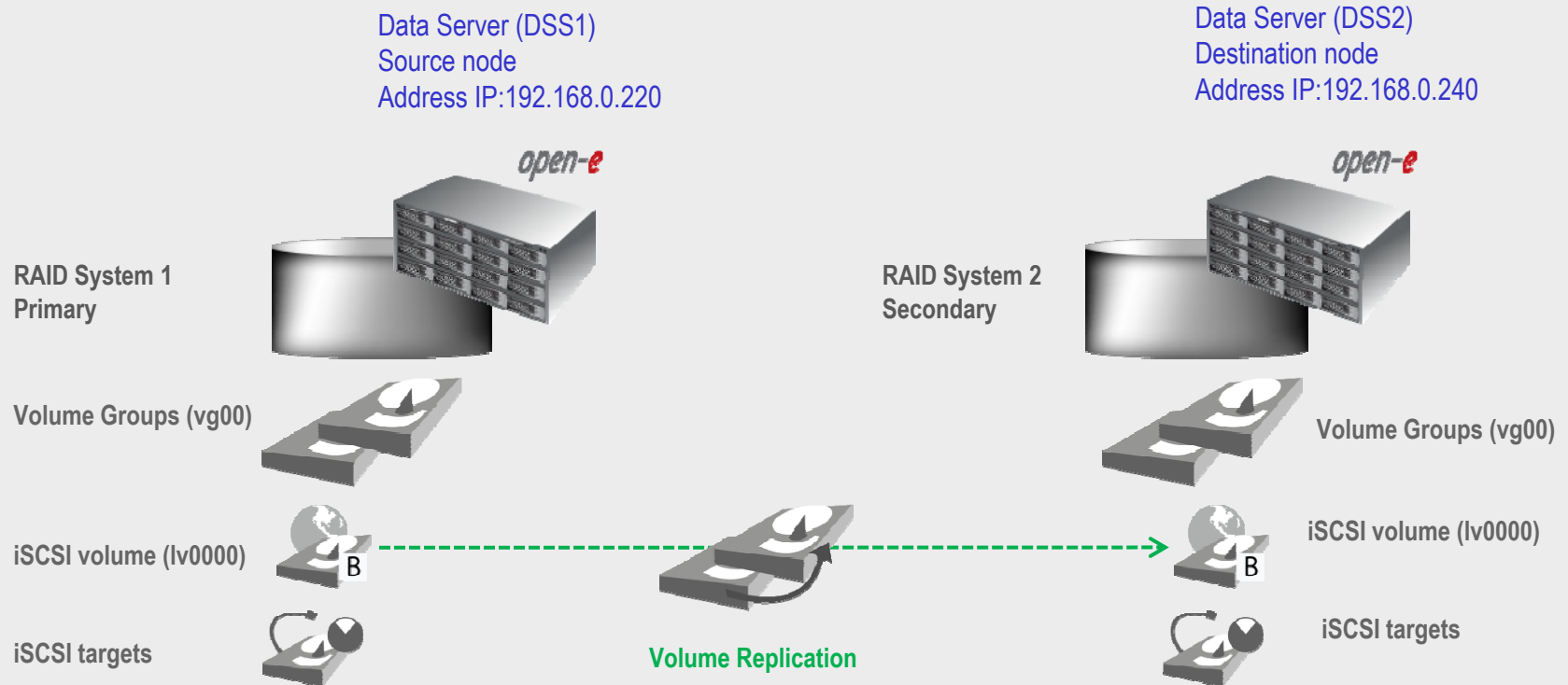
1. Hardware configuration
2. Configure the destination node
3. Configure the source node
4. Create the replication task
5. Checking status volume replication

Setting up Synchronous Volume Replication over a LAN *open-e*

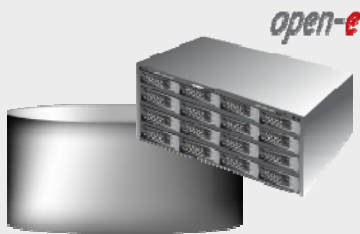
Hardware Requirements

To run the Volume replication of Open-E DSS (or iSCSI-R3), a minimum of two systems are required. Both servers are working in the Local Area Network. An example configuration is shown below:

1. Hardware Configuration



Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

Under the „CONFIGURATION” tab, select „volume manager”.

Volume Groups (vg00)



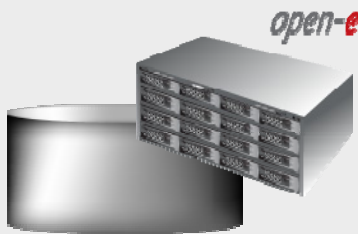
Add the selected physical units (Unit MD0) to create a new volume group (in this case, vg00) and click **apply** button.

The screenshot shows the open-e DSS web interface. The top navigation bar includes 'logout', 'DSS', 'DATA STORAGE SERVER', and 'open-e'. Below this are tabs for 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. Under the 'CONFIGURATION' tab, there are sub-tabs: 'volume manager', 'NAS settings', 'NAS resources', 'iSCSI target manager', and 'FC target manager'. The 'volume manager' sub-tab is active. On the left, there are two sections: 'Vol. groups' and 'Vol. replication'. The 'Vol. groups' section is expanded, showing a table of units. The 'Unit MD0' is selected with a checkmark. Below the table, there is a form with 'Action:' set to 'new volume group' and 'Name:' set to 'vg00'. An 'apply' button is visible at the bottom right of this section. The 'Unit rescan' and 'Unit manager' sections are also visible. At the bottom, there is an 'Event Viewer' and a footer that says 'Data Storage Server. All rights reserved.'

Unit	Size (GB)	Serial number	Status
<input checked="" type="checkbox"/> Unit MD0	74.62	N/A	available

Action: new volume group
Name: vg00


Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

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

iSCSI volume (lv0000) 

Next check the box to **Use volume replication**

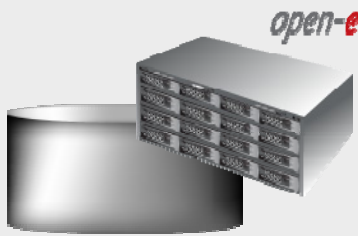
After assigning an appropriate amount of space for the iSCSI volume, click the **apply** button

The screenshot shows the 'DSS DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'volume manager' sub-tab is selected. On the left, under 'Vol. groups', the 'vg00' group is selected. Below that, the 'Vol. replication' section is visible. On the right, the 'Volume manager' configuration page is shown for 'Volume group: vg00'. It features a table of system volumes:

System volumes	Size (GB)
Reserved Pool	4.00
Reserved for snapshots	0.00
Reserved for system	1.00
Reserved for replication	0.00
Free	69.56

Below the table, the 'Action:' dropdown is set to 'new iSCSI volume' and the 'Options:' dropdown is set to 'Just create volume'. The 'Use volume replication' checkbox is checked. Under 'Block I/O', the 'Initialize' checkbox is also checked. At the bottom, the 'add:' field is set to '10.00 GB' and the 'apply' button is highlighted.

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

iSCSI volume (lv0000)



The destination iSCSI Volume Block I/O is now configured.

The screenshot shows the 'DSS DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'volume manager' sub-tab is selected. The 'Vol. groups' section shows a group named 'vg00'. The 'Vol. replication' section is also visible. The main area displays the configuration for a logical volume named 'lv0000'. A table lists the volume's properties:

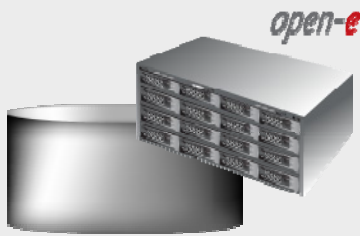
Logical Volume	Type	Snap.	Rep.	Init.	Blocksize (bytes)	Size (GB)
lv0000	B		✓		N/A	10.00

Below the table, the 'System volumes' section shows the following details:

- Reserved Pool: 4.00 GB
- Reserved for snapshots: 0.00 GB
- Reserved for system: 1.00 GB
- Reserved for replication: 0.13 GB
- Free: 59.44 GB

The 'Action' dropdown is set to 'new NAS volume'. There are checkboxes for 'Use volume replication' and 'WORM', both of which are currently unchecked. At the bottom, there is a slider for size adjustment and an 'add:' field set to '0.00 GB'. An 'apply' button is located at the bottom right of the configuration area.

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

Now, select the **Vol. replication** and check box under **Destination** and click the **apply** button

Volume Replication

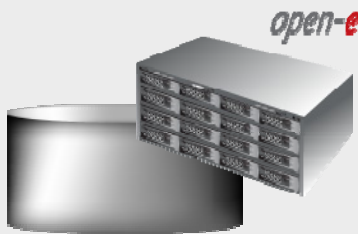


Next, under **Mirror Server IP** function, enter the IP address of the source node. In our example, this would be 192.168.0.220 click the **apply** button

The screenshot shows the 'DSS DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'Vol. replication' sub-tab is selected. A table shows a volume 'lv0000' with 'done' status and a checked 'Destination' box. The 'Mirror server IP' section has 'IP address' set to '192.168.0.220'. An 'Info' message at the bottom states: 'No volumes with replication functionality found or all volumes have a task assigned already.'

Logical Volume	Init	Source	Destination	Clear metadata
lv0000	done	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

Under the „CONFIGURATION” tab, select „iSCSI target manager”.

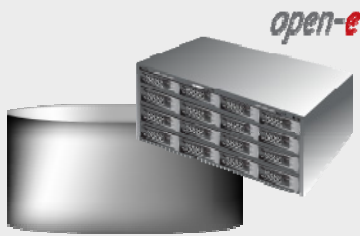
iSCSI targets



In the **Create new target** function enter a name for the new target (as desired) in the Name field and click **apply** to confirm.

The screenshot shows the open-e Data Storage Server (DSS) web interface. The top navigation bar includes 'logout', 'DSS', 'DATA STORAGE SERVER', and the 'open-e' logo. Below this is a menu with 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. Under the 'CONFIGURATION' tab, there are sub-tabs for 'volume manager', 'NAS settings', 'NAS resources', 'iSCSI target manager', and 'FC target manager'. The 'iSCSI target manager' sub-tab is selected, showing a 'Targets' section with a search icon and a '+' icon. Below this is a 'Create new target' form with a 'Name' field containing 'iqn.2009-02:dss2.target0' and an 'Alias' field containing 'target0'. There is an 'apply' button below the form. Below the form is a 'CHAP user target access' section with a checkbox for 'Enable CHAP user access authentication' and another 'apply' button. At the bottom of the interface, there is an 'Event Viewer' section and a footer that reads 'Data Storage Server. All rights reserved'.

Setting up Synchronous Volume Replication over a LAN *open-e*




Data Server (DSS2)
Destination node
Address IP:192.168.0.240

2. Configure the Destination Node

Select target0 within the Targets field.



iSCSI targets



To assign a volume to the target, click the button  located under **Action**

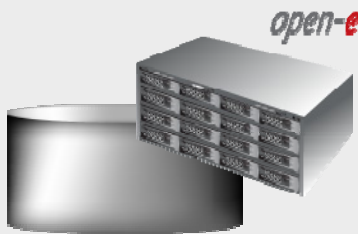
The screenshot shows the DSS web interface with the following elements:

- Navigation tabs: SETUP, CONFIGURATION, MAINTENANCE, STATUS, HELP
- Sub-navigation tabs: volume manager, NAS settings, NAS resources, iSCSI target manager, FC target manager
- Target selection: Target: iqn.2009-02:dss2.target0
- Target volume manager section with an info message: "There are logical volumes selected as mirror destination. There is no direct access to mirror destination volume. In order to access such volume, you can stop mirror task and switch destination mode to source mode or create a snapshot on the destination volume and assign the snapshot to a new target."
- Volume table with columns: Volume, Scsi id, LUN, RO, WB, Action
- CHAP user target access section with a checkbox for "Enable CHAP user access authentication" and an "apply" button.
- Target IP access section with input fields for "Deny access:" and "Allow access:".

Volume	Scsi id	LUN	RO	WB	Action
lv0000	dxN3mqMqvz3CNKJL	0	<input type="checkbox"/>	<input type="checkbox"/>	 

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

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

Under the **CONFIGURATION** tab, select **volume manager**.



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

The screenshot shows the open-e DSS web interface. The top navigation bar includes 'logout', 'DSS', 'DATA STORAGE SERVER', and 'open-e'. Below this are tabs for 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. Under the 'CONFIGURATION' tab, there are sub-tabs for 'volume manager', 'NAS settings', 'NAS resources', 'iSCSI target manager', and 'FC target manager'. The 'volume manager' sub-tab is active, showing a 'Vol. groups' section with a search icon and a question mark. Below this is a 'Vol. replication' section. On the right side, there are three main sections: 'Unit rescan' with a 'rescan' button, 'Unit manager' with a table of units, and 'Drive identifier' with another table. The 'Unit manager' table has the following data:

Unit	Size (GB)	Serial number	Status
Unit MD0	465.77	N/A	available

Below the table, there is an 'Action:' dropdown menu set to 'new volume group' and a 'Name:' text input field containing 'vg00'. An 'apply' button is located below these fields. The 'Drive identifier' table has the following data:

Unit	Serial number	Status
Unit S000	9RY1GP7W	

At the bottom of the interface, there is an 'Event Viewer' field and a footer that reads 'Data Storage Server. All rights reserved'.

Setting up Synchronous Volume Replication over a LAN *open-e*

Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

The screenshot shows the open-e Data Storage Server (DSS) web interface. The main navigation tabs include SETUP, CONFIGURATION, MAINTENANCE, STATUS, and HELP. Under CONFIGURATION, there are sub-tabs for volume manager, NAS settings, NAS resources, iSCSI target manager, and FC target manager. The 'volume manager' sub-tab is active, showing a list of volume groups on the left with 'vg00' selected. The right pane shows the configuration for 'vg00', including a table of system volumes and options for creating a new iSCSI volume.

System volumes	Size (GB)
Reserved Pool	4.00
Reserved for snapshots	0.00
Reserved for system	1.00
Reserved for replication	0.00
Free	460.72

Configuration options shown:

- Action: new iSCSI volume
- Options: Just create volume
- Use volume replication
- File I/O
 - Initialize
- Block I/O
- Slider: 0 to 460.72 GB
- add: 10.00 GB (+0.12 GB for replication)
- apply button

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

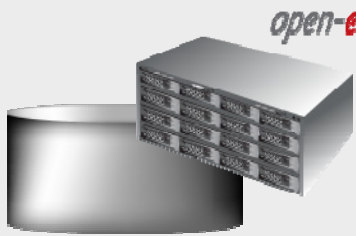
Next check the box to **Use volume replication**

After assigning an appropriate amount of space for the iSCSI volume, click the **apply** button

NOTE:

The source and destination volumes must be of identical size. Remember to enable Volume Replication

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

iSCSI volume (lv0000)

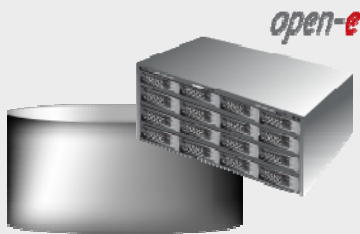


The destination iSCSI Volume Block I/O is now configured.

The screenshot shows the 'DSS DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'volume manager' sub-tab is selected. The 'Vol. groups' section shows a group named 'vg00'. The 'Volume manager' section displays a table of logical volumes and system volumes. A blue arrow points from the 'lv0000' entry in the table to the 'Action' dropdown menu, which is set to 'new NAS volume'. Below the table, there are checkboxes for 'Use volume replication' and 'WORM', and a slider for volume size. The 'add:' field is set to '0.00 GB'. An 'apply' button is visible at the bottom right of the configuration area.

Logical Volume	Type	Snap.	Rep.	Init.	Blocksize (bytes)	Size (GB)
lv0000	B		✓		N/A	10.00
System volumes						Size (GB)
Reserved Pool						4.00
Reserved for snapshots						0.00
Reserved for system						1.00
Reserved for replication						0.13
Free						450.59

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

Under the „CONFIGURATION” tab, select „iSCSI target manager”.

iSCSI targets

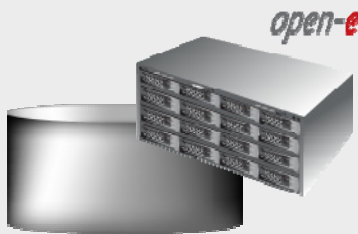


In the **Create new target** function enter a name for the new target (as desired) in the Name field and click **apply** to confirm.

The screenshot shows the web interface of the Data Storage Server (DSS) with the following elements:

- Top navigation: **logout**, **DSS**, **DATA STORAGE SERVER**, *open-e*
- Secondary navigation: **SETUP**, **CONFIGURATION** (selected), **MAINTENANCE**, **STATUS**, **HELP**
- Tertiary navigation: **volume manager**, **NAS settings**, **NAS resources**, **iSCSI target manager** (selected), **FC target manager**
- Main content area:
 - Targets** section with a search icon and a question mark.
 - Create new target** form:
 - Target Default Name
 - Name:
 - Alias:
 -
 - CHAP user target access** section:
 - Enable CHAP user access authentication
 -
- Bottom left: **CHAP users** section with a search icon and a question mark.
- Bottom left: **Event Viewer:**
- Bottom right: Data Storage Server. All rights reserved

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

Select target0 within the Targets field.



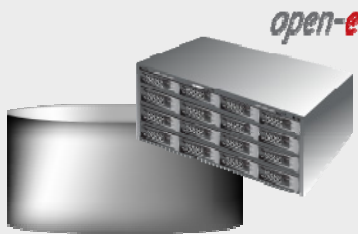
To assign a volume to the target, click the button **+** located under **Action**

The screenshot shows the 'iSCSI target manager' configuration page for a 'DATA STORAGE SERVER'. The 'Targets' tab is active, showing a list with 'target0' selected. The configuration details for 'target0' are visible, including the target name 'iqn.2009-02:dss1.target0'. Under the 'Target volume manager' section, a table lists volumes:

Volume	Scsi id	LUN	RO	WB	Action
lv0000	dxN3mqMqvz3CNKJL	0	<input type="checkbox"/>	<input type="checkbox"/>	+ -

An arrow points from the '+' button in the 'Action' column to the 'Action' header in the text box above. Below the table are sections for 'CHAP user target access' and 'Target IP access', each with an 'apply' button. The footer of the interface reads 'Data Storage Server. All rights reserved'.

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

3. Configure the Source Node

Now, select the **Vol. replication** and check box under **Source** and click the „**apply**” button

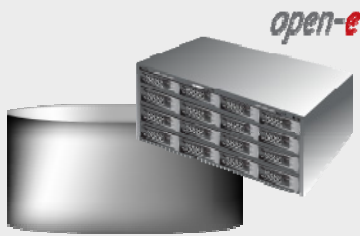
Volume Replication



Next, under **Mirror Server IP** function, enter the IP address of the destination node. In our example, this would be 192.168.0.240 click the **apply** button


The screenshot shows the 'DSS DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'volume manager' sub-tab is selected. The 'Vol. groups' section shows 'vg00'. The 'Vol. replication' section is expanded, showing a table with columns: Logical Volume, Init, Source, Destination, and Clear metadata. The row for 'lv0000' has 'done' under 'Init', a checked box under 'Source', and unchecked boxes under 'Destination' and 'Clear metadata'. An 'apply' button is below this table. The 'Mirror server IP' section has an 'IP address' field containing '192.168.0.240' and an unchecked 'WAN' checkbox. An 'apply' button is below this section. The 'Create new volume replication task' section shows an info message: 'Mirror Server IP is not set.' The 'Replication tasks manager' section shows an info message: 'No tasks have been found.'

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

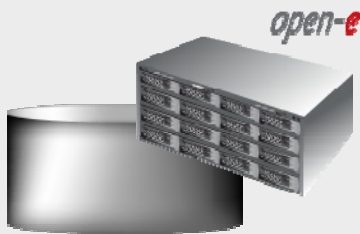
4. Creating replication task

Enter the task name in field **Task name** next, click on the  button

In the **Destination volume** field select the appropriate volume (in this example, **lv0000**) and click **create** to confirm.

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

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

4. Creating replication task

After the DSS console has reloaded, you can start, stop or delete the task within the **Replication task manager** function.

The screenshot shows the open-e DSS console interface. The main menu includes SETUP, CONFIGURATION, MAINTENANCE, STATUS, and HELP. Under CONFIGURATION, there are sub-menus for volume manager, NAS settings, NAS resources, iSCSI target manager, and FC target manager. The 'Vol. groups' section shows a group named 'vg00'. The 'Vol. replication' section shows a task named 'Replication_01'. The 'Replication tasks manager' section displays a table with the following data:

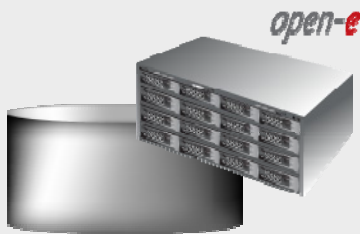
Name	Start time	Action
Replication_01	2009-02-15 22:50:55	[Start] [Stop] [Delete]

Below the table, the task details are listed:

- Source volume: lv0000
- Destination volume: lv0000
- Destination IP: 192.168.0.240
- Protocol type: Synchronous

The 'Mirror server IP' section shows the 'Address IP' field set to 192.168.0.240 and the 'WAN' checkbox unchecked. The 'Create new volume replication task' section shows an info message: 'No volumes with replication functionality found or all volumes have a task assigned already.'

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

4. Creating replication task

Also, you can start, stop or delete the task within the **Replication Task Manager** function by clicking on the name replication (in this case, **Replication_01**)

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

The screenshot shows the 'DATA STORAGE SERVER' web interface. The 'CONFIGURATION' tab is active, and the 'volume manager' sub-tab is selected. The 'Vol. groups' section shows 'vg00'. The 'Vol. replication' section shows a task named 'Replication_01'. The 'Replication tasks manager' section displays a table with the following data:

Name	Start time	Action
Replication_01	2009-02-15 22:50:55	[Start] [Stop] [Delete]

Below the table, the configuration details for 'Replication_01' are shown:

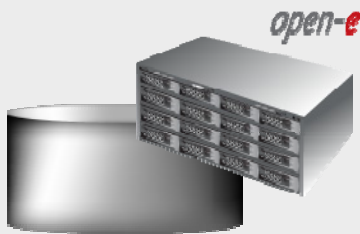
- Source volume: lv0000
- Destination volume: lv0000
- Destination IP: 192.168.0.240
- Protocol type: Synchronous

The 'Create schedule for volume replication task' section is also visible, showing a 'Comment' field with 'TaskV01' and a schedule configuration with checkboxes for days of the week (Monday through Sunday) and time slots (Start: 07:00, Stop: 15:00). An 'apply' button is located at the bottom right of this section.

NOTE:

Once the replication process has started, the replication direction cannot be changed.

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

5. Checking volume replication status

Under the „STATUS” tab, select „tasks”.

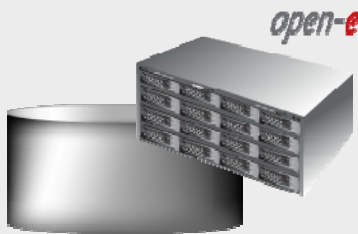
The screenshot shows the DSS web interface with the following structure:

- Logout button
- Navigation tabs: SETUP, CONFIGURATION, MAINTENANCE, STATUS (selected), HELP
- Sub-navigation tabs: network, logical volume, connections, system, hardware, tasks (selected), S.M.A.R.T.
- Left sidebar: Tasks menu with options: Backup, Restore from backup, Data Replication, Antivirus, Volume Replication, Snapshots
- Main content area:
 - Running tasks table:

Name	Type	Start time
Replication_01	Volume replication	2009-02-15 22:50:55
 - Tasks log table:

Time	Name	Type	Status	Action
2009-02-15 22:51:04	Replication_01	Volume replication	OK	Started
- Event Viewer: [input field]
- Footer: Data Storage Server. All rights reserved

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

5. Checking volume replication status

Select Volume Replication to display information on existing volume replication tasks

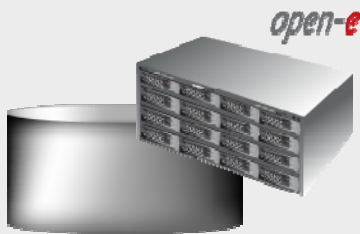
The screenshot shows the DSS web interface with the following components:

- Logout button
- Navigation tabs: SETUP, CONFIGURATION, MAINTENANCE, STATUS, HELP
- Sub-navigation tabs: network, logical volume, connections, system, hardware, tasks, S.M.A.R.T.
- Left sidebar: Tasks menu with options: Backup, Restore from backup, Data Replication, Antivirus, **Volume Replication** (selected), Snapshots
- Main content area: Tasks: Volume Replication
- Running tasks table:

Name	Type	Start time
Replication_01	Volume replication	2009-02-15 22:50:55
- Tasks log table:


Time	Name	Type	Status	Action
2009-02-15 22:51:04	Replication_01	Volume replication	OK	Started
- Event Viewer: [input field]
- Footer: Data Storage Server. All rights reserved

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

5. Checking volume replication status

Click on  button with task name (in this case **Replication_01**) to display detailed information on the current replication task.

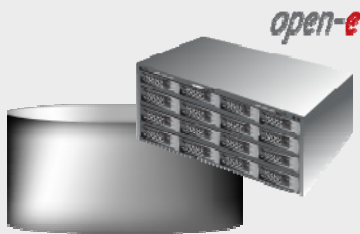
The screenshot shows the DSS (Data Storage Server) web interface. The main menu includes SETUP, CONFIGURATION, MAINTENANCE, STATUS, and HELP. The 'tasks' tab is selected, showing a list of tasks: Backup, Restore from backup, Data Replication, Antivirus, Volume Replication (selected), and Snapshots. The 'Volume Replication' task is expanded, showing a table of running tasks:

Name	Type	Start time
Replication_01	Volume replication	2009-02-15 22:50:55

Below the table, detailed information for the selected task is shown:

- Protocol type: Synchronous
- Connection: SyncSource
- Total size to replicate: 8549 MB
- Remain to replicate: 2454 MB
- Speed (avg): 68316 kB/s (32500 kB/s)
- Time left: 0:00:36
- Source info:**
 - Logical volume: lv0000
 - Consistency: Consistent
- Destination info:**
 - Logical volume: lv0000
 - Consistency: **Inconsistent**
 - IP address: 192.168.0.240

Setting up Synchronous Volume Replication over a LAN *open-e*



Data Server (DSS1)
Source node
Address IP:192.168.0.220

5. Checking volume replication status

The replication task provides information about the consistency of the data on destination node. In this case the replication process for the destination mode is ended.

The screenshot shows the 'open-e' web interface for a 'DATA STORAGE SERVER'. The main menu includes 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. Under 'STATUS', there are sub-menus for 'network', 'logical volume', 'connections', 'system', 'hardware', 'tasks', and 'S.M.A.R.T.'. The 'tasks' sub-menu is selected, showing a tree view with 'Volume Replication' highlighted. The main content area displays 'Tasks: Volume Replication' with a 'Running tasks' section. A table lists the task 'Replication_01' with details on protocol type, connection, source and destination info, and consistency. Below this is a 'Tasks log' section with a table header for 'Time', 'Name', 'Type', 'Status', and 'Action'. The footer of the interface reads 'Data Storage Server, All rights reserved'.

Name	Type	Start time
Replication_01	Volume replication	2009-02-15 22:50:55

Protocol type: Synchronous
Connection: Connected

Source info:
Logical volume: lv0000
Consistency: Consistent

Destination info:
Logical volume: lv0000
Consistency: Consistent
IP address: 192.168.0.240

Volume Replication, between source and destination nodes, is now complete

Thank You!