



RAIDIX 5.1.0.X TO RAIDIX 5.1.2 UPDATE MANUAL

Document version 1.1

CONTENTS

Introduction.....	3
Intended Audience.....	3
Guide Conventions.....	3
Contact Us.....	3
Requirements and Limitations	4
Features.....	4
System Update through the Web Interface.....	5
System Update in SC.....	5
System Update in DC	6
System Update through the Command Line Interface	8
System Update in SC.....	8
System Update in DC	9

INTRODUCTION

Intended Audience

This manual describes the procedure of updating the software RAIDIX 5.1.0.x to RAIDIX 5.1.2.


This manual is mandatory for partners of RAIDIX LLC who perform the update of the RAIDIX 5.1.0.x software.


Guide Conventions

The Guide uses the typefaces and formatting to specify different names and terms:

Convention	Uses
Bold	GUI controls, option value, minor titles.
<i>Italic</i>	Emphasis, term references, documentation titles, section titles, file paths.
Text color	Instructions below are only for specific situations and configurations.
Monospace	Commands, command utilities, and console-driven text.

Text paragraphs that need your special attention are marked with the following frame:


 *Note* – a note providing valuable information.


 *Warning* – binding instructions to guarantee the proper work of the software.

Contact Us

If you have any comments or suggestions on the improvement of the RAIDIX end-user documentation, send them at doc.comments@raidix.com. Specify a document title, a chapter number, and a page. Refer to the specific pages and sections whenever possible.


REQUIREMENTS AND LIMITATIONS

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

 After the update, some drives may get the "Dirty" status.

To perform the update, follow these requirements and recommendations:

1. Perform the update as the user admin.
2. Perform the update only for the RAIDIX 5.1.0.x.
3. Perform the update in strict accordance with this manual and follow the sequence of the steps.

 Until the update *is fully complete* for the entire system:

- DON'T modify any RAIDIX objects.
- DON'T disable the dual-controller mode (DC) until consulting the RAIDIX Support Team.
- DON'T make any changes to the hardware components.
- DON'T clean drives (**Clean** or `rdcli drive clean`).

4. The update is not supported for the DC system with manually-enabled Single Mode.
5. In DC system, all RAIDs must have the Online state.
6. The system must have valid license.
7. Both nodes must work correctly.
8. Before the update, make sure that the heartbeat network is up and its interfaces have no VIPs.

Features

1. The update doesn't require system reinstallation.
2. The update of the DC system is available under the load.
3. The update can be started from any node.
4. After the update via CLI, the node reboots automatically.

SYSTEM UPDATE THROUGH THE WEB INTERFACE

System Update in SC

! 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 SSD cache is using in the system, turn it off until the update is complete:

i After the update, you should reconfigure SSD cache. Before turning SSD cache off, make sure you have info about its configuration settings.

On the **STORAGE | LUN LIST** 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. Save the configuration file `raidixcfg.json`:
 - 2.1. Open the **SYSTEM | CONFIGURATION RECOVERY** page.
 - 2.2. In the *Current System Configuration* pane, click **Save AS...** and save the current configuration to the system.
 - 2.3. In the System Configurations sections, in the line with just saved configuration, click **Download**.
3. Run the update:
 - 3.1. Open the **MONITORING | SUPPORT** page.
 - 3.2. In the *Software Version* section, click **Update Service**.
 - 3.3. In the opened window, select `rdx-patch-5.1.0.1-5.1.2.rpk`.

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

After the node update is complete, the "*Update Completed*" message shows. Click **Reboot the system** to reboot the node.

4. Wait for the updated node to fully load.
5. If you use SAN, check the visibility of LUNs on the host. If necessary, run Rescan Disks (Disk Management - Action - Rescan Disks) for Windows systems or rescan SCSI host for Linux systems.
6. If you have disabled SSD cache, reconfigure it (to learn more, see the document *RAIDIX 5.1 Administrator's Guide*).

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. Disable target synchronization between the nodes, performing on each node:

i After the update, you should turn on target synchronization. Before turning the synchronization off, make sure you have info about its configuration settings.
You can see the info on the **HOSTS & INTERFACES | ADAPTERS** page by clicking **Target Synchronization**.

- 1.1. Open the **HOSTS & INTERFACES | ADAPTERS** page and click **Target Synchronization**.
 - 1.2. Disable the synchronization.
2. If SSD cache is using in the system, turn it off until the update is complete on each node:

i After the update, you should reconfigure SSD cache. Before turning SSD cache off, make sure you have info about its configuration settings.

On the **STORAGE | LUN LIST** 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. Save the configuration file `raidixcfg.json` from all the nodes you are going to update:
 - 3.1. Open the **SYSTEM | CONFIGURATION RECOVERY** page.
 - 3.2. In the *Current System Configuration* pane, click **Save AS...** and save the current configuration to the system.
 - 3.3. In the System Configurations sections, in the line with just saved configuration, click **Download**.
4. Select a node for the update and do the following:
 - 4.1. Make sure the Heartbeat network is up:
On the **SYSTEM | NODES** page, both nodes are shown.
 - 4.2. Run the update:
 - 4.2.1. Open the **MONITORING | SUPPORT** page.
 - 4.2.2. In the *Software Version* section, click **Update Service**.
 - 4.2.3. In the opened window, select `rdx-patch-5.1.0.1-5.1.2.rpk`.

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

After the node update is complete, the "*Update Completed*" message shows. Click **Reboot the system** to reboot the node.



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.

- 4.3. Wait for the updated node to fully load.
- 4.4. If you use SAN, check the visibility of LUNs on the host.

If necessary, run Rescan Disks (Disk Management - Action - Rescan Disks) for Windows systems or rescan SCSI host for Linux systems.
5. Perform step 4 on the second (non-updated) node.
6. If necessary, perform Failback on any node:
 - 6.1. Open the **SYSTEM | NODES** page.
 - 6.2. Click **Failback**.
7. Enable target synchronization on each node:
 - 7.1. Open **HOSTS & INTERFACES | ADAPTERS**.
 - 7.2. Click **Target Synchronization**.
 - 7.3. Turn on target synchronization.
8. If you have disabled SSD cache, reconfigure it (to learn more, see the document *RAIDIX 5.1 Administrator's Guide*).

SYSTEM UPDATE THROUGH THE COMMAND LINE INTERFACE

System Update in SC

! 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 SSD cache is using in the system, turn it off until the update is complete:

i After the update, you should reconfigure SSD cache. Before turning SSD cache off, make sure you have info about its configuration settings.

- If SSD cache is using for reading and writing:

```
$ rdcli ssdcache delete --name <ssd_cache_name> --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 ssdcache delete --name <ssd_cache_name>
```

2. Save the configuration file `raidixcfg.json`:

```
$ scp /var/lib/raidix/raidixcfg.json [<user>@]<host>[:<path>]
```

3. Run the update:

```
$ scp [<user>@]host:[<path>]rdx-patch-5.1.0.1-5.1.2.rpk ~/
```

```
$ rdupdate ~/rdx-patch-5.1.0.1-5.1.2.rpk
```

! *Do not* reboot the system during the update.

After the node update is complete, the system will show the message "*System is rebooting...*" and start rebooting.

4. Wait for the updated node to fully load.
5. If you use SAN, check the visibility of LUNs on the host.

If necessary, run Rescan Disks (Disk Management - Action - Rescan Disks) for Windows systems or rescan SCSI host for Linux systems.

6. If you have disabled SSD cache, reconfigure it (to learn more, see the document *RAIDIX 5.1 Administrator's Guide*).

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. Disable cache synchronization between the nodes:

i After the update, you should turn on target synchronization. Before turning the synchronization off, make sure you have info about its configuration settings.

You can see the info by running

```
$ rdcli dc show
```

```
$ rdcli dc modify --targets ""
```

```
$ rdcli dc modify --targets "" --remote
```

2. If SSD cache is using in the system, turn it off until the update is complete on each node:

i After the update, you should reconfigure SSD cache. Before turning SSD cache off, make sure you have info about its configuration settings.

- If SSD cache is using for reading and writing:

```
$ rdcli ssdcache delete --name <ssd_cache_name> --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 ssdcache delete --name <ssd_cache_name>
```

3. Save the configuration file `raidixcfg.json` from all the nodes you are going to update:

```
$ scp /var/lib/raidix/raidixcfg.json [<user>@]<host>[:<path>]
```

4. Select a node for the update and do the following:

- 4.1. Make sure that the Heartbeat network is up:

```
$ rdcli dc show
```

The *heartbeat* value must be *1*.

- 4.2. Run the update:

```
$ scp [<user>@]host:[<path>]rdx-patch-5.1.0.1-5.1.2.rpk ~/
```

```
$ rdupdate ~/rdx-patch-5.1.0.1-5.1.2.rpk
```



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

After the node update is complete, the system will show the message “*System is rebooting...*” and start rebooting.

- 4.3. Wait for the updated node to fully load.
- 4.4. If you use SAN, check the visibility of LUNs on the host.

If necessary, run Rescan Disks (Disk Management - Action - Rescan Disks) for Windows systems or rescan SCSI host for Linux systems.

5. Repeat step 4 on the second (non-updated) node.
6. If necessary, on a required node, perform Failback:

```
$ rdcli dc failback
```

7. Enable target synchronization by running on each node:

```
$ rdcli dc modify -t <targets> [-a <iscsi_ip>]
```

where <targets> are:

- for iSCSI: **iscsi** (also requires the `-a` parameter with the value of the remote IP address for synchronization);
 - for InfiniBand: one or more comma-separated GUID values;
 - for SAS: one or more comma-separated SAS address values.
8. If you have disabled SSD cache, reconfigure it (to learn more, see the document *RAIDIX 5.1 Administrator's Guide*).