



# RAIDIX ERA 3.3.0 OR HIGHER TO RAIDIX ERA 3.4.0 UPDATE INSTRUCTIONS

Document version 1.0

## INTRODUCTION

To update to RAIDIX ERA 3.4.0, use one of the chapters in this manual:

- For OS distributions that use the RPM package format (except SLES) see the chapter "Updating Systems with RPM."  
Operating systems: ALT, RHEL, CentOS, Oracle, SUSE.
- For OS distributions that use the DEB package format – the chapter "Updating Systems with DEB."  
Operating systems: Ubuntu, Proxmox, Debian.
- For SLES see the chapter "Updating SLES."

The details of the update script operation are described in the "Update Features" chapter.



In RAIDIX ERA 3.4.0, the recommended options for automatic mounting the file system at system startup have been changed. Information about changing the mount options is given in appendix "Changing automatic mount options on ERA devices at system startup."

## UPDATING SYSTEMS WITH RPM

1. Make sure your system meets the requirements listed in the document *RAIDIX ERA 3.4.0 System Requirements*.
2. Make sure all RAID devices are in the state *"online"* or *"online, initialized"*.
3. Prepare the system for the update:
  - Unpack the archive with the RAIDIX ERA 3.4.0 updater for your OS (*era-updater-3.3.1-3.4.0-\*.tar.gz*) and go to the corresponding directory:

```
# tar xzf </path/to/archive_name>
```

- Install the *sos* package:

```
# yum install sos
```

- If you are updating to the DKMS version:

- Make sure the *dkms* package is installed or install it:

```
# yum install dkms
```

- Make sure the *kernel-devel* package with the headers of your current Linux kernel version is installed or install it:



Some OS distributions do not have such package (and some repositories may not have package versions for out-of-date kernel versions). In this case, you should find the package or the repository containing it for your kernel version yourself.

```
# yum install kernel-devel-$(uname -r)
```

4. Stop using ERA devices before the update is complete:
  - Unmount the file systems from all ERA RAID devices:

```
# umount /dev/era_<raid_name>
```

- Stop other applications that are using ERA RAID devices.

5. Start the update with

```
# cd era_updater/
```

```
# python3 updater33.py --rpm
```

Wait until the update is complete.

6. You can resume using the ERA devices:

In RAIDIX ERA 3.4.0, the recommended options for automatic mounting the file system at system startup have been changed. For a detailed description and setup examples, see

the appendix "[Changing automatic mount options on ERA devices at system startup.](#)"  
Apply new changes and mount the file systems that was unmounted at step 4.

- Start the applications that was stopped at step 4.

## UPDATING SYSTEMS WITH DEB

1. Make sure your system meets the requirements listed in the document *RAIDIX ERA 3.4.0 System Requirements*.
2. Make sure all RAID devices are in the state *"online"* or *"online, initialized"*.
3. Prepare the system for the update:
  - Unpack the archive with the RAIDIX ERA 3.4.0 updater for your OS (*era-updater-3.3.1-3.4.0-\*.tar.gz*) and go to the corresponding directory:

```
# tar xzf </path/to/archive_name>
```

- Install the *sosreport* package:

```
# yum install sosreport
```

- If you are updating to the DKMS version:

- Make sure the *dkms* package is installed or install it:

```
# yum install dkms
```

- Make sure the *linux-headers* package with the headers of your current Linux kernel version is installed or install it:



Some OS distributions do not have such package (and some repositories may not have package versions for out-of-date kernel versions). In this case, you should find the package or the repository containing it for your kernel version yourself.

```
# apt install linux-headers-$(uname -r)
```

4. Stop using ERA devices before the update is complete:
  - Unmount the file systems from all ERA RAID devices:

```
# umount /dev/era_<raid_name>
```

- Stop other applications that are using ERA RAID devices.

5. Start the update with

```
# cd era_updater/
```

```
# python3 updater33.py --deb
```

Wait until the update is complete.

6. You can resume using the ERA devices:

In RAIDIX ERA 3.4.0, the recommended options for automatic mounting the file system at system startup have been changed. For a detailed description and setup examples, see

the appendix "[Changing automatic mount options on ERA devices at system startup.](#)"  
Apply new changes and mount the file systems that was unmounted at step 4.

- Start the applications that was stopped at step 4.

## UPDATING SLES

1. Make sure your system meets the requirements listed in the document *RAIDIX ERA 3.4.0 System Requirements*.
2. Make sure all RAID devices are in the state *"online"* or *"online, initialized"*.
3. Prepare the system for the update:

- Unpack the archive with the ERA 3.4.0 updater for your OS (*era-updater-3.3.1-3.4.0-\*.tar.gz*) and go to the corresponding directory:

```
# tar xzf </path/to/archive_name>
```

- Install the *supportutils* package:

```
# zypper install supportutils
```

- If you are updating to the DKMS version:

- Make sure the *dkms* package is installed or install it:

```
# zypper install dkms
```

- Make sure the *kernel-default-devel* package with the headers of your current Linux kernel version is installed or install it:



Some OS distributions do not have such package (and some repositories may not have package versions for out-of-date kernel versions). In this case, you should find the package or the repository containing it for your kernel version yourself.

```
# zypper install kernel-default-devel-$(uname -r)
```

4. Stop using ERA devices before the update is complete:

- Unmount the file systems from all ERA RAID devices:

```
# umount /dev/era_<raid_name>
```

- Stop other applications that are using ERA RAID devices.

5. Start the update with

```
# cd era_updater/
```

```
# python3 updater33.py --rpm
```

Wait until the update is complete.

6. You can resume using the ERA devices:

In RAIDIX ERA 3.4.0, the recommended options for automatic mounting the file system at system startup have been changed. For a detailed description and setup examples, see

the appendix "[Changing automatic mount options on ERA devices at system startup.](#)"

Apply new changes and mount the file systems that was unmounted at step 4.

- Start the applications that was stopped at step 4.



## UPDATE FEATURES

While updating, the script performs the following operations:

1. Creates a backup of the configuration file.
2. Stops ERA services, unloads RAIDs from the system.
3. Deletes old RPM packages.
4. Installs new RPM packages.
5. Starts ERA services, reloads RAIDs.
6. Updates the configuration file.
7. Collects logs.

After the update finished, the script will collect update logs into a *\*.tar.gz* file.

If an error occurs during the update, the script will try to restore the system to the ERA 3.3.1 version.  
Send collected logs to RAIDIX Support Department.

## APPENDIX. CHANGING AUTOMATIC MOUNT OPTIONS ON ERA DEVICES AT SYSTEM STARTUP

RAIDIX ERA 3.4.0 supports automatic mount of the file system at system startup with

- the service systemd (systemd.mount);
- the file /etc/fstab.

### Mounting with systemd.mount

**Example:** mounting xfs located on a RAID `/dev/era_raid` into `/mnt/raid/` through `systemd.mount`:

**i** Objects, paths and file names used for the example are additionally marked with "<" and ">" in the executable commands.

1. Set a timeout of 5 minutes for the ERA device in the unit file:

- 1.1. Run

```
# systemctl edit --force --full </dev/era_raid>
```

- 1.2. Add the following lines:

```
[Unit]
```

```
JobRunningTimeoutSec=5m
```

Save the changes.

- 1.3. Check the changes:

```
#systemctl cat </dev/era_raid>
```

2. Modify the file (named for example `mnt-raid.mount`) with mount options at `/etc/systemd/system/` by adding the following lines:

```
DefaultDependencies=no
```

```
Before=umount.target
```

```
Conflicts=umount.target
```

Comparison of the files `/etc/systemd/system/mnt-raid.mount` in the RAIDIX ERA 3.4.0 and in lower versions

Mounting options in RAIDIX ERA 3.4.0	Mounting options in previous versions
<pre>[Unit] Description=Mount filesystem on RAIDIX ERA Requires=eraraid-restore.service After=eraraid-restore.service DefaultDependencies=no Before=umount.target Conflicts=umount.target  [Mount] What=/dev/era_raid Where=/mnt/raid/ Options=defaults Type=xf  [Install] WantedBy=multi-user.target</pre>	<pre>[Unit] Description=Mount filesystem on RAIDIX ERA Requires=eraraid-restore.service After=eraraid-restore.service  [Mount] What=/dev/era_raid Where=/mnt/raid/ Options=defaults Type=xf  [Install] WantedBy=multi-user.target</pre>

3. Run the command

```
# systemctl daemon-reload
```

Enable automatic mounting at system startup:

```
# systemctl enable <mnt-raid.mount>
```

Start the service to mount the file system:

```
# systemctl start <mnt-raid.mount>
```

## Mounting with `/etc/fstab`

When setting up automatic mounting at system startup via `/etc/fstab`, change the set of options (in previous versions, "x-systemd.after=eraraid-restore.service") with one of the following sets of options:

- `x-systemd.requires=eraraid-restore.service,x-systemd.device-timeout=5m,_netdev`
- `x-systemd.requires=eraraid-restore.service,x-systemd.device-timeout=5m,nofail`

After you change the file, mount the file system.

The parameter `x-systemd.device-timeout=` configures how long systemd should wait for a device to show up before giving up on an entry from `/etc/fstab`. Specify a time in seconds or explicitly append a unit such as "s", "min", "h", "ms".

Note that this option can only be used in `/etc/fstab`, and will be ignored when part of the `Options=` setting in a unit file.

The value `_netdev` sets that the filesystem resides on a device that requires network access (used to prevent the system from attempting to mount these filesystems until the network has been enabled on the system).

The value `nofail` disables reporting errors for this device if it does not exist.

**Example:** mounting xfs located on a RAID `/dev/era_raid` into `/mnt/raid/` through `/etc/fstab` with the option `_netdev`.

The line from the file `/etc/fstab`

---

```
/dev/era_raid /mnt/raid/ xfs x-systemd.requires=eraraid-restore.service,x-systemd.device-timeout=5m,_netdev 0 0
```

---

**Example:** mounting xfs located on a RAID `/dev/era_raid` into `/mnt/raid/` through `/etc/fstab` with the option `nofail`.

The line from the file `/etc/fstab`

---

```
/dev/era_raid /mnt/raid/ xfs x-systemd.requires=eraraid-restore.service,x-systemd.device-timeout=5m,nofail 0 0
```

---