



RAIDIX 4.7.2 TO RAIDIX 5.0.1.1 UPDATE MANUAL

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INTRODUCTION

Intended Audience

This manual describes the procedure of updating the software RAIDIX 4.7.2 to RAIDIX 5.0.1.1.

This manual is mandatory for partners of RAIDIX LLC who perform the update of the RAIDIX 4.7.2 software.

Requirements and Limitations



When updating under load, after failover, there may be a short interruption to host access. Some services and applications that are using shares may require a restart.

To perform the update, follow these requirements and recommendations:

1. Perform the update only for the RAIDIX 4.7.2.
2. Perform the update in strict accordance with this manual and follow the sequence of the steps.
3. During the update, don't modify any RAIDIX objects.
4. Do not disable the dual-controller mode (DC) without consulting the RAIDIX Support Team.
5. During the update, don't make any changes to the hardware components.
6. The update is not supported for the DC system with manually enabled Single Mode.
7. Disable SSD Cache on all nodes. Delete the LUN used for the configuration of SSD Cache.
8. The system must have a valid license file.
9. Before the update, download Configuration Files *.json from all nodes.
10. Both nodes must work correctly.
11. Before the update, make sure that heartbeat network is up.
12. Take into account automatic failover after an updated node reboots automatically.
13. After the update, some drives may get the status Dirty.
14. The name of unzipped update folder is *raidix-patch-4.7.0-4.7.2*.
15. Update through CLI available only for root user.
16. In GUI, the software version will be 5.0.1*.

* To find out if the system has a patch 5.0.1.1, run the CLI command `cat /etc/raidix/release-info` (in GUI, you can use CLI at the **MONITORING | SUPPORT** page).

Features

1. The update doesn't require the system reinstallation.
2. The update of the DC system is available under the load.
3. The update of the DC system doesn't require manual Failover.
4. The Update can be started from any node.
5. Manual RAID Migration is available via `dc failover` or `raid migrate` (without SSD Cache).

SYSTEM UPDATE THROUGH THE WEB INTERFACE

System Update in Single-Controller Mode

! Before you start the update, fulfill the requirements, and review the limitations for the update, which are pointed in the chapter "[Requirements and Limitations](#)".

1. If Replication is using in the system, disable it during the update:
 - 1.1. Open the **STORAGE | REPLICATION** page.
 - 1.2. In the *Replicated LUN List* section, for each replicated LUN, click **⋮** and select **Disable Replication**.
 - 1.3. In the *Replication Metadata* section, click **Disable Replication Metadata**.

After the update is complete, Replication should be reconfigured manually.

2. If SSD cache is using in the system, disable it during the update:
 - 2.1. On the **STORAGE | DASHBOARD** page, in the *SSD Cache* section, get a name of the SSD cache LUN and click the **DISABLE SSD CACHE** button.

i If SSD cache contains data, which has not been flushed to the main RAID, SSD cache disabling may take a long time due to the flush of cached data.

- 2.2. Delete the LUN that was used for SSD cache configuration.

You can delete the LUN from the page of a RAID on which the LUN was created.

After the update is complete, SSD cache should be reconfigured manually.

3. If SSD cache is using in the system, disable it during the update:
 - 3.1. On the **STORAGE | DASHBOARD** page, in the *SSD Cache* section, get a name of the SSD cache LUN and click the **DISABLE SSD CACHE** button.

i If SSD cache contains data, which has not been flushed to the main RAID, SSD cache disabling may take a long time due to the flush of cached data.

- 3.2. Delete the LUN that was used for SSD cache configuration.

You can delete the LUN from the page of a RAID on which the LUN was created.

After the update is complete, SSD cache should be reconfigured manually.

4. Save the Configuration File *.json:
 - 4.1. Select **SYSTEM > CONFIGURATION RECOVERY**.
 - 4.2. In the *Current System Configuration* pane, click **Download Configuration File**.
5. Run the update:
 - 5.1. Select **MONITORING > SUPPORT**.
 - 5.2. In the *Software Version* section, click **Go to the Update Service**.
 - 5.3. In the opened window, select the archive rdx-update-default-4.7.2-5.0.1.1.zip and apply it.



Do not reboot the system in the process of the system update.

While updating, the message *"The server encountered a temporary error and could not complete your request"* shows by the reboot stage. It's a part of normal updating process and does not require any actions. Just wait until the system restarts.

After the update is complete, the system will reboot automatically.



After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

System Update in DC

! Before you start the update, fulfill the requirements, and review the limitations for the update, which are pointed in the chapter "[Requirements and Limitations](#)".

1. Make sure each node has actual date and time:
 - On each node, check out current date and time on the **SYSTEM | TIME SETTINGS** page. If necessary, click **SYNCRONIZE**.
2. Make sure that the heartbeat network is up:
 - On the **SYSTEM | NODES** page, both nodes are shown.
3. If Replication is using in the system, disable it during the update:

Do the following steps on *both* nodes:

- 3.1. Open the **STORAGE | REPLICATION** page.
- 3.2. In the *Replicated LUN List* section, for each replicated LUN, click **⋮** and select **Disable Replication**.
- 3.3. In the *Replication Metadata* section, click **Disable Replication Metadata**.

After the update is complete, Replication should be reconfigured manually.

4. If SSD cache is using in the system, disable it during the update:

Do the following steps on *both* nodes:

- 4.1. On the **STORAGE | DASHBOARD** page, in the *SSD Cache* section, get a name of the SSD cache LUN and click the **DISABLE SSD CACHE** button.

i If SSD cache contains data, which has not been flushed to the main RAID, SSD cache disabling may take a long time due to the flush of cached data.

- 4.2. Delete the LUN that was used for SSD cache configuration.

You can delete the LUN from the page of a RAID on which the LUN was created.

After the update is complete, SSD cache should be reconfigured manually.

5. Save the Configuration File *.json:
 - 5.1. Select **SYSTEM > CONFIGURATION RECOVERY**.
 - 5.2. In the *Current System Configuration* pane, click **Download Configuration File**.
6. Run the update:
 - 6.1. Select **MONITORING > SUPPORT**.
 - 6.2. In the *Software Version* section, click **Go to the Update Service**.
 - 6.3. On the opened page, select the archive `rdx-update-default-4.7.2-5.0.1.1.zip`, then apply it.

! Do not reboot the system in the process of the system update.
While updating, the message "*The server encountered a temporary error and could not complete your request*" appears at the reboot stage. It's a part of normal updating process and does not require any actions. Just wait until the system restarts.

The updated system will reboot. All RAIDs on the updated node will become Passive, and RAIDs on the second node will become Active.

! After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

! After the first node is updated, RAIDIX web interface might display incorrectly; both **RAID LIST** and **DRIVES** pages might be unavailable.
Full functionality of the web interface will be restored after updating the second node.

7. Move to the second node, then make sure that heartbeat between the nodes is up (see the step 2).
8. Save the Configuration File *.json:
 - 8.1. Select **SYSTEM > CONFIGURATION RECOVERY**.
 - 8.2. In the *Current System Configuration* pane, click **Download Configuration File**.
9. Run the update:
 - 9.1. Select **MONITORING > SUPPORT**.
 - 9.2. In the *Software Version* section, click **Go to the Update Service**.
 - 9.3. On the opened page, select the archive rdx-update-default-4.7.2-5.0.1.1.zip and apply it.

! Do not reboot the system in the process of the system update.
While updating, the message "*The server encountered a temporary error and could not complete your request*" appears at the reboot stage. It's a part of normal updating process and does not require any actions. Just wait until the system restarts.

10. Wait for the update process to finish.

The updated system will reboot. All RAIDs on the updated node will become Passive, and RAIDs on the other node will become Active.

! After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

11. If necessary, perform Failback. Do the following steps on both nodes:
 - 11.1. Select **SYSTEM > NODES**.
 - 11.2. Click **Failback**.

SYSTEM UPDATE THROUGH THE COMMAND LINE INTERFACE

System Update in Single-Controller Mode

! Before you start the update, fulfill the requirements, and review the limitations for the update, which are pointed in the chapter "[Requirements and Limitations](#)".

1. If Replication is using in the system, disable it during the update:

- 1.1. Disable each replicated LUN:

```
rdcli replication delete -n <lun_name>
```

- 1.2. Disable a LUN with replication metadata:

```
rdcli replication metadata delete -n <meta_lun_name>
```

After the update is complete, Replication should be reconfigured manually.

2. If SSD cache is using in the system, disable it during the update:

- 2.1. Get a name of the SSD cache LUN:

```
rdcli param ssdcache show
```

- 2.2. Disable SSD cache by one of the ways:

- If SSD cache is using for reading and writing:

```
rdcli param ssdcache modify -l "" --force_wait
```

i If SSD cache contains data, which has not been flushed to the main RAID, SSD cache disabling may take a long time due to the flush of cached data.

- If SSD cache is using in the *Read Only* mode:

```
rdcli param ssdcache modify -l ""
```

- 2.3. Delete the LUN that was used for SSD cache configuration.

```
rdcli lun delete -n <lun_name>
```

After the update is complete, SSD cache should be reconfigured manually.

3. Download the `/var/lib/raidix/raidixcfg.json` from the node to be updated:

```
cp /var/lib/raidix/raidixcfg.json ~/
```

4. Run the update:

- 4.1. Copy the `rdx-update-default-4.7.2-5.0.1.1.zip` archive to the node and unzip it (by default, to the directory `raidix-patch-4.7.0-4.7.2`):


```
unzip rdx-update-default-4.7.2-5.0.1.1.zip
```

- 4.2. Move to the `raidix-patch-4.7.0-4.7.2` directory (or to the directory you selected on the step 4.1):

```
cd raidix-patch-4.7.0-4.7.2
```


- 4.3. Run the script:

```
./install
```

 Do not reboot the system in the process of the system update.

 After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

System Update in DC

 Before you start the update, fulfill the requirements, and review the limitations for the update, which are pointed in the chapter "[Requirements and Limitations](#)".

1. Make sure each node has actual date and time:

```
rdcli param time show
```

2. Make sure that the heartbeat network is up:

```
rdcli dc show
```

The *heartbeat* value must be 1.

3. If Replication is using in the system, disable it during the update:

Do the following steps on *both* nodes:

- 3.1. Disable each replicated LUN:

```
rdcli replication delete -n <lun_name>
```

- 3.2. Disable a LUN with replication metadata:

```
rdcli replication metadata delete -n <meta_lun_name>
```

After the update is complete, Replication should be reconfigured manually.

4. If SSD cache is using in the system, disable it during the update:

Do the following steps on *both* nodes:


- 4.1. Get a name of the SSD cache LUN:

```
rdcli param ssdcache show
```

4.2. Disable SSD cache by one of the ways:

- If SSD cache is using for reading and writing:

```
rdcli param ssdcache modify -l "" --force_wait
```

 If SSD cache contains data, which has not been flushed to the main RAID, SSD cache disabling may take a long time due to the flush of cached data.

- If SSD cache is using in the *Read Only* mode:

```
rdcli param ssdcache modify -l ""
```

4.3. Delete the LUN that was used for SSD cache configuration.

```
rdcli lun delete -n <lun_name>
```

After the update is complete, SSD cache should be reconfigured manually.

5. Download the /var/lib/raidix/raidixcfg.json file from the node that you are updating:

```
cp /var/lib/raidix/raidixcfg.json ~/
```

6. Run the update:

- 6.1. Copy the rdx-update-default-4.7.2-5.0.1.1.zip archive to the node and unzip it (by default, to the directory *raidix-patch-4.7.0-4.7.2*):


```
unzip rdx-update-default-4.7.2-5.0.1.1.zip
```

- 6.2. Change the directory to *raidix-patch-4.7.0-4.7.2* (or to the directory you selected on the step 6.1):

```
cd raidix-patch-4.7.0-4.7.2
```

- 6.3. Run the script:

```
./install
```

 Do not reboot the system in the process of the system update.

The updated system will reboot. All RAIDs on the updated node will become Passive, and RAIDs on the second node will become Active.

 After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

7. Move to the second node, and make sure that heartbeat network is up.
8. Repeat the steps 5 and 6 on the second node.

9. Wait for the update process to finish.

The updated node will reboot. All RAIDs on the updated node will become Passive, and RAIDs on the other node will become Active.



After the reboot, if necessary, rescan all SCSI hosts on all the hosts connected to the system.

10. If necessary, perform Failback. Run the following command on both nodes:

```
rdcli dc failback
```